



CREEE

CARIBBEAN CENTRE FOR RENEWABLE
ENERGY & ENERGY EFFICIENCY



2018 ENERGY REPORT CARD DOMINICA

This document presents Dominica's Energy Report Card (ERC) for 2018. The ERC provides an overview of energy sector performance in Dominica. The ERC also includes energy efficiency, projects, technical assistance, workforce, training and capacity building information, subject to the availability of data.

This ERC includes data and information that was provided by government ministries, agencies or departments with responsibility for energy and was supplemented by internet research, author calculations and inferences.



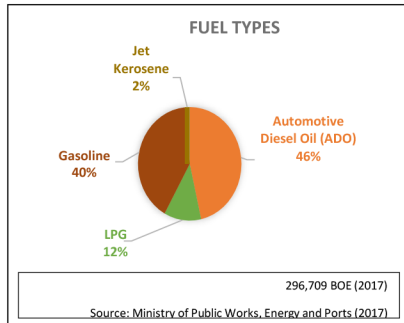
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“AT A GLANCE”

Summary of the Energy Sector

KEY DATA & INFORMATION – ENERGY SECTOR	
Population	71625 ¹
GDP (USD) Per Capita	\$9466.52 ²
Human Development Index	0.715 (2017) ³
National Energy Policy	In draft ⁴
Renewable Energy (RE) Policy	In draft ⁵
RE Target	100 % by 2030. ⁴
Energy Performance Standards/Appliance Labelling	No
Total Oil Imports (BOE) per day	N/A
Total Oil Export (BOE) per day	N/A
Total Installed Capacity (MW)	25.98 ⁵
Total Installed RE (MW)	6.64 ⁶
Fuel & Oil Imports as % of GDP	2.02 (2017) ⁷
Electric vehicle stock	N/A
National Repository for Energy Data	No



ENERGY SECTOR PERFORMANCE AGAINST THREATS

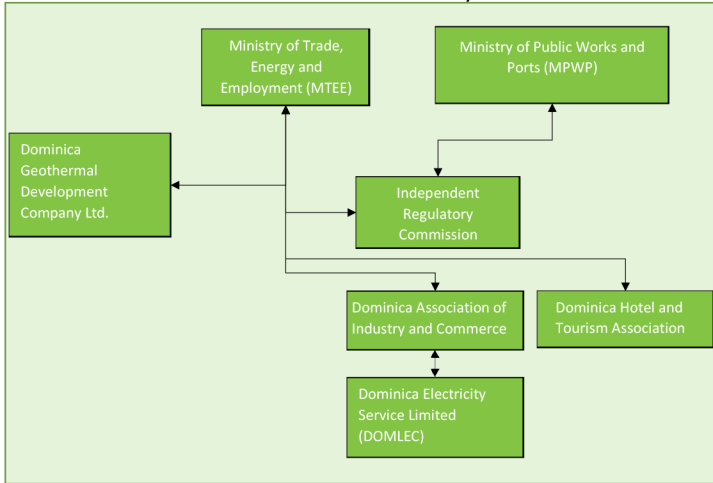
<i>Indicator</i>	<i>Base /Current Performance (Year)</i>	<i>National Target</i>	<i>Proposed CARICOM National Target by 2027 ⁸</i>	<i>Indicative RE Oil Displacement^{9,10} Potential Annually**</i>
RE as % of Installed Capacity	26 %	100% by 2030 ⁵	56 %	<ul style="list-style-type: none"> • 1 MW wind displaces 1,760 barrels of oil equivalent (BOE) • 1 MW hydro displaces 3,300 BOE • 1 MW solar displaces 1,210 BOE
*Energy Intensity (BTU/US\$1 Unit of output)				<p><u>Energy Intensity (EI)¹¹:</u></p> <ul style="list-style-type: none"> • EI measures how energy benefits the economy and is calculated by taking the ratio of total primary energy use (all of the fuels and flows that a country uses to get energy) to GDP (the total money made in a country). EI indicates how effectively an economy uses their fuels and flows.

*The energy efficiency target for CARICOM is 33% reduction in energy intensity by 2027, compared to a reference of Average Annual Energy Intensity of ~13,000 BTU per USD of GDP in 2015.

**Based on capacity factors of 0.32 for wind. 0.6 for hydro and 0.22 for solar.-¹⁶

KEY ENERGY STAKEHOLDERS

Governance Structure for the Electricity Sector



OTHER KEY STAKEHOLDERS:

Dominica Bureau of Standards

Customs Division

PDV Caribe Ltd, Rubis West Indies and West Indies Oil Company

National Petroleum Marketing Co. Ltd.

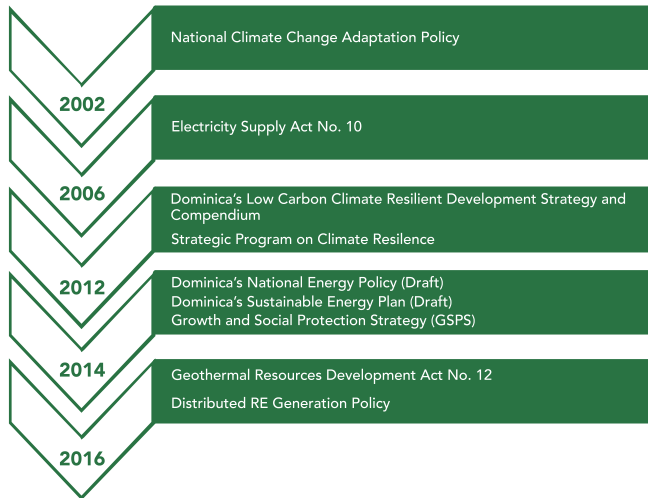
Sol Petroleum

POLICY, LEGAL AND REGULATORY FRAMEWORK

Electricity Sector: Policy, Legal and Regulatory (PLR) Framework

✓ Energy Policy and Energy Action Plan	●
✓ RE Target	●
✓ EE Target	●
✓ Electricity Regulator	●
✓ Net billing/Net metering	●
✓ Interconnection Policy/Standards	●
✓ Feed-in-tariff	●
✓ RE/EE Act	●
●	●
●	●
●	●

