

Energy Snapshot

British Virgin Islands

This profile provides a snapshot of the energy landscape of the British Virgin Islands (BVI), one of three sets of the Virgin Island territories in an archipelago making up the northern portion of the Lesser Antilles. The 2015 electricity rates for BVI are of \$0.16 to \$0.24 per kilowatt-hour (kWh), lower than the Caribbean regional average of \$0.33/kWh. Like many island nations, the BVI is almost 100% reliant on imported fossil fuels for electricity generation, leaving it vulnerable to global oil price fluctuations that directly impact the cost of electricity.

Population	32,680
Total Area	151 square kilometers
Gross Domestic Product (GDP)	\$0.5 billion U.S. dollars (USD)
Share of GDP Spent on Fuel and Imports	Electricity - 1.2% Total - 4.8%
GDP Per Capita	\$42,300 USD
Urban Population Share	40.8%

Electricity Sector Data

The British Virgin Islands Electricity Corporation (BVIEC) was formed by ordinance in 1978. As the territory's sole utility, BVIEC is in charge of generation, transmission, supply, and distribution, all of which is generated from diesel fuel. Rates are designed in "declining block rates" so that customers are charged a rate according to the amount of electricity they use. The blocks decrease in price so customers who use higher amounts of electricity are billed less for each incremental unit.



The British Virgin Islands' Renewable Energy Goal:
None

Government and Utility Overview

Government Authority	Ministry: Ministry of Communications and Works	
	Key Figure: Mark Vanterpool	
Designated Institution for Renewable Energy	None	
Regulator	British Virgin Islands Government	
Utilities	Name: British Virgin Islands Electricity Corporation	Publicly owned corporation
	Serves 15,250 customers. 100% of shares held by the British Virgin Islands Government.	

Clean Energy Policy Environment

Current law provides a monopoly to BVIEC, as is common throughout the region. The law was originally enacted to ensure that the utility would have sufficient revenue to cover its infrastructure costs. Some homes and businesses have installed solar water heating, while off-grid consumers and

Electricity Sector Overview

Total Installed Capacity	44 megawatts (MW)	
Peak Demand	32 MW	
Total Generation	50 gigawatt-hours	
Renewable Share	<1%	
Transmission & Distribution Losses	8%	
Electrification Rate	Unknown	
Average Electricity Tariffs (USD/kWh)	Residential	\$0.19-\$0.29
	Commercial	\$0.19-\$0.29
	Industrial	\$0.19-\$0.29

those on the outer islands are able to produce their own electricity, subject to regulation by the BVI government.

Green VI, a nonprofit organization, is working to pass legislation that would allow renewable energy to be developed in the BVIEC service area.

Energy Efficiency and Renewable Energy Projects

Based on renewable energy resources for proximate island nations, the BVI is estimated to have developable solar and wind resources, although no specific values have been published. In September 2014, BVIEC held a solicitation for companies to develop roughly 2 MW of solar photovoltaic

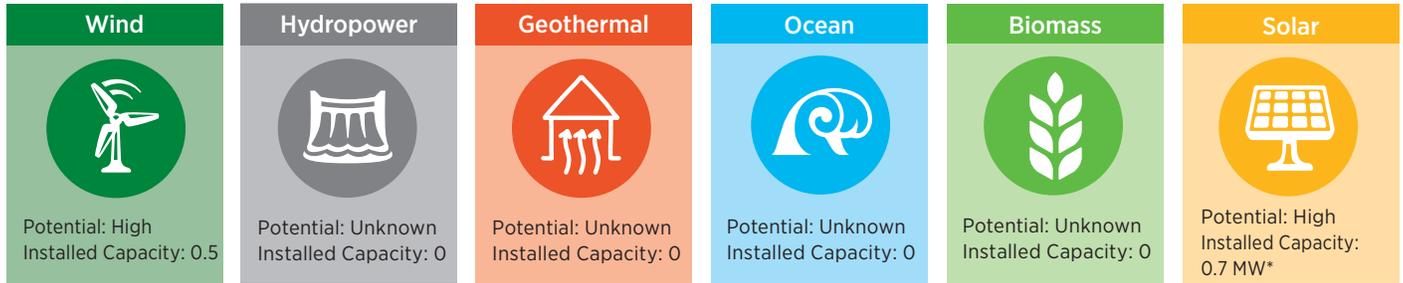
Existing Policy and Regulatory Framework

Renewable Energy	
Feed-in Tariff	
Net Metering/Billing	
Interconnection Standards	
Renewables Portfolio Standard/Quota	
Tax Credits	
Tax Reduction/Exemption	
Public Loans/Grants	
Green Public Procurement	
Energy Efficiency	
Energy Efficiency Standards	
Tax Credits	
Tax Reduction/Exemption	
Public Demonstration	
Restrictions on Incandescent Bulbs	
Appliance Labeling Standards	
Targets	
Renewable Energy	
Energy Efficiency	

● In Place ■ In Development



Renewable Energy Status and Potential



*Does not include 208 PV panels installed at Cooper Island Beach Club.

(PV) systems on government buildings. Thirteen companies made site visits and four submitted bids. The BVI is also investigating the potential for waste-to-energy plants and switching streetlights to LEDs to increase efficiency.

The outer islands already use renewable resources to produce energy. Peter Island generates 70% of its electricity from two Wind Energy Solutions hybrid turbines rated at 250 kilowatts (kW) each, backed-up by diesel generators. Cooper Island generates more than 75% of its electric needs from solar PV and uses solar water heating. Virgin Limited Edition has proposed building a resort on Mosquito Island with enough renewable energy generation to make the site carbon-neutral. Privately owned Necker Island is working with NRG Energy to build a renewably powered microgrid on the island that will incorporate 900 kW of wind capacity, 300 kW-direct current of solar capacity, and 500 kWh of energy storage.

Opportunities for Clean Energy Transformation

The BVI has sufficient renewable energy resource potential to meet some or all of its current and future electricity needs. To leverage these resources, the island must address the barriers associated with integrating high levels of variable renewable energy generation into its isolated, relatively small electrical distribution system. The electricity monopoly law passed in 1978 has not been updated to address self-generation and poses a direct barrier to distributed renewable energy. Policy options not currently in use in the BVI could support renewable energy development by reducing or removing some of these barriers. Finally, the market size and current grid infrastructure present real—but solvable—challenges to attracting funding for large-scale renewable energy projects.

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Energy Transition Initiative

This energy snapshot was prepared to support the Energy Transition Initiative, which leverages the experiences of islands, states, and cities that have established a long-term vision for energy transformation and are successfully implementing energy efficiency and renewable energy projects to achieve established clean energy goals.

Through the initiative, the U.S. Department of Energy and its partners provide government entities and other stakeholders with a proven framework, objective guidance, and technical tools and resources for transitioning to a clean energy system/economy that relies on local resources to substantially reduce reliance on fossil fuels.



Sources

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