



Section I. Introduction

EDITOR'S NOTE

Greetings and welcome once again to The Cowrie.

This edition focuses on the theme of "Sustainable Energy" in line with Sustainable Development Goal(SDG) 7, "Ensure access to affordable, reliable, sustainable and modern energy for All". SDG 7 was one of the six goals being reviewed at this year's meeting of the High Level Political Forum held from 9-20 July 2018 in New York along with SDGs 6, 11, 12, 15 and 17.

The pivotal role of sustainable energy in realizing the sustainable development goals of SIDS cannot be over emphasized. SIDS are highly dependent on fossil fuels, with the majority spending in excess of 30 percent of their foreign exchange earnings, annually. Paradoxically, the vast renewable energy resources of SIDS remain largely undeveloped or under developed. Converting renewable energy resources into economic benefits, for SIDS, requires inter alia financial resources, human capacity and access to technology. Notwithstanding, SIDS continue to demonstrate tremendous leadership in harnessing their renewable energy potential, as this edition will demonstrate.

As a testimony, to the ongoing work and achievements, we have included in this Edition, contribution from IRENA, the OECS Commission, UNICEF, PCREEE, UNDP and the UAE which all showcase the many efforts to promote sustainable energy development in SIDS.

Mr. Sainivalati S. Navoti (Sai) Chief of SIDS Unit, UNDESA Editor-In-Chief

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Mr. Liu Zhenmin Under-Secretary-General for Economic and Social Affairs

Remarks High-Level Dinner Sustainable Renewable Energy at the Heart of SDGs

16 July 2018, New York



Your Excellency, President Remengesau of Palau, State Secretary of Norway, MP. Holte, Mr. Adnan Amin, Director-General of IRENA, Honorable Ministers, Distinguished Participants, Ladies and Gentlemen,

This is a momentous gathering on the occasion of the SDG 7 review at the High-Level Political Forum, the first critical milestone in taking stock of progress-to-date.

The message from the review of SDG 7 is clear: A transformative approach to energy lies at the heart of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change.

Access to clean, affordable and modern energy services is essential if we are to leave no one behind.

Clean energy transition can realize synergies between the 2030 Agenda and climate change. It reduces emissions, strengthens resilience and produces tremendous development benefits, from innovation to new jobs, from poverty reduction to empowered women.

I am very encouraged to see that renewable energy is acting as a catalyst and a force-multiplier for the implementation of SDGs.

Around the world, over half of the new power generation capacity now comes from renewable energy.

Off-grid renewable energy solutions are expanding rapidly in so many developing countries to provide access to energy services, including those in the last miles.

The opportunities ahead of us are enormous. We must seize them.

I commend the global leadership of IRENA in making the best knowledge and expertise available to steer all of us toward the right directions.

Ladies and gentlemen,

The momentum around renewable energy is enormous.

Still, it's not sufficient. The progress toward SDG 7 remains too slow to be on track to meet the global energy targets for 2030.

I urge all stakeholders to maintain the momentum and redouble your efforts on all your initiatives.

Partnerships that mobilize and share knowledge, expertise, technology and financial resources are indispensable to success.

We at UN DESA are committed to doing our part to make SDG 7 a reality.

To support the Global Conference on SDG 7 review, we have convened the multi-stakeholder SDG 7 Technical Advisory Group, which produced a set of 27 SDG 7 Policy Briefs. We will continue to strengthen our work with the group.

As the secretariat of UN-Energy, DESA will enhance its coordination and alignment within the UN system and beyond.

Together, let us continue our work to make SDG 7 a reality.

Thank you.

Section II. Articles on Energy





Islands Embrace a New Age of Energy

The SIDS Lighthouses Initiative coordinated by IRENA Has Supported Rapid Energy Transformation in Small Islands Developing States. Having Met Initial Targets Ahead of Time, the Initiative Now Looks to Raise its Ambition

Renewable energy presents a critical pathway to economic development, energy security and climate resilience for small island developing states (SIDS). It also serves as an enabler of long-term prosperity and stability for island countries that have, until now, relied heavily on expensive and often volatile fuel imports to meet domestic energy needs.

The pursuit of these objectives has fuelled rapid deployment of renewable energy on SIDS, who have become frontrunners in the energy transition. Their leadership and ambition serve as an example to the world. "Small island developing states have taken decisive action to harness their vast renewable energy potential to boost their energy security while unlocking substantial socioeconomic benefits and meeting long term climate objectives," said Mr. Adnan A. Amin, Director-General of the International Renewable Energy Agency (IRENA).

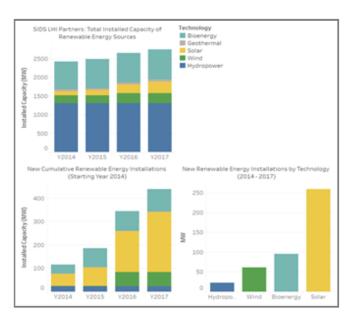
While the implementation of the Paris Climate Agreement fuelled early momentum, continued cost reductions and technology improvements now present an opportunity for SIDS to further accelerate this development. Since its very beginning, IRENA has worked closely with SIDS to support these efforts, with its SIDS Lighthouses Initiative (LHI), at the centre of this cooperation. Launched at the 2014 Climate Summit in New York, LHI has provided a global framework for the energy transition on islands from predominantly fossil-based power systems to renewable energy based ones.

It's aims were clear – to mobilise USD 500 million for renewable deployment and drive 120 MW of solar and wind capacity additions through partnerships with public, private, intergovernmental and non-governmental organisations. Adopting a holistic and strategic approach, LHI has facilitated island renewables development by analysing best practice to develop recommendations on the policies, market instruments and technologies necessary to accelerate the transformation, recognising that each island nation requires specific, tailor-made solutions and interventions.

Success, so far, has been remarkable. Installed capacity growth across SIDS has exceed 125 megawatts per year between 2014

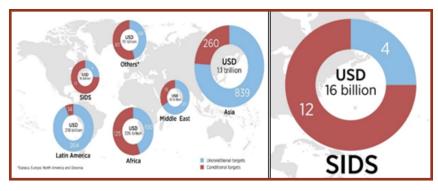
and 2017, and more than 400 MW of renewables have been deployed by the 36 SIDS partners alone in that time, attracting millions of dollars in investments. Solar and wind energy have led the growth accounting for 250 MW and 50 MW respectively, proving that the expansive coastlines and hours of sunshine islands often enjoy are more than just a blessing for tourism.

"The growth of renewable energy in SIDS has exceeded the initial targets established under the Lighthouses Initiative, showing what is possible when strong resource endowments, enabling frameworks and focused technical support meet government ambition," said Mr. Amin. "IRENA's global network of policy makers together with the LHI's 36 SIDS and 20 development partners represent a unique platform for the type of knowledge and best practice exchange so crucial to enable islands to accelerate renewables deployment."



Almost all islands have national renewable energy targets in place, and 13 SIDS partners of LHI aim for between 80 and 100 per cent renewable energy penetration. 10 aim for 100 per cent renewable energy in electricity generation – ambition that puts island nations imperilled by climate change at the forefront of the global energy transformation. In contribution to this ambition, LHI has facilitated access to funding and advisory services in support of roadmaps, policies, and grid stability studies, bringing together local policy makers, utilities, and other key actors to participate in capacity building and training programmes.





"SIDS progress has been encouraging, but it is just the beginning of a journey to long-term prosperity and energy independence," said Gurbuz Gonul, Acting Director for Country Support and Partnerships at IRENA. "To take the energy transformation on small islands to the next level there are several key challenges to address to ensure islands realise the full benefits of a new age of energy."

The need to strengthen knowledge capital is a central challenge. Variable renewable energy sources such as wind and solar require a more responsive and innovative approach to energy system planning and management and for that, stakeholders need exposure to new ideas and better management tools to develop the necessary skills.

Investment too is a challenge. IRENA's Quick scan analysis ¹ found that a lack of access to investment capacity is one of the most critical barriers to renewable energy deployment. IRENA estimates that around USD 16 billion will be needed by 2030, to meet the renewable energy targets set out by SIDS in Nationally Determined Contributions (see figure one).

At the same time, government funding is insufficient to achieve the level of renewable energy deployment envisioned and the frameworks to attract foreign direct investments into renewables are often not in place or ineffective. And with access to concessional finance proving challenging, more innovative financing mechanisms between public and private sectors are required to mobilise the necessary funding.

