

CARIBWISE WHITE PAPER / OCTOBER 2026

Powering the Caribbean

Renewable Energy, Electricity Costs
and Investment Opportunities



Which countries are turning energy ambitions into operating projects - and what is preventing others from doing so?

EXECUTIVE PERSPECTIVE

Caribbean energy transition: key findings

The evidence points to different forms of progress. The Dominican Republic has demonstrated repeated renewable deployment; Dominica has crossed a major geothermal operating milestone; and Guyana has commissioned part of a multi-site solar programme. Other markets are building the storage, procurement and financing arrangements needed for the next wave. [3-7]

Main finding

Countries turn ambition into operating projects when generation, grid readiness, a credible buyer and financing advance together. This is CaribWise's synthesis of the cases, rather than a statistical claim that one policy causes success everywhere.

From commissioning to reliable supply

Commercial operation establishes that a project has passed a contractual threshold. Reliable output, payment performance and customer savings require further evidence. Dominica's regulator is monitoring bills after geothermal commissioning; it has not yet established a full-year tariff outcome. [3]

Storage procurement and investment

Barbados links additional renewable connections to storage. Jamaica has enlarged its planned renewable-and-storage procurement. Belize has a published battery tender. These create different commercial entry points and must not be added together as operating renewable capacity. [8-11]

CaribWise assessment: The most useful opportunity map follows the bottleneck: grid studies and controls, storage integration, project preparation, finance, and long-term operations alongside new generation.

Reading guide

Country data, charts and profiles: pp. 3-18; industry implications: p. 19

Electricity costs: p. 20

Project case studies: pp. 21-24

Project tracker and implications: pp. 25-27

Methods and references: pp. 28-33

12 SELECTED MARKETS

Electricity capacity and generation: country comparison

IRENASTAT's 28 September 2026 release supplies the latest common baseline retrieved. Capacity covers end-2025; generation shares cover 2024 because 2025 observations are unavailable for these markets. [1,20]

Market	Renewable capacity, MW (2025)	Share of capacity, % (2025)	Share of generation, % (2024)
Dominican Republic	3,274	38.89	18.42
Jamaica	281	16.73	10.80
Suriname	217	29.79	61.29
Belize	98	39.88	77.29
Trinidad and Tobago	97	4.52	0.06
Guyana	88	21.71	3.31
Haiti	87	17.91	23.53
Barbados	71	19.16	10.45
Bahamas	23	2.35	1.57
Dominica	9	32.69	22.37
Saint Lucia	6	6.06	1.88
Grenada	4	5.21	1.62

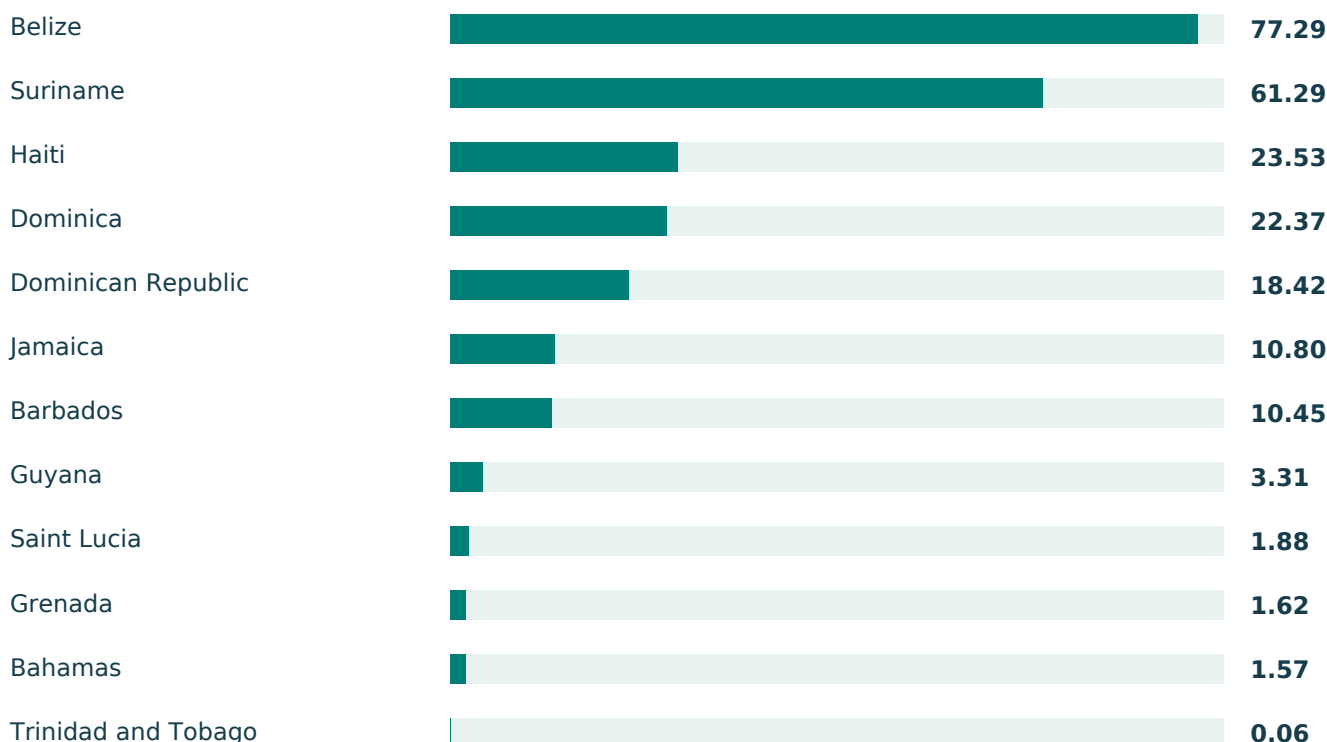
Source: IRENASTAT H2 2026, updated 28 September; retrieved 12 October 2026. © IRENA 2026. Capacity rounded to whole MW. Generation data for 2024 are preliminary; some observations are estimates. [1,20]

Interpretation: Generation share measures domestic production, not necessarily the electricity consumed after imports. The 2024 column cannot measure the effect of projects commissioned during 2025 or 2026. A low share is not evidence that a specific announced project has failed.

COUNTRY COMPARISON

Renewable generation shares by country

Renewable share of domestic electricity generation, 2024 (%)



Source: IRENASTAT, 28 September 2026 release. © IRENA 2026. Reference year 2024 (preliminary); latest comparable generation shares retrieved. [20]

Scale, penetration and delivery answer different questions

Installed megawatts indicate asset scale. Generation share measures how much domestic electricity renewables supply. A project tracker shows recent execution. None alone establishes reliability, affordability or the best location for a new investment.

Belize illustrates the boundary problem: the World Bank described roughly half of electricity as imported when launching its energy project in February 2025. A high renewable share of domestic generation therefore should not be presented as the same share of national consumption. [12]

Comparison rule: Match geography, reporting year, technology scope and denominator before ranking markets. Keep national statistics separate from utility-system or single-project figures.

ELECTRICITY GENERATED / 2024

Renewable versus non-renewable

Share of domestic generation, alongside the amount produced. Non-renewable generation is predominantly fossil-fuel electricity; the detailed fuel mix follows.

