



2017 ENERGY REPORT CARD

DOMINICAN REPUBLIC

This document presents Dominican Republic's Energy Report Card (ERC) for 2017 and was prepared primarily using data and information submitted by the CARIFORUM Member State, with supplemental data from online resources (see list of References). The ERC provides an overview of energy sector performance in the Dominican Republic 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.

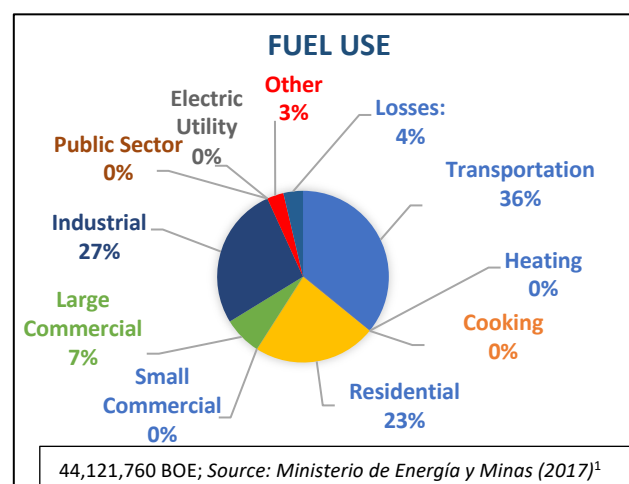
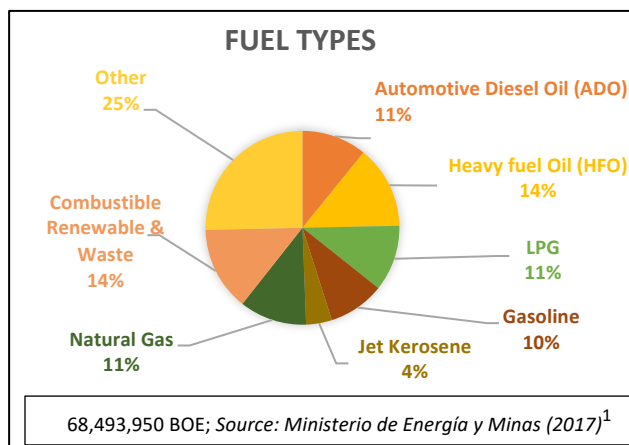
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“AT-A-GLANCE” SUMMARY OF DOMINICAN REPUBLIC’S ENERGY SECTOR

KEY DATA & INFORMATION	
Population	10,169,172 ¹
GDP (USD) Per Capita	7,477.31 (2017) ¹
Debt: GDP Ratio	
Human Development Index	0.722 (2017) ¹
National Development Plan/ Overall Country Development Strategy	Yes ^{2,3}
National Energy Policy	Yes ¹
Renewable Energy (RE) Policy	
RE Target	25% by 2025 ¹
Energy Performance Standards	Yes ¹
Appliance Labelling	
Number of Persons Employed in Energy Sector	
Total Oil Import (BOE) per day	19,883.73 (2017) ¹
Total Oil Export (BOE) per day	0 ¹
Total Installed Capacity (MW)	3,707.51 (2017) ¹
Total Installed RE (MW)	810.67 (2017) ¹
Electricity System Losses (%)	29.9% (2017) ¹
Energy Use (kWh) Per Capita	1605.49 (2017) ¹
Energy Intensity (BTU/\$)	3410 (2017) (588 BOE/MMUSD) ¹
Oil Imports as % of GDP	3.74% (2017) ¹
Climate Change Policy	Yes ⁴
National Determined Contributions	Yes (2015) ⁵
National Repository for Energy Data	MEM; CNE