As investments begin to flow, key and specific areas of the energy transition should be targeted. End-use sectors, such as heating, cooling and transportation, all of which lag progress in the power sector, being critical. "Innovating to electrify end-use sectors is a fundamental component of the transition," confirmed Mr. Gonul.

Understanding the most appropriate technology mix can help accelerate end-use renewables in a cost-effect way. As higher shares of solar and wind are integrated into island grids, technologies such as geothermal,

ocean and bioenergy can decarbonise power, cooling and transportation systems whilst creating economic opportunities across the value chain. Information sharing and technical guidance can facilitate a committed effort to ramp up ambition – something the LHI is now focused on.

"The potential to do more, faster is clear and the benefits of doing so are central to sustainable economic development on many islands," said Gurbuz Gonul. "The consultation process to launch the next phase of our Lighthouses work remains ongoing but these critical elements will all be addressed."

Partnerships and international co-operation, through support and coordination with initiatives such as the Initiative for Renewable Island Energy (IRIE), the Climate Vulnerable Forum (CVF) and SIDS DOCK can play a key role in bringing together actors focused on achieving interrelated energy, development and climate goals on islands. And with IRENA's LHI in the process of adjusting its focus in preparation for the launch of its next phase, the initiative will be better positioned to support the bold ambition and leadership of SIDS in the transition to a sustainable energy future.

For further information on the SIDS Lighthouses Initiative, please visit: http://islands.irena.org



 $^{^{1}}$ Report available at: http://www.irena.org/publications/2017/Nov/SIDS-Lighthouses-quickscan-Interim-report

Supporting Energy Resilience in the Caribbean through Renewable Energy

Introduction

Energy is a critical input for growth and development. Significant efforts are therefore being invested in finding sustainable energy solutions that meet the growing energy demand and simultaneously address global warming. The drive for renewable energy has remained strong, despite the recent fall in oil prices, demonstrating an increased appreciation of its advantages for economic, social and physical development. For the small developing islands (SIDS) of the OECS, finding the optimum energy mix is a priority given their dependence on imported energy. Imported energy accounts for as much as 30 % of the islands' Gross Domestic Product (GDP) with negative implications for growth and competitiveness. Successful development of renewable energy could serve to increase energy security, reduce energy imports and reduce energy prices. Furthermore, renewable energy can help support resilience building efforts in the face of climate change.

Hurricanes are a common annual phenomenon for the Caribbean. The potential damage and destruction wrought by such events can have widespread and long-lasting effects on the environment, people and economies of the region. Within less than 24 hours, development gains made over decades and assets valued at billions, could be lost. This includes electricity and critical infrastructure which are essential to the recovery efforts following a disaster. With the anticipated effects of climate change, the frequency and intensity of hurricanes are expected to increase. This further underscores the need to build resilience into the energy systems of SIDS of the Organisation of Eastern Caribbean States (OECS).

The passage of the 2017 hurricane season highlighted the need for resilient energy infrastructure. Until recently, some parts of the islands most affected by the hurricanes Irma and Maria, including Dominica and Puerto Rico, were still without power, affecting the quality of life for residents. Resilience in its broadest sense refers to strengthening the ability

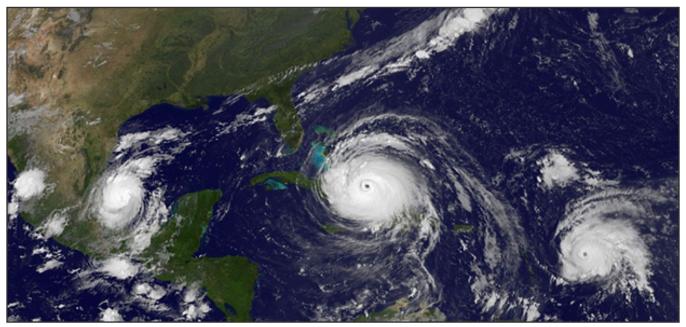


Figure 1: Hurricanes Katia and Irma and Tropical Storm Jose (from left to right) on September 8, 2017 Source: http://www.noaa.gov/media-release/extremely-active-2017-atlantic-hurricane-season-finally-ends



of human and non-human systems to withstand and respond to changes. From a climate change perspective, it can be thought of as a way to bridge the conceptual divide between mitigation and adaptation approaches to climate change. Renewable energy can support mitigation and resilience efforts by helping reduce the overall greenhouse gas emissions from the region, particularly from the electricity and transportation sectors. Renewable energy supports adaptation resilience by strengthening of the energy infrastructure to withstand the impacts of climate change and to ensure a reliable supply of energy for the functioning of services. Capitalising on the economic advantages offered by renewable energy will also help build resilience in the economic sectors of the region and amongst the various socioeconomic groups.

Solar Energy in the Caribbean

The use of solar energy is growing in the Caribbean, especially due to the falling global prices and the introduction of more conducive regulatory conditions which encourage self- generation and the entry of independent power producers. Today, solar energy is perhaps the most rapidly growing source of power for many Caribbean islands. Currently over half of Caribbean electric utilities already own or operate solar photovoltaic (PV) as part of their generation mix. In addition, there is at least 225 megawatts (MW) of solar installed across rooftops, parking canopies, and large tracts of land in the region. Solar energy is certainly a viable option for the region, given its high level of irradiance. Nevertheless, a key consideration for the region is the ability of PV panels to withstand the expected increase in hurricane intensity and frequency. This points to the need to ensure that the design and construction of solar systems in the region are robust enough to help them withstand wind forces of category 4 and 5 hurricanes.

Geothermal Energy

If the region is to experience significant contributions

of renewable energy to the electricity sector, efforts must include geothermal energy development. The Eastern Caribbean is an archipelago consisting of several volcanic islands who are currently pursuing this energy source. Although the global contribution of geothermal energy is comparatively low and well below its potential, it presents several advantages over the other technologies. Geothermal energy has the distinction of having high availability, and can be delivered 24 hours a day, 365 days a year. Geothermal energy plants can also operate continuously at up to 98% capacity because they have a constant source of "fuel" and require little downtime for maintenance. The development of geothermal energy in this region could help to build the resilience of the energy supply as geothermal plants are less likely to be impacted by strong winds and do not rely on an imported fuel source.

Renewable Energy and Economic Resilience

A major challenge to the economic development of SIDS is the high cost of energy which has ripple effects on the prices of goods and services. Amongst the key objectives of renewable projects in the region, is the reduction of electricity tariffs to fuel economic activity and allow small business to withstand external shocks. Hence, the successful incorporation of renewable energy into the productive sectors will build economic resilience and strengthen our revenue generating capacity. The tourism sector is currently the main contributor growth in our islands and presently, energy costs are second only to salaries in the hotel sector in the Eastern Caribbean. Renewable energy could therefore help reduce the operating costs within this sector, allowing for a more competitive product. Renewable energy can also support tourism by allowing access to 'greener' markets, helping to attract additional customers. Renewable energy can also assist other key economic sectors such as agriculture and manufacturing in similar ways.



Renewable Energy as an Adaptation Measure

Usually, renewable energy has been considered as a purely mitigation measure. However, it must now be considered in the context of adaptation, since in many instances it can be more resilient than conventional energy infrastructure in face of climate impacts. Decentralised PV systems for example, can provide energy in locations where the grid has been destroyed by hurricanes. Such systems can form part of a microgrid, helping to restore power in a much shorter time frame than is required for restoration of the entire grid. Small standalone renewable energy systems can easily be installed on schools and hospitals, allowing these critical institutions to continue to function in times of disaster. Further, incorporating storage into such systems makes them even more robust.

Conclusion

Given the unique energy challenges facing Caribbean SIDS, renewable energy, with its many, and growing opportunities, can no longer be considered a mere option, but rather, a vital ingredient for energy resilience in the OECS. A new and heightened sense of awareness of energy production, distribution and consumption will therefore contribute to both climate and economic resilience for small island states.

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Pacific Island Countries Work Together For A Sustainable Energy Future



Samoa Pathway Mid Term Review MTR - Tonga

Island countries in the Pacific face very specific challenges when it comes to energy security. With a limited supply of domestic fossil fuels, they have historically depended on imported fuels like diesel for their electricity production and transportation. Add the region's remoteness and size to that scenario and the result is little access to electricity, high energy prices and global warming.

