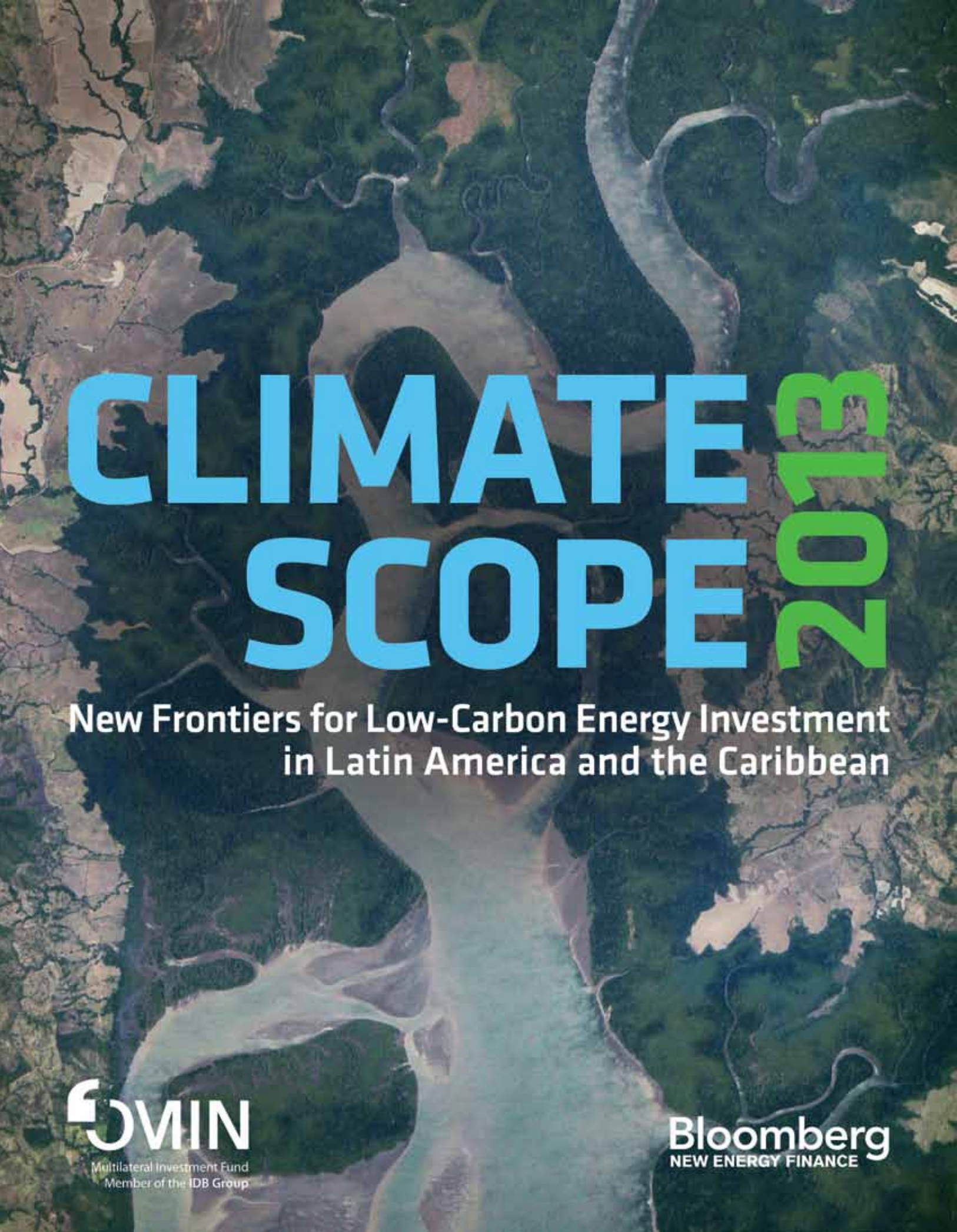

CLIMATE SCOPE 2013

New Frontiers for Low-Carbon Energy Investment in Latin America and the Caribbean

FOMIN
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THE MULTILATERAL INVESTMENT FUND

The Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank (IDB) Group, is funded by 39 donors and supports private sector-led development benefitting low-income populations and the poor - their businesses, their farms, and their households. The aim is to give them the tools to boost their incomes: access to markets and the skills to compete in those markets, access to finance, and access to basic services, including green technology. A core MIF mission is to act as a development laboratory - experimenting, pioneering, and taking risks in order to build and support successful micro and SME business models.
More information at www.fomin.org.

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Cover: Panama - Rio San Pablo as it empties into the Golfo de Montijo in Veraguas, Panama. It is an ecological transition zone, changing from agriculture and pastures to mangrove forests, swamps, and estuary systems.

CLIMATESCOPE 2013

TABLE OF CONTENTS

PREFACE

The Multilateral Investment Fund of the Inter-American Development Bank and Bloomberg New Energy Finance are proud to partner again on Climatescope 2013: New Frontiers for Low-Carbon Energy Investment in Latin America and the Caribbean. This year's index, report, and accompanying online tool provide an updated profile of clean energy investment opportunities in this vibrant region and track progress made since last year's inaugural *Climatescope*.

Latin America and the Caribbean should be a natural home for clean energy investment. The region is blessed with exceptional natural resources, ready to be harnessed by photovoltaic, wind, geothermal and other clean energy technologies. Many of the region's nations have seen strong economic growth over the past five years and are projected to continue to grow at 3+% over the next at least two years. Most also have energy security concerns and a strong desire to become more energy self-sufficient.

All of the above suggests there should be significant opportunities for low-carbon energy development. Still, too many energy investors see regional economies as difficult to navigate and understand. Recognizing how local markets operate, determining what favorable policies exist, and ascertaining other critical information can be challenging.

This is where *Climatescope* comes in, providing actionable information: local power price data, local value chain profiles, and an assessment of local capital availability. For private investors, project developers or manufacturers, it offers a uniquely rapid and useful screening tool. This index and report aspires to be nothing less than the benchmark for identifying low-carbon energy investment opportunities.

The title of this year's report – New Frontiers for Low-Carbon Energy Investment – was chosen to reflect how rapidly opportunities are expanding geographically across Latin America and the Caribbean. Investment into countries beyond Brazil skyrocketed by 164% between 2011 and 2012 to $7.5bn. Mexico, the Dominican Republic, Uruguay, Peru, and Chile all saw investment in their clean energy sectors jump by more than 300% in 2012. Twenty of the region's 26 nations attracted new clean energy capital.

Climatescope does more than guide private sector players. It also engages policy-makers, by profiling individual countries' low-carbon energy policy frameworks. In fact, in the past 12 months we have seen a number of nations in the region take steps to improve their regulatory regimes, motivated in part by a desire to resolve issues identified in the inaugural edition of *Climatescope*.

The total number of low-carbon energy policies in the region tracked by Bloomberg New Energy Finance has risen to 110, from 80 last year. Equally important is the growing diversity of such policies. Countries are writing rules for clean energy power contract tenders, enacting "net metering" regulations, examining how their tax codes can be adjusted, and finding other innovative techniques for attracting more private capital to the sector.

Still, there remains significant room for further development and regional growth in the sector. We expect that the policy environment in the region will continue to improve, that investment will continue to grow, and more clean energy capacity will be deployed over the coming year.

From the start, the methodology behind *Climatescope* was designed to be applicable across regions and countries. The data collected to assess attractiveness of climate investigating in Peru, Honduras, or Jamaica are equally relevant for Ghana, Indonesia or China.

In recent months we have begun planning a major expansion of this vital project. We have every hope that this preface next year will introduce a Global Climatescope that examines not just Latin America and the Caribbean but developing nations in Africa and Asia.

For now though, we hope you explore – and put to good use – this year's *Climatescope*.

NANCY LEE
General Manager,
Multilateral Investment Fund

MICHAEL LIEBREICH
Chief Executive and Founder,
Bloomberg New Energy Finance

EXECUTIVE SUMMARY

Climatescope is a comprehensive index and report assessing the environment for low-carbon investment in Latin America and the Caribbean, developed by the Multilateral Investment Fund, part of the Inter-American Development Bank, and Bloomberg New Energy Finance. This second edition identifies new frontiers, in both countries and sectors, for low-carbon investment, clean energy capacity build-up and carbon offset project development in the region.

Climatescope profiles 26 countries in the region, evaluates their ability and potential to attract capital for low-carbon energy sources, and ranks them based on what has been achieved to date. All of the countries profiled are borrowing members of the Inter-American Development Bank (IDB). They include:

IDB BORROWING MEMBERS

CARIBBEAN

- Bahamas
- Barbados
- Dominican Republic
- Guyana
- Haiti
- Jamaica
- Suriname
- Trinidad and Tobago

CENTRAL AMERICA & MEXICO

- Belize
- Costa Rica
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Panama

SOUTH AMERICA

- Argentina
- Bolivia
- Brazil
- Chile
- Colombia
- Ecuador
- Paraguay
- Peru
- Uruguay
- Venezuela

KEY FINDINGS

INSTALLED POWER CAPACITY

Total renewable capacity in the 26 Latin American and Caribbean (LAC) nations surveyed grew from 11.3GW in 2006 to 26.6GW by 2012 representing a 296% compound annual growth rate. In 2012 alone, the region brought 3.3GW of new renewable capacity on line.

CLEAN ENERGY INVESTMENT

Latin America and the Caribbean out-performed global clean energy investment trends: LAC investment fell 3.8% to $16.8bn in 2012, versus an 11% drop in global clean energy financing. The region represented 6% of the total $268.7bn global figure, up from 5.7% in 2011, when global investments came to $302.3bn.

Investment was more diversified beyond Brazil last year, with 45% of total financing outside the largest country in the region in 2012, versus 17% in 2011. Chile, the Dominican Republic, Mexico, and Uruguay, among others, posted strong growth rates. Outside of Brazil, total low-carbon investment in the region spiked 164% in 2012 to $7.5bn from $2.8bn the year prior.

POLICY FRAMEWORK

Policy frameworks are expanding and strengthening in the region. Total policies tracked for this survey rose to 110 from 80 in last year's report. 19 of the 26 *Climatescope* countries have at least one type of low-carbon energy policy in place. These include national renewable energy, biofuels or CO2-reduction targets, as well as feed-in tariffs, reverse auctions for clean power delivery, net metering regulations, and tax-based subsidies for clean energy.

POWER AUCTIONS

Tenders for clean power contracts are becoming more popular and foreshadow more clean energy deployment ahead. Nine countries in the region have now successfully held reverse auctions to procure clean power: Argentina, Brazil, Costa Rica, Guatemala, Honduras, Jamaica, Panama, Peru and Uruguay.

NET METERING

Net metering laws, which allow consumers and businesses to feed surplus power from their renewable systems back to the grid, are growing in popularity and bode well for further growth. Eight countries have such laws on the books and half of them have very high-priced electricity for residential and small commercial consumers.

PRICE ATTRACTIVENESS

Power prices remain generally high through much of the region, offering significant opportunities for renewable deployment. Retail consumers in 10 countries paid on average above $0.28/kWh for electricity in 2012.

POWER MARKET STRUCTURE

Chile, Brazil and Peru topped the list on the *Climatescope* indicator gauging power market liberalization. Over six years these countries have seen clean energy investment and deployment grow. Independent power producers are responsible for a good deal of the development.

GREEN MICROFINANCE

Green microfinance institutions are playing a growing role in expanding energy access in Latin America and the Caribbean and are poised to do more. A total of 63 such organizations are operating in the region and disbursed around $400m to date. 10 institutions in Peru offer green financial products to entrepreneurs, low-income individuals and families and have provided credit to over 12,000 borrowers. Chilean institutions have provided the most green microcredit available to date, totaling approximately $120m.

SECTOR VALUE CHAINS

The region's clean energy sector value chain continues to expand. A total of 35 out of 40 value-chain segments from six renewable sectors are now fulfilled in the region. The biofuels, biomass & waste and small hydro subsectors all have complete value chains in at least one country. Unsurprisingly, larger economies (Brazil, Argentina, Chile, and Mexico) are leaders in this area.

CARBON OFFSET PROJECTS

There are 927 carbon offset projects, registered under four different standards, in Latin America and the Caribbean. Of these, 790 are registered with the Clean Development Mechanism (CDM). Over half of those are carbon offset projects in power generation.

OVERVIEW

To arrive at an overall score for each country, *Climatescope* examines the following four overarching but interrelated parameters:

I Enabling Framework — 40%

The existing policy framework, power market structure, and level of clean energy capacity online in a given country, as well as other market-size related factors.

II Clean Energy Investment and Climate Financing — 30%

Funds deployed in support of clean energy, plus the availability and cost of local capital including microfinance.

III Low-Carbon Business and Clean Energy Value Chains — 10%

The availability of local manufacturing and supply chains for clean energy goods, services and financing.

IV Greenhouse Gas Management Activities — 20%

Conditions for carbon offset projects, carbon policies and corporate actions toward mitigating emissions, improving energy efficiency and other sustainable practices.

These parameters are supported by a series of 39 qualitative and quantitative indicators based on data captured by Bloomberg New Energy Finance through first-hand research, consultation of publicly available sources and discussions with experts. Together, the parameters and their corresponding indicators form a holistic picture of a particular country's environment for climate investment, its potential for clean energy project and carbon offset project development.

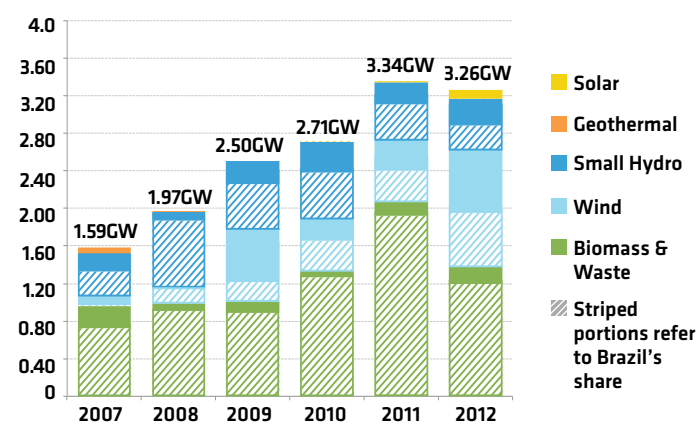
Climatescope rests on transparency. Readers of this report are encouraged to access the web-based tool at *http://climatescope.fomin.org* where underlying aggregated data comprising the index can be downloaded. The online tool is interactive, empowering users to adjust parameter and indicator weights to apply their own assumptions and hypothetical scenarios.

I. ENABLING FRAMEWORK

RENEWABLE ENERGY POLICIES, INVESTMENTS AND CAPACITY ADDITIONS

The *Climatescope* Enabling Framework parameter examined existing policies, power market structures, levels of clean energy capacity online, price attractiveness and other facilitating factors in each of the 26 countries. Where supportive clean energy policies are implemented, private capital typically follows and installed capacity levels usually rise. For example, Germany, Italy, Spain, the US, Japan and several other countries have introduced feed-in tariffs, and other policy and tax-based instruments to successfully propel growth. The Latin American and Caribbean region has until recently lacked similar policy support. As a result, its share of global clean energy investment historically accounted for no more than 5% of worldwide capital flows.

Latin America and the Caribbean net renewable capacity additions, 2007-2012 (GW)



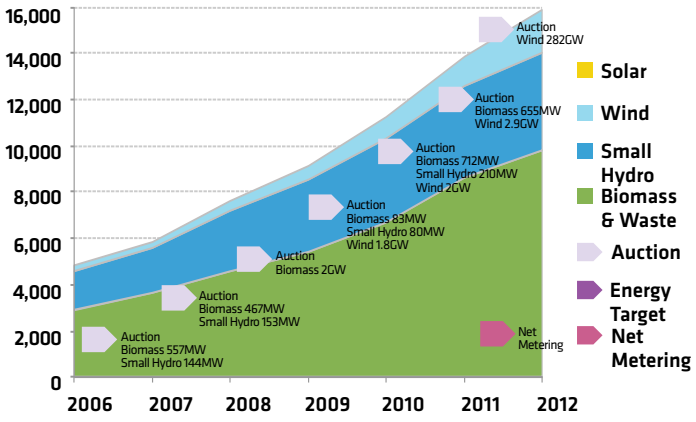
Source: Bloomberg New Energy Finance, for a full list of references, please refer to the Sources section, on page xxxi.

In 2007, the region added 1.5GW of renewable capacity. Since then, 19 countries in the region have introduced government-sponsored reverse auctions, tax incentives, renewable energy targets, feed-in tariffs and other policies. These have led to a 296% compound annual growth rate for installed renewable capacity, which jumped from 11.3GW in 2006 to 26.6GW in 2012. Last year, some 3.3GW of new renewable capacity came on line in the region. Brazil alone contributed 62% of the total, or 2GW. **Declining system costs, particularly for wind and solar, coupled with the introduction of more policy incentives throughout the region, are driving growth in clean energy capacity.**

Perhaps unsurprisingly, the recent growth spurt has come in the midst of an improving clean energy policy landscape in the region. For the 2012 *Climatescope* edition, Bloomberg New Energy Finance researched and compiled information on 80 low-carbon energy policies in the region. This year, **Climatescope identified 30 additional clean energy policies introduced, taking the total to 110. Reverse auctions for clean energy power contracts or regulations to allow homeowners to "net**

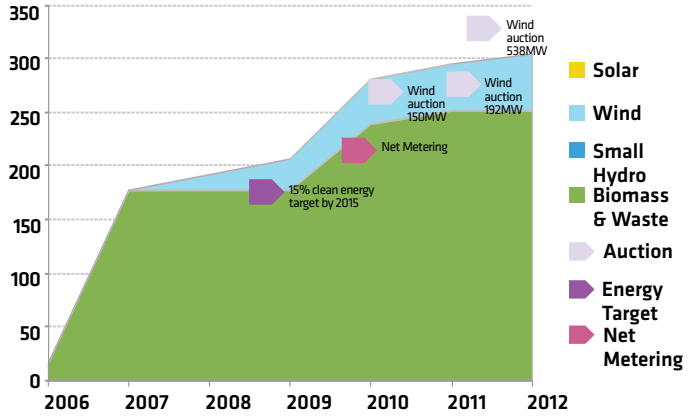
Clean energy policies and renewable energy installed capacity by source, 2006-2012 (MW)

Brazil



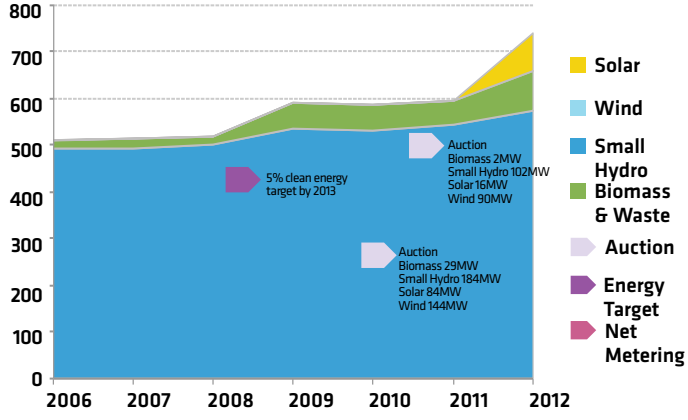
Source: Bloomberg New Energy Finance

Uruguay



Source: Bloomberg New Energy Finance

Peru



Source: Bloomberg New Energy Finance

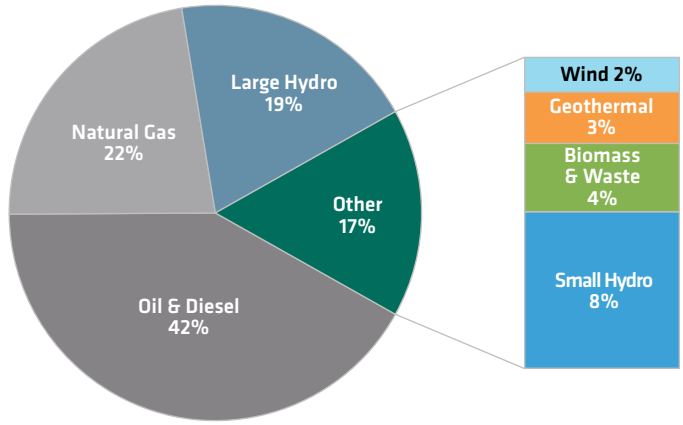
meter" were among the most popular innovations.
Brazil, Uruguay and Peru topped the list on the *Climatescope* indicator assessing the stability, predictability, transparency, effectiveness, ambition, longevity and comprehensiveness of a given country's policy framework. All three have at least five approved policy types and have been experimenting with government-backed reverse power auctions.

Consequently, clean energy capacity growth has spiked in these three nations, but they are hardly alone in moving to strengthen policy regimes. Argentina, Costa Rica, Guatemala, Jamaica and Panama have also held such tenders, suggesting renewable capacity is poised to grow in these countries as well.

Within Central America and the Caribbean, the desire to green local power generation is driven as much by energy security concerns as environmental worries. Oil or diesel account for no less than 42% of installed capacity. With coal playing only a minor role, a new megawatt of clean energy capacity can directly replace a petroleum-fired megawatt. Several of these economies topped the list on indicators tracking clean energy penetration. Renewables account for 17% of generation in Central America and the Caribbean – almost six times as high as in non-Brazil South America.

Central America & Caribbean installed power capacity, 2012

3.4GW total installed capacity



Source: Bloomberg New Energy Finance, for a full list of references, please refer to the Sources section, on page xxxi.

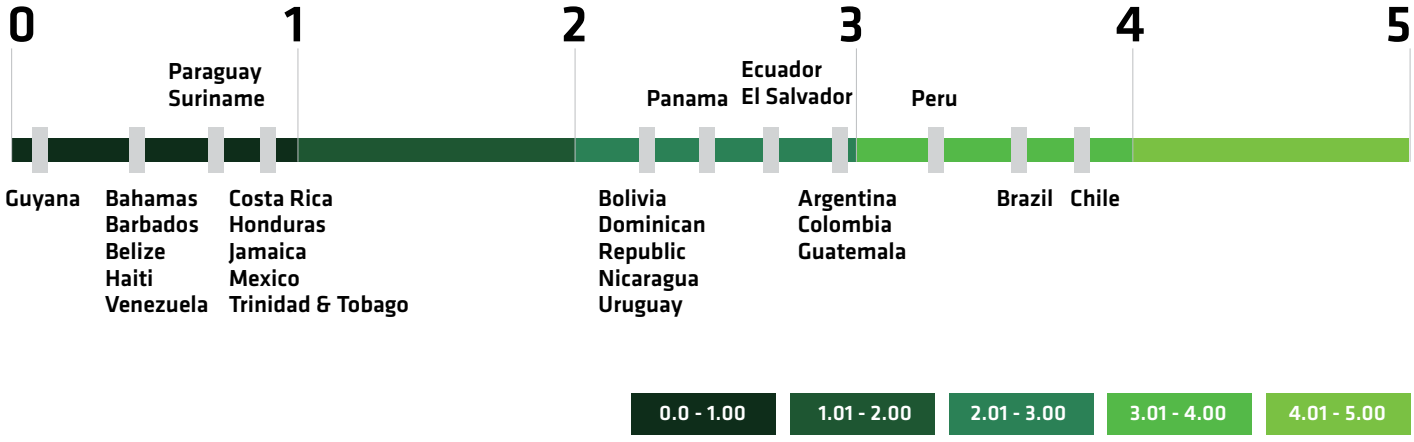
POWER MARKET STRUCTURE, PRICE ATTRACTIVENESS AND MARKET SIZE EXPECTATIONS

The worldwide average levelized cost of electricity (LCOE) for wind and solar dropped 19% and 56%, respectively, between Q2 2009 and Q1 2013, Bloomberg New Energy Finance estimates. Still, the per-MWh costs of these and other renewable technologies are generally higher than those of conventional power generation technologies. Thus, markets where electricity is priced high both on the retail and wholesale side offer the best opportunities for renewable energy developers.

13 of 26 countries in Latin America and the Caribbean have functioning wholesale power markets. While a liberalized power market has generally been more attractive for the deployment of utility-scale renewable energy projects - usually undertaken by independent power producers (IPPs) - opportunities can be found in less liberalized markets where existing power prices are high and credible offtakers are available, such as Mexico.

Bloomberg New Energy Finance assessed relative levels of market liberalization by examining 10 key market characteristics (see Methodology section page 22). As with other indicators, countries were scored on a 0-5 basis. **Chile, Brazil and Peru topped the list for the indicator looking at the degree of power market liberalization. Over the last six years these countries have seen increases in renewable penetration and investment. IPPs are largely responsible for this development.** Chile, a pioneer in electricity market liberalization, scored highest with a 4. The 25 other nations scored a 3 or lower.

Power market structure indicator score by country

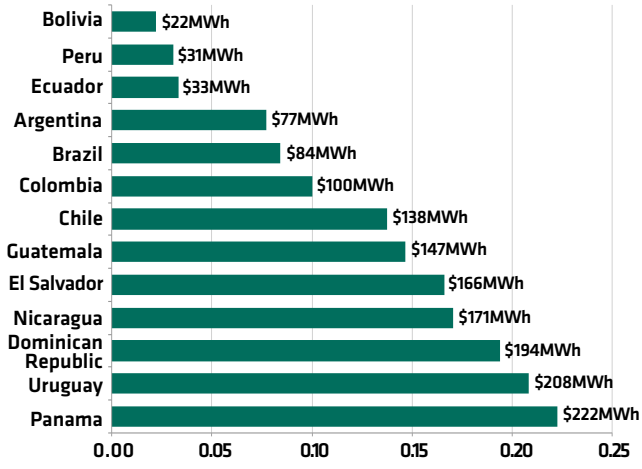


Source: Bloomberg New Energy Finance Note: 0 is not liberalized and the market is dominated by a public vertically integrated utility, 5 is totally liberalized with a functioning and very liquid wholesale power market. 3 denotes there is a wholesale power market in place, albeit not a very liquid or well-functioning one.

At least five of 13 countries with functioning wholesale power markets – Panama, Uruguay, the Dominican Republic, Nicaragua, and El Salvador – saw average spot prices last year of above $150/MWh. Brazil and Chile, which ranked highest on this indicator, had significantly lower averages, but spot prices in the two nations fluctuate temporally and by region. Between November 2012 and January 2013, prices in Brazil's south-east and central-west regions hit around $200/MWh due to lower hydro reserves. Prices in Chile's Central Interconnected System (SIC) hit $268/MWh in April 2012. Solar project developers have flocked to the Antofagasta region (served by the SIC) where solar resources as well as spot prices can be high, and where credible offtakers such as mining companies seek to cut their electricity bills and improve reliability by procuring clean power locally.

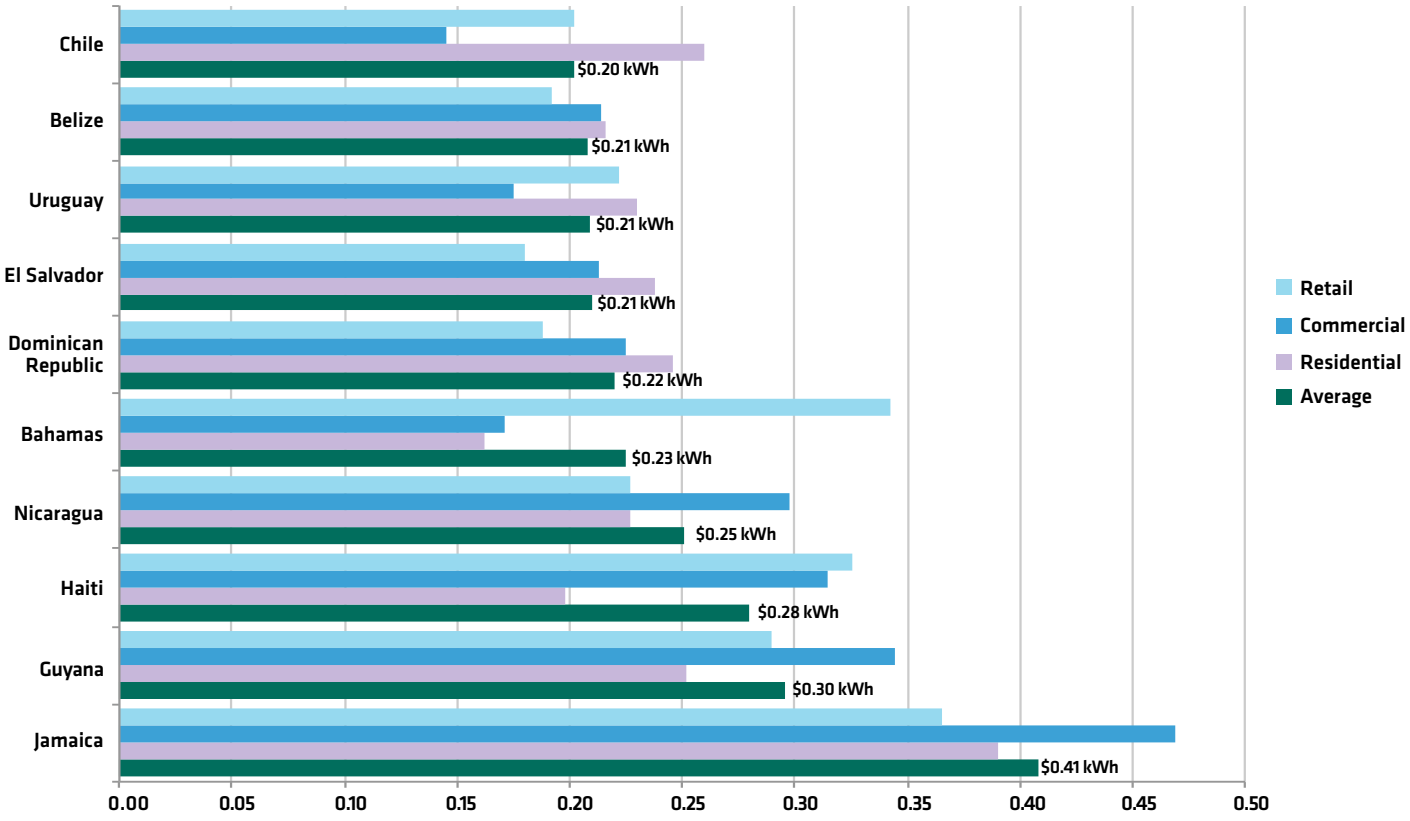
IPP activity in the renewable space helps explain the Mexican anomaly: the country scored low for the indicator assessing power sector structure as it is controlled by a monopoly utility (see figure above) but came in third on the indicator tracking growth in clean energy investment and fourth on the indicator tracking growth in renewable generation. Despite being a single-buyer power market, Mexico has a large number of credit-worthy power offtakers looking to procure clean power. In fact, it was one of the highest scoring countries for the indicators tracking corporate awareness largely because it is home to socially responsible companies that have realized the importance of mitigating emissions, implementing energy efficiency and procuring clean energy.

