## CAPRI DATABASE & TOOLS GLOSSARY

## GLOSSARY OF TERMS

Term	Definition
AC	Alternating current. A form of electric current used in the majority of modern day electrical appliances and equipment
Agro-Energy	An area of agriculture that focuses on crops that can be grown to supply biomass energy to a process
Availability Factor	The ratio or percentage of time, during a set period (typically annually) wherein an energy generation technology is available to operate (irrespective of whether or not it is made to operate)
Avoided Cost	The theoretical cost that a utility avoids by purchasing power from an independent producer versus: generating power itself; purchasing power from another source; or constructing a new power plant
BL&P	Barbados Light and Power Company Ltd
boe	Barrel of oil equivalent
BOS	Balance of system. The components of an electricity generation system that allow the electricity generated to be properly applied to the load: components to condition the electricity produced from the system, safely transmit the electricity to the load, and/or store the electricity for future use
Capacity Factor	The ratio or percentage of actual energy output of a power plant over a given period of time, to its potential output if it were able to operate at rated capacity continuously over the same period of time.
Charge Controller	An electrical device used to adjust and control the level of charge to a battery pack.
Closed-loop	As it relates to solar water heater systems, a closed loop system is one in which the water is heated by a separate, isolated fluid circulating in a closed loop, continuous cycle. The isolated fluid is heated by the sun, which in turn transfers its heat to the water through a heat exchanger before returning to the beginning of the cycle.
Commercial Scale System	Power generation systems for meeting commercial energy needs
Country	The country in which RE implementation is targeted.
Currency	The different currencies include:  - BBD, Barbadian Dollars  - EUR, Euros  - GYD, Guyanese Dollars

	- JMD, Jamaican Dollars
	- USD, United States Dollars
	- XCD, East Caribbean Dollars
DC	Direct current. A form of electric current often associated with primary power suppliers such batteries, solar panels and wind turbines
Deep Cycle Battery	A rechargeable battery, commonly associated with renewable energy systems, designed to accommodate multiple deep discharges and recharges.
Dispatchable	When an electricity generating plant's output can be controlled in accordance with the needs of the grid operator, i.e. the generating plant can be turned on or off, or have its power output adjusted according to order
EE	Energy Efficiency
FIT	Feed in tariff. A rate paid by the utility to a generator for electrical energy received
Flat-Plate Collector	A type of solar collector consisting of a series of flat glass or plastic plates with built in black surfaces that absorb solar radiation for heating a fluid (usually water)
Fuel <mark>C</mark> alorific Value	The energy content of a fuel per unit mass
Grid	Network of electrical transmission and distribution lines to transport electricity from power generating facilities to point of use/consumption
Grid- Tied/Connected	The state in which a renewable energy system is connected to the grid and can inject electricity into the grid, as well as use electricity from the grid, effectively using the grid as a backup source of electricity
Household	A house and its occupants regarded as a unit
Insolation	The rate of delivery of direct solar radiation per unit of horizontal surface
Instrument	Refers to the type of incentive being applied, e.g. FIT, Small Loan, Tax incentive, etc.
	The amount charged by a lender to a borrower for a loan, typically expressed as an annual percentage of the loan outstanding. There are two main types of interest rate:
Interest rate	<ul> <li>Fixed: Interest rate is fixed throughout the duration of the loan</li> </ul>
	<ul> <li>Variable: Interest rate is allowed to vary throughout the duration of the loan as a function of the base rate in the financial market</li> </ul>
IPP	Independent Power Producer. A private entity which owns and operates facilities to generate electric power for sale to the national electric grid

## European Union Energy Facility II Project: Frameworks, Policies and Instruments for Mobilising Renewable Energy in the Caribbean