Fortunately, Pacific island countries are now committed to promote the adoption of renewable energy and energy efficiency in the region. In 2017, Pacific Energy Ministers launched the Pacific Centre for Renewable Energy and Energy Efficiency (PCREEE) to boost efforts to increase access to energy which is cheaper, more reliable and better for the environment. With a special focus on entrepreneurship and the private sector, PCREEE has the technical support of the United Nations Industrial Development Organization (UNIDO) and is funded by the Government of Austria and the Republic of Korea.

Tareq Emtairah, Director of UNIDO's Department of Energy, said, "More than just increased access to electricity, we want to see localized value chains and businesses contributing to

sustainable energy transitions in the region."

"Access to renewable energy will generate income, create jobs and help local economies to grow," added Martin Lugmayr, UNIDO Sustainable Energy Expert.

Founded little over a year ago, the PCREEE acts on four fronts. It offers policy advice, shares knowledge and raises awareness on renewable energy and energy efficiency technologies, offers capacity development services, and fosters investment and entrepreneurship in the sector.

"Addressing the lack of enabling policies on renewable energy technologies is essential. Clear rules make the market more predictable, reduce risks and encourage investment," said Solomone Fifita, Manager of PCREEE. "We have been helping countries develop plans which are realistic, practical and affordable. They must make a difference and have measurable impact. Otherwise, a plan is just another document," he added.

Another problem PCREEE addresses is the lack of access to information. The centre gathers knowledge on existing



policies, laws, stakeholders, prices, generation costs, resources, investments, energy efficiency measures and potential project sites.

"Information is essential for investors and project developers to decide what to do and where," added Fifita.

Increased investment in renewable energy technologies raises the demand for a highly qualified workforce. The Centre fills this gap by offering training which teaches, amongst other things, how professionals from non-energy sectors like agriculture, health, water and transport, can integrate renewable energy components into their sectors.

"In line with our knowledge-sharing initiatives, we also recently started a fund to support university students conduct research related to sustainable energy in the region," said Fifita.

The Centre works with entrepreneurs as well. Through its entrepreneurship support facility, PCREEE helps new businesses in sustainable energy get started. It offers technical assistance like market studies, packaging of loan proposals and preparing tenders. It also offers business mentoring by established sister businesses in the region.

"Small and medium size enterprises are extremely important as they are often responsible for bringing new technologies to the market but can only thrive with adequate access to information and finance," added Fifita.

The Centre acts as a facilitator and is already building strong partnerships in the region. By bringing actors from public and private sectors together it seeks to increase cooperation and encourage the adoption of renewable energy and energy efficiency in the Pacific Community (SPC).

"Access to clean, modern and affordable energy services is essential for a healthy and thriving economy," added Emtairah. PCREEE is part of a broader initiative coordinated by UNIDO, the Global Network of Regional Sustainable Energy Centres which promotes the adoption of renewable energy and energy efficiency technologies across the globe. Under an international framework called SIDS DOCK, which assists Small Islands Developing States (SIDS) transform their energy systems, PCREEE also closely cooperates with the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) and the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE).





UAE Expands Renewables Partnership from Pacific to Caribbean

The \$50 million United Arab Emirates-Caribbean Renewable Energy Fund is set to break ground on the first cycle of its US\$50 million renewable energy development projects in the Bahamas, Barbados and Saint Vincent and the Grenadines. The Fund, one of the largest-ever single grant investments in the region's clean energy sector, follows the implementation of solar and wind projects in 11 Pacific countries under the \$50 million grant UAE-Pacific Partnership Fund. Both funds aim to deploy renewable energy projects to help reduce energy costs, normalize renewable technologies in the market, and support achievement of SDG7. Following the 2017 Atlantic hurricane season, the Caribbean Fund was also refocused to improve the climate resiliency of power systems.

The first cycle of the Caribbean Fund includes solar photovoltaic (PV) installations with a total capacity of 2.35 megawatts, along with battery systems and electric vehicle (EV) charging stations across the three island nations, all designed to withstand hurricane-force winds. The projects are scheduled to come on stream by the final quarter of 2018 and will result in a diesel fuel saving of 895,000 litres per year, which will in turn displace over 2.6 million tonnes of carbon dioxide per year.

Concurrently, the Caribbean Fund is working with Antigua and Barbuda and Dominica to finalize the designs of projects that were upended by the hurricanes. The project on Antigua and Barbuda will deliver a solar-battery solution as an anchor of the new power system, while the Dominican project will provide a major battery solution in support of the island's existing hydropower and forthcoming geothermal project.

The Caribbean Fund also announced a second cycle of projects in January 2018, which includes Belize, the Dominican Republic, Grenada, Guyana, Haiti, St Kitts and Nevis, and St Lucia. The Fund is currently working with the government to identify or finalize projects, which include a significant focus on bringing electricity to off-grid communities for the first time.

The Caribbean Fund was inspired by the \$50 million UAE-Pacific Partnership Fund, the projects of which were often the first large-scale renewable energy generation in the countries. The projects collectively save over \$3.7 million in fuel costs annually. Both funds represent a partnership between the UAE Ministry of Foreign Affairs and International Cooperation, Abu Dhabi Fund for Development (ADFD), and Masdar. Projects are competitively and internationally tendered and transferred to a government-specified owner/operator upon completion.

The funds also build on the UAE's extensive cooperation with other SIDS in renewable energy, including the Seychelles, as well as the Maldives, Cabo Verde, and Mauritius under the IRENA-ADFD Project Facility.



Energy and Children in Guyana: Challenges and Prospects



Introduction

In 2018, UNICEF conducted a study on Climate Landscape for Children (CLAC) using a mixed methods approach consisting of a review of relevant documents that focus on children, national policies, strategies and action plans; and 'face to face' semistructured interviews with twenty-one stakeholder agencies. Such an approach allowed for assessment of several issues: the Climate, Environment and Energy (CEE) Situation in the Country; Institutional mapping: Government responses to/priorities on CEE; The impact of climate, environment and energy issues on children; Child-Inclusive CEE policies, strategies and programming; The UNICEF Country Programme and linkages to CEE; and Recommendations for future workplans.

This article focuses on access to affordable, reliable, sustainable and modern energy in Guyana. Undoubtedly, energy is an

important input for health, education, food production, transportation, job creation, community development and poverty alleviation. Moreover, the lack of energy services in hinterland areas disrupts the provision of health care, emergency services, water and other critical infrastructure that have major implications for children.

Background: The Context

Guyana, a country with a total territory of 214,970 square kilometres (km²), is bordered by the Atlantic Ocean on the north, Suriname in the east, Venezuela in the west, and Brazil in the west and south. The country, which has less than one million inhabitants, with children representing approximately 36 per cent of the total population, is particularly known for its forests cover of approximately 80 percent of the land, rich biodiversity, productive coastal soils, minerals including gold and diamond, as well as its numerous rivers, streams, creeks and waterfalls.



In 2006, 33.7 per cent of people aged 16-25 were under the poverty line, almost 10 points more than people older than 41 (24 per cent under the poverty line) (Ministry of Finance, 2011). Notably, in the 2016 UNDP Human Development Report, Guyana is ranked in position of 127 out 188 countries, with a HDI value of 0.638. Despite the fact that the latest value shows an improvement of 0.87 per cent when compared to the value in 2000, the country has been stagnated in the same ranking position since 2008...... Poverty in Guyana has a child's face.

Energy Access in Guyana

In 2010, Guyana imported and consumed more than 4 million barrels of petroleum products, with estimates indicating increases at an average rate of 7 per cent annually.

There are stark differences with regard to energy supply in coastal regions and interior regions of Guyana: The current energy situation in the interior communities is characterized by the fact that public infrastructure is weak and in most cases there is usually no power grid existing to distribute electricity among public services, households or businesses. In larger communities or in vicinity to villages or towns, electricity supply and distribution grids are more common. However, supply is in most cases ensured for a maximum of several hours a day (for example, 3-4 hours in the evening).

