

2023

ENERGY REPORT CARD SURINAME





Introduction

This is the Energy Report Card (ERC) for 2023 for Suriname.

The ERC provides an overview of the energy sector performance, highlighting the following areas:

- Installed Conventional and Renewable Power Generation Capacity
- Annual Electricity Generation, from Conventional and Renewable Plants
- Other Electricity Sector Metrics, such as Losses, Consumption, and Tariffs
- Renewable Energy Targets
- Renewable Energy Resource Potential

The ERC also includes sectoral data and information on policies and regulations; workforce; training and capacity building; and related areas.

The data and information that are available in the ERC were mostly provided by the government ministries, agencies, and departments, that have responsibility for statistics and planning, in general, and the energy sector and electricity subsector including the electric utilities, in particular. The data and information collected was supplemented by desk-based research and, in instances, information was generated from calculations and analyses that were performed by the CCREEE.

Quality Assurance

The collection and treatment of data and information that is produced for the ERC is consistent with the International Recommendations for Energy Statistics (IRES), which provides a comprehensive methodological framework for the collection, compilation, and dissemination of energy statistics in all countries irrespective of the level of development of their statistical system. The ERC is produced in accordance with these performance standards that seek, as far as is possible, to ensure the quality (i.e., objectivity, utility, and integrity) of data and information that it disseminates to the public.

The CCREEE strives for transparency on the information and methods that are used within the production of the ERC, with a view to improve understanding on how the information should be treated and to facilitate reproducibility of the information. Nevertheless, the Centre recognizes that quality may be limited by the nature and source of the data and information disseminated.

Disclaimer

The ERC includes data and information that is contained in a variety of public sources and, though every effort is made to validate the accuracy and validity of the contents, reliance on the information herein is strictly at the user's risk.

Correction of Errors

If a substantive error is detected after the ERC is disseminated, the CCREEE will make correction and issue an errata notice, or other notification as appropriate. Also, the information contained within the ERC may be revised, after initial dissemination to reflect more complete information or other significant changes in the underlying data. The ERC may, from time to time, include information that is preliminary and is expected to be revised, or information that is revised from previously disseminated versions. In such instances, those cases are clearly noted.

Requests for Correction

The CCREEE has established administrative mechanisms to allow persons to seek and obtain, where appropriate, legitimate correction(s) to information maintained and disseminated through the ERC. Any request for corrections should be sent to: energyreportcard@ccreee.org, under the subject: REQUEST FOR CORRECTION TO ERC 2023 FOR SURINAME.

Acknowledgements

The CCREEE acknowledges the contributions of the intern, Jalimsing Gyany who supported the preparation of the ERC.



Energy Sector Summary

| | |
|--|---|
| Population (Mid-Year 2022) | 6,249,000 [1] |
| GDP (USD) | \$ 3,800,000,000 [1] |
| GDP (USD) Per Capita | \$ 5,953 [1] |
| Gross National Income (GNI) Per Capita (USD) | \$ 21,520 [2] |
| Debt as % of GDP | 108% [1] |
| Human Development Index | 0.690 [3] |
| National Development Plan/Overall Country Development Strategy | Meerjaren Ontwikkelingsplan 2022-2026 van de Republiek Suriname (<i>Multi-Annual¹ Development Plan 2022-2026 of the Republic Suriname</i>) [4] |
| National Energy Policy | Suriname's National Energy Policy 2013 – 2033 (Draft) [5] |
| Renewable Energy (RE) Policy | None |
| Renewable Energy Target | 35% by 2030 [6] |
| Energy Efficiency Target | None |
| Total Installed Conventional Capacity (MW) | 322.3 MW [9] ² |
| Total Installed RE (MW) | 197.05 MW [9] ² |
| Electricity System Losses (%) | 10% [9] ² |

| | |
|---|--|
| Energy Use (kWh) Per Capita | 1,968 kWh ² |
| National Repository for Energy Data | sieSURINAME[10] |
| Climate Change Policy | National Climate Change Policy, Strategy and Action Plan (2014 – 2021) [7] |
| Nationally Determined (NDC) Summary [6] | Maintaining 93% forest cover; Renewable energy above 25% by 2025 and above 35% by 2030 |

1 - This document is not available for public viewing.
2 - The information presented reflects the most recent year—2022—for which complete and verified energy data is available.