Average spot power prices in Latin America and the Caribbean by country, 2012 ($/MWh)



Source: Bloomberg New Energy Finance, for a full list of references, please refer to the Sources section, on page xxxi. Note: Only 13 out of 26 countries in the region have fuctioning wholesale power markets.

Top 10 retail electricity tariffs by end-user segment and country, 2012 ($/kWh)



Source: Bloomberg New Energy Finance, for a full list of references, please refer to the Sources section, on page xxxi.

High electricity prices also help renewables penetrate the distributed market. Retail consumers (residential, commercial and industrial consumers) in 10 countries paid above $0.28/kWh for electricity, on average, last year. Residential consumers in 10 Latin American and Caribbean countries paid $0.20/kWh or higher on average last year.

It is important to note that interruption rates in these countries can often be elevated, thus high prices do not necessarily mean high reliability. Consumers in markets such as Haiti and the Dominican Republic who opt for residential photovoltaic systems stand to benefit not just by offsetting high-priced power but by having a more reliable source of electricity during high-demand daylight hours.

Policies supporting "net metering" which allow consumers to sell, or get credit on their upcoming bill from the surplus power their photovoltaic systems generate back to the grid can make solar all the more attractive. **Eight countries – Barbados, Brazil, Chile, Costa Rica, the Dominican Republic, Jamaica, Mexico and Uruguay – have approved net metering laws. Half of these countries are among the region's highest-priced markets for electricity end-users.**

MARKET SIZE EXPECTATIONS

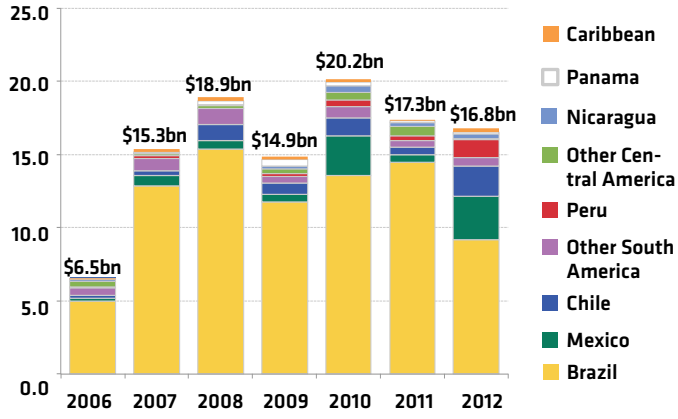
Consistent with weak global macroeconomic conditions, demand for electricity in the US, parts of Europe, and other parts of the globe has flat-lined or even declined in the past five years. Not so in Latin America and the Caribbean. In 2012, annual-demand growth rates exceeded 5% in Paraguay, Panama, the Dominican Republic, Nicaragua, Peru, and Venezuela. Several of these nations also rely heavily on imported fossil fuels for power generation, offering an added incentive to source locally-produced clean energy.

Paraguay topped the list with an 11% rise in power demand but was a net power exporter of around 6.4GW of hydro-generated electricity to neighboring Brazil and Argentina. Panama, the Dominican Republic, Nicaragua and Peru all posted demand growth rates of 7% in 2012. With the exception of Peru, these countries depend heavily on imported fossil fuels, meaning opportunities for faster renewable penetration are substantial. Low electrification rates also offer a powerful attraction for investors seeking to develop new clean energy projects. Grid-delivered electricity is only available to 15% of the Haitian population, and that power is often unreliable. Given Haiti's 10.4m population, high electricity prices, reliable solar resources, and the relatively high inflow of grants from foreign sources, the country presents an opportunity for developers of both utility-scale and distributed clean energy generation.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Total clean energy investment across Latin America and the Caribbean slipped slightly to $16.8bn in 2012 from $17.3bn the prior year. Still, a handful of countries in the region – most notably Mexico, Chile, and some nations in Central America – posted spectacular triple-digit percentage gains on investment. The primary reason total capital in-flows remained essentially level from 2011 was a precipitous investment decline in Brazil; in 20 of 25 other nations, clean energy investment levels rose in 2012.

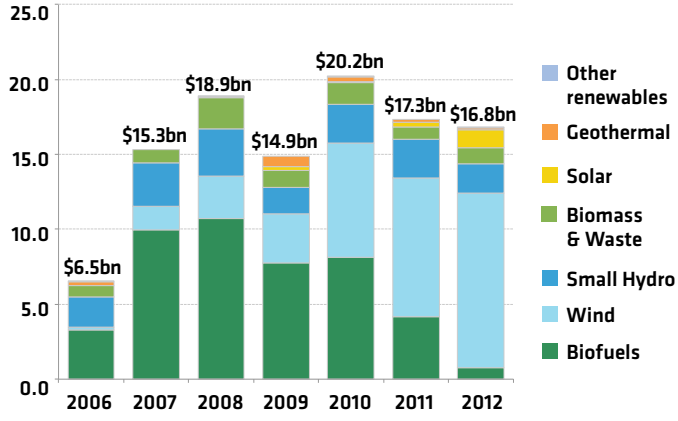
Total investment in clean energy by destination, 2006-2012 ($bn)



Source: Bloomberg New Energy Finance Note: Other South America comprises Argentina, Colombia, Ecuador, Uruguay, Venezuela, Paraguay and Bolivia. Other Caribbean comprises Dominican Republic, Trinidad and Tobago, Jamaica, Guyana, Bahamas, Haiti, Barbados and Suriname.

Global clean investment fell 11% in 2012, the first significant drop Bloomberg New Energy Finance has recorded since it began tracking figures in 2004. Overall, last year saw worldwide investment in wind, solar, biofuels, and other low-carbon technologies and projects of $268.7bn, down from a revised figure of $302.3bn in 2011. The uncertain subsidy environment in key markets such as the US, India, Spain and Italy, coupled with falling unit costs for solar and wind equipment, help explain the drop.

Total annual investments in clean energy by source, 2006-2012 ($bn)

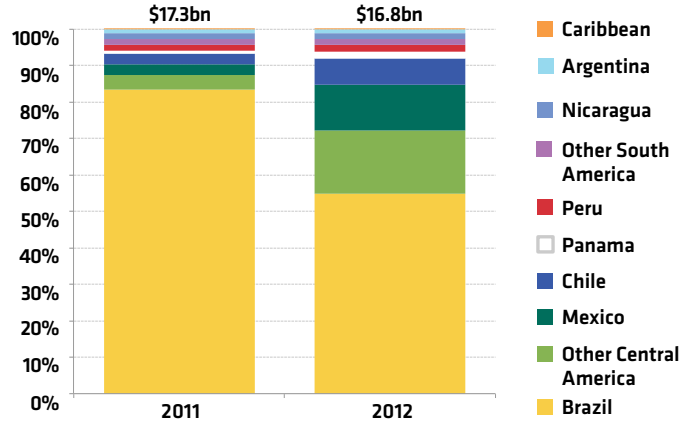


Source: Bloomberg New Energy Finance

The Latin American and Caribbean region played an increasingly important role in global markets last year, as developers and manufacturers in more mature markets sought new growth opportunities. Overall, Latin America and the Caribbean attracted 6.2% of global total investment. While the total invested into the region dropped 3.2% from 2011, the decline was considerably smaller than what was seen globally. **In fact, if Brazil were not included in annual totals, low-carbon investment in the region would actually have jumped 164%, from $2.8bn in 2011 to $7.5bn last year. This marked an all-time high for investment in the region outside Brazil.** A handful of Latin American and Caribbean countries, including Mexico, Chile, the Dominican Republic and Guatemala, markedly improved their enabling environments for clean energy development in 2012; this translated into expanded capital commitments.

Overall, the share of investment in non-Brazil Latin America and the Caribbean rose to 45% in 2012, up from 17% in 2011. Mexico attracted the largest share outside Brazil, with about 17% of the total $16.8bn invested last year. Chile and Peru followed with 12% and 7%, respectively. Nicaragua attracted $292m, but managed to top the list on the indicator assessing total clean energy investment as a percentage of GDP.

Percent of total clean energy investment by destination, 2011-2012 (%)



Source: Bloomberg New Energy Finance

Several key markets in the region saw triple-digit growth in investment in 2012, including Mexico (450%), the Dominican Republic (431%), Uruguay (327%), Peru (325%) and Chile (314%).

A slowing economy and long disbursement cycles tied to the national development bank BNDES depressed Brazil's clean energy investment by 36% to $9.2bn in 2012 from $14.5bn in 2011. However, investment is poised to pick back up this year, thanks to a pipeline of close to 1GW of new wind projects expected on line by the end of 2014. Despite the slowdown in investment, Brazil performed extremely well on almost every other indicator and thus was able to retain the top spot in *Climatescope* for the second consecutive year.

Among the clean energy technologies, wind maintained its lead in the region, attracting over half of all investment. From 2004 to 2009, when the Brazilian ethanol industry was still rapidly growing, biofuels accounted for the lion's share of total clean energy financing across the region. However, in 2012 biofuels attracted less investment than solar, a sector that has only recently seen a ramp-up in activity in the region.

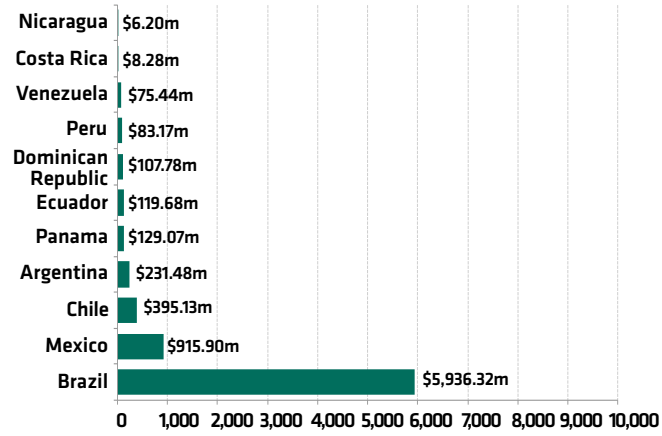
Solar now appears poised for further growth. Last year, the technology attracted $1.4bn in commitments – around 7% of the region's total. Costa Rica saw its first investment in the solar sector in 2012, with close to $10m. Ecuador enjoyed its first $4.4m of financing, thanks to a feed-in tariff scheme. Peru was the region's top destination for solar investment, bringing in $468m. Mexico and Chile followed, with $329m and $198m, respectively.

Investment in Nicaragua's low-carbon sector rose 6.3% last year and the $292m in commitments helped it top the ranking for the indicator tracking total clean energy investment relative to GDP. This, coupled with strong performance on all indicators comprising the clean energy penetration category of Parameter I, explains why the small Central American nation topped the ranking for the Enabling Framework parameter this year. In 2012, Nicaragua received more grants to fund low-carbon energy programs, from development finance institutions and multilaterals, than any other country in the region, at around $702m. Other small economies followed, including Barbados in second place, with $143m in grants. **From 2006 to 2012, Latin America and the Caribbean received $7bn in grants to support low-carbon initiatives.**

Green microfinance is playing an increasingly important role in assisting clean energy deployment in the developing world. Microfinance institutions are most active in Peru where they have helped expand energy access. 10 such institutions in Peru offer green financial products to entrepreneurs, low-income individuals and families. Peru is also home to more microfinance borrowers than any other nation with 12,590 active borrowers. Still, it is Chile that has disbursed more green micro loans than any other nation in Latin America and the Caribbean, with a total value of approximately $120m.

The region's largest economies continue to lead in terms of active domestic players involved in investing and lending to companies and projects in the low-carbon space. However, if local commitments by local players are levelized to take into account the relative size of these economies, Panama tops the list. Brazil, which has a much higher absolute volume of local funds into the sector, follows in second place, just before the Dominican Republic.

Investment by local players into the local low-carbon sector, 2012 ($m)

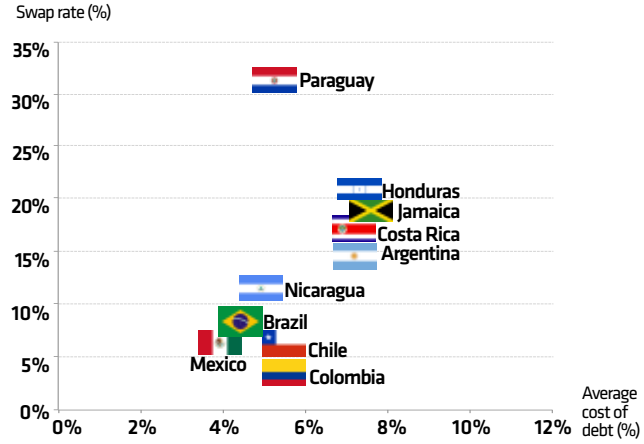


Source: Bloomberg New Energy Finance

Another trend revealed by *Climatescope* 2013 is that average swap rates for a number of countries in the region closely approximate all-in swap borrowing rates for high-quality clean energy projects in markets such as northern Europe, which averaged 5.5% in Q1 2013. Colombia, Chile, Mexico and Brazil all displayed swap rates averaging less than 8% last year (see figure below).

A survey conducted with the main lenders to large-scale renewable energy projects identified six countries in which project loans have been made for under 6% (lenders in 13 of the 26 countries responded to the survey). The figure below only displays countries in which data were available for both swap rates and cost of debt. In these countries, it is reasonable to assume that high rates are not a roadblock to clean project development.

Selected LAC countries' swap rate versus cost of debt, 2012 (%)



Source: Bloomberg New Energy Finance

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

In both the 2012 and 2013 editions of *Climatescope* a total of 40 segments of six clean energy sector value chains were tracked. However, for the 2013 edition some subcomponents were added or removed (see table below). This year's survey found that companies in the region are fulfilling 35 of 40 value-chain segments. Three clean energy sectors – biofuels, biomass and waste and small hydro – have complete value chains in at least one country. Biofuels and biomass and waste are the only two clean energy sectors with complete value chains in two countries.

However, if all sub-components available in all countries are combined the remaining three other sectors – solar, wind and geothermal – would only need one subcomponent each to be complete in the region. No country in the region hosts solar-grade silicon producers, wind bearings manufacturers, or geothermal operation and maintenance service providers. If these were available in any *Climatescope* country the Latin American and Caribbean region as a whole would have complete value chain for all six clean energy technologies assessed in the report.

Sector	2012 sub-sectors	2013 sub-sectors
Biofuels 	Feedstock suppliers** Engineering Companies Producers Distribution and Blending	Engineering Companies Producers Distribution and Blending
Biomass & Waste 	Feedstock Supply Manufacturing Equipment System Integration Project Development Power Generation	Feedstock Supply Manufacturing Equipment System Integration Project Development Power Generation
Geothermal 	Pre-Drilling Exploration Exploration/Production Drilling Well Completion & Resource Confirmation Turbine & Power Block Balance of Plant Project Development Operation & Maintenance Power Purchase	Pre-Drilling Exploration Exploration/Production Drilling Well Completion & Resource Confirmation Turbine & Power Block Balance of Plant Project Development Operation & Maintenance Power Purchase
Small Hydro 	Turbines Balance of Plant Civil Works/Builder Engineering Operation & Maintenance Power Purchase	Pipes* Turbines Project Development Civil Works/Builder Engineering Operation & Maintenance Power Purchase
Solar 	Polysilicon/ingots Wafers Cells Modules Balance of Plant Project Development EPC Owner/Operator	Polysilicon/ingots Wafers Cells Modules Balance of Plant Project Development EPC Owner/Operator
Wind 	Bearings Gearboxes Generators Blades Turbines Project Development; Construction/Installation Power Generator Operation & Maintenance	Bearings Gearboxes Generators Blades Turbines Project Development Construction/Installation Power Generator Operation & Maintenance

Source: Bloomberg New Energy Finance
Note: * refers to sub-sectors added in the 2013 edition. ** denotes sub-sectors that have been removed.

In terms of which nations have the most complete value chains, it is the region's larger economies which continue to be leaders. Brazil, Argentina, Chile and Mexico are all home to significant numbers of equipment makers, project developers, installers, operation and maintenance providers and others. *Climatescope* data suggest the size of the economy, coupled with a minimum capacity threshold, determines the level of development of clean energy sector value chains.

No country in Latin America and the Caribbean has a complete wind value chain, comprising all nine sub-sectors surveyed for *Climatescope*: manufacturers of bearings, gearboxes, generators, blades, turbines plus project developers, construction and installations firms, operation and maintenance providers and generators. Brazil has eight of nine wind sub-sectors (lacking only bearings production), making it the closest country to having a complete value chain. By 2016, Brazil is poised to have a full wind value chain as low-cost debt from development bank BNDES is now contingent on compliance with firmer local-content rules.

Argentina, Chile and Mexico are home to companies representing six of nine wind value-chain sub-sectors. All three countries have more than 60MW of installed wind capacity and fairly large economies (see table below).

Country leaders in active wind value-chain sub-sectors, installed wind capacity and GDP, 2012

Country	GDP ($bn)	Installed wind capacity (MW)	Value-chain segments (%)
Brazil	2,396	1,815	88
Argentina	475	61.6	66
Chile	268	198.7	66
Mexico	1,177	1,288	66
Colombia	366	18.4	44
Costa Rica	45	143.5	44
Nicaragua	11	102.6	44

Source: Bloomberg New Energy Finance

For the top four countries on wind value chains, the correlation between size of the economy and installed wind capacity at or above 60MW appears to hold. For countries with only four out of nine active wind sub-sectors, data suggest that either installed wind capacity or size of the economy leads to the active presence of wind equipment manufacturers, developers and service providers.

Country leaders in active small hydro value-chain sub-sectors, installed small hydro capacity and GDP, 2012

Country	GDP ($bn)	Installed small hydro capacity (MW)	Value-chain segments(%)
Brazil	2,396	4,248	100
Chile	268	687	85
Peru	199	573	85
Argentina	475	495	71
Colombia	366	594	71
Costa Rica	45	588	71
Guatemala	50	289	57
Mexico	1,177	568	57

Source: Bloomberg New Energy Finance

In 2012, Latin America and the Caribbean had 9.5GW of installed small hydro capacity, representing 36% of the total renewable capacity in the region. Still, Brazil is the only country in the region to boast a complete value chain for small hydro. Chile and Peru follow, respectively, with the second and third most complete value chains for this sector with six out of seven sub-components in place. Each country has over 500MW of installed small hydro capacity. The table above compares installed small hydro capacity, size of the economy and level of value chain completeness of the top scoring countries for this indicator. Argentina and Brazil are the only two countries in the region that have a complete value chain for at least two clean energy technologies. Chile and Peru are poised to become the only countries, other than Brazil, to have a complete value chain for small hydro. The Andean nations are only missing one sub-component of the small hydro value chain.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

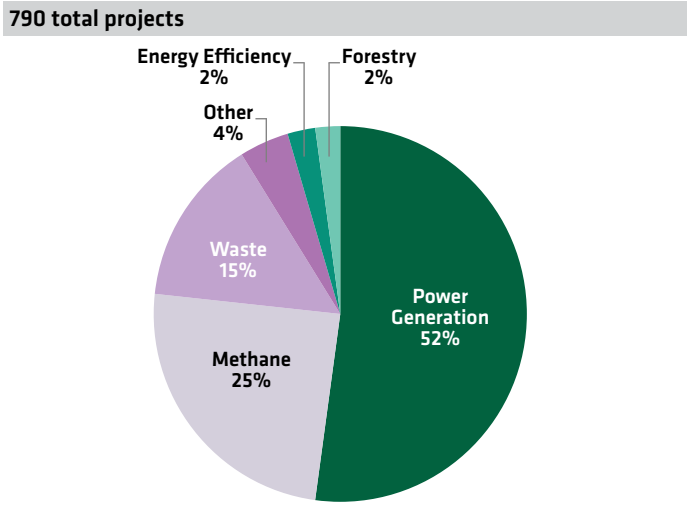
Climatescope 2013 found there are 927 carbon offset projects from four standards comprising the American Carbon Registry, Gold Standard, United Nations Clean Development Mechanism (CDM) and Verified Carbon Standard, in the Latin American and Caribbean region.

Of these, 790 are registered with the CDM and more than half of those are carbon offset projects in power generation. These can range from renewable energy power generation projects to those replacing coal with natural gas power generation or a cleaner fuel. Energy efficiency initiatives only comprise 19 projects for the entire region. Mexico and Argentina each have five energy efficiency projects registered with the CDM – the most compared with all other countries in the region. Brazil and Peru follow with three and two, respectively.

The largest economies in the region host the majority of projects: Brazil has 345, Mexico 174, Chile 85, Colombia 51 and Argentina 39. Honduras, a relatively small economy, follows with about 34 projects – just below the regional average of 35 projects. The total number of carbon credits issued or expected to be issued in the region amounts to almost 350m.

Uruguay, Trinidad and Tobago and Brazil display the greatest potential for further developing carbon offset projects. Policies to reduce the carbon footprint across the public and private sectors have not yet fully developed in the region. Costa Rica, Brazil and Mexico are seen as the pioneers in this space, but some policies proposed, such as emission reduction targets, are not binding. In terms of corporate actions on climate change mitigation, sustainability, energy efficiency and the use of renewable energy, large corporations based in Brazil and Mexico retain their lead.

Latin America and Caribbean total existing UN CDM projects by sector, 2012



Source: Bloomberg New Energy Finance

Carbon offsets historic activity

Metric	Regional Average
Number of Credit Types	1.65
Number of Projects	3.65
Number of Sectors	2.85
Credits Issued / Expected to be Generated	12ktCO_2

Source: Bloomberg New Energy Finance

Greenhouse gas corporate awareness

Indicator	Regional Average
Global Reporting Initiative	Of 500 companies active in a given country, one typically reported to GRI
Principles of Responsible Investment	2.5 companies per country
Energy Efficiency Initiatives	Of 50 companies active in a given country, one typically reported energy efficiency initiatives
Emission Reduction Policies	Of 50 companies active in a given country, one typically reported emission reduction initiatives

Source: Bloomberg New Energy Finance

REPORT ROADMAP

The following section of the report details the *Climatescope* index methodology. The Score Summaries section (pages 32 to 41) provides an overview and analysis of the overall ranking, parameter by parameter. The last section contains detailed profiles for all 26 countries in the Latin American and Caribbean region. The report is accompanied by a fully interactive online tool available at http://climatescope.fomin.org which allows users to adjust various assumptions in the *Climatescope* model to see how countries score under different scenarios and assumptions. The site makes all the underlying data from the report available for download in aggregate form.

CLIMATE SCOPE 2013 KEY FACTS

ARGENTINA HAS A COMPLETE **BIOFUELS** AND **BIOMASS & WASTE** VALUE CHAIN

LOWEST ELECTRIFICATION RATE: HAITI - 15%

HIGHEST ELECTRIFICATION RATE: COSTA RICA, TRINIDAD & TOBAGO, URUGUAY AND VENEZUELA - 99%

2012 DOMINICAN REPUBLIC HAD A **63%** INCREASE IN CLEAN ENERGY COMMITMENTS

WIND IN LAC: **3.9GW** OF CAPACITY

MEXICO HAS A TARGET TO REDUCE **30%** OF GHG EMISSIONS BY 2020

FROM 2006-2012, LAC RECEIVED **$7BN** IN GRANTS TO SUPPORT RENEWABLE ENERGY

URUGUAY **5** OUT OF **8** POSSIBLE POLICY INCENTIVES FOR RENEWABLES IN PLACE

OVER 2006-2012, CHILE RECEIVED **$6BN** IN CUMULATIVE RENEWABLE ENERGY INVESTMENT

IN 2012, COSTA RICA GENERATED **44%** OF ITS ELECTRICITY FROM CLEAN SOURCES

EL SALVADOR HAS **200MW** GEOTHERMAL CAPACITY

PERU HOSTS **10** GREEN MFI ORGANIZATIONS, THE MOST IN THE REGION.

BIOFUELS & BIOMASS IN LAC: **11.7GW** OF CAPACITY

SOLAR IN LAC: **90.3MW** OF CAPACITY

GEOTHERMAL IN LAC: **1.4GW** OF CAPACITY

2006-2012, **$106BN** WAS INVESTED IN CLEAN ENERGY IN LAC. BRAZIL WAS THE MAIN DESTINATION, ACCOUNTING FOR **78%** OF TOTAL INVESTMENTS.

COLOMBIA HOSTS **51** CARBON OFFSET PROJECTS

PANAMA HAS THE HIGHEST SPOT POWER PRICE IN LAC: **$222.5/MWH**

BRAZIL HAS THE LARGEST INSTALLED **WIND** CAPACITY: **1.8GW**

SMALL HYDRO IN LAC: **9.6GW** OF CAPACITY

IN 2012, LAC ATTRACTED **$16.8BN** IN INVESTMENTS TO CLEAN ENERGY

36% OF NICARAGUA'S POWER MATRIX IS RENEWABLE

Colors show methodology sub-divisions and weightings

PARAMETERI | PARAMETERII | PARAMETERIII | PARAMETERIV

METHODOLOGY

Trinidad & Tobago - North coast of Trinidad and a series of subtle, interacting arcs in the southeastern Caribbean Sea, known as “internal waves”.

OVERVIEW

In June 2012 at the historic United Nations "Rio+20" Conference on Sustainable Development, the Multilateral Investment Fund of the Inter-American Development Bank and Bloomberg New Energy Finance introduced *Climatescope*, a comprehensive effort to profile the state of clean energy and climate-related business development in 26 countries in Latin America and the Caribbean.

Climatescope ranks countries on their past, present, and future ability to attract investment for clean energy companies and projects. In this second edition, the index comprises 39 indicators[1], both qualitative and quantitative in nature. These indicators each fall under four broad parameters: Enabling Framework (I), Clean Energy Investment and Climate Financing (II), Low-Carbon Business and Clean Energy Value Chains (III), and Greenhouse Gas Management Activities (IV). Indicators are also sub-categorized thematically within parameters. Each parameter contributes to a country's overall score but they are not weighted equally (see illustration on page 18 and 19).

Climatescope is a knowledge and information sharing tool available to the public online at http://climatescope.fomin.org. Its primary aim is to bridge data gaps while providing investors, entrepreneurs, manufacturers, policy-makers and other key stakeholders tangible information to make critical strategic decisions in Latin America and the Caribbean. Questions or comments on the methodology are welcome and should be submitted through the *Climatescope* website.

2013 METHODOLOGY ENHANCEMENTS

On 17 October 2012, the Multilateral Investment Fund (MIF) and Bloomberg New Energy Finance (BNEF) hosted the *Climatescope* Methodology Review Day at the Inter-American Development Bank headquarters in Washington D.C. The meeting brought together investors, policy-makers, and others stakeholders from the non-governmental community with an interest in clean energy in Latin America and the Caribbean. All participants were asked to carefully review the 2012 *Climatescope* methodology and offer suggestions on how it might be enhanced in 2013. Based on their feedback, BNEF and MIF chose to make the following key improvements for this year's edition (see Appendix A):

• The clean energy policy indicator was revamped. Participants suggested substantially broadening the measurement of policies to be more comprehensive. Some reviewers recommended a larger panel of experts that would include more specific sector policy expertise. The need to incorporate measures of political and country risks into the policy framework score was also highlighted. The methodological changes incorporated as a result of these suggestions can be seen in the Methodology Section and Appendix A.

• The power market structure indicator was enhanced to better take into account nuances on how different power markets have been liberalized.

• The Parameter IV methodology was restructured with added categories and indicators.

• The indicator assessing retail-electricity prices now accounts for greater depth related to price availability for different end-users, constituting: residential, commercial and industrial.

• The cost of debt category comprising Parameter II was enhanced with the introduction of swap rate analysis as well as results from a survey conducted with at least two local lenders to large-scale clean energy projects by country. The cost of debt survey assessed borrowing costs and financing terms.

• Certain indicator weights were adjusted up or down. Most significantly, the four indicators comprising the microfinance category of Parameter II now have a lower combined impact on the overall *Climatescope* score.

SCORING APPROACHES

Scoring approaches employed in the first edition of *Climatescope* were also used for this 2013 edition. Below is a description of the three main scoring approaches used throughout the report:

Indexing: the *Climatescope* index is based entirely on a 0-5 scoring system, with 5 representing the highest possible score. Using the indexing approach, the country with the maximum output for a given indicator, after levelization in most cases, received the highest score in the index (5). All other countries' outputs were mapped relative to the maximum score. This approach was employed on quantitative indicators such as clean energy installed capacity, clean energy investment and electrification rate.

Tiering: in other cases, country indicator scores were tiered into predefined quintiles. For example, in the case of the clean energy policies indicator, tiering was used and countries were placed in different quintiles depending on the perceived policy ambition or effectiveness of their clean energy policy framework. This methodology is better suited than indexing for qualitative assessments such as rating the ease of carbon offset project development. Tiering was also used in cases when the quantitative outputs are based on limited data.

Simple counting: some indicators were simply binary and thus countable. In such cases, the country either received a 0 or a 5 score. For instance, one indicator simply sought to take into account whether countries have rural electrification programs using clean energy sources. Those that did received scores of 5. Those that did not received scores of zero.

