

Energy Snapshot Saint-Martin/Sint Maarten

This profile provides a snapshot of the energy landscape of the northeast Caribbean island Saint Martin. The island is divided between two nations, France in the north (Saint-Martin) and the Netherlands in the south (Sint Maarten). By law, Saint-Martin's residents pay the same electricity rates as all other French citizens, with utility rates starting at \$0.12 per kilowatt-hour (kWh) for residential customers. For Sint Maarten, the equivalent rates are roughly \$0.35/kWh. Like many islands, Saint Martin is highly dependent on imported fossil fuels, leaving it vulnerable to global oil price fluctuations that directly impact the cost of electricity. The electrical networks serving the two sides of the island do not regularly operate on an interconnected basis; however, a single line allows energy exchange in case of emergency.¹

Population	36,500 (French) ² 39,700 (Dutch) ³
Total Area	54 sq. km (French) 34 sq. km (Dutch) ³
Gross Domestic Product (GDP)	\$778 million U.S. Dollars (USD) [French] ⁴ \$900 million USD (Dutch) ⁵
Share of GDP Spent on Fuel and Imports	Electricity – Unknown (French) 18% (Dutch) ⁶ Total – Unknown (French and Dutch)
GDP Per Capita	\$21,300 USD (French) ⁷ \$23,300 USD (Dutch) ⁸
Urban Population Share	Unknown (French) 100% (Dutch) ³



Saint-Martin's Renewable Energy Goal:
Unknown

Sint Maarten's Renewable Energy Goals:

- 35% by 2016
- 80% by 2020
- 100% Heavy Fuel Oil free by 2025.⁶

Government and Utility Overview (Saint-Martin)

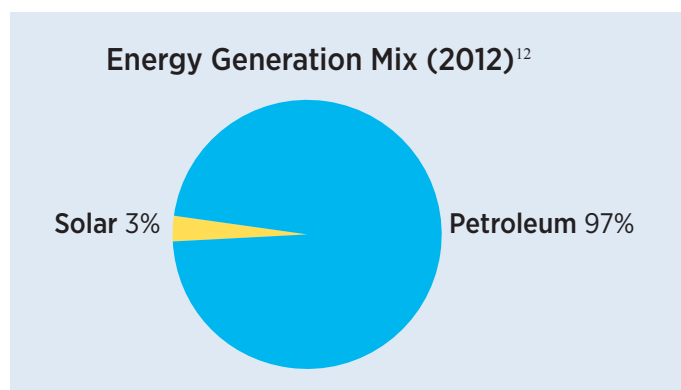
Regulator	Commission for Regulation of Energy	
Utilities	Name: Electricite de France	Mixed ownership (85% French government, 15% publicly held) ⁹

Government and Utility Overview (Sint Maarten)¹⁰

Government Authority	Ministry: Ministry of Public Housing, Spatial Planning, Environment and Infrastructure	
	Key Figure: Secretary General Louis Brown ¹¹	
Designated Institution for Renewable Energy	Ministry of Public Housing, Spatial Planning, Environment and Infrastructure	
Regulator	None	
Utilities	Name: NV GEBE	Government-owned

Electricity Sector Overview Saint-Martin

Total Installed Capacity (2012) ¹²	52.9 megawatts (MW)	
Peak Demand (2012) ¹²	32.2 MW	
Total Generation (2012) ¹²	196 gigawatt-hours	
Renewable Share (2012) ¹²	3%	
Electrification Rate (2010) ¹³	88.23%	
Average Electricity Tariffs (USD/kWh) ¹⁵	Residential	\$0.12
	Commercial	\$0.12
	Industrial	\$0.11
	Public Lighting	\$0.08



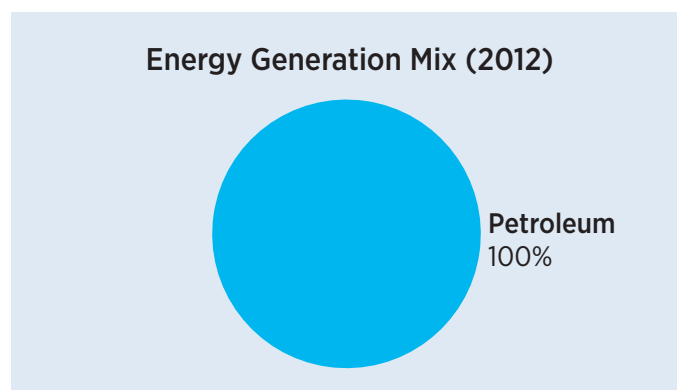
Energy consumption by sector is unknown.