Market	Total GWh	RE GWh	RE share	Non-RE GWh	Non-RE share
Bahamas	2,262.9	35.6	1.57%	2,227.3	98.43%
Barbados	1,146.7	119.8	10.45%	1,026.9	89.55%
Belize	423.1	327.0	77.29%	96.1	22.71%
Dominica	114.8	25.7	22.37%	89.1	77.63%
Dominican Republic	27,654.1	5,094.7	18.42%	22,559.4	81.58%
Grenada	289.7	4.7	1.62%	285.0	98.38%
Guyana	1,360.7	45.1	3.31%	1,315.7	96.69%
Haiti	930.6	219.0	23.53%	711.6	76.47%
Jamaica	4,607.0	497.8	10.80%	4,109.3	89.20%
Saint Lucia	457.8	8.6	1.88%	449.2	98.12%
Suriname	1,914.9	1,173.7	61.29%	741.2	38.71%
Trinidad & Tobago	9,830.3	6.3	0.06%	9,824.1	99.94%

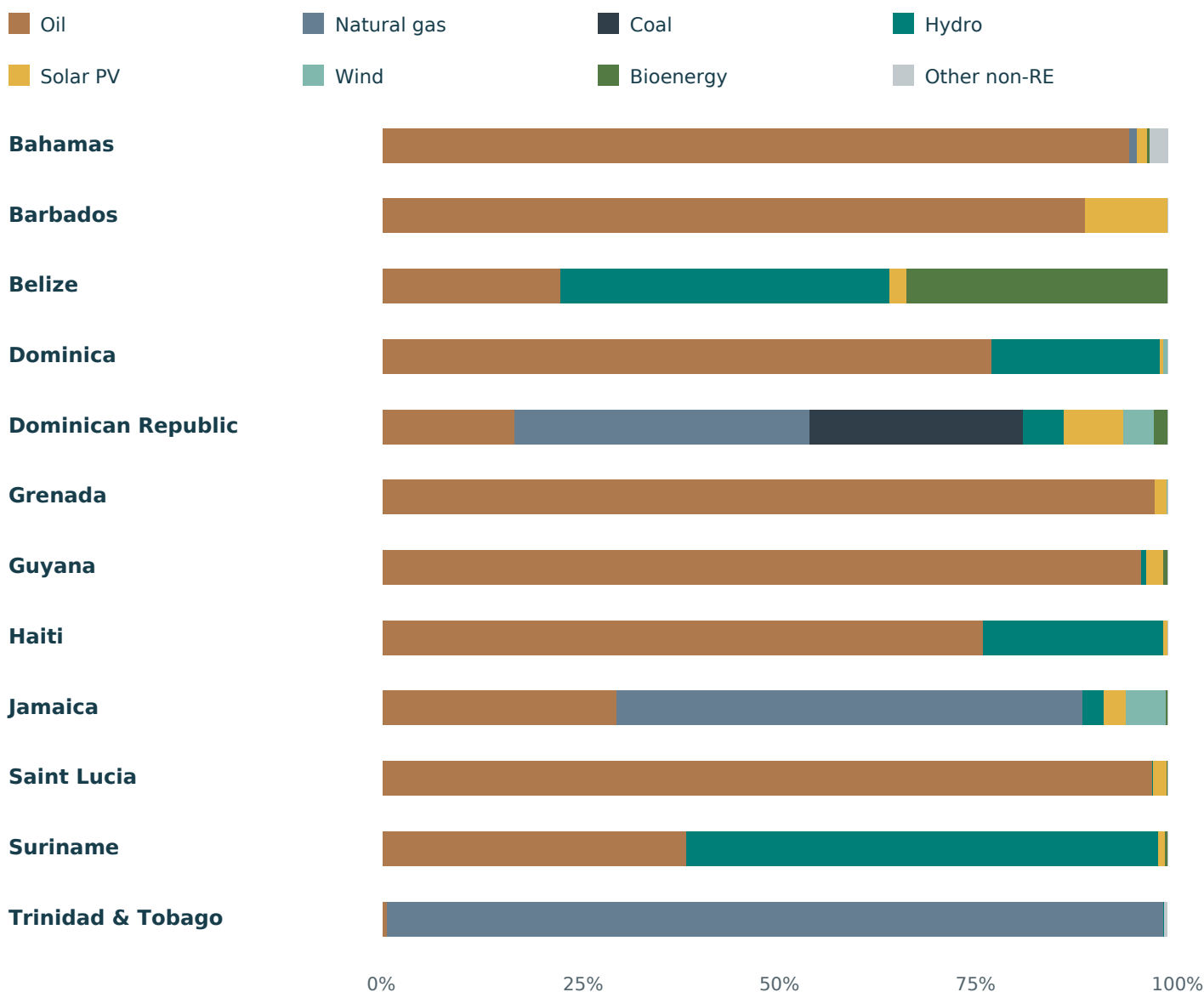
Source: IRENASTAT H2 2026, updated 28 September 2026. CaribWise calculations. Generation: 2024, preliminary; capacity: end-2025. © IRENA 2026. [1]

What the denominator excludes: Imported electricity is not domestic generation. These percentages do not measure the whole energy economy, transport fuels, cooking energy, electricity access or reliability. GWh = million kilowatt-hours.

ELECTRICITY GENERATION MIX / 2024

Electricity generation by fuel

Percentage of domestic generation. Each bar totals approximately 100%.



Source: IRENASTAT H2 2026, updated 28 September 2026. CaribWise calculations. Generation: 2024, preliminary; capacity: end-2025. © IRENA 2026. [1] Small shares may be too narrow to distinguish visually; see the numerical table on the next page.

Similar renewable shares can conceal different systems

Hydro supplies most renewable output in Suriname and Haiti. Barbados is mainly a solar transition, while Jamaica combines wind, solar and hydro. Belize also has substantial bioenergy. Different technologies imply different operating, maintenance and integration needs.

SHARE OF DOMESTIC ELECTRICITY GENERATION / %

Fuel shares by country

Oil includes petroleum-based generation. Bioenergy combines solid biofuels and biogas; other non-renewables retain IRENA's separate category.

Market	Oil	Gas	Coal	Hydro	Solar	Wind	Bio	Other
Bahamas	95.17	0.95	—	—	1.25	0.03	0.29	2.31
Barbados	89.55	—	—	—	10.44	0.01	—	—
Belize	22.71	—	—	41.82	2.21	0.01	33.24	—
Dominica	77.63	—	—	21.37	0.47	0.52	—	—
Dominican Republic	16.79	37.64	27.15	5.25	7.60	3.81	1.75	—
Grenada	98.38	—	—	—	1.55	0.08	—	—
Guyana	96.69	—	—	0.60	2.15	0.01	0.56	—
Haiti	76.47	—	—	23.02	0.50	0.01	—	—
Jamaica	29.75	59.45	—	2.66	2.79	5.17	0.19	—
Saint Lucia	98.12	—	—	—	1.78	—	0.10	—
Suriname	38.71	—	—	60.10	0.88	—	0.31	—
Trinidad & Tobago	0.59	98.95	—	—	0.06	0.00	—	0.40

Source: IRENASTAT H2 2026, updated 28 September 2026. CaribWise calculations. Generation: 2024, preliminary; capacity: end-2025. © IRENA 2026. [1] Shares may not sum to 100% because of rounding. An em dash indicates no positive generation reported for that technology; it is not proof of technological absence. 0.00 denotes a positive share below 0.005%. Reported components reconcile to the published totals.

Fuel matters: Oil supplies more than 95% of generation in four sample markets. Gas leads in Trinidad and Tobago, Jamaica and the Dominican Republic. Replacing oil with gas changes the fossil-fuel mix, not the renewable share.

CAPACITY BY TECHNOLOGY / END-2025, MW

Installed capacity by technology

Installed capacity measures equipment scale, not annual output or dependable supply. Non-renewable capacity is shown for context.