The impact of Energy on children in Guyana

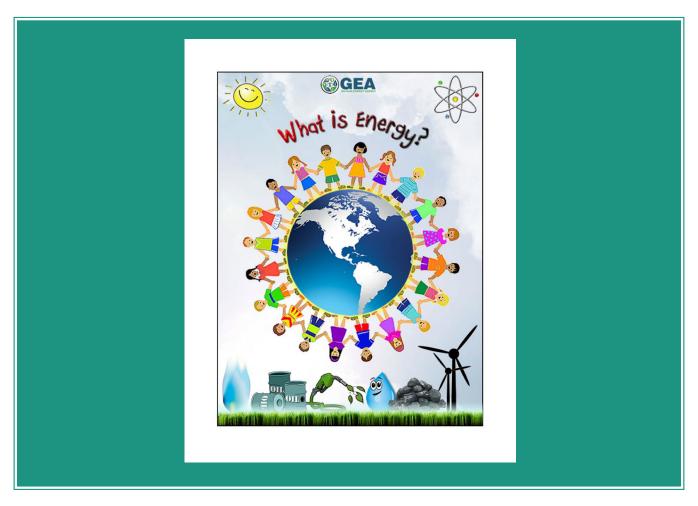
Children, particularly those in hinterland and rural communities, lack sufficient access to energy services: for instance, reliable electricity supply to study at nights or use ICT. In other cases, children may be required to search and collect firewood as part of their household chores which can be burdensome and time consuming. Also, the homes that use firewood for cooking are exposed to particulate matter (soot or smoke) and high concentrations can lead to respiratory problems, allergies, and asthma. These have two major effects on our children; carbon monoxide poisoning/exposure and interrupting of social services that require power (for example, schools). Further, energy costs also prevent poor families from accessing the service due to the issue of affordability: The monthly expenses for electricity amount on average to about USD30 and for

cooking to approximately USD25 per household and month in the communities which are close to larger towns and between USD25 and USD45 per household and month in remote communities (ConPlusUltra, 2012). This implies that at specific hours of the day, some families have no power for use; Wi-Fi for research, power to iron clothes necessary for school, as well as fuel supply for cooking purposes.

Lack of a reliable power supply also affects school children's ability to study and engage in other important extra-curricular activities. Although street lights can be found along the main access roads, they are not usually available along the streets leading to them. This can be dangerous for children and young adults returning home from lessons and other extracurricular activities; especially around year end since it gets darker as the sun sets earlier. This prevents children from attending extra lessons that increase their capacity to fully grasp concepts taught at school to fulfil their academic pursuits, since parents often advise them to return early to their homes perceived as being safer. Consequently, many children lack education beyond the primary level and are hardly involved in extra-curricular activities critical to the devleopment of their psycho-motor skills, memory and, ultimately their improved social development.

Government of Guyana Response

Guyana's Nationally Determined Contributions under the Paris Agreement Framework indicate that the country's dependence on fossil fuels for energy generation will be reduced by achieving close to 100% 'renewables' by 2025, through a diversified renewable energy infrastructure including biomass, solar, wind and hydropower. Further, the National Energy Policy (2016) provides the basis for planning and implementation of renewable energy and energy efficiency programmes and projects, with the aim to increase access to reliable, clean, and affordable energy services that serve the basic needs and demands of the population. The goal of the Government of Guyana is to: expand and improve its programmes in rural electrification with an emphasis on micro-grids, solar photovoltaic systems with batteries, run-of-river and river dam hydro, and hybrid renewable energy systems using photovoltaic or wind with biodiesel and other biofuels; and explore new and proven methodologies for financing of rural electrification, in order to enhance social and economic activity and quality of life at the least economic and environmental cost.



UNICEF Response

The UNICEF Country Office is committed to continue working with the Government and other development institutions to address the issue regarding children and their access to energy services in Guyana. Specifically, the Country Office will meet with the Guyana Energy Agency to discuss their strategic plans and areas of synergies with UNICEF's 2018 Plan, with a view to fostering greater partnership for better results for children including awareness in mainstreaming child sensitive programmes in the energy sector; initiatives that allow the voices of children to be heard on matters pertaining to energy security; and design of child-friendly infrastructure..

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Children in Georgetown, Guyana learn about solar energy during an exhibition. (Credit: CREDP)

Source: http://www.caribbean360.com/opinion/richard-schiffman-a-clean-energy-revolution-on-the-front-lines-of-climate-change

The Most Renewable Resource? Knowledge!

"Six ways in which the Aruba Centre of Excellence for SIDS has made knowledge flow in sustainable energy"

The <u>Aruba Centre of Excellence (COE) for SIDS</u> – a UNDP initiative – has quite a knowledge challenge: it aims to <u>help all SIDS across all SDGs</u>. However, demand from SIDS policy-makers has surfaced some obvious topics more than others: sustainable tourism, marine biodiversity, waste management, access to finance, and renewable energy. Yes, SDGs should always be considered in combination, but it seems that for SIDS some SDGs – like SDG 7 on energy – are more equal than others.

Hence, in COE's short history, SDG7 has been one of the focus areas as it fosters knowledge capture and sharing between SIDS. Hundreds of professionals from SIDS from around the world have benefited from these knowledge exchanges (see 6 examples below). One thing has become apparent: there is a clear need among energy practitioners and policy-makers from SIDS to be able to access good practices with 'how-to' knowledge' from other SIDS. Below are listed 6 key knowledge activities of the COE that aim to address this need, including links to corresponding resources. We hope you can benefit from this existing knowledge and leverage them for your own energy challenges. Feel free to reach out to the COE team for more information or to explore opportunities for collaboration; as you will notice we develop all our knowledge activities in partnership with others.

I. Workshop: Roadmaps for Sustainable Energy

This workshop was supported by <u>IRENA</u> and facilitated by renewable energy experts from <u>TNO Caribbean</u> and addressed the key challenges and opportunities of sustainable energy in an island context. 26 policymakers from SIDS from around the world participated in this 3 day workshop that underlined the need to create a roadmap for the energy transition. Find the presentation here.



II. Online Course: Sustainable Energy for SIDS Policy-makers

A 5-week online course was developed in collaboration with Hamburg University of Applied Sciences in which close to 400 learners participated, from government, academia, private sector and NGOs. The lively online discussions and cases presented by participants were at least as insightful as the curriculum itself. It underlined the value of eLearning platforms to connect geographically dispersed participants with similar challenges. Find the learning platform here.



III. Hackathon: Ideas for Building Back Better

After the devastating hurricanes of 2017 in the Caribbean, the COE together with EY Caribbean organized a hackathon in St.Maarten to surface ideas from the community to build back better. In the end 21 teams produced innovative ideas for a more resilient island future, of which 7 had a strong renewable energy component, like resilient housing with integrated solar power. The event underlined how important it is to give all of society's stakeholders a voice and confirmed that renewable energy is a prerequisite for a resilient island. Find the debrief document with the ideas here.



IV. Community session: Putting Energy Knowledge in Motion

Together with the renewable energy community <u>CAREC</u>, the COE organized a gathering of the Caribbean energy community with a specific focus on the knowledge needs of renewable energy professionals. Based on discussions and mobile polling, their key needs surfaced: a one-stop online shop for the latest renewable energy trends, a mechanism for sharing best practices, and more face-to-face meeting opportunities. Find more information on the community <u>here</u>.



V. Technical Assistance: Energy Missions to SIDS

The COE has offered several technical assistance missions with the objective of supporting SIDS policy-makers on the ground in developing renewable energy roadmaps. They are carried out by TNO Caribbean. For example, energy-related missions were held in Jamaica, Seychelles and Vanuatu. Across all SIDS involved, the common insight was that without an inclusive multistakeholder approach a successful energy transition is extremely challenging at the least. Read a corresponding article here.





VI. Case Study: Multi-stakeholder Engagement Approach for Energy Transition

Together with the Government of Aruba, the COE analysed how the country was managing its ambitious energy transition to ensure renewable energy would be the dominant source of energy for the future. It not only underlines Aruba's commitment to sustainable development, but also its willingness to share its experiences along the way. A key insight that surfaced was that progress only really got underway when diverse stakeholders – especially policy-makers, politicians and engineers – sat at the same table and came to a common understanding of both vision and implementation. Find the case study here.

Even though the 6 knowledge sharing mechanisms varied - from in-person to online, from on the ground to conference rooms, from broad to specific - some common themes appeared as the COE looked for good practices in sustainable energy for SIDS:

- Limited economies of scale and central resources means island-island cooperation is imperative.
- Inclusive multi-stakeholder approaches are a prerequisite to successful energy projects.
- Renewable energy is a key component of more sustainable, resilient future for SIDS.
- Preferences for knowledge sharing mechanisms vary, hence a combined approach is advised.