Energy Sector Summary

Energy Performance Standards/Appliance Labelling [8]

Voluntary Standards

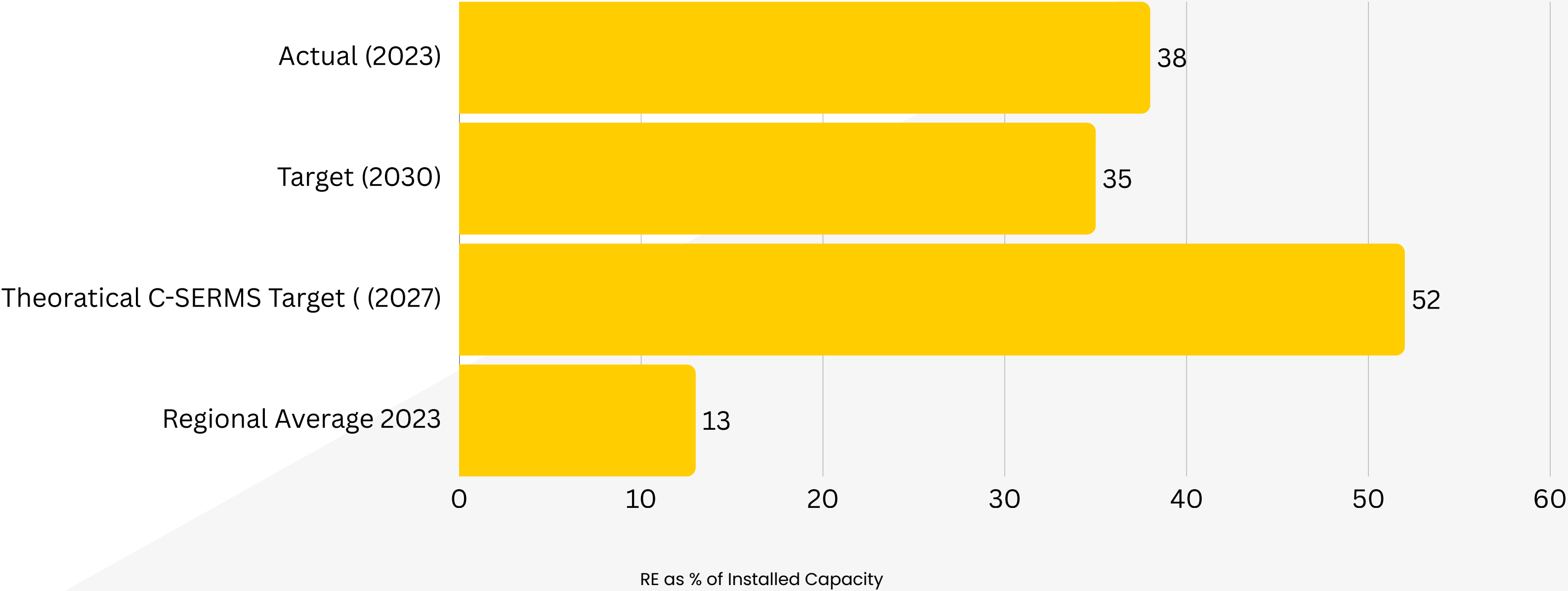
- SSB CRS 57: Energy Labelling – Refrigerating Appliances Requirements
- SSB CRS 58: Energy Labelling – Compact fluorescent lamps and light emitting diode lamps – Requirements
- SSB CRS 59: Energy Labelling – Air Conditioners – Requirements
- SSB IEC 62552-1 Household refrigerating appliances – Characteristics and test methods Part 1: General requirements
- SSB IEC 62552-2 Household refrigerating appliances – Characteristics and test methods Part 2: Performance requirements
- SSB IEC 62552-3 Household refrigerating appliances – Characteristics and test methods Part 3: Energy consumption and volume
- SSB ISO 5151:2017 Non-ducted air conditioners and heat pumps – Testing and rating for performance



Energy Sector Performance [9][11]³



Renewable Energy Capacity Against Targets



3 - The information presented reflects the most recent year—2022—for which complete and verified energy data is available.



Government Ministries, Departments and Agencies

Ministerie van Natuurlijke Hulpbronnen (Ministry of Natural Resources) [12]

- Dienst Electrificatie Voorziening-DEV (Department for Rural Electrification)
- Directoraat Energie (Energy Directorate)

Ministerie van Ruimtelijke Ordening en Milieu (Ministry of Spatial Planning and Environment) [13]

Ministerie van Transport, Communicatie en Toerisme (Ministry of Transport, Communication and Tourism) [14]

Ministerie van Economische Zaken, Ondernemerschap en Technologische Innovatie (Ministry of Economic Affairs, Entrepreneurship and Technical Innovation) [15]

Surinaams Standaarden Bureau (Surinamese Standards Bureau) [23]