Market	Non-RE	Hydro	Solar PV	Wind	Bio	Total RE
Bahamas	936.00	0.00	21.34	0.30	0.93	22.56
Barbados	297.54	0.00	69.34	1.16	0.00	70.50
Belize	147.17	55.15	6.96	0.02	35.50	97.63
Dominica	18.09	7.60	0.96	0.23	0.00	8.79
Dominican Republic	5,144.76	625.16	2,083.06	482.20	83.39	3,273.81
Grenada	70.20	0.00	3.78	0.08	0.00	3.86
Guyana	318.98	4.55	39.07	0.04	44.79	88.44
Haiti	400.39	79.49	7.87	0.02	0.00	87.38
Jamaica	1,397.16	30.00	116.57	102.00	32.13	280.70
Saint Lucia	88.40	0.00	5.53	0.00	0.18	5.71
Suriname	512.20	180.04	35.82	0.00	1.50	217.35
Trinidad & Tobago	2,040.25	0.00	96.62	0.01	0.00	96.63

Source: IRENASTAT H2 2026, updated 28 September 2026. CaribWise calculations. Generation: 2024, preliminary; capacity: end-2025. © IRENA 2026. [1] Technology subtotals can differ by 0.01 MW from reported totals due to source rounding. Blank technology observations are treated as no reported contribution when reconciling totals. No geothermal capacity is reported for these markets at end-2025; Dominica's 2026 commissioning is treated separately.

Do not calculate utilisation across mismatched years

The Dominican Republic records 2,083.06 MW of solar capacity at end-2025, while the generation table describes 2024. Dividing those numbers would produce a misleading utilisation estimate. Use same-year plant availability and generation to assess performance.

CROSS-COUNTRY INTERPRETATION / CARIBWISE ANALYSIS

What the country comparisons reveal

1. Hydro leadership is not the same as solar momentum

Suriname's 61.29% renewable share includes 60.10 percentage points of hydro; Haiti's 23.53% includes 23.02 points of hydro. Solar plus wind contributes approximately 0.88% and 0.51%, respectively. Barbados reaches 10.45% almost entirely through solar. These are different transition paths. [1]

2. A small percentage can still be a large market

The Dominican Republic produces 5,094.68 GWh of renewable electricity in the common baseline, compared with 1,173.71 GWh in Suriname. Its lower renewable share reflects a much larger electricity system. Suppliers should assess absolute demand and project scale as well as penetration. [1]

3. Solar and wind show a different order

Combined solar and wind shares are about 11.41% in the Dominican Republic, 10.45% in Barbados and 7.95% in Jamaica, compared with 2.22% in Belize. This comparison isolates variable renewable generation; it is not an investment attractiveness score. [1]

4. Domestic generation can misrepresent the supply picture

Belize's 77.29% domestic renewable share excludes imported power. Assess domestic generation, imports and demand together before making claims about national energy independence. The World Bank's 2025 project launch described imports as roughly half of electricity supply. [1,12]

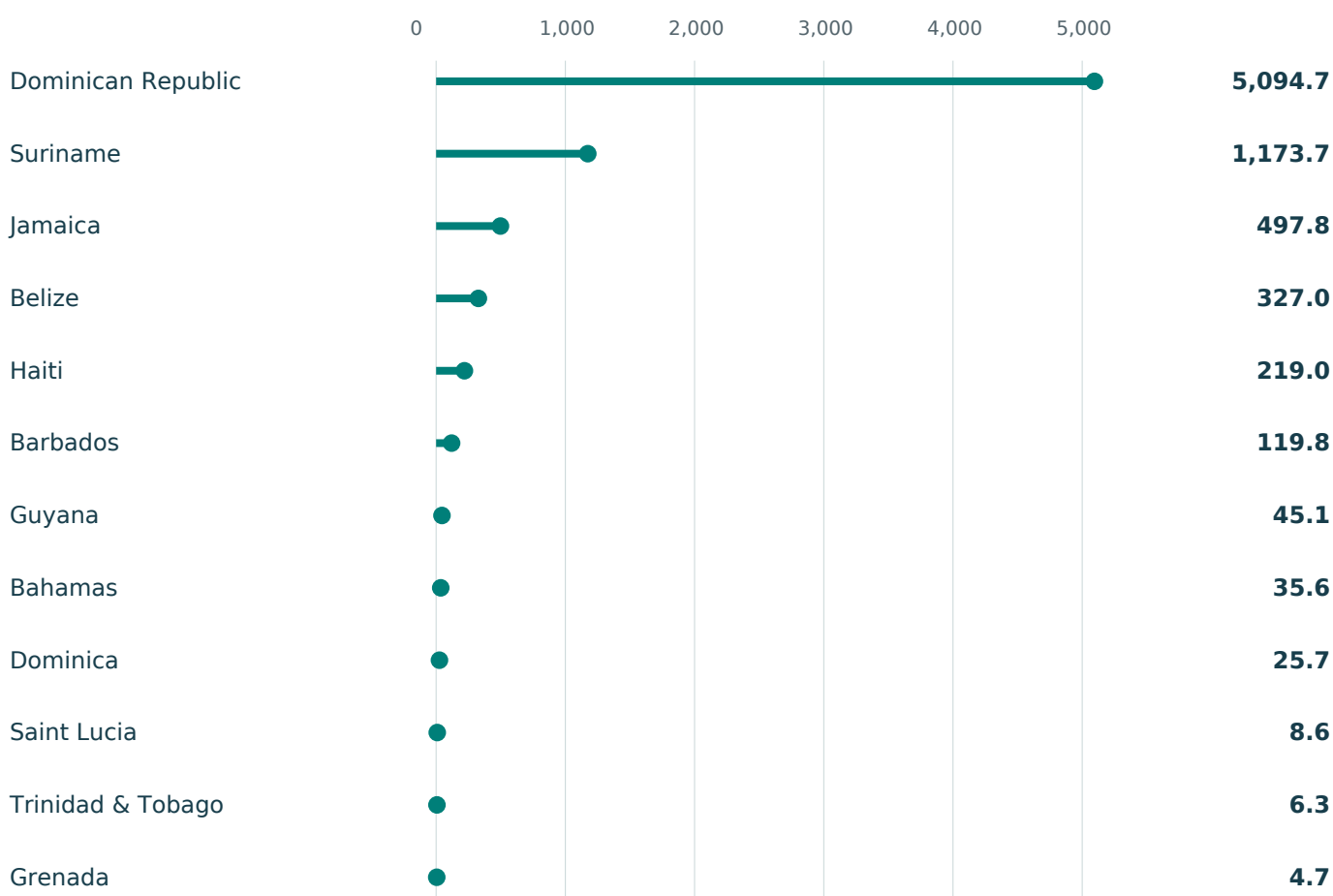
5. The next constraint is country-specific

Oil-heavy systems raise fuel-substitution questions; hydro-heavy systems raise diversification and water-risk questions; rising solar penetration raises questions about flexibility and network capacity. Storage procurement in Barbados, Belize and Grenada illustrates different responses. [9,11,24]

RENEWABLE ELECTRICITY GENERATED / 2024

Renewable electricity production by country

Absolute renewable output, GWh. A high national share and a large electricity market are different measures.



Source: IRENASTAT H2 2026; 2024 generation is preliminary. CaribWise calculations. © IRENA 2026. [1] Linear scale begins at zero.