Electricity Sector Data

Electricite de France (EDF) manages power generation and distribution in Saint-Martin and has a total installed capacity of 52.9 megawatts (MW), a peak demand of 32.2 MW,¹² and connects 88.23% of the households in Saint-Martin to the utility grid.¹³ EDF also has 1.44 MW in solar photovoltaic (PV) installations.¹² EDF has different tariffs for low- and high-voltage residential, commercial, and industrial customers. Saint-Martin has lower tariffs than other Caribbean island countries since it lies under the jurisdiction of Commission for Regulation of Energy, which also regulates EDF's operations in mainland France and its other overseas territories. An important aspect of this jurisdictional overlap is that electricity rates are required to be equalized throughout France and its overseas territories despite much higher costs of production in some overseas regions.¹⁴

Electricity Sector Overview Sint Maarten⁶

Total Installed Capacity (2013)	97.3 MW	
Peak Demand (2013)	50 MW	
Total Generation (2013)	372.671 gigawatt-hours	
Renewable Share (2013)	0%	
Transmission & Distribution Losses (2013)	9%	
Average Electricity Tariffs (USD/kWh)	Residential	\$0.35-\$0.36
	Commercial	\$0.35-\$0.36
	Industrial	\$0.35-\$0.36



In Sint Maarten, the sole power producer and distributor is the government-owned NV GEBE, which has a total installed capacity of 97.3 MW, 86 MW of which is operated on heavy fuel oil.⁶ The historical peak demand is 50 MW.⁶ The average tariff in Sint Maarten is \$0.35-\$0.36/kWh, which consists of a base rate and an adjustable fuel surcharge that fluctuates every month based on actual fuel costs.⁶

Clean Energy Policy Environment

Saint-Martin has developed an action plan that promotes production of electricity from renewable energy sources on the island to reduce energy dependence, diversify energy production, and promote sustainable development. Recommended actions include conducting feasibility studies to understand renewable resource potential on the island and developing financial incentives to encourage uptake of

Existing Policy and Regulatory Framework (Saint-Martin)¹⁰

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	

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renewable energy.¹⁰ The plan also emphasizes the need to raise awareness of energy conservation among individuals and businesses through communication campaigns.

Sint Maarten developed a National Energy Policy (NEP) in 2014 that aims to mitigate the impact of energy use on the environment while reducing electricity tariffs. The main issues and actions addressed in the policy include moving away from fossil fuels; developing a country-wide energy efficiency program; promoting renewable energy, smart grids, and alternative fuels; and introducing a regulatory framework for the power sector.⁶ The current Electricity Concessions Ordinance grants concessions to corporations for producing power by waste incineration, gasification, or with other renewable energy sources for their own use but only up to a maximum size of 450 kilowatts (kW). Independent power producers are allowed to produce electricity

Existing Policy and Regulatory Framework (Sint Maarten)⁶

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	

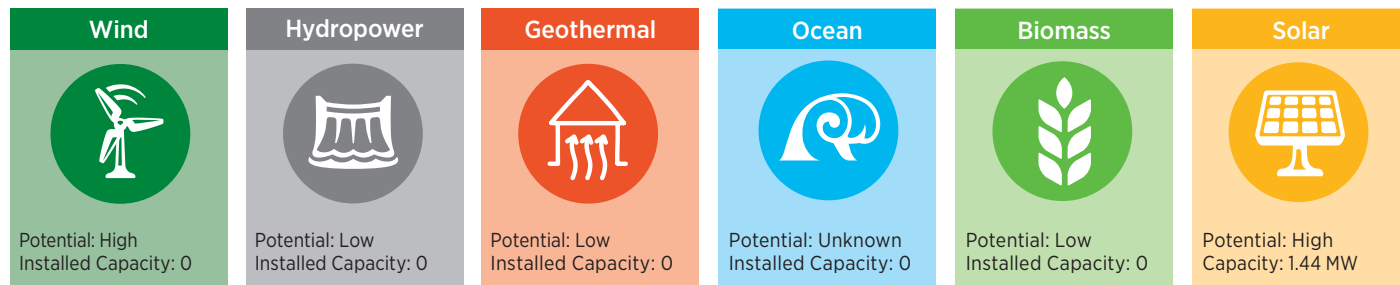
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and sell it using a power purchase agreement to NV GEBE.⁶ The NEP highlights the need for establishing a regulatory body to oversee the overall energy market, energy pricing, equitable access to electricity, and energy security. The NEP also encourages distributed renewable energy through net metering and utility-scale renewable energy integration using feed-in tariff tools.⁶ The introduction of country-wide energy efficiency programs has been promoted through energy audits and energy-efficient lighting technologies.