Fuel Importers & Suppliers

GOw2 Energy Suriname N.V. [16]
Sol Suriname [17]
RUBIS Suriname [18]



Independent Power Producer

State Oil Power Company Suriname (SPCS) [20]

- SPCS Thermal
- SPCS Hydro

Electricity Regulator

Energie Autoriteit Suriname
(Suriname Energy Authority) [21]

Electric Utility

N.V. Energie Bedrijven Suriname
(Energy Company Suriname) (N.V. EBS) [19]



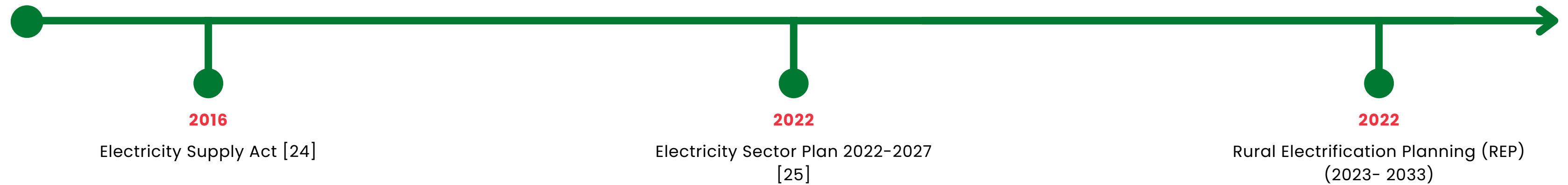
Policy, Legal and Regulatory (PLR) Framework

| | Year | Status |
|---|------|-------------------|
| Energy Policy [5] | 2012 | Draft |
| Energy Action Plan | | Not Establish |
| RE Target [6] | 2020 | In Force |
| EE Target | | Not Established |
| Electricity Regulator [21] | 2016 | In Force |
| Net Billing/Net Metering | | Not Established |
| Interconnection Policy/Standards | 2018 | Draft |
| Feed-In-Tariff | 2018 | Draft |
| Integrated Resource and Resilience Plan | | Draft in Progress |
| RE/EE Act [30] | | Not Established |



Policy, Legal and Regulatory (PLR) Framework

Key Achievements: PLR Framework Timeline for Electricity Sub-Sector





Policy, Legal and Regulatory (PLR) Framework

Policies Relevant to the Energy Sector

| Year | Name | Status | Description |
|------|--|----------|---|
| 2003 | Suriname's National Energy Policy (2013-2033) [5] ⁴ | In Force | |
| 2014 | 2017-2021 Policy Development Plan [26] | In Force | The Policy outlines the framework for the country to become energy secured and urges the diversification of the energy mix. The use of renewable energy to including solar, geothermal and waste-to-energy is encouraged as the country makes a transition in the energy sector. The Policy addresses the electricity sector and the transportation sector in the transition. |
| 2017 | Energy Sector Plan 2022 - 2027 [27] | In Force | The Plan evaluates supply resource options in response to demand growth on a comprehensive basis and provides an analysis of the options. |

