



**IMELS**

Italian Ministry for Environment,  
Land and Sea

## Report

# Ten Years of PSIDS-IMELS Partnership For Climate Cooperation 2007 – 2017

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**2017 Italian Ministry for Environment, Land and Sea (IMELS)**

Directorate General of Sustainable Development, Environmental Damage and Relations with the European Union and International Organizations

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## Preface



The Paris Agreement has set a fundamental tenet of the climate change equation, namely, the need to achieve a balance between adaptation and mitigation, consistently with the conditions, priorities and needs of developing countries, especially those that are particularly vulnerable to the adverse effects of climate change and have significant capacity constraints, such as the LDCs and the SIDS<sup>1</sup>

The path for tackling the climate change fierce challenge for the PSIDS has been marked since a long time by their geography: remote in vast expanses of ocean, but basking in solar energy, the PSIDS aim at using their natural resources to adapt to their new reality, thus mitigate. The financial crisis of the last decade coupled with the intensifying negative impact of climate change made it imperative for the Island States to cut imported fossil fuel and develop local energy sources. The local energy sources are virtually all renewable.

The Paris Agreement has indeed created the political momentum to accelerate these efforts. While the global commitment of the Paris Agreement makes the de-carbonization of the energy-sector an absolute prerequisite, the Nationally Determined Contributions, submitted by most of the PSIDS countries reflect what they have been pleading to the international community for more than a decade now, namely that rapid action is needed much before the Paris Agreement is due for implementation.

Ten years ago the Pacific SIDS were already poised to implement, and Italy, joined later by Austria, Luxembourg and Spain, was there to work together.

In 2007, more than eight years before the Paris Agreement finally materialized, the Pacific SIDS and Italy decided that something had to be done about the development of climate change mitigation and adaptation measures in the Pacific region. We made a “we must do” promise to each other and launched a Partnership dedicated to the development of local renewable energy sources that began delivering on the ground a few months later.

From the very beginning, the concept that energy is not only about mitigation was challenged, and successfully so; in a decade of cooperation we have been able to demonstrate that the energy

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<sup>1</sup> Paris Agreement, Article 9, paragraph 4

component of the projects we have developed under the driving leadership of the beneficiary communities and their governments contributes to poverty eradication, better health and education, women's empowerment, better access to clean water, food security and climate resilience in general.

In a decade of activities of cooperation with the PSIDS, IMELS' projects equally addressed mitigation and adaptation needs and in the 16% of the cases they were capable of addressing both. In terms of sustainable development, although the primary goal of the Partnership has been the implementation of SDG 13 (Climate Action), it has substantially contributed to also to other goals within the 2030 Agenda, and in particular SDG 2 on Zero Hunger and SDG 6 on Clean Water and Sanitation thanks to the provision of storage tanks, dispensers for drinking water, water pumps for irrigation and drinking water from wells, all powered by solar systems. More than a third of the projects carried out provided electrification for education centers and economic facilities, thereby contributing to the implementation of SDG 7 for Affordable and Clean Energy. Finally, electrification of outer islands played a role in the implementation of SDG 14 for the Conservation and Sustainable Use of the Marine Resources since it afforded sustainable fisheries and improved food security to the local population.

The Ministry of Environment, Land and Sea, therefore, is working at a new framework for the next decade of activities in SIDS and is prepared to further strengthen the partnership through new leverages, broader involvement of new partners from both public and private sectors, an expanded attention to capacity building, and intensified technology transfer, building upon Italian knowledge and research on renewable energy, food and water security and ocean health, and increased monitoring so as to generate better understanding of lessons learnt and maximize activity impact.

**Dr. Francesco La Camera**

*Director General*

Sustainable Development, Environmental Damage and Relations  
with the European Union and International Organizations  
Italian Ministry for the Environment, Land and Sea





Ten Years of Cooperation  
in the Pacific Small Island  
Developing States





# Ten Years of Cooperation in the Pacific Small Island Developing States

## I. Introduction

### I.1 The PSIDS among the most vulnerable countries to climate change

*PSIDS are on the frontline of climate change*

•••

The geographic location, the geomorphological processes and the widespread poverty are amongst the leading causes that make the Pacific Small Island Developing States particularly exposed to the effects and consequences of the global climate actions and policies.

Population in PSIDS often live on narrow and low-lying lands within extremely vulnerable ecosystems, to both man-induced and natural impacts, and are aware that one extreme event could lead to the disappearance of their land. As the inhabitants of Tarawa say, “*If you stand in the middle, you can see water on both sides*”

Many of these atolls are experiencing the progressive rise of the sea level. In more than one case, land became inhospitable and migratory phenomena triggered. The loss of livable territories is nowadays endangering the very existence of Pacific nations notwithstanding the efforts of their Governments. An unprecedented issue in the human history.

The Italian Ministry for the Environment, Land and Sea (IMELS), within the International Cooperation Framework envisaged by the Italian Government, and in consideration of its commitments on combating climate change, started ten years ago a Partnership for supporting these threatened countries.

## 1.2 Adaptation, as an imperative

Despite their negligible amount of CO<sub>2</sub> emitted, mainly due to the use of diesel as energy source, the mitigation represents a PSIDS' commitment in the Nationally Determined Contributions (NDCs) for the Paris Agreement.

As stated on COP21 from the President of the Republic of Kiribati, H.E. Anote Tong: "*Against the threat of climate change it is vital that we as a global community act collectively*" and also from the Prime Minister of Cook Islands, H.E. Henry Puna "*We may be a small country but we believe in big actions, we did not cause the problems of today, but we want to be part of the solutions*". Therefore, mitigation is minor only if compared to the urgent need for adaptation.

Adapting, for PSIDS, means having tools capable of reducing the risk link to frequent occurrences of extreme events such as cyclones, floods and droughts. But, at the same time, adapting also means protecting the natural resources from which communities strongly depend for their subsistence.

The loss of habitats and biodiversity, caused by climate change, deprives ecosystems, populations and local economies of their intrinsic and natural resilience.

*Loss of habitat,  
due to climate  
change, deprives  
ecosystems,  
communities  
and economies,  
of their intrinsic  
resilience*



### **PSIDS involved in the Partnership**

**Cook Islands, Fiji, Kiribati, Micronesia, Marshall Islands, Nauru, Niue, Solomon Islands, Palau, Papua New Guinea, Samoa, Tonga, Tuvalu, Vanuatu**



### 1.3 The vision of the cooperation as in bilateral and multilateral meetings

A direct financing for the priorities of the beneficiary countries

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From the beginning, the PSIDS-IMELS Partnership recognized the ownership of the beneficiary countries in the implementation of projects. This has allowed to plan activities resulting from a listening process carried out with local Governments and responding to their requests with a direct support.

In the early years of the Partnership, ensuring the availability of safe and renewable energy, particularly for outer islands, represented the main request of the beneficiary countries.

COP21 signed the beginning of a new chapter of cooperation. Since the Paris Agreement, Italy and PSIDS found themselves further strengthened around the common goal of fighting climate change. During the past two years, the implementation of NDCs became a point of reference for the activities planned within the Partnership.

As the Italian Minister for the Environment, H.E. Gianluca Galletti stated at COP21, *“Ambition today is no longer an option. Italy will play its role, as our Prime Minister, Matteo Renzi, rightly pointed out in his opening intervention. Italy will increase its contribution for climate finance up to 4 billion dollars between 2015 and 2020”*.

The implementation of NDCs embodies a common aim within the Partnership

•••

Additionally, in the same period, a new area of cooperation, requested by the PSIDS, has been approved through the Annex I that introduced the framework for the implementation of an ecosystem-based approach for marine and coastal resources, including the improvement of the capacities of local communities in the management of Marine Protected Areas (MPAs) for developing ecological, economic and social resilience.

Italy and PSIDS are also working together on Agenda 2030 and SDG14. The 10x20 Initiative, launched by the Ocean Sanctuary Alliance (OSA) and the Italian Government, gave a strong contribution to raise the focus on target 14.5 and on the strengthening the sustainable use of coastal and marine ecosystems.

Most of the work carried out in the 10x20 Initiative was presented at the United Nation Ocean Conference, on July 2017, as in Italy’s Voluntary Commitment and in Partnership Dialogue 2 co-chaired by Italy and Palau.

From the Ocean Conference, Undersecretary of IMELS, Hon. Silvia Velo, stated, *“Recently, Italy has also increased its engagement with partner such as Small Island Developing States focusing on capacity*



*building activities and to the establishment and maintenance of Marine Protected Areas. We are indeed extremely honored to be partner with the Republic of Palau on the implementation of the Palau First Nationwide Marine Sanctuary as well as to contribute to new projects in the Republic of Tonga and in Kiribati, dedicated to spatial planning and to the maintenance of the Phoenix Island Protected Area, respectively. As a contribution to this Conference and in the context of climate change, Italy stands ready to raise its support, if partner countries wish so, on MPA and on actions to progress towards more sustainable ocean-based economies”.*

*A further  
commitment to  
strengthen the  
ocean-climate  
linkage*



*“The very existence of entire areas, especially those islands, is at risk from global warming. Italy pushed for a commitment to contain overheating by 1,5 degrees Celsius since the very beginning of the negotiations” the Italian Minister for the Environment Gian Luca Galletti said, stressing that such a goal is the “only one capable of saving islands on the front line of global warming and to create conditions for sustainable growth in developing countries”.*







Milestones of the  
Memorandum of  
Understanding and  
Programme Outlines





# Milestones of the Memorandum of Understanding and Programme Outlines

## 2. Technical Details

### 2.1 The steps of the agreements

*The MoU was signed in New York at the United Nations, on the 11<sup>th</sup> of May 2007 among Italy and fourteen PSIDS*  
•••

The Memorandum of Understanding titled "*Co-operation on climate change and on the Clean Development Mechanism (CDM) under article 12 of the Kyoto Protocol*" among the Italian Government represented by the Ministry for the Environment, Land and Sea (IMELS) and the Ministry of Foreign Affairs and of International Cooperation (IMFA), and fourteen Governments of the Pacific Small Island Developing States, was signed in New York on the 11<sup>th</sup> May 2007.

