



## Cook Islands, Fiji, Niue, Solomon Islands, Tokelau, Tuvalu and Vanuatu 100% Renewable Energy Targets in the Pacific Islands

Activity	National and regional policies, plans, and strategies to set and meet the 100% renewable energy goals in seven Pacific Island Countries
Country	Cook Islands, Fiji, Niue, Solomon Islands, Tokelau, Tuvalu and Vanuatu
Sector(s) involved	Energy sector
Time frame	2012–ongoing

**Case summary**

In May 2012, Ministers representing a group of the Small Island Developing States (SIDS) agreed to the Barbados Declaration, which included a declaration on renewable energy targets by Pacific Island Countries (PICs), seven of which declared an ambitious target to generate 100% of their electricity from renewable technologies. The Cook Islands, Niue and Tuvalu have set a goal of 100% renewable energy by 2020, and Fiji, Vanuatu and Solomon Islands for 100% renewable energy by 2030. Tokelau already achieved the target by 2012/2013. The process of transition to renewable energy generation is deeply rooted in the existing national and regional policies, plans and priorities of the PICs, as reflected in their national and regional energy policy documents. However, the case demonstrates the highest political will of seven PICs to transition to 100% of their electricity generation from renewable energy technologies, exhibiting ambitious goals for RE transition. A coordinated and consultative approach at all levels (local, national and regional) was undertaken to remove barriers to the implementation of renewable energy plans in these countries. To ensure the implementation of the targets, the governments are seeking technical and financial support through ongoing regional activities and support from bilateral and multilateral finance channels. The country governments and the Secretariat of the Pacific Community aims to continue the momentum of meeting with these ambitious targets and to draw synergies with upcoming activities including the development of Nationally Appropriate Mitigation Actions (NAMAs) and the preparation of Intended Nationally Determined Contributions (INDCs).



### Why is it good practice

- » The policy framework reflects commitment, leadership and ambition at the highest political level.
- » It involves country driven processes for setting national targets for RE deployment in the country as they guide public policy (including regulatory arrangements) and indicate where potential investment opportunities lie for the private sector.
- » The initiatives engage stakeholders from all sectors from within the country as well as through regional and donor integration to ensure coordination across different key ministries for implementation of activities.
- » The seven individual country governments have also built consensus amongst stakeholders and attempted to draw synergies with follow-up activities on Nationally Appropriate Mitigation Actions (NAMAs) and the preparation of Intended Nationally Determined Contribution (INDCs).
- » Clear emphasis on capacity development in the energy sector, which is imperative for the region's development, has been a key focus of the entire exercise of meeting the 100% renewable energy target, facilitating peer-to-peer learning in the entire process.

