



Renewable Caribbean: towards energy independence

Although renewable generation is already cheaper, policy and regulatory barriers perpetuate the Caribbean's dependence on fossil fuels.

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Author: Wilmar Suárez

Contents

About

Key highlights

Executive summary

What fossil dependence costs the Caribbean

1.1 Fossil power leaves the Caribbean highly exposed to imports

1.2 Households pay among the highest power prices in the world

Renewables already cost less than fossil power

2.1 Solar with batteries now costs less than a new gas plant

Renewable generation targets are not being met

3.1 Almost all set a target; not all defined how to measure it

3.2 The solar build-out the Caribbean's statistics cannot yet see

Closing the gap between target and delivery

4.1 Set targets that can be checked, and verify progress

4.2 Stop the utility deciding who competes with it

4.3 Tender what the system needs, and publish the result

Supporting materials

Methodology

Acknowledgements

About

This report examines fossil power dependence in thirteen Caribbean countries (Antigua and Barbuda, the Bahamas, Barbados, Cuba, Dominica, Grenada, Haiti, Jamaica, the Dominican Republic, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia and Trinidad and Tobago), and it explores the evidence on the deployment of renewables: what they cost, what utilities agreed to pay, what national targets commit to, what has been delivered, and how much of the solar build-out official statistics miss. It proposes three policy changes to accelerate renewable deployment. It is published ahead of the XI Energy Week of the Latin American and Caribbean Energy Organization (OLACDE).

Read the report online at:

<https://ember-energy.org/latest-insights/renewable-caribbean-towards-energy-in-dependence>

Key highlights

9.1%

The share of renewable electricity generation across the thirteen Caribbean countries in 2024.

11 of 13

Caribbean countries have a renewable target for 2030 or later.

1.8x

The Caribbean likely installed nearly twice the solar capacity officially recorded between 2021 and 2024.

An expensive dependence with cheaper alternatives available

Renewables supply less than a tenth of Caribbean electricity, and the region depends on international fuel markets to generate the rest. Contracts signed in the region itself show that fossil generation is no longer the cheapest way to produce electricity. Many countries have set renewable targets, but not all can be measured. Of those that can be measured, none are on track.

Eleven of the thirteen Caribbean countries analysed in this report produce none of the fuel they burn to generate electricity, and 91% of the region's power still comes from fossil sources. In four of them, imported fuel for all uses costs more than 7% of GDP – two to three times the world average. When oil prices rise, the cost passes through to household bills or to the public accounts through subsidies.

The region's fossil dependence persists even though renewables are already contracted at lower prices than fossil power. In the Bahamas, the state utility contracted solar at less than half the price of gas-fired generation in the same contracting round. In June 2026, the Dominican Republic awarded renewables with batteries at a lower price than its distribution companies were paying generators on average the year before.

Yet renewables remain under a tenth of the region's generation, and countries with verifiable targets had reached less than a fifth of the goal by 2024. The region is buying solar panels far faster than those figures suggest: 1,809 MW of Chinese panels arrived in 2024, five times the 2021 total, and official capacity statistics do not register that pace.

Policies, not costs, are the main barrier to renewable deployment in the Caribbean. This report proposes three policy changes: measurable targets, with regular progress checks that are verified independently; an independent decision-making body to approve generation and grid connections; and tenders designed around what the system needs, with the result published.

01

Four Caribbean countries spend more than twice as much of their GDP on imported fuel as the world average, and one spends almost three times as much.

In 2023, imported fuel of every kind – for power, transport and cooking – absorbed 9.5% of GDP in Jamaica, 8.5% in Dominica, 8.0% in Grenada and 7.3% in Barbados, compared to a world average of 3.2%. Even three less exposed countries exceed the global average – the Dominican Republic, Saint Vincent and the Grenadines and the Bahamas.

02

Two Caribbean buyers have contracted renewable generation for less than they were already paying for power.

In the Bahamas, the state utility contracted solar generation at 11.5 US cents per kilowatt-hour (c/kWh) compared to 23.3 c/kWh in the same contracting round for generation with liquefied natural gas bought from third parties. In June 2026 the Dominican Republic awarded 326 MW of renewable capacity with 50% battery backup, at 10.6–10.9 c/kWh – below the 14.9 c/kWh its distribution companies paid generators on average in 2025.

03

Four Caribbean countries weakened or dropped their renewable target between 2021 and 2025.

Of the 13 countries analysed in this report, 11 have a renewable target for 2030 or later, while Grenada and Haiti set none. Two countries delayed their target: Barbados moved its 95% renewable electricity commitment from 2030 to 2035, and Saint Kitts and Nevis moved its 100% target from 2020 to 2030. Saint Lucia removed its target in 2021 and set a

less ambitious one in 2025. Of the six countries whose target is set as a share of electricity generation, none had reached a fifth of it by 2024.

04

Solar panel imports from China were five times higher in 2024 than in 2021, and reached 2,174 MW in 2025.

Official capacity statistics do not register that pace. In total, the thirteen countries imported 3,861 MW of solar panels from China between 2021 and 2024, which would result in an estimated 2,280 MW installed. However, official statistics record almost half that (1,269 MW). In eleven countries, excluding the Dominican Republic and Cuba, just an eighth of the solar likely installed since 2021 is recorded.

Renewables and batteries are now cheaper than fossil power, but policy is often what holds back their deployment. As a result, the region remains highly exposed to fossil fuel imports, and every rise in the oil price feeds through to the cost of living for households or to the public accounts.

The region's own contracts show that renewables are already the cheaper option, its ports show that the panels are already arriving, and several of its countries show that the right rules produce results.

The Caribbean now has a real opportunity to reimagine its energy system: one that is not exposed to the volatility of fossil fuel markets and is more resilient to hurricanes and storms. Homes and businesses could be powered locally with affordable electricity, generated from the sun and wind the region has in abundance and stored in batteries for when it is needed most.

Secure, affordable energy is within reach for the Caribbean; leaders who act decisively will position their countries at the forefront of this historic opportunity.

Wilmar Suárez

Senior Energy Analyst, Latin America, Ember

What fossil dependence costs the Caribbean

The region generates 91% of its electricity from fossil fuels, and ten of the thirteen countries produce none of the fuel they burn. An oil price shock abroad lands either on the household bill or on the public budget.

Caribbean power systems are small and isolated. Several grids are sized for populations under a hundred thousand, and almost all of them run on fuels bought in dollars at a price set outside the region. That leaves little room to absorb the shocks that international fuel markets create.