Subsequently more donor countries entered in the Partnership: (i) in 2008 the Federal Ministry for Europe, Integration and International Affairs of the Republic of Austria with the *First Complementary Memorandum*; (ii) in 2012 the Grand Duchy of Luxembourg with the *Amendment No.2 to the Memorandum and to the First Complementary Memorandum* and finally, (iii) in 2014 the Ministry of Foreign Affairs and Cooperation of Spain with the *Second Complementary Memorandum*.

So nowadays, the Partnership is composed by four donor countries (Italy, Austria, Luxemburg and Spain) and fourteen PSIDS comprising the Cook Islands, Fiji, Kiribati, Micronesia, Marshall Islands, Nauru, Niue, Solomon Islands, Palau, Papua New Guinea, Samoa, Tonga, Tuvalu, Vanuatu.

The last step was in 2015, with the introduction of the *Addendum to the Annex I to all Memoranda of Understanding between the Governments of Italy, Austria, the Grand Duchy of Luxembourg and Spain and the Governments of the Pacific SIDS* with the approval of a further sub-programme of cooperation.

Following the procedures, IMELS supports PSIDS in a direct modality financing the local Governments while IMFA operates in an indirect manner through the financing of an implementation entity as the *International Union for Conservation of Nature (IUCN)*.

## 2.2 The governance and the Joint Committee

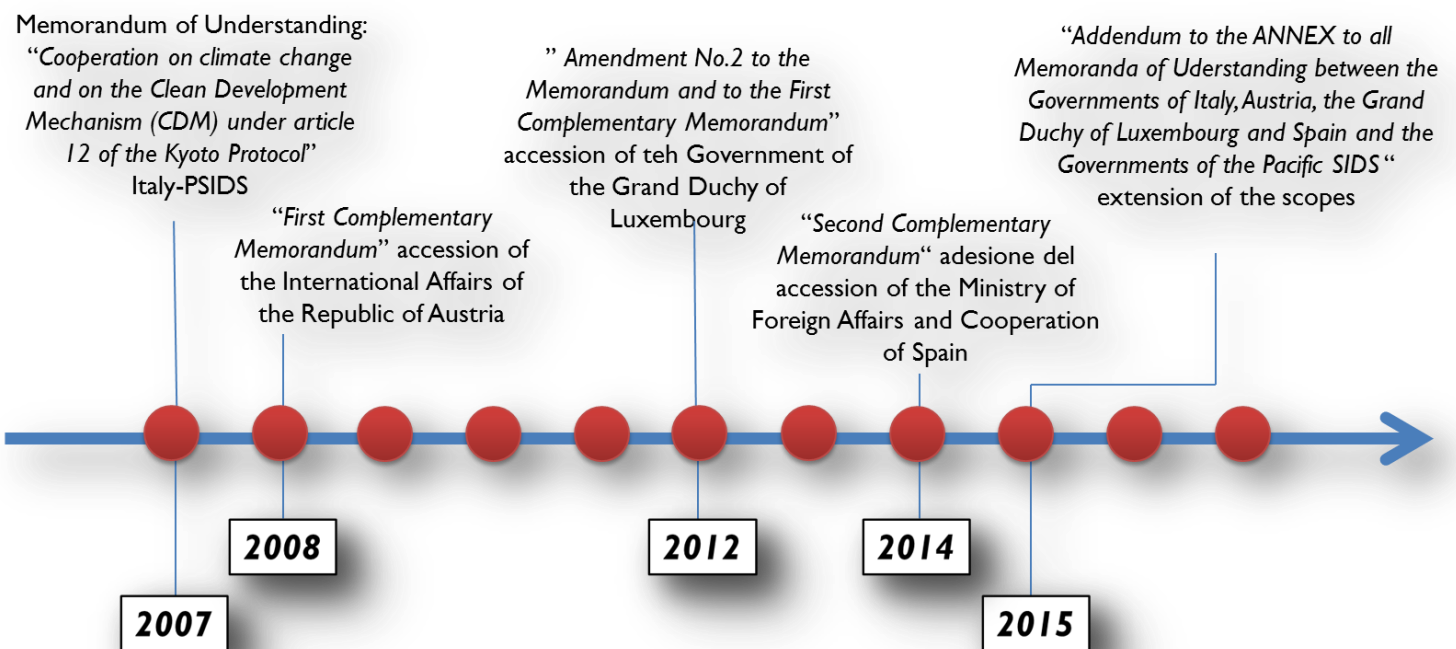
The governance is entrusted to a Joint Committee (JC) which meets at the United Nations in New York. The JC is the decision-making body that adopts measures for the proper functioning and development of the Partnership, approves projects and funding presented by PSIDS and revises the MoU and its Addendum as necessary.

Italy is represented in these meetings by the Director General for Sustainable Development of the IMELS (DG SVI) and by a representative of the IMFA, supported by appointed experts. The Director General of IMELS co-chairs the Joint Committee together with the PSIDS Permanent Representative appointed by the members of PSIDS participating in the Partnership.

The UN Permanent Representatives in New York for Austria, Luxembourg, Spain and the PSIDS Governments also participate. Since 2007, 11 JC meetings took place in New York, the last of which - the JC II - was organised on the 25<sup>th</sup> of July 2017.

To date, eleven Joint Committee meetings took place in NY

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The frequency of Joint Committee meetings has increased after COP21



*Ninth Meeting of the Joint Committee.  
NY March 2, 2016.*



*Tenth Meeting of the Joint Committee.  
NY December 8, 2016.*



*Eleventh Meeting of the Joint Committee.  
NY July 25, 2017. Celebration of ten years of activity.*

### **2.3 The Programme Outlines**

The cooperation Programme, described by the “Annex Sustainable energy and climate change adaptation program for the Pacific Small Island Developing States - Programme Outline”, envisages two areas of action related to energy security and adaptation, particularly for vulnerable communities in rural areas and remote islands. These area of action are:

- 1- Sustainable Energy Programme with 5 sub-programmes;
- 2- Climate Change Adaptation Programme with 3 sub-programmes.

#### **2.3.1 Sustainable Energy Programme**

Protection from and adaptation to the adverse effects of climate change as well as mitigation of harmful emissions generated by energy utilization, are priorities established by the local

Governments.

Energy however is a key driver of economic growth, with a significant bearing on education, environment, health and social welfare thus, energy and sustainable development need to be integrated and prioritized in national strategic development plans.

The activities have been articulated in the five sub-programmes: (i) Development of climate change adaptation measures; (ii) Assessment of energy requirements and strengthening of energy policies and action plans; (iii) Rural electrification; (iv) Development of biofuels and (v) Development of renewable energy sources.

#### **Development of climate change adaptation measures** -

This action involves long-term monitoring of environmental impacts due to climate change. The sub-programme includes data collection system for forecasting and better managing events as sea level rise and soil degradation and recording of climatic phenomena by frequency and intensity. Some activities are the expansion of bulletin of climatic information or the configuration and setup and strengthen early warning systems.

#### **Assessment of energy requirements and strengthening of energy policies and action plans** -

Rural electrification are often hampered by people dispersion and poverty conditions, although renewable energies could be economically more advantageous. Therefore, overcoming geographic, technological and economic barriers is a priority and a common objective. This is pursued through actions such as: development of human resources specialized in the planning, implementation and management of energy policies, strategies and plans; strengthening the participation of all actors in the design and implementation of renewable energy policies and practices, particularly for women living in rural areas; strengthening national capacities for the development of national and regional energy markets, as well as of the appropriate financial instruments.

**Rural Electrification** – Energy access means access to critical services. The safety and well-being of communities cannot ignore basic essential services such as availability of drinking water, irrigation, public health centers, spread telecommunications and technological education in the schools. The sub-programme recognizes an urgent need to increase the photovoltaic technology with new installations and rehabilitation of existing facilities. It is foreseen as the most suitable technology in those

*Community-based process for technology transfer and capacity building, particularly women*

• • •

*Energy-based adaptation since energy access means critical services access*

• • •

*The risk of natural disasters requires coordinated, continuous and preventive management*  
•••

islands where solar energy is the most abundant renewable source. Other renewable energy technologies such as mini-hydro and wind are developed in accordance with the local potential.

**Development of biofuels** - A variety of locally grown crops have considerable potential for production and utilization of biofuels for the local transportation and power generation – ethanol from sugarcane, cassava and breadfruits, coco diesel from copra. Nonetheless, the impacts are largely shared by the scientific community arising from biomass cultivation activities but also from their use. For this reason, the sub-programme includes initiatives such as: the assessment of the viability of biofuel production from diversified local sources; feasibility studies and pilot projects/testing the utilization of biofuels for local transportation and power generation; technical studies and process analysis for biofuels production.

**Development of renewable energy sources** - The Pacific region has in general a considerable potential for a variety of renewable sources – biomass, geothermal, hydro, solar, tide, waves and wind. According to each country priorities, the programme will include the following feasibility studies and pilot projects: photovoltaic stand-alone electrification in urban areas; photovoltaic integration into the national grid; wind energy data collection and resource assessment; biogas from household waste and waste management; assessment of the geothermal, tidal and wave power generation potential; small hydropower resource assessment

Renewable energies provide access to essential services to enhance adaptation to extreme events and disasters



### 2.3.2 Climate Change Adaptation Programme

The SAMOA Pathway calls for support to the efforts of Small Island Developing States for building resilience and improving their adaptive capacity. However, climate change also increases the vulnerability to the impact of natural occurrences such as severe weather phenomena, as well as of anthropogenic activities, and the unsustainable use of natural resources that leading to ecosystem degradation and biodiversity loss.

