



2017 ENERGY REPORT CARD

ST. LUCIA

This document presents St. Lucia's Energy Report Card (ERC) for 2017, which was prepared using data and information submitted by the Member State as well as supplemental data extracted from online resources (see list of References). The ERC provides an overview of energy sector performance in St. Lucia by focusing on two priority sub-sectors: Electricity and Transportation. The ERC also includes energy efficiency, climate change, energy sector workforce, training and capacity building information, subject to the availability of data.

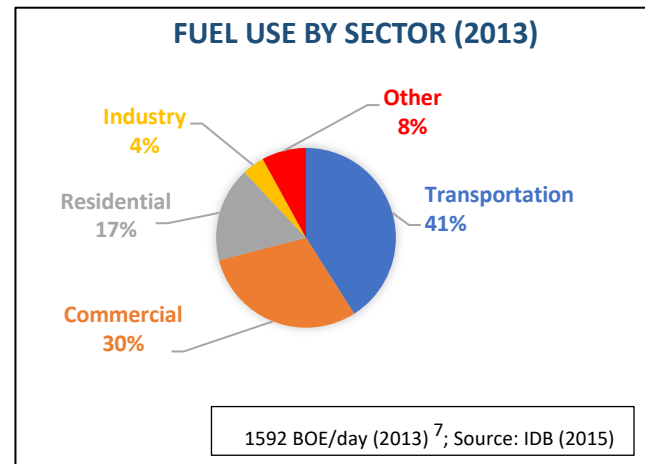
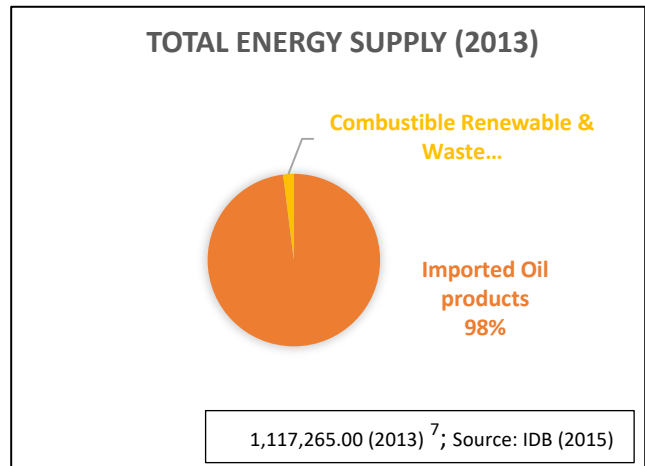
December 2018

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“AT-A-GLANCE” SUMMARY OF ST. LUCIA’S ENERGY SECTOR

KEY DATA & INFORMATION – ENERGY SECTOR IN ST. LUCIA	
Population	164,994 (2017) ¹
GDP (USD) Per Capita	14,400.8 ⁵
Debt as a % of GDP	70.7% of GDP (2017 est.) ²
Human Development Index	0.747 (2017) ³
National Development Plan/ Overall Country Development Strategy	Yes ⁴
National Energy Policy	Yes (2010) ⁵
Renewable Energy (RE) Policy	
RE Target	35% by 2020 ^{5, 6}
Energy Performance Standards/ Appliance Labelling	No ⁵
Number of Persons Employed in Energy Sector	
Total Oil Import (BOE) per day	3000 (2013) ⁷
Total Oil Exports (BOE) per day	
Total Installed Capacity (MW)	91.4 (2018) ⁵
Total Installed RE (MW)	3 (2018) ⁸
Electricity System Losses (%)	8% (2016) ⁵
Energy Use (kWh) Per Capita	2,426 ⁹
Energy Intensity	2,727 ¹⁰
Oil Imports as % of GDP	
Climate Change Policy	Yes ¹¹
National Determined Contributions	Yes ¹²
National Repository for Energy Data	



ST. LUCIA’S ENERGY SECTOR PERFORMANCE AGAINST TARGETS

Indicator	Base /Current Performance (Year)	National Targets	National Target (Proposed by CARICOM – CSERMS Report) ¹³	<i>Indicative RE Oil Displacement^{14,15} Potential Annually**</i>
RE as % of Installed Capacity	3.3% (2018)	35% by 2020	69% by 2027	<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)				Energy Intensity (EI)¹⁶:
% Reduction in Energy Sector Emissions	643 GtCO ₂ -ea (Base year, 2010)	16% Reduction by 2025		<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.¹⁴