DOMINICAN REPUBLIC’S ENERGY SECTOR PERFORMANCE AGAINST TARGETS

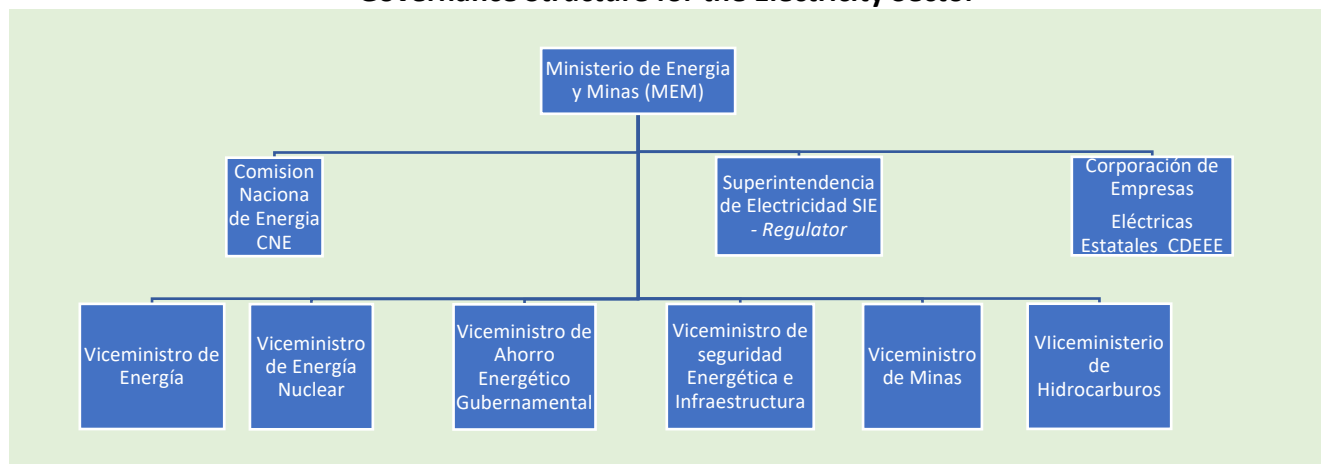
Indicator	Base /Current Performance (Year)	National Targets	National Target (Proposed by CARICOM – CSERMS Report) ⁶	Indicative RE Oil Displacement ^{7,8} Potential Annually**
RE as % of Installed Capacity	21.9% (2017)	25% by 2025	N/A	<ul style="list-style-type: none"> 1 MW wind displaces 1,760 barrels 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)	3410 (2017)			
% Reduction in Energy Sector Emissions (as per NDC) ⁵	3.6 tCO ₂ e per capita (2010)	Reduction of 25% of base year emissions by 2030		<p>Energy Intensity (EI)⁹:</p> <ul style="list-style-type: none"> El 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). El 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.⁷

KEY ENERGY SECTOR STAKEHOLDERS: DOMINICAN REPUBLIC

Governance Structure for the Electricity Sector¹



Other key electricity stakeholders include:

-  **Organismo Coordinador del Sistema Eléctrico Nacional Interconectado de la República Dominicana (OC- SENI)** - coordinates the Dominican Republic's electricity generation, transmission and distribution^{1, 10}.
-  **Electricity Distribution Companies (EDES)** - respond to the business coordination of the CDEEE and have concession contracts with the exclusive right to commercialize energy within their concession area exclusively to regulated users.
-  **Empresa de Transmisión Eléctrica Dominicana (ETED)** - State electric company whose objective is to operate the National Interconnected Electrical System (SENI) to provide high voltage electric power transport services to the entire national territory.
-  **Empresa de Generación Hidroeléctrica Dominicana (EGEHID)** - State company resulting from the reform process, in charge of the management of hydroelectric generation.
-  **Independent Power Producers (IPPs)** - Through direct contracts with the State or with the distribution companies within this group, there are companies that inject into the Interconnected System. E.g., AES Andres - Dominicana Poder Parte - Sabor - Montero - Barack Pueblo Viejo - Gas Natural Fenosa - LAESA - CESPM - CEPP - Metaldom
-  **Ministerio de Industria Y Comercio Y MIPYMES (Ministry of Industry and Commerce And MIPYMES)** - Fuel Regulator
-  **Petroleum import companies and the refinery, La Refinería Dominicana de Petróleo, S. A, (REFIDOMSA)**