The Climate Change Adaptation Programme aims therefore at: (i) Supporting Disaster Risk Reduction efforts of the PSIDS and (ii) Supporting the protection and conservation of marine and terrestrial ecosystems and biodiversity.

**Disaster Risk Reduction** -The Pacific region is the site of the most intense and important climate variations hence the sub-programme is consistent with the basic tenets of the Sendai Framework 2015 – 2030 including: strengthening early warning systems, disaster risk governance and national capacities for disasters prevention, fostering collaboration and partnership across mechanisms and institutions, enhancing the resilience of national health systems, developing of new building codes, rehabilitation and reconstruction practices, increasing resilience of new and existing critical infrastructure, including water and sanitation, transportation and telecommunications infrastructure.

*A sub-programme for the Samoa Pathway and the 2030 Agenda implementation*

•••

Risk depends not only on the severity of the extreme event, but also on the level of vulnerability, number of people involved and environmental conservation





*The conservation of marine resources for an ocean-based adaptation*

•••

Protection and conservation of marine and terrestrial ecosystems and biodiversity - The SAMOA pathway has recognized that the Pacific SIDS have extraordinary marine and terrestrial biodiversity which is fundamental for their livelihood and identity, and noted that this valuable biodiversity and the ecosystem services it provides are at grave risk also due to climate change. Furthermore, the proposal for an SDG 14 and its targets have highlighted the fact that the reduction of marine pollution of all kinds, the sustainable management, protection and restoration of marine and coastal ecosystems, the regulation of resources harvesting and the end of overfishing are key to maintaining healthy and productive Oceans for the benefit of millions of people and future generations. In this context the sub-programme includes: the development of conservation measures for coastal and marine areas affected by the negative impacts of climate change, especially those that are particularly significant for their biodiversity and for providing ecosystem services; strengthening the national managerial and organizational capacity as well as governance in the areas of protection and conservation of marine biodiversity; development of protected areas; development of programmes and projects that enhance ecosystem resilience and increase the contribution of biodiversity to carbon stocks through conservation and restoration measures; development of measures to minimize and address the impacts of ocean acidification. The sub-programmes, wherever possible, will be community-based and implemented with the involvement and support of the communities to ensure long-term sustainability.

Marine Protected Areas can help to

mitigate impacts of climate change enhancing the blue carbon sink





## Institutional Relationships among IMELS and PSIDS





# Institutional Relationships among IMELS and PSIDS

## 3. Bilateral, Multilateral and Joint Initiatives

### 3.1 The official visit of the Italian Minister for the Environment to the PSIDS and the Joint Declarations signature

The Italian Minister Hon. Gianluca Galletti paid an official visit to Pacific in 2016. The Minister, supported by a delegation of experts, visited Papua New Guinea, Solomon and Vanuatu to keep supporting Italy's action in addressing the vulnerability of these States.

Visited countries:  
Papua New  
Guinea, Solomon  
Islands and  
Vanuatu Islands

•••



Hon. Gianluca Galletti with the President of the Republic of Vanuatu H.E. Baldwin Lonsdale, during the official visit to Pacific March 2016.



Hon. Gianluca Galletti with the Minister for the Foreign Affairs for Papua Nuova Guinea Hon. Rimbink Pato, during the official visit to Pacific March 2016.



Hon. Gianluca Galletti with the Prime Minister of Solomon Islands H.E. Manasseh Sogavare, during the official visit to Pacific March 2016



Hon. Gianluca Galletti with the Minister for Climate Change of Vanuatu Hon. Ham Lini Vanuaroroa, during the official visit to Pacific March 2016

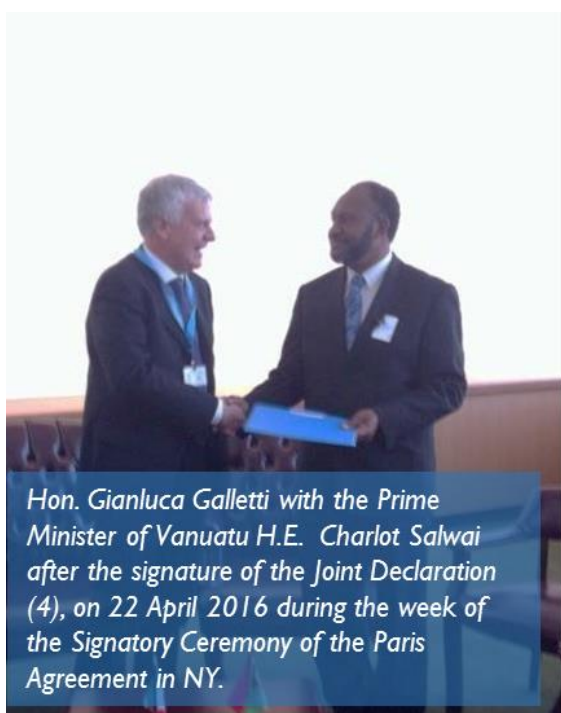


The outcomes of these visits were enclosed in a Joint Declaration aimed at further renewing Italy's commitment through cooperation programmes and confirming the continuity of the taken commitment towards climate change strategies, natural risk management and environmental vulnerabilities as well as technology and capacities transfer also through Italian technical missions to the Pacific.

The Joint Declaration was symbolically signed in New York with the Government representatives of two Pacific SIDS, Solomon Islands and Vanuatu, on 22<sup>nd</sup> of April 2016, during the week of the Ceremony for the signing of the Paris Agreement.

*The commitments of the Partnership during the Ceremony of the Paris Agreement in New York*

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### **3.2 The 10x20 Initiative and the UN Ocean Conference**

Based on a request of the Republic of Palau, the Italian Permanent Representation to the United Nations organized, in March 2016 in Rome, jointly with the IMFA and IMELS and in partnership with UNEP and the Ocean Sanctuary Alliance (OSA) a Conference on “*Marine Protected Areas: An Urgent Imperative – A Dialogue Between Scientists and Policymakers*” that resulted in the *Rome Call for Action* and the *Scientific Consensus Statement on Marine Protected Areas (MPAs): Characteristics, Governance, and Sustainable Financing*.

The Initiative is focused on the achievement of the Sustainable Development Goal 14 and one specific target: “*By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific*

information scientific information”.

The 10x20 Initiative strengthened the involvement of the Italian Government and contributed to the establishment of voluntary commitments at the Ocean Conference

•••



The Rome Call for Action and the Consensus Statement, recognize that increased MPAs are needed in areas closer to human populations so that communities may achieve benefit in terms of social and economic stability since MPAs are a powerful mechanism for delivering sustainable development objectives for coastal marine ecosystems at varying scales, including food security, livelihoods, climate change and disaster risk reduction. .

As the Hon. Silvia Velo stated at the Ocean Conference, “Within this Initiative, Italy is proud to support the Ocean Sanctuary Alliance to identify globally significant areas that would be candidates for additional MPA development”



The contribution of the 10x20 Initiative is an integral part of the climate cooperation on adaptation issues and it became particularly visible during the United Nations Ocean Conference on June 2017, when the Italian Government and IMELS, led by the Undersecretary of State for the Environment H.E. Silvia Velo, registered a Voluntary Commitment on Ocean conservation amounting to \$6.6 million by 2020.





Italian and Tongan delegations at UN during the Ocean Conference, New York June 2017



Italian and Vanuatu delegations at UN during the Ocean Conference, New York June 2017



Italian and Palau delegations at UN during the Ocean Conference, New York June 2017

### 3.3 The Italian technical missions in the Pacific

Four technical missions were entrusted by IMELS between 2016 and 2017 with the purpose of establishing an open dialogue with the inhabitants and institutions directly involved in the project implementation in PSIDS.

IMELS charged the Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) to carry out the technical visits to Kiribati, Palau, Solomon and Vanuatu.

*IMELS and  
PSIDS  
delegations  
working together  
for the  
Ocean health*



ENEA delivered the Italian flag on the Chevalier College Director's request. Abemama, July 2017



Italian technicians were guided by the local Government representatives through the sites of ongoing or finalized projects receiving the opportunity to talk with the people involved and gather useful findings for best practices and for new cooperation commitments.

## *The Italian technical mission to Kiribati, Palau, Solomon and Vanuatu*

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In particular, technical missions addressed main purposes as to monitor results and put together lessons learnt, identify actions that would increase the impact of the projects with adjustments, updates and or modifications. The evaluation of available data was made to ensure extensions and pilot activities or even investment opportunities and to evaluate directly on-site the actual implementation. The main results of the visits were the exchange of knowledge and the approval of nine new projects at JCI0 and JCI1.



*ENEA delegation with the Director of the Don Bosco Technical Institute of Solomon after discussing the new project for training youth on solar systems management, July 2016*



*ENEA delegation with the Ministry for Agriculture of Vanuatu Hon. Matai Seremaiah, during the technical mission July 2016*



*ENEA technician visiting the solar installation financed by IMELS at the Chevalier College. Kiribati, March 2017*



*Meeting with the ENEA technicians at the Palau National Marine Sanctuary, Palau March 2017*



Support to the PSIDS  
priorities





# Support to the PSIDS priorities

## 4. Project Description

### 4.1 Implementation of a prioritized action framework

*Environmental  
mainstreaming to  
promote the  
sustainable  
development*

•••

Over the years, projects covered almost all the Programme scopes: from the installation of solar technologies to the establishment of Marine Protected Areas and from the disaster planning for resilient infrastructures to the improvement of water cycle management.