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Success factors	<ul style="list-style-type: none"> <li>» Political willingness towards renewable energy transition</li> <li>» Donor support for finance, capacity building and institutional development</li> <li>» Development of regional partnerships</li> <li>» Existing potential to tap renewable energy and small geographical size of countries</li> </ul>
Overcoming barriers/ challenges	<p>What were the main barriers/challenges to delivery?                  How were these barriers/challenges overcome?</p>
Financial	<p>There is lack of financial resources for RE projects' feasibility study as well as project implementation. Multilateral funding arrangements with donor partners such the EU, ADB often solve this problem.</p> <p>There is suppressed market for electricity due to low rate of electrification in these countries to justify large RE projects.</p> <p>A regional approach to implementation through regional organisations such as SPC, PPA, SPREP, etc. often fits into the donor agencies preference for large projects.</p> <p>There is low purchasing power among consumers who are unable to afford decentralised renewable energy technologies even with subsidies.</p> <p>Incentivised mechanisms such as import duty free, subsidy schemes and low interest loans offered by National Development banks make the RE affordable.</p> <p>Getting RE equipment transported to more remote islands is expensive, irregular and causes issues with installations and maintenance.</p> <p>Most of the installations are usually carried by government agencies such as the Department of Energy, or a private company hired by the Government. In the case of Fiji and some other countries, the upkeep of the RE systems are subsidised by Governments. Also the regional approach mentioned above by combining a number of countries together makes the implementation of projects more attractive and viable.</p>
Institutional	<p>Poor infrastructure.</p> <p>Although in many cases, the investments in these areas are incremental, countries have realised the need to improve existing infrastructure and strengthen institutional capacity by allocating resources either through the national budgetary process or through bilateral partnerships funding.</p> <p>Bureaucratic hurdles for foreign investors and inability to secure rights over land make PICs an unattractive destination for foreign investments.</p> <p>Regulatory process covering foreign investments and land tenure can be a hindrance to private sector investment in the energy sector. Understanding the culture and knowing the key stakeholders/partners and who to approach (including organisations) helps expedite things. Moreover, regional cooperation among different stakeholders is helping to build this readiness.</p>
Information	<p>Comprehensive data sets for RE development planning are not readily available in these countries.</p> <p>The usual practice is to ask around for data, which are scattered all over the different entities. Recently there is an attempt to establish a regional data repository for the purpose of quality planning by the SPC.</p>
Capacity	<p>The seven countries have limited technical capacity in energy planning, adequate management capacities at government level, and Operation and maintenance capacities at local level.</p> <p>Donors, international/technical/implementing organisations are providing technical assistance to local staff, governmental bodies, utilities and industry associations to build both managerial and technical capacity at all levels, and identify and eliminate barriers to entry of RE technologies. Focus for technology transfer has shifted from hardware to soft skills based training to stakeholders, demonstration projects.</p>
Political/Policy	<p>Highly controlled electricity sector. There are state monopolies that deter private sector investments in the sector.</p> <p>Country governments have sought to promote investment in renewable energy technologies by reforming the electricity sector aimed at establishing independent power price regulation in order to facilitate cost recovery and attract private sector investment have been undertaken in some countries, including Fiji.</p>

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### Technology

Technology for RE deployment is available however RE energy storage is a critical barrier in increasing the potential of renewable energy in these counties to 100%.

Organisations such as IRENA are involved in charting the roadmap to address the issue of energy storage in the seven countries to ramp up RE deployment to 100%. For instance in Cooks Island, Fiji, Solomon Islands and Vanuatu many possibilities have been identified for energy storage including developing small hydropower stations with small impoundments that could serve as pumped storage for solar.

### Lessons learned

- » **Ready availability of finance and regional coordination is key:** The 'many partners, one team' approach needs to be put into practice through increased coordination between development partners, donors, regional institutions, national authorities and universities.
- » **Importance of harmonised technical standards for implementation of renewable energy technologies:** With most renewable energy projects in the PICs being supported through international development assistance, a wide range of technologies from different countries and differing specifications are being installed. This causes significant complications for operation and maintenance. An energy development initiative such as SIDS-DOCK could help to overcome such problems, provided funds are managed through the unified programme and not cut into many small projects with different decision makers.
- » **Clear assessment on the energy-water and land-use nexus is required:** The spatial constraints of islands require that the energy, water and land-use nexus must be assessed carefully with stakeholder involvement in the planning process for successful large-scale deployment of renewable energy.
- » **It is important to build investor confidence going beyond international development assistance:** The current dominance of, and reliance on, international development assistance financing for renewable energy projects in the seven PICs limits the opportunities to enhance investor confidence through demonstration of the commercial attractiveness of existing projects.
- » **An enabling environment is needed to attract the private sector:** An enabling regulatory environment is needed to attract private sector investments in renewable energy deployment in the region.
- » **Cultural adaptation is crucial:** Cultural adaptation linked to property rights, and the capacity to demonstrate the advantages of adopting change, are important factors to successfully install new projects, which will foster favourable development for local populations.