●	●	●
Completed/ In place	In progress/ Draft	Not yet started/ Not established



POLICY, LEGAL AND REGULATORY FRAMEWORK

Policies and Legislation Relevant to the Transportation Sector ^{14, 15, 16}	
Policies	<ul style="list-style-type: none">• Dominica's National Energy Policy (draft)• Dominica's Sustainable Energy Plan (draft)• Dominica's Low Carbon Climate Resilient Development Strategy• National Roads Policy
Legislation & Regulation	<ul style="list-style-type: none">• Supplies Control Act No. 21 of 1979• Climate Change, Environment & Natural Resource Management Bill, 2014

ELECTRICITY AND ENERGY EFFICIENCY

KEY DATA & INFORMATION	
1. Fuel Consumption – Electricity Subsector (BOE)	
2. Installed Conventional Capacity – Electric Utility (MW)	25.98 ⁵
3. Installed Conventional Capacity – IPPs (MW)	7.705 ⁵
4. Base Load (MW)	6.46 ¹⁷
5. System Peak Demand (MW)	12.92 ¹⁷
6. Total Generation (MWh)	65,411 ¹⁷
7. Total Sales (MWh)	56,289 ¹⁷
8. Total Number of Customers	
TARIFFS	
9. Residential Tariff (US\$/kWh)	0.22 – 0.25 ¹⁸
10. Commercial (US\$/kWh)	0.24 – 0.27 ¹⁸
11. Industrial/Large Power (US\$/kWh)	0.24 ¹⁸
12. Street Lights (US\$/kWh)	0.27 ¹⁸

EFFICIENCY	
13. EE Target	N/A
14. Electricity System Losses (%)	9.4 % ⁵
15. Energy Use (kWh) Per Capita	7,85.9 ¹²
16. EE Initiative and Impact	N/A

RE Resource	Installed Capacity (MW) ⁵
Wind	0
Solar	0
Hydro	6.64
Geothermal	0
Biomass/ WTE	0
Total	6.64

RE as % of installed Power Capacity = 26%

RE Resource Potentials	Potential Capacity (MW) ⁵
Wind	30
Solar PV	45
Hydro	17
Geothermal	300
Biomass/ WTE	0
Total	392

PROJECTS IN THE PIPELINE

Renewable Energy Source	Resource & Project Capacity	Development Partner	Funding Source
Geothermal	Resource capacity = Up to 300 MW, Project capacity = 7 MW	World Bank (WB), Government of Dominica, Government of New Zealand, French Development Agency (AFD), European Union (EU)	Government of Dominica, World Bank, Government of New Zealand, SIDS DOCK grant, Department for International Development (DFID) grant

Source:

Dominica Geothermal Development Company Ltd. (DGDC)

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

NAME OF ENTITY	NUMBER OF PERSONS EMPLOYED	BREAKDOWN BY GENDER	
Dominica Electricity Services Limited	150	Females: 5	Males: 145
Independent Regulatory Commission	3	Females: 1	Males: 2
Ministry of Trade, Energy and Employment Dominica	1	Females: 0	Males: 1

*This may not be an exhaustive list

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²Trading Economics (2018) <https://tradingeconomics.com/dominica/gdp-per-capita-ppp>

³United Nations Development Programme. (2018). Human Development Reports: Table 2. Human Development Index Trends, 1990-2017. Retrieved from <http://hdr.undp.org/en/composite/trends>

⁴Dominica Ministry of Trade, Energy and Employment (2019)

⁵Independent Regulatory Commission (2019)

⁶Dominica Electricity Service Limited (DOMLEC) Annual Report 2017 - 2018: Dominica Electricity Services Ltd.

⁷National Accounts - Central Statistics Office: Ministry of Finance: Government of Dominica (2017)

⁸Worldwatch Institute. (2015). Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) Baseline Report and Assessment. Retrieved from http://www.worldwatch.org/system/files/C-SERMS_Full_PDF.pdf

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- ¹⁵Inter-American Development Bank. (2015). Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Dominica Energy Dossier. Retrieved from <https://publications.iadb.org/bitstream/handle/11319/7302/IDB-TN-850%20Energy%20Dossier%20Dominica.pdf>
- ¹⁶National Renewable Energy Laboratory. (2015). Energy Snapshot: Dominica. Retrieved from <https://www.nrel.gov/docs/fy15osti/62704.pdf>

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¹⁷Operating Statistics in Dominica (2014 – 2018) Electricity: Government of Dominica: Dominica Electricity Services Ltd.

¹⁸DOMLEC Tariff Structure (2019)

¹⁹Rapid Scan Assessment of the Capacity Requirements for Sustainable Energy Development for CARICOM Countries (Professor Dr. Olav Hohmeyer, International Energy Consulting) (2019)