The goals achieved and their effects on the field were reflected well beyond the predicted outcomes since actions for protecting natural resources achieved to strengthen local communities and their economies. This led to confirm, once again, the key role of the environmental component in cooperation as a tool for promoting social stability and sustainable development.

Furthermore, over the last two years new elements came into the activities. For example, in the field of electrification, following the experience acquired from the technical mission to PSIDS, an operational package for training local technician, particularly of youth, on solar systems management has been introduced in the electrification projects.

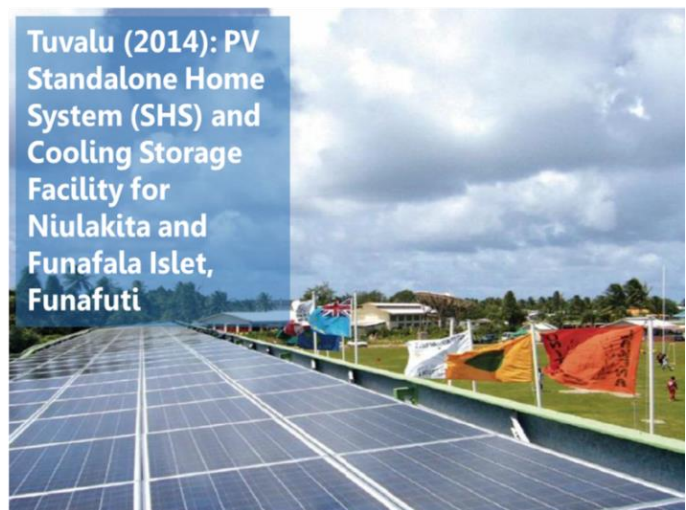
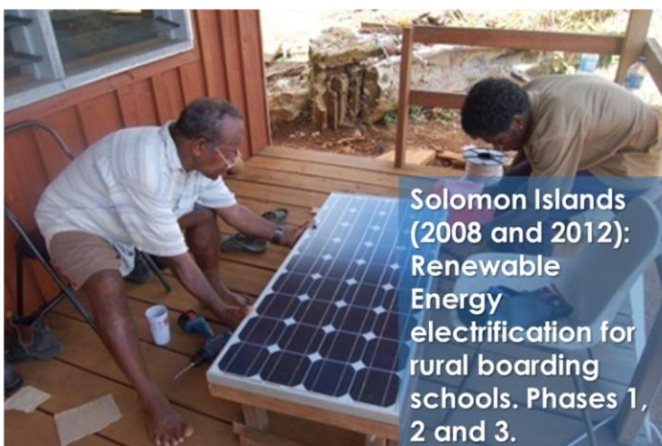
With the Article 11 of the Paris Agreement the capacity building demand has grown on issues as international climate and ocean processes. The programs implemented have supported local ownership and guidance process allowing PSIDS to access the international climate negotiations and finance.

Finally, as for Ocean conservation objectives, cooperation activities provided the useful following feedbacks: (i) creation of successful synergies between the electrification of fish centres and ocean protection and sustainable fisheries; (ii) introduction of an accounting system for blue carbon sink, in agreement with the outcomes of the United Nations Ocean Conference; (iii) launch of new awareness-raising campaigns for supporting local communities in the management of Marine Protected Areas for an ocean-based economy as well as in Article 53 of the SAMOA Pathway.



## 4.2 Mitigation as a climate adaptation tool

The first rural electrification projects were designated for the rural schools of the Solomon Islands in 2008. IMELS supported the electrification of 15 schools with solar systems. Over this years, this initiative contributed to avoid emissions from using diesel generators and, at the same time, prolonged the hours dedicated to education, starting from early morning until late at night.



Since the strong correlation between per capita electricity consumption and the level of education, spreading renewable energies to schools also means to give the opportunity of a wide variety of educational tools (computers, internet, laboratories, mass media, etc.) and to reduce illiteracy.

But, in rural contexts, the energy security also means to access to adaptation. Water purification systems, satelitary communication tools for early warnings, food and medical refrigeration, sustainable irrigation, are all essential services guaranteed by an affordable renewable electrification.

However, it might be coupled with community capacity building

*Renewable  
energies and  
small-scale  
communities for  
sustainable  
fisheries*



and training efforts, to disseminate knowledge for designing, repairing and maintenance of the energy systems; moreover, knowledge allows to explore and overcome the main barriers to accessing international markets in the energy sector. The gradual dissemination of these technologies will help to establish even more local and tailor made solutions for the small scale needs.

To date, energy-based adaptation represented the main goal of six projects that IMELS is supporting in Solomon, Vanuatu, Micronesia, Tuvalu and Kiribati.

#### ***4.3 The rural electrification for the Ocean conservation***

Fish centres offer services such as providing ice to local fishermen to maintain the freshness and quality of their catches while fishing for a long time at sea. They also provided and sell out fishing gears at the affordable and reasonable price. Further to that, the centers bought fish from the local fishermen and resold to the people who could not fish that day. This activity has significantly contributed to increasing revenues for fishermen as well as enhancing food security. The implementation of solar off-grid systems generate savings from the diesel fuels costs that can be used to provide funding assistance to conduct community fishing trainings, purchase of fishing equipment and sales at minimal prices on the outer islands. In that way it is possible to extend the opportunity in fishing activities on the outer islands and people who previously were unable to buy expensive fishing equipment.

In the context of climate action, in addition to the mitigation due to fossil substitution, this initiative allows to improve the adaptation conditions by sustaining small-scale activities with a low impact on marine and coastal resources. This reduces overfishing for a better economic, social and ecological resilience. To date IMELS supported the electrification of 22 fishing centres on remote islands in Kiribati and Tuvalu.

#### ***4.4 Local communities handling their own sustainable energy***

The project carried out in the outer islands in Kiribati represented an example of local governance development given that, during the installation of the solar systems for supplying the fish centres, a MOU was signed by the Mayor, Clerk and officers from the local Ministry of Public Works and the Ministry of Fisheries. A full council meeting was conducted with all Island Council members. The term of the agreement was thoroughly discussed and the MOU implied a legal commitment among parties as well as encouraged and

reminded individual stakeholders to understand their obligations supporting related initiatives during and after project implementation.

The Island Council also agreed to save sufficient funds from the income of their fish centres that could be used for maintenance purposes in the future.



The Ministry of Public Works of Kiribati is therefore committed in providing technical training onsite to the Island Council technician as part of capacity building enhancement to ensure a good understanding to operate and maintain the systems. Furthermore, a supervision will be provided over the time as well as electrical tools needed and these will be left to the island Council for maintenance activities.

Also in Tuvalu's project, the two plants installed for lighting, cooling and communications, were delivered with an inaugural ceremony in the hands of local communities.

Following the project's Final Report of the Tuvalu Electricity Corporation (TEC), experiences around the Pacific region have shown that without the involvement of the local communities, the system will operate for few years and then failed. So, to ensure the long-term durability of the solar installations, the TEC established to operate and manage itself the systems for all the



major components (panels, inverters, charger controller and batteries) and to promote the management of the cooling storage facilities by the Island Council.



#### **4.5 Examples of an Ocean-based Economy**

Climate change is the greatest threat to the health of Pacific Ocean ecosystems. Increasing sea surface temperature, sea level rise, and ocean acidification are generating bleaching of the reef ecosystems, changes in ocean circulation and in marine life migration patterns. In addition, decreasing pH levels is shifting the ecological balance of marine plankton and bottom dwelling species that form calcium skeletons.

In response to these threats, the Republic of Palau, with the support of Italy (IMELS), established the Palau National Marine Sanctuary (PNMS) in the Exclusive Economic Zone. Alongside the Marine Sanctuary, a 20% of the entire Exclusive Economic Zone (EEZ) was designated as Domestic Fishing Zone with a prohibition on fish exports to strengthen the management of local fisheries. The goal is to increase the level of domestic engagement in Palau fisheries and gradually manage fishing efforts

at a sustainable level, focused on supplying local food security and tourism markets. The export ban is intended to foster an internalization of the fish market towards and enforcing it consistently through a reformed modern domestic commercial long-lining fishing fleet with observer oversight on 100% of its vessels.

The studies carried out on the Palau's Fisheries Development Transition in the PNMS have shown that the protection of marine and coastal resources positively affect the local economy. According to an economic assessment, shark diving is a major contributor to the economy of Palau, generating for approximately 8% (\$18 million per year) of the Gross Domestic Product – GDP - of the country compared with the commercial fishing, largely by boats from Japan and Taiwan, that represents the 3.3% of GDP (\$5 million per year).

The recent Italian technical mission to Palau fostered the approval at the JCII of the second phase of the project on PNMS focused on ensuring the results achieved. The envisaged awareness campaign titled "Pristine Paradise Palau" will tend to limit the intensive tourism adding by the way an ecosystem service payment that will be charged to tourists as a tax for Palauan future generations and devolved to the PNMS also for surveillance and enforcement activities.



**Palau (2017): Education and Awareness (Palau Pristine Paradise Initiative)**



*The Phase II on the Palau Marine Sanctuary will aim to the development of sustainable tourism and to strength monitoring and surveillance within the protected area*

Another example of Ocean-based economy come from the Kingdom of Tonga who submitted at the JCII a project for the implementation of a holistic approach to sustainable management of its EEZ in line with the NDC that is to double the 2015



number of MPAs by 2030. The main tool will be the Marine Spatial Planning integrated with MPAs, ecosystem-based measures and Special Management Areas (SMAs) that are particularly community-managed marine areas.

Within each SMA, a designated Fish Habitat Reserve or no-take area will be proposed, implemented and enforced by the community involved. Finally, a blue carbon accounting will be performed by Italian experts to better plan the ocean-based activities in the aim of ensuring the sustainable use of marine resources.