1.1 Fossil power leaves the Caribbean highly exposed to imports

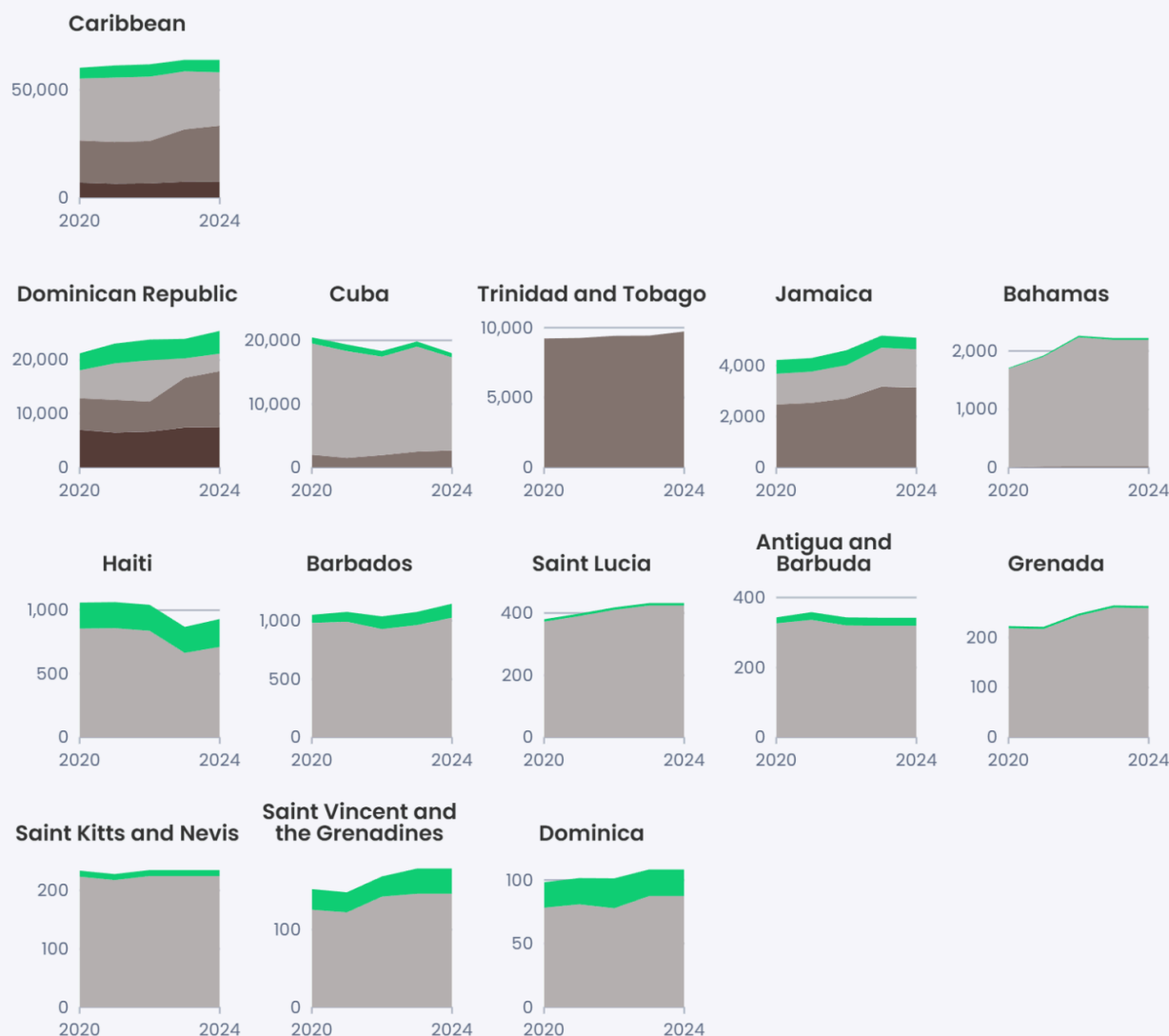
In 2024, 90.9% of the 64 TWh generated across the thirteen Caribbean countries came from fossil sources: gas (40.5%), oil products (38.7%) and coal (11.7%). Renewables reached 9.1%, compared to [32%](#) worldwide.

Between 2018 and 2024, total regional electricity generation grew 7.6%. Two-thirds of that increase was met with fossil fuels, which raised the renewable share by less than two percentage points, from 7.3% to 9.1% – precisely while [solar](#) and [storage](#) were getting markedly cheaper worldwide.

Fossil fuels dominate electricity generation in the Caribbean

Electricity generation by source, 2020-2024 (GWh)

Coal Gas Oil Renewables



Source: OLACDE-sieLAC (Cuba, Grenada, Haiti, Jamaica, Trinidad and Tobago, the Dominican Republic and Barbados); IRENA, IRENASTAT, accessed 19 September 2026 (Antigua and Barbuda, The Bahamas, Dominica, Saint Kitts and Nevis, Saint Vincent and the Grenadines and Saint Lucia) • Generation only; net imports excluded. IRENA does not publish 2024 generation, so for those six countries 2024 repeats the 2023 mix. Due primarily to underreporting of distributed solar generation, the renewables share in most countries is underestimated in this data. Caribbean is the aggregate of the thirteen countries shown.