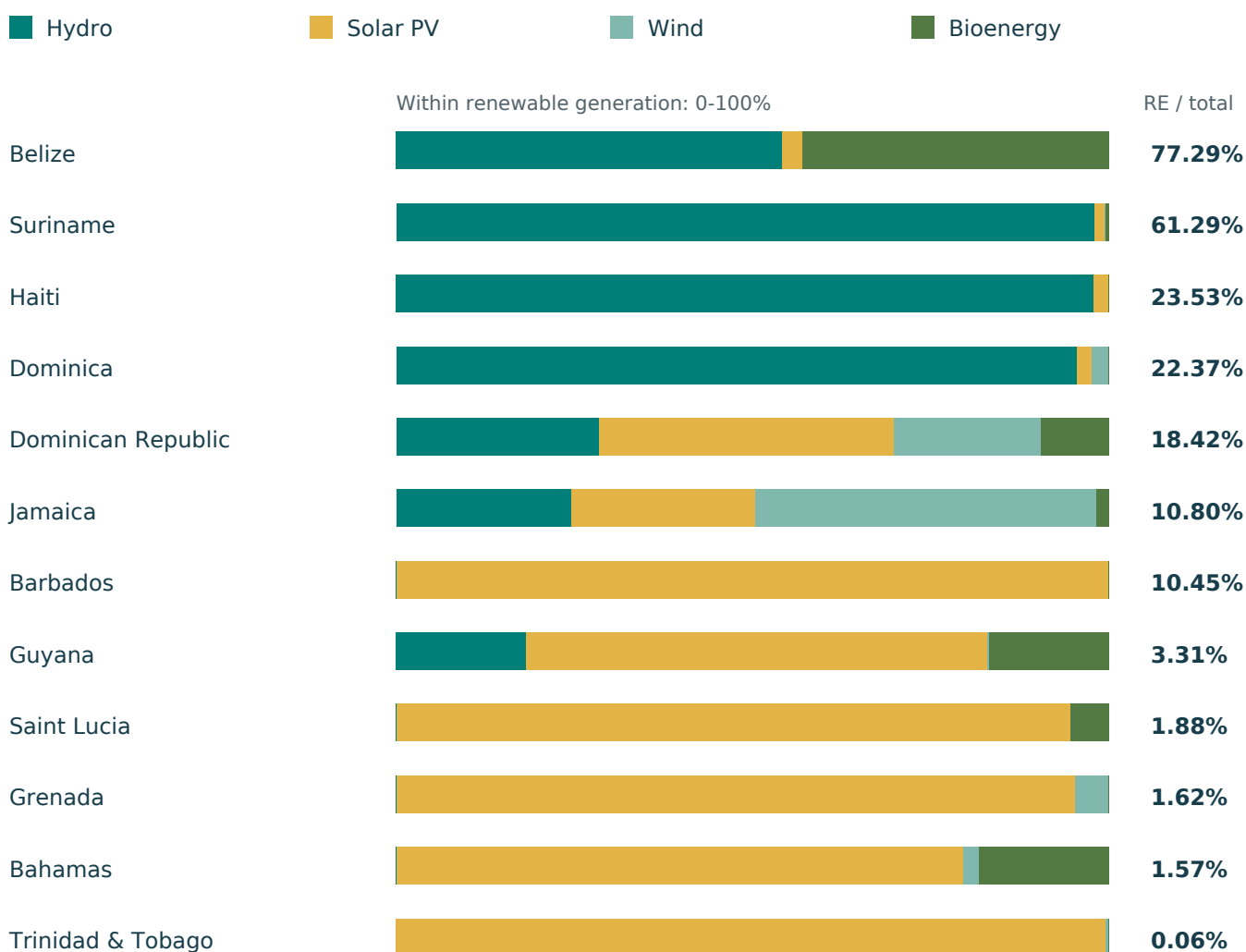
4.34 times: The Dominican Republic generates approximately 4.34 times as much renewable electricity as Suriname, despite a lower renewable percentage. Absolute output helps distinguish the scale of operating systems from the share supplied by renewables.

Commercial interpretation: asset servicing and component demand depend on the installed fleet and operating activity. Renewable share alone cannot measure the addressable market.

COMPOSITION OF RENEWABLE GENERATION / 2024

Which renewable sources power each country?

Each bar shows the composition of renewable output only. The number at right shows renewables' share of total domestic generation.



Source: IRENASTAT H2 2026, 2024 preliminary data. Components normalised to 100% of reported renewable generation; tiny differences from published totals reflect source rounding. © IRENA 2026. [1]

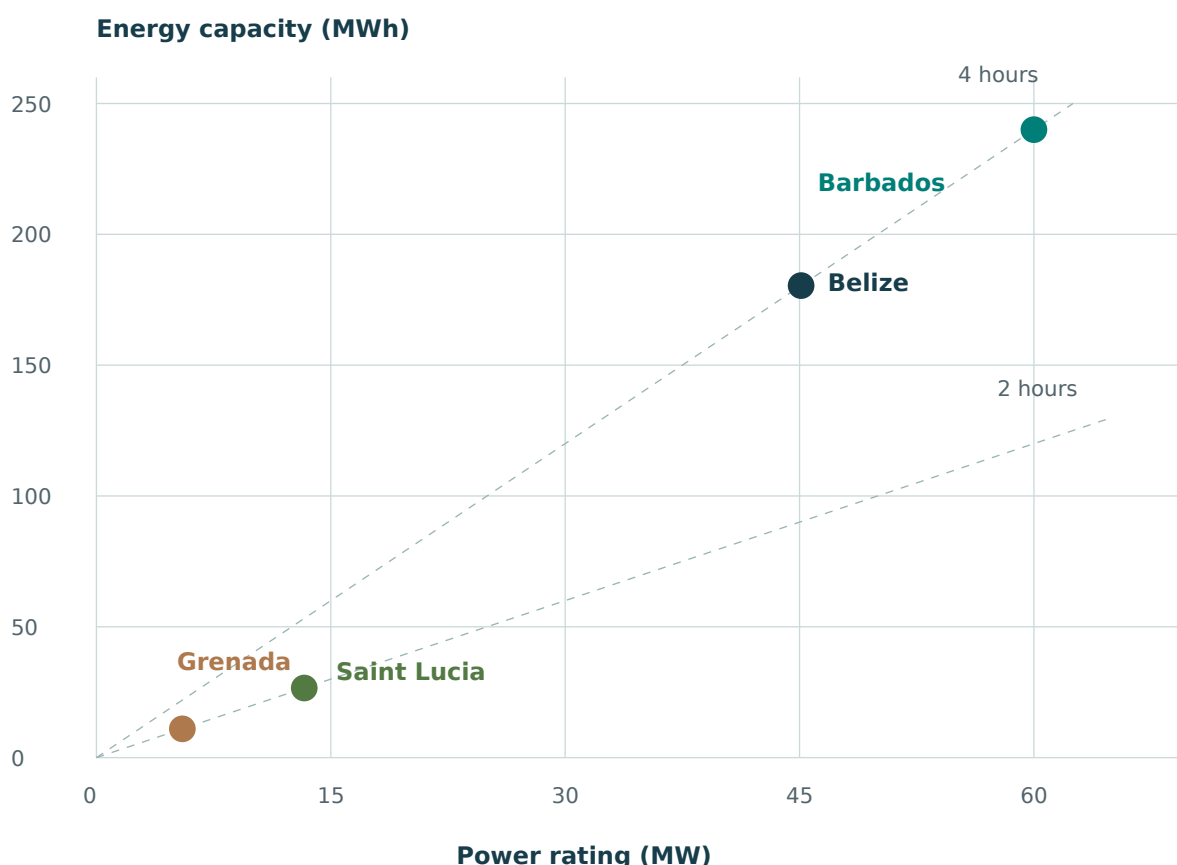
Technology mix determines the questions to ask

Hydro-heavy systems need water and asset-availability analysis. Solar and wind need time-of-day and variability analysis. Bioenergy needs feedstock and operating evidence. The chart describes the existing mix; it does not establish which technology should be developed next.

SELECTED PROCUREMENT SPECIFICATIONS / NOT OPERATING CAPACITY

Storage: power and duration are different

Battery energy capacity (MWh) versus power rating (MW). Diagonal lines show the nominal energy-to-power ratio.



Specifications: Barbados 60 MW / 240 MWh [9]; Belize 45.1 MW / 180.4 MWh, summed site ratings [11]; Grenada 5.5 MW / 11 MWh [24]; Saint Lucia 13.3 MW / 26.6 MWh [29]. Procurement dates and status are detailed in the country profiles. No commissioning is inferred.