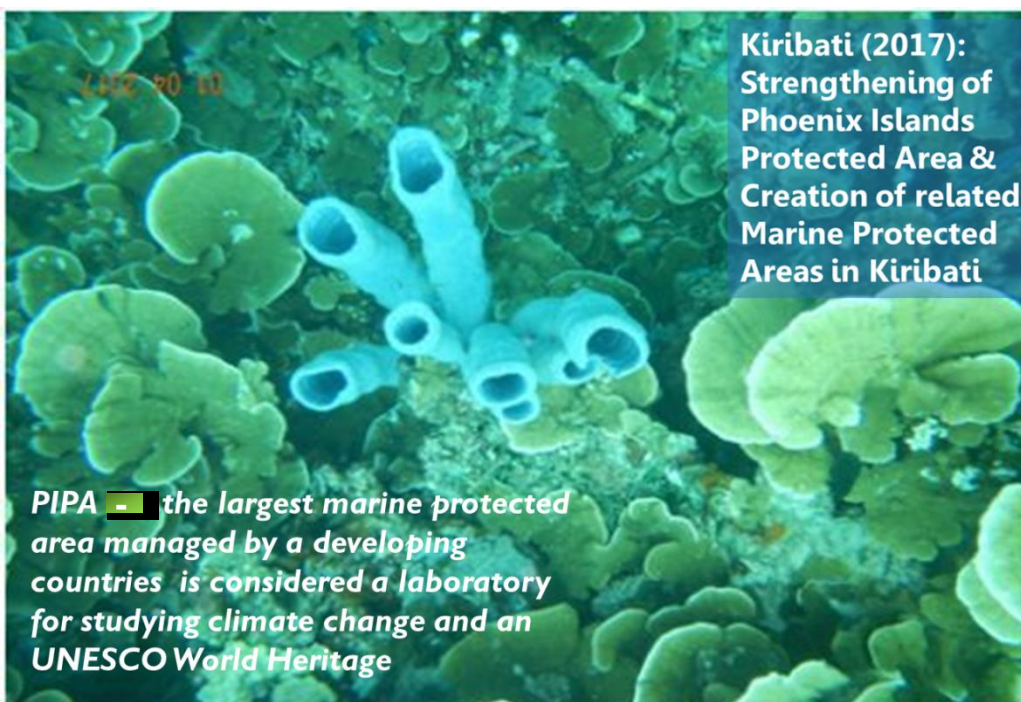
#### **4.6 The climate change laboratory**

The Phoenix Islands Protected Area (PIPA) is the largest marine protected area managed by a developing country. It covers more than 400.000 square kilometers with over 500 marine species and an average water depth of over 4000 meters deep. The area is almost completely uninhabited, given the scarcity of fresh water, except for the few settlements of local government representatives managing fishing licenses, whereby anthropic activity is very limited.

Therefore, this remote area of the Pacific is considered a laboratory for studying the effects of climate change. Due to the low anthropogenic impact, the coral reefs of this area are attributable to an ecological model for comparison with other reefs in the world as well as a point of reference for studying phenomena of global relevance such as acidification of the ocean or circular patterns of El

Niño Southern Oscillation (ENSO) cycles.

Following Obura *et al.*, 2016<sup>2</sup> this natural laboratory is significant at two levels: (i) for Kiribati, to understand how degradation of ecosystem goods and services on populated islands undermines the resilience both of natural systems (the islands and marine systems) and society to climate change threats (freshwater, salinization, fishing, agriculture, public health, etc.); (ii) for the world, as one of the few reference sites with significance globally for the issues listed above, as well as to larger scale climate issues such as ocean acidification, circulation patterns and the ENSO cycles that originate in this part of the Pacific.



For all these characteristics, the PIPA has been defined by the local population, by the way in a song, as "*Our Gift to Humanity*" and it was included in the UNESCO World Heritage Site in 2010.

IMELS expressed its commitment in supporting, as for request by the Government of Kiribati, an awareness raising project called "*Bringing PIPA home*" with a strategic education and public outreach campaign tailored on the opportunities, realities and limitations and targeted to the Kiribati Government officials, including through briefings to Cabinet and key government officials. The initiative includes the creation of community managed pilot MPAs on the outer islands and a scholarship

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<sup>2</sup> Obura D, Donner SD, Walsh S, Mangubhai S, Rotjan R. Living document. Phoenix Islands Protected Area climate change vulnerability assessment and management, Report to the New England Aquarium, Boston, USA. 35 pp. Updated January 18, 2016

programme on marine biology and ocean science to build a pool of national expertise who can be the future leaders and advocates of PIPA in order to ensure the long-term sustainable management of this vast oceanic area.

#### 4.7 Strengthening over time the capacities of the local politician

Capacity-building under the Article 11 of the Paris Agreement should enhance the capacity and ability of developing country Parties, in particular countries that are particularly vulnerable to the adverse effects of climate change, such as Small Island Developing States, to take effective climate change action, including, *inter alia*, to implement adaptation and mitigation actions, and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information.



Capacity-building should be country-driven, based on and responsive to national needs, and foster country ownership of Parties. Capacity-building should be guided by lessons learned, including those from capacity-building activities under the Convention, and should be an effective, iterative process that is participatory, cross-cutting and gender responsive.

In recent years, there has been an increase in the demand for PSIDS



to support training programmes aimed at young local politicians to gain an international experience on climate and ocean multilateral processes.

Following the project's Final Report of the first fellowship carried out by the Permanent Representation of Tonga to the United Nations, it results that the fellows underwent a variety of academic and skills based trainings on topics relating to oceans and climate and, throughout a year, they learned, experienced and strongly participated in the UN processes. This Fellowship concluded on Wednesday 7<sup>th</sup> December 2016 with the fellows presenting the findings of their research to the PSIDS and other invited guests at the UN Headquarters.

Generally, the Fellowship Programmes supported by IMELS mainly consist in weekly classes, academic and skills based trainings and participation in working groups and multilaterals for leading to the development of national positions of their respective countries. To date, IMELS is committed in supporting the formation of eleven young politicians from different PSIDS such as Tonga, Palau, Fiji and Tuvalu.

#### **4.8 Planning a disaster culture**

The Marshall Islands have begun an implementation process for a "mature system" to manage the risk factors of major urban centers in Majuro Capital, and Ebeye, where approximately three quarters of the population live.



In these areas, high rates of immigration from rural areas and increasing fertility rates have contributed to generating a high and chaotic urbanization, with over 95% of the infrastructures built within 500 meters from the coast. The increasing occurrence of extreme events calls for immediate action to protect these urban instalments. Even in the presence of efficient forecast measures but in the absence of effective planning, the likelihood of huge damage remains very high. Therefore, the new approach planned by the Marshall Islands, aims at diverting the risk from forecasting and intensity of the extreme event, to the responsibility of its management.

Technology represents only one aspect of prevention. Individuals, with their capabilities and responsibilities, governance, with executive support and strategy alignment, and training and the collection of documentation, are essential for systems to be successful in preventing and reducing the impact of natural disasters. Information management is complex and comprises various steps such as needs analysis, planning, production, organisation, sharing and re-use. Different capacities are required to support all steps adequately. Emphasis was placed on critical aspects such as executive support, participation, communication and scope management. The purpose is to enhance the understanding and reduce risks while optimising the future adoption of solutions.

Known and documented risks include financial and human resources or current practice with limited functionality and interoperability or standards. Less obvious yet still important, are the different organisational and information cultures which need to be considered with behaviours or attitudes often based on oral traditions. The project supported by IMELS in the Marshall Islands aims by the way to formulate and propose for adoption, rules and regulations establishing minimum standards for the construction of buildings.

#### ***4.9 El Niño Southern Oscillation and the drought***

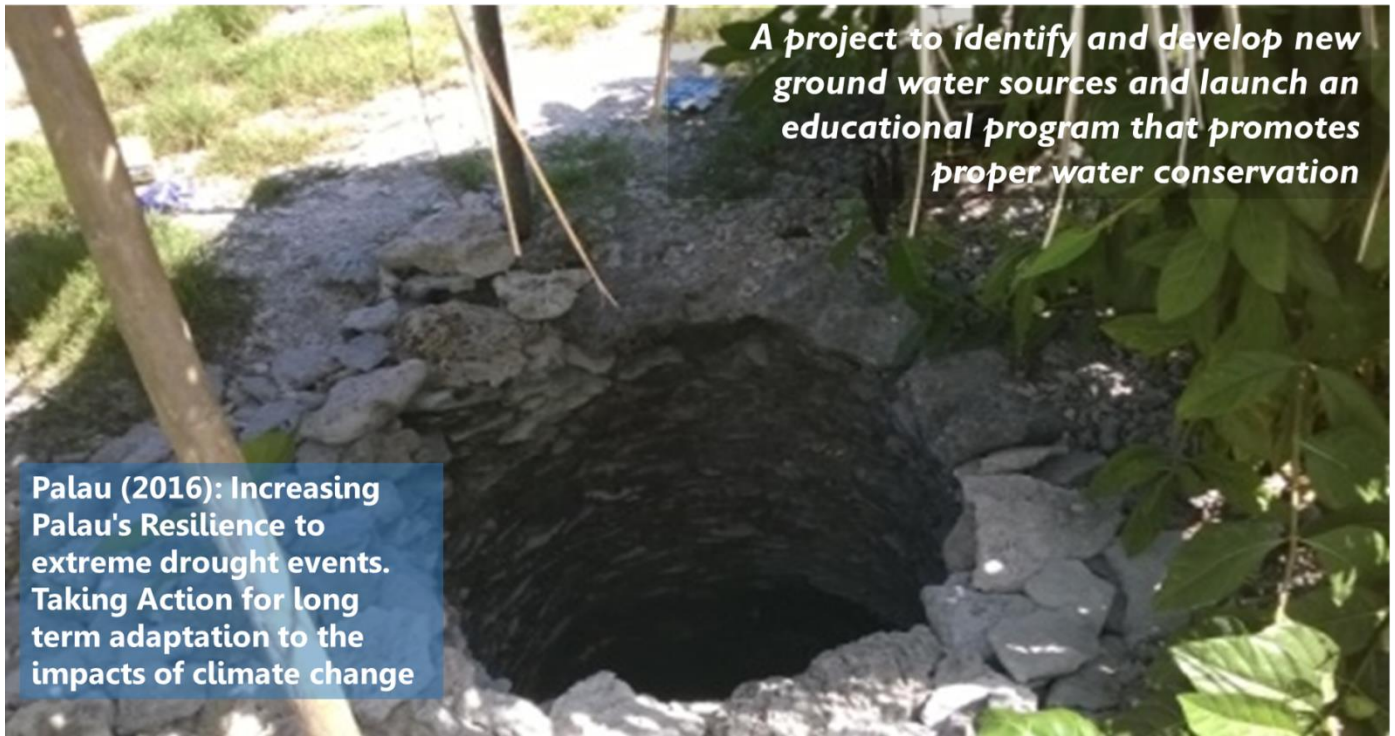
According to UNOCHA data, the extreme event of El Niño Southern Oscillation (ENSO) 2015/16 involved 60 million people predominantly in the Horn of Africa, South America and the Caribbean and Pacific.