KEY ENERGY SECTOR STAKEHOLDERS: ST. LUCIA

Key electricity stakeholders include:

GOVERNMENT MINISTRIES, DEPARTMENTS AND AGENCIES¹⁷:	<ul style="list-style-type: none"> • Ministry of Infrastructure, Ports, Energy and Labour • St. Lucia Bureau of Standards • Ministry of Education, Innovation, Gender Relations and Sustainable Development
FUEL IMPORTERS & SUPPLIERS⁷	<ul style="list-style-type: none"> • PDV Caribe • Sol Petroleum • Buckeye Partners
ELECTRIC UTILITY(IES):	<ul style="list-style-type: none"> • St. Lucia Electricity Services Ltd (LUCELEC)^{18,19}
INDEPENDENT POWER PRODUCER(S):	<ul style="list-style-type: none"> • No current PPAs
REGULATOR:	<ul style="list-style-type: none"> • National Utilities Regulatory Commission²⁰

Key Stakeholders: Road Transportation Sub-sector

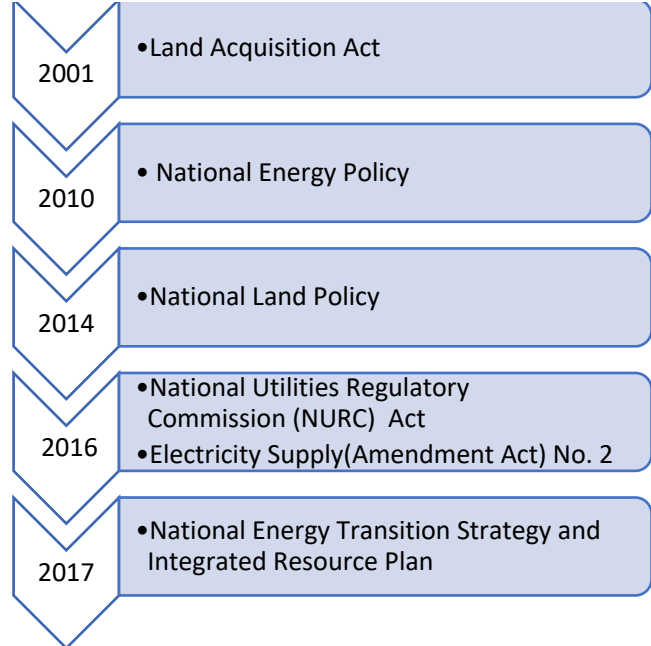
- Ministry of Economic Development, Housing, Urban Renewal, Transport and Civil Aviation
- Ministry of Infrastructure, Ports, Energy and Labour
- St. Lucia Transport Board
- Ministry of Education, Innovation, Gender Relations and Sustainable Development
- Fuel importers and suppliers⁷:
 - PDV Caribe
 - Sol Petroleum
 - Buckeye Partners

POLICY, LEGAL AND REGULATORY FRAMEWORK: ST. LUCIA

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

✓	Finalized 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	●

Key Achievements: PLR Framework Timeline for the Electricity Sector²¹



Policies and Legislation Relevant to the Transportation Sector

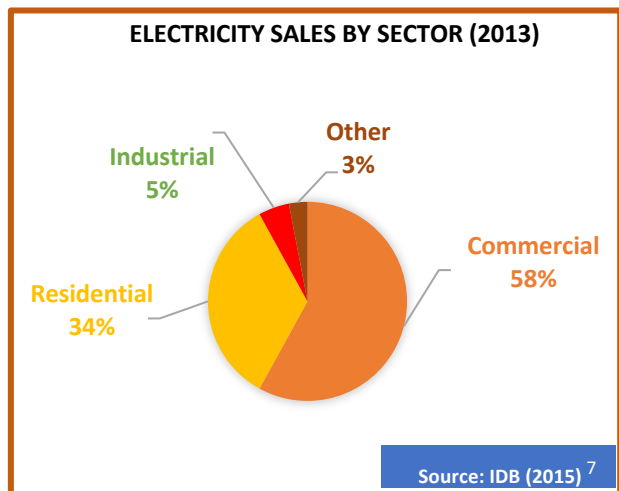
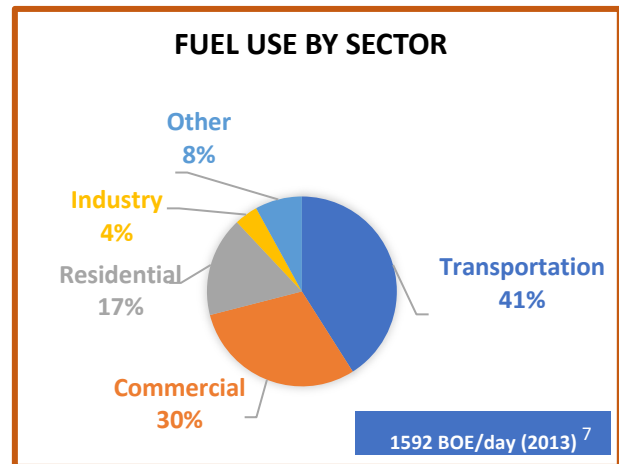
Policies	<ul style="list-style-type: none"> Saint Lucia's Vehicle Management Policy (VMP), 2016²²
Legislation & Regulation	<ul style="list-style-type: none">