1. In the first edition, Climatescope measured 30 indicators categorized into four parameters. Based on feedback from a session held on 17 October 2012 we added one indicator "average cost of debt" to Parameter II. Parameter IV now looks at 13 indicators instead of seven.

METHODOLOGY OVERVIEW

I. ENABLING FRAMEWORK — 40%

Policy & Regulation

Clean Energy Policies	9.6%
Power Market Structure	4.8%
Clean Energy Rural Electrification Programs	1.6%

Clean Energy Penetration

Clean Energy Installed Capacity	2.4%
Growth Rate of Clean Energy Installed Capacity	3.2%
Clean Energy Electricity Generation	2.4%
Growth Rate of Clean Energy Electricity Generation	3.2%
Biofuels Production	1.6%
Growth Rate of Biofuels Production	3.2%

Price Attractiveness

Average Retail Electricity Prices	2.0%
Average Electricity Spot Prices	2.0%

Market Size Expectation

Growth Rate of Power Demand	2.0%
Electrification Rate	2.0%

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING — 30%

Amount Invested

Clean Energy Investment	6.8%
Growth Rate of Clean Energy Investment	6.8%

Fund Sources

Loans, Grants, Grant Programs	3.0%
Local Investment	3.0%

Green Microfinance

Number of Green Microfinance Institutions (MFIs)	2.1%
Green Microloans	1.2%
Green Microborrowers	1.2%
Average Cost of Green Microdebt	1.0%

Cost of Debt

Average Cost of Debt	2.6%
Swap Rate	2.6%

Colors show methodology subdivisions and weightings

PARAMETER | WEIGHT | CATEGORY | INDICATOR | NET WEIGHT

METHODOLOGY OVERVIEW (continued)

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS — 10%

Value Chain

Clean Energy Service Providers	2.5%
Value Chains by Clean Energy Sector	5.0%
Financial Institutions in Clean Energy	2.5%

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES — 20%

Carbon Offsets

Historic Activity	4.0%
Clean Development Mechanism (CDM) Risk	2.0%
Future Potential	2.0%

Carbon Policy

Greenhouse Gas (GHG) Emission Reduction Targets	2.5%
Country Registry	1.5%
Market-Based Instruments	0.5%
PMR & NAMA Commitments	1.5%

Corporate Awareness

GHG Global Reporting Initiatives	1.0%
Principles of Responsible Investment	1.0%
Energy Efficiency Initiatives	1.0%
Emission Reduction Policies	1.0%
Environmentally Focused Business Training	1.0%
Environmentally Focused Think Tanks	1.0%

The *Climatescope* index measures the environment for clean energy and climate-related business development in 26 countries in Latin America and the Caribbean. In this second edition of *Climatescope*, the report tracks 39 indicators categorized into four broad but interrelated parameters: Enabling Framework (I); Clean Energy Investment and Climate Financing (II); Low-Carbon Business and Clean Energy Value Chains (III); and Greenhouse Gas Management Activities (IV). Throughout this section of the report parameters are easily identifiable in green.

Each parameter has a weighted contribution to a country's overall score, as illustrated above. A parameter consists of a series of indicators grouped into categories. Each indicator has a net impact on the overall *Climatescope* score (illustration above). For a comprehensive list of indicators and raw data behind each indicator please download the "source data" file at http://climatescope.fomin.org. The following sections offer further details on the methodology for each parameter and its associated categories and indicators.

Colors show methodology subdivisions and weightings

PARAMETER | WEIGHT | CATEGORY | INDICATOR | NET WEIGHT

I. ENABLING FRAMEWORK

I	Policy & Regulation	40%
	Clean Energy Penetration	40%
	Price Attractiveness	10%
	Market Size Expectations	10%

The Enabling Framework parameter encompasses fundamental structures and market conditions typically required for a given country to attract investment and interest from financiers, project developers, or independent power producers looking to develop new low-carbon projects, companies or manufacturing facilities. A welcoming enabling framework is one where: a comprehensive, effective and stable set of rules are in place; the power market structure encourages and adequately rewards new market entrants; the private and public sectors foster universal access to clean and sustainable energy in rural or isolated communities; clean energy penetration of the power and primary energy matrices is ever increasing; adequate price signals are available; and growing demand for power and rapid electrification combine to create a substantial market.

A total of 13 indicators serve as the inputs into Parameter I. These indicators fall into four categories: Policy and Regulation, Clean Energy Penetration, Price Attractiveness, and Market Size Expectation. Each category contributed with varying weights to the overall Enabling Framework parameter score.

POLICY & REGULATION

Important improvements were made to the Policy and Regulation methodology from the first edition of Climatescope. Indicators assessing a country's clean energy policies and power sector structure were expanded to incorporate a more diverse set of inputs from a larger group of experts. The methodology for the third indicator of this category – clean energy rural electrification – remains largely the same from the first edition.

The Policy and Regulation category consists of three policy-specific indicators: (i) clean energy policies, (ii) power sector structure, and (iii) clean energy rural electrification. Combined, their net weights account for 40% of the Enabling Framework parameter score and, in turn, 16% of a country's overall 2013 *Climatescope* score (see page 18).

Clean energy policies

For the 2013 edition of *Climatescope*, a comprehensive search for relevant policies in the Latin American and Caribbean region was undertaken by examining primary source documents and conducting interviews with local policy-makers. In the end, the number of policies being tracked by Bloomberg New Energy Finance grew from 80 to 110. Each policy was then divided into one of the following eight types: (1) energy target (2) feed-in-tariff/price premium, (3) auctions, (4) biofuels blending mandate, (5) debt/equity incentive, (6) tax incentive, (7) utility regulation and (8) net metering.

A review panel consisting of 18 external energy policy experts was then convened to assess the 110 policies. Each expert was assigned the task of examining and scoring a set number of policies of specific types across multiple countries. At no point were panelists asked to assess a country's overall policy framework. This was intended to reduce any potential national bias a panelist might have toward a certain country.

Two to four external experts were assigned to review policies for each of the eight clean energy policy types, covering all 110 policies. The experts were asked to take into account six cross-cutting factors when judging a specific clean energy policy (see table below).

Clean Energy Policies (maximum points: 5)

Cross-cutting factors		
①	Stability	Is the policy built to last? Has it been altered, delayed or mishandled in ways that might undermine confidence in its long-term existence?
②	Predictability	If changes have been made to the policy, have they been done in ways to minimize instability?
③	Transparency	Have availability, timing, terms and amendments been communicated clearly?
④	Effectiveness	Has the policy contributed to new clean energy capacity additions in a fast and timely manner?
⑤	Ambition	How significant are the opportunities for clean energy investment?
⑥	Longevity	Are incentives offered over sufficient timeframes to attract investment?

Each panelist was assigned to a specific policy type based on his or her area of expertise, and the panelist then reviewed and scored those policies. Some judges assessed more than one policy type due to their knowledge base and willingness to contribute. For each policy they reviewed, expert panelists assigned "high", "medium" or "low" scores corresponding to the six cross-cutting

Colors show methodology subdivisions and weightings

I Clean Energy Policies (maximum points: 4)

Raw Country Policy Score **X** Policy Equalizer **=** Overall Policy Score

Policy Types

- Energy Targets
- Feed-in Tariff / Price Premium
- Auctions
- Biofuels Blending Mandate
- Debt / Equity Incentives
- Tax Incentives
- Utility Regulation
- Net Metering

Cross Cutting Factors

Stability	Predictability
Transparency	Effectiveness
Ambition	Longevity

X

Comprehensiveness

+

Political Risk

=

Argentina	2.67
Bahamas	1.00
Barbados	1.68
Belize	1.00
Bolivia	1.00
Brazil	3.86
Chile	2.54
Colombia	2.27
Costa Rica	2.42
Dominican Republic	3.02
Ecuador	2.04
El Salvador	1.36
Guatemala	1.56
Guyana	1.00
Haiti	1.00
Honduras	2.19
Jamaica	2.08
Mexico	2.37
Nicaragua	1.56
Panama	2.31
Paraguay	1.38
Peru	3.21
Suriname	1.00
Trinidad & Tobago	1.00
Uruguay	3.53
Venezuela	1.00

Colors show methodology subdivisions and weightings

factors. The high, medium, and low scores were then translated into numerical values of five, three and one, respectively. Participation was done remotely and all scores were submitted electronically via an online survey. In the end, each of the 110 policies was reviewed by at least three expert panelists with most having been reviewed by four.

Each policy then received a "raw" policy score – the average score for each of the cross-cutting factors given by all experts assigned to judging the policy in question. From these scores, an overall raw clean energy policy score per country was derived by adding the scores assigned by panelists.

In cases where a country did not have a specific type of policy, it received no score. For instance, eight nations in Latin America and the Caribbean have net metering laws and thus received scores for those. The other 18 nations without such policies received no net metering score. Thus countries that have established policies in a given area were rewarded while those that have not were, in effect, penalized.

This year's edition of *Climatescope* seeks to better account for country and political risk. Thus a policy "equalizer" consisting of two subcomponents – comprehensiveness and political risk – was incorporated into the methodology.

Comprehensiveness is defined here as the level of completeness of a country's overall policy framework – the number of different policy types it has vis-à-vis its peers. The comprehensiveness metric was obtained by assigning each country a relative score based on how many policies were available in that country out of a possible maximum of eight. Scores were then benchmarked against one.

The World Bank's Worldwide Governance Indicators (WGI) index was used to address the question of political risk. This index covers six overarching political and country risk-related factors – voice and accountability, political stability and absence of violence, governance effectiveness, regulatory quality, rule of law, and control of corruption. The last complete WGI dataset

Power Sector Structure (maximum points: 5)

	Metric (Questions)	Yes	No	Degree
①	Does a public or private vertically integrated, monopoly utility control the market?	0	0.5	-
②	Are generation, transmission and distribution assets controlled by legally separate entities?	0.5	0	0.25 (somewhat)
③	Is the bulk power transmission system operated by an independent body (ISO/RTO)?	0.5	0	-
④	Are end-user electricity tariffs subsidized?	0	0.5	0.25 (Yes, to some extent)
⑤	Is there a functioning power exchange?	0.5 (a very liquid one)	0	0.25 (Yes, but of limited liquidity)
⑥	Are there significant barriers to private sector participation in generation?	0	0.5	0.25 (Yes, but opportunity)
⑦	Are end-users free to choose third-party power marketers?	0.5	0	0.25 (Yes, but nobody does)
⑧	Is there a functioning competitive wholesale power market in place?	0.5	0	-
⑨	How concentrated is the generation market?	0 (very)	0.5 (not at all)	0.25 (somewhat)
⑩	How concentrated is the retail market?	0 (very)	0.5 (not at all)	0.25 (somewhat)

Colors show methodology subdivisions and weightings

PARAMETER | WEIGHT | INDICATOR | METRIC

was published in 2011. The six components of the WGI score were averaged to obtain the final political risk metric. The political risk subcomponent score was then added to the comprehensiveness score rank to derive a final policy equalizer per country. A nation's equalizer was then multiplied by its raw country policy score to derive a final clean energy policy score.

Power sector structure

A fundamental assumption underlies the power sector structure indicator: a liberalized power market is more conducive to fostering new renewable generation than a tightly controlled market. This indicator seeks to gauge liberalization in a country's power market.

To derive the power sector score, 10 specific questions were asked about a country's power market, with possible scores of 0, 0.25, and 0.5 per question. Thus the maximum possible score for any country on these 10 questions was 5. As these questions were relatively non-qualitative, Bloomberg New Energy Finance conducted primary research on the power market structures for all 26 countries and assigned the scores on each question for each country.

Clean energy rural electrification

The third indicator in the Policy & Regulation category of Parameter I assesses the efforts of nations to expand access to power to the rural poor using clean energy technologies. It contributed to 10% of the policy and regulation category score and had a 1.6% net weight of the overall Climatescope score. Scoring on this indicator was binary: countries with rural electrification programs that promote clean energy received a 1 while others received a 0.

CLEAN ENERGY PENETRATION

This category consists of six distinct indicators that seek to measure shares of clean energy installed capacity, shares of clean energy generation and levels of biofuels production, as well as the associated growth rates for each. These indicators are: clean energy installed capacity, growth rate of clean energy installed capacity, clean energy electricity generation, growth rate of clean energy electricity generation, biofuels production, and growth rate of biofuels production.

Each of the three Indicators related to growth rates contributed 20% to the Clean Energy Penetration category score, and had a net weight of 3.2% toward the overall *Climatescope* score. Each non-growth energy indicator held a 15% weighting of the category score, with a 2.4% net weight, while the biofuels production indicator held a 10% category weighting, with a 1.6% net weight for the overall *Climatescope* index.

Only eight countries in Latin America and the Caribbean have notable biofuels production capacity: Argentina, Brazil, Colombia, Costa Rica, Guatemala, Nicaragua, Peru and Paraguay. These countries were judged based on all six indicators. The remaining set of countries – those with no commercial-scale biofuels production – were assessed based on the first four indicators only; thus the scoring system did not penalize them for not having biofuels production capacity.

Data for all six indicators comprising the clean energy penetration category were derived from primary sources, including websites and publications from energy ministries, power market regulators, system operators and utilities. The Bibliography contains a comprehensive list of sources used per country. For both Haiti and the Bahamas, primary source data were not available; therefore a best estimate based on secondary-source data from the World Bank, local utilities and national energy policies was made.

Whenever possible, 2012 data were employed for *Climatescope*. However, six countries had not publicly disclosed their 2012 data by March 2013 when data collection for the report was finalized. Argentina, Bolivia, the Dominican Republic, El Salvador, Honduras and Suriname were all assessed using 2011 data. Growth rates were calculated based on changes between the latest two years for which data were available.

PRICE ATTRACTIVENESS

The price attractiveness category comprises two power price-related indicators: average electricity spot prices and average retail electricity prices. The two made equal contributions to the price attractiveness category and the Enabling Framework parameter. Each also comprised 2% net of a country's overall *Climatescope* score. Data sources used in the category were the same as those used to assess clean energy penetration category levels.

Average Retail Electricity Tariff (maximum point: 1)

Metric	Score
Average residential end-user tariff	Averaged all three classes. Indexed to the highest rate.
Average commercial end-user tariff	
Average industrial end-user tariff	

Average electricity spot price

Half of the 26 countries in the region do not have wholesale power markets and thus were not judged, or penalized, on the average electricity spot price indicator. They are: the Bahamas, Barbados, Belize, Bolivia, Guyana, Haiti, Honduras, Jamaica, Mexico, Paraguay, Suriname, Trinidad & Tobago and Venezuela. The remaining 13 countries with wholesale power markets received a mark for this indicator indexed based on the country with the highest available average spot power price for the 2012 year. The country with the highest price received the maximum score of 5, and was used as the benchmark. All other countries received scores relative to their positioning against the benchmark.

Average electricity retail price

All 26 countries were assessed on the average retail electricity price indicator. This year's scoring methodology differed slightly

from that used in the first edition because different end-user tariffs were considered in this edition. Average end-user tariffs for the 2012 year (when data were not available, 2011 figures were used instead) were taken for three consumer groups: residential, commercial and industrial, measured in $/kWh. The average for all three was aggregated to derive the country's average retail electricity price.

The highest priced country received a score of 5 and was the benchmark used to index all other countries. Generally speaking high electricity prices are a positive factor for the potential development of clean energy capacity in a country.

MARKET SIZE EXPECTATIONS CATEGORY

Markets poised for growth are attractive to clean energy investors. Recent strong growth in power demand and a high percentage of the population without access to reliable electricity represent potential opportunities for clean energy deployment. The Market Size Expectations category sought to measure countries with such characteristics through two equally weighted indicators, with a net weight of 2% each toward the overall *Climatescope* score.

The clean energy electrification indicator assessed electrification levels in a country. The nation with the lowest such rate was considered the benchmark and received a mark of 5, with all others then receiving scores mapped relative to the maximum. For the power demand growth rate indicator, the country with the highest growth was used as the benchmark against which other countries were compared.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

II		
	Amount Invested	45%
	Fund Sources	20%
	Green Microfinance	18%
	Cost of Debt	17%

Few investors are comfortable with being the first to invest in a new technology or a new region. To rank a country's ability to attract low-carbon investment, it is important to assess its achievements in that regard to date. The Clean Energy Investment and Climate Financing parameter tracks historic investment activity in a given country while laying out financing conditions for future commitments.

In all, Parameter II comprises 10 indicators distributed across four categories: Amount Invested, Fund Sources, Green Microfinance and Cost of Debt. Each of these four categories contributed with varying weights to the overall Clean Energy Investment and Climate Financing parameter score (see figure above).

AMOUNT INVESTED

The Amount Invested category consists of two indicators related to historic financial commitments to low-carbon companies and projects: cumulative clean energy investment and clean energy investment growth rate. The two made equal contributions to the Amount Invested category. Each also comprised 6.8% net of a country's overall *Climatescope* score. The timeframe used was 2006 to 2012.

Data sources employed in the category were drawn from Bloomberg New Energy Finance's proprietary Industry Intelligence database – the world's most accurate database of clean energy and carbon investment activity. This database goes back as far as 2000, but for the purposes of this report only 2006-2012 was considered. A team of 32 Bloomberg New Energy Finance researchers is responsible for expanding this database each day by adding current activity and maintaining records. The database contains detailed information on funds invested in clean energy projects and technologies, grant programs and grants, venture, private equity and corporate finance transactions, and project financing. The Amount Invested methodology follows that employed in *Climatescope* 2012.

Amount Invested		
	Clean Energy Investment	50%
	Investment Growth Rate	50%

Cumulative clean energy investment

The clean energy investment indicator of the Amount Invested category includes four metrics related to the investment type: asset finance, corporate finance, venture capital and private equity investment and investment in small distributed capacity additions. All four investment-type metrics were aggregated to derive the total cumulative clean energy investment figure. Data points underlying these metrics are available online for the purpose of external analysis[1].

Clean Energy Investment		
Metric (Investment type)		
①	Asset finance investment	Aggregate all four investment types to obtain total clean energy investment figure.
②	Corporate finance investment	
③	Venture capital & private equity investment	
④	Small distributed-scale investment	

1. For a comprehensive list of indicators and the raw data behind each indicator please download the "source data" file at http://climatescope.fomin.org

Colors show methodology subdivisions and weightings

Asset finance: new build, refinancing and acquisitions of renewable energy generating projects. This includes both electricity generation and biofuels production assets. Projects may be financed via balance sheets of the project owners, or through financing mechanisms such as: syndicated equity from institutional investors, or project debt from banks.

Corporate finance: later-stage investments in clean energy technology companies, fundraising on public markets, debt financing arrangements, and coverage of investor exits made through either mergers and acquisitions (M&A) type buyouts or the closing of positions in publicly-quoted organizations. It includes all clean energy deals from M&A, public markets, joint ventures and corporate debt.

Venture capital and private equity: early and late stage venture capital funding of pure-play clean energy companies as well as funds raised privately for the purpose of expansion.

Small distributed investment: is defined as all new financial investments in projects with capacity below 1MW. Data for this metric were tracked on a country-by-country basis from primary sources.

Note that the total clean energy investment indicator accounts for cumulative commitments from 2006 through 2012. Investment commitments follow different orders of magnitude because of the variation in the size of the 26 *Climatescope* countries. Thus, countries were ranked for this indicator based on the value of total clean energy investments as a percentage of GDP in purchasing power parity to ensure standardization. Once investments were benchmarked by the size of the economy, countries were ranked using the indexing approach. The country with the highest share of cumulative clean energy investment relative to the size of its economy was set as the benchmark with a score of 5; all other country scores were derived based on their relative position to 5.

Clean energy investment growth rate

Similarly, the growth rate for the clean energy investment indicator took into account the same seven-year period and was based on compound annual growth rates. Scoring was also derived by using the index approach with the country with the highest compound six-year annual growth rate receiving the maximum score of 5.

FUND SOURCES

Fund Sources	**Loans, Grants and Grant Programs**	**50%**
	Local Investment	**50%**

The methodology for scoring the indicator analyzing local commitments by local players for local projects was updated this year.

The sources of funds category contributed 20% to the Parameter II score. Its two unique indicators – loan, grants and grant programs and local investment by local players – each made up half of the parameter weight and contributed 3% apiece to the overall *Climatescope* score.

Loans, grants and grant programs

The methodology employed to track loan, grants and grant program commitments remained the same as that employed in the first edition of *Climatescope*. Data were gathered using primary sources and Bloomberg New Energy Finance's proprietary Industry Intelligence database. Standardization was achieved by comparing fund source commitments to GDP. Scoring was determined based, on the index approach.

Local investment by local players

Only total new investment and acquisitions were used in the analysis of this indicator. Investment into small distributed projects was not considered. The total investment data for each country was then filtered by investor domicile to derive the dollar amount committed in any given country by investors domiciled in the same country. The score for this indicator was obtained by taking the ratio of dollar amount committed by local players for local projects over total clean energy investment at a national level. The country with the highest ratio received the maximum score of 5 and was considered the benchmark.

Investors were classified by the country in which they are registered in all instances except where a non-governmental agency was deemed to hold a stake of 50% or greater in the ownership structure of the investor. In such cases, the majority stakeholder's domicile was applied. In cases where specific investors in a project could not be identified, the value of the deal was considered to be "unknown" for the purpose of this analysis.

To illustrate the methodology, consider the $130m financing of the 100.8MW Satara wind farm in Panama – the benchmark country for this indicator. In this specific transaction only $41.42m – not the entire financial commitment to the project – was recorded toward the total value of investments by local players for Panama.

Financing Origin of Satara Wind Farm

Total value	Debt/ equity	Investor and domicile	Organization's home market	Investment classification
$130.7m	$89.3m (Debt)	Rabobank International (Netherlands)	$89.3m (Netherlands)	$89.3m (Foreign)
	$41.4m (Equity)	Panama Wind Energy Pvt Ltd (Panama)	**$41.4m (Panama)**	**$41.4m (Domestic)**

Colors show methodology subdivisions and weightings

GREEN MICROFINANCE

Green Micro Finance	Number of Green MFIs	38%
	Green Microloans	22%
	Green Microborrowers	22%
	Average Cost of Green Microdebt	18%

Green microfinance is playing an increasingly important role in the deployment of clean energy and energy efficiency technologies in the developing world. Considering its nascent but growing relevance, this category has a weight of 18% for Parameter II.

A total of four indicators comprise this category, including: number of green microfinance institutions operating in a given country, total green microloans disbursed in a given country, number of green microborrowers per country and average cost of green micro debt.

Each of the four indicators contributes a different weight to the overall Parameter ranking (see table above). Together they make up 5% of the overall *Climatescope* score. Last year, the net weight for these four indicators was slightly higher at 7.9%. Based on stakeholder feedback that this category - while important - was too heavily weighted in the first edition, its net weight was re-assessed. Last year, the cost of green micro debt indicator was part of the Cost of Debt category; this year it was moved to the Green Microfinance category to facilitate the analysis.

Information on microfinance that is specifically 'green-oriented' typically is not readily available. As a result, a specific survey was conducted of microfinance organizations to gauge their level of involvement in this area. Data from this survey are used in all four indicators comprising this category.

COST OF DEBT

Cost of Debt	Average Cost of Debt	50%
	Swap Rate	50%

Financing conditions in a given country are fundamental for developers and investors alike. The cost of debt category is made up of two indicators related to financing conditions for utility-scale renewable projects or investments into low-carbon manufacturing capacity or firms. These indicators are average cost of debt and average swap rate by country; each contributed equally to the overall category score. Each indicator had a 2.6% net weight toward the overall *Climatescope* score.

Data on the average cost of debt available to project developers looking to build large-scale renewable projects were gathered through a survey. The survey captured responses from at least two active local lenders to clean energy projects. Financial institutions in 13 of 26 countries responded to the cost of debt survey. The scoring system entailed assigning the highest possible mark of 5 to the country with the lowest interest on debt then indexing all other indicators relative to that country.

Responses to surveys were not received from the following countries and no data was recorded for them: the Bahamas, Barbados, Belize, Bolivia, Dominican Republic, Guatemala, Guyana, Haiti, Panama, Suriname, Trinidad & Tobago, Uruguay and Venezuela. For these 13 nations, an indicator tracking swap rate per country was created, and they were ranked on this indicator twice. A swap rate is the borrowing rate between financial institutions and was deemed to be the closest proxy for the cost of debt per country. The country with the lowest swap rate was assigned a score of 5 and all other country scores were determined by indexing their rate to that of the benchmark country. Swap rate data per country were taken directly from the Bloomberg terminal (see Bibliography for the full citation).

Colors show methodology subdivisions and weightings

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

III		
	Service Providers	25%
	Sector Value Chains	50%
	Financial Institutions	25%

A nation's ability to attract capital and accelerate low-carbon energy deployment is partly contingent on how many segments of key value chains it has in place. Parameter III sought to take this into account. It contributed 10% to the overall *Climatescope* score and included three indicators.

Service providers

A well-developed local presence of service providers for the low-carbon economy, including firms involved in legal and marketing services, project development and ancillary services is imperative to propel and sustain the development of clean energy. This indicator accounted for 25% of the Parameter III score. Points were given if the country had at least one provider in each sub-sector (see figure below).

Service Providers (maximum points: 20)

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	9	Consultancy-O&M ; Consultancy-Technical; Contract Maintenance ; Contract Manufacturing; Control Room Systems ; Education & Training ; Inspection & Maintenance ; Specialist Services ; Testing & Certification Services
Developers & Utilities	1	Integrated Service Provider
Marketing Services	3	Distributor ; Market Research ; PR Company
Financial & Legal Services	7	Banking-Corporate ; Banking-Custody ; Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ; Recruitment/Search

Sector value chains

The clean energy sector value chains indicator tracked the presence of six distinct sector value chains - and their subsectors - in each country, biofuels, biomass & waste, geothermal, small hydro, solar and wind. Combining all segments yielded a maximum possible score of 40 points per country. Nations were awarded 1 point per segment they had in place. A strong manufacturing base is imperative for attracting investment and producing the necessary equipment to help expand clean energy capacity.

Sector Value Chains (maximum points: 40)

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; Producers ; Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; Project Development ; O&M ; Power Purchase
Small Hydro	Pipes ; Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; Power Purchase
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; Project Development ; EPC ; Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; Project Development ; Construction/Installation ; O&M ; Power Generator

Financial institutions

The financial institutions indicator tracked how many types of financial service providers such as banks, corporate finance institutions, investment funds and private equity and venture capital funds invested in the low-carbon sector. Primary research was conducted to assess if at least one of these four types of financial institutions was active in a given country. Each type of lender could receive at most 1 point. Thus 4 points were the maximum for this indicator – a sign that the country has the ability to supply funds needed for the industry to grow. This indicator contributes 25% to the overall Parameter III score.

Financial Institutions (maximum points: 4)

✓	Banks	✓	Corporate Finance
✓	Funds	✓	Private Equity/Venture Capital

Colors show methodology subdivisions and weightings

PARAMETER | WEIGHT | CATEGORY | INDICATOR | METRIC

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES PARAMETER

IV		
	Carbon Offsets	40%
	Carbon Policy	30%
	Corporate Awareness	30%

The Greenhouse Gas Management Activities parameter aims to assess the status, risk and potential for carbon offset project activity in a given country. Favorable actions and conditions for this parameter included: a solid track record of commissioned Clean Development Mechanism (CDM) or other offset projects; high success rates for projects seeking CDM accreditation; ample opportunities for further offset project development; forward-looking federal or state-level policies or actions aimed at curbing GHG emissions; and progressive actions from private sector players to adopt projects and measures to reduce carbon footprints.

A total of 13 unique indicators serve as inputs into Parameter IV. These are arranged into three categories: carbon offsets, carbon policy and corporate awareness. Each category has its own weighting within the overall Parameter IV ranking. The carbon offset category measures what countries have done to develop offset projects and measures their potential to continue into the future. It holds the greatest weight at 40%. The two remaining categories – carbon policy and corporate awareness – are responsible for 30% apiece of the overall Parameter IV score. The methodology for this parameter has been substantially updated, revised, expanded and improved from the 2012 edition of *Climatescope*.

CARBON OFFSETS

Carbon Offsets		
	Historic Activity	50%
	CDM Risk	25%
	Potential	25%

The carbon offsets category comprises three distinct indicators assessing the historic activity of CDM and other offset project types in a given country, the risk projects will fail to gain CDM accreditation or approval, and offset project potential considering existing capacity in each country to support further project development. Each indicator contributes with varying weights to the overall category. Each country's carbon offset category score was derived by multiplying a "raw" score for each indicator by that indicator's weighting, then aggregating the three final scores.

Historic activity

The historic activity indicator investigates whether a country has CDM projects or other types of voluntary offset projects in place. It also assesses the depth of a country's current project pipeline by tracking sectors covered by these offset projects as well as the volume of current and expected credit issuance. While several offset project schemes exist, data was gathered from the main four: the UN CDM, Verified Carbon Standard, Gold Standard, and American Carbon Registry. The data for these four schemes were more comprehensive and reliable than the data available on projects in other programs. Still, the CDM represented the vast majority of projects in place for almost all countries.

Metrics captured for this indicator include the number of credit-scheme types, projects and sectors available in each country, and the volume of credits issued or expected to be generated by offset projects. The score awarded for each of these four metrics was binary: a country could receive either 1 or 0. Each metric was categorized as "above average" or "below average" compared with the region as a whole. A country was given a score of 1 for each metric considered above average. The maximum mark a country could obtain for this indicator was therefore four.

Historic Activity (maximum points: 4)

Metric		1 point each
①	Number of existing offset standards in a given country (ACR, GS, CDM, VCS)	If # is ⩾ LAC average
②	Number of offset projects in a given country (per 100ktCO$_2$e of emission)	
③	Number of sectors covered within country's project pipeline (power generation, methane, forestry, waste, energy efficiency)	
④	Volume of emission reductions from credits issued or expected to be generated (per 100ktCO$_2$e of emission)	

Source: American Carbon Registry, Gold Standard, UN CDM pipeline database, Verified Carbon Standard

For example, Brazil had 345 carbon offset projects per 100ktCO$_2$ in 2012 while the average across all Latin America and the Caribbean was 36. Thus Brazil received a score of 1 for the metric assessing number of projects because it had more than the average. A separate example: 411,301 credits were recorded as having actually been issued or expected to have been issued for projects in Panama. Meanwhile, the regional average for this metric was 13m credits. Thus Panama received a score of 0 for falling below the regional mean.