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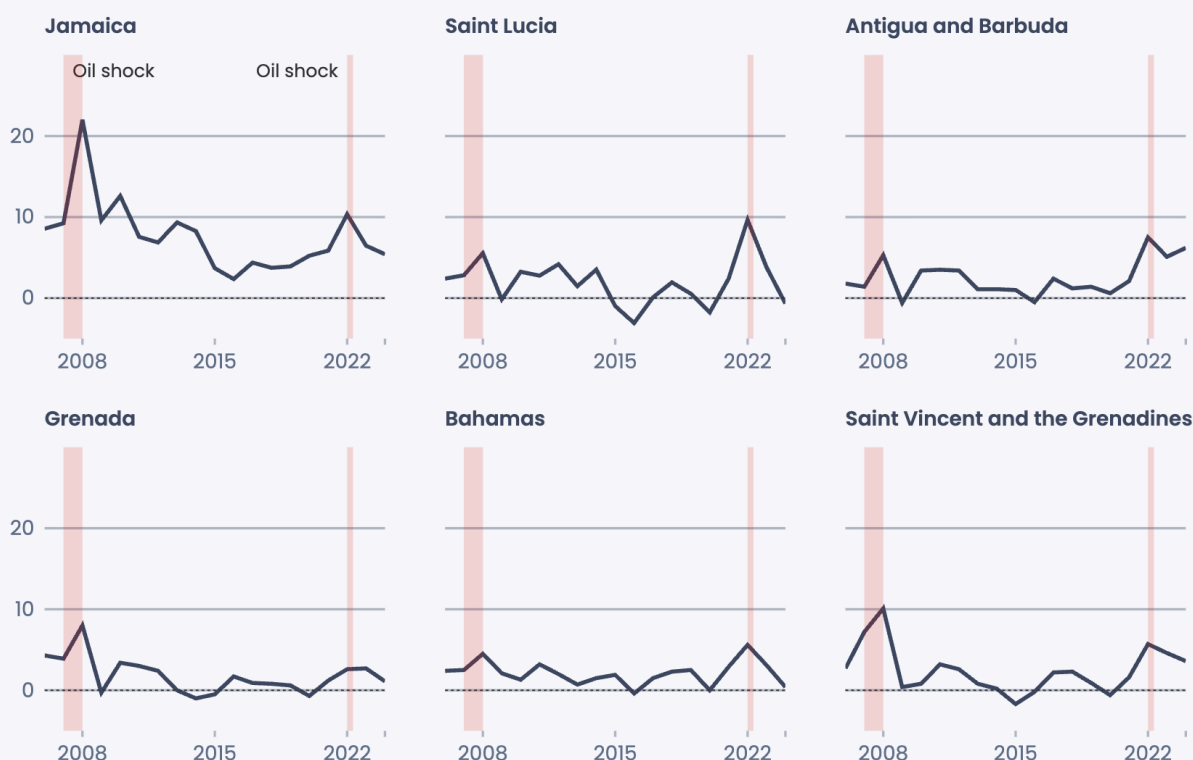
Many Caribbean countries are highly dependent on imported fossil fuels to meet their electricity demand. Only two of the thirteen countries in this report burn fuel they produce themselves: [Trinidad and Tobago](#) generates its electricity with gas produced on its own territory, and [Cuba covers close to 60% of its electricity output](#) with domestic crude and gas. Barbados [produces some oil and gas](#), but [none of it is used to generate electricity](#). In the remaining ten countries, every unit of fuel burned to generate electricity is imported, at a price set outside the region.

Imported fuel for every use – electricity, transport, cooking and the rest – absorbed 9.5% of GDP in Jamaica in 2023, 8.5% in Dominica, 8.0% in Grenada and 7.3% in Barbados, compared to 3.2% worldwide and 2.8% on average for Latin America and the Caribbean. The [indicator can be measured in seven of the thirteen countries](#), and all seven exceed both averages, even the three least exposed – the Dominican Republic, Saint Vincent and the Grenadines and the Bahamas – which sit between 4.1% and 4.4%.

That exposure reaches households through the cost of living. Two oil shocks of this century show up in Caribbean inflation: in 2008, [Jamaica's](#) rose from 9.2% to 22.0%, and in 2022 [Saint Lucia's quadrupled](#). [Antigua and Barbuda's](#) more than tripled in both. The third shock is under way: Brent [passed \\$100 USD in March 2026](#) after the closure of the Strait of Hormuz, and its effect will not be measurable until 2027.

Inflation surged across the Caribbean during the oil price shocks

Annual consumer price inflation (%), 2006–2024



Source: World Bank, FP.CPI.TOTL.ZG (inflation), FRED, Brent crude (POILBREUSD) • The 2008 and 2022 shocks highlighted were global and multi-cause; the chart shows timing, not causal shares.

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Where prices moved less, it was rarely because of lower exposure to international markets. Several governments applied [tariff caps that shifted the cost increase onto the public purse](#). The bill is always paid; the only difference is whether the treasury absorbs it or households end up paying it.

1.2 Households pay among the highest power prices in the world

Electricity in much of the Caribbean is among the most expensive in the world. [The World Bank](#) puts the regional average at around 25 c/kWh, more than double the United States average, with some countries above 40 c/kWh. In the six eastern Caribbean states that share a common currency – Antigua and Barbuda, Dominica, Grenada, Saint

Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines – the [International Monetary Fund](#) measured rates of 26–37 c/kWh, three to four times the median price in emerging economies (10 c/kWh) and almost double the 19 c/kWh in advanced economies.

Three factors help explain those prices. The first is the grid: ageing and poorly maintained infrastructure produces [transmission and distribution losses](#) of 15–20% in those six eastern Caribbean countries, compared to 6% in advanced economies. The second is that generation is mostly fossil-fired, so every kilowatt-hour carries a fuel purchase – a largely imported, recurring cost that renewable generation does not carry at all. The third is scale: these are small, isolated systems that buy in small volumes, have no neighbouring grid to draw on, and have little bargaining power over what they pay.

In 2024, the average residential tariff was 38.0 c/kWh in Grenada, 36.9 c/kWh in Jamaica and 32.3 c/kWh in Barbados – the three highest of the eighteen Latin American and Caribbean countries in [OLACDE's price series](#), whose median was 16.9 c/kWh. Trinidad and Tobago, at the other extreme, recorded 6.2 c/kWh: it generates its electricity entirely with its own gas and has had its [tariff frozen since 2009](#).

High electricity prices land on households. In the Bahamas, which generates 99% of its power from imported oil products across grids on separate islands, the average household spends around [\\$4,800 USD a year on energy](#) – five times the Latin American and Caribbean average. Among the poorest fifth of households, electricity alone takes 7.3% of income, compared to 4.4% regionally.

Renewables already cost less than fossil power

Signed contracts and executed auctions show that Caribbean renewables are already being secured at lower prices than fossil power

In this chapter we will consider both global benchmarks and specific real-world examples from the Caribbean. The global benchmarks are modelled costs – built on assumptions about the cost of capital, the hours a plant runs and the lifespan it is given, and drawn from large interconnected grids rather than islands of a few hundred thousand people. The Caribbean figures are prices actually agreed in the region, so the cost of borrowing and the premium of building on a small island are already factored in.

2.1 Solar with batteries now costs less than a new gas plant

Globally, more than 90% of utility-scale renewable projects commissioned in 2025 produce [cheaper electricity](#) than the cheapest new fossil plant available in their market. The International Renewable Energy Agency (IRENA) puts the [global weighted-average levelised cost](#) of onshore wind at 3.3 c/kWh and of solar at 4.4 c/kWh. That same year, gas turbine shortages roughly doubled the investment required for a new combined-cycle plant, pushing its levelised cost towards 10 c/kWh in high gas-price markets. That is already changing what gets built: in 2025, [the rise in solar](#) was eighteen times larger than that of gas, the only fossil fuel that grew at all.