Legislation Relevant to the Energy Sector

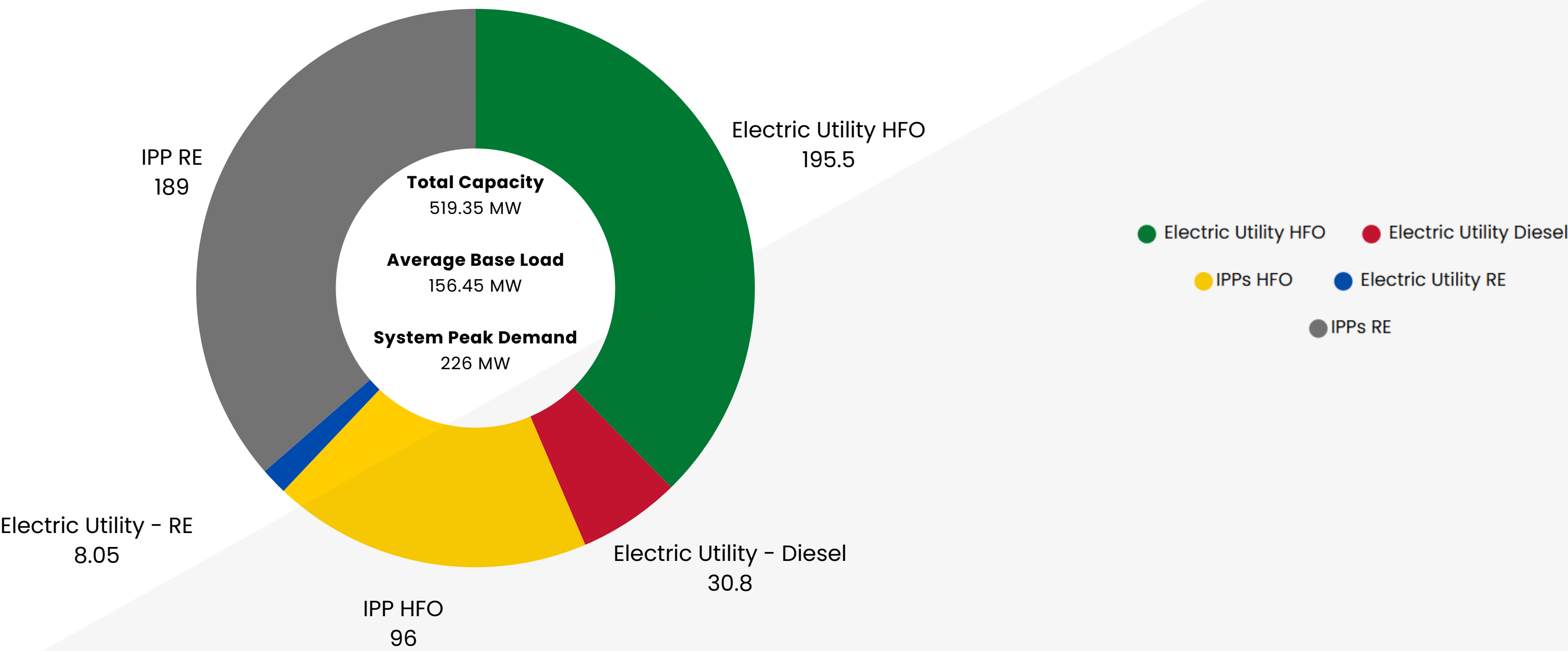
| Year | Name | Status | Description |
|------|----------------------|----------|--|
| 1947 | Electricity Act [28] | In Force | The Act established the Energy Authority of Suriname for the regulation of the electricity supply sector and introduced renewable energy tenders allowing for the marketisation of renewable energy. |

4 - Public Reference no longer available



Electricity and Energy Efficiency [9] [11] ⁵

Installed Capacity (MW)