Colors show methodology subdivisions and weightings

CDM risk

The CDM Risk indicator assessed the likelihood that CDM offset projects in a given country fail to get commissioned or otherwise fail to gain accreditation or will local approval. It also took into account the average processing time for project registration within CDM. Given the limited data available for other offset project types for the purposes of this analysis, CDM project risk was tracked exclusively. However, the vast majority of offset projects do fall under this UN mechanism. The CDM risk indicator incorporated three distinct metrics: (1) the average number of failures per active CDM project, (2) the average number of restarts per CDM project, and (3) the number of days it takes for a project to successfully complete the registration process.

The scoring system for the first two metrics – number of project failures and restarts – followed the scoring system used for the metrics in the carbon offsets historic activity indicator. Each country was categorized as above or below average compared with the region as a whole. Above average nations received 1's and below-average nations received 0's. This calculation was done separately for both the number of project failures and number of project restarts.

The metric assessing CDM registration processing times examined two distinct phases of project development to measure how swiftly or slowly countries moved to bring projects to completion. The metric first took into account phase I, the period between when a project submits a letter to a host country government for approval until when it completes validation. Phase II comprised the period from when the project moves from validation to when it gets officially registered in the CDM. In this case, the average number of days taken to complete the two phases of the CDM registration process for all 26 countries in the *Climatescope* index was first calculated. From this, a regional average for each phase was then derived. The above/below average scoring system was then applied. If the average number of days taken for projects to be awarded validation for phase I and registration for phase II fell below the regional average, the country in question received a score of 1. Those with above-average durations received a 0.

The standard deviations from the first and second phases for each country were then compared with the average standard deviations for each phase for the entire Latin America and Caribbean region. If the standard deviation for phase I fell below the regional average, the country was awarded an additional mark of 1 and vice-versa if it fell above the average. The same process was applied to phase II.

Six was the maximum score a given country could achieve in the CDM risk indicator, comprising the aggregated scores from failures, restarts, Phase I duration, Phase I standard deviation, Phase II duration and Phase II standard deviation. The CDM risk indicator has a 25% weighting for the carbon offset category.

IV CDM project risk (maximum points: 6)

Metric		1 point	0 point
1	Number of project failures (rejected, withdrawn, inactive for over two years or more)	If # is > LAC average	If # is < the LAC average
2	Number of project restarts (labeled as "replaced" in CDM database)		
3	Number of days to obtain CDM registration	See 3.1 & 3.2 below	

		up to 2 points each
3.1	Phase I From when project submits letter of approval to receiving validation	If # is > LAC average & σ < σ of LAC average
3.2	Phase II From validation to approval	

Colors show methodology subdivisions and weightings

Potential for developing emission offset projects

The project potential category assessed opportunities for developing emission offset projects in a given country. Carbon-intensive economies – those with high emissions per unit of GDP, or those highly inefficient in their use of energy generally – have significant abatement opportunities. This indicator aims to assess the size of this opportunity by examining four metrics:

- ✓ Abatement potential from energy efficiency, measured by the energy use per kilogram of oil equivalent per $1,000 GDP
- ✓ Potential for Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD), meas ured by forestry abatement potential per hectare combined with a REDD-readiness score
- ✓ Anthropogenic methane emissions
- ✓ High global warming potential gas emissions from nitrous oxide (N2O) and three main types of fluorinated gases hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) measured by ktCO2 emissions from 2010.

Each country could receive a 1 or 0 score per metric, allowing a total maximum for this indicator of four points. Using the indexing approach, the country with the maximum output for a given metric received the highest score in the ranking for that metric. All other countries' outputs were mapped relative to the maximum score. The final indicator score was derived by summing the metric scores.

Potential carbon offsets opportunities (maximum points: 4)

Metric		1 point each
①	**Energy efficiency** (Energy use per kg of oil equivalent per $1,000 GDP using 2010 as base year)	Using index approach
②	**REDD** (Forestry abatement potential/hectare + "REDD readiness")	
③	**Anthropogenic methane emissions (CH_4)** (CH_4 per tCO2e per person)	
④	**High global warming potential (N_2O, SF_6, HFCs, PFCs)** (HGWP per tCO2 emissions per person)	

Source: World Bank, World Development Indicators, The Open Source Impacts of REDD+ Incentives Spreadsheet (OSIRIS), World Resources Institute Climate Analysis (CAIT)

CARBON POLICY CATEGORY

The carbon policy category of Parameter IV sought to evaluate public policies and initiatives *Climatescope* countries have undertaken to reduce greenhouse gas emissions. This category covers four broad but interrelated indicators (see figure on the right) that answer the following questions:

- ✓ Does a country have emissions reductions targets?
- ✓ Does it have a greenhouse-gas (GHG) registry
- ✓ Is the country planning to develop market-based instruments to cut GHG emissions?
- ✓ Is it an "implementing country participant" of the Partnership for Market Readiness (PMR) or has it committed to the Nationally Appropriate Mitigation Action (NAMA) policies and actions?

Carbon Policy	**GHG Targets**	**42%**
	Country Registries	**25%**
	Market-based Instruments	**8%**
	PMR & NAMA	**25%**

These four indicators measure if a country has implemented or legislated specific emission reduction policies, and if so, what actions have been undertaken. Each of these indicators contributed a different weight to the overall carbon policy category and thus had a varied net weight on the overall *Climatescope* index.
The GHG emissions reduction targets indicator made the strongest contribution to the carbon policy category score with a weight of 42%. Five was the maximum score a country could achieve on this indicator. The mark consisted of two metrics: regional and national targets. If a regional goal is in place, the country obtained a mark of 2; if a national target has been announced, the country obtained a mark of 3; if both are in place, the country obtained the highest mark of 5.

The GHG country registry indicator accounted for 25% of the policy category score. The maximum points a country could receive on this indicator was three based on the following: if a country is planning to establish a GHG registry it receives 0.5 points, if a country has a voluntary registry in place is gets 2 points, and finally if a country has a mandatory registry in place it gets the maximum of 3 points.

The PMR & NAMA indicator was also responsible for 25% of the category score. If a country is officially an "implementing country participant" of the World Bank's PMR – a forum for collective innovation and actions to support capacity building to scale up climate mitigation – but is still only in the expression of interest phase, it received 1 point; it got 2 points if it is already in the preparation phase and 3 points if it is in the implementation phase. Additionally, if the country has at least one NAMA initiative being implemented, it received a score of 1.

The GHG market-based instruments was the least significant indicator within this category, with a mere 8% weight. The maximum a country could obtain in this indicator was 1 whereas it received 0.5 points if it is plans to develop an emissions trading system and/or a crediting mechanism.

Colors show methodology subdivisions and weightings

CORPORATE AWARENESS

Accounting for 30% of the Parameter IV score, the corporate awareness category evaluates the level of environmental awareness among companies in a given country. It covers six independent indicators pertaining to voluntary corporate actions, each of which was equally weighted at 17%:

		1 point each
Corporate Awareness (maximum points: 6)	Global Reporting initiative (GRI)	> LAC average
	Principles of Responsible Investment (PRI)	
	Energy efficiency initiatives	
	Emission reduction policies	
	Environmentally focused business training	at least one exists
	Environmentally focused think tanks	

Source: Bloomberg Environmental, Social and Governance Data (ESG), Principles for Responsible Investment, Global Reporting Initiative.
Note: All six indicators are equally weighted at 17%

Global Reporting Initiative

The GHG Global Reporting Initiative indicator investigated whether companies in a country voluntarily reported their emissions to the Global Reporting Initiative(GRI), using the initiative's online database. The number of companies in Bloomberg's Environmental, Social and Governance (ESG) database was used as a proxy for the total number of companies in a given country. The indicator score was derived by dividing the number of companies reporting to the GRI by the total number of companies in a given country (ie, those listed in the ESG database). The maximum ratio for the region was obtained by compiling the same dataset across all 26 countries in the region. If the country ratio was greater than the maximum ratio for the region, the country received 1 point; if it was lower, it received 0.

Principles of Responsible Investment

The Principles of Responsible Investment indicator assessed how many asset owners in a given country are represented among the signatories of the UN's Principles for Responsible Investment (PRI) – a network of investors working to put into practice the six voluntary and aspirational Principles for Responsible Investment. The PRI database was used to count the number of asset owners, investment managers and professional service partners who signed up to the initiative. The same scoring method used in the GRI indicator was applied to the Principles indicator. The maximum point a country received was 1 if its maximum ratio fell above the maximum ratio for the region.

Energy efficiency initiatives & emission reduction policies

The energy efficiency initiatives and emission reduction policies indicators each looked at how many companies reported dedicated initiatives based on the Bloomberg ESG database. The number of companies reporting energy efficiency or emission reduction initiatives to Bloomberg's Environment, Social and Governance database (ESG) was counted. The data was levelized by dividing the number of companies reporting these initiatives by the number of active companies in a given country on the Bloomberg terminal.

These fields in the Bloomberg terminal are maintained by a team of outsourced vendors, contracted by Bloomberg. The team combs annual reports and sustainability reports, looking for any of the following three indications to determine whether a company is serious about its energy efficiency initiatives: the initiatives merit more than a passing mention in the annual or sustainability report; there is more than one initiative related to energy efficiency; there is numeric metric associated with the initiative (eg, quantified goal).

Principles of responsible investment (maximum points: 1)

Six Principles

①	Will incorporate ESG issues into investment analysis and decision-making processes.
②	Will be active owners and incorporate ESG issues into ownership policies and practices.
③	Will seek appropriate disclosure on ESG issues by the entities in which invests.
④	Will promote acceptance and implementation of the Principles within the investment industry.
⑤	Will work together to enhance effectiveness in implementing the Principles.
⑥	Will report on activities and progress toward implementing the Principles.

Source: Principles of Responsible Investment

Capacity building: environmentally focused business training & think tanks

These two indicators were binary. Primary research was conducted to trace if there was at least one environmentally focused business training and think tank. The country received a score of 1 for each of these indicators if it had one of these entities.

SCORE SUMMARIES

Chile - The rivers of glacial ice in Torres del Paine National Park grind over bedrock, turning some of that rock to turquoise dust.

OVERALL CLIMATESCOPE SCORES

Scores by Country

Colors show range for overall score
Numbers refer to country's 2013 overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

OVERALL RANKING

In this second edition of *Climatescope*, Brazil, Chile and Nicaragua top the list as the most attractive clean energy markets in Latin America and the Caribbean.

Brazil had the highest overall composite *Climatescope* score for the second year in a row with a 2.47. It scored first in two of four parameters assessed: Low-Carbon Business & Clean Energy Value Chains (III) and Greenhouse Gas Management Activities (IV). Brazil maintained its leading position in the index thanks to a solid renewable energy policy framework, significant clean energy value chains, and progressive greenhouse gas (GHG) emission management activities. Well-rounded policy incentives coupled with a relatively liberalized power market structure and low-interest debt financing for utility-scale renewable projects helped boost clean energy deployment by 15% in 2012 and triple it in the last six years to 15.8GW. Still, the largest economy in the region did not perform as well on the Clean Energy Investment and Climate Financing parameter (II). Its new clean energy investment dropped from $14.5bn in 2011 to $9.2bn on slower economic growth and reduced power demand.

Chile moved up three positions to second with an overall score of 2.41 and performed well in all parameters. The country's healthy business environment, growing power demand and natural resources helped it become a hot spot for renewable investment, which jumped from just under $0.5bn in 2011 to $2.1bn in 2012. The country also boosted clean energy generation by 28% to 1.2TWh out of a total 18TWh in 2012.

Nicaragua finished third with a mark of 2.26. It scored highest on the Enabling Framework (I) and Clean Energy Investment and Climate Financing (II) parameters. In 2012, Nicaragua saw renewable capacity grow by an impressive 40% thanks to $292m committed to its clean energy market relative to its $10.5bn economy.

▲ WHO MOVED UP?

Nine countries, including Chile, improved their *Climatescope* ranking this year.[1] **Mexico** moved up one slot to fifth with a 2.09 score, driven by a spike in renewable investment from $0.5bn in 2011 to $2.9bn in 2012. **Uruguay** advanced four positions to sixth with a 1.67 mark, due to a dramatic improvement in the clean energy policy indicator, one of the most important indicators out of the 39 data points assessed. **Argentina** and the **Dominican Republic** climbed four and seven positions, taking seventh and eighth place, respectively. In Argentina, 85% out of $271m in clean energy commitments came from local players. Cumulative renewable investment doubled in the Dominican Republic, and reached $645m in 2012. **Venezuela**, the region's largest oil exporter, rose to 20th from 25th last year. Renewables comprise a negligible share of Venezuela's power matrix but the commissioning of one 6.2MW wind farm and a $70m commitment to finance another 25MW wind project allowed the country to stand out compared with other bottom-tier countries, which saw no activity in the sector. **Ecuador**, **Belize** and **Guyana** complete the list of nine countries that moved up the ranking in *Climatescope* 2013.

▶ WHO STAYED PUT?

Peru, together with Brazil and other five countries,[2] retained the same position as last year, maintaining fourth place with an overall score of 2.25. However, the country succeeded in attracting more renewable investment and finished no lower than sixth in all four parameters. **Paraguay**, **Bolivia**, the **Bahamas**, **Haiti** and **Suriname** all retained their rankings from last year's *Climatescope*.

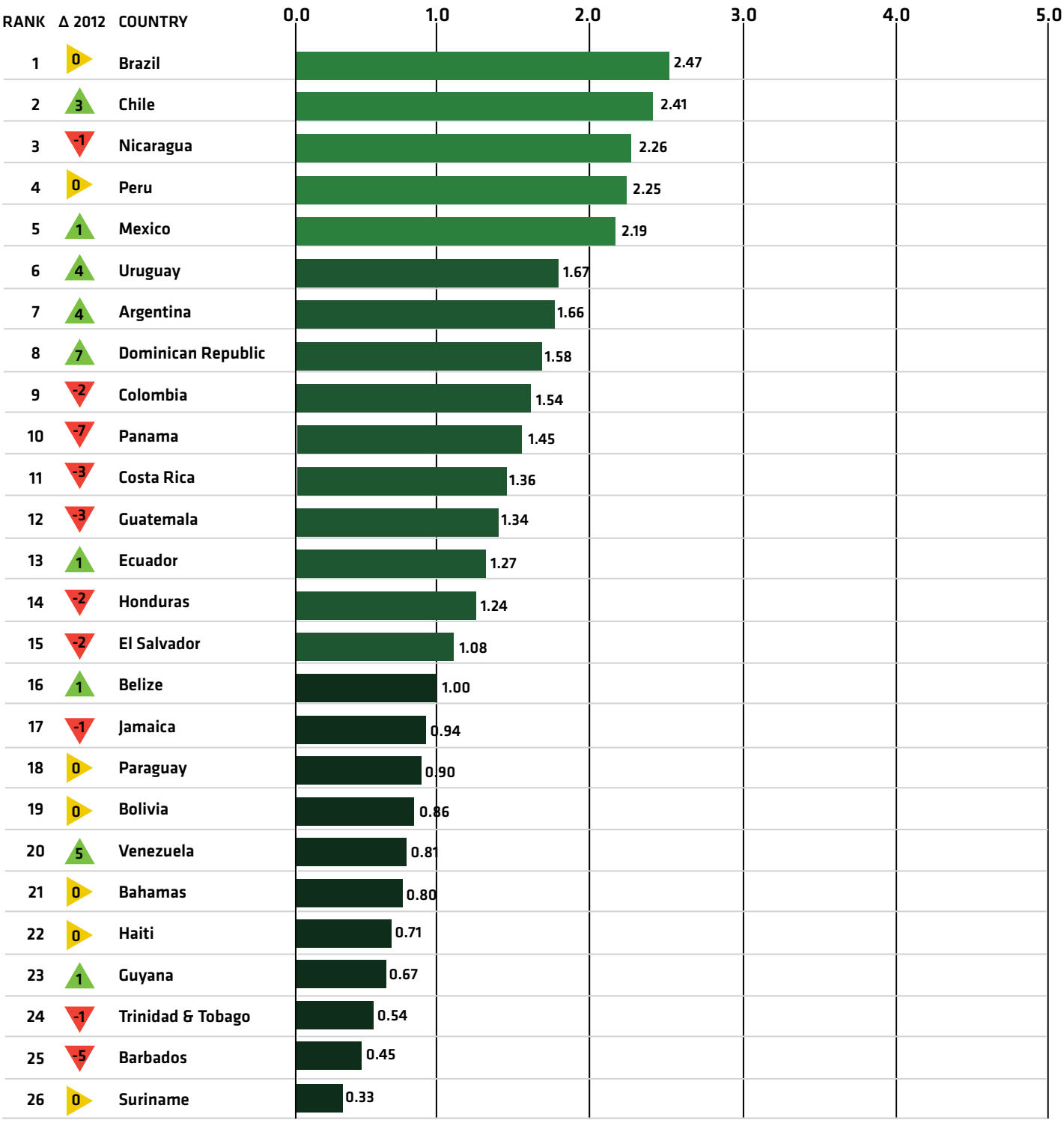
▼ WHO MOVED DOWN?

A total of 10 countries descended their rankings from last year.[3] **Colombia** dropped two spots but remained in the top 10 at ninth with a 1.54 score. Colombia's clean energy market saw limited activity in 2012 with few projects commissioned and no funds committed. **Panama** experienced the biggest drop, slipping from third last year to 10th with a 1.45 score. Panama also saw little capacity added and did not perform well on Parameter IV, due to a small number of carbon offset projects and no GHG emission reduction policies both in the public and private space. **Costa Rica**, with an overall 1.36 score, is no longer in the top 10, falling from eighth in 2012 to 11th this year. The decline was largely due to its weak performance on Parameter II, with only $10m invested in renewables in 2012. **Barbados** moved down five positions due to a significant drop on Parameter II, since it only scored in one indicator among the 10 assessed. **Guatemala**, **Honduras**, **El Salvador**, **Jamaica**, Nicaragua and **Trinidad & Tobago** all also moved down the *Climatescope* ranking this year.

1. Nine countries improved their rank compared with their position in the first edition: Argentina, Belize, Chile, Dominican Republic, Ecuador, Guyana, Mexico, Uruguay and Venezuela.
2. Seven countries remained on the same ranking position compared to their spot in the first edition: the Bahamas, Bolivia, Brazil, Paraguay, Peru and Suriname.
3. 10 countries descended the ranking compared with their position in the first edition: Barbados, Colombia, Costa Rica, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Panama, Nicaragua and Trinidad & Tobago.

Overall 2013 Climatescope score

Ranking and scores by country



Green arrow refers to increase, red to decrease and yellow to no change

Colors show range for overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

I. ENABLING FRAMEWORK

Investors and others seeking low-carbon business opportunities in Latin America and the Caribbean are well served to understand the history and potential for growth for renewables in a market. The Enabling Framework parameter assesses key characteristics that make a market more or less attractive to investors.[4]

DESCRIPTION

Parameter I comprises four categories: policy and regulation, clean energy penetration, price attractiveness, and market size expectations. It measures four growth indicators and assesses country actions to date to build a greener economy. The parameter includes 13 indicators that collectively account for 40% of the overall *Climatescope* score.

PARAMETER I: TOP AND BOTTOM-RANKED COUNTRIES

Nicaragua achieved the highest Enabling Framework score, followed by **Brazil** and **Uruguay**. At the other end of the table were **Barbados**, **Trinidad & Tobago** and **Suriname**. Nicaragua finished top largely due to clean energy's high penetration of its power matrix. Brazil and Uruguay stood out for their policy regimes.

PERFORMANCE BY INDICATOR

Clean energy policy

The methodology for judging clean energy policies for Climatescope 2013 was improved from last year's report.[5] The changes made little difference to Brazil, which had the highest score on this indicator for the second year running. Uruguay followed, thanks to its stable and all-encompassing incentives. On the downside, eight countries have yet to develop any significant incentives for renewables: the Bahamas, Belize, Bolivia, Guyana, Haiti, Suriname, Trinidad and Tobago and Venezuela.

Power market structure

There were no major changes to the power market structures of Latin American and Caribbean countries from last year and this year's results reflect that. Brazil, **Chile**, **Peru** and **Colombia** all have relatively deregulated and liberalized power markets, and thus received the highest marks for this indicator. The regulated and vertically integrated power markets of the Caribbean, **Costa Rica**, **Mexico**, **Paraguay** and **Venezuela** received lower scores as it is often difficult for new entrants to penetrate these markets.

Clean energy-rural electrification programs

In all, 19 out of the 26 countries in Latin America and the Caribbean have public programs aimed at expanding energy access by encouraging the use of clean and sustainable resources. Seven countries – **the Bahamas**, Barbados, **Belize**, **Haiti**, Paraguay, Suriname and Trinidad & Tobago – do not have any public-sponsored clean energy rural electrification programs.

Renewable installed power capacity & renewable generation

Belize topped the list for having the highest percentage of clean energy installed capacity for the second year in a row. In 2012, 94% (273GWh) of Belize's electricity generation came from renewable sources. However, this represented just half the country's 528GWh total electricity consumption, with the remainder met through imports from Mexico.

Costa Rica ranked third and second for renewable capacity and generation, respectively[6]. In 2012, 44% of generation (10TWh) came from small hydro, wind, geothermal, biomass & waste and solar sources. From 2006 through 2012, Nicaragua and Mexico had the highest year-on-year growth rates both in terms of installed renewable capacity and renewable power generation. 36% of Nicaragua's 1GW grid comes from renewable sources, thanks to 77MW of geothermal and 40MW of wind capacity commissioned in 2012. Mexico added 587MW of renewable capacity in 2012 – a 28% jump from the previous year. **Jamaica**, **Panama** and Uruguay all had solid renewable installation numbers in 2011 but did not sustain solid growth in 2012 as few projects were commissioned. The Bahamas, Barbados, Paraguay, Suriname and Trinidad & Tobago continue to have no large-scale renewable capacity.

Biofuels production and production growth rate

Brazil, the world's second-largest ethanol producer, maintains its lead in biofuel production in the region. No country is close to reaching Brazil's annual 25bn liters production but several saw strong growth last year. Paraguay boosted production to 21m liters, up 43% from the prior year. Guatemala reached 13m liters, up 15% from 2011. Both countries came top for the biofuels production growth rate indicator. The rankings for biofuels producers did not change, with Brazil, Argentina and Colombia topping the list.

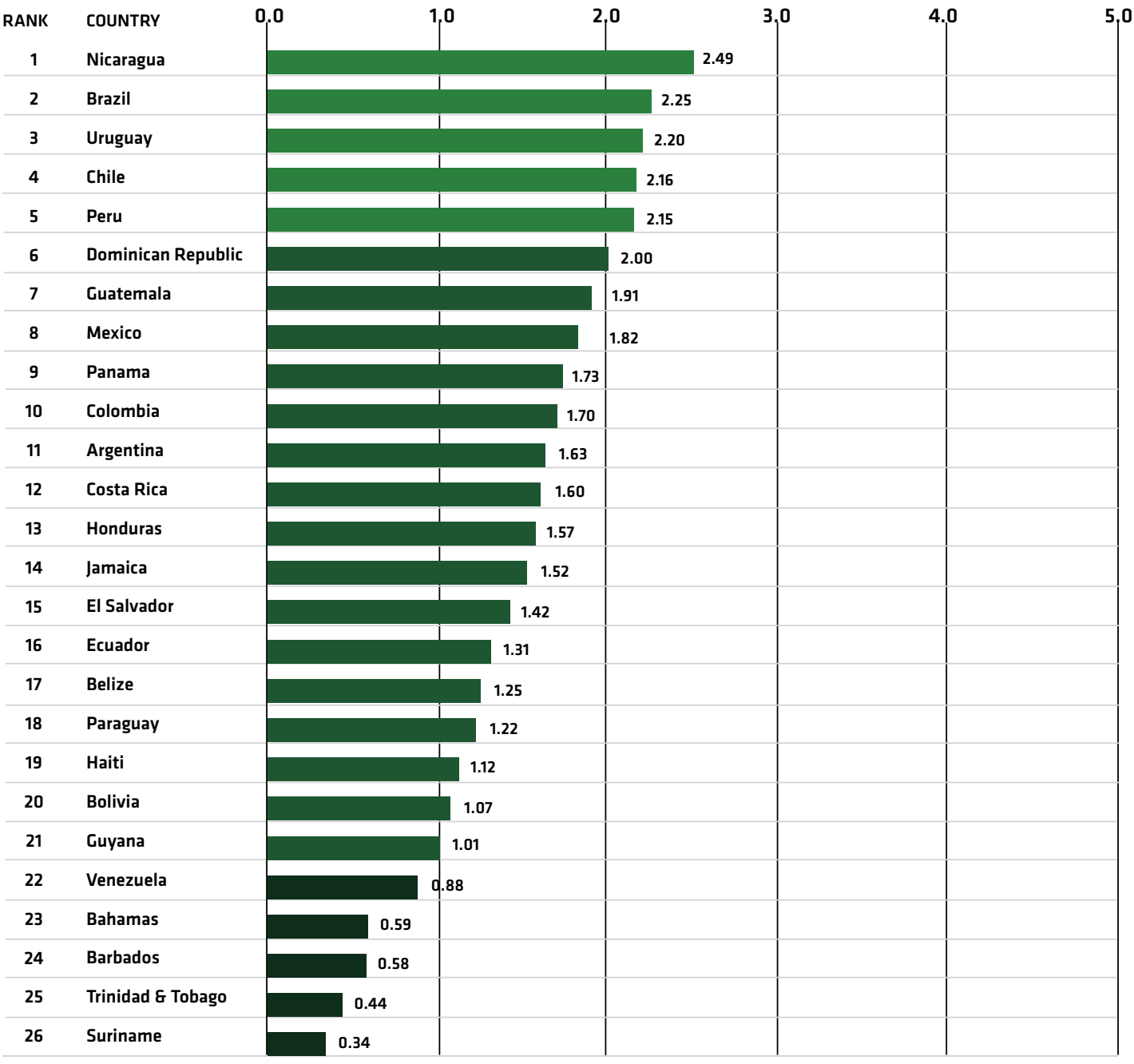
Price attractiveness

Power prices are an important factor in determining the economic competitiveness of renewables vis-à-vis fossil sources. Solar or other small-scale renewable solutions may be an attractive option for residential or commercial consumers paying high power prices. Markets with high wholesale spot power prices or high industrial end-user prices signal opportunities to developers to build alternative renewable capacity.

4. Please visit http://climatescope.fomin.org to assign a 100% weight to Parameter I and see results reshuffle live.
5. For more details, please refer to the Methodology section on page 16.
6. Climatescope follows Bloomberg New Energy Finance long-standing definition, and does not consider hydro projects with capacity of over 50MW as a low-carbon source of power generation.

2013 Climatescope scores

Parameter I



Colors show range for overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

Jamaica continues to be the most expensive electricity market in the region for retail consumers due to its heavy reliance on oil and diesel for electricity generation. Other Caribbean nations **Guyana**, Haiti, the Bahamas and the **Dominican Republic** were also among the top 10 countries for highest electricity prices. Uruguay and Nicaragua have the highest retail electricity prices in South and Central America, respectively. On the wholesale side, half the countries in the region have functioning spot markets. Panama still has the highest spot power price in the region, followed by Uruguay and the Dominican Republic.

Power demand growth & electrification rate

The last two indicators comprising Parameter I are a proxy for analyzing the potential for market expansion in terms of expected power demand growth and the percentage of the population not yet connected to the grid. Paraguay, Panama and the Dominican Republic had the highest growth rates for power demand. Meanwhile, Trinidad & Tobago, Uruguay and Barbados actually saw power demand decline in 2012 and thus received no score for this indicator. Haiti still has the lowest electrification rate in the region at just 15%. Honduras and Nicaragua come next, with 73% and 77%, respectively. These are markets where residents may be able to use renewable energy to attain basic electrification access.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

The Clean Energy Investment and Climate Financing parameter examines historic clean energy investment as well as the availability and terms of financing for projects. It also explores microfinance involvement in green financing with an eye toward micro entrepreneurs and individuals looking for low-carbon solutions to improve their business or living standards.

DESCRIPTION

Parameter II tracks different asset classes, sources and types of funding for clean energy and accounts for 30% of a country's overall *Climatescope* score. Its 14 indicators do not measure absolute dollar values, but rather examine commitments as a percentage of a given country's economy.[7]

Total new investment in clean energy dropped by 12% globally, Latin America and the Caribbean also experienced a decrease, but of only 3.2%. In 2012, the region received $16.8bn in clean energy financing, which brought cumulative investment to $110bn since the start of 2006. The drop can be mainly attributed to a slowdown of Brazilian renewable investments. Historically, **Brazil** has accounted for three quarters of total commitments in the region but in 2012 its share declined to 55% ($9.2bn). **Mexico**, **Chile** and **Peru** saw investment surges compared with previous years, attracting $2.9bn, $2.1bn and $1.2bn, respectively. Others, including **Argentina**, **Nicaragua**, **Dominican Republic**, **Ecuador** and **Uruguay** also saw gains.

PARAMETER II: TOP AND BOTTOM-RANKED COUNTRIES

The shift in investment dynamics is reflected in Parameter II's rankings. While Nicaragua retained the top spot, Brazil dropped to seventh from second in last year's edition. Peru went from fourth to second, followed by Chile, which climbed an impressive 13 positions. Mexico and the Dominican Republic also moved up, finishing fourth and fifth, respectively. **Guyana**, **Barbados** and **Suriname** did not receive any renewable investment in 2012 and finished in the bottom three for Parameter II.