For an island system, what matters is the firm cost: generation plus the storage needed to deliver power at any hour. [IRENA models this](#) for places with strong and steady sunshine, where less storage is needed to cover the gaps: Bahia State in Brazil, the Thar

Desert in India, Southern Queensland in Australia. None of them is an island. It finds that firm solar-plus-battery cost at 95% reliability fell from above 10 c/kWh in 2020 to 6.5–8.2 c/kWh in 2025, and for grid-constrained or islanded systems it treats that figure as a conservative ceiling rather than an expected cost. Both generation and storage got cheaper: the installed cost of a four-hour utility-scale battery fell 95% from 2010 and stood at \$140 per kWh of capacity in 2025.

[Borrowing costs](#) range from 3–5% to more than 12% depending on the market, and the difference falls hardest on renewables, whose spending comes almost entirely at the start of a project. Renewable and battery costs have fallen far enough to absorb that difference, and the Caribbean already has cases that prove it

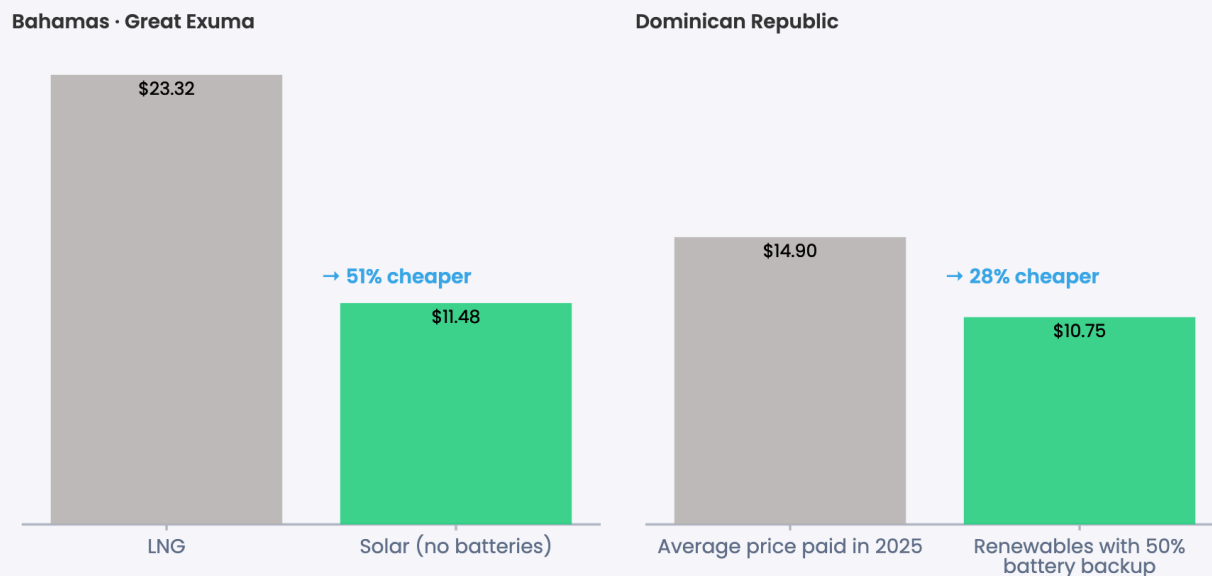
In two recent Caribbean contracts, renewables came in cheaper than the conventional alternative

In Great Exuma, the Bahamas, the state utility Bahamas Power and Light (BPL) [contracted 3 MW of solar](#) at 11.5 c/kWh compared to 23.3 c/kWh for generation with liquefied natural gas bought from third parties. Under the same procurement process, solar cost less than half the price of gas per kilowatt-hour. The solar plant contracted in the Bahamas was well above the global utility-scale benchmark, yet it still won against the fossil alternative. The contract did not include batteries, and [adding them](#) would have brought solar to 14.8 c/kWh: still a third below the gas price. The difference is almost entirely fuel: the fixed part of the gas contract, 10.5 c/kWh, is almost equal to the full price of solar, and the remaining 12.8 c/kWh is recalculated every month.

Another example from the Caribbean shows the pattern repeat on a much larger scale. In June 2026, the Dominican Republic [awarded 326 MW of renewable generation](#) with 50% battery backup at 10.6–10.9 c/kWh, below the 14.9 c/kWh that distribution companies paid their generators on average in 2025, with commercial operation expected from June 2028. The National Energy Commission justified the auction on the same premise as this report: reducing exposure to imported fuel costs.

Two Caribbean countries already buy renewable generation cheaper than the alternative, with and without storage

Contract prices against what the buyer was already paying (US cents per kWh)



Source: The Nassau Guardian (Feb 2026), Comisión Nacional de Energía, Dominican Republic (Jun 2026) • Bahamas: two contract prices from the same round – the gas fuel component (12.8¢) is recalculated monthly; 23.3¢ reflects conditions at signing. Dominican Republic: awarded price (delivery from 2028) against the distributors' average purchase price in 2025, which includes existing contracts across all technologies; the bar shows the midpoint of the awarded range (10.6–10.9¢/kWh)

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Fossil power creates a non-stop exposure to commodity imports that renewable power does not. Both contracts run 20 to 25 years and both adjust for inflation once a year, but only the thermal one adds a component recalculated every month with the fuel price.

Renewable generation targets are not being met

Eleven of the thirteen countries analysed in this report have a renewable target. Only six measure it in terms of electricity generation, and of those, none had reached a fifth of their target by 2024. Four of the thirteen weakened or dropped theirs since 2021. Solar is arriving faster than the statistics show, but not fast enough to close the gap.

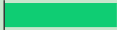
Across the region, renewable targets are scattered across various instruments, from Nationally Determined Contributions (NDCs) and national energy plans to indicative strategies and formal legislation. Verifying progress against these goals is rarely straightforward. In many cases, published data is insufficient to track deployment, while in others, available figures show that progress is falling far short of where targets imply it should be.

Despite these challenges, setting explicit targets remains essential for driving the deployment of renewable generation. A clear goal gives utilities a roadmap for grid planning, provides regulators with the foresight to adapt rules, and gives investors the market certainty needed to commit long-term capital.

3.1 Almost all set a target; not all defined how to measure it

Cost is no longer the obstacle. Yet regional renewable generation barely reached 9% in 2024, even though ten of the thirteen countries have set quantified targets for 2030, and Barbados for 2035. Only [Grenada](#) and [Haiti](#) limit themselves to emissions-reduction objectives.