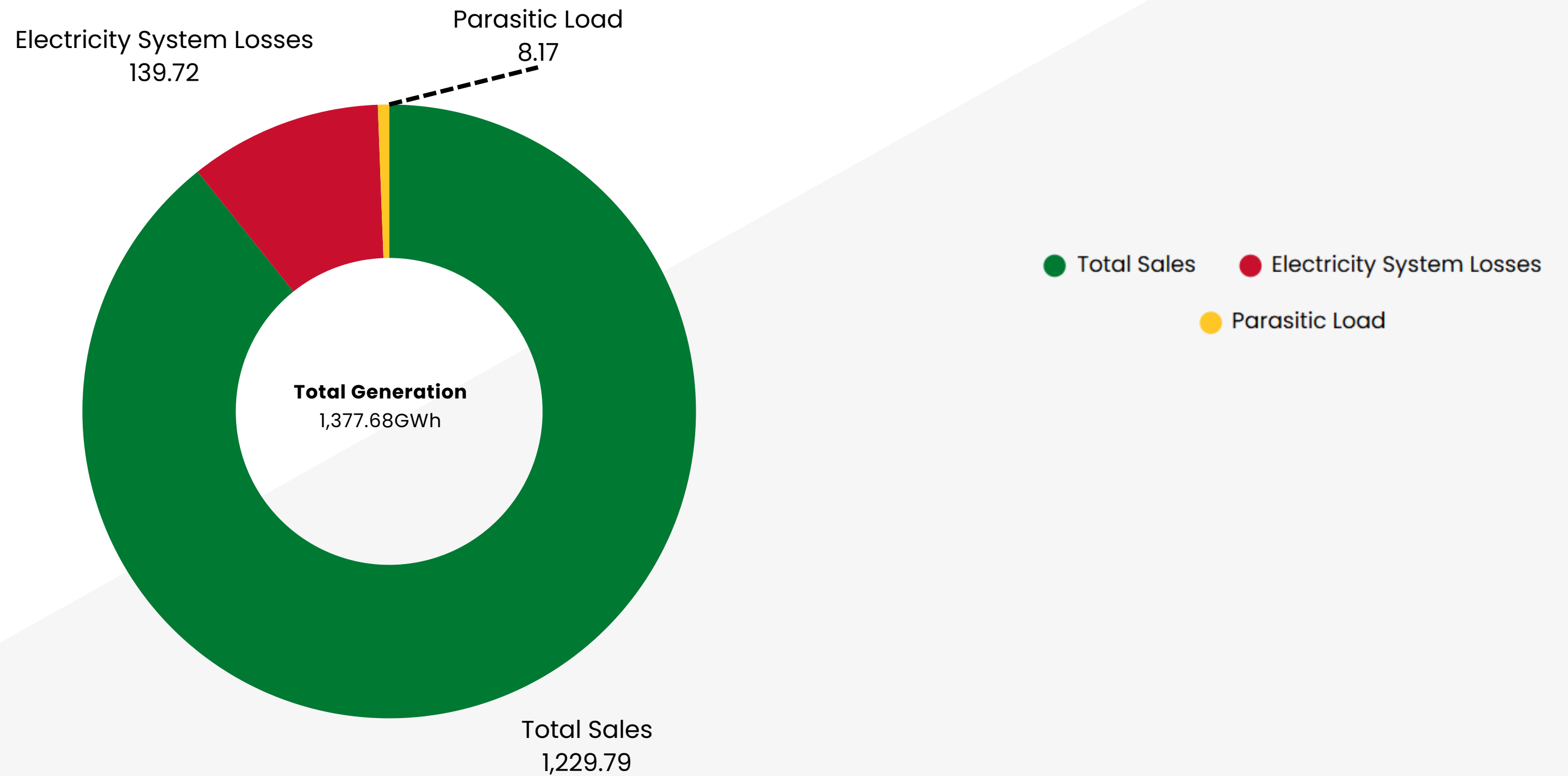


5 - The information presented reflects the most recent year—2022—for which complete and verified energy data is available.



Electricity and Energy Efficiency [9] [11]⁶

Energy Generation (GWh)



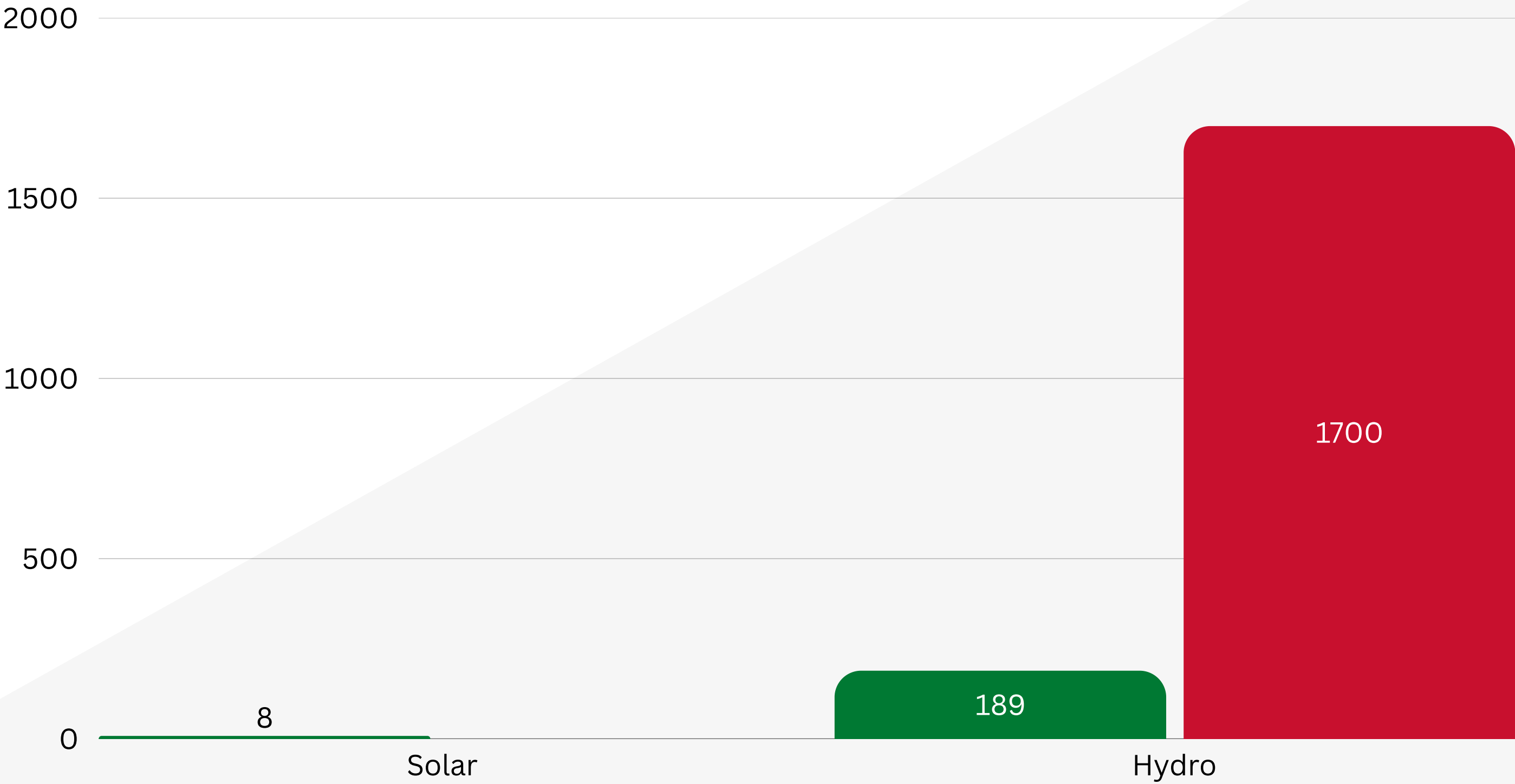
6 – The information presented reflects the most recent year—2022—for which complete and verified energy data is available.