PERFORMANCE BY INDICATOR

Clean energy investment

This indicator looks at financial commitments in renewable energy, assessing four different investment types: asset finance, corporate finance, venture capital and private equity and small distributed-scale projects.

Nicaragua saw the highest rate of clean energy investment relative to the size of its economy. Some $292m was committed in 2012, representing 3% of its $10.5bn economy. Brazil and Mexico, which had the highest absolute amount of clean energy financing – at $9.2bn and $2.9bn – only took fourth and 15th place in this indicator, due to the size of their economies.

Clean energy growth rates

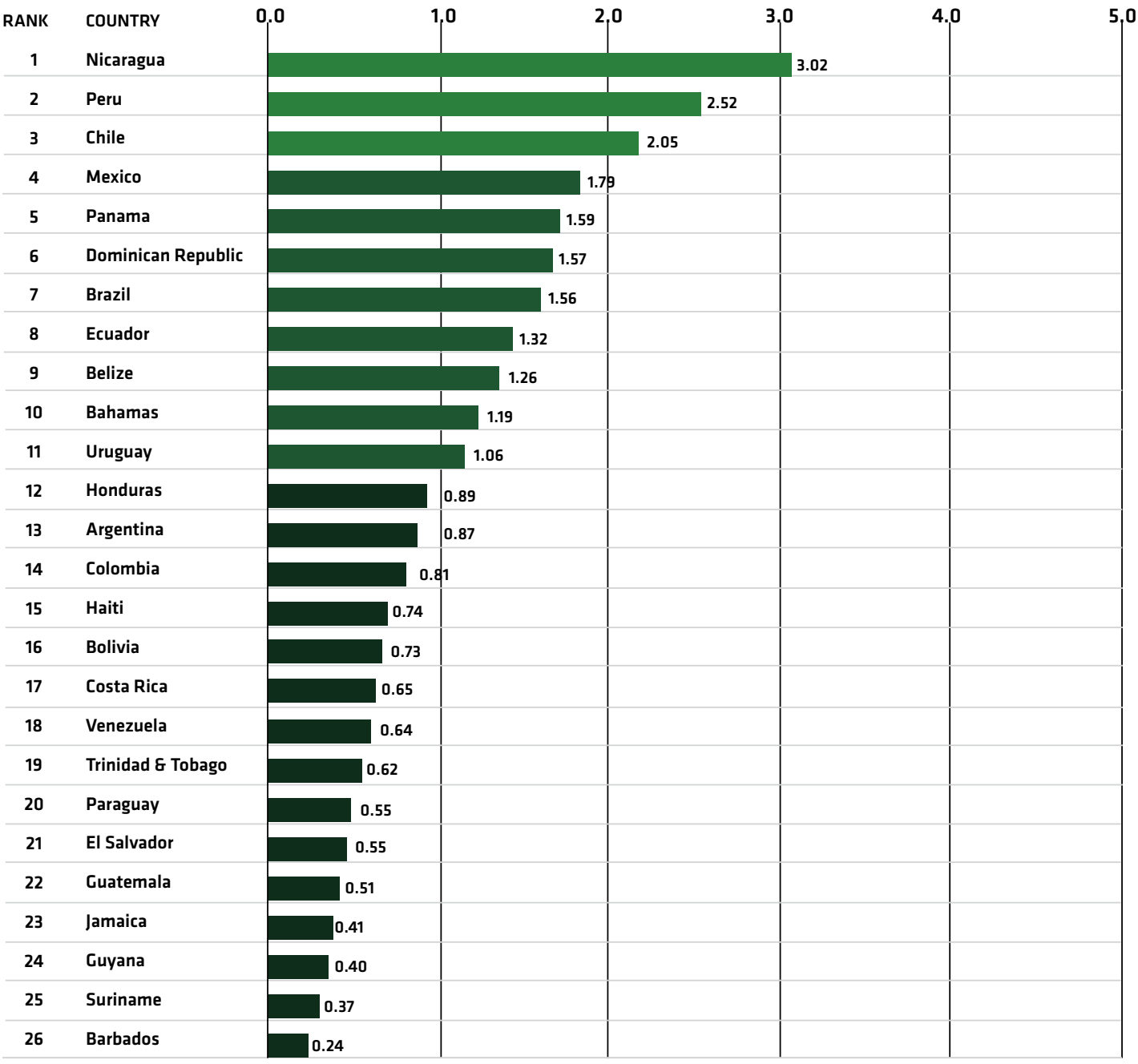
The countries with the highest growth rates for clean energy investment also had the biggest improvements for Parameter II: Peru (93%), the Dominican Republic (62%), Mexico (55%), Chile (50%) and Ecuador (44%). These impressive growth rates were driven by local weak investment levels in 2011 but also Latin America surging as an emerging market for renewable energy and increasingly attracting international and local players.

Loans, grants & grant programs

Parameter II also examines different types of funding source for renewables, including grants, investments by local players and microfinancings. In 2012, Nicaragua, Barbados and **Honduras** received the highest levels of grants relative to the size of their economies. These came largely from multilateral institutions such as the IDB and the World Bank.

7. Please refer to the Methodology section, page 17, for more details on how indicators are levelized.

2013 Climatescope Scores
Parameter II



RANK	COUNTRY	
1	Nicaragua	3.02
2	Peru	2.52
3	Chile	2.05
4	Mexico	1.79
5	Panama	1.59
6	Dominican Republic	1.57
7	Brazil	1.56
8	Ecuador	1.32
9	Belize	1.26
10	Bahamas	1.19
11	Uruguay	1.06
12	Honduras	0.89
13	Argentina	0.87
14	Colombia	0.81
15	Haiti	0.74
16	Bolivia	0.73
17	Costa Rica	0.65
18	Venezuela	0.64
19	Trinidad & Tobago	0.62
20	Paraguay	0.55
21	El Salvador	0.55
22	Guatemala	0.51
23	Jamaica	0.41
24	Guyana	0.40
25	Suriname	0.37
26	Barbados	0.24

Colors show range for overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

Local investment by local players

In 2012, only 11 of the 26 Latin American and the Caribbean nations received some kind of clean energy investment from a local organization or financial institution. **Panama** had the highest share with 80% of the $160m committed in the country coming from five local developers. Brazil came second, due to the considerable participation of its national development bank (BNDES) in funding large-scale renewable projects.

Microfinance

Microfinance plays an important role in Latin American and Caribbean economies and also funds small-scale clean energy projects. As in 2011, Peru and Nicaragua had the highest level of green microfinance penetration this year. Of 465 microfinance organizations operating in the region and surveyed, 64 offer green micro products. Ten of these are based in Peru with an additional eight in Nicaragua and other six in Bolivia. **The Bahamas**, Barbados, **Belize**, **Colombia**, **Guyana**, **Suriname** and **Trinidad & Tobago** do not have any organizations offering green microloans.

Cost of debt

The last indicators of Parameter II focus on the cost of financing renewable projects. Bloomberg New Energy Finance conducted a survey of public and private financial institutions active in Latin America and the Caribbean examining the costs and conditions for financing clean energy projects in the region. Institutions in 13 countries responded to the survey.[8] Mexico, Brazil, Chile and Colombia have the best financing terms in the region, according to the survey. The survey also looked at swap rates to determine a proxy for countries that do not have any financed low-carbon energy projects. Swap rates are the interest paid for inter-bank borrowing. Colombia again had one of the lowest interest rates, followed by the Bahamas and Chile. At the other extreme, Jamaica, Honduras and **Paraguay** have the highest swap rates in the region.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Assessed on its own, the Low-Carbon Business and Clean Energy Value Chains parameter offers a significantly reshuffled list of countries with larger and more developed economies topping the list.

DESCRIPTION

The Low-Carbon Business and Clean Energy Value Chains parameter looks beyond renewable projects and policies to map financial, manufacturing and service industries which support clean energy sectors. Parameter III accounts for 10% of the Climatescope overall score. Inevitably, there is a strong link between the largest economies in the region and the countries in the top spots for Parameter III. Eight of the 10 best placed countries in this parameter are among the top 10 nations for GDP in Latin America and the Caribbean.[9]

PARAMETER III: TOP AND BOTTOM-RANKED COUNTRIES

Brazil and **Chile** took the top two slots for Parameter III as they did in last year's *Climatescope*. Both were also among the top three for all the indicators comprising this parameter. **Argentina**, **Mexico** and **Peru** complete the top five in the list. As in the 2012 edition, four Caribbean nations are among the bottom five for Parameter III, which is unsurprising given the size of their economies and limited deployment of renewables. **Haiti** fell 23rd on the list with **Barbados**, **Guyana** and **Suriname** all tied in 24th.

PERFORMANCE BY INDICATOR AND BY REGION

Financial institutions in clean energy

Parameter III consists of three indicators. The first assesses the presence of different types of financial institutions which have either provided funds for clean energy initiatives or have credit lines available for renewable projects. Brazil is the sole country in the region hosting all four types of organizations: banks, corporate finance, funds, and private equity/venture capital. Meanwhile, of the 26 countries in Latin America, 18 have at least one commercial bank active in the clean energy space based in their territory.

Clean energy value chains

The second indicator maps the presence of equipment providers in the region and looks more closely at the different manufacturing segments that comprise the following six clean energy sectors: biofuels, biomass & waste, geothermal, small hydro, solar and wind. There is a large presence of biomass and small hydro equipment providers in Central and South America. Manufacturing capacity for biofuels and wind tends to surge in countries once there is at least 250mLpa and 60MW in commissioned capacity, respectively. Brazil and Mexico are the only countries with a solid service basis for solar projects, while the value chain for geothermal plants remains at a very early stage in the region.

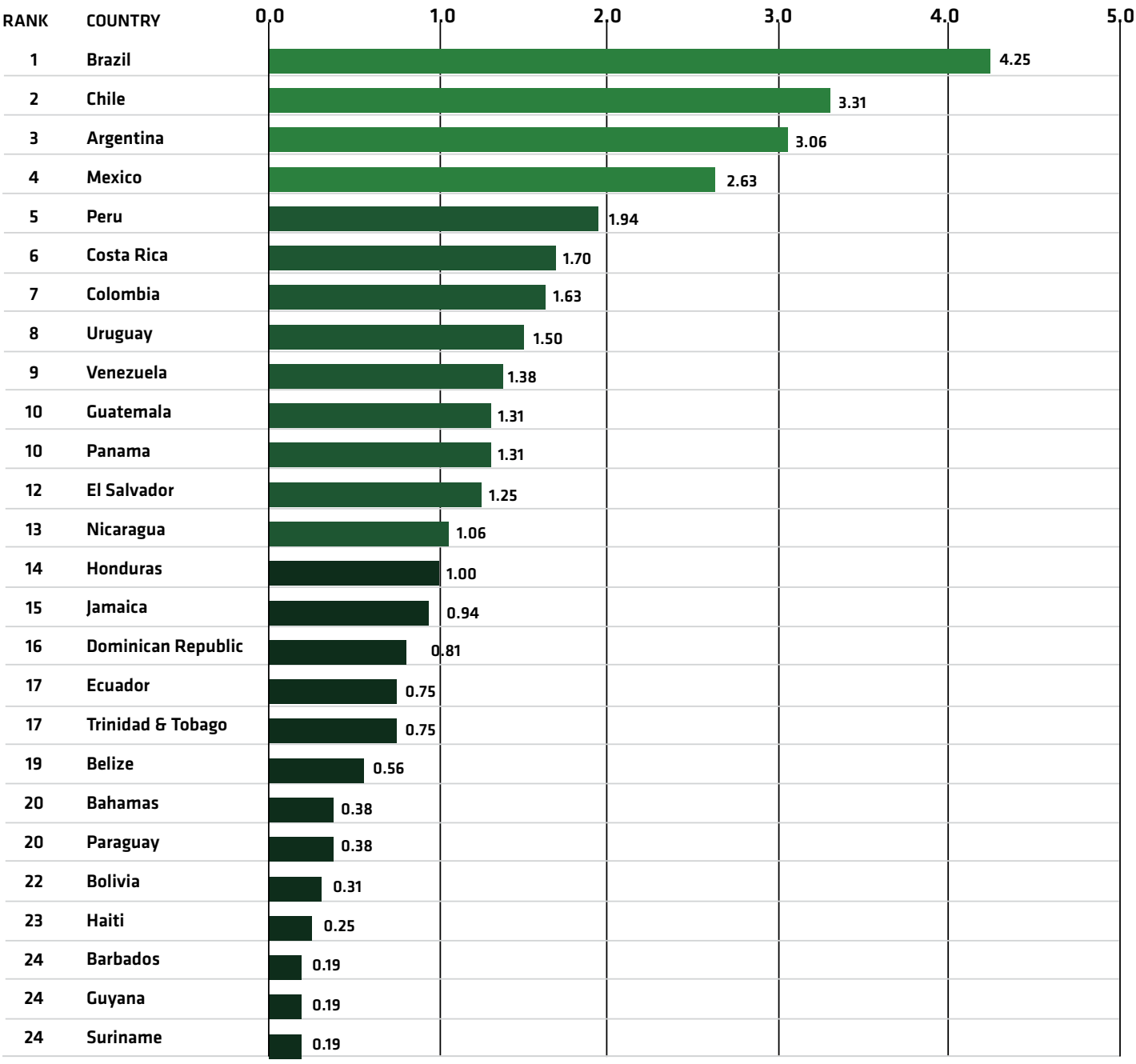
Caribbean

When looking at the technology value chains by sub-region, we see that technology-specific services are limited in the Caribbean. The countries with the most complete value chains – **Jamaica** and the **Dominican Republic** – also have a greater penetration of renewables. In these two countries, most of the segments present are developers or engineering services. In the **Bahamas**, Barbados, Guyana, Haiti, Suriname and **Trinidad & Tobago**, the clean energy value chain is almost non-existent.

8. Argentina, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Jamaica, Mexico, Nicaragua, Paraguay and Peru. For more details, please refer to the Methodology section page 17.

9. These are: Brazil, Chile, Argentina, Mexico, Peru, Colombia, Venezuela and Guatemala.

2013 Climatescope scores
Parameter III



Colors show range for overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

Central America & Mexico
Mexico's value chain is by far the most developed among the eight countries. This is due to the size of the country's manufacturing capacity and renewable energy penetration, as well as its proximity and ability to export to the US market. **Costa Rica** has the next most developed clean energy value chain, thanks to the substantial presence of small hydro and wind projects. **El Salvador**, **Guatemala**, **Honduras**, **Nicaragua** and **Panama** have sparse clean energy technology sub-sectors, with only developers or engineering services present in these countries. **Belize** has the least developed value chain in all sectors.

South America
Brazil has the most complete value chain across all sectors, with the exception of geothermal. Argentina and Chile have significant biomass & waste and wind value chains, while the former is also strong in biofuels and the latter in small hydro. **Colombia**, Peru and **Uruguay** have developed a solid value chain for biofuels, biomass & waste and small hydro. Although all three have small- or large-scale developers for solar and wind, they do not have equipment providers based in their territory. Finally, **Bolivia**, **Paraguay** and **Venezuela** have a very limited presence of equipment providers and did not stand out in this indicator.

Clean energy service providers
The last indicator – clean energy service providers – examines services that cater to the development of clean energy. This includes marketing, financial and legal operations. Brazil, Chile and Mexico have a significant advantage over other countries in the region, with a strong basis of services, ranging from distributors to insurance providers and lawyers. The rest of the region has a very limited offering of service segments. Technical consultancies are present in 18 of the 26 countries throughout the region.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Parameter IV was revamped for the 2013 edition of *Climatescope* as explained in the methodology section.[10] It now encompasses three categories involving 13 indicators.

DESCRIPTION

The last parameter – Greenhouse Gas (GHG) Management Activities – accounts for 20% of a given country's overall score. It assesses private and public efforts to mitigate GHG emissions in three spheres: carbon offset projects, policy and corporate initiatives.

PARAMETER IV: TOP AND BOTTOM-RANKED COUNTRIES

Looking solely at Parameter IV, we see that Latin America's largest economies stood out and took the first five spots. Brazil and Mexico swapped places this year, with the former coming first and the latter a close second. Next on the list were Chile, Colombia and Argentina. Meanwhile, the bottom of the list is accounted for by carbon-intensive countries Jamaica (22nd) and Trinidad & Tobago (23rd), along with smaller economies such as Belize (24th), Suriname (25th) and Haiti (26th).

PERFORMANCE BY CATEGORY

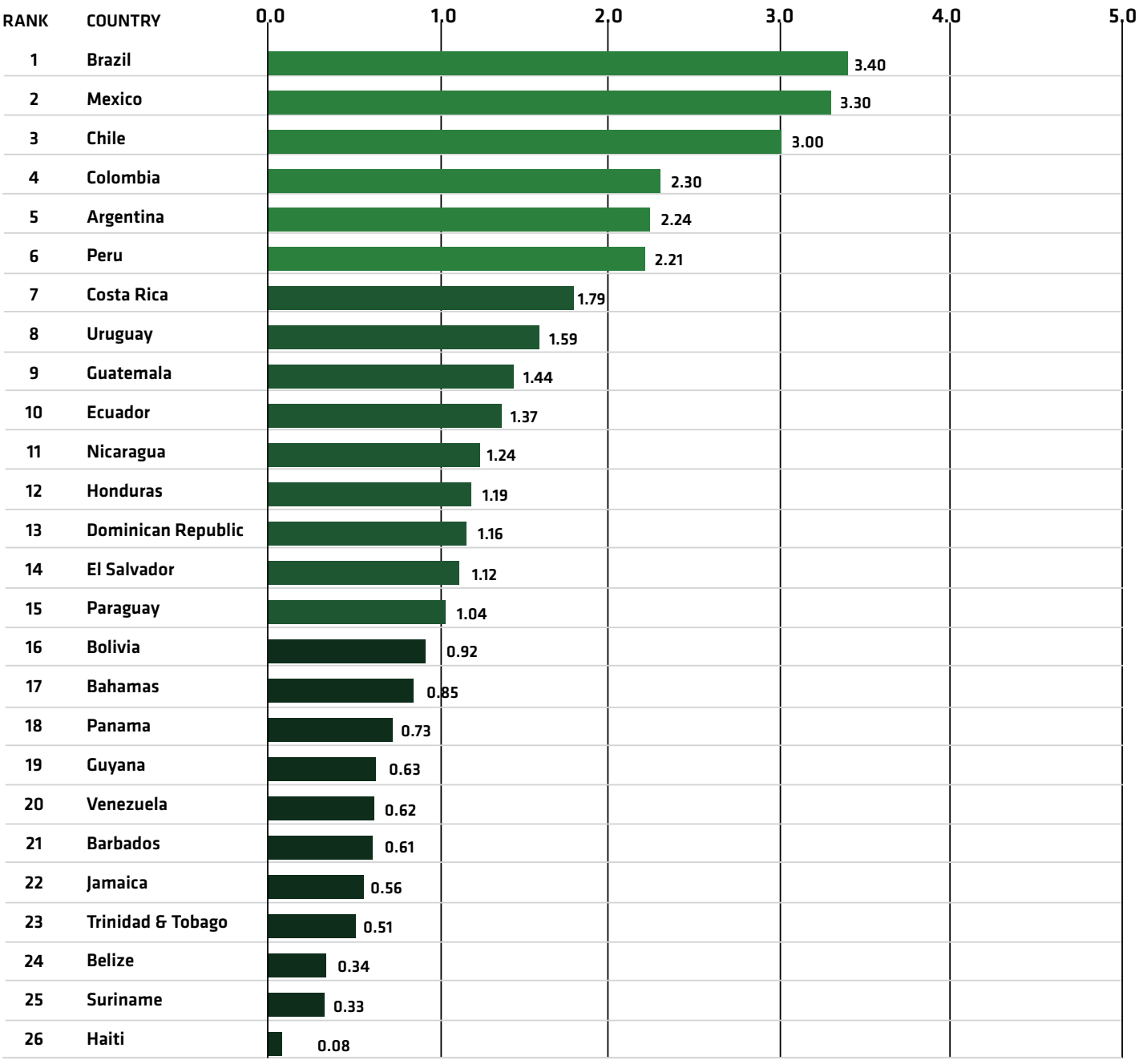
Carbon offset projects
The first category, carbon offsets, looks at existing emission reduction projects under four different standards[11] and countries' potential for new projects. Latin America and the Caribbean is a dynamic region for carbon offset project development and has the second-highest number of projects, just behind the Asia-Pacific region. More developed economies fared better in terms of the indicator looking at historic offset activity, with Argentina, Brazil, Chile, and Mexico scoring above the average on a levelized basis on number of projects and credits issued. However, there are still five countries in the region that do not host any carbon offset projects: Barbados, Haiti, Suriname, Trinidad & Tobago and Venezuela.

The carbon offsets category also examined the potential for project development in countries in four specific areas: energy efficiency, REDD,[12] anthropogenic methane emissions and high global warming potential gases (GWP). Uruguay, Trinidad & Tobago and Brazil had the most opportunities for new offset projects. Uruguay has considerable potential to mitigate methane and high GWP emissions, largely ranging from cattle and farming practices. Trinidad & Tobago, which has an economy centered on the oil and gas industry, also has opportunities for methane emissions reductions and energy efficiency. Lastly, Brazil has great potential to reduce high GWP emissions and deploy more REDD projects.

Corporate Awareness
Parameter IV's third and final category, Corporate Awareness, looks at voluntary actions by companies in given nations to become more sustainable and transparent, by improving energy efficiency and reporting and reducing GHG emissions. Capacity building efforts were also included in this category, with one indicator looking at environmentally-focused business courses and think tanks. Again, larger economies – Brazil, Colombia, Chile and Mexico – stood out in this category.

10. For more details, please refer to the Methodology section on page 28.
11. The standards are Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), Gold Standard and American Carbon Registry (ACR). For more details, please refer to the Methodology section on page 28.
12. United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries.

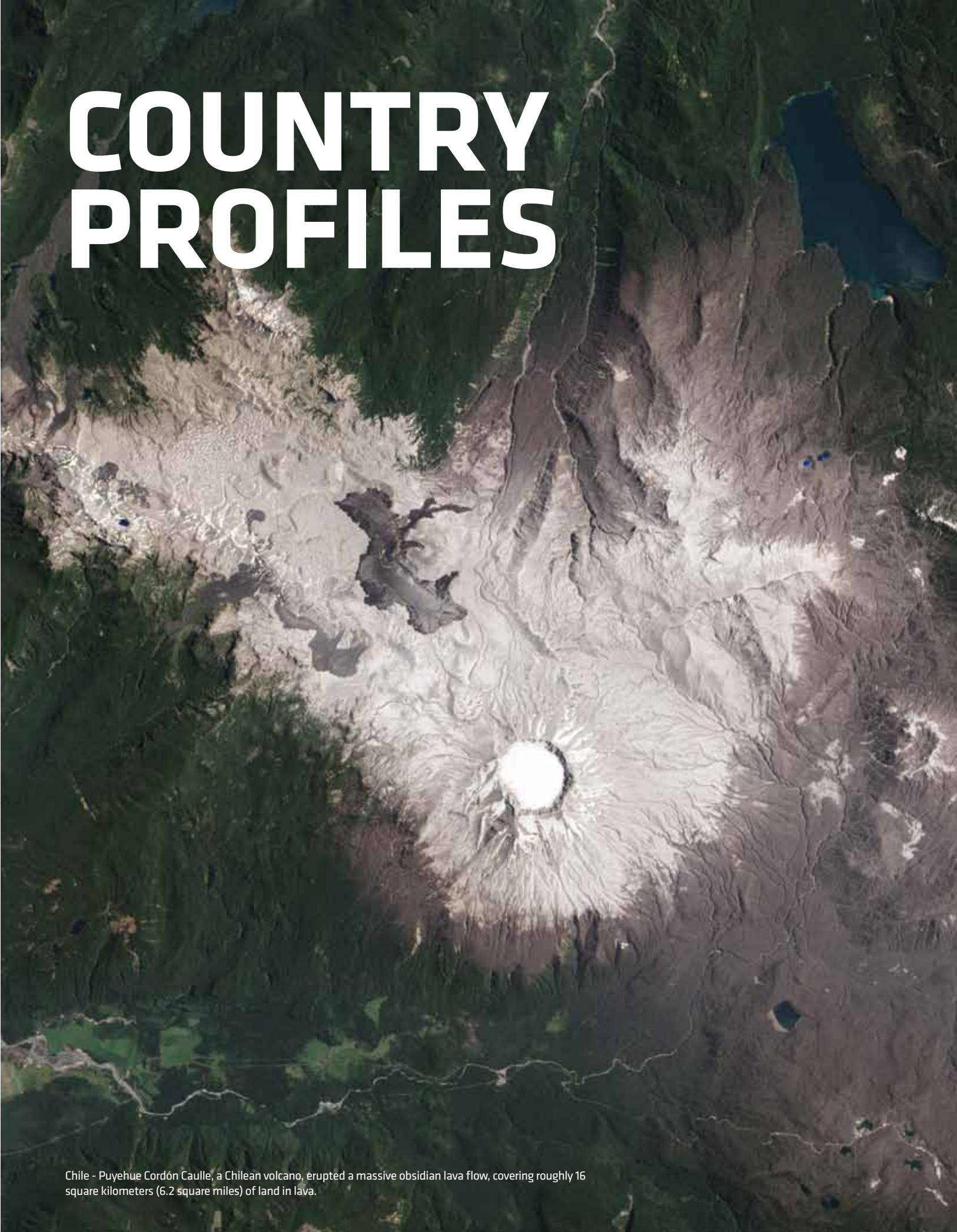
2013 Climatescope scores
Parameter IV



Colors show range for overall score

0.0 - 1.00 | 1.01 - 2.00 | 2.01 - 3.00 | 3.01 - 4.00 | 4.01 - 5.00

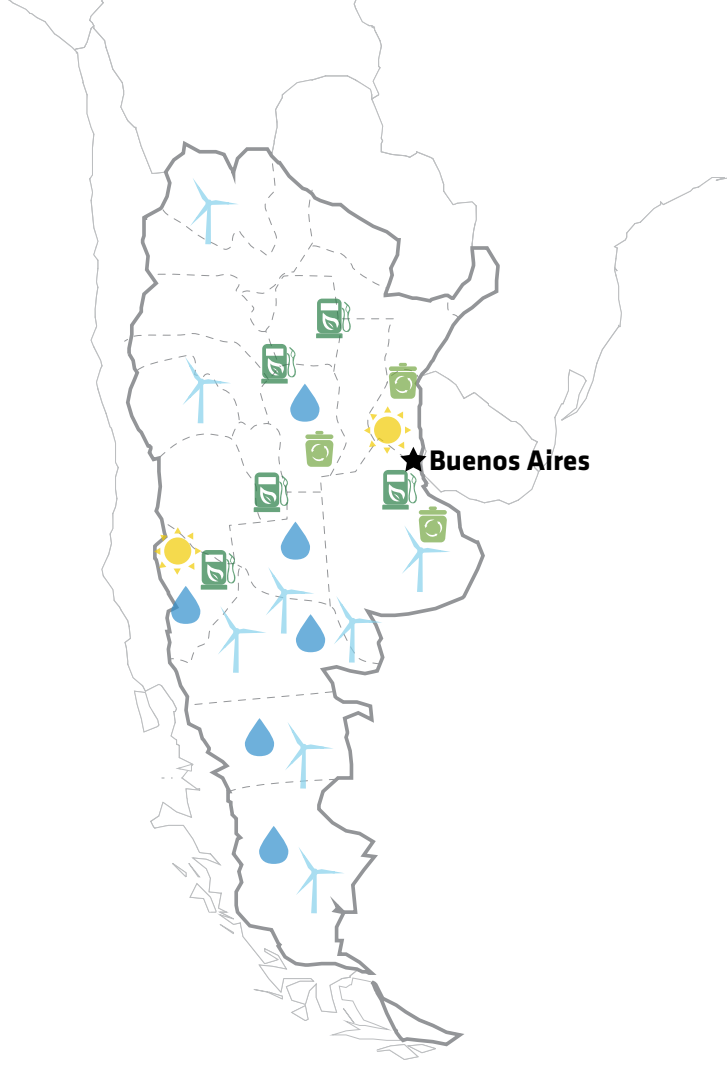
COUNTRY PROFILES



Chile - Puyehue Cordón Caulle, a Chilean volcano, erupted a massive obsidian lava flow, covering roughly 16 square kilometers (6.2 square miles) of land in lava.

SOUTH AMERICA

Argentina



GDP[1]: **$743.1bn**
Seven-year economic growth rate[2]: **8%**
Population[3]: **41m**
Total clean energy investment, 2006-2012[4]: **$2.1bn**
Installed power capacity[5]: **34GW**
Renewable share[6]: **2%**
Total clean energy generation[7]: **1,386GWh**
Top energy authority: **Ministry of Planning**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
7	11	1.66

PARAMETER	RANKING	SCORE
I. Enabling Framework	11	1.63
II. Clean Energy Investment & Climate Financing	13	0.87
III. Low-Carbon Business & Clean Energy Value Chains	3	3.06
IV. Greenhouse Gas Management Activities	5	2.24

SUMMARY

Argentina moved up four places from the previous *Climatescope*, finishing seventh this year with an overall score of 1.66. The country fared well on the Low-Carbon Business and Clean Energy Value Chain and the Greenhouse Gas Management Activities parameters, which together make up 30% of the overall *Climatescope* mark.

Argentina scored above the country average for the breadth of clean energy-promoting policies in place. On the biofuels production indicator, it was outscored only by Brazil.

The country faces stronger headwinds in making progress on clean energy deployment than other major South American economies due to the national policy risk perceived by outside investors and economic turmoil. The country's relatively high cost of debt, and sparse availability of local and foreign capital, make it difficult for project developers to secure financing.