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Innovation Lab on E-Mobility Powered by Renewables (Elmo Lab) in the Caribbean



Background

The integration of renewable energy and e-mobility holds real opportunities for developing and emerging economies to leap-frog towards low-emission transport systems. But what is necessary to fast-track this development? Are we able to develop solutions that are viable in developing economies already today?

To explore these questions with a motivated team from various backgrounds, the German Agency for International Cooperation GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) formed an internal E-Mobility Group and gathered with external experts from various fields to create the "Elmo Future Labs: City and Island Mobility Powered by Renewables".

A more recent focus is on Small Island Development States (SIDS) as they are particularly threatened by climate change and are highly exposed to foreign exchange risks due to imported fuels. Thus, they have a strong interest in advancing the

energy and mobility transition equally. Short distances on the majority of the SIDS reduce requirements regarding the range of transport means and increase the practicability of electric vehicles (EVs). Additionally, it is in the islands' interest to use their own renewable energy sources to decrease the costs for expensive imported fuel, to preserve natural resources and to limit water and air pollution.

This regional prioritization of the opportunity for coupling of the power and transport sectors with utilization of indigenous renewable energy resources fits clearly within the CARICOM Regional Energy Policy and the Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS).

Elmo Lab in Frankfurt

In September 2017, more than 20 experts from Germany and across different professions gathered at a two-day innovation lab – the Elmo Lab – in Frankfurt, Germany. The aim was to explore and develop innovative concepts for real-world cases





Devon Gardner from CARICOM Energy welcoming the participants

and to connect with other experts from industry, research institutes, government and development agencies. GIZ initiated this lab because of growing demand from partner countries all over the world to combine the transport and energy sectoral approaches and put them to live.

The Elmo Lab looked, among others, at two Caribbean islands: Barbados and St. Vincent and the Grenadines. Case presenters showcased main challenges in their countries and acted as valuable resource persons during the lab.

Combining the transport and energy sector is essential as motorized transport in the future will be powered by electricity to a large extent, and the power of the future will be generated by wind, water, sun and biomass – supplied through grids, smart enough to match supply and demand. This is even more likely to hold true for emerging economies – especially the SIDS – than for developed economies due to the macro-economic benefits of utilizing domestic energy resources rather than more risky and expensive imported fuels. The island cases also allow for integrated whole-system concepts due to their size, the low level of interconnectedness and the very high costs of final energy and mobility services.

Elmo Lab in Barbados

To utilize and adapt the insights gained during the Elmo Lab in Frankfurt and responding to the level on interest and enthusiasm in the Caribbean, the next step was to take challenges and

possible solutions into the regions. The Practitioners' Lab & Exposition, which took place from 20th-22nd June 2018 in Bridgetown, Barbados, marked the start of this initiative.

The Elmo Lab brought together regional leaders and pioneers to develop integrated energy projects – combining the sectors of renewable energy and e-mobility – in order to mitigate the risks of foreign energy dependency and climate change, as well as to stimulate the economies in the region. The lab was organized by CARICOM Energy and GIZ (through the headquarters and the Renewable Energy and Energy Efficiency Technical Assistance (REETA) project).

Further, it was supported by the CARICOM Electric Vehicle Working Group (EVWG). This group aims to provide a forum for the Caribbean through which leading national governments, institutions and industry players share experiences and good practices on EV use and performance within the region. The expectation is that the information and analytics that emerge from the group will serve as a guide towards the development of EV policies and strategies within CARICOM, aiming at a regional roadmap on e-mobility and by that supporting the agreed energy goals and benchmarks of the Caribbean Community.

GIZ is supporting the EVWG through the collaborative partnership between the Government of Germany and CARICOM by providing technical advice and connecting the Caribbean stakeholders with experts from Germany and partner countries around the globe. The Elmo Lab in Barbados therefore was of



high value to bring strategies into practice by developing realcase projects.

Approach and Participants

In the event, more than 60 experts and representatives from government, utilities, research, transportation, financing and other sectors gathered to create innovative solutions utilizing their diverse perspectives. Among the participants were representatives from fourteen CARICOM Member States and two Associate Member States as well as regional and international organizations. Furthermore, German institutions and companies

gave insights into their latest products and services.

As the lab followed a human-centered design, it led participants from exploration of the current challenges to the development, testing and iteration of concrete solutions and to finally drafting an action plan and next steps.

Participants of the lab were inspired by inputs of international and regional experts from industry and science, e.g. Daimler, Deutsche Post DHL, IFEU Institute for Energy and Environmental Research, Megapower and Xergy Energy. All expert presentations can be accessed through the CARICOM Energy website.

The lab was opened by the Minister for Energy and Water Resources from Barbados, who expressed his dedication for clean energy and transport solutions. His Government's long-term plans are aimed at making Barbados "the first small island developing state in the world to become a 100% green economy by the year 2030". It also emerged that public transport should be a priority for electrification in the region so that the majority of inhabitants benefit from available technologies and opportunities.



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Results and Outlook

Following the identification of key challenges and main stakeholders the group split into eight sub-groups, consisting of participants from different countries and professional backgrounds. Each group was responsible to develop a solution to one of the different challenges identified in the lab. To see how other islands already found solutions for similar challenges was an important step of sharing knowledge and get practical guidance from peers in the region.

The developed solutions include regulatory issues, fleet renewal concepts, training and assembling centers, grid integration of EVs, access to financing options, new market opportunities for utilities, etc. These approaches will feed into a framework for the e-mobility roadmap design and possible flagship projects within the region. According to the very positive feedback from the participants as well as the political partner, the lab was very successful: next steps are putting the developed solutions into practice and connecting with interested stakeholders for further detailing and investment.

The lab was also followed by a public Electric Vehicle Technology Expo on the premises of the Regional University of the West Indies in Barbados. The lab participants as well as the general public could learn about EV designs, charging technologies, battery technology, etc. Many Barbadians, among others the transport minister and the energy minister, took the opportunity to test drive one of the many different EVs which were displayed. Moreover, regional pioneers presented their experiences from ongoing e-mobility projects.

Photos (©GIZ)

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Section III Recent Events

Resolution on the "Modalities for the High-Level Review of the SAMOA Pathway resolution" adopted

The UNGA has adopted the resolution A/RES/72/307 on the "Modalities for the 2019 high-level review of the SAMOA Pathway." The review will provide the international community with an opportunity to conduct a thorough assessment of the progress made, lessons learned and constraints encountered in the implementation of the SIDS Accelerated Modalities of Action (SAMOA) Pathway and to agree on what needs to be done to further address the vulnerabilities of small island developing States. The Resolution stipulates that the High-level Review will (i) be structured around an opening plenary meeting, followed by two multi-stakeholder round-table sessions, with time provided for an interactive dialogue and a closing plenary meeting and (ii) be chaired by the President of the General Assembly. The President of the General Assembly will designate two Co-Chairs, one from a small island developing State and one from a developed country, to facilitate intergovernmental consultations, which will result in a concise, action-oriented and inter-governmentally agreed political declaration as the outcome of the high-level review, based on, inter alia, inputs from the preparatory meetings.

2018 HLPF -Presentation of Voluntary National Review of the SIDS and Thematic Review from SIDS perspective.

7 SIDS made their VNR presentations during this year's HLPF (Bahamas, Carbo Verde, Dominican Republic, Jamaica, Kiribati and Singapore). In 2019 another of 8 SIDS (Fiji, Mauritius, Nauru, Palau, Saint Lucia, Timor-Leste, Tonga, Vanuatu) have indicated their intent to present their VNR during the HLPF. By next year, approximately half of the SIDS will have presented their VNRs at least once during the HLPF. The main messages for the 2018 SIDS VNRs can be found at "Compilation of main messages for the 2018 voluntary national reviews", document E/HLPF/2018/5 and the presentations are available on the sustainable development knowledge platform.