In the Pacific, the warm phase of El Niño 2015/16 has been one of the strongest recorded in the last fifty years. Similar cycles were also found in 1997/98 and 1982/83. The peak was recorded at the



end of 2015 and continued until May 2016.

Much of the Pacific region, with the exception of the central Pacific, experienced below normal rainfall associated with the 2015/16 El Niño, according to PICO data, in large parts of the southwest Pacific. The maximum rainfall anomaly was experienced in January 2016 when precipitations were less than 40% of the average levels for the month.



Many impacts linked with the decreased rainfalls were experienced across the region. These included drinking water shortages (from rain tanks, wells and streams) and water rationing, salt water contamination of freshwater lenses, sanitation and health problems, poor agricultural production, high food prices, and significant costs associated with government drought relief (e.g. for transporting containers of drinking water and emergency food supplies).

The Republic of Palau declared a State of Emergency in March 2016 following the worsening of drought conditions, with Koror producing only 19 percent of its normal water production.

These extreme conditions drew the attention of IMELS that in two years and under request, supported PSIDS in four new projects respectively to enhance the water cycle and reservoirs of Palau, to finalize the installation of tanks for water harvesting in Nauru, to improve the sustainability of the irrigation in Vanuatu

and to install rooftop rainwater catchment systems in Micronesia.

#### **4.10 Traditional knowledge and solar irrigation for resilience in agriculture**

There is strong interdependency between food and water security and the sustainable and climate-resistant food systems development. In the PSIDS, agricultural activity is often based on a family level subsistence production and on products such as tubers (taro, yam, cassava) and fruits such as papaya, banana and pineapple. The need for improvement and diversification of the diet led to the introduction of vegetables such as cabbage, tomatoes and eggplants. The market for these vegetables is also supported by the tourism sector demand but this opportunity is greater in larger islands, near cities and tourist centers.

IMELS is supporting the resilience in agriculture in Vanuatu realizing six high-efficiency irrigation systems in farms located on the islands of Efate, Tanna and Santo, where the demand for horticultural products is supported by both the presence of tourists and the city. At the same time IMELS is also supporting a project in the State of Yap in Micronesia where the tourism income is limited due to lack of access and facilities.



**Vanuatu (2016):  
Irrigation for a  
resilient and  
sustainable  
agriculture**

*One of the farm  
visited during the  
Italian technical  
mission and involved  
in the solar irrigation  
project. Efate,  
Vanuatu*

However, in all cases, local culture and traditions always represent a precious sink from which to draw out best-practices and nature-based solutions for a resilient agriculture.

An example of that, is the starting project for the Yap communities in Micronesia where the 30% of people live in subsistence. In these remote area, household and community-level climate resilient food systems will be established by the project implementation, in the form alternative crop production systems at household-level (e.g. raised bed gardening, SPIN farming, container gardening, micro-gardening) and agroforestry systems development incorporating climate-resilient trees (for e.g. breadfruit) along with traditional staple crops at community-level.

For the development of climate-resistant agriculture systems remains therefore a crucial aim to joint innovative elements such as restoring degraded lands or renewables for irrigation, with endemic elements such as the agricultural biodiversity and the local knowledge.

*A resilient  
agriculture and  
innovative  
elements jointed  
with  
environmental  
endemism and  
traditional  
knowledge*









The Results of Ten Years  
of Activities within the  
Partnership





# The Results of Ten Years of Activities within the Partnership

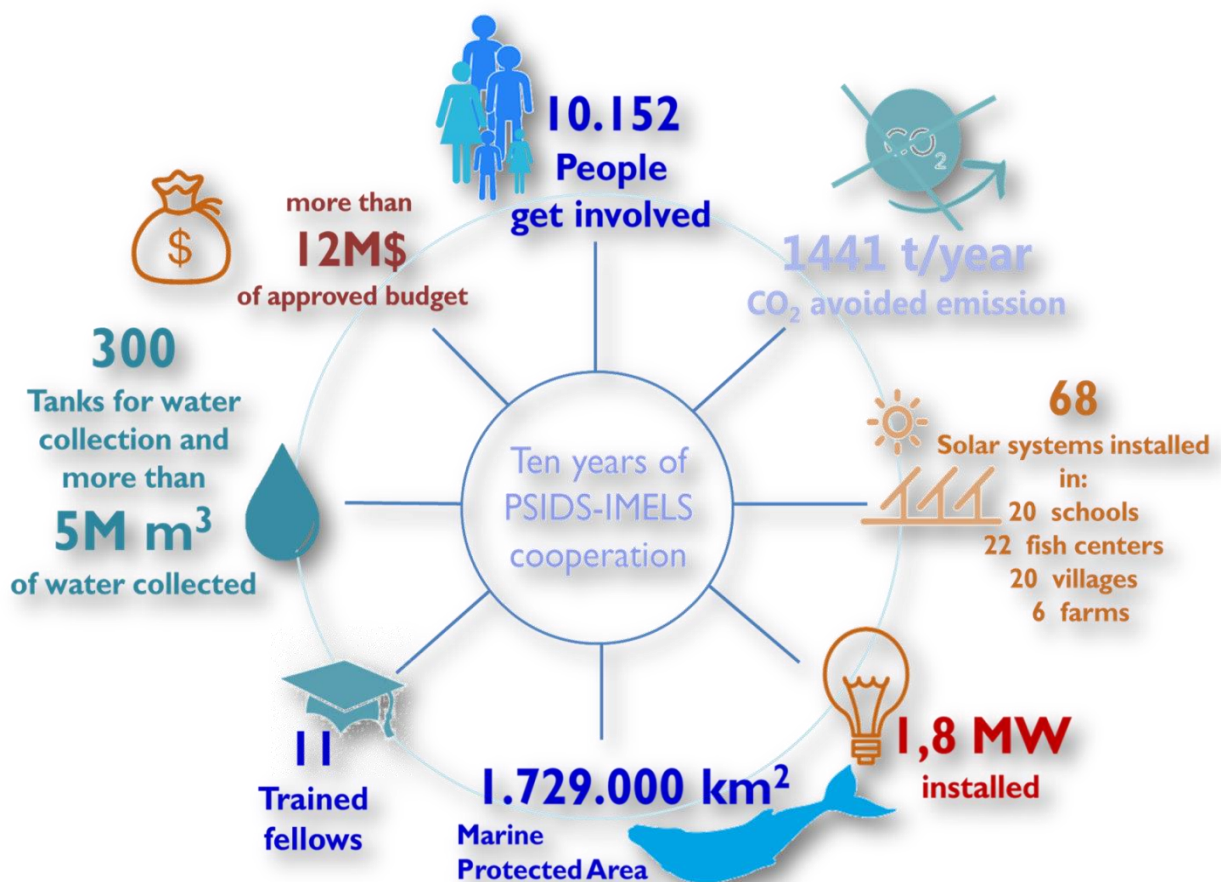
## 5. Data Analysis

### 5.1 Ten-year results

*In ten years more than ten thousand people directly involved*  
•••

During a decade, the Partnership passed by several phases that differently contributed to enrich and implement it. Many working groups of IMELS and of Permanent Representatives in New York have guaranteed over the years the projects implementation but above all allowed to preserving the international relations while ensuring an open door to dialogue between Italy and PSIDS over time.

In ten years of cooperation, 29 projects were approved for a total budget of more than US 12 million dollars. More than ten thousands people were directly involved in the projects and almost two hundred thousand people indirectly.



Emissions avoided has been more than a thousand tons of CO<sub>2</sub> emissions per year have been avoided, considering the annual energy consumption and the use of more than one energy source apart from diesel, the most widely used source in PSIDS.

The overall solar systems allowed to electrify schools, farms, fishing centres, irrigation systems and all essential services needed for almost 70 communities for a total of about 2 MW of installed power.

The MPAs implemented cover about 2 millions square kilometers from the implementation of three projects on sustainable management of marine resources according to conservation approaches, communities participation, marine spatial planning and ecosystem-based measures.