This year, the country improved on its already impressive score for the Low-Carbon Business and Clean Energy Value Chains parameter. On the Greenhouse Gas Management Activities parameter, Argentina still has room to advance before reaching a rank consistent with its status as one of the region's three largest economies.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investment in this period.
5.Source: Secretaría de Energía. Notes: For 2011.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

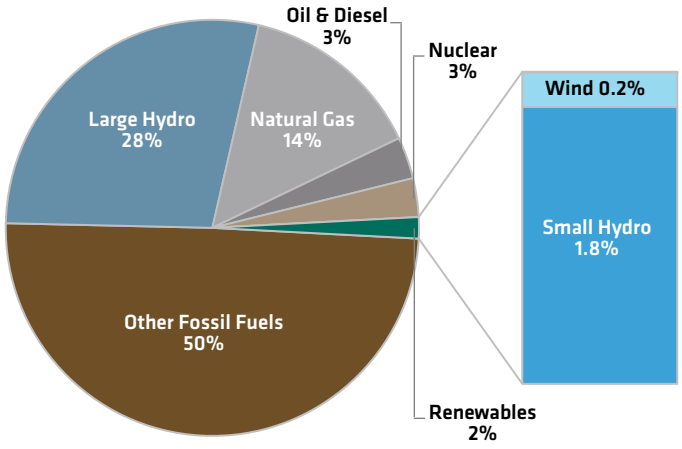
I. ENABLING FRAMEWORK

Ranking 11 / Score 1.63

Argentina ranked 11th for the Enabling Framework parameter, and its 1.63 score is just above the average of 1.46 for all *Climatescope* countries. It scored particularly well on the indicator assessing its clean energy policy framework as Argentina has six of eight possible policy types. Among all countries in the survey, the average was just three.

INSTALLED POWER CAPACITY BY SOURCE, 2011 (GW)

34GW total installed capacity



Source: Bloomberg New Energy Finance, Secretaría de Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers

Argentina had the second largest installed annual production capacity of biofuels in the region in 2012, with 3.2 b liters. Its biofuels capacity grew 9.3% last year, in contrast with Brazil, the regional leader by production, which saw its capacity decline slightly. Argentina's biofuels production likely would be even higher had blending mandates of 7% for biodiesel and 5% for ethanol been enforced more rigorously.

KEY POLICIES

Energy Target	8% renewable electricity consumption by 2016.
Feed-in Tariff	FiT legislation approved in 2006, but has not been implemented.
Auction	GENREN held 1 auction, contracting 760MW of wind, 110MW of biomass, 20MW of solar PV and 10MW of small hydro plants.
Biofuels	7% biodiesel blend with conventional diesel and 5% ethanol blend with conventional gasoline.
Tax Incentives	VAT tax rebate and accelerated depreciation benefit.

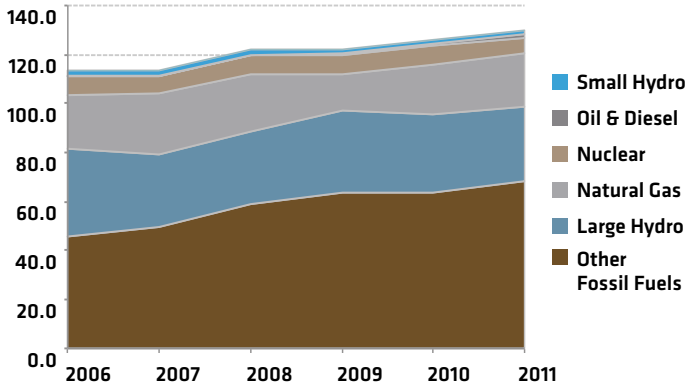
Source: Bloomberg New Energy Finance Policy Library

In 2012, the country experienced year-on-year growth in all the primary renewable generation technologies except small hydro. Solar generation expanded to 1.6GWh last year from just 0.09GWh in 2011. Wind generation rose by almost 7%, to 27GWh. Biomass generation rose slightly, while small hydro fell about 13%. With a growth rate from all generation sources of only 2.8%, it is clear that wind and solar are increasing their share of the Argentine market. But they and other clean technologies remain far too limited to exert a meaningful impact on the level of greenhouse gas emitted by the country's power sector.

Argentina's low retail power prices present a significant barrier to clean energy growth. Even with the withdrawal of some subsidies last year, electricity rates remain lower than those of neighboring countries. Yet the cost of producing renewable electricity continues to fall, suggesting that the cost barrier will be overcome sooner rather than later if Argentina maintains its power market liberalization efforts.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2011 (TWh)

129TWh total generation



Source: Bloomberg New Energy Finance, Secretaria de Energía
Note: Some values cannot be graphically represented due to scale, please see source data fot the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

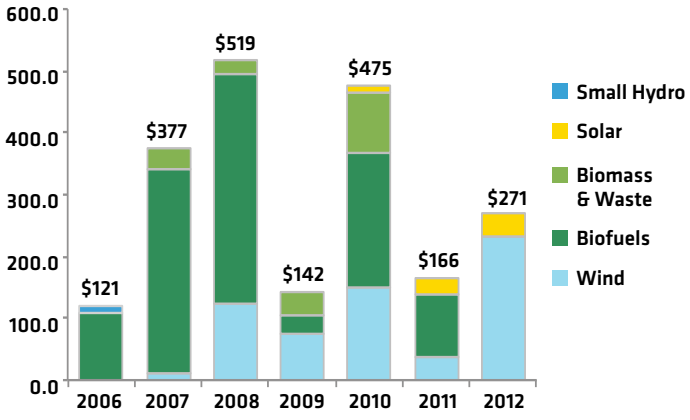
Ranking 13 / Score 0.87

Argentina moved up two slots in the Parameter II rankings from last year's *Climatescope*, to reach 13th position with a score of 0.87.

Total investment in Argentina's clean energy industry rebounded in 2012 to $271m – a 63% gain compared to 2011. For the first time, wind captured the largest share of capital, with about $231m. The country's previous record for wind was a 32% share of financing in 2010. The growth is a direct result of projects coming online from contracts tendered in 2011 and 2012.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$2bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investment includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

Perhaps as significant was the absence of capital directed at Argentine biofuels projects. Such investment, focused on the country's soy biodiesel production chain as well as that of corn ethanol, constituted the biggest share of all green capital in five of the six years from 2006 to 2011.

Solar investment maintained its steady growth, increasing more than 39% from the 2011 total of $39m. There was no measurable solar investment in Argentina prior to 2010.

Looking ahead, the continued rise of clean energy investment in Argentina is threatened by foreign investor's worries about the national government's respect for private industry. The nationalization of local assets owned by Spain's biggest oil company Repsol will slow capital flows and does little to address the country's stubbornly high interest rates. At more than 8%, Argentina's average cost of debt is almost twice that of Mexico and more than 300 basis points above that of Brazil.

LOCAL INVESTMENTS BY LOCAL PLAYERS

2012 Total Local Investments	$208m

Top Three Local Investors, 2012 ($m)

1st	Banco de Inversión y Comercio Exterior SA	$108m
2nd	Banco de la Nación Argentina	$69m
3rd	Industrias Metalúrgicas Pescarmona SA (IMPSA)	$31m

Top Three Asset Finance Deals, 2012 ($m)

Rank	Sector	Project (MW)	Developer	Value
1st		Malaspina I (50MW)	IMPSA	$100m
2nd		Koluel Kaike II (25MW)	IMPSA	$81m
3rd		Chimbera II (3MW)	360 ENERGY	$15m

Source: Bloomberg New Energy Finance
Notes: Figures refer to asset finance investments committed in 2012 and include balance sheet commitments.

Argentina has yet to see the kind of commercial forays into distributed renewable energy generation that have taken place in neighboring countries. However, the volume of green micro loans spiked in 2012, suggesting that distributed power may soon debut in the Argentine portfolio.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	1/16
Green Microborrowers	1,500
Total Amount of Green Microloans Disbursed	$750,000
Average Cost of Green Microloans	3%
Average % of Loans Portfolio	5-10%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 16 MFIs in Argentina, 13 responded to the survey.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 3 / Score 3.06

Argentina climbed three positions on this parameter from *Climatescope* 2012, finishing third with a score of 3.06.

The country has three types of financial institutions present locally: commercial banks, funds and private equity firms. Argentine organizations have had to play important roles in financing renewable projects, given perceived risks on the part of foreign investors. These local institutions have included state-owned Banco la Nación Argentina and state development bank Banco de Inversión y Comercio Exterior (BICE).

Argentina has no less than 24 of a possible 40 segments of the various clean energy value chains in place, spanning all technologies included in the survey. It has complete chains for biofuels and biomass and waste. This reflects the country's well developed biodiesel industry, which primarily employs soy as feedstock. Argentina has almost complete value chains for the geothermal, small hydro and wind sectors.

Argentina also has eight segments present in the service provider sector, two more than was recorded for the last survey. The country now has at least one active company providing technical consultancy, education, banking and law assistance services.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
✓	**Funds**	✓	**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	**Engineering Company ; Producers ; Distribution and Blending**
Biomass & Waste	**Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation**
Geothermal	**Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation;** Turbine & Power Block ; Balance of Plant ; Project Development ; O&M ; Power Purchase
Small Hydro	Pipes ; **Turbines ; Project Development ;** Civil Works/Builder ; **Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; **Generators ;** Blades ; **Turbines ; Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 5 / Score 2.24

Argentina came in fifth overall on this parameter, with a score of 2.24. It performed well on the carbon offsets category, ranking above the Latin American and Caribbean average for historical activity and risk to develop CDM projects. 39 CDM projects were observed in the country, with the largest segments occupied by power generation (11) and waste management (11). It has at least five energy efficiency projects, and eight others are spread across methane, forestry and other industries.

Argentina is in the process of developing a voluntary registry for corporate greenhouse gas emissions, and should follow the model of existing registries in Brazil and Mexico. As for corporate initiatives, there are only three companies in the country that report energy efficiency and emission reduction actions: Gas Natural Ban, Arcos Dorados Argentina, and Ledesma. In spite of a limited number of companies, Argentina placed above the regional average under the corporate awareness category.

Bahamas

GDP[1]: **$11.1bn**
Seven-year economic growth rate[2]: **2%**
Population[3]: **0.4m**
Total clean energy investments, 2006-2012[4]: **$4.6m**
Installed power capacity[5]: **575MW**
Renewable share[6]: **N/A**
Total clean energy generation[7]: **N/A**
Top energy authority: **Ministry of Environment**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
21	21	0.80

PARAMETER	RANKING	SCORE
I. Enabling Framework	23	0.59
II. Clean Energy Investment & Climate Financing	10	1.19
III. Low-Carbon Business & Clean Energy Value Chains	20	0.38
IV. Greenhouse Gas Management Activities	17	0.85

SUMMARY

The Bahamas finished *Climatescope* 2013 in 21st place, with a 0.80 overall score. The country made very little progress compared to last year's edition and thus stayed level in the rankings. Thanks to ample sun, a well-developed financial sector, and high priced imported energy, the Caribbean archipelago has excellent opportunities for local clean energy development that have gone almost entirely unexploited to date.

Due to its tourism-based economy, the Bahamas has the highest GDP per capita among all 26 countries assessed in this report. However, the entire archipelago relies solely on oil for electricity generation, with 575MW of on-grid capacity. Since the country produces no fossil fuels, Bahamian consumers must bear the burden of high electricity rates associated with imports; retail electricity prices averaged $0.23/kWh in 2012.

Thanks in part to its role in international banking, the Bahamas has a highly developed financial system and offers the second-lowest swap rates in the region. Such rates could eventually result in low-cost financing becoming available to renewables and a jump-starting of development in the country.

Until now, however, renewables have had a very limited presence on the islands. The Bahamas has no policy incentives directed at the sector and only $4.6m was invested in clean energy between 2006 and 2012.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Estimate based on data from Bahamas Electricity Corporation and Grand Bahamas Power Company for the 2012 period.
6. Ibid. Notes: N/A refers to no renewable installed capacity.
7. Ibid. Notes: N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

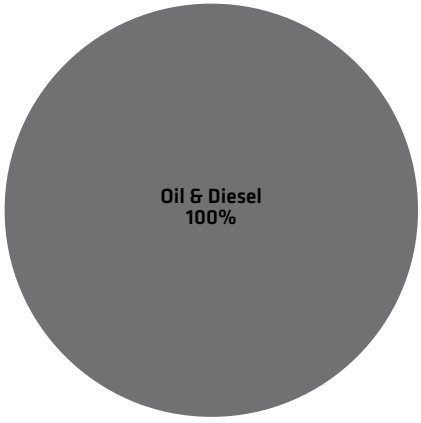
With high insolation rates, high power prices and a healthy financial system, the Bahamas has vast potential for solar energy deployment. Despite these favorable conditions, however, the country has seen very little renewable energy-related activity so far.

The Caribbean archipelago had its weakest performance on Parameter I, which assesses historic clean energy deployment and conditions for renewable development. It came in 23rd, with a 0.59 parameter score. The island nation does not have any policy incentives to encourage clean energy development. In addition, the Bahamas' small power market is dominated by two utilities, one private and one public. This set-up inhibits the entrance of new players.

The island nation solely relies on fossil fuels for electricity generation throughout its 575MW national grid. This dependence on oil-based power generation has a big impact on consumers' electricity bills: Bahamians pay the fifth-highest price for power among the 26 countries assessed in *Climatescope*, averaging $0.23/kWh. Industrial customers pay even more – a striking $0.34/kWh.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (MW)

575MW total installed capacity



Source: Bloomberg New Energy Finance
Notes: Estimate based on Bahamas Electricity Corporation and Grand Bahamas Power Company data.

The Bahamas achieved its best score in the Clean Energy Investment and Climate Financing parameter, mostly due to its well-developed financial system and low borrowing rates. It has the second-lowest swap rate among all Latin American and Caribbean countries; only Colombia offers lower rates.

From last year's report, there were no major changes in the country's clean energy value chain. As a result, the country remained in 20th place on Parameter III.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	**Feedstock Supply ;** Manufacturing Equipment ; System Integration ; Project Development ; Power Generation
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; Project Development ; **EPC ;** Owner/Operator

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. The Bahamas has no companies in the geothermal, small hydro and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

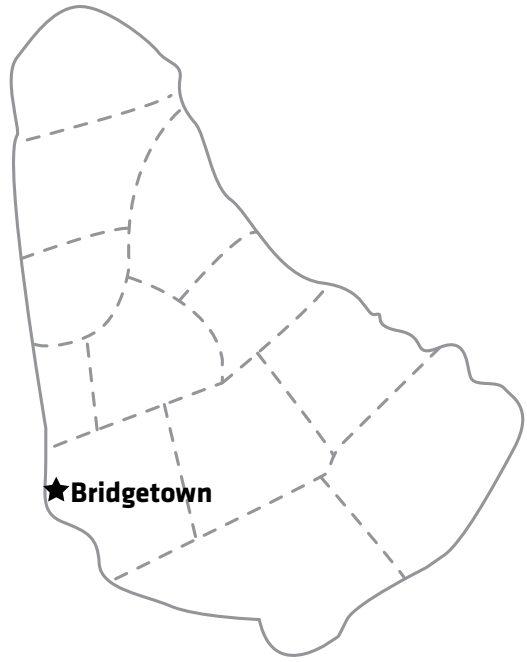
On the Greenhouse Gas Management Activities parameter, the Caribbean island nation made it to 17th position. It has one project operating under the UN's Clean Development Mechanism (CDM): a 1MW landfill gas plant located in Freeport, Grand Bahama Island. Unavailable data for anthropogenic methane and high global warming potential gas emissions affected the country's score on the carbon offsets potential indicator. On the corporate awareness category, the country did not score in five out of six indicators assessed. But it received a good score for the environmentally-focused think tanks indicator, since there is at least one organization present in the country.

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✗
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Barbados



GDP[1]: **$7.1bn**
Seven-year economic growth rate[2]: **2%**
Population[3]: **0.3m**
Total clean energy investments, 2006-2012[4]: **N/A**
Installed power capacity[5]: **239MW**
Renewable share[6]: **N/A**
Total clean energy generation[7]: **N/A**
Top energy authority:
Energy Division, Office of the Prime Minister

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
25	20	0.45

PARAMETER	RANKING	SCORE
I. Enabling Framework	24	0.58
II. Clean Energy Investment & Climate Financing	26	0.24
III. Low-Carbon Business & Clean Energy Value Chains	24	0.19
IV. Greenhouse Gas Management Activities	21	0.61

SUMMARY

In *Climatescope* 2013, Barbados declined five positions to penultimate place, with a 0.45 score. The Caribbean island was among the bottom three countries in three of four parameters assessed. It has been implementing a framework to spur renewables, including policy incentives and grant-sponsored programs. However, these initiatives have yet to produce a significant impact on renewable capacity deployment.

In 2012, Barbados committed to source 29% of its electricity from renewables by 2029. Currently, oil- and diesel-powered plants account for all of its 239MW power generating capacity though small-distributed renewable technologies are starting to be adopted to help reduce the island's oil dependency. In 2010, Barbados's power utility established a net metering program, which included 25 consumer generators as participants until the end of 2012. Last year, a private company financed the purchase of 1.4MW of solar photovoltaic panels to help reduce its electricity bill and carbon footprint.

Since 2006, Barbados has received $143m in grants to support renewable energy. The island is one of the two countries with the highest grant inflows relative to the size of its economy. Given its renewable target and financial inflows, Barbados must jump start its clean energy industry and capacity deployment, so it can build a green economy and improve its *Climatescope* score.

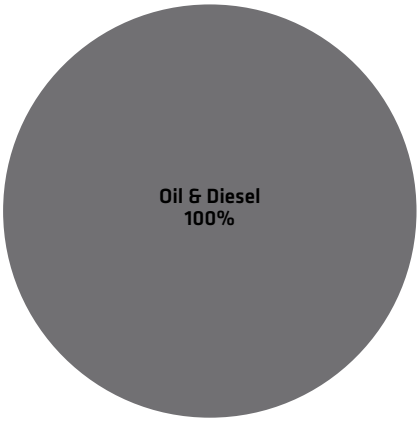
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Barbados Light & Power Company. Notes: For 2012
6. Ibid. Notes: N/A refers to no renewable installed capacity.
7. Ibid. Notes: N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Barbados did not fare well on the Enabling Framework parameter, scoring 0.58 and landing just below the Bahamas at 24th place. The island nation received a low mark for nine out of 13 indicators assessed in Parameter I. It currently has no grid-connected renewable capacity, and as a result Barbados did not receive a score for four indicators under the clean energy penetration category. The country also has a high electrification rate (98%) and no clean energy electrification program, which depressed its parameter score. Like others in the Caribbean, Barbados has a power market controlled by a vertically integrated monopoly utility that relies heavily on imported fossil fuels for electricity generation. However, the country is committed to reducing its oil dependency and in May 2012 hosted the Achieving Sustainable Energy for All in Small Island Developing States conference where it announced an ambitious renewable energy target of 29% by 2029. It is now one of the few countries in the Caribbean to have such a mandate.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

239MW total installed capacity



Source: Bloomberg New Energy Finance, Barbados Light & Power Company

The sunny island has enormous potential for solar energy and small-scale projects are slowly being deployed. In 2012, local manufacturing and engineering company Williams Industries installed 1.4MW of photovoltaic capacity on 10 of its buildings to cut electricity costs and carbon emissions. The project was backed by Export-Import Bank of the US, which provided a $6.4m loan guarantee for the purchase of photovoltaic modules.

KEY POLICIES

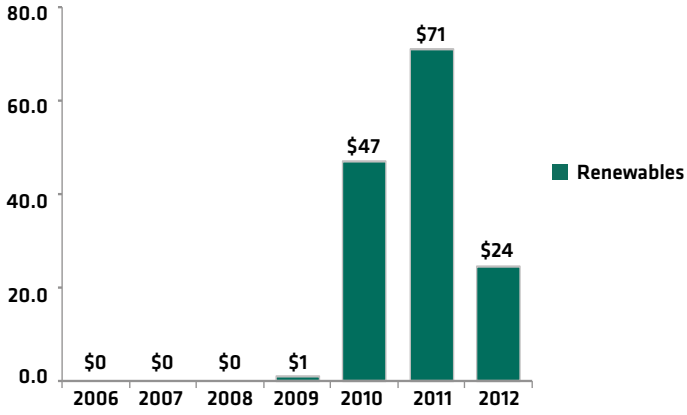
Energy Target	29% of electricity consumption from renewable sources by 2029
Net Metering	Renewable Energy Rider program, where customers may generate renewable electricity and sell excess to national utility

Source: Bloomberg New Energy Finance Policy Library

Barbados ranked 26th on Parameter II with a score of 0.24. For the second year, it was among the top two grant recipients for renewable energy development. From 2006 through 2012 it received $143m, representing 2% of its $7.1bn economy. The Inter-American Development Bank was responsible for most of that, supplying $136m to finance the Sustainable Energy Framework and Public Sector Smart Energy programs. However, the country did not fare well on the parameter's remaining indicators, such as clean energy investment, local investment by local players and green microfinance, resulting in its low score.

CLEAN ENERGY LOANS, GRANTS AND GRANT PROGRAMS, 2006-2012 ($m)

$143m total cumulative grants



Source: Bloomberg New Energy Finance

Barbados has an almost non-existent clean energy value chain and thus received a low mark on Parameter III, coming in 24th. On the Greenhouse Gas Management Activity parameter, the island nation achieved its highest score, 0.61, due to its corporate and policy efforts. Barbados is the only Caribbean country to have developed an initiative to promote renewable energy under the Nationally Appropriate Mitigation Action program.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Ancillary Products & Services	2	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; **Education & Training ;** Inspection & Maintenance ; Specialist Services ; Testing & Certification Services
Financial & Legal Services	1	**Banking-Corporate ;** Banking-Custody ; Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ; Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Only displays clean energy service providers sectors with at least one available sub-sector. Barbados does not have any companies active within the developers & utilities sector or the marketing service sector. Bold text, on the right, signifies there is at least one firm in that specific sub-sector active in the country.

Belize

GDP[1]: **$3.0bn**
Seven-year economic growth rate[2]: **4%**
Population[3]: **0.3m**
Total clean energy investments, 2006-2012[4]: **$177.2m**
Installed power capacity[5]: **137MW**
Renewable share[6]: **63%**
Total clean energy generation[7]: **273GWh**
Top energy authority:
Ministry of Energy, Science & Technologies and Public Utilities

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
16	17	1.00

PARAMETER	RANKING	SCORE
I. Enabling Framework	17	1.25
II. Clean Energy Investment & Climate Financing	9	1.12
III. Low-Carbon Business & Clean Energy Value Chains	19	0.56
IV. Greenhouse Gas Management Activities	24	0.34

SUMMARY

Belize, the smallest economy among the 26 Latin American and Caribbean countries, moved up one place in the 2013 *Climatescope* rankings, to 16th place with a score of 1.00. Its gain was propelled by advances in clean energy investment and financing, as well as strengthened clean energy value chains.

Because the country imports a substantial portion of its electricity from Mexico and relies on diesel for some of its domestic electricity production, Belize's retail power rates are higher than the regional average. The usage of imported power amplifies the share of renewables in its 137MW domestic generation portfolio. In 2012, 63% of Belize's domestic power capacity was small hydro and biomass & waste, and an impressive 94% of its power production was from those technologies. Belize in 2012 recorded its first-ever solar generation for the grid, commissioning a 0.48MW photovoltaic project on the University of Belize's Belmopan campus. The project was financed by a $10.3m grant from the Japan International Cooperation Agency (JICA).

Subsequent to the 2011 nationalization of Belize Electricity Ltd., there were concerns that Belize's investment environment would be complicated. The government maintains that nationalizations would be limited to transmission and distribution activities of the utility sectors, and that power generation remains overwhelmingly in the private-sector.

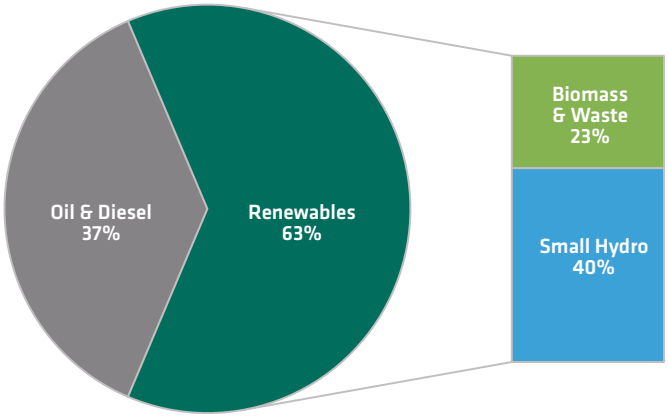
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Public Utilities Commission of Belize. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Belize earned an overall 1.00 *Climatescope* score, placing it 16th place out of 26 countries covered.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (MW)

137MW total installed capacity

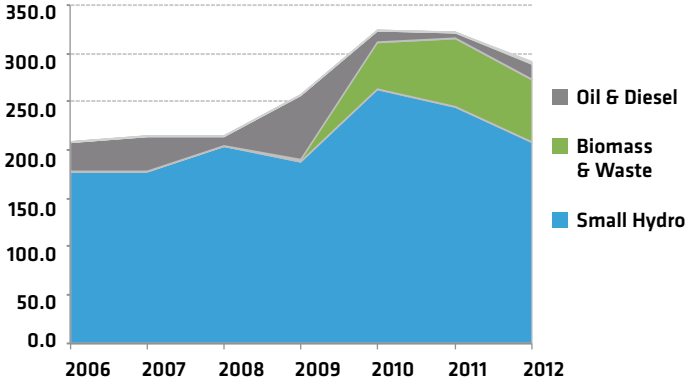


Source: Bloomberg New Energy Finance, Public Utilities Commission of Belize
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

It boasts the highest rate of renewable energy capacity and power generation, as a percentage of its total matrix, in the Latin America and Caribbean region. However, that distinction is only possible because Belize imports about a quarter of its electricity from Mexico. Belizeans pay among the highest retail electricity rates in the region, a situation that can create opportunities for further renewables development. The extent of that opportunity depends on the duration and minimum-take provisions of Belize's cross-border electricity purchases from Mexico.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (GWh)

290GWh total generation



Source: Bloomberg New Energy Finance, Public Utilities Commission of Belize
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Belize moved up nine positions from 2011 to 2012 on Parameter II and ranked 9th place. The country did especially well in two indicators: clean energy investment and loans, grants and grant programs. Belize received the second highest overall score on Parameter II's clean energy investment indicator. Since 2006, the country has captured a total of $177m in investment to biomass & waste and biofuels plants. While that would be a minor flow in a big-country economy, Belize's GDP amounts to only $1.5bn.

On Parameter II's loans, grants and grant programs indicator, Belize has received $22m to date in grants for renewable energy. JICA's $10.3m grant funded the country's first grid-connected solar photovoltaic project, a 0.48MW PV installation in the capital.

Belize ranked 19th among *Climatescope* countries on Parameter III. The country has companies active in at least one segment of biomass & waste, small hydro and solar, each of which supports the existing renewable capacity in the country.

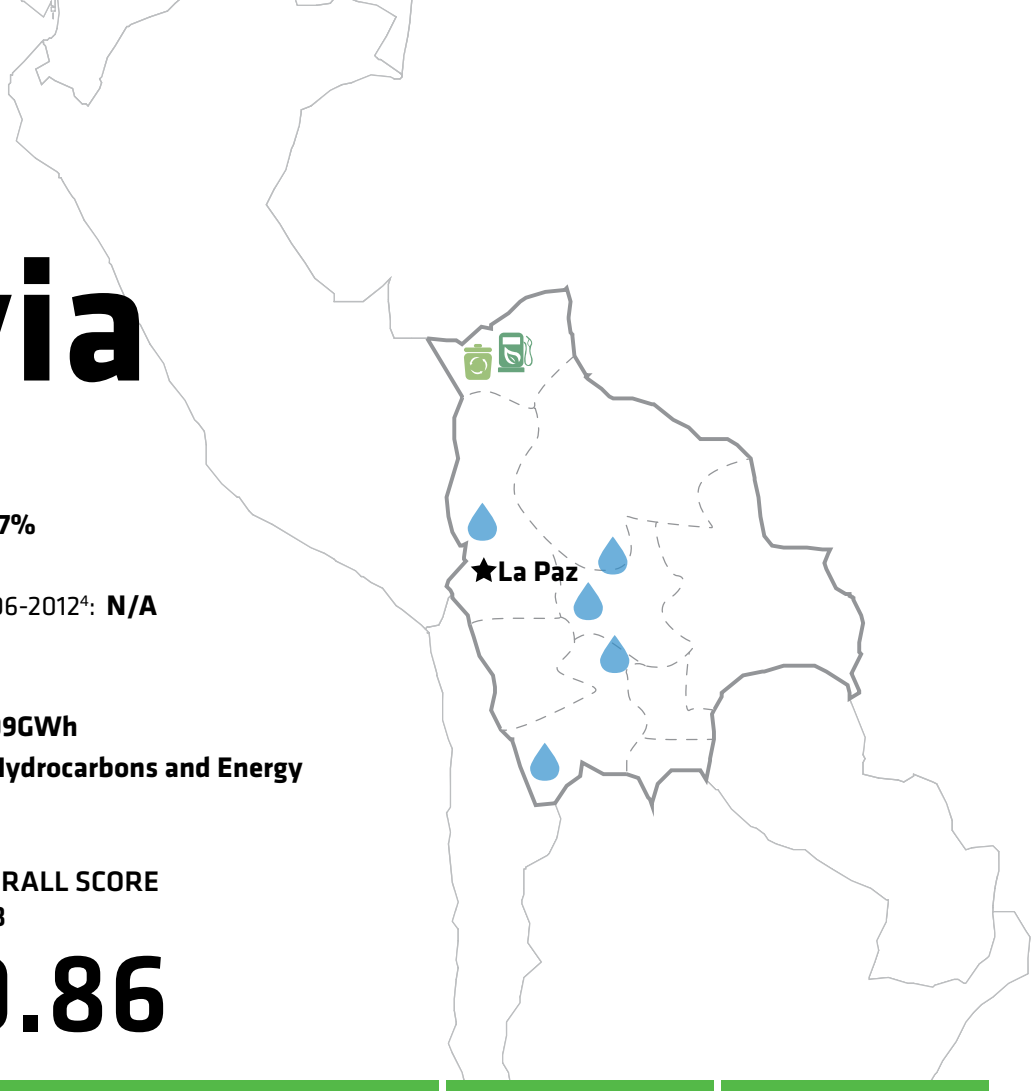
In terms of Parameter IV, Belize fell seven positions from last year's level to 24th place. The country has no national policies in place to curb or mitigate CO2 emissions and a limited roster of carbon offset projects.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment; System Integration ; **Project Development ; Power Generation**
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; Power Purchase
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; Project Development ; **EPC ;** Owner/Operator

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Belize has no companies in the biofuels, geothermal and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

Bolivia



GDP[1]: **$55.2bn**
Seven-year economic growth rate[2]: **7%**
Population[3]: **10.8m**
Total clean energy investments, 2006-2012[4]: **N/A**
Installed power capacity[5]: **1.7GW**
Renewable share[6]: **18%**
Total clean energy generation[7]: **1,409GWh**
Top energy authority: **Ministry of Hydrocarbons and Energy**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
19	19	0.86

PARAMETER	RANKING	SCORE
I. Enabling Framework	20	1.07
II. Clean Energy Investment & Climate Financing	16	0.73
III. Low-Carbon Business & Clean Energy Value Chains	22	0.31
IV. Greenhouse Gas Management Activities	16	0.92

SUMMARY

Bolivia received a 0.86 overall score, placing it 19th among 26 *Climatescope* nations. It was one of six *Climatescope* countries that neither gained nor lost ground in the 2013 rankings. Bolivia is South America's largest natural gas exporter and relied on the fuel for approximately 53% of its electricity generation in 2012.