This year's discussions in the SIDS thematic review, examined

the issue of building island and community resilience through the water and sustainable energy lens, and took place on 11 July 2018; 9-11am. The session was moderated by H.E. Ms. H. Elizabeth Thompson, Permanent Representative of Barbados to the UN, and a former Minister for Energy and Environment of Barbados. The panelists were Hon. Alexander Teabo, Minister for Environment, Lands and Agriculture Development of Kiribati, Ms. Tessa Williams-Robertson, Head of Renewable Energy/Energy Efficiency Unit, Caribbean Development Bank, Mr. Adrianus Tvlugman, Senior Advisor, Water Sanitation, Environmental Health, PAHO & WHO. Lead discussants were Ms. Rhonda Robinson, Deputy Director, Water and Sanitation, Secretariat of the Pacific Community and Ms. Addys Claribel Then Marte, Executive Director of Alianza ONG(Volunteers). More information on this session can be found at https://sustainabledevelopment.un.org/ index.php?page=view&type=20000&nr=4142&menu=2993 where statements and presentation made are also available. https://www.ccreee.org/

Caribbean SIDS Regional Preparatory Meeting for the mid-term review of the SAMOA Pathway

The Caribbean SIDS Regional Preparatory Meeting for the midterm review of the SAMOA Pathway was held in San Pedro, Belize from 7-9 August. With the participation of Senior Government officials from the Caribbean, including Belize's Prime Minister, the meeting provided an opportunity for the Caribbean SIDS to assess their implementation of the SAMOA Pathway, identify gaps and challenges as well as discuss the means to further enhance efforts to realize their sustainable development priorities. The meeting resulted in an outcome document, "San Pedro Declaration" and a regional report which will inform the SIDS Interregional Preparatory Meeting. More information on the Caribbean regional meeting as well as on the two other previous regional meetings that took place, namely the Pacific Regional Preparatory meeting (Tonga, 19-20 June 2018) and AIMS Regional Preparatory Meeting (23-25 May, 2018) as well as the respective outcome document and report can be accessed at the following link: https://sustainabledevelopment.un.org/ sids/samoareview

Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C approved by governments

"Limiting warming to 1.5°C is possible within the laws of chemistry and physics but doing so would require unprecedented changes," said Jim Skea, Co-Chair of IPCC Working Group III.

October 8 – Limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society, the IPCC said in a new assessment. With clear benefits to people and natural ecosystems, limiting global warming to 1.5°C compared to 2°C could go hand in hand with ensuring a more sustainable and equitable society, the Intergovernmental Panel on Climate Change (IPCC) said on Monday.

The Special Report on Global Warming of 1.5°C was approved by the IPCC on Saturday in Incheon, Republic of Korea. It will be a key scientific input into the Katowice Climate Change Conference in Poland in December, when governments review the Paris Agreement to tackle climate change.

"With more than 6,000 scientific references cited and the dedicated contribution of thousands of expert and government reviewers worldwide, this important report testifies to the breadth and policy relevance of the IPCC," said Hoesung Lee, Chair of the IPCC.

Ninety-one authors and review editors from 40 countries prepared the IPCC report in response to an invitation from the United Nations Framework Convention on Climate Change (UNFCCC) when it adopted the Paris Agreement in 2015.

The report's full name is Global Warming of 1.5°C, an IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

"One of the key messages that comes out very strongly from this report is that we are already seeing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes," said

Panmao Zhai, Co-Chair of IPCC Working Group I.

The report highlights a number of climate change impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C, or more. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C. Coral reefs would decline by 70-90 percent with global warming of 1.5°C, whereas virtually all (> 99 percent) would be lost with 2°C.

"Every extra bit of warming matters, especially since warming of 1.5°C or higher increases the risk associated with long-lasting or irreversible changes, such as the loss of some ecosystems," said Hans-Otto Pörtner, Co-Chair of IPCC Working Group II.

Limiting global warming would also give people and ecosystems more room to adapt and remain below relevant risk thresholds, added Pörtner. The report also examines pathways available to limit warming to 1.5°C, what it would take to achieve them and what the consequences could be. "The good news is that some of the kinds of actions that would be needed to limit global warming to 1.5°C are already underway around the world, but they would need to accelerate," said Valerie Masson-Delmotte, Co-Chair of Working Group I.

The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO2) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050. This means that any remaining emissions would need to be balanced by removing CO2 from the air.

"Limiting warming to 1.5°C is possible within the laws of

chemistry and physics but doing so would require unprecedented changes," said Jim Skea, Co-Chair of IPCC Working Group III.

Allowing the global temperature to temporarily exceed or 'overshoot' 1.5°C would mean a greater reliance on techniques that remove CO2 from the air to return global temperature to below 1.5°C by 2100. The effectiveness of such techniques are unproven at large scale and some may carry significant risks for sustainable development, the report notes.

"Limiting global warming to 1.5°C compared with 2°C would reduce challenging impacts on ecosystems, human health and well-being, making it easier to achieve the United Nations Sustainable Development Goals," said Priyardarshi Shukla, Co-Chair of IPCC Working Group III.

The decisions we make today are critical in ensuring a safe and sustainable world for everyone, both now and in the future, said Debra Roberts, Co-Chair of IPCC Working Group II.

"This report gives policymakers and practitioners the information they need to make decisions that tackle climate change while considering local context and people's needs. The next few years are probably the most important in our history," she said.

The IPCC is the leading world body for assessing the science related to climate change, its impacts and potential future risks, and possible response options.

The report was prepared under the scientific leadership of all three IPCC working groups. Working Group I assesses the physical science basis of climate change; Working Group II addresses impacts, adaptation and vulnerability; and Working Group III deals with the mitigation of climate change.

The Paris Agreement adopted by 195 nations at the 21st Conference of the Parties to the UNFCCC in December 2015 included the aim of strengthening the global response to the threat of climate change by "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels."

As part of the decision to adopt the Paris Agreement, the IPCC

was invited to produce, in 2018, a Special Report on global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways. The IPCC accepted the invitation, adding that the Special Report would look at these issues in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

Global Warming of 1.5°C is the first in a series of Special Reports to be produced in the IPCC's Sixth Assessment Cycle. Next year the IPCC will release the Special Report on the Ocean and Cryosphere in a Changing Climate, and Climate Change and Land, which looks at how climate change affects land use.

The Summary for Policymakers (SPM) presents the key findings of the Special Report, based on the assessment of the available scientific, technical and socio-economic literature relevant to global warming of 1.5°C.

The Summary for Policymakers of the Special Report on Global Warming of 1.5°C (SR15) is available at https://www.ipcc.ch/report/sr15 or www.ipcc.ch.

Key statistics of the Special Report on Global Warming of 1.5°C

91 authors from 44 citizenships and 40 countries of residence

- 14 Coordinating Lead Authors (CLAs)
- 60 Lead authors (LAs)
- 17 Review Editors (REs)

133 Contributing authors (CAs)

Over 6,000 cited references

A total of 42,001 expert and government review comments (First Order Draft 12,895; Second Order Draft 25,476; Final Government Draft: 3,630)

For more information, contact: IPCC Press Office, Email: ipcc-media@wmo.int Werani Zabula +41 79 108 3157 or Nina Peeva +41 79 516 7068



First IGC on International Legally Binding Instrument under UNCLOS on the Conversation and Sustainable Use of Marine Biological Diversity of Areas of BBNJ



Credit: IISD PHOTO

The first session of the Intergovernmental Conference (IGC) on an international legally binding instrument under the UN Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction (BBNJ) convened from 4-17 September 2018, at UN Headquarters in New York. Delegates considered a document prepared by the IGC President, which identified areas for further discussion not containing treaty text, aimed at leading to substantive discussions based on the elements of a package agreed in 2011 on:

- marine genetic resources (MGRs), including questions on benefit-sharing;
- environmental impact assessments (EIAs);
- area-based management tools (ABMTs), including marine protected areas (MPAs); and
- \bullet capacity building and marine technology transfer (CB&TT).

IGC-1 made some progress in clarifying delegations' positions on the elements of the package and tabling more detailed options for a process on ABMTs. Several participants stressed the need to proceed on the basis of a zero draft of the international legally binding instrument (ILBI) to fully switch into negotiating mode at the next session. President Lee suggested preparing a document that would not be labelled "zero draft," to facilitate text-based negotiations, containing treaty language and reflecting options on the four elements of the package, taking into account all inputs during IGC-1 as well as the Preparatory Committee's report, well in advance of IGC-2.

Too see IISD's full Earth Negotiations Bulletin coverage, please visit:

http://enb.iisd.org/oceans/bbnj/igc1/#collapse10.