Eleven Caribbean countries have a renewable target, only six can be checked against generation data

Country	Target	Year	Basis	Reference
Saint Kitts and Nevis	100% 	2030	Electricity generation	NDC, October 2021
Antigua and Barbuda	86% 	2030	Electricity generation	NDC, September 2021
Jamaica	50% 	2030	Electricity generation	Integrated Resource Plan 2022 and NDC 3.0, September 2025
Saint Lucia	40% 	2030	Electricity generation	NDC, February 2025
Trinidad and Tobago	30% 	2030	Electricity generation	NDC, January 2026
Cuba	26% 	2035	Electricity generation	NDC 3.0, February 2025
The Bahamas	30% 	2030	Energy matrix	NDC 3.0, November 2025
Barbados	95% 	2035	Electricity sales	NDC, August 2025
Saint Vincent and the Grenadines	60% 	2030	Energy matrix	NDC, September 2025
Dominica	100% 	2030	Not stated	NDC, July 2022
Dominican Republic	30% 	2030	Indicative plan only	National Energy Plan 2022–2037 (CNE)
Grenada		No renewable target	—	NDC, November 2020: emissions reduction
Haiti		47% removed in 2022	—	NDC 2022, June 2022

Rows in the darkest green are the six targets set as a share of electricity generation, the only ones that can be checked against the data. Figures available without an adopted instrument are not used here: 100% for Grenada, 80% for Haiti, 50% for Saint Lucia, and 100% for Barbados, which covers the whole energy system rather than electricity. Cuba's NDC gives 24% for 2030 as the reference point for its 2035 commitment; this report's 2030 projection uses it.

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The way renewable targets are set varies greatly across the Caribbean. Only six express it as a share of electricity generation in an adopted instrument. [The Bahamas](#) and [Saint Vincent and the Grenadines](#) set theirs on the national energy mix, [Barbados](#) on electricity sales, [Dominica](#) does not state a basis; and that of the [Dominican Republic](#) exists only in an indicative plan.

Every target set on electricity generation is behind

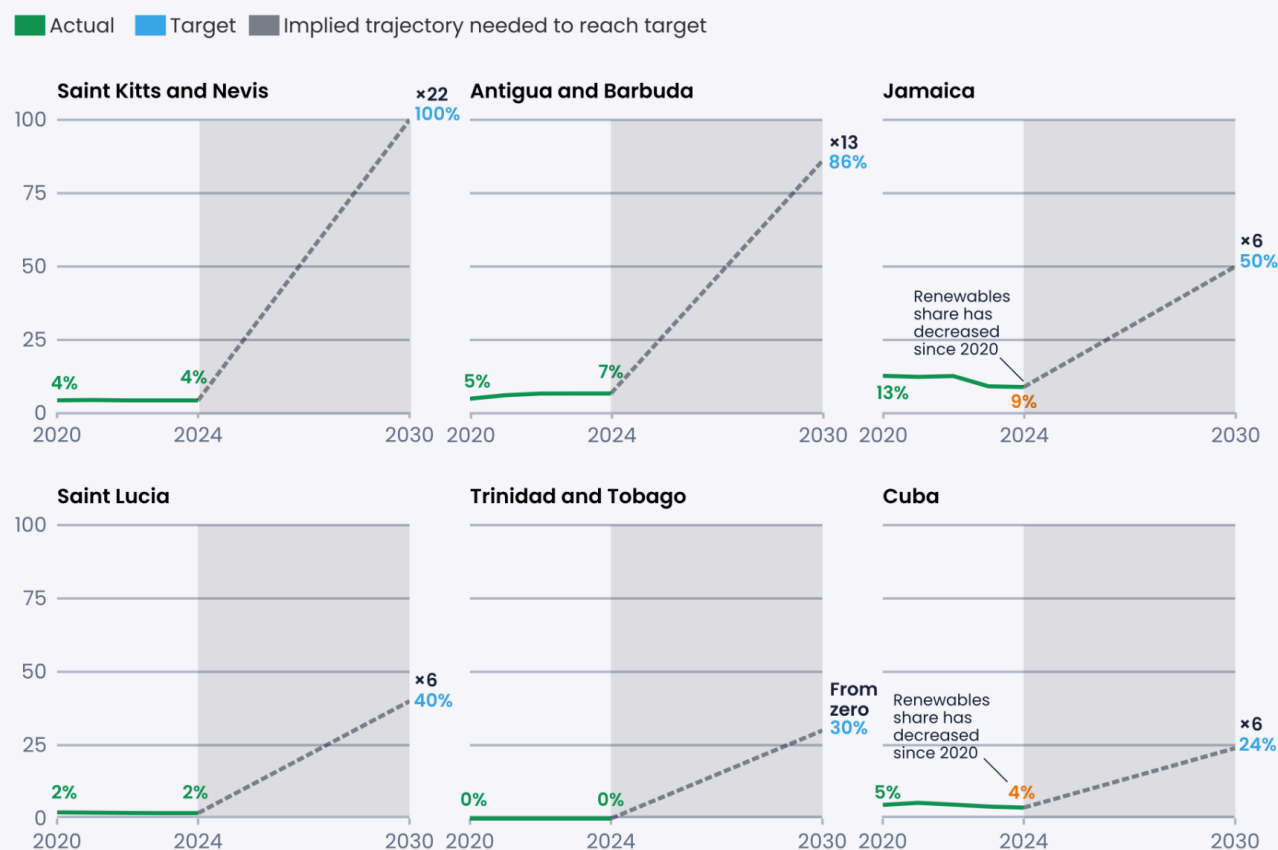
By the end of 2024, none of the six countries whose target is set on electricity generation had reached even a fifth of it. And the lag is not explained by over-ambitious targets: [Cuba](#) set the most modest of the six, 26% for 2035, yet stood at 3.7% in 2024; [Jamaica](#), the most advanced, set 50% for 2030 and stood at 8.9% in 2024. For [Trinidad and Tobago](#), with a 30% target for 2030, the statistics record no renewable generation at all. Meeting these commitments would mean multiplying 2024 renewable generation by seven in Cuba, by six in Jamaica, by thirteen in Antigua and Barbuda, and by more than twenty in both Saint Kitts and Nevis and Saint Lucia.

Three of the countries in this report have moved further away from their target since 2020, not closer: the renewable share fell 3.8 points in Jamaica, 0.9 in Cuba and 0.3 in Saint Lucia. The reasons differ: in Saint Lucia nothing new was built and the additional demand was met with oil; in Jamaica hydro and wind generated less while demand grew by a fifth and was met with gas and oil; in Cuba biomass generation (largely bagasse from sugarcane) fell by more than a third and solar generated less despite more capacity. Antigua and Barbuda is the only country that gained ground, by 1.8 points; Saint Kitts and Nevis has not moved at all.

Some targets are not firm promises either. [Antigua and Barbuda](#), [Saint Kitts and Nevis](#), [Saint Lucia](#) and Trinidad and Tobago make theirs conditional on international finance. Only Cuba committed unconditionally, and Jamaica does not state either way.