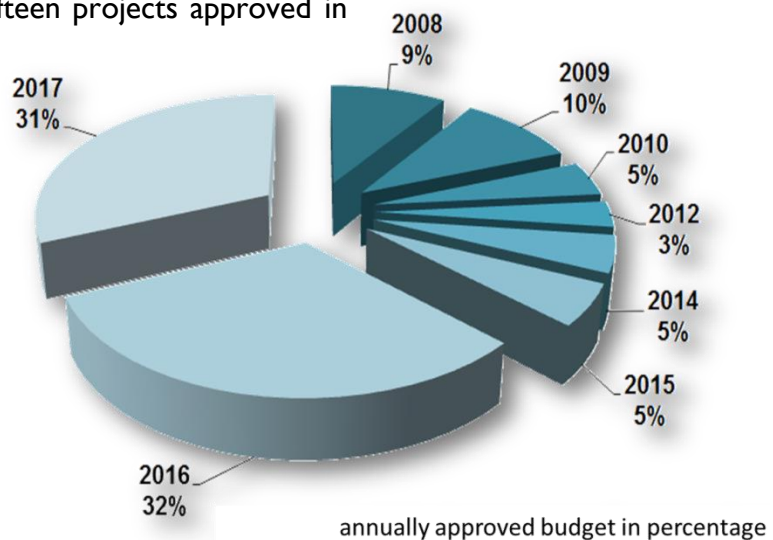
Eleven young politicians are doing or ended a fellowship on climate and oceans building a capacity of participating to the international processes for the implementation of the national priorities.

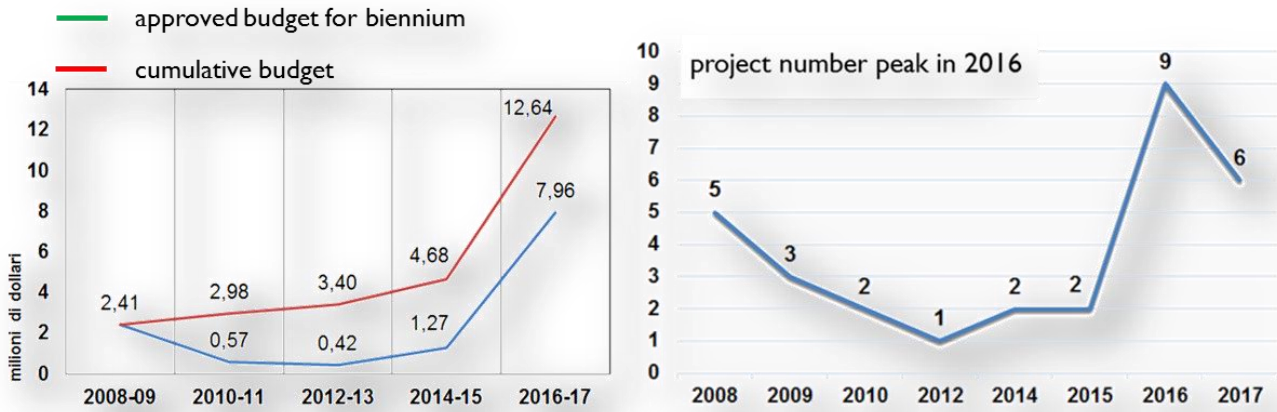
Finally, about three hundred tanks for water collection, six solar powered irrigation and rooftop rainwater catchment systems were installed or are being installing and two capacity building projects on water sustainable management are ongoing.

**5.2 The last biennium of cooperation**

Over the last two years, the program has increased in terms of the number of approved projects (32% of projects have been approved between JC9 and JC10 and 31% at JC11), as well as of the number of the bilateral meetings between IMELS and PSIDS. The two technical missions in the four PSIDS (Palau, Kiribati, Solomon and Vanuatu) gave a decisive impulse for the approval of ten projects on the total amount of fifteen projects approved in the biennium 2016-2017.

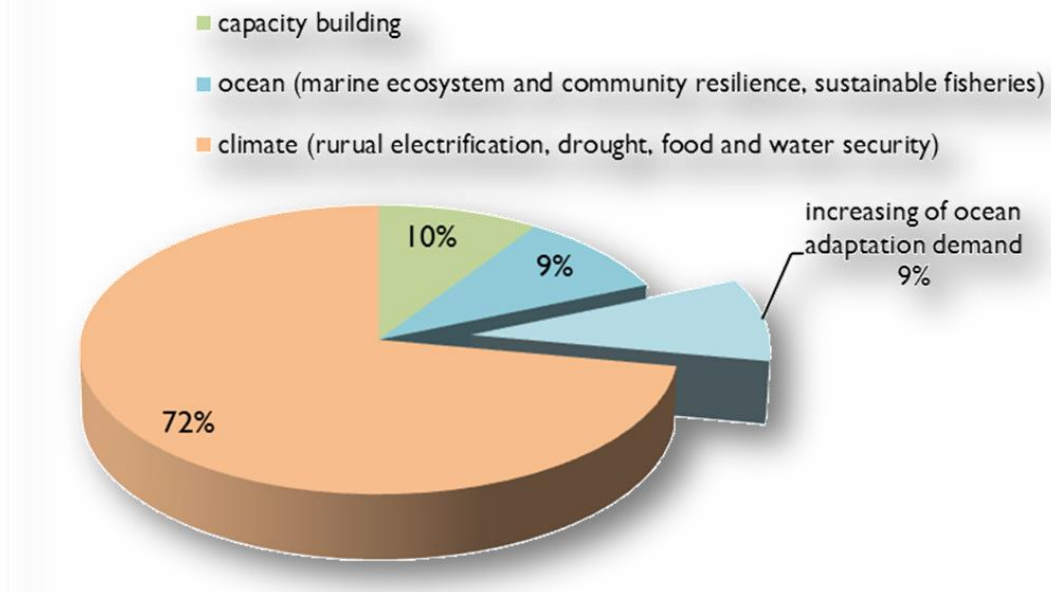
*Essential services  
for almost 68  
communities and  
2 MW installed*





The *climate-ocean related issues* was proposed by PSIDS in 3 projects on the *ecosystem-based adaptation* and in 3 fellowships for *capacity building*. Technical training and technology transfer in the electrification field reentered in 4 project for the *energy security*.

The severe event of the ENSO occurred during this biennium led to the approval of 4 projects on *water and food security* and finally 1 on *disaster risk reduction*.



### 5.3 The 2030 Agenda and the NDCs implementation

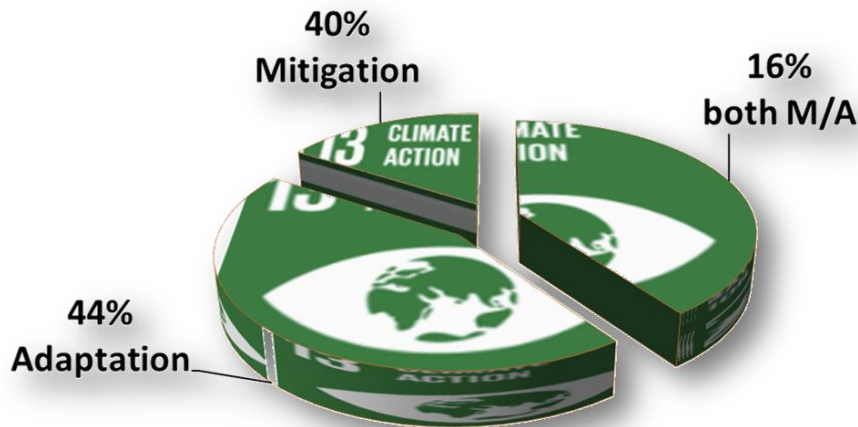
With respect to the Sustainable Development Goals (SDGs), the priority goal implemented is the SDG 13 on Climate Action. The projects equally covered either mitigation and adaptation needs and in the 16% of the cases both needs.

According to the linkages among SDGs further goals have been implemented. More than one third of the projects gave a contribution in the implementation of the SDG 7 for Affordable and Clean Energy with the rural electrification and replacing fossil

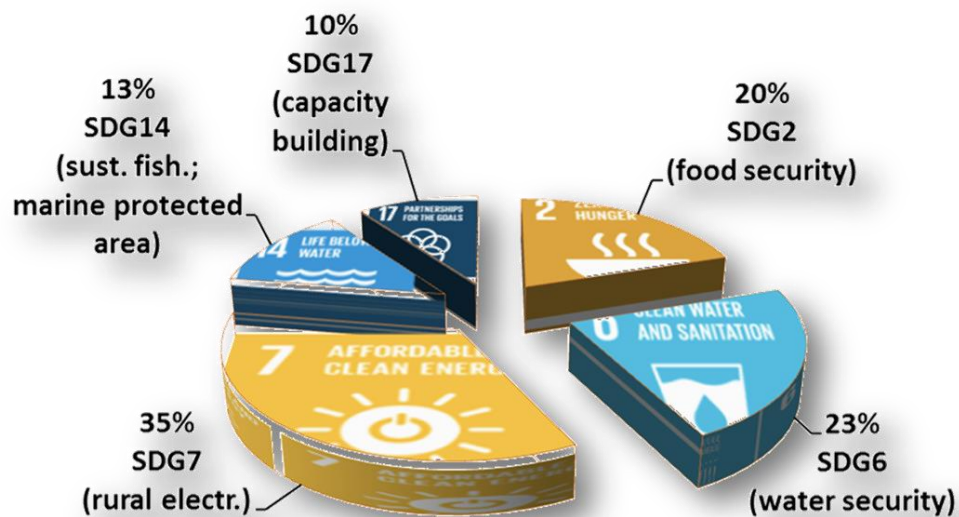


fuels with renewables.