Bolivia saw no growth in clean energy investment or deployment from 2011 to 2012 and its prospects for foreign investment could be impacted by recent nationalization developments.

Renewables have an 18.6% share of Bolivia's total generation capacity thanks primarily to the presence of significant small hydro capacity. The country ranks sixth among all *Climatescope* nations in the clean energy share-of-generation indicator, placing it ahead of Brazil and Chile, among others.

Bolivia has the region's third most vibrant green microfinance sector, as determined by the percentage of microfinance institutions offering some type of green financial product. Microfinance is positioned to have a central role in bringing clean distributed generation to rural Bolivia; the country lags other Latin American and Caribbean nations in the proportion of residents served by the grid.

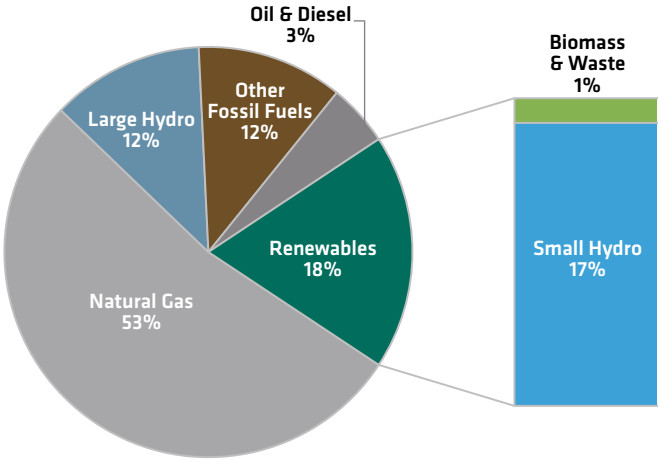
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. . Source: Autoridad de Fiscalización y Control Social de Electricidad. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Bolivia's overall score was depressed by a weak performance in three out of four parameters due to insignificant growth in renewable capacity, lack of clean energy policies and limited activity to curb greenhouse gases. The country did well in Parameter II, where it came in at 16th overall thanks to a comparatively strong green microfinance sector.

INSTALLED POWER CAPACITY BY SOURCE, 2011 (GW)

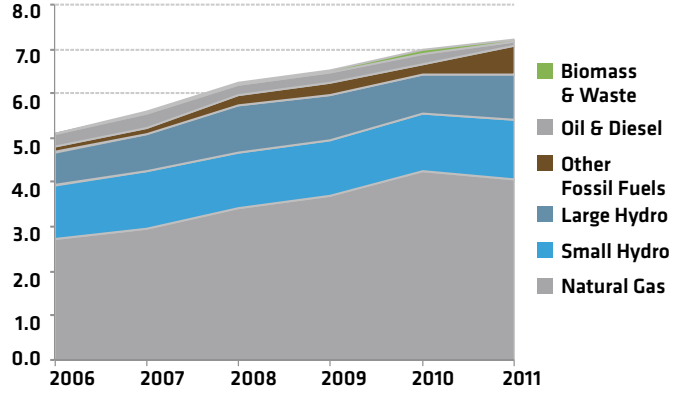
1.7GW total installed capacity



Source: Bloomberg New Energy Finance, Autoridad de Fiscalización y Control Social de Electricidad

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2011 (TWh)

7TWh total generation



Source: Bloomberg New Energy Finance, Autoridad de Fiscalización y Control Social de Electricidad.

Bolivia made no progress from 2011 to 2012 in attracting large-scale investments in clean energy projects or companies. The lack of progress is almost certainly due to investor fears of asset seizures; the Bolivian government has nationalized energy, mining and telecommunications operations. The country's significant fundings historically have come from governmental and multilateral development organizations the European Commission, World Bank and Inter-American Development Bank.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFI Institutions	5/23
Green Microborrowers	563
Total Amount of Green Microloans Disbursed	$3,500,000
Average Cost of Green Microloans	11.3%
Average % of Loans Portfolio	0.5%-2.5%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 23 MFIs in Bolivia, 19 responded to the survey.

On Parameter I, Bolivia fell two positions to 20th. It occupies the bottom tier of national rankings on the indicator of clean energy policy-making, and its growth rate of installed green capacity has stalled.

On Parameter III, Bolivia moved down one position to 22nd. The number of financial institutions and service providers in clean energy remains low in comparison to other Climatescope countries, both large and small. Bolivia's low-carbon value chain remains relatively undeveloped, with companies active in two biomass subsectors and one in small hydro.

On Parameter IV, Bolivia moved up two positions to 16th. The country tied for third place on the indicator assessing activity in carbon offsets. Still, the country has only minor project volume, and no companies reporting emissions and efficiency improvement activities.

Bolivia has the lowest electrification rate in South America, with only about three-quarters of the population having grid access. It has responded with the Electricidad para Vivir con Dignidad ("Electricity for Life with Dignity") program, focused on installing solar photovoltaic systems in more than 40 municipalities across the country.

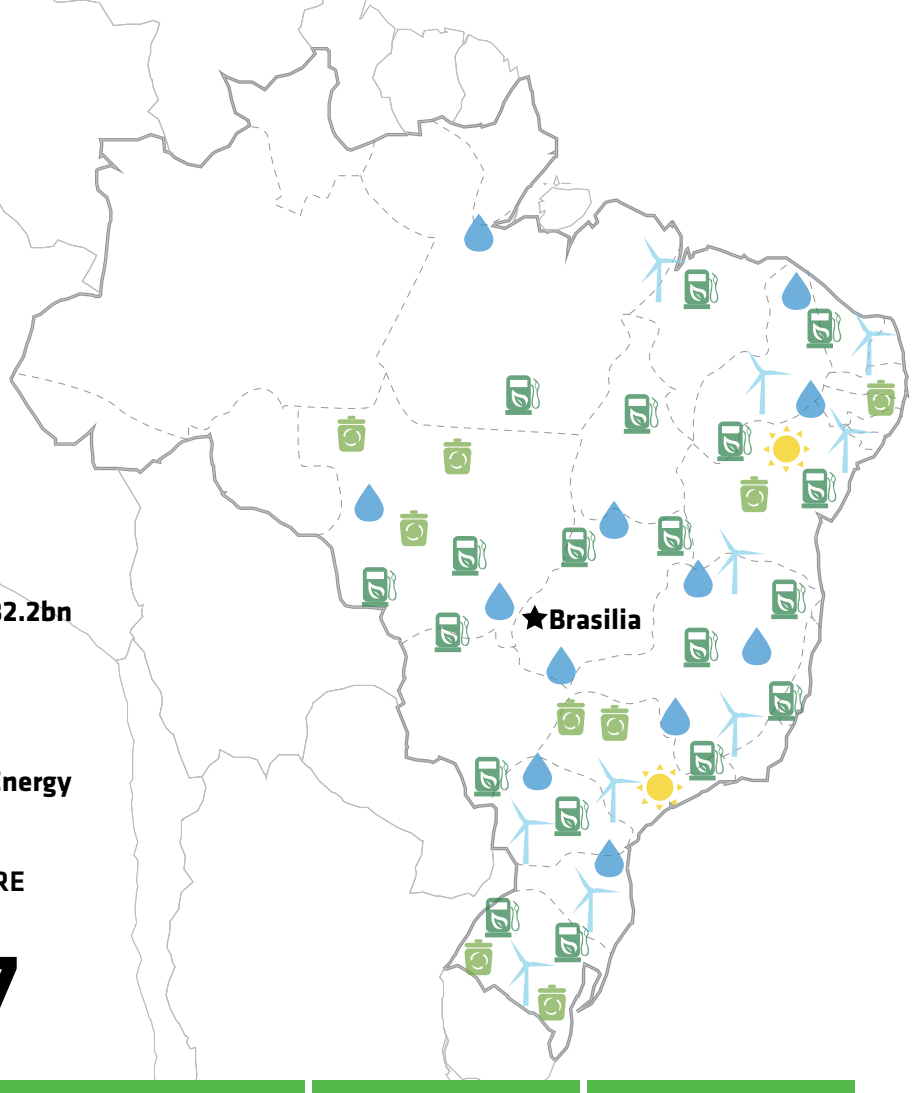
CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Bolivia has no companies comprising the solar, geothermal, wind and biofuels value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one country in that sub-sector is active in the county.

SOUTH AMERICA

Brazil



GDP[1]: **$2,396bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **198m**

Total clean energy investments, 2006-2012[4]: **$82.2bn**

Installed power capacity[5]: **123GW**

Renewable share[6]: **13%**

Total clean energy generation[7]: **57,400GWh**

Top energy authority: **Ministry of Mines and Energy**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
1	1	2.47

PARAMETER	RANKING	SCORE
I. Enabling Framework	2	2.25
II. Clean Energy Investment & Climate Financing	7	1.56
III. Low-Carbon Business & Clean Energy Value Chains	1	4.25
IV. Greenhouse Gas Management Activities	1	3.40

SUMMARY

Brazil emerges, once again, as the most attractive market overall for low-carbon investment in Latin America and the Caribbean, with the highest composite *Climatescope* score of 2.47. The country has done more than any other nation in the survey to green its $2.4bn economy. Yet, Brazil would have received a higher overall score had it not dropped five spots on Parameter II after it saw clean energy investment decline 36% in 2012 to $9.2bn.

To some extent, the slowdown reflects the sluggish state of the overall economy which saw year-on-year GDP growth fall to an average of just 0.87% per quarter – its worst performance since 2009. Financing for clean energy was also hindered by the national development bank's long loan disbursement cycle. Still, the South American giant performed extremely well on the other three parameters assessed. It topped the list on Parameters III and IV with scores of 4.25 and 3.40, respectively. On Parameter I, it placed second after Nicaragua with a 2.25 mark. Brazil was the top performer on the parameter assessing Low-Carbon Businesses and Clean Energy Value Chains scoring 4.25 – the closest any country has ever got to the maximum 5.00.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Agência Nacional de Energia Elétrica. Notes: For 2012.
6. Ibid.
7. Source: Empresa de Pesquisa Energética. Notes: For 2011.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 2 / Score 2.25

On Parameter I, Brazil maintained second place with a score of 2.25. It fared well in the policy & regulation category, topping the ranking for the clean energy policy indicator and finishing second on the power sector openness indicator.

Brazil has at least one policy type in seven of the eight assessed, which helped boost its policy comprehensiveness score. Brazil's experiment with government-sponsored reverse power auctions helped it gain high marks on four of the six cross-cutting factors comprising the clean energy policy indicator score: stability, transparency, effectiveness and ambition. Its net metering and dynamic pricing schemes are due to come into effect and could boost solar development, particularly in states where power prices are highest. Still, the country has barriers protecting locally-produced equipment and high taxes that could impede development.

KEY POLICIES

Feed-in Tariff / Price Premium	PROINFA program guaranteed power prices above average market rate to 3GW of 135 projects coming from biomass & waste, small hydro and wind sources. PROINFA ended in 2011.
Auctions	10 tenders for power purchase where renewables competed, contracting 12GW of biomass, small hydro and wind plants.
Biofuels Blending	5% biodiesel blend with conventional diesel and 20% ethanol blend with conventional gasoline.
Debt / Equity Incentives	Development bank offers special credit lines for renewable energy, energy efficiency and ethanol projects.
Tax Incentives	Equipment import duty reduction, biodiesel PIS/COFINS tax reduction, and renewable energy PIS/COFINS 2-year tax exemption
Utility Regulation	Renewable energy transmission and distribution discount and metering technical requirements for smart meters.
Net Metering	Legislation for net metering program approved, but not fully implemented yet.

Source: Bloomberg New Energy Finance Policy Library

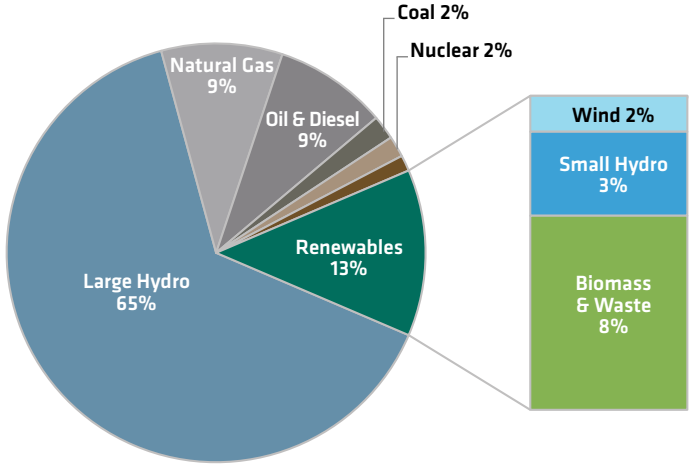
Brazil came in 12th on the indicator accounting for retail power prices, which are currently high but could fall 20% if a law implemented by the government this year has its intended effect. That would be counterproductive for clean energy developers who require higher-priced power to make their technologies competitive.

Last year, Brazil brought some 2GW of new renewable power capacity online, 23% below 2011 net additions and placed the country among the top five on three of the six indicators comprising the clean energy penetration category.

Brazil did not fare well on the indicator assessing growth in biofuels production, placing it last among eight countries[9] assessed. Production declined in 2012 as ethanol became economically uncompetitive with gasoline.

INSTALLED POWER CAPACITY BY SOURCE, 2006-2012 (GW)

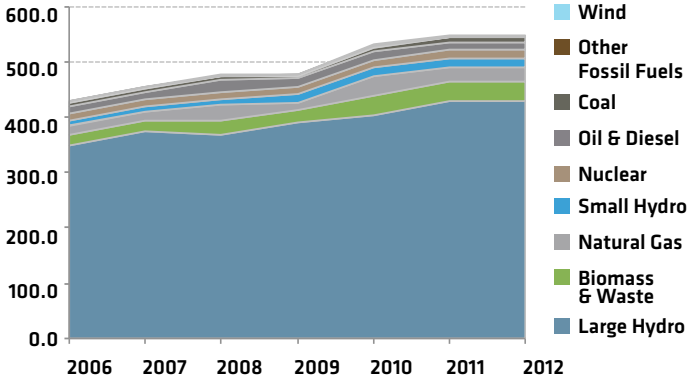
123GW total installed capacity



Source: Bloomberg New Energy Finance, Agência Nacional de Energia Elétrica
Note: In Brazil, small hydro only includes hydro plants with capacity up to 30MW. Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

549TWh total generation



Source: Bloomberg New Energy Finance, Agência Nacional de Energia Elétrica
Note: In Brazil, small hydro only includes hydro plants with capacity up to 30MW

9. Only countries with biofuels production were assessed on this indicator.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

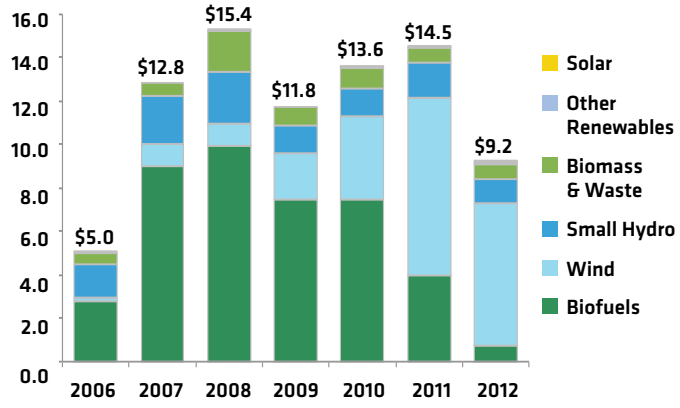
Ranking 7 / Score 1.56

Brazil scored 1.56 on Parameter II declining five spots from last year's *Climatescope* to seventh place largely due to poor performance on indicators tracking investment commitments and growth rates.

From 2006 through 2012, Brazil attracted approximately $82bn in low-carbon energy investment, representing 74% of all funds committed to the region in this area. Around 71% of its investment went to wind, which is likely to continue attracting the lion's share of funds. Asset (project) finance[10] remains the primary driver of new investment. Brazil only came in fourth when comparing its total low-carbon investment to its overall economy.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($bn)

$82bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments. Other Renewables includes Energy Smart Technologies and Marine.

Brazil placed 17th on the indicator tracking loans, grants and grant programs, largely because the development bank BNDES effectively keeps other creditors out of the market by lending at highly discounted rates. On the flip side, BNDES loans enabled Brazil to finish second on the indicator tracking local investment by local players as the development bank lends almost exclusively within Brazil.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFI Institutions	1/41
Average Cost % of Green Microloans	2.5%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 41 MFIs in Brazil, 31 responded to the survey.

To date, BNDES has lent over $17bn to build Brazil's low-carbon economy and in cumulative terms it is the world's top lead arranger to clean energy deals. In 2012 alone, the bank lent $2.6bn for the low-carbon sector. BNDES' low-cost financing also helped Brazil rank second on the indicators assessing the low cost of debt for utility-scale projects. On the small-scale side of things, Brazil offers, on average, the best rates for green microloans of all *Climatescope* countries.

LOCAL INVESTMENTS BY LOCAL PLAYERS

2012 Total	$5,936m

Top Three Local Investors, 2012 ($m)

1st	Banco Nacional de Desenvolvimento Economico e Social	$2,676m
2nd	CPFL Energia SA	$663m
3rd	Fundo de Investimentos em Participações da Serra	$470m

Top Three Asset Finance Deals, 2012 ($m)

Rank	Sector	Project (MW)	Developer	Value
1st		Verace Portfolio (258MW)	Eletrosul	$497m
2nd		Rio Grande do Norte & Bahia Portfolio I (138MW)	Iberdrola	$325m
3rd		Rio Grande do Norte & Bahia Portfolio II (120MW)	Iberdrola	$288m

Source: Bloomberg New Energy Finance
Notes: Figures refer to asset finance investments committed in 2012 and include balance sheet commitments

10. Asset finance investment comprises all new build, refinancing and acquisition of renewable energy generating projects. This includes both electricity generation and biofuels production assets. Projects may be financed via the balance sheets of the project owners, or through financing mechanisms such as syndicated equity from institutional investors, or project debt from banks.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 1 / Score 4.25

For the second consecutive year, Brazil performed better than any other country on Parameter III, which assesses the level of development of its clean energy sectors, service providers and financial institution value chains, scoring 4.25.

Industrial policy – more than the need to green the power generation fleet – has driven Brazilian in the clean energy realm. Last year, BNDES published local content rules dictating the characteristics of which wind turbines can receive state-backed financing. The aim is to boost the local wind value chain and have a 100% Brazil-made turbine by 2016.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	**Engineering Company ; Producers ; Distribution and Blending**
Biomass & Waste	**Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation**
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; Project Development ; O&M ; Power Purchase
Small Hydro	**Pipes ; Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; Power Purchase**
Solar	**Polysilicon/Ingots ; Wafers ; Cells ; Modules ;** Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; **Gearboxes ; Generators ; Blades ; Turbines ; Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Ancillary Products & Services	**9**	**Consultancy-O&M ; Consultancy-Technical ; Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; Inspection & Maintenance ; Specialist Services ; Testing & Certification Services**
Developers & Utilities	**0**	Integrated Service Provider
Marketing Services	**3**	**Distributor ; Market Research ; PR Company**
Financial & Legal Services	**6**	**Banking-Corporate ; Banking-Custody ; Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ;** Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

The country already has a complete value chain for both the biofuels and biomass and waste sectors and a nearly complete wind value chain. Small hydro is the oldest and second-largest clean energy source in the country, with 4.2GW capacity. This sector's value chain is 100% developed. Brazil almost completely lacks geothermal power-generating resources, which is why its value chain remains undeveloped. Since 2011, some 3.9GW of combined solar capacity applied for permits with power regulator Agência Nacional de Energia Elétrica (ANEEL), signalling the Brazilian solar value chain should develop further.

Given the depth of its capital markets, Brazil has at least one locally based financial institution of each of the four types assessed on the indicators tracking the presence of banks, corporate finance institutions, funds and private equity & venture capital firms active in the low-carbon space. Brazil has more clean energy service providers than any other *Climatescope* country.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**	✓	**Corporate Finance**
✓	**Funds**	✓	**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

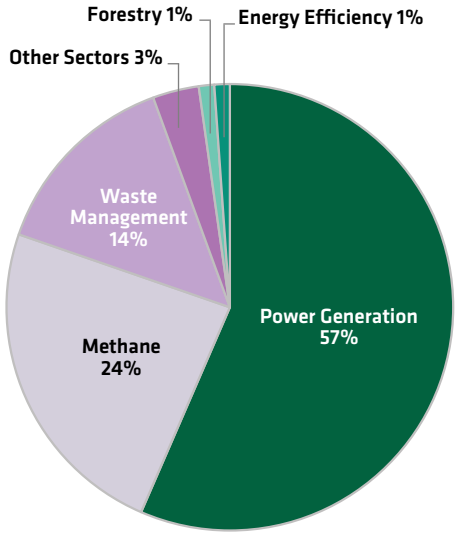
Ranking 1 / Score 3.40

As in last year's *Climatescope*, Brazil came in first on Parameter IV, this time with a 3.40 score. The region's largest economy performed particularly well in the category assessing corporate awareness.

Brazil also fared well on the carbon offset category, sharing the top spot with Argentina, Chile and Mexico on the carbon offset historical activity indicator. Brazil is a relatively high-risk country for CDM projects, placing 18th on the indicators assessing risk for the mechanism. It came third on the indicator judging its carbon offset future potential, just behind Uruguay and Trinidad & Tobago, largely due to its vast size.

CDM OFFSET PROJECTS BY SECTOR

269 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, N2O, CO2 usage and Transport project types.

GHG EMISSION REDUCTION POLICIES

Emission Reduction Target	Voluntary target to reduce 36-39% of greenhouse gas emissions by 2020
GHG Registry	Voluntary registry which counts 92 Brazilian companies reporting GHG emissions

Source: Bloomberg New Energy Finance

Brazil has not been a global leader in developing CO2 emission reduction policies but still did fairly well on two indicators assessed in that category. In 2008, it introduced the National Climate Change Plan, which contained certain provisions on specific actions that the country should take to shrink its carbon footprint while reducing poverty and inequality. The scheme included programs to distribute efficient appliances to low-income families, hold reverse auctions for power contracts, and stimulate the use of biomass for power generation. The document outlines a non-binding voluntary emission reduction target of 36-39% by 2020, based on 2008 levels.

Several Brazilian companies have been at the forefront of sustainability and energy efficiency practices. The country has more than 108 companies from various sectors reporting their energy efficiency and clean energy practices and most are publicly traded. Similarly, the country hosts institutions for capacity awareness, and think tanks serving the low-carbon sector. Brazil has at least one project active under NAMA and is a PMR participant.

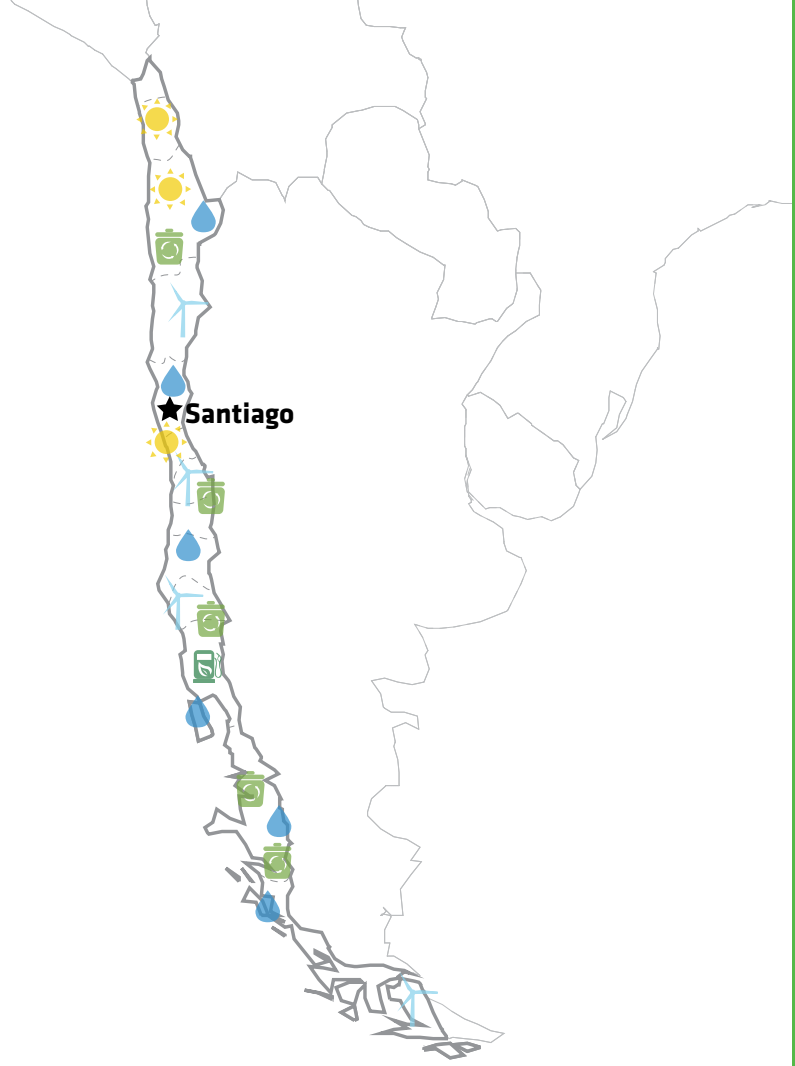
GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	> LAC Average
Principles of Responsible Investment	> LAC Average
Energy Efficiency Initiatives	> LAC Average
Emission Reduction Policies	> LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

SOUTH AMERICA

Chile



GDP[1]: **$320.5bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **17.4m**

Total clean energy investments, 2006-2012[4]: **$6.2bn**

Installed power capacity[5]: **17GW**

Renewable share[6]: **7%**

Total clean energy generation[7]: **5,429GWh**

Top energy authority: **Ministry of Energy**

OVERALL RANKING

2013 2012

2 5

OVERALL SCORE

2013

2.41

PARAMETER	RANKING	SCORE
I. Enabling Framework	4	2.16
II. Clean Energy Investment & Climate Financing	3	2.05
III. Low-Carbon Business & Clean Energy Value Chains	2	3.31
IV. Greenhouse Gas Management Activities	3	3.01

SUMMARY

In this second edition of *Climatescope*, Chile moved up three positions to second place with an overall score of 2.41 – just 0.06 points below Brazil. The largest global copper producer performed well on all parameters, coming in fourth or above and moving up the rankings for all parameters compared with *Climatescope* 2012. As the region's most developed economy, it fared particularly well on Parameter III.

Chile is one of the region's most attractive destinations for low-carbon investment thanks to its robust clean energy value chains, strong power demand growth, and abundant natural resources. In 2012, $2bn was committed to renewable energy assets in the country, double the investment in the previous year.

Clean energy accounted for 7% of the country's total electricity generation, at 18TWh, in 2012. Biomass and small hydro plants account for the lion's share of Chile's 17GW of installed renewable capacity. A strong pipeline of new build wind and solar projects in the north will help boost the share of renewables in its power matrix. The debate on increasing Chile's clean energy target from 10% to 20% by 2025 resurfaced in the legislative agenda this year. We expect a positive decision on this policy matter to come in 2014. This will help propel further clean energy investment.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Comisión Nacional de Energía. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

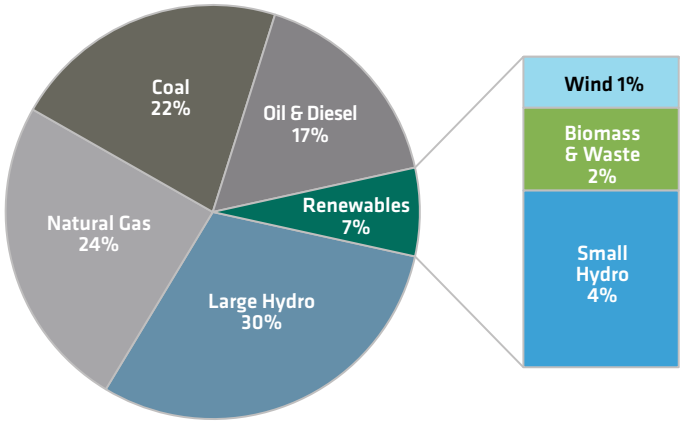
I. ENABLING FRAMEWORK

Ranking 4 / Score 2.16

Looking just at the Enabling Framework parameter, Chile emerges in fourth position, with a 2.16 mark. The country stood out for its liberalized power market structure and rapid increase in its share of renewable installed capacity and generation. Renewable power generation grew by 28% from 1TWh in 2011 to 1.3TWh in 2012, accounting for 7% of total electricity generated.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

17GW total installed capacity



Source: Bloomberg New Energy Finance, Comisión Nacional de Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

The country has strong potential for developing solar, wind, biomass, geothermal and hydro projects from northern to southern Chile, thanks to its local resources. The pace of clean energy project development has not matched the potential, however, as only a few projects are online. Still, renewable capacity has doubled since 2006, going from 606MW to 1.2GW in 2012. Small hydro continues to be the flagship renewable energy source in Chile, accounting for more than half of the 1.2TWh renewable generating capacity in 2012. However, other sectors are slowly starting to blossom: there are 200MW of operating wind farms between the Atacama and Magallanes regions. In 2012, three utility-scale solar plants were commissioned in the Antofagasta, Coquimbo and Tarapacá regions, amounting to 3MW of combined capacity.