Caribbean countries need renewables to grow at least six-fold to meet their 2030 goals

Share of electricity generation from renewables (%), 2020–2024, against the 2030 target



Source: OLACDE-sielAC and IRENASTAT; targets from NDCs and Jamaica's Integrated Resource Plan 2022 • IRENA publishes no 2024 generation, so Antigua and Barbuda, Saint Kitts and Nevis and Saint Lucia repeat 2023. Trinidad and Tobago's zero is what the statistics record. Cuba's target is 26% by 2035; the 24% at 2030 is the reference point in the same document. Jamaica's figure is OLACDE-sielAC's; its ministry publishes 10% for 2024 and its regulator 12.9%.

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The six countries whose commitments are measured as a share of electricity generation account for 56% of the region's fossil generation. Meeting their renewable targets would cut fossil-fuelled generation by between 23% and 100% in each. At the regional level, this would lift the renewable share from 9.1% in 2024 to 23% in 2030, almost regardless of how much demand grows. If consumption continues to grow at the rate observed between 2018 and 2024, fossil generation would fall 9% in absolute terms. Less than half of those new renewables would be enough to stop it from growing.

Four Caribbean countries weakened or dropped their renewable target between 2021 and 2025

Four countries adjusted the target instead of accelerating delivery. Barbados says so in its own NDC: the 95% it committed to for 2030 in 2021 "is maintained", but is "now expected to be achieved by 2035". Saint Kitts and Nevis moved its 100% from 2020, set in its [2014 energy policy](#), to 2030 in its 2021 NDC. Saint Lucia's target went from 50% for 2030, set in 2015, to being omitted from its 2021 update, and then reappeared at 40% in 2025 – below the 50% that still stands in its [national energy policy](#). Finally, Haiti removed the 47% it had set in 2015.

Not every country followed that path. Trinidad and Tobago adopted a 30% target for 2030 after missing a [10% for 2021](#). And the Dominican Republic advanced more than anyone without a target that could be required of it: its [law](#) says that the authorities "shall endeavour" that 25% of service needs be covered by renewables in 2025, and its energy plan sets 30% for 2030 on an indicative basis only. Its renewable share of electricity generation rose from 7.6% to 16.6% between 2015 and 2024: solar went from 0.2% to 5.8% and wind from 1.6% to 4.2%, while hydro barely moved.

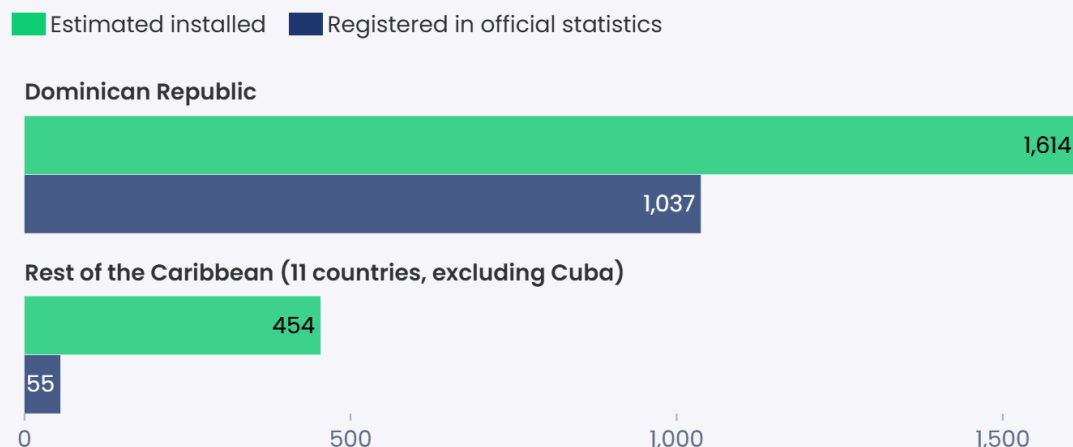
3.2 The solar build-out the Caribbean's statistics cannot yet see

Across the thirteen countries, [solar panel imports from China](#) rose from 337 MW in 2021 to 1,809 MW in 2024 – five times as much in four years – and reached 2,174 MW in 2025. The buying is concentrated: in 2025, Cuba and the Dominican Republic accounted for 85% of imports, and Cuba alone more than half.

Chinese panel imports are a good proxy for installations, but not a direct measure of them. [Ember](#) estimates that about 73% of exported panels end up installed, and that they take roughly six months to reach the site after shipping. Applying both factors to the 3,861 MW that arrived in the thirteen countries between 2021 and 2024 gives an estimated 2,280 MW installed by the end of 2024.

The Caribbean has installed more solar than statistics show: 1.5x more in the Dominican Republic and 8x more across 11 other countries

Solar capacity (MW), 2021–2024



Source: Ember, China Solar PV Export Explorer (imports), IRENA, Renewable Capacity Statistics 2026 (capacity) • Installed capacity estimated from Chinese panel exports using Ember's 73% installation rate and six-month lag. Capacity is IRENA's. Cuba is excluded: its registered capacity rose 59% from 2021 to 2024 while its solar generation fell 26%.

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Official statistics record 1,269 MW of new solar capacity across the thirteen countries over those same four years (2021–2024): just over half of the 2,280 MW estimated. But the gap is not the same everywhere. In the Dominican Republic, the statistics record 1,037 MW compared to an estimated 1,614 MW: two out of every three. In the other eleven countries, excluding Cuba, they record just 55 MW compared to an estimated 454 MW: one in eight. Cuba is treated separately because its case is different: its registered solar capacity grew 59% over those years, but its solar generation fell 26%. There, the problem is not panels going uncounted, but panels already counted that are not generating. And even if all the unregistered capacity were generating, the region's renewable share would rise by less than two percentage points.

The pace of solar imports rose from an average of 151 MW a month in 2024 to 181 MW a month in 2025. In the first seven months of 2026, it fell to 87 MW a month. Whether that is a pause or a change of trend is not yet known; it will only become clear when the year closes.

Closing the gap between target and delivery

There are three changes that a government already has the authority to take and that do not depend on new technology or capital: setting targets that can be checked, establishing an independent body for granting licences and connections, and publishing the results of tenders.

The preceding chapters outlined the region's power generation mix, its reliance on imported fuels, and its renewable deployment targets. Given that renewables are already being contracted below the price of the fossil power they displace, costs do not explain the gap between these targets and actual progress. The key lies in the rules of the game – a factor under the region's direct control – as they determine whether a project signed today remains grid-connected and continues generating revenue throughout its contract lifecycle.