Two hours versus four hours: The stated energy-to-power ratios differ even before dispatch requirements, reserve margins, efficiency and degradation are considered. They describe nameplate specifications, not guaranteed usable discharge duration.

Jamaica is excluded because the cited update specifies storage power without a final energy capacity or duration. Source discrepancies for Belize remain flagged in the case study.

BAHAMAS / BARBADOS

Country profiles

Bahamas — Oil dependence; a hybrid pipeline

1.57% renewable | 98.43% non-renewable
2,262.9 GWh generated in 2024 | 22.56 MW renewable capacity, 2025

Oil supplies 95.17% of recorded generation. Renewable output is only 35.61 GWh, mostly solar, with small wind and biogas contributions. The national aggregate should not be treated as the operating conditions of every island system. [1]

An August 2026 government site update describes the Abaco hybrid facility under construction: nearly 30 MW of gas engines and 20 MWh of batteries, alongside solar. Solar was targeted for November 2026; engines and storage for May 2027. These are delivery targets, not verified operating dates. [28]

Assess fuel displacement, island-specific demand and maintenance logistics. Gas remains fossil fuel and batteries are not a generation source. A hybrid label alone does not establish the renewable share of output.

Barbados — Solar progress meets a network constraint

10.45% renewable | 89.55% non-renewable
1,146.7 GWh generated in 2024 | 70.50 MW renewable capacity, 2025

Solar accounts for 119.74 GWh of the 119.80 GWh renewable total. Hydro and bioenergy do not explain the renewable share here. End-2025 solar capacity is 69.34 MW; annual generation remains dominated by oil at 89.55%. [1]

The original 60 MW / 240 MWh storage tender explicitly links further renewable connections to system stability and balancing. An August 2026 announcement adds 65 MW of planned procurement. Awards and operating dates require separate confirmation. [9,23]

Investigate controls, storage integration and connection engineering alongside solar installation. Model customer savings against the avoidable bill components and verified export arrangements, not a headline generation cost.



AI-generated editorial illustration; not a photograph of a named project.

BELIZE / DOMINICA

Country profiles

Belize — Hydro and bioenergy; imports change the picture

77.29% renewable | 22.71% non-renewable
423.1 GWh generated in 2024 | 97.63 MW renewable capacity, 2025

Hydro supplies 41.82% of domestic generation and bioenergy 33.24%; solar and wind together supply just 2.22%. Oil accounts for 22.71%. The high renewable share therefore reflects a broader mix than a solar-led transition. [1]

The current battery procurement specifies four systems totalling 45.1 MW / 180.4 MWh using site ratings. Its extended deadline is 23 November 2026. Imports remain important to the overall supply assessment, so domestic renewable percentages must not be substituted for consumption shares. [11,12]

Examine hydro availability, biofuel supply and import availability together. Storage can shift energy and provide system support, but does not create a new primary energy source. Lifecycle service obligations matter alongside equipment supply.

Dominica — A baseline overtaken by a major milestone

22.37% renewable | 77.63% non-renewable
114.8 GWh generated in 2024 | 8.79 MW renewable capacity, 2025

The 2024 baseline is 77.63% oil and 22.37% renewable generation, primarily hydro. End-2025 renewable capacity of 8.79 MW excludes the geothermal plant commissioned the following year. This is a clear case where historical statistics lag project delivery. [1,3]

The 10 MW geothermal plant reached commercial operation on 31 July 2026. September regulatory evidence nevertheless identifies simultaneous loss of both units as a remaining grid risk. Commissioning changes the system; it does not eliminate the need for contingency planning. [3,4,22]

Follow metered geothermal output, hydro conditions and oil displacement before estimating the new annual mix. Commissioning support, protection studies and maintenance capability are immediate areas for commercial investigation.



AI-generated editorial illustration; not a photograph of a named project.

DOMINICAN REPUBLIC / GRENADA

Country profiles

Dominican Republic — Large-scale deployment in a fossil-heavy system

18.42% renewable | 81.58% non-renewable

27,654.1 GWh generated in 2024 | 3,273.81 MW renewable capacity, 2025

The largest generation market in this sample produces 27,654.10 GWh. Gas provides 37.64%, coal 27.15% and oil 16.79%. Renewable output combines solar, hydro, wind and bioenergy. Solar plus wind contributes 3,156.22 GWh, or 11.41%. [1]

The end-2025 renewable asset base reaches 3,273.81 MW, including 2,083.06 MW of solar. A June 2026 award covers another 325.69 MW with battery support and expected entry from June 2028; that award is pipeline evidence, not current output. [1,25]

The addressable market includes operating-asset services as well as new construction. Test connection capacity, dispatch and curtailment assumptions, and whether storage revenue and performance responsibilities are clearly contracted.

Grenada — A low renewable share with a storage pathway

1.62% renewable | 98.38% non-renewable

289.7 GWh generated in 2024 | 3.86 MW renewable capacity, 2025

Oil supplies 98.38% of generation. The renewable contribution is 4.70 GWh, comprising 4.48 GWh solar and 0.22 GWh wind. End-2025 renewable capacity totals only 3.86 MW, indicating a relatively small starting asset base. [1]

CDB's airport storage procurement specifies 5.5 MW / 11 MWh and an October 2026 bid deadline. The two-hour nameplate ratio describes energy capacity relative to power, not an unconditional guarantee of usable discharge duration. No commissioning confirmation was retrieved. [24]

Test the sequencing of solar additions and storage availability. Battery controls, local service capability and replacement planning can influence whether the programme enables dependable renewable integration.



AI-generated editorial illustrations; not photographs of named projects.

GUYANA / HAITI

Country profiles

Guyana — Deployment is advancing from an oil-heavy baseline

3.31% renewable | 96.69% non-renewable

1,360.7 GWh generated in 2024 | 88.44 MW renewable capacity, 2025

Oil supplies 96.69% of 2024 generation. The remaining 3.31% comes from solar, hydro, bioenergy and very small wind output. End-2025 bioenergy capacity is 44.79 MW, but capacity alone cannot establish dispatch or fuel availability. [1]

Five GUY SOL sites totalling 18 MWp were operating in the March 2026 programme update. The remaining 15 MWp Linden component was still being developed; an August utility statement targeted its first phase for end-2026 amid a supply shortfall. [7,16]

Assess each grid and load centre separately. Solar peak capacity should not be counted as firm supply through the evening. Storage, demand profiles and network readiness belong in the same development assessment.

Haiti — Hydro share is not a measure of electricity access

23.53% renewable | 76.47% non-renewable

930.6 GWh generated in 2024 | 87.38 MW renewable capacity, 2025

Renewables supply 23.53% of recorded generation, with hydro alone supplying 23.02%. Solar contributes 4.69 GWh. These figures describe production composition; they do not establish how many people receive electricity or how reliable their service is. [1]

ANARSE's July 2026 update reports construction progress at the planned 13.4 MW Caracol solar plant, with more than 20,000 panels installed. It also reports equipment arrival and distribution works for Génipailler's 436 kW solar / 900 kWh storage mini-grid. Neither update establishes COD. [26]

Project preparation must address distribution, payment collection and durable local operations alongside generation. ANARSE also reports financing constraints slowing Dame-Marie, illustrating why construction progress and funding continuity should be tracked together. [26]



AI-generated editorial illustration; not a photograph of a named project.

JAMAICA / SAINT LUCIA

Country profiles

Jamaica — Gas dominates; wind leads renewable output

10.80% renewable | 89.20% non-renewable
 4,607.0 GWh generated in 2024 | 280.70 MW renewable capacity, 2025

Gas provides 59.45% of generation and oil 29.75%. Wind contributes 238.00 GWh, solar 128.39 GWh and hydro 122.47 GWh, with a small bioenergy balance. The renewable share of generation is 10.80%. [1]

The latest GPE market update increases forthcoming procurement to up to 300 MW of renewable generation and 150 MW of storage, with the RFP anticipated in Q4 2026. Final storage duration is not established in that update. [8]

Compare the final RFP with operating-system needs and demand timing. The opportunity extends to engineering and performance services, but a preparation-stage procurement should not be represented as awarded capacity or future revenue.