Electricity and Energy Efficiency [9] [11] ⁷

Renewable Energy Resources

● Installed RE ● Potential RE



7 - The information presented reflects the most recent year—2022—for which complete and verified energy data is available.



Electricity and Energy Efficiency

Electricity Tariffs [29]



| Monthly Consumption/Demand | Tariff (US\$/month) | Tariff (US\$/kWh <800 kWh) | Tariff (US\$/kWh >800 kWh) |
|--------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|
| Low Voltage Residential 1 Phase | \$ 5.25 | \$ 0.06 | \$ 0.09 |
| Low Voltage Residential 2Phase | \$ 7.88 | \$ 0.06 | \$ 0.09 |
| Low Voltage Residential 3 Phase | \$ 10.50 | \$ 0.06 | \$ 0.09 |
| | | Tariff (US\$/kWh <2600 kWh) | Tariff (US\$/kWh >2600 kWh) |
| Low Voltage Non-Residential 1 Phase | \$ 5.25 | \$ 0.06 | \$ 0.09 |
| Low Voltage Non-Residential 2 Phase | \$ 10.50 | \$ 0.06 | \$ 0.09 |
| Low Voltage Non-Residential 3 Phase | \$ 15.75 | \$ 0.06 | \$ 0.09 |
| Next 125 units | Base Tariff (US\$/kVA/month) | Base Tariff (US\$/kVA/month) | Base Tariff (US\$/kVA/month) |
| Low Voltage Non-Residential > 24 kVA | \$ 0.58 | \$ 0.06 | \$ 0.09 |
| High Voltage Non-Residential | \$ 0.68 | \$ 0.06 | \$ 0.09 |
| | | | |
| Streetlighting | | \$ 0.08 | |



Projects in the Pipeline

Programmes

| Programme Name | Executing Agencies | Funding Awards | Funding Source |
|--|---|---|---------------------------------|
| Support for rural electrification with renewable energy, potable water and telecommunications in Suriname [30] | Ministry of Energy and Business Development | \$11,120,000 - Co-financing \$3,318,995 - GEF Project Grant \$ 14,438,995 - Total | Inter-American Development Bank |
| Support for the execution, supervision and closing of energy projects in Suriname [31] | Ministry of Energy and Business Development | | Inter-American Development Bank |



Tertiary Programmes Offered





Climate Change Framework

| | |
|---|---|
| Climate Change Policy | National Climate Change Policy, Strategy and Action Plan (2014 - 2021) [7] |
| Nationally Determined Contributions Summary [10] | Maintaining 93% forest cover; Renewable energy above 25 % by 2025 and above 35 % by 2030 [6] |
| Emissions Reduction Target | An estimated 70% of emissions from the following sectors: Forests, energy, agriculture, and transport. [6] |
| Priority Sectors for NDC [6] | <ul style="list-style-type: none">• Forestry• Energy• Transportation• Agriculture |
| National Communications (NC) to the UNFCCC | Republic of Suriname First National Communication under the United Nations Framework Convention on Climate Change (2005) [34] |
| | Republic of Suriname Second National Communication to the United Nations Framework Convention on Climate Change (2016) [35] |
| | Republic of Suriname Third National Communication to the United Nations Framework Convention on Climate Change (2023) [36] |