Key Stakeholders: Road Transportation Sub-sector¹

- National Institute of Transit and Terrestrial Transportation- Transportation Regulator
- Ministerio de Medio Ambiente y Recursos Naturales,
- Ministerio de Energías y Minas
- Ministerio De Industria Y Comercio Y Mipymes (Ministry of Industry And Commerce And MIPYMES) - Fuel Regulator
- Hydrocarbons Bureau, Quality Systems and Regulation Bureau (DIGENOR)
- Specialized Control Body for Fuels (CECCOM)
- Oficina Para el Reordenamiento del Transporte
- General Directorate of Traffic Safety and Land Transportation (Digeset)
- Oficina de Transporte Terrestre
- Union of Drivers and Association of Owners of Tanker Trucks
- Consejo Nacional para el Cambio Climático y el Mecanismo de Desarrollo Limpio

POLICY, LEGAL AND REGULATORY FRAMEWORK: DOMINICAN REPUBLIC

Electricity Sector: Policy, Legal and Regulatory (PLR) Framework¹

✓ 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	●
<div>● Completed/ In place</div> <div>● In progress/ Draft</div> <div>● Not yet started/ Not established</div>	

Key Achievements: PLR Framework Timeline for the Electricity Sector¹



Policies and Legislation Relevant to the Transportation Sector

Policies	National Energy Plan
Legislation & Regulation	La ley 63-17, de Movilidad, Transporte Terrestre, Transito y Seguridad Vial de la República Dominicana Ley de Hidrocarburos 112-00 (Hydrocarbons Law 112-00), 2000 Ley 103-13 de incentivo a la importación de vehículos de energía no convencional (Law 103-13 on incentives to import non-conventional energy vehicles), 2013

Climate Change Framework - Dominican Republic	
Climate Change Policy	Yes (2016) ⁴
National Determined Contributions	Yes (2015) ⁵
Emissions Reduction Target	Reduction of 25% of base year (2010) emissions by 2030 ⁵
Priority Sectors for NDC	Energy; Industrial processes and product use; Agriculture; Waste; Land Use, Land-Use Change and Forestry ⁵
National Communications (NC) to the UNFCCC	NC1 submitted in 2000, NC2 in 2012 and NC3 in 2017 ¹¹

