

## **EQUATOR SOLAR ENERGY COOK ISLANDS**





Does Rarotonga have solar power? The Cook Islands Electricity Sector All inhabited islands of the Cook Islands currently have centralised power supplies that have historically been powered by diesel generators. Since around 2011,increasing solar PV generation on Rarotonga has changed this situation.





Will the Cook Islands use renewable electricity? The Cook Islands will be careful in its selection of renewable electricity options and will not entertain unproven or non-commercial technologies. The attached Summary Table provides some indicative and preliminary information on the types and costs of the renewable electricity technologies we are considering.





Can solar power be used in the Cook Islands? The Cook Islands has abundant solar radiation, which makes solar electricity PV an attractive option. On average, about 80 percent of households already use solar water heating, and we are committed to increasing the use of photovoltaics for electricity generation and to reduce reliance on diesel.





How will new energy technologies affect the Cook Islands? In future,new energy technologies such as marine energy may offer new opportunities for the Cook Islands to generate electricity from other renewable sources. Developments in energy storage or in energy efficiency may also further reduce the Cook Islands??? reliance on diesel. The Cook Islands prefers to use proven and economic energy technologies.





What is a Cook Islands renewable electricity chart (road map)? This document is called the Cook Islands Renewable Electricity ???Chart???. Other countries have called similar documents a ???Road map??? ??? and these are countries that are either landlocked or have many kilometres of road between settlements. Our environment is different. We have many kilometres of sea between islands.



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Where are solar panels installed in the Cook Islands? The Cook Islands is a recipient of the Fund and has committed to installing Solar (PV) systems for the islands of Rakahanga, Pukapuka, Nassau, Suwarrow and part of Manihiki.





Equator Energy is East Africa's market leader in Commercial and Industrial (C& I) solar power. We operate over 120 solar plants with a total capacity of over 50MW of solar capacity in 7 countries. Of these 6,2 MW are installed at gold mines, ???





Based on average solar radiation of 6 hours, a 100kW solar system can produce  $100kW \times 6$  hours = 600kWh of electrical energy per day. This is the optimal state, and is based on the calculation of the equator zone, the region with the most ???





Expected results. 300 MW of solar capacity deployed by 2030;; 60,000 T CO???-eq. avoided per year by 2025.; Quote "We are excited that IBL and STOA are shareholders in Equator ???





1. Introduction. This Plan updates the Te Atamoa o te Uira Natura (The Cook Islands Renewable Electricity Chart (CIREC), 2012) and is a guiding document for all stakeholders.1 While ???





Although nearly all households in the Cook Islands are connected to grid electricity, only 5.5% of households have additional solar photovoltaic systems installed, and 1% use small diesel generators. Several ???



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Renewable Power for Remote Communities. The preceding maps of Solar radiation (Solargis) and Wind energy (Global Wind Atlas) show that Oceania is able to be roughly split into regions ???





In its approach to delivering a 100% renewable energy target across 12 islands by 2020, the Cook Islands presents a rare insight into how planning requirements of high penetration renewable





Offshore floating solar panels are an ideal way to address the solar energy needs of high population density countries like Indonesia and Nigeria., according to a study published July 27, 2023 by