Climate Change Framework

Summary of Suriname's GHG Emissions and Removals (Gg) for 2017

| Sources | Emissions Gg CO ₂ Equivalent | | |
|---|---|----------------------------|----------------------------------|
| | Carbon Dioxide (CO ₂) | Methane (CH ₄) | Nitrous Oxide (N ₂ O) |
| Energy | 2,914.2 | 9.3 | 25.9 |
| Industrial Processes Product Use | 8.5 | | |
| Forest and Other Land Use Sector | -17,847 | -9 | -3.97 |
| Waste | 2.5 | 4 | 0.03 |



References

- [1] Central Bank of Suriname, "Statistics Department – Suriname Country Profile Economic and Financial Data," June 2024. [Online]. Available: <https://www.cbvs.sr/images/content/statistieken/CP/SurinameCountryProfile.pdf>. [Accessed 08 June 2024].
- [2] The World Bank Group, "GNI per capita, Atlas Method (Current US \$)," The World Bank Group, 2024. [Online]. Available: <https://data.worldbank.org/indicator/NY.GNP.PCAP.CD>. [Accessed 5 July 2024].
- [3] United Nations Development Programme, "Human Development Report 2023/2024 – Breaking the gridlock Reimagining cooperation in a polarized world," 2023. [Online]. Available: <https://hdr.undp.org/system/files/documents/global-report-document/hdr2023-24reporten.pdf>. [Accessed 16 July 2024].
- [4] Planning Office Suriname, "Meerjaren Ontwikkelingsplan 2022–2026 van Suriname – volledig –Final – Planning Office Suriname," SPS, 2022. [Online]. Available: <https://www.planningofficesuriname.com/meerjaren-ontwikkelingsplan-2022-2026-van-suriname-volledig-final/>. [Accessed 27 May 2024].
- [5] R. Jharap, "Sustainable Energy for All: Rapid Assessment Gap Analysis Suriname," 25 February 2014. [Online]. Available: https://www.seforall.org/sites/default/files/Suriname_RAGA_EN_Released.pdf. [Accessed August 2023].
- [6] The Republic of Suriname, "The Republic of Suriname Nationally Determined Contribution," December 2019. [Online]. Available: <https://unfccc.int/sites/default/files/NDC/2022-06/Suriname%20Second%20NDC.pdf>. [Accessed 27 May 2024].
- [7] United Nations Environment Programme, "Final National Climate Change Policy, Strategy and Action Plan for Suriname 2014–2021. | United Nations Environment Programme Law and Environment Assistance Platform," 01 January 2015. [Online]. Available: <https://leap.unep.org/en/countries/sr/national-legislation/final-national-climate-change-policy-strategy-and-action-plan..> [Accessed 27 May 2024].
- [8] Surinaams Standaarden Bureau (SSB), "Surinaams Standaarden Bureau (SSB)," February 2024. [Online]. Available: <https://ssb.sr/standaarden-catalogus/>. [Accessed 27 May 2024].
- [9] Energie Bedrijven Suriname, Electricity & Energy Efficiency Data, Paramaribo, Suriname: Private Communication, 2023.
- [10] SIE, "SieSuriname," 2024. [Online]. Available: <https://siesuriname.olade.org/>. [Accessed 27 May 2024].
- [11] A. Ochs , M. Konold, K. Auth, E. Musolino and P. Killeen, "Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) Baseline Report and Assessment," Worldwatch Institute, Washington, D.C., 2015.
- [12] Overheid van de Republiek Suriname, "Minister en staf – Overheid van de Republiek Suriname,," 2024. [Online]. Available: <https://gov.sr/ministeries/ministerie-van-natuurlijke-hulpbronnen/minister-en-staf/>. [Accessed 06 June 2024].
- [13] Overheid van de Republiek Suriname, "Minister en staf – Overheid van de Republiek Suriname,," 2024. [Online]. Available: <https://gov.sr/ministeries/ministerie-van-ruimtelijke-ordering-en-millieu/minister-en-staf/>. [Accessed 06 June 2024].
- [14] Overheid van de Republiek Suriname, "Minister en staf – Overheid van de Republiek Suriname,," 2024. [Online]. Available: <https://gov.sr/ministeries/ministerie-van-transport-communicatie-toerisme/minister-en-staf/>. [Accessed 3 June 2024].
- [15] Government of the Republic of Suriname, "Ministerie van Economische Zaken, Ondernemerschap en Technologische Innovatie – Minister en staf," 2023. [Online]. Available: <https://gov.sr/ministeries/ministerie-van-economische-zaken-ondernemerschap-technologische-innovatie/minister-en-staf/>. [Accessed 5 June 2023].
- [16] GOw2 Suriname, "Our Mission and Values," 2023. [Online]. Available: <https://gow2.com/about-us/missie-waarden/>. [Accessed 5 June 2023].
- [17] Sol Suriname , "Sol Suriname," 2023. [Online]. Available: <https://suriname.solpetroleum.com/>. [Accessed 6 June 2023].
- [18] Rubis Caribbean, "RUBIS Launches in Suriname," 01 January 2023. [Online]. Available: <https://www.rubis-caribbean.com/rubis-launches-in-suriname/>. [Accessed 17 July 2024].
- [19] NV Energiebedrijven Suriname , "About Us," 2023. [Online]. Available: <https://nvebs.com/over-ons>. [Accessed 9 June 2023].
- [20] Staatsolie, "Staatsolie – Suriname's National Energy, Oil & Gas Company," 2024. [Online]. Available: <https://www.staatsolie.com/en/about-us/>. [Accessed 3 June 2024].
- [21] Energie Autoriteit Suriname, "Over Ons – Energie Autoriteit Suriname," 2024. [Online]. Available: <https://eas.sr/overons/>. [Accessed 03 June 2024].
- [22] Suriname Energy Chamber, "Over Ons – Suriname Energy Chamber," 2024. [Online]. Available: <https://sec.sr/about-us/>. [Accessed 03 June 2024].
- [23] Surinamese Standards Bureau, "Mission and Vision," [Online]. Available: <https://www.ssb.sr/over-ssb/missie-en-visie/>. [Accessed 5 June 2023].
- [24] Climate Change Laws of the World, "Electricity Act," 2016. [Online]. Available: https://climate-laws.org/document/electricity-act-2016_b9ff.. [Accessed 11 June 2024].