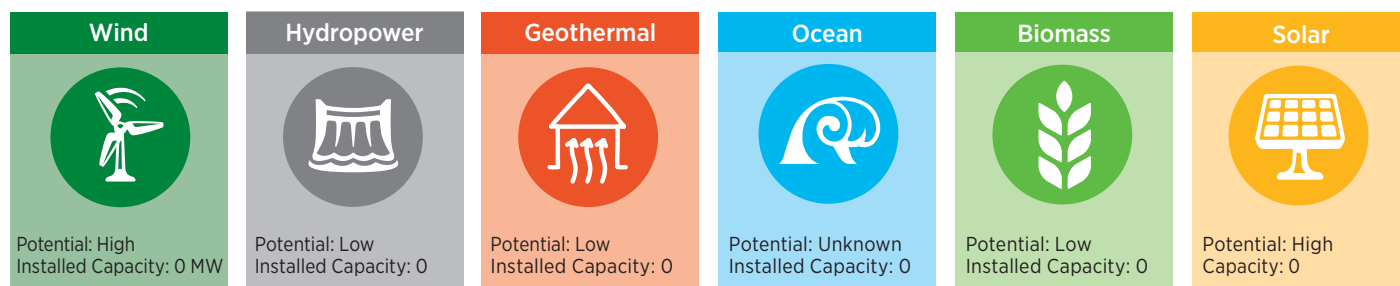
Energy Efficiency and Renewable Energy Projects

Renewable energy in Saint-Martin makes up an increasing share of energy generation. Per EDF's 2013 report, 46 PV installations were connected to the network for a total capacity of 1.44 MW.¹² EDF has further plans to develop PV

Renewable Energy Status and Potential Saint-Martin¹⁶



Renewable Energy Status and Potential Sint Maarten⁶



plants that will increase the share of renewables in the energy generation mix—total renewable generation in 2020 is planned to reach 25 gigawatt-hours, or 10% of the energy generation mix.¹²

Sint Maarten is entirely fossil fuel-dependent for electricity generation, with no renewable generation installed to date. However, there are plans to implement an 8-MW waste-to-energy (WTE) power plant in 2016.⁶ Recent studies suggest that renewable energy has high potential to displace fossil fuel generation, particularly using onshore wind, solar hot water heating, residential PV, and commercial PV.⁶ The neighboring islands of Saba and Sint Eustasius also have high potential for geothermal energy and have undertaken a collaborative research and development initiative with Sint Maarten to explore it. Based on early studies, Saba has the potential to

set up a 100-MW or larger geothermal generation project, which could then be interconnected to Sint Maarten via a 60-kilometer submarine cable.⁶

Opportunities for Clean Energy Transformation

Both sides of Saint Martin have valuable wind and solar energy resources that can be integrated into their existing electricity generation infrastructure. Sint Maarten is also exploring other renewable energy sources, mainly WTE and geothermal energy, to diversify its energy generation mix. To leverage these renewable energy resources, however, the island nations must continue to reduce policy and infrastructure barriers.

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.



¹ <http://www.sintmaartengov.org/government/AZ/Department%20of%20Interior-and-Kingdom-Relations-BAK/Programming%20Documents/Saint-Martin%20%20Sint%20Maarten%20European%20territorial%20cooperation%20Programme%202014-2020.pdf>.

² <http://www.insee.fr/fr/ppp/bases-de-donnees/recensement/populations-legales/com.asp?dep=978>.

³ <https://www.cia.gov/library/publications/the-world-factbook/geos/sk.html>.

⁴ http://www.iedom.fr/IMG/pdf/nc227_portrait_panorama_2012_saint-martin_version_anglaise.pdf.

⁵ <https://economics.rabobank.com/publications/2014/august/country-report-sint-maarten/>.

⁶ <http://www.sintmaartengov.org/Policy%20and%20Reports/140822-National%20Energy%20Policy%20SXM%20-DEF%202-0.pdf>.

⁷ Divided row 3 by row 1.

⁸ <https://economics.rabobank.com/publications/2014/august/country-report-sint-maarten/>.

⁹ <http://shareholders-and-investors.edf.com/edf-share/shareholding-structure-42691.html>.

¹⁰ https://ec.europa.eu/europeaid/sites/devco/files/renewable_energies_and_green_policy_in_octs_annexes_2014_en.pdf.

¹¹ <http://www.sintmaartengov.org/government/VROMI/Pages/Secretary-General-and-Support-Staff.aspx>.

¹² <http://sei.edf.com/fichiers/fckeditor/Commun/SEI/corp/BilanPrevisionnel/Bilan-previsionnel-saint-martin-juillet-2013.pdf>.

¹³ <http://data.worldbank.org/indicator/EG.ELC.ACCS.ZS>.

¹⁴ <http://www.cre.fr/operateurs/service-public-de-l-electricite-cspe/mecanisme>.

¹⁵ <http://guadeloupe.edf.com/collectivites/ma-relation-au-quotidien-avec-edf/les-tarifs-edf-49699.html>.

¹⁶ <http://guadeloupe.edf.com/fichiers/fckeditor/Commun/SEI/corp/BilanPrevisionnel/EDF-SEI-Bilan-previsionnel-2014-Saint-Martin.pdf>.

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