4.1 Set targets that can be checked, and verify progress

Renewable energy targets that are credible and fully verifiable by design will help to attract private investment. A robust target should rely on existing public datasets while clearly defining its baseline, deadline, and scope – such as whether distributed generation counts. Governance is most effective when there is a designated reporting agency, a fixed reporting schedule and interim milestones. If a milestone is missed, regulations should require a public corrective plan to catch delays early. Finally, figures should be verified by an independent body, as reporting mandates without external verification lose accountability over time.

Current status

Six countries have a target set in a way that can be measured; that is the one requirement widely met. Only one country's law names who must publish the renewable figure and how often.

Elsewhere, such a requirement is either absent or omits the obligation to report renewable generation data. [Dominican law](#) requires its energy commission to report to Congress each year on the execution of its renewable programmes, but not on the share itself. Where no one is named, more than one figure circulates: in Jamaica the [energy ministry's statistics](#) put the renewable share at about 10% for 2024, while the [regulator's annual report](#) gives 12.9% – a figure that carries neither a year nor a source. The regional dataset this report uses, OLACDE-sieLAC, gives 8.9% for the same year. In short, three different figures for one country, and no way for a reader to know which of them is the valid one.

Four countries set an interim renewable share for a date before their final target year, two of them in annexes rather than in the commitment itself. However, none of these instruments specify what happens if a target is missed, with no requirement for a corrective plan, mandatory review or follow-up action.

Finally, in no country is the published figure checked by a body outside the one that produces it. Jamaica shows what that permits: two official figures, more than two points apart, with no process by which either is reconciled.

Where this has worked

No country meets the full recommendation, but Antigua and Barbuda comes closest – at least on paper. Since 2015, its [Renewable Energy Act](#) has required what most of the region still has not legislated: renewable targets for electricity generation prescribed by regulation, middle-term as well as long-term, an annual published report on progress towards them, and a quarterly return on connected capacity. Ten years on, the [regional centre](#) that compiles Caribbean energy statistics still obtains Antigua and Barbuda's electricity data by private communication from the utility. The Act requires no action if progress falls short and gives every function to the minister, so there are no outside observers to notice delays. Antigua and Barbuda is at 6.7% of generation against 86% for 2030.

4.2 Stop the utility deciding who competes with it

Two decisions determine whether a new generator can enter the market: who is permitted to generate, and who gets connected to the grid. Both should be taken by a body that neither generates nor sells electricity – not by the incumbent utility, which is precisely who that new generator would compete with. In practice this means two things. First, the generation licence is granted against criteria published in advance. Second, connection to the grid can be refused only on grounds that a body outside the utility can review.

Current status

On paper, the monopoly has all but disappeared. Most of these countries now allow companies other than the incumbent utility to generate and sell electricity. But the monopoly survives by another route. The laws opened up generation, yet left in the incumbent's hands the decisions that determine whether a competitor can actually enter.

Where the incumbent decides who may generate, [the Bahamas](#) is the clearest case and the newest law: under an Electricity Act passed in 2024, BPL decides whether new capacity is needed, then it may meet that need itself on nothing more than a notification to the regulator, or where it opts for a third party it selects the winner. In [Trinidad and Tobago](#), the right to generate is vested in the state utility by statute, which then declares a generator "approved".

In other countries, the decision on whether a new generator receives a licence rests directly with a minister, with no independent regulator taking part. That is the case in [Saint Kitts and Nevis](#), under its 2011 Electricity Supply Act, and in [Barbados](#), under its Electric Light and Power Act 2013: there, a committee reviews applications, but it is made up of government officials and only issues recommendations; the decision remains the minister's. There is also a third case: a law that opens the market but is never put into effect. [Saint Lucia](#) took renewables out of the monopoly in 2016, but the regulations needed to grant licences were never made. Ten years on, its only renewable plant is still the utility's own.

The second decision, connection to the grid, is rarely regulated in writing, and that is where the incumbent utility recovers the control the law had taken from it over

generation. In [Barbados](#), the utility stopped connecting new solar customers for about two years on the grounds that the grid could take no more; it was a decision it took itself, with no outside review. In [Antigua and Barbuda](#), the law makes the connection of renewable projects depend on the interconnection policy set by the utility itself, the Antigua Public Utilities Authority. Cuba reaches the same outcome by another path: a private producer may own its plant, but is obliged to sell all of its generation to UNE, the state utility, at the price UNE decides.

Where this has worked

[Dominica](#) shows what happens when this change is applied. There, both decisions rest with the regulator, not the utility: the regulator grants generation licences and approves the technical rules for connecting to the grid. In addition, the incumbent utility's licence is non-exclusive, so the regulator was able to grant a second licence to an independent producer. That producer's 10 MW geothermal plant [entered commercial operation](#) in 2026 and in June supplied around 43% of the country's electricity. Added to the hydropower already in place, two-thirds of Dominica's electricity that month was renewable.

[Grenada](#) already has the legal mechanism, though not yet the result. Its law prohibits any generation licence from being exclusive, and requires the capacity available to connect new projects to be assessed jointly by the network operator and the regulator, rather than the utility alone deciding whether the grid is "full". Since 2021, 17 small producers have been licensed. But renewable generation is still 1.7%, and the technical rules for connection remain in draft.

4.3 Tender what the system needs, and publish the result

Buying through competition, and saying publicly what it cost, allows the next buyer in the region to start from a real price rather than from a cost model. On an island grid the value of a renewable project is not only how cheaply it generates but whether the system can take the power when it arrives; the tender should therefore be written around what the system needs – generation, storage, network capacity, or a combination – and where it asks for batteries it should say what their function will be, frequency regulation and reserve included, not only how many hours of electricity they

can supply. And the award should be published: who bid, what each project's levelised cost was, and how each tariff is indexed.

Current status

Most generation in the region is contracted bilaterally. Of the five power purchase agreements in force in Trinidad and Tobago, one was awarded by tender and the rest were negotiated directly; all five are confidential, with only general terms disclosed to a parliamentary committee. The electricity statute of [Saint Kitts and Nevis](#) says nothing about how generation is to be procured and Cuban law provides for no tender at all – an independent producer negotiates with UNE.

[Barbados](#) shows what happens when only generation is bought. Solar was procured project by project, with no storage contracted alongside it, until the grid could take no more. The remedy was a tender for storage on its own – 60 MW and 240 MWh – to clear a backlog of projects already approved.