Review of Progress in the Implementation of the Samoa Pathway: Regional Preparatory Meetings and Interregional Meeting held successfully



UN DESA USG Liu - Photo courtesy UNDP country team Apia Samoa

In 2017, the UNGA decided to in 2018 convene 3 regional preparatory meetings and 1 inter regional preparatory meeting to review progress and implementation of the Samoa Pathway at the national and regional levels over the last 5 years. The meetings now complete, were co-organized by UN-DESA through the SIDS Unit and OHRLLS with support from relevant UN system agencies, including the regional commissions. The preparatory process will culminate with a High-Level Review Meeting to be held 27 September 2019 and will result in a concise, action-oriented and intergovernmentally agreed political declaration.

The first Preparatory Meeting was held in Balaclava, Mauritius, 23 - 25 May 2018 for the Atlantic, Indian

Ocean, Mediterranean and South China Sea (AIMS) SIDS. The Meeting adopted an Outcome document listing inter alia their regional priorities. The second regional meeting took place in Nuku'alofa, Tonga 19 - 21 June 2018 for the Pacific SIDS, and was attended by Pacific Member states, Regional organizations, civil society, academia and the private sector. The meeting adopted the 'Nuku'alofa Outcome Document' which details the region's progress and priorities for the mid-term review process. The final regional preparatory meeting was held for the Caribbean, and took place in San Pedro, Belize, 7-9 August 2018. The Meeting saw participation from several senior Government officials from across the Caribbean. including Belize's Prime Minister, and provided the opportunity for the Caribbean SIDS to assess progress



on implementation of the SAMOA Pathway, identify gaps and challenges as well as discuss the means to further enhance efforts to realize their sustainable development priorities. The "San Pedro Declaration" was adopted as the Outcome Document for this Meeting.

Finally, the Inter-regional meeting for the Midterm Review of the SAMOA Pathway was held in Apia, Samoa, 29 October - 1 November. The Meeting concluded with the Adoption of the Apia Outcome Document and the Samoa Declaration on Climate Change in the context of Sustainable Development. The meeting was attended by some 250 persons representing Member States, civil society, universities, private sector and UN system agencies globally. The inter-regional meeting was preceded by a Global Partnership Dialogue, held on 29 October, and followed by a training workshop for 2019 Pacific SIDS VNR Countries, held on 2 November. A total of 13 side events were held by various UN agencies, Regional Institutions and NGOs in the margins of the meetings. More information on the meetings, as well as the related documents are available at the following link: https://sustainabledevelopment.un.org/sids/samoareview/inter



"The Apia Outcome reaffirms the SAMOA Pathway as the overarching framework for guiding SIDS in their global, regional and national development efforts, and as an integral part of the 2030 Agenda for Sustainable Development. Countries recommit to priority areas, such as climate change mitigation, disaster risk reduction (DRR), the sustainable management of oceans, and improved connectivity among SIDS, and between SIDS and other States. They call for increased international support over the next five years for capacity building, data collection, and monitoring and review, in order to implement the SAMOA Pathway."

IISD http://sdg.iisd.org/news/sids-regions-meet-in-advance-of-mid-term-review-of-samoa-pathway/

CLEAN SHIPPING EMISSIONS - PIDF PACIFIC POSITION PAPER



Chair of PIDF Senior officials Committee, HE Patteson Oti and Government of Fiji, Hon. Vijay Nath (centre seated) Assistant Minister for Infrastructure and Transport with Participants at the Opening of the IMO Roadmap Pacific Maritime Officers Workshop.

Suva, Fiji, April 30 2018: The Pacific Islands Development Forum (PIDF) published a PIDF Pacific Position Paper in regards to Shipping Emissions for the International Maritime Organisation's (IMO) 72nd meeting of the Marine Environment Protection Committee (MEPC). The PIDF Pacific Position Paper on Shipping Emissions was developed with the support of the Micronesian Centre for Sustainable Transportation (MCST) jointly run by the University of the South Pacific and Marshall Islands, and the University College of London.

The Pacific is the one region in the world most dependent on imported fossil fuels with imported petroleum products accounting for on average 40% of Pacific Island Countries' (PICs) GDP. This heavy reliance represents a major drain on economies, a major barrier to development and a source of vulnerability. Fossil fuel dependency has a crippling effect on national budgets and revenues, particularly affecting fisheries, agriculture and tourism. The Transport Sector is the largest user of fossil fuels in Pacific Island Countries accounting for some 70% of all fossil fuel use. Fuel used for transport can be broken down into air, land and sea. For all PICs sea transport is a significant user, for some representing 75% of all fossil fuel used, and for extremes, such as Tokelau, this could be as high as 90%.

The paper argues that a decarbonisation by 2050 strategy requires clear and significant short-term measures to be adopted if momentum is to be built and a clear decarbonisation pathway be demonstrated. Without this it is difficult to see how the ambition is given effect. The available science is clear

that a delay in determining and implementing substantive measures until after 2023 makes a 1.5C target largely unattainable. To keep 1.5C alive the Initial Strategy must include commitment to implementation of adequate short-term measures to demonstrate early IMO/industry commitment to a decarbonisation trajectory.

The paper also identifies five issues that are particularly relevant to the Pacific:

- a) potential risk of disproportionately increased transport cost;
- b) potential negative implications for transport dependency and security, disaster preparation and response;
- ability of States to participate in the IMO Roadmap processes;
- d) ability of States to execute any increase in their international responsibility as flag and port States; and
- e) ability to maximize opportunity for design and implementation of domestic and national aspects of the decarbonisation agenda and to ensure domestic capacity to meet any stepped changes.

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Section IV Partnerships

SIDS Partnership Norms and Criteria presented at SC meeting on Partnerships for SIDS

A meeting of the Steering Committee on Partnerships for SIDS at the Ambassadorial level was held on 12th Sept. 2018 in New York. At this meeting, a draft set of SIDS Partnership Norms and Criteria was introduced for consideration. The draft is a result of a series of regional partnership dialogues held in 2018 on the margins of the regional preparatory meetings of the SAMOA Pathway midterm review. The co-chairs invited comments and concrete suggestions to improve the document, to be submitted to the Secretariat no later than 5 October 2018. An updated version of the draft will be included in the outcome document of the upcoming inter-regional preparatory meeting for the review of the SAMOA Pathway, to be held 30 October-1 November in Samoa, to be preceded by a Samoa Partnership Dialogue on 29 October, and inform the inter-governmentally agreed political declaration of the high-level review of the SAMOA Pathway, to be held in September 2019.



PACIFIC PARTNERSHIP FOR TRAINING IN SOLAR ENERGY THE "STAR C" PROGRAM

Suva, Fiji, March 26 2018: The Pacific Islands Development Forum (PIDF) became a key partner to the University of Fiji (UniFiji) Centre of Renewable Energy (CORE) in early 2018. UniFiji and PIDF agree to jointly manage the CORE, with UniFiji focussing on the provision of renewable energy education, capacity building and research, whereas PIDF focuses on application of renewable energy for development.

The CORE was established as a partnership project between

UniFiji, University of Alicante, Spain (UA) and the University of Papua New Guinea (UPNG). The initial establishment was sponsored by the European Commission under the Renewable Energy in The Pacific: Developing Skills and Capacity (EPIC) Project.

CORE's vision is "to serve as a leading centre of excellence, knowledge hub in renewable energy and meeting point for experts by encouraging the cooperation and collaboration in the research, innovation and technologies development of renewable energy between higher education institutions and relevant stakeholders. It also envisions facilitating the university-industry link at national, regional and international levels."

CORE's mission is "to act as a think-tank for strategic issues pertaining to renewable energy from priorities set by Pacific Island Leaders. It will collaborate with national, regional and international organizations and institutions to conduct research/ analysis of emerging issues in renewable energy such as use of solar, biomass, bio-fuels, energy efficiency, technologies for sustainable energy supply in Fiji and Pacific Islands."

The partnership has progressed beyond just signing the Memorandum of Understanding between the two organizations. The PIDF along with its strategic partner Solar Technology Application Resource –Centre (STAR-C) of the International Solar Alliance (ISA) are now working with CORE. The STAR-C is dedicated to building a network of training and technical centers in ISA member countries. The PIDF has been successfully advocating amongst its members to join the International Solar

Alliance.

In the first phase of the STAR-C program, training and knowledge resources will be pooled by the program partners to disseminate good practices and develop training programs for all solar energy stakeholders, through 8 training courses for technicians, trainers, project developers and policy makers. The program also aims at securing funding to set up training and certification centers in the Alliance countries. All the documentation will be made available on the International Solar Alliance Infopedia.

