

Republic of the Marshall Islands Pursuing a Sustainable and Resilient Energy Future

The Republic of the Marshall Islands (RMI) and the United States have a strong relationship as enshrined in the Compact of Free Association, U.S. Public Law 108-188.

RMI is an archipelago of 24 low-lying coral atolls in the North Pacific. Nearly 90% of national energy needs are currently met by imported petroleum products, although biomass remains important for cooking and crop drying on outer islands. All carbon dioxide emissions are the result of combustion of imported fossil fuels. A major fuel price spike in 2008 increased attention on the need to reduce the reliance on imported fossil fuels and to scale-up renewable energy.

National Energy Vision

The National Energy Policy of 2009 establishes a vision for an improved quality of life for its people through clean, reliable, affordable, accessible, environmentally appropriate and sustainable energy services.

Energy & Climate Facts

Total capacity (2015): 36.2 MW
Diesel: 35.9 MW
Solar PV: 0.28 MW

Total generation (2012): 77,495 MWh

Demand for electricity (2013):

Average/Peak: 7.0/10.7 MW

GHG Emissions per capita

(2010): 3.53 tCO₂e

Residential electric rate: \$0.346/kWh

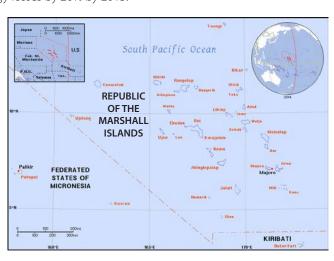
(2015 average)

Population (2015): **72,191**



- Electrify 100% of all urban households and 95% of rural outer atoll households by 2015.
- Provide 20% of energy through indigenous renewable resources by 2020.
- Improve efficiency of energy use in 50% of households and businesses, and 75% of government buildings by 2020.
- Reduce supply side energy losses by 20% by 2015.

RMI's 2009 Energy Policy emphasizes reducing fossil fuel imports, with a goal to replace more than one-third of fossil fuels by 2030 through renewable energy and energy efficiency measures in the energy and transport sectors. The country's 2009 Energy Action Plan supports implementation of the country's energy policies.



"Marshall Islands wants to demonstrate its seriousness about combating climate change...most importantly, it wants to lead by walking the talk."

— Hilda Heine, President of the Republic of the Marshall Islands

 $^1 http://www.pireport.org/articles/2016/02/23/major-solar-energy-project-reduce-marshalls\% E2\% 80\% 99-energy-costs.\\$

Energy Programs

Energy supply – Reliant on imported fuel for energy and transportation. Transport is largest consumer of petroleum fuel.

Energy efficiency – Some supply-side and demand-side load reductions have been introduced such as pre-paid meters, energy efficient light bulbs, and efficient air conditioners.

Renewable resources – Solar panels are used for household lighting and small grid tied systems. Biomass is heavily used for cooking in remote areas.

Current Activities

Climate change planning — RMI's intended nationally determined contribution (INDC) to the 2015 global climate agreement set a target to reduce greenhouse gases (GHGs) to 32% below

Images courtesy of: OIA logo (Office of Insular Affairs), RMI map (Portable Atlas), island photos (Misty Conrad).

2010 levels by 2025 and an indicative target to reduce emissions to 45% below 2010 levels by 2030.

Building audits — Auditing buildings to determine energy conservation measures for improvement, as well as, roof top solar assessments.

Energy efficiency — Continuing work on supply and demand side efficiency measures and loss reduction. Promoting fuel efficiency for vehicles and boats.

Renewable resources — Solar panels and copra biofuel are being developed to offset diesel generation.

Next Steps: Collect Data & Measure Progress

 Fuel consumption electricity, transportation.



- Electricity production base, peak, renewables %.
- Energy consumption by sector.
- Energy efficiency initiatives track energy savings.
- GHG emissions inventory electricity, transportation, agriculture.

Areas for Further Development

Resource assessment and financing — Promote renewable development.

Energy efficiency — Improve demand and supply side energy efficiency, lighting, cooling, appliance and building standards, and energy audits.

Energy technology — Clean cookstoves, electric vehicles, coconut oil production for electricity and transport.

Greenhouse gas — Mechanisms to facilitate energy/fuel data collection and analysis for decision making.

Disaster resiliency — Emphasizing energy security, conservation, and low carbon, climate resilient infrastructure development.

Energy planning — Develop transparent decision-making processes, legal tools and regulations, consistent enforcement of regulations, integrated energy project planning and regional cooperation.

Financial, technology and capacity building — Coordinate and leverage donor support and strengthen public/private partnerships.



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www.nrel.gov www.doi.gov/oia

NREL/FS-7A40-66682 • July 2016

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The U.S. Department of Energy's National Renewable Energy Laboratory is providing strategic guidance and technical support to Palau as the country strives to build a more sustainable and resilient future. This partnership is made possible through a grant from the U.S. Department of the Office of Insular Affairs.

NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.