Saint Lucia — Solar and storage must arrive with the network

1.88% renewable | 98.12% non-renewable
 457.8 GWh generated in 2024 | 5.71 MW renewable capacity, 2025

Oil supplies 98.12% of recorded generation. Solar provides 8.14 GWh and bioenergy 0.46 GWh; total renewable capacity at end-2025 is 5.71 MW. The transition therefore starts from a strongly oil-dependent electricity mix. [1]

LUCELEC's November 2025 RFP combines 10 MWac of solar, 13.3 MW / 26.6 MWh of batteries and a substation at Troumassee. The verified document establishes procurement scope; a later award or commissioning milestone was not established for this paper. [29]

The bundled design makes connection infrastructure part of the project, not an assumed external input. Investigate network acceptance, storage controls, coastal equipment durability and long-term maintenance before assessing delivery readiness.



AI-generated editorial illustrations; not photographs of named projects.

SURINAME / TRINIDAD & TOBAGO

Country profiles

Suriname — Hydro leadership; solar has a different role

61.29% renewable | 38.71% non-renewable
 1,914.9 GWh generated in 2024 | 217.35 MW renewable capacity, 2025

Hydro supplies 60.10% of national generation and almost all renewable output. Oil supplies 38.71%; solar only 0.88%. End-2025 solar capacity is 35.82 MW, but the historical renewable share is principally a hydro story. [1]

The government reports commissioning the Goejaba solar project on 3 May 2026 to extend round-the-clock electricity to much of Upper Suriname. This is a local access and service milestone; it must not be presented as nationwide coverage. [27]

Distinguish diversification of the main power system from service delivery in interior communities. Hydrology, local demand, maintenance capability and replacement funding require different treatment across these settings.

Trinidad & Tobago — A gas system with a changing capacity inventory

0.06% renewable | 99.94% non-renewable
 9,830.3 GWh generated in 2024 | 96.63 MW renewable capacity, 2025

Gas supplies 98.95% of recorded generation; renewables supply only 6.26 GWh, or 0.06%. Oil and other non-renewables make up the balance. End-2025 renewable capacity reaches 96.63 MW, overwhelmingly solar. [1]

The apparent gap between capacity and generation is not a performance finding: the observations cover different years. The 2025 inventory cannot establish the current operating status, dispatch or annual contribution of individual solar facilities.

For prospective renewable projects, investigate the buyer's avoided generation cost, contract terms and connection requirements. A gas-dominated system should not inherit the same savings assumptions as an oil-dominated island grid. Obtain current operating evidence before classifying capacity as dependable supply.



AI-generated editorial illustration; not a photograph of a named project.

INDUSTRY IMPLICATIONS / CARIBWISE ANALYSIS

Energy needs across business sectors

The same technology can solve different business problems. These are hypotheses to test against metered demand, service requirements and current contracts—not quantified savings forecasts.

Business segment	Country evidence	Commercial question
Tourism and hospitality	Oil dominates Barbados, Bahamas and Saint Lucia. [1]	How much daytime cooling demand can solar offset? Which loads require continuity, and for how long?
Food processing and cold storage	Belize combines hydro, bioenergy and imported supply. [1,12]	How do seasonal demand, feedstock availability and interruption costs affect the generation and storage design?
Industrial and commercial users	Gas dominates Trinidad and Tobago and leads Jamaica's mix. [1]	What is the actual avoidable tariff or contracted supply cost? Does a solar proposal remain competitive under that baseline?
Distributed service providers	Haiti mini-grid construction and Suriname local solar commissioning. [26,27]	Who funds connections, collects payment, maintains equipment and purchases replacement components?
Utilities and asset operators	Geothermal operation in Dominica; storage procurement across several markets. [3,9,11,24]	Which system service is needed: energy shifting, reserves, frequency support or outage support? How is performance measured?

Translate opportunity into evidence: Request 12 months of interval demand, the current tariff or supply agreement, outage records, connection conditions and an operating-cost budget. These inputs determine whether a promising market statistic becomes a workable project.

AFFORDABILITY AND COMPETITIVENESS

Electricity costs: compare the bill

CDB reported average commercial electricity prices of US\$0.37/kWh across its borrowing member countries in May 2026. This is regional context, not a uniform tariff or an October country ranking. The cited release does not provide a harmonised customer-by-customer comparison. [2]

Observed measure	Dated evidence	What it means
Barbados: fuel clause adjustment	September 2026: 37.5253 Barbados cents/kWh. January: 28.9949 cents. [13]	A variable bill component, not the total tariff; includes purchased energy as well as fuel.
Bahamas: BPL commercial base rate	14.50 Bahamian cents/kWh; tariff card effective 1 July 2024. [14]	Add the applicable fuel charge and tax. Applies to BPL customers, not all Bahamian utilities.
Bahamas: dated fuel observation	February 2026: 17.4 cents/kWh for the first 800 kWh; 21.4 cents above that. [15]	Latest dated row retrieved; not presented as an October rate.

A transparent worked example

At 1,000 kWh under BPL's commercial class and the February fuel observation: base charge = B\$145; fuel = $(800 \times B\$0.174) + (200 \times B\$0.214) = B\$182$. Total before any applicable tax or other adjustments = B\$327, or B\$0.327/kWh. This is a calculated example, not a customer invoice. [14,15]

Why cheaper generation may not cut bills immediately

A retail bill also recovers network assets, system services, losses and financing. For a project assessment, model the avoidable portion of the bill and the mechanism passing savings to customers. Do not compare a wholesale power-purchase price with an all-in retail tariff.

CaribWise calculation and analysis. Obtain current tariff schedules, tax treatment, monthly adjustments, maximum demand and consumption profiles before pricing a customer proposal.

CASE STUDY / DELIVERY AND THE GRID

Dominica: reaching commercial operation

Verified milestone: The geothermal plant reached commercial operation on 31 July 2026 following testing. The full power-purchase agreement with DOMLEC is active. [3]

The 10 MW project demonstrates why construction completion and commercial operation should be tracked separately. In its May 2026 filing, Ormat said construction was complete but instability on the main transmission line was delaying commercial operation. The company described a 25-year power-purchase agreement and eventual transfer of the plant to government. [4]

The network was part of the investment

The World Bank approved US\$38.5 million of IDA financing for transmission infrastructure in January 2024, alongside a US\$0.25 million Canadian grant. Supporting infrastructure belongs in the delivery assessment, rather than being treated as an automatic consequence of building generation. [5]

The next test is measured performance

The IRC approved a tariff structure effective 1 October 2026, including lower off-peak pricing. Bill monitoring will assess customer effects and utility revenues. In September, it also warned that simultaneous loss of both 5 MW geothermal units remains a system vulnerability, although batteries can support loss of one unit. [21,22]

Implications for other markets

Schedule grid energisation, protection settings, reliability tests and contractual acceptance as explicit project milestones. Allocate responsibility for delays at the connection point before construction begins. The case supports this practical lesson; it does not establish that geothermal is the appropriate technology for every island.

Commercial implication: Commissioning support, grid engineering, asset monitoring and maintenance can remain valuable after the power plant itself is built. For geothermal development elsewhere, resource confirmation and drilling risk require a separate assessment.