References

- [25] Ministry of Suriname – Ministry of Natural Resources, Energy Sector Information, Paramaribo, Suriname, 2020.
- [26] Government of the Republic of Suriname, “2017–2021 Policy Development Plan,” January 2017. [Online]. Available: <http://www.planningofficesuriname.com/wp-content/uploads/2018/02/2017-2021-DEVELOPMENT-PLAN.pdf>. [Accessed 18 March 2024].
- [27] G. o. S. Ministry of Natural Resources, Interviewee, Energy Sector Information. [Interview]. 2020.
- [28] Government of the Republic of Suiname, “Electricity Act,” 2016. [Online]. Available: <https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/02/SURelectricityact16.pdf>. [Accessed 18 March 2024].
- [29] Energie Bedrijven Suriname, “Stroomtarieven,” 2023. [Online]. Available: <https://nvebs.com/elektriciteit/stroomtarieven>. [Accessed 27 June 2023].
- [30] Inter American Development Bank, “Support for rural electrification with renewable energy, potable water and telecommunications in Suriname,” 2024. [Online]. Available: <https://www.iadb.org/en/whats-our-impact/SU-T1165>. [Accessed 24 June 2024].
- [31] Inter American Development Bank, “Support for the execution, supervision and closing of energy projects in Suriname,” 2024. [Online]. Available: <https://www.iadb.org/en/whats-our-impact/SU-T1167>. [Accessed 24 June 2024].
- [32] Anton de Kom University of Suriname, “Bacheloropleiding in Elektrotechniek,” 2018. [Online]. Available: https://www.uvs.edu/universe_course/bacheloropleiding-in-elektrotechniek/. [Accessed 15 March 2025].
- [33] Anton de Kom University of Suriname, “Masteropleiding Sustainable Management of Natural Resources,” 2018. [Online]. Available: https://www.uvs.edu/universe_course/masteropleiding-smnr/. [Accessed 15 March 2025].
- [34] Polytechnic College Suriname, “Elektrotechniek,” 2024. [Online]. Available: <https://www.ptc.edu.sr/nieuws-2/elektrotechniek/>. [Accessed 15 March 2025].
- [35] United Nations, “Republic of Suriname First National Communication under the United Nations Framework Convention on Climate Change,” 2005. [Online]. Available: <https://cop23.unfccc.int/sites/default/files/resource/Suriname%20INC.pdf>. [Accessed 27 Jun 2024].
- [36] United Nations, “Republic of Suriname Second National Communication to the United Nations Framework Convention on Climate Change,” Mar 2016. [Online]. Available: <https://unfccc.int/sites/default/files/resource/Surnc2rev.pdf..> [Accessed 27 Jun 2024].
- [37] Republic of Suriname, “Republic of Suriname Third National Communication to the United Nations Framework Convention on Climate Change,” April 2023. [Online]. Available: https://unfccc.int/sites/default/files/resource/SURINAME%20NC3_2023_FINAL.pdf.. [Accessed 27 May 2024].