Approximately 40% of the activities enabled both SDG 2 for Zero Hunger and SDG 6 for Clean Water and Sanitation since the implementation of food and water security realized through new water-saving capacities (e.g. irrigators, tanks and rooftop catchments) and sources (e.g. dispenser of drinking water, water pumps and wells).



10% of the projects focused on SDG 17 particularly on Target 17.9 for enhancing targeted capacity-building in developing countries. Finally, 13% of the projects had a positive impact on the SDG 14 through the reinforcement of the MPAs in the Pacific.



With respect to the Nationally Determined Contributions (NDCs) the implementation achieved is closer related to the priority needs of adaptation to climate change rather than mitigating targets, according to the low percentage of the global emissions of the PSIDS.

Since the signing of the Paris Agreement, IMELS financed almost

eight millions dollars for the implementation of NDCs on the following sectors already widely described above: (i) Energy-based adaptation and mitigation; (ii) Ocean-based adaptation; (iii) Capacity building under Art.II; (iv) Resilient agriculture and water security. The level of implementation has been summarize in the following table.

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## 1. Energy based adaptation and mitigation (4 projects, \$2.719.367)

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### Kiribati

#### From the NDC:

Activity 7 – Outer Island Fish Centres - design, procure and install off-grid PV systems for the Fish Centres (3.75kWp each) in all the Islands to a level to support a fully equipped centers lighting, refrigeration and other equipment

#### Project implementation:

Outer Island Fish Center Solar Panel System Phase I and 2

### Solomon

#### From the NDC:

The Ministry of Environment, Climate Change, Disaster Management and Meteorology (MECDM) will ensure that all projects funded by external sources support the implementation of National Action Plan for Adaptation - NAPA, and community-based adaptation programmes and mitigation measures

#### Project implementation:

- 1) Planning for electricity network in Solomon Islands
- 2) Sustainable Program of a widespread rural electrification for water and energy security

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## 2. Ocean based adaptation (3 projects, \$1.877.250)

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### Kiribati

#### From the NDC:

NDC covers fossil fuels and marine sequestration. Maritime and coastal sector including mangrove, coastal vegetation and seagrass beds. In addition to these quantified outcomes, Kiribati will proactively protect and sustainably manage its mangrove resources, as well as protect and enhance coastal vegetation and seagrass beds. Sector Carbon storage in the ocean ecosystem and Mitigation Option Mangrove forest enhancement will cover the 9.6% of 2025 projected inventory

#### Project implementation:

Strengthening of Phoenix Islands Protected Area (PIPA) & Creation of related Marine Protected Areas in Kiribati

In addition IMELS provided technical assistance for developing an accounting system for the blue carbon sinks

### Palau

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**From the NDC:**

The reference is within the Palau Climate Change Policy (PCCP): “ocean warming and acidification will heavily impact coral reefs, fisheries, and other marine-based resources crucial to our livelihoods, economy and culture” since the Intervention A.2 foresees Build resilience to temperature change and ocean acidification in marine ecosystems /fisheries by protecting coral sites

**Project implementation:**

1) Palau National Marine Sanctuary: Education and Awareness – Phase II

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**Tonga****From the NDC:**

To double the 2015 number of Marine Protected Areas by 2030

**Project implementation:**

Strengthening Protected Area Management in the Kingdom of Tonga

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**3. Capacity building under the Article 11 of the Paris Agreement (4 projects \$1.201.156)****Tonga****From the NDC:**

Means of implementation: Tongan Strategic Development Framework 2015-2025 the National planning framework with its national goal to achieve a more inclusive, sustainable and effective land administration, environment management, and resilience to climate and risk, finance initiatives and capacity building

**Project implementation:**

- 1) Strengthening of National Capacity For the Follow-up to, and Implementation of the Paris Agreement, the Sustainable Development Goals and related Major International Agreements
- 2) Tonga at the United Nations: A Capacity-Strengthening Project Aimed at the “De-Silo-ing” the Whole-of-Government Approach to Sustainable Development and Connecting Ocean Health with Climate Change Policies
- 3) Capacity building for the follow-up to and implementation of major international agreements

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**Fiji****From the NDC:**

there is a need to strengthen partnerships at all levels for building resilience for climate change and improve access to global financing facilities

**Project implementation:**

Fellowship for Capacity Building on Climate Change and Oceans

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**4. Resilient agriculture and water security (4 projects, \$2.038.608)****Micronesia****From the NDC:**

Nation Wide Integrated Disaster Risk

**Project implementation:**

Enhancing water security and climate resilient

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Management and Climate Change Policy 2013 and the FSM Climate Change Act 2014  
Strategic Outcome “Food, water and energy security – Uninterrupted supply of locally grown high-quality food crops for domestic consumption”

food systems for displaced atoll communities in Yap

### **Nauru**

#### **From the NDC:**

to improve the indigenous food supply and potable water availability and storage and the Water security from the National Sustainable Development Strategy (NSDS) 2005 – 2025

#### **Project implementation:**

Fellowship for Capacity Building on Climate Change and Oceans

### **Palau**

#### **From the NDC:**

Palau Climate Change Policy and the National Adaptation Plan foreseen “Intervention G.5 Undertake a comprehensive water resource inventory and develop an integrated water resource management plan”

#### **Project implementation:**

Increasing Palau’s resilience to extreme drought events: taking action for long-term adaptation to the impacts of climate change

### **Vanuatu**

#### **From the NDC:**

Vanuatu National Adaptation Programme of Action “Agriculture and food security · Development of resilient crop species including traditional varieties · Land use planning and management · Water resource management”

#### **Project implementation:**

Irrigation for a resilient and sustainable agriculture

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## Annex 1- List of the project approved in ten years

Beneficiary Country	Project Title	Approved at	budget in USD
<b>Cook Islands</b>	National Program of Action for Adaptation to Climate Change	JC2 (2008)	150.000
<b>Fiji</b>	Implementation of a comprehensive Policy Act, Biofuel standards, National Biogas Programme	JC2 (2008)	280.000
<b>Fiji</b>	Fellowship for Capacity Building on Climate Change and Oceans	JC10 (2016)	83.809
<b>Kiribati</b>	Renewable energy systems for water pumping in rural communities	JC2 (2008)	141.000
<b>Kiribati</b>	Wind resource assessment for Kiritimati Island	JC2 (2008)	105.000
<b>Kiribati</b>	Biofuel production and refining development at Kiribati	JC4 (2009)	170.000
<b>Kiribati</b>	PV-Hybrid minigrid for Chevalier College Abemama Atoll	JC4 (2009)	346.290
<b>Kiribati</b>	Outer Island Fish Center Solar Panel System	JC9 (2016)	753.400
<b>Kiribati</b>	Strengthening of Phoenix Islands Protected Area & Creation of related Marine Protected Areas in Kiribati	JC11 (2017)	730.600
<b>Kiribati</b>	Outer Island Fish Center Solar Panel System Phase 2	JC11 (2017)	764.838
<b>Marshall</b>	Building Infrastructure Resilience	JC9 (2016)	497.794
<b>Micronesia</b>	Grid-Tied photovoltaic power systems for Chuuk State	JC4 (2009)	700.000
<b>Micronesia</b>	Enhancing water security and climate resilient food systems for the displaced atoll communities in Yap	JC11 (2017)	948.750
<b>Nauru</b>	Household Water Storage	JC5 (2010)	570.000
<b>Nauru</b>	Household Water Storage Phase 2	JC8 (2015)	300.000
<b>Nauru</b>	Household Water Storage Phase 3	JC10 (2016)	45.522
<b>Palau</b>	Establishment and operationalization of the first nationwide Marine National Sanctuary in Palau	JC7 (2014)	300.000
<b>Palau</b>	Increasing Palau's Resilient water to extreme drought events. Taking Action for long term adaptation to the impacts of climate change	JC10 (2016)	800.000
<b>Palau</b>	Palau National Marine Sanctuary: Education and Awareness	JC11 (2017)	400.000
<b>Solomon</b>	Renewable energy electrification project for rural boarding school - Phase 1&2	JC2 (2008)	353.000
<b>Solomon</b>	Renewable energy electrification project for rural boarding school – Phase 3	JC6 (2012)	424.627
<b>Solomon</b>	Sustainable Program of a widespread rural electrification for water and energy security	JC10 (2016)	956.129



<b>Solomon</b>	Planning for electricity network in Solomon Islands	JC10 (2016)	245.000
<b>Tonga</b>	Capacity building for the follow-up to and implementation of major international agreements	JC8 (2015)	373.370
<b>Tonga</b>	Tonga at the United Nations: A Capacity-Strengthening Project Aimed at the “De-Silo-ing” the Whole-of-Government Approach to Sustainable Development and Connecting Ocean Health with Climate Change Policies	extr.procedure (2016)	370.625
<b>Tonga</b>	Strengthening Protected Area Management in the Kingdom of Tonga	JC11 (2017)	746.650
<b>Tonga</b>	2018 Tonga Fellowship on the Environment and Ocean (TFEO): Enhancing and Strengthening the Effective Implementation of Major International Agreements, including the United Nations Conventional on the Law of the Sea, the Paris Agreement, and the 2030 Agenda for Sustainable Development, in the Kingdom of Tonga	JC11 (2017)	373.352
<b>Tuvalu</b>	PV Standalone Home System (SHS) and Cooling Storage Facility for Niulakita and Funafala Islet, Funafuti, Tuvalu	JC7 (2014)	300.000
<b>Vanuatu</b>	Irrigation for a resilient and sustainable agriculture	JC10 (2016)	244.336



**2017 Ministero dell'Ambiente, del Territorio e del Mare**

Direzione Generale per lo Sviluppo Sostenibile, per il Danno Ambientale e per i Rapporti con l'Unione Europea e gli organismi Internazionali

**2017 Sogesid s.p.a.**