Inverter	An electrical device used to convert DC electricity to AC electricity
JPS	Jamaica Public Service Company Ltd.
kW	Kilowatt. A metric unit for real electrical power
kWh	Kilowatt-hours. A metric unit of energy usually used to represent electrical energy
LCOE	Levelised Cost of Electricity/Energy
Load Factor	The ratio of the average energy demand (average load) on a generator over a given period of time, to its rated peak energy demand (peak load) over the same time period
Long Run Avoided Cost	The avoided cost based on accounting for long-term costs including capital expenditures for facilities and infrastructure upgrades
Monocrystalline	A type of silicon used in the manufacture of some types of solar photovoltaic panels
Net-Billing	A policy mechanism which allows a renewable energy generator to export any excess energy produced to the grid for a credit from the utility at a defined rate (typically the avoided cost)
Net-Metering	A policy mechanism which allows a renewable energy generator to export any excess energy produced to the grid for a credit from the utility at their electricity retail cost
O&M	Operation and Maintenance
Peak Demand	The maximum demand in kVA or kW recorded by the utility, over a set time period.
Peak Sun Hours	The equivalent number of hours per day when solar irradiance averages $1{,}000~\text{w/m}^2$
Policy Name	The title or name assigned to a policy by its proponents
Policy Type	There are two policy types:  • Policy
	Pre-Policy: a prelude to a policy
RE	Renewable Energy. Any form of energy that comes from a renewable source (solar, wind, water (hydro), biomass etc.)
	Renewable energy technology. A technology used to convert renewable energy into usable energy. RETs covered include:
	- <b>Biomass</b> : a technology that converts the energy in plant-based material to derive fuel or produce electricity
RET	- <b>Geothermal</b> : a technology that utilises the heat generated from inside the earth as its primary input to generate electricity
	- <b>Hydro</b> : a technology that converts the energy from the flow of water (typically in a river) to produce electricity
	- <b>Solar Photovoltaic</b> : a technology that utilises solar

	irradiance to produce electricity
	- <b>Solar Water Heater</b> : a technology used to heat water, using thermal energy from the sun as its primary input
	<ul> <li>Wind: a technology that converts the kinetic energy in wind to electricity</li> </ul>
	- <b>Waste to Energy</b> : a technology that converts the energy in solid waste material to derive a fuel or produce electricity
Renewable Energy Rider	The name given to Barbados Light & Power's net billing scheme
Residential Scale System	Power generation systems for meeting residential energy needs
ROI	Return on Investment
	Refers to the target sector of the incentive. There are three sectors covered in this database:
Sector	<ul> <li>Residential: Households, apartments or other built facilities designated as residential</li> </ul>
ATT DO	<ul> <li>Commercial/Industrial: Built facilities designated for commercial/industrial operation</li> </ul>
	Utility/IPP: See respective definitions for utility and IPP
Short Run Avoided Cost	This cost refers to avoided cost calculated based on energy acquisition costs plus other marginal operating and short-term costs
	The stage of implementation of the instrument. There are three states of completion:
Status	Implemented
(for incentives)	In discussion
	Planned
Status of Approval (for policies)	Refers to the level of completion and adoption of a policy document. The database specifies the following levels:
	• <b>Under Development:</b> There is an official commitment to develop a policy but it is still in the drafting phase
	Draft: The policy has been drafted, but has not been passed into effect, and is subject to revision
	Draft (Incomplete): Draft policy is incomplete
	In Effect: The policy document is finalised, and has been adopted by government
TBC	To be confirmed
tCO2	Ton of carbon dioxide
toe	Ton of oil equivalent
Utility	Entity responsible for the transmission, distribution and sale of
· · · · · · · · · · · · · · · · · · ·	

## European Union Energy Facility II Project: Frameworks, Policies and Instruments for Mobilising Renewable Energy in the Caribbean

	electricity to consumers within their geographic area of operation
Utility Scale Systems	Power generation systems designed for commercial sale of electricity to the national grid.
White Paper	A White paper is a policy document that sets out Government's proposal for a future legislation. It informs readers concisely about a complex issue and presents the government's philosophy on the matter. It is intended to act as a guide or information document



Taking Responsibility