### How to replicate this practice

- » **Strengthen the collection and management of energy data:** This will assist in the development of robust energy information to begin with. It is also important to undertake in-country feasibility studies of renewable energy potential, which varies across countries.
- » **Make the transfer of soft skills a mandatory component of technology transfer:** This will help in building capacity for renewable energy at various levels. Targeted training workshops to address specific needs should be undertaken.
- » **Develop bankable renewable energy projects:** In the PICs, the fact that virtually all renewable power projects were funded from grants or soft loans endangered the sustainability of the projects and at times proved detrimental to the development of the renewable energy sector. For renewable energy projects, it is critical that projects include a sustainable business model where investment costs are readily recuperated.
- » **Participate in regional coordination networks and activities:** For replication of these activities, countries must participate in the 'many partners, one team' approach taken up through increased coordination between development partners, donors, regional institutions, national authorities and universities.

### Institutions involved

- » **Secretariat of the Pacific Regional Environment Programme (SPREP):** It has been set up by the governments and administrations of the Pacific region to lead the coordination of regional climate change policies and programmes through the Pacific Climate Change Roundtable, the Pacific Islands Framework for Action on Climate Change and the CROP CEOs Working Group on Climate Change.
- » **Council of Regional Organisations of the Pacific Energy Working Group:** Forum for coordinating energy-related activities within the members of PICs such as drafting of Pacific Islands Energy Policy and Plan, National Energy Policies and PIGGAREP.
- » **Secretariat for the Pacific Community:** A non-political party in existence since 1947, comprising of 22 PICs as members.

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- » **Department of Energy (DoE):** Department of Energy in these seven countries were involved in conducting stakeholder consultations for renewable energy assessments to achieve RE targets.
- » **Other institutions involved:** Pacific Power Association, University of the South Pacific, Pacific Islands Forum Secretariat, and the UN Economic and Social Commission for Asia and the Pacific.
- » **International Renewable Energy Agency (IRENA):** Provides technical expertise and knowledge sharing to PICs.

### Cooperation with

- » The International Union for Conservation of Nature's Energy, Ecosystems for Sustainable Livelihoods Initiative;
- » Asian Development Bank's Energy for All Initiative;
- » World Bank's Energising the Pacific initiative;
- » FAO's Bio-energy and Food Security effort and those of the Renewable Energy and Energy Efficiency Partnership;
- » Global Climate Change Alliance Pacific Small Islands States Project funded by the EU;
- » Global Renewable Energy Islands Network of IRENA aimed at bringing IRENA members together to share knowledge and experience on a number of activities organised around Pacific clusters;
- » The University of the South Pacific, partner in Project DIREKT, the Small Developing Island Renewable Energy Knowledge and Technology Transfer Network, a collaboration between universities in Germany, Fiji, Mauritius, Barbados, Trinidad and Tobago who are all working to raise the level of scientific expertise in Pacific small island developing nations.

### Finance

- » **Development Aid:** Renewable energy investments in PICs have been largely funded by development aid from Denmark, China, European Union, New Zealand, Australia, UAE and Japan (Pacific Environment Community Fund).
- » **Multilateral Funding:** From the Global Environment Facility (GEF) implemented by the United Nations Development Programme (UNDP), Asian Development Bank.
- » **Budgetary Allocation:** Comprises a small component of overall finance needs for RE transition in the seven PICs.
- » **Equipment donations:** Supporting organisations, developed countries and the Council of Regional Organisations of the Pacific agencies have provided equipment for many rural stand-alone systems and more recently also for larger grid-connected systems.
- » **SIDS DOCK:** The SIDS DOCK programme facilitates funding through a combination of sources including the SIDS themselves (government, private sector and social organisations) and the global private sector and development partners.

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### Organisers

The Global Good Practice Analysis and accompanying case studies are a joint initiative by the International Partnership on Mitigation and MRV and the UNDP Low Emission Capacity Building Programme in an effort to document and share examples of good practice in the design and implementation of INDCs, LEDS, NAMA and MRV systems. For an extensive version of this factsheet and more information, including the criteria applied, please visit [www.mitigationpartnership.net/gpa](http://www.mitigationpartnership.net/gpa)



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