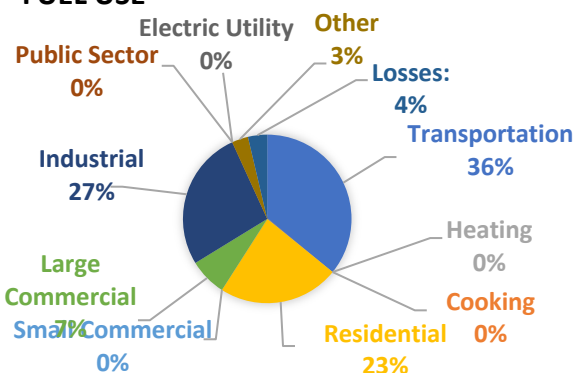
Greenhouse Gas (GHG)
Inventory

Yes⁵

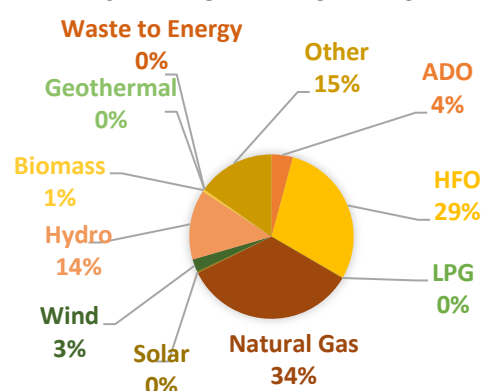
ELECTRICITY SUBSECTOR & ENERGY EFFICIENCY: DOMINICAN REPUBLIC

KEY DATA & INFORMATION		
CONVENTIONAL ENERGY		
1. Fuel Consumption – Electricity Subsector (BOE)		
2. Total Installed Capacity (MW)	3,707.51 (2017) ¹	
3. Installed Conventional Capacity – Electric Utility (MW)	767.70 (2017) ¹	
4. Installed Conventional Capacity – Independent Power Producers (IPPs) (MW)	2,159.54 (2017) ¹	
5. Base Load (MW)	923.30 (2017) ¹	
6. System Peak Demand (MW)	3,397.00 (2017) ¹	
7. Total Generation (MWh)	16,326,490.00 (2017) ¹	
8. Total Sales (MWh)	14,992,000.00 (2017) ¹	
9. Total Number of Customers	2,310,930.00 (2017) ¹	
RENEWABLE ENERGY		
10. Total Installed RE Capacity (MW)	810.67 (2017) ¹	
11. RE Capacity – Electric Utility (MW)	750.67 (2017) ¹	
12. RE Capacity – IPPs (MW)	30 (2017) ¹	
13. RE as % of Total Installed Generating Capacity	21.87	
14. RE Target	25% by 2025 ¹	
TARIFFS		
15. Residential Tariff (US\$/kWh)		
16. Commercial (US\$/kWh)		
17. Industrial/Large Power (US\$/kWh)		
18. Street Lights (US\$/kWh)		
EFFICIENCY		
19. Electricity System Heat Rate		
20. Electricity System Losses (%)	29.9% (2017) ¹	
21. Energy Use (kWh) Per Capita	1605.49 (2017) ¹	
22. Energy intensity (Unit of energy per unit of GDP (BTU/\$))	3410 (2017) (588 BOE/MMUSD) ¹	
23. EE Target		
MANAGEMENT OF ENERGY DATA/KNOWLEDGE		
24. Name of Energy Knowledge Management System		
25. Name of Energy Data Management System		

FUEL USE

44,121,760 BOE; Source: Ministerio de Energía y Minas (2017)¹

2017 NET GENERATION BY FUEL TYPE

Source: Ministerio de Energía y Minas (2017)¹

RE Resource	Installed Capacity (MW)	Year Commissioned
Wind	134.95	
Solar	30	
Hydro	615.72	
Geothermal		
Biomass/ WTE	30.00	
Total	810.67	

RE as % of installed Capacity = 21.87%

RE Resource Potentials	Potential Capacity (MW)	Assessment Conducted?
Wind	30,000 ¹	Yes
Solar	50,000 ¹	Yes
Hydro	1,481 ¹	Yes
Geothermal		
Biomass/ WTE		
Total	81,841	

TRANSPORTATION SUBSECTOR: DOMINICAN REPUBLIC

Key Transportation Data and Information	
Fuel Consumption, Transportation (BOE)	15,823,160 ¹
Energy-related transportation targets?	
Sustainable /Alternative fuels used?	
Total Imports for Alternative Fuels	
Conventional Vehicle Stock/Vehicle Registration	5,265,904 (1998-2017) ¹
Trucks	1,335,612 ¹
Cars	2,670,946 ¹
Buses	287,479 ¹
SUVs	971,867 ¹
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		
Kerosene		

WORKFORCE: ENERGY SECTOR, DOMINICAN REPUBLIC

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: Managerial Level: Supervisor: Technical: Administrative:	Males: 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: Managerial Level: Supervisor: Technical: Administrative:	Males: Managerial Level: Supervisor: Technical: Administrative:

Indicative Number and Type of Tertiary level and vocational training SE Programmes Offered in Country

Name of Education Programme Provider	Name of Programme	Number of persons enrolled	Type of Programme			
			Certificate	B.Sc	M.Sc	Ph.D

References

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- ⁵ Government of the Dominican Republic. (2015). *Intended Nationally Determined Contribution*. Retrieved from [https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Dominican%20Republic/1/INDC-DR%20August%202015%20\(unofficial%20translation\).pdf](https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Dominican%20Republic/1/INDC-DR%20August%202015%20(unofficial%20translation).pdf)
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- ⁹ J.M.K.C. Donev et al. (2018). *Energy Education - Energy intensity*. Retrieved from https://energyeducation.ca/encyclopedia/Energy_intensity.
- ¹⁰ Climatescope 2018 by Bloomberg NEF. (2018.) *View All Markets: Dominican Republic*. Retrieved from <http://global-climatescope.org/en/country/dominican-republic/#/enabling-framework>
- ¹¹ 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>