Climate Change Framework - St. Lucia

Climate Change Policy	Yes (2003) ¹¹
National Determined Contributions	Yes (2015) ¹²
Emissions Reduction Target	Reduction of 16% (121 GgCO ₂ -eq) by 2025 and reduction of 23% (188 GgCO ₂ – eq) by 2030 (against 2010 baseline: 643 GgCO ₂ -eq) ¹²
Priority Sectors for NDC	Energy, Electricity Generation, Transport ¹²
National Communications (NC) to the UNFCCC	NC1 submitted in 2001, NC2 in 2012 and NC3 in 2017 ²³
Greenhouse Gas (GHG) Inventory	Yes ²⁴

ELECTRICITY SUBSECTOR & ENERGY EFFICIENCY: ST. LUCIA

KEY DATA & INFORMATION	
CONVENTIONAL ENERGY	
1. Fuel Consumption – Electricity Subsector (BOE)	
2. Total Installed Capacity (MW)	91.4 (2018) ^{25, 8}
3. Installed Conventional Capacity – Electric Utility (MW)	88.4 (2017) ²⁵
4. Installed Conventional Capacity – IPPs (MW)	
5. Base Load (MW)	
6. System Peak Demand (MW)	61.7 (2017) ²⁵
7. Total Generation (MWh)	400,300 (2017) ²⁵
8. Total Sales (MWh)	359,654(2017) ²⁵
9. Total Number of Customers	66,784 (2017) ²⁵
RENEWABLE ENERGY	
10. Total Installed RE Capacity (MW)	3 (2018) ⁸
11. RE Capacity – Electric Utility (MW)	3 (2018) ⁸
12. RE Capacity – IPPs (MW)	
13. RE as % of Total Installed Generating Capacity	3.3%
14. RE Target	35% by 2020 ⁵
TARIFFS	
15. Residential Tariff (US\$/kWh)	
16. Commercial (US\$/kWh)	\$0.29 – 0.33 ⁵
17. Industrial/Large Power (US\$/kWh)	
18. Street Lights (US\$/kWh)	\$0.32 ⁵
EFFICIENCY	
19. Electricity System Heat Rate	
20. Electricity System Losses (%)	8% (2016) ⁵
21. Energy Use (kWh) Per Capita	2,426 ⁹
22. Energy intensity index (EII) BTU/US\$1 Unit of output	2,727 ¹⁰
23. EE Target (reduction in consumption)	20% by 2020 ⁵
MANAGEMENT OF ENERGY DATA/KNOWLEDGE	
24. Name of Energy Knowledge Management System	N/A
25. Name of Energy Data Management System	N/A



RE Resource	Installed Capacity (MW)	Year
Wind		
Solar	3 ⁸	2018
Hydro		
Geothermal		
Biomass/ WTE		
Total	3	

RE as % of installed Capacity = 3.3%

RE Resource Potentials	Potential Capacity (MW) ²⁶	Assessment Conducted?
Wind	40	
Solar	36	
Hydro	0.15	
Geothermal	170	
Biomass/ WTE		
Total	246.15	

TRANSPORTATION SUBSECTOR: ST. LUCIA

Key Transportation Data and Information	
Fuel Consumption, Transportation (BOE)	658 BOE/day (2013) ⁷
Energy-related transportation targets?	
Sustainable /Alternative fuels used?	
Total Imports for Alternative Fuels	
Conventional Vehicle Stock/Vehicle Registration	
Trucks	
Cars	
Buses	
SUVs	
Hybrid vehicle stock	
Electric vehicle stock	
Fuel Quality Standards?	