DOMINICAN REPUBLIC AND GUYANA

Renewable project development

Dominican Republic: repeated additions

CNE reported in July 2026 that around 40 renewable projects had been incorporated into the national system over the previous five years. It identified storage integration and stronger electricity infrastructure as the next stage. This supports a finding of repeated delivery, without equating the project count with a particular annual renewable generation share. [6]

A June 2026 government release also reports 325.69 MW awarded under renewable power contracts with battery support, with entry into the system expected from June 2028. This belongs in the contracted pipeline, not operating capacity. Operations, replacement components and system integration remain commercial areas to investigate. [25]

Guyana: a programme with delivered and unfinished parts

GRIF's March 2026 update records five GUYSQL solar farms operating, totalling 18 MWp out of a planned 33 MWp. Its commissioning list spans November 2025 to January 2026. The remaining 15 MWp Linden component was still under implementation. [7]

An August 2026 LECI statement put available generation at 14.5 MW against peak demand above 15 MW and scheduled the first phase of the Linden solar installation for the end of 2026. The project is therefore treated as planned delivery, not an achieved operating milestone. [16]

The shared lesson: Delivery must keep pace with system needs. A programme can show real progress while part of the system still faces a supply gap. Solar nameplate capacity is not interchangeable with firm capacity during every hour.

Evidence boundaries: GUYSQL figures are programme-specific and expressed in MWp. They must not be added mechanically to the IRENA baseline, which may already include some installations. Gas-fired electricity is excluded from renewable capacity.



AI-generated editorial illustration; not a photograph of a named project.

JAMAICA AND BARBADOS

Renewable energy and storage procurement

Jamaica: use the revised procurement scope

GPE's September market update, posted on 1 October 2026, increases the forthcoming procurement to up to 300 MW of renewable generation and 150 MW of storage. It anticipates RFP publication in Q4 2026 and a technology-neutral storage component. The earlier 220 MW generation / 110 MW storage concept is superseded for this paper. [8]

This is procurement preparation, not a contract award or a commissioned asset. The update does not establish the final storage duration. Prospective participants need the issued RFP and its final technical and commercial provisions before treating the opportunity as executable.

Barbados: the grid creates the immediate need

The 60 MW / 240 MWh storage tender states that further renewable onboarding requires storage to address grid stability and balancing constraints. Its published deadline was 6 March 2026. The ministry's tender index retrieved at the research cut-off reports no open opportunities; an award or operating date was not verified. [9,10]

An official 25 August update adds 65 MW of planned storage procurement, targeted for Q4 2026: 15 MW at transmission level and 50 MW at distribution level. Together with the original programme, this supports an estimated 125 MW storage requirement. Procurement launch and commissioning are separate milestones. [23]

Question for market participants	Why it matters
Who controls dispatch and bears curtailment risk?	Determines the revenue that a generator or storage provider can realise.
What capacity, duration and availability are guaranteed?	Separates instantaneous power from sustained delivery and performance obligations.
How are degradation, augmentation and end-of-life costs paid?	Prevents a low initial equipment price from hiding lifecycle liabilities.

Questions above are CaribWise analytical recommendations. Procurement publication, award, financial close and commercial operation remain distinct stages.

BELIZE, GRENADA AND REGIONAL FINANCE

Storage investment and financing in smaller markets

Belize: a defined storage procurement

The September extended notice seeks four battery systems with site ratings that sum to 45.1 MW / 180.4 MWh, including three years of operations and maintenance. It specifies a 23 November 2026, 3 p.m. local bid deadline. This is a tender-stage opportunity; commissioning has not been verified. [11]

The notice also retains a general 40 MW description. A February World Bank market-engagement page used 45.1 MW / 180.2 MWh. This paper uses the later site-by-site notice and flags the discrepancy for bidder clarification rather than silently merging the figures. [11,17]

Grenada: financing for system flexibility

CDB announced US\$3 million of UK/EU grant support and a US\$5.7 million Canadian SURGE loan in July 2026 for battery storage at Maurice Bishop International Airport. CDB now lists a 5.5 MW / 11 MWh battery tender with a 23 October 2026, noon AST deadline. This updates the status to procurement, not operation. [18,24]

Regional aggregation can change the economics

The World Bank approved a US\$110 million facility in April 2025 for Grenada, Saint Lucia, and Saint Vincent and the Grenadines. It combines project aggregation, grid investment and support intended to mobilise up to US\$120 million of commercial credit through partial guarantees. These are programme commitments and mobilisation objectives, not proof of private finance already disbursed. [19]

Commercial implication: Small markets may be approached through repeatable engineering, shared procurement and long-term service capability. Country-level licensing, contracts and operational requirements still need individual treatment.

SELECTED PROJECT AND PROGRAMME REGISTER

Project status and procurement timelines

Status reflects the latest evidence identified, not a claim of continuous operational monitoring. Figures use the units stated in their sources.

Market / asset	Scale	Evidence and status
Dominica / geothermal	10 MW	Operating: COD 31 July 2026 confirmed by regulator. [3,4]
Guyana / GUYSOL delivered sites	18 MWp	Five operating sites in March 2026 programme update. Not the entire 33 MWp programme. [7]
Guyana / Linden solar	15 MWp planned	Under development; August statement targets first phase by end-2026. No COD verified. [7,16]
Jamaica / forthcoming procurement	Up to 300 MW RE; 150 MW storage	Preparation: September update anticipates RFP in Q4 2026. Storage duration not established. [8]
Barbados / storage services	60 MW / 240 MWh; additional 65 MW planned	Original tender deadline passed; additional procurement targeted for Q4 2026. No COD verified. [9,10,23]
Belize / four storage sites	45.1 MW / 180.4 MWh*	Tender: extended notice deadline 23 November 2026. Site ratings summed by CaribWise. [11]
Grenada / airport storage tender	5.5 MW / 11 MWh	Tender: bids due 23 October 2026, noon AST. No commissioning confirmation retrieved. [24]

*Belize source discrepancy discussed on p. 24. Storage is an enabling asset: it does not itself create renewable electricity. Do not total this register with national capacity statistics or sum MW and MWp as a uniform measure.

INVESTMENT OPPORTUNITIES / CARIBWISE ANALYSIS

Business and investment opportunities

The cases suggest several routes to participation. These are areas for commercial investigation, not forecasts of returns or a ranking of investment attractiveness.

Opportunity	Evidence anchor	What must be tested
Storage integration and lifecycle services	Barbados, Belize, Jamaica procurement designs. [8,9,11]	Dispatch rights, availability, degradation, safety, warranty coverage and replacement funding.
Grid engineering and controls	Dominica connection delay; regional grid finance. [4,19]	Connection capacity, protection studies, commissioning responsibility and utility acceptance.
Operations and performance services	Operating geothermal and multi-site solar. [3,7]	Measured output, failure history, spare parts, local technicians and service response.
Project preparation and transaction support	Forthcoming procurement and regional facility. [8,19]	Land, permits, environmental and social work, buyer credit and a financeable contract.
Business-site efficiency and solar	High regional commercial prices and variable bill components. [2,13-15]	Actual interval demand, avoidable tariff, roof/site condition, connection and export rules.

Assess customer demand

A hotel may prioritise cooling and continuity; a cold-storage operator may value avoided spoilage; a utility may need frequency support. Each requires a different service specification, contract and savings model. Treat these as customer segments to validate through evidence and interviews.

A credible proposal should show delivered cost, integration responsibilities and ongoing service capability. Renewable resource quality alone does not establish a paying customer.



AI-generated editorial illustrations; not photographs of named projects.