Trinidad and Tobago shows the same gap from the other side. Its 92 MW Brechin Castle solar plant is the largest in the country and the only one of its five power purchase agreements awarded by tender. It began delivering in July 2025 and [came off the grid](#) at the end of January 2026. The minister responsible attributes that to the plant having no batteries: the tender bought solar generation, but the system could not absorb that power when it arrived.

Where this has worked

Jamaica published what its tender resulted in. [Twelve bids](#) for 100 MW led to [two awards](#) of solar without storage, at 6.5 and 7.0 c/kWh, and the results were published with the bidders, each project's levelised cost and the indexation of each tariff. The [Dominican Republic](#) did the same at scale, for a different product: 32 qualified bidders for 326 MW of renewables with battery storage, awarded at 10.6–10.9 c/kWh for delivery from 2028.

Both results are public, and in both cases what is known is not only the price but exactly what was bought at that price: how much capacity, with or without batteries, with what delivery date, and how the tariff adjusts over time. That is the value of publishing: a price on its own is no reference, but a price alongside the description of what it bought is. Whoever prepares the next tender in the region no longer needs to rely on a global cost model, or accept the price a single bidder proposes. They can start from prices already bid and signed a few hundred kilometres away, in systems of similar size and with

similar fuel costs, and use those documents to draft their own terms: how the tariff is indexed, what the storage must do, when the plant must come online. With just two published tenders, the other countries of the Caribbean now have a point of comparison that did not exist before.

In conclusion, none of these three decisions depends on a new technology appearing or on finance arriving. They depend on the decisions of those who have the authority to take them. And the Caribbean reaches that moment with an advantage: its own contracts show that renewables are already the cheaper option, its ports show that the panels are already arriving, and several of its countries show that the right rules produce results. Every percentage point that renewables gain is a point less exposure to a price the region does not control, and a step closer to electricity generated with resources that are its own.

Methodology

Scope

The report covers thirteen Caribbean countries: Antigua and Barbuda, The Bahamas, Barbados, Cuba, Dominica, Grenada, Haiti, Jamaica, the Dominican Republic, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Saint Lucia and Trinidad and Tobago. The unit of analysis is electricity generation, not primary energy. Installed capacity appears in one place only: to compare the solar the region has bought with the solar its statistics record.

Electricity generation

Data by country and fuel come from [OLACDE-sieLAC](#) for the seven member countries and from [IRENA](#) for the remaining six, consulted in August 2026.

For Antigua and Barbuda, The Bahamas, Dominica, Saint Kitts and Nevis, Saint Vincent and the Grenadines and Saint Lucia – 5.5% of regional generation – IRENA does not publish 2024, and the 2023 technology mix was used. Growth is measured from 2018, the base year used throughout this report.

Where installed capacity is converted to generation, a 13.5% capacity factor is used: the rate implied by the Dominican Republic's own 2024 solar generation and its average installed capacity that year, the only country among the thirteen with enough solar to measure it.

Renewable targets

Each target was verified against its primary source – [NDCs](#) registered with the United Nations Framework Convention on Climate Change, decrees and national plans. Secondary compilations were not used, as they reclassify as installed capacity targets that governments expressed on generation. Figures circulating without an instrument behind them were excluded: 37% for Cuba, 100% for Grenada, 80% for Haiti, and Barbados's 100%, which covers the whole energy system. Four of the six targets set on electricity generation are conditional on international finance; only Cuba's is unconditional, and Jamaica does not state either way.

Progress is the 2024 renewable share divided by the target. The reduction in a country's own fossil generation if it meets its target is $1 - (1 - \text{target}) / (1 - 2024 \text{ share})$; the generation projection cancels out, so it needs no demand assumption.

For the region, the six are assumed to meet their targets and the other seven to hold their 2024 share, giving 23% in 2030 – invariant to uniform demand growth, and between 23.2% and 23.8% with divergent rates. The fall in fossil generation does depend on demand: 9% at the 1.25% annual growth observed from 2018 to 2024, and 16% if demand is flat. All four conditional targets are treated as met; excluding Trinidad and Tobago's would give a 2030 share of 19% and a fossil fall of 4%.

Cuba's commitment is 26% for 2035; the 2030 projection uses the 24% that its Nationally Determined Contribution states as the 2030 reference point from which that commitment is measured.

Fuel imports as a share of GDP

$\frac{\text{Fuel imports (\% of merchandise imports)}}{100} \times \frac{\text{Merchandise imports (current US\$)}}{\text{GDP (current US\$)}}$. Only seven of the thirteen countries have all three series available and stable; in the other six the fuel share swings by more than a factor of twenty between adjacent years, or is truncated. The last year with all seven is 2023.

Solar panel imports

Imports: Ember, [China Solar PV Export Explorer](#), commodity type "Panels", in watts-peak direct current; 2026 covers January to July. Capacity: [IRENA, Renewable Capacity Statistics 2026](#), 16 April 2026 release. No country among the thirteen has a solar capacity figure from an official national source for any year from 2019 to 2024; the first four appear in 2025.

Installations are estimated from imports following [Ember's method](#): 73% of reported Chinese panel exports are installed, after a six-month lag, applied on calendar years as half the current year plus half the previous one. The two series are compared over the same window, 2021 to 2024, with capacity added measured as the 2024 figure minus the 2020 one. Ember's adjustments for non-Chinese imports, re-exports and domestic manufacturing are not applied, and no DC-to-AC conversion is made, following Ember. Ember treats 73% as conservative for 2026; in a young and fast-growing market more panels are still in warehouses, so the estimate here is more likely to overstate installations than to understate them. Cuba is reported separately.

Tariffs

The Latin American comparison is against the eighteen countries covered by [OLACDE](#), a sample that does not include Haiti.

Legal and regulatory review

Section 4 rests on a review of each country's electricity statute, any renewable-specific law, and the instrument setting its renewable target, asking of each: who may authorise an independent generator; who decides connection; whether an interim renewable figure is set before the target year and what follows if it is missed; and whether verification is assigned to any body other than the one reporting. The review distinguishes what a statute provides from what exists – several instruments create powers never brought into effect, such as the licensing regulations under section 64 of [Saint Lucia's Electricity Supply Act](#) – and states where a finding rests on a regional compilation rather than on the instrument itself. The findings on procurement rest on a different evidence base: published tender documents and award announcements, power purchase agreements where their terms are public, and what utilities and ministries have disclosed to parliaments or to the press.

Units and comparability

Electricity prices are in US cents per kilowatt-hour (c/kWh) and battery costs in dollars per kWh of capacity. Five cost metrics circulate in this field and are not interchangeable: end-user tariff, generation cost, contract or award price, average wholesale purchase price, and modelled levelised cost. The report keeps them separate and states which one it is using in each case.

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Contributors

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