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International United Nations Volunteers at the UNDP Samoa Multi-Country Office





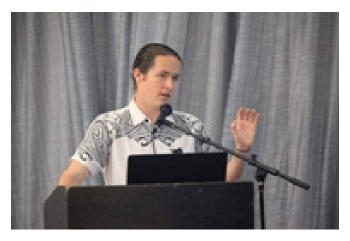
International United Nations Volunteers are stationed around the world assisting UN agencies and projects in remote and sometimes challenging locations. These Volunteers embrace the spirit of volunteerism and helping those around them. The UNDP Samoa MCO and the UNCDF is lucky to have a host of volunteers who work tirelessly within the organisation to assist with programme and project delivery in the small island nation of Samoa. The multi-country office works in Samoa, Cook Islands, Tokelau and Niue and our volunteers have spent hours on boats and planes accessing the smaller islands, making sure that targeted and meaningful development takes place in all countries under the office's mandate.

Volunteerism is a meaningful way for people to contribute their time, skills and knowledge to achieve development goals. Being a volunteer allows you to engage in tackling development challenges which benefits both society at large and helps to employ and build on the skills Volunteers have. Volunteerism is a global phenomenon that transcends boundaries, religions and cultural divides, taking place on a local, national and international level.

The Small Islands Developing States face a variety of unique development challenges, be it climate change, youth unemployment and gender inequality. The work of Volunteers in the Pacific reflects the width of the challenges that the UN System is aiming to address in the region. The remoteness and isolation of the islands add to the challenge of the development but these young people help to bring new and innovative solutions and work with the peoples of these islands to grow the resilience of these nations every day.

The team of Volunteers in the UNDP Samoa Multi-country office and the UNCDF come from all corners of the world – Africa, Europe, South America as well as neighbouring states of the Asia-Pacific region. The Volunteering team are good friends and support each other both inside and outside the workplace, sharing insights in to island life and the tricks of living in a developing nation.

The volunteers in the Samoa team are working on a number of different projects in many different areas. We have two volunteers heavily involved in climate change projects which are becoming increasingly important to SIDS across the world.



Michael Dyer is from Australia and has a background in tropical plant ecology and is the GIS and project implementation specialist on the USD 65 million Green Climate Fund project in the Vaisigano catchment. Based in the Ministry of Natural Resources and the Environment and the Ministry of Finance, he uses GIS and remote sensing expertise to support informed implementation of activities including Ecosystem-Based Adaptation, Payment for Ecosystem Services and Cash for Work through Green Jobs. Within the Ministries, Michael is a strong advocate for increased digital capacity and project decision making, through geospatial data analysis and management.

Prudence Raine is from the Netherlands and works in the Environment department assisting on the GCF Vaisigano River Catchment Project as well as other national climate change adaptation projects. Pru has been in Samoa the longest of our current Volunteers and has an excellent knowledge of project management and implementation.

We have another team of Volunteers who work in the space of economic growth and employment.

Tomomi Ishikawa is from Japan and is based at the Ministry of Women, Community and Social Development working with Savai'i Koko to build up the koko industry and Samoan Natural Food to



encourage further employment. She works with a local team under the ACEO on programme delivery.

Iris Kissiti is from Uganda is volunteering with the UNCDF working on financial inclusion programmes through the Central Bank and the Pacific Financial Inclusion Programme.

A final team work in governance and poverty reduction on a number of interesting projects, building programmes around social needs and public policy.

Mark Rowe is from Australia and is the IUNV for the Women in Leadership and Good Governance. Mark assisted on the design of the Women in Leadership in Samoa Project as well as programme development in E-Governance, Human Rights and Access to Justice programming.

Carla Fonseca Paris is from Chile and volunteers within the Ministry of Women, Community and Social Development to assist in communications and results based management, building the capacity of the government department in their delivery.

Thibault Le Pivain from France is the UNV Project Manager for Tokelau. Thibault works two days a week in the Tokelauan Apia Liaison Office in Apia and regularly makes the journey to the remote atolls by boat to support and monitor UN projects on the atolls. He has developed strong relationships with leaders and project beneficiaries, many of whom he calls friends.



Gabby Bush from New Zealand worked on the Digital Pacific 2018 Conference and will continue to work within the digital transformation space in Samoa over the coming year. Her mandate is partnerships and resource mobilisation to grow the work of the Governance and Poverty Reduction Unit.

These volunteers are commitment to the development of Samoa, Tokelau, Niue and the Cook Islands. They have a passion for the SIDS of the Pacific ensuring the inclusive growth and sustainable environmental solutions for all. They participate actively in the workplace and engage in local life.

Their work on International Volunteers day clearing rubbish from the Apia Sea wall, was an excellent example of this. These volunteers have bright futures ahead of them and under the mandate of "inspiration in action" they hope to lead an example for generations of young people looking to learn and share their skills and enthusiasm through volunteering.

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Section V Upcoming Events

Preparations for the Inter-regional meeting for SIDS for the Midterm Review of the SAMOA Pathway to be held in Apia, Samoa from Oct 29 to Nov 1, 2018 are on-going led by UN DESA in collaboration with the OHRLLS. This Interregional meeting will give SIDS the opportunity to renew emphasis on the SAMOA Pathway and to reinvigorate commitment to action. The Meeting will be preceded by the Interregional Partnership Dialogue on 29 October 2018. The provisional agenda of the Meeting as well as the Partnership Dialogue have been finalized and invitation letters have been sent out to the SIDS as well as to the Inter Agency Consultative Group members.

#	Date	Venue	Event
1.	2 - 14 December 2018	Katowice, Slaskie, Poland	Conference of the Parties to the United Nations Framework Convention on Climate Change - UNFCCC COP24
2	5-8 March 2019	UNHQ, New York	50th Session of the United Nations Statistical Commission
3.	13 - 17 May	Geneva, Switzerland	Global platform for disaster risk reduction
4.	08 - 19 July 2019	UNHQ, New York	High-level Political Forum on Sustainable Development (HLPF) 2019
5.	September 2019	UNHQ, New York	Climate Summit
6.	24-25 September 2019	UNHQ, New York	HLPF under the auspices of the General Assembly (SDG Summit)
7.	27 September 2019	UNHQ, New York	High-Level Review of the SAMOA Pathway in 2019



High-level Political Forum on Sustainable Development (HLPF) 2018



Synopsis/Summary

Conference of the Parties to the United Nations Framework Convention on Climate Change - UNFCCC COP24, 2018

The Katowice Climate Change Conference will include the 24th session of the Conference of the Parties (COP 24) to the UNFCCC, along with meetings of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP), the Subsidiary Body for Scientific and Technological Advice (SBSTA), the Subsidiary Body for Implementation (SBI), and the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA). COP 24 is expected to finalize the rules for implementation of the Paris Agreement on climate change under the Paris Agreement work programme (PAWP).

Sixth Global platform for disaster risk reduction - 2019

The sixth Session of the Global Platform for Disaster Risk Reduction (GP2019) will take place in Geneva, Switzerland from 13 to 17 May 2019, convened and organized by the UN Office for Disaster Risk Reduction (UNISDR) and hosted by the Government of Switzerland. The session will be co-chaired by Switzerland and UNISDR. It will represent the next important opportunity for the international community to boost the implementation of the Sendai Framework and related Sustainable Development Goals of the 2030 Agenda, as well as commitments of the Paris Climate Agreement. The GP2019 will be organized under the overall theme entitled: Resilience Dividend: Towards Sustainable and Inclusive Societies. It will focus on how managing disaster risk and risk-informed development investments pay dividends in multiple sectors at all levels and throughout social, economic, financial and environmental fields.

High-level Political Forum on Sustainable Development (HLPF) 2019

The high-level Political Forum on Sustainable Development (HLPF) 2019 will be held on 08 - 19 July, in New York. The following SIDS countries will conduct VNRs for the first time in 2019: Fiji, Mauritius, Nauru, Palau, Saint Lucia, Timor-Leste, Tonga, and Vanuatu.

High-Level Review of the SAMOA Pathway in 2019

The UN General Assembly (UNGA) at the 71st session in 2016 decided to convene at UNHQ in September 2019 a one-day high level review of the progress made in addressing the priorities of small island developing States (SIDS) through the implementation of the SIDS Accelerated Modalities of Action (SAMOA) Pathway. The UNGA also decided that the high-level review will result in "a concise action oriented and inter-governmentally agreed political declaration".