DELIVERY PRIORITIES / CARIBWISE RECOMMENDATIONS

Barriers to project development

1. Align plant completion with grid readiness

Dominica provides a documented connection constraint; Barbados explicitly links new onboarding to storage. Publish connection studies, required reinforcements and responsibility for energisation early enough to influence project schedules. [4,9]

2. Convert policy ambition into a bankable process

A target is not a procurement schedule. Publish the buyer, contract structure, evaluation method and realistic approval sequence. Jamaica's revised scope shows why market intelligence must monitor amendments, not simply preserve an original announcement. [8]

3. Finance the complete delivery package

Generation equipment is only part of the cost. Include network works, preparation, safeguards, insurance and operating capability. The regional facility offers one approach to aggregation and credit support; its mobilisation objectives still require execution. [19]

4. Make customer outcomes measurable

Report metered output, outages, losses and actual tariff effects alongside installed capacity. Dominica's planned bill monitoring is an example of evaluating benefits after the operating milestone rather than assuming them beforehand. [3]

5. Publish a dated project register

For each asset disclose technology, units, procurement stage, contract date, construction progress, testing and COD. Identify the owner of each update. This reduces the risk that investors, agencies and suppliers mistake an old project announcement for a current opportunity.

What would change this assessment? Verified awards and financial closes, completed network works, new operating certificates, and observed cost reductions. These should drive the next edition more than revised national targets alone.

METHODOLOGY AND LIMITATIONS

Methodology and data limitations

Scope and timing

Research cut-off: 12 October 2026. The statistical sample covers 12 selected sovereign markets across the Caribbean region, including Belize, Guyana and Suriname. It is not an exhaustive inventory of all islands, territories or projects. Detailed cases were selected for documented delivery milestones and distinct implementation challenges.

Comparable data versus current events

The common baseline was refreshed from IRENASTAT H2 2026, updated 28 September: capacity at end-2025 and generation shares for 2024. The database contains no 2025 generation-share observations for these 12 markets. IRENA flags 2024 generation as preliminary. Dated 2026 project evidence is reported separately. [1,20]

Units and status definitions

MW measures power; MWh measures energy; MWp is photovoltaic peak capacity and is not automatically equivalent to net AC output. Operating means explicit commissioning or COD evidence. Tender/preparation means procurement evidence. Financing announced does not prove disbursement, construction or COD. No operating status is inferred solely from a scheduled completion date.

Electricity-cost treatment

No harmonised October 2026 country tariff dataset was established. The paper therefore uses a regional commercial benchmark and clearly dated utility examples. Local currency, consumption blocks, fuel adjustments, tax and customer class remain explicit. It does not rank countries using incompatible retail and wholesale prices.

Evidence quality and interpretation

Sources prioritise regulators, utilities, procurement authorities, government, multilateral institutions and an operator filing. Announcements can lag actual conditions and developer statements may be promotional. Source discrepancies are flagged where material. Commercial conclusions are CaribWise analysis; no interviews, independent engineering inspection or project-level financial due diligence were performed.

Images are AI-generated editorial illustrations created for this publication; they do not depict verified project sites. Charts and tables use the cited data.

REFERENCES 1-7

[1] IRENA

IRENASTAT H2 2026 country electricity statistics; updated 28 September 2026. Capacity by technology, all grid connections, 2025; generation by technology, 2024 (preliminary). Retrieved 12 October. © IRENA 2026.

[Open original source](#)

[2] Caribbean Development Bank

Powering Progress: energy transition seminar, 8 May 2026. Regional commercial price context.

[Open original source](#)

[3] Dominica Independent Regulatory Commission

Geothermal Is Now in Commercial Operation: What It Means for Dominica. Confirms COD 31 July 2026 and planned bill monitoring.

[Open original source](#)

[4] Ormat Technologies

Form 10-Q filed 7 May 2026, project development discussion. Construction, connection delay and PPA.

[Open original source](#)

[5] World Bank

The World Bank supports clean energy generation in Dominica, 26 January 2024.

[Open original source](#)

[6] Dominican Republic CNE

RD suma 40 proyectos renovables y entra en una nueva etapa con almacenamiento energético, 7 July 2026.

[Open original source](#)

[7] Guyana REDD+ Investment Fund

Guyana Utility Scale Solar Photovoltaic Program. Results status as of March 2026; commissioning table.

[Open original source](#)

REFERENCES 8-14

[8] Jamaica Generation Procurement Entity

Market Update, September 2026; posted 1 October 2026. Revised forthcoming procurement.

[Open original source](#)

[9] Barbados Ministry of Energy and Business

Tender Notice: 60 MW / 240 MWh BESS services. Published deadline 6 March 2026.

[Open original source](#)

[10] Barbados Ministry of Energy and Business

Tenders index. No open opportunities displayed when retrieved.

[Open original source](#)

[11] Belize Ministry of Finance

BRRES BESS extended notice, September 2026 file. Site capacities; deadline 23 November 2026.

[Open original source](#)

[12] World Bank

Belize Launches New Energy Project to Enhance Power Reliability and Boost Renewables, February 2025.

[Open original source](#)

[13] Barbados Light & Power

Fuel Clause Adjustment. January-September 2026 observations and calculation method.

[Open original source](#)

[14] Bahamas Power and Light

Tariff card effective 1 July 2024. Commercial base charge and bill components.

[Open original source](#)

REFERENCES 15-21

[15] Bahamas Power and Light

Monthly Fuel Charge. Latest dated row retrieved: February 2026.

[Open original source](#)

[16] Guyana Department of Public Information / LECI

Press statement on Linden outages and demand, 16 August 2026. Solar first-phase schedule.

[Open original source](#)

[17] World Bank

Belize early market engagement: design, supply, installation and commissioning of BESS, 9 February 2026. Earlier scope.

[Open original source](#)

[18] Caribbean Development Bank

CDB Drives Key Investment in Grenada's Energy Resilience, 14 July 2026.

[Open original source](#)

[19] World Bank

Caribbean Countries Strengthen Energy Resilience via New Facility, 17 April 2025.

[Open original source](#)

[20] IRENA

IRENASTAT H2 2026 renewable shares; updated 28 September 2026. Capacity shares for 2025; preliminary generation shares for 2024. Retrieved 12 October.

[Open original source](#)

[21] Dominica Independent Regulatory Commission

New Electricity Tariff Takes Effect October 1: What Customers Should Know, 31 August 2026.

[Open original source](#)

REFERENCES 22-25

[22] Dominica Independent Regulatory Commission

Dominica's Electricity Grid Faces a Remaining Geothermal Challenge, 16 September 2026.

[Open original source](#)

[23] Barbados Government Information Service

Barbados Targeting 50% Renewable Energy Penetration by 2027, 25 August 2026. Additional storage procurement.

[Open original source](#)

[24] Caribbean Development Bank

Battery Storage System Project: Grenada procurement notice. 5.5 MW / 11 MWh; bid deadline 23 October 2026. Retrieved 12 October.

[Open original source](#)

[25] Dominican Republic Presidency

CUED renewable capacity award and contract signing, 25 June 2026. Reported 325.69 MW; expected system entry from June 2028.

[Open original source](#)

REFERENCES 26-29**[26] Haiti ANARSE**

Northern energy project site visits, 3 July 2026. Caracol and Génipailler construction; Dame-Marie financing constraint.

[Open original source](#)

[27] Government of Suriname

Upper Suriname solar service expansion; Goejaba commissioning on 3 May 2026.

[Open original source](#)

[28] Bahamas Office of the Prime Minister

EA Energy hybrid power facility site tour, 28 August 2026. Abaco construction and target dates.

[Open original source](#)

[29] Saint Lucia Electricity Services

Troumassee solar, battery and substation RFP, 10 November 2025. Verified procurement scope, not current award or operating status.

[Open original source](#)



CARIBWISE

Understanding the region. Following the evidence.

info@caribwise.com

caribwise.com

This publication provides general market information and analysis. It is not investment, financial, legal, tax or engineering advice, an offer of securities, or an endorsement of a project or supplier. Readers should verify current procurement documents and obtain advice appropriate to their circumstances. Project conditions, data and policies may change after the research cut-off.

© 2026 CaribWise. Third-party data remain subject to their respective rights and attribution requirements. Cover and back-cover imagery: AI-generated editorial illustration, not a photograph of an identified project.