Breakdown of Fuel Use in the Transportation Sector		
Type of Fuel/s	Quantity (BOE)	Purpose (Road, Railway, Aviation, Marine)
Gasoline		
Diesel		
Turbo Fuel		
HFO Bunker and ADO Bunker		

WORKFORCE: ENERGY SECTOR, ST. LUCIA

Number of Persons Employed in the Energy Sector

NAME OF ENTITY	PRIVATE OR PUBLIC?	NUMBER OF PERSONS EMPLOYED	BREAKDOWN BY GENDER AND EMPLOYMENT LEVEL	
			Females:	Males:
	Private	13 ⁵	Managerial Level: Supervisor: Technical: Administrative:	Managerial Level: Supervisor: Technical: Administrative:

Number of Persons Trained in the Energy Sector in 2017

NAME OF ENTITY	PRIVATE OR PUBLIC?	NUMBER OF PERSONS TRAINED	BREAKDOWN BY GENDER AND EMPLOYMENT LEVEL	
			Females:	Males:
			Managerial Level: Supervisor: Technical: Administrative:	Managerial Level: Supervisor: Technical: Administrative:

References

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- ³ United Nations Development Programme. (2018). *Human Development Reports: Table 2. Human Development Index Trends, 1990-2017*. Retrieved from <http://hdr.undp.org/en/composite/trends>
- ⁴ Government of Saint Lucia: Department of Finance. (2018). *Medium Term Development and Strategic Plan*. Retrieved from <https://www.finance.gov.lc/resources/download/45/.pdf>
- ⁵ Ministry of Infrastructure, Ports, Energy and Labour (Focal Point: Mr. Igor Daniel). (2018). CARIFORUM Energy Report Card Input Data 2017 (completed for St. Lucia).
- ⁶ Rocky Mountain Institute. (2017). *Saint Lucia National Energy Transition Strategy and Integrated Resource Plan*. <http://www.govt.lc/media.govt.lc/www/resources/publications/saint-lucia-nets-executive-summary-final.pdf>
- ⁷ Inter-American Development Bank. (2015). *Challenges and Opportunities for the Energy Sector in the Eastern Caribbean: Saint Lucia Energy Dossier*. Retrieved from <https://publications.iadb.org/bitstream/handle/11319/7300/IDB-TN-852%20Energy%20Dossier%20Saint%20Lucia.pdf>
- ⁸ Rocky Mountain Institute. (2018). *St. Lucia Solar Park Opens*. Retrieved from <https://www.rmi.org/our-work/global-energy-transitions/islands-energy-program/saint-lucia-solar-park-opens/>
- ⁹ Calculated using generation and population figures.
- ¹⁰ Calculated using total energy supply and GDP figures.
- ¹¹ Government of St. Lucia. (2003). *Saint Lucia National Climate Change Policy and Adaptation Plan*. Retrieved from https://www.preventionweb.net/files/13471_nccpolicysadaptation27june200302.pdf
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- ¹³ http://www.worldwatch.org/system/files/C-SERMS_Full_PDF.pdf
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- ¹⁵ Sustainable Energy Ireland – Renewable Energy Information Office. (2011). *Energy Unit Conversion Tool*. Retrieved from https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/make-it-be_energy_unit_conversion_tool.xlsx
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- ²⁰ National Utilities Regulatory Commission NURC. (2018). *About Us*. Retrieved from <http://nurc.org.lc/about/>
- ²¹ Rocky Mountain Institute. (2017). *Saint Lucia National Energy Transition Strategy and Integrated Resource Plan*. Retrieved from <http://www.govt.lc/media.govt.lc/www/resources/publications/saint-lucia-nets-executive-summary-final.pdf>
- ²² Government of St. Lucia. (2016). *St Lucia's Vehicle Management Policy*. Retrieved from https://www.cepal.org/sites/default/files/project/files/enhancing_energy_efficiency_in_national_transportation_systems.pdf
- ²³ United Nations Framework Convention On Climate Change. (2018). *Process and Meetings: National Communication submissions from Non-Annex I Parties*. Retrieved from <https://unfccc.int/process-and-meetings/transparency-and-reporting/reporting-and-review-under-the-convention/national-communications-and-biennial-update-reports-non-annex-i-parties/national-communication-submissions-from-non-annex-i-parties>
- ²⁴ United Nations Framework Convention on Climate Change. (2018). *Documents and Decisions: GHG Inventory to NC3 Saint Lucia*. Retrieved from <https://unfccc.int/documents/81559>
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