KEY POLICIES

Energy Target	10% electricity generation from renewable sources by 2024.
Tax Incentives	Renewable generators receive a reduction on transmission tariff.
Net Metering	Net metering legislation approved, but not implemented.

Source: Bloomberg New Energy Finance Policy Library

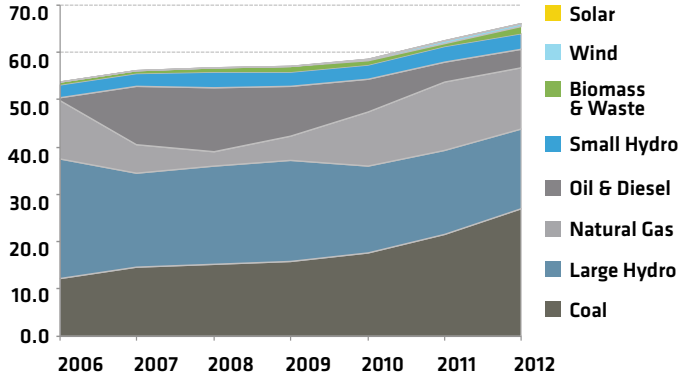
Consumers in Chile pay some of the most expensive electricity prices in Latin America and the Caribbean, since end-user prices are set by the market based on nodal pricing. In 2012, residential tariffs averaged $0.26/kWh – the second-highest in the region. Power demand is also high, especially for the energy-intensive mining industry, which is responsible for around 36% of the country's total electricity consumption. To meet increasing power demand, Chile must add about 8GW of capacity by 2020.

Given the country's appetite for power, legislators have been working to increase the renewable target from 10% to 20% by 2025. After negotiations which began in 2010, the bill was finally approved by the House of Representatives in June 2013, but with several modifications to the original text. The bill will now go back to the Senate for revision and final approval. The new target should be approved by 2014 – a positive outcome that would spur renewable development.

In spite of a sluggish renewable policy progress, we expect Chile to remain a hot spot for clean energy in Latin America and the Caribbean, with renewables grabbing a large chunk of future capacity additions.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

66TWh total generation



Source: Bloomberg New Energy Finance, Comisión Nacional de Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

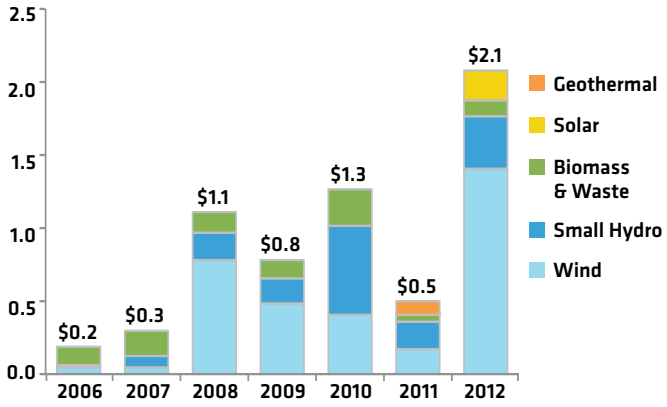
II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 3 / Score 2.05

Chile finished third for Clean Energy Investment and Climate Financing, moving up 13 positions compared with *Climatescope* 2012. Its advance was thanks to a large increase in renewable investment, with important participation of local players acting as financiers.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($bn)

$6.2bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

In 2012, $2bn was invested in Chile's clean energy sector, of which 67% went to new build wind projects. The largest commitment was a $283m term loan to finance a 115MW wind farm in central Chile. A 90MW wind farm in the north also received an estimated $140m in investment last year. Solar, which has historically attracted considerable attention but not much investment, finally received a significant commitment: some $200m was invested in 2012 to commission 65MW of utility-scale solar capacity expected online between 2013 and 2014. Chilean banks also made a more significant contribution to investment compared with previous years. Local financial institutions were responsible for financing $300m of the total $2bn committed in 2012.

Chile has one of the lowest costs of financing in Latin America and the Caribbean. The average cost of debt for renewable projects is the third-lowest among the region's 26 countries, based on a survey conducted by Bloomberg New Energy Finance. The country also has the third-lowest swap rate in the region, which measures borrowing rates between financial institutions as a proxy for borrowing costs.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	1/16
Green Microborrowers	3,000
Total Amount of Green Microloans Disbursed	$120m
Average Cost of Green Microloans	14.5%
Average % of Loans Portfolio	5-10%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 6 MFIs in Chile, 5 responded to the survey.

The Chilean microfinance sector is limited, as the country is relatively well developed, but one green microfinance institution is making a significant impact. BancoEstado is the only organization in Chile providing microloans for renewable energy projects and firms. These microloans have benefited 3,000 people by offering energy efficiency and insurance products.

LOCAL INVESTMENTS BY LOCAL PLAYERS

2012 Total	$891m

Top Three Local Investors, 2012 ($m)

1st	Alba SA	$108m
2nd	Electrica Nueva Energia SA (ENESA)	$56m
3rd	Corp Nacional de Cobre de Chile	$55m

Top Three Asset Finance Deals, 2012 ($m)

Rank	Sector	Project (MW)	Developer	Value
1st		El Arrayán Plant (115MW)	AEI, Pattern Energy ,Antofogasta Minerals	$283m
2nd		Valle de los Vientos Plant (90MW)	Enel Latin America	$140m
3rd		Valle de los Vientos Plant (90MW)	Alba SA	$77m

Source: Bloomberg New Energy Finance
Notes: Figures refer to asset finance investments committed in 2012 and include balance sheet commitments.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 2 / Score 3.31

Chile came second on Parameter III, scoring 0.94 points below Brazil. The country maintained its position from the first edition, but improved its parameter score from 2.81 in 2012 to 3.31 in 2013. Chile's good standing comes as no surprise, given its level of industrialization and healthy business environment.

Local companies have filled up key segments for clean energy technologies and services that were missing in Chile until last year. The country has organizations active in at least one segment of all six renewable sectors assessed. It has a complete value chain for biomass & waste projects, in addition to significant service support for small hydro and wind. As of last year, Chile has also had a much more robust value chain for solar and geothermal, with the addition of pre-drilling exploration companies for geothermal projects and solar engineering, procurement and construction (EPC) businesses and plant operators.

In addition, the country counts more types of consultancy and specialized service for clean energy compared with the previous year. Integrated service providers and operation and maintenance consultants are now present in the country.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	5	**Consultancy-O&M ; Consultancy-Technical ; Contract Maintenance ;** Contract Manufacturing ; **Control Room Systems ;** Education & Training ; Inspection & Maintenance ; **Specialist Services ;** Testing & Certification Services
Developers & Utilities	1	**Integrated Service Provider**
Marketing Services	1	**Distributor ;** Market Research ; PR Company
Financial & Legal Services	5	**Banking-Corporate ;** Banking-Custody ; **Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ;** Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	**Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation**
Geothermal	**Pre-Drilling Exploration ; Exploration/Production Drilling ;** Well & Resource Confirmation; Turbine & Power Block ; **Balance of Plant ; Project Development ;** O&M ; **Power Purchase**
Small Hydro	Pipes ; **Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ; Owner/Operator**
Wind	Bearings ; Gearboxes ; Generators ; **Blades ; Turbines ; Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	Banks		Corporate Finance
✓	Funds	✓	Private Equity/Venture Capital

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

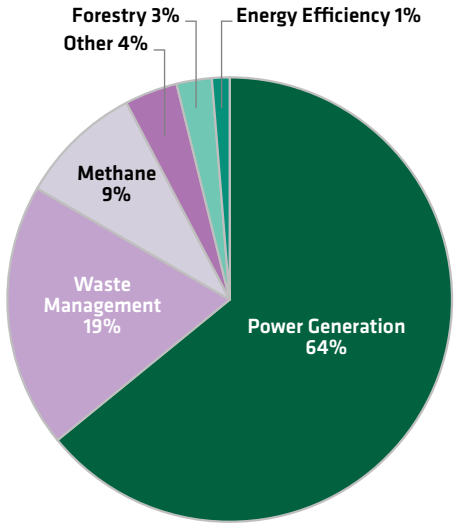
Ranking 3 / Score 3.01

Chile finished in third place with a 3.01 score on Parameter IV, after Brazil and Mexico. Chile has 78 active Clean Development Mechanism (CDM) projects, more than half of which aim to cut emissions from power generation projects. However, the country stands out in the carbon policy and corporate initiative categories of Parameter IV. It is one of the few countries in Latin America and the Caribbean which has advanced in terms of policies to curb greenhouse gas (GHG) emissions. In addition, Chilean companies have made progress toward making their operations more sustainable and transparent.

In 2007, the country established a voluntary target to reduce emissions by 20% by 2020, based on 2007 levels, under the terms of the UN Framework Convention on Climate Change. To support the target, the Ministry of Energy has created a program to advise and help organizations to calculate and report their GHG emissions. In all, 12 companies in Chile report energy efficiency and emission reduction policies, of the 474 surveyed. These businesses come from different sectors, such as Enersis (power), Compañía de las Cervecerías Unidas (beverages) and Banco Santander and Banco Bilbao (finance). Six of these 12 also report to the Global Reporting Initiative.

CDM OFFSET PROJECTS BY SECTOR

78 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

GHG EMISSION REDUCTION POLICIES

Emission Reduction Target	Voluntary target to reduce 20% of greenhouse gas emissions by 2020
GHG Registry	Planning stage for voluntary GHG corporate accounting and reporting standard

Source: Bloomberg New Energy Finance

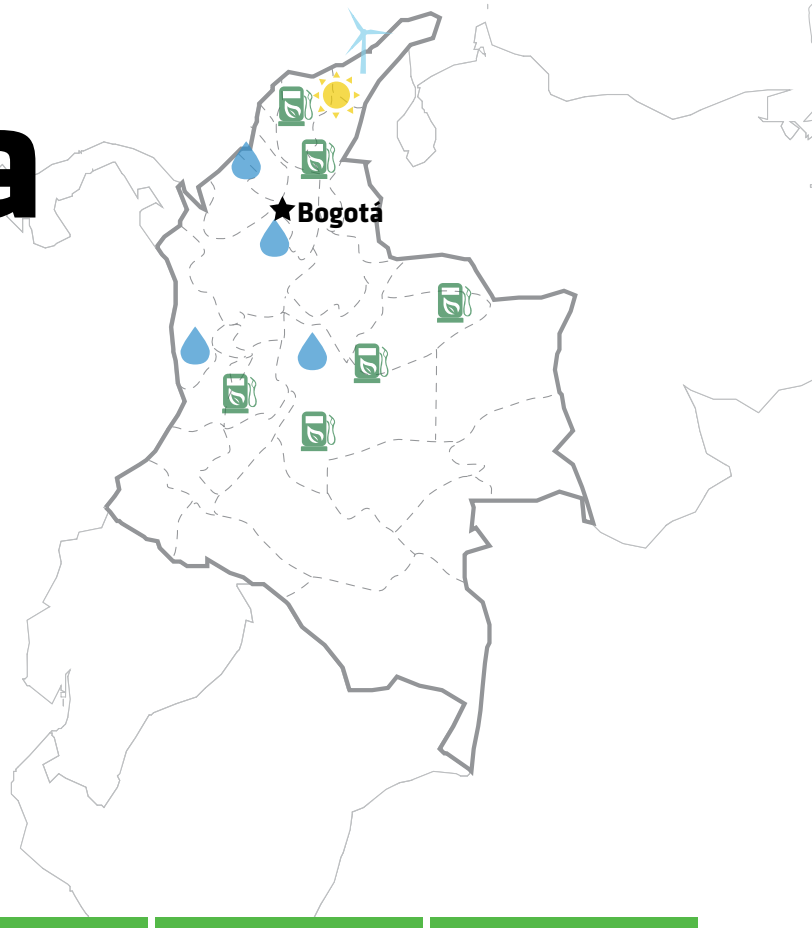
GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

SOUTH AMERICA

Colombia



GDP[1]: **$503bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **46.6m**

Total clean energy investments, 2006-2012[4]: **$1.2bn**

Installed power capacity[5]: **14GW**

Renewable share[6]: **5%**

Total clean energy generation[7]: **3,060GWh**

Top energy authority: **Ministry of Energy and Mines**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
9	7	1.54

PARAMETER	RANKING	SCORE
I. Enabling Framework	10	1.70
II. Clean Energy Investment & Climate Financing	14	0.81
III. Low-Carbon Business & Clean Energy Value Chains	7	1.63
IV. Greenhouse Gas Management Activities	4	2.30

SUMMARY

Colombia dropped slightly in the rankings compared with the first edition of *Climatescope*, slipping from seventh to ninth, with a score of 1.54 this year. Its score on the Enabling Framework parameter declined due to lower scores for the clean energy policy and power market indicators. The decrease was partly offset by a higher Greenhouse Gas Management Activities score.

Given its status as the fifth largest economy in Latin America, Colombia's level of clean energy investment is relatively weak, ranking 19th on a levelized (GDP-adjusted) basis across all 26 nations surveyed. It attracted $1.2bn in clean energy capital from 2006 through 2012, mostly in the form of project financings for biofuels and small hydro, but little of that came in the last few years. Only $71m was invested in 2011 and capital in-flows were negligible in 2012. Colombia is also a laggard in green microfinance availability.

Yet there are signs that clean energy investment could soon thrive. The country has climate-oriented policies. GDP growth has been healthy. The country was among the region's leaders in biofuels production and its local financial institutions offer attractive lending rates compared with surrounding countries. Colombia also had a moderate amount of carbon offset activity and ranked highly in metrics related to corporate awareness of greenhouse gas management.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Compañía de Expertos en Mercado SA ESP, Ministerio de Minas y Energía. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

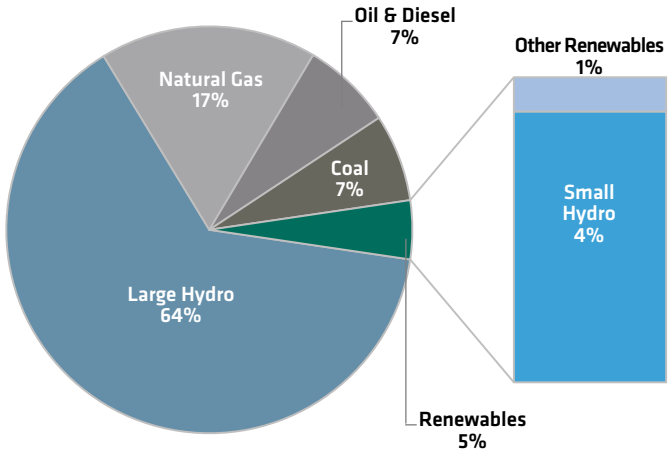
I. ENABLING FRAMEWORK

Ranking 10 / Score 1.70

Colombia received a 1.70 score for its enabling framework, ranking 10th among the 26 nations on this key parameter. Clean energy policy support in Colombia has been moderate to date and it received a 2.27 score on this important indicator, well above the regional average (1.92), but below its mark (2.90) in the first edition of *Climatescope*. This was partially due to a change in the methodology for this indicator; it now assesses policies based on six cross-cutting factors, up from two in the 2012 report.[9]

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

14GW total installed capacity



Source: Bloomberg New Energy Finance, Ministerio de Minas y Energía
Note: Other renewables refers to biomass & waste and wind plants.

Colombia has implemented three of the eight possible policy types scored in *Climatescope*: a biofuels blending mandate, a clean energy target with special emphasis on off-grid applications (already fulfilled), and tax relief for certain wind and biomass generators and for equipment used for carbon offset projects. In terms of power sector structure, Colombia scored in the top quintile; it fared well thanks to its liberalized power market, but lost points for its subsidized electricity rates.

KEY POLICIES

Energy Target	3.5% of on-grid and 20% off-grid generation from renewable sources by 2015.
Biofuels	10% biodiesel blend with conventional diesel and 10% ethanol blend with conventional gasoline.
Tax Incentives	Income tax exemption for wind and biomass generators and import duties exemption on equipment for activities that generate carbon credits.

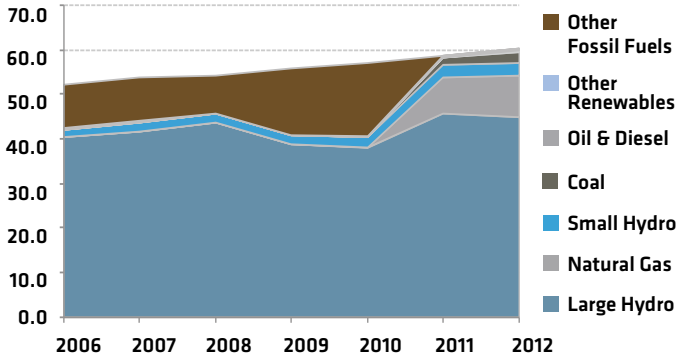
Source: Bloomberg New Energy Finance Policy Library

On a capacity basis, less than 5% of Colombia's 14.4GW of installed power capacity is represented by non-large hydro renewables (most capacity is large hydro). However, clean energy capacity grew by more than 20% in 2012. The country also has among the highest growth rates for biofuels production. Installed capacity climbed 12% to reach 0.87bn liters last year and has increased 28% on an annualized basis since 2008.
Yet Colombia's Enabling Framework parameter score was hurt by lackluster electricity generation. Here, Colombia fared less well, though this was likely an anomaly. In 2011, flooding brought on by torrential rains devastated parts of the country. This may explain why generation from small hydro, which makes up 87% of the country's renewable electricity, was extraordinarily high that year; Colombia's small hydro assets typically average 50% capacity factors, whereas in 2011, these climbed to more than 60%. In 2012, they dropped back down to normal levels. As a result, overall clean electricity generation declined 4.6% in 2012 from 2011.

Colombia is the region's fifth-largest economy in terms of GDP but does not offer the most attractive conditions for clean energy investment due to its low power demand growth rate and relatively low electricity prices at both the retail and wholesale levels.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

60TWh total generation



Source: Bloomberg New Energy Finance, Ministerio de Minas y Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers. Other renewables refer to biomass & waste and wind plants. Starting from 2011, other fossil fuels are broke down into natural gas, oil & diesel and coal plants.

9. For more details, please refer to the Methodology section, on page 18.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 14 / Score 0.81

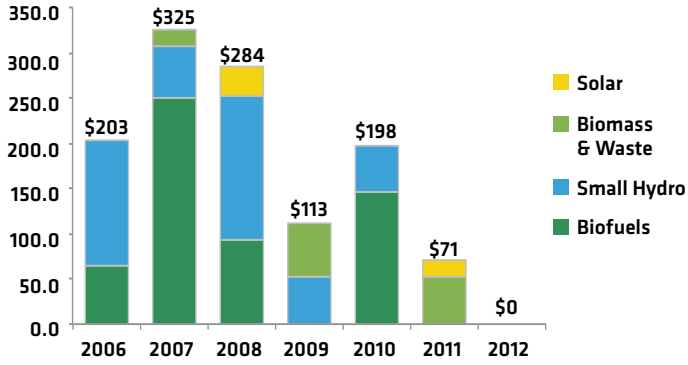
The country scored poorly on this parameter, ranking 14th. It has invested less in clean energy, on an absolute (non-levelized) basis than countries with substantially lower GDPs – namely, Chile, Peru, Nicaragua and Panama. From 2006 to 2012, clean energy investment in Colombia totaled $1.2bn, with nearly half going to biofuels and another 40% to small hydro projects.

Green microfinance offerings are slim in the country, with no organizations providing microcredit products specifically for low-carbon solutions.

An area in which Colombia shines, and which is of high importance to sponsors behind clean energy projects, is the lending environment. Colombia's cost of debt at 5.2%, and its swap rate at 4.7%, are below the levels of most of its peers for which data was available. (Nations where these data were not identified are assumed to have minimal lending activity.)

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$1.2bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 7 / Score 1.63

In sectors such as solar, geothermal and wind (particularly on the upstream side), there are few Colombian entities. The value chain is slightly more present for downstream activities, and considerably more developed for the bioenergy sector, where there are companies that provide feedstock, tackle system integration, develop projects, and produce biofuels. There are also companies offering services such as engineering and operations and maintenance to the small hydro sector.

On the whole, Colombia has players operating in 16 of the 40 value-chain positions captured in this analysis – roughly the same as Peru, Uruguay and Costa Rica, but well below the levels of the region's larger countries: Argentina, Brazil, and Mexico.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	2	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; Inspection & Maintenance ; **Specialist Services ;** Testing & Certification Services
Marketing Services	1	**Distributor ;** Market Research ; PR Company
Financial & Legal Services	2	**Banking-Corporate ;** Banking-Custody ; Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; **Lawyer-Project Finance ;** Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	**Feedstock Supply ;** Manufacturing Equipment ; **System Integration ; Project Development ; Power Generation**
Small Hydro	Pipes ; **Turbines ; Project Development ;** Civil Works/Builder ; **Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Colombia has no companies in the geothermal value chain. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

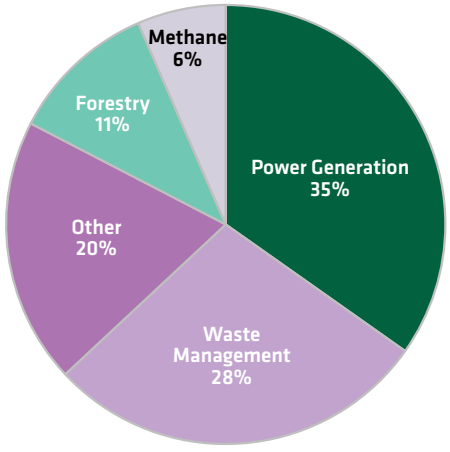
Ranking 4 / Score 2.30

Colombia's performance for this parameter helped to boost its final ranking. Of the parameter's three categories, one– corporate awareness and action around greenhouse gas issues – features six metrics. Colombia earned top marks in five of these. It led the region (on a levelized basis) in terms of voluntary greenhouse gas reporting by corporations into the Global Reporting Initiative, and several of its largest publicly listed companies have energy efficiency initiatives and emission reduction policies in place.

For carbon offset potential and risk (ie, likelihood that projects will gain CDM accreditation or approval, and processing time for project registration), Colombia is around the average for the region. But its historic offset activity is high: it has 51 CDM projects, the majority of which fall under power generation or waste management.

CDM OFFSET PROJECTS BY SECTOR

46 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

GHG EMISSION REDUCTION POLICIES

GHG Registry	Planning stage for voluntary GHG corporate accounting and reporting standard

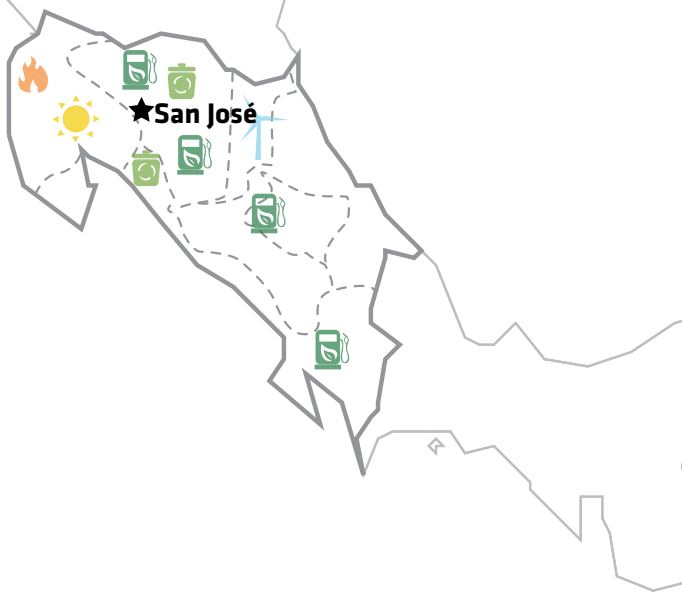
Source: Bloomberg New Energy Finance

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Costa Rica



GDP[1]: **$58.8bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **4.7m**

Total clean energy investments, 2006-2012[4]: **$1.1bn**

Installed power capacity[5]: **3GW**

Renewable share[6]: **36%**

Total clean energy generation[7]: **4,461GWh**

Top energy authority:

Ministry of Environment, Energy and Telecommunications

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
11	8	1.36

PARAMETER	RANKING	SCORE
I. Enabling Framework	12	1.60
II. Clean Energy Investment & Climate Financing	17	0.65
III. Low-Carbon Business & Clean Energy Value Chains	6	1.69
IV. Greenhouse Gas Management Activities	7	1.79

SUMMARY

Costa Rica finished 11th in the 2013 edition of *Climatescope*, with a 1.36 mark. The country descended three positions from last year and fell just 0.09 shy of making the top 10. Despite improvements on Parameters I and IV, the Central American country's performance was hit by a poor standing on Parameter II after it attracted little new clean energy investment in 2012.

Costa Rica has one of the greenest power matrices in the region. In 2012, 44% of its total 10TWh of electricity production came from renewables due partly to 50MW of new clean capacity. Costa Rica's renewable energy share should rise further in the next few years after vertically integrated utility Instituto Costarricense de Electricidad held its first tender for clean power contracts in 2012. In all, 100MW of wind and 38MW of small hydro capacity were contracted and are expected on line by 2015.

The tender should also help boost investment, which slackened in 2012. Last year, just $10m was invested in renewables locally, virtually all of it to fund the country's first utility-scale solar photovoltaic plant. In 2014, renewable net capacity should rise slightly while investment should grow at a faster pace as projects that secured contracts in the last tender seek to get built.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5.Source: Autoridad Reguladora de los Servicios Públicos. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

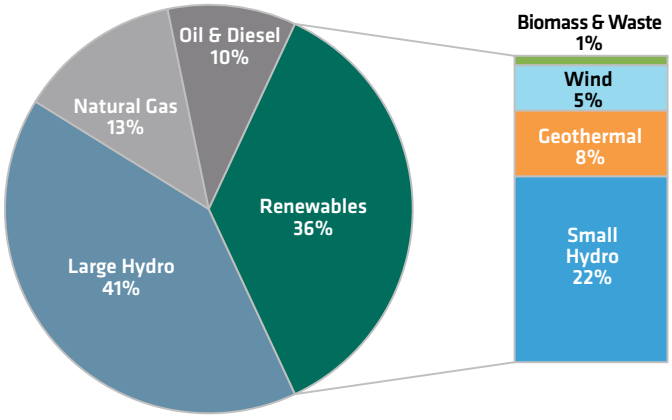
I. ENABLING FRAMEWORK

Ranking 12 / Score 1.60

Looking at the Enabling Framework parameter in isolation, Costa Rica finished 12th with a 1.60 score. The country was in the top three for the two indicators that measure clean energy capacity and generation. Renewables represent more than a third of the country's installed capacity and were responsible for 44% of the 10TWh of total electricity generation in 2012.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

3GW total installed capacity



Source: Bloomberg New Energy Finance, Autoridad Reguladora de los Servicios Públicos
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Costa Rica has a diversified renewable energy matrix, which includes small hydro (588MW), geothermal (209MW), wind (144MW) and biomass (30MW) plants. In 2012, the country's first utility-scale photovoltaic project, at 1MW in the Guanacaste province, was commissioned. Costa Rica improved its mark for the clean energy policies indicator, scoring 2.42 and placing well above the regional average of 1.92. Following a regional trend, Costa Rica has recently adopted auctions as a mechanism for contracting clean energy. In 2012, Instituto Costarricense de Electricidad (ICE) conducted its first tender. 138MW of clean capacity was contracted, with 100MW from wind and 38MW from small hydro projects. A second tender is planned for the third quarter of 2013. Costa Rica also has a net metering program and provides tax incentives for clean energy projects.

KEY POLICIES

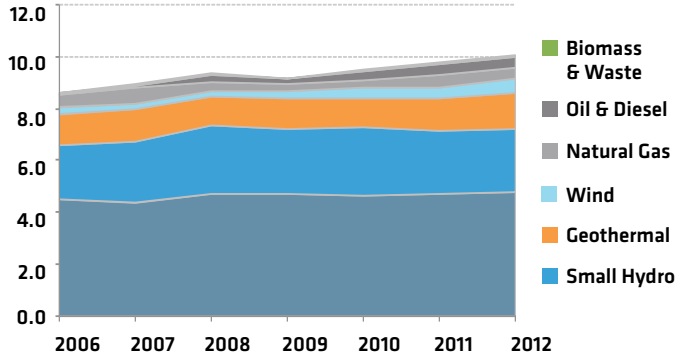
Auction	1 tender exclusively to renewable sources, contracted 138MW of small hydro (38MW) and wind (100MW) plants.
Tax Incentives	Tax exemption for equipment and materials used in the renewable energy industry.
Net Metering	Pilot net metering program, with 43 clients connecting renewable facilities to the grid

Source: Bloomberg New Energy Finance Policy Library

Power demand in Costa Rica has grown at an average pace of 1.5% over the last six years. In 2012, peak demand rose to 1.6GW – a 2.2% increase from 2011. No less than 99.3% of Costa Ricans have access to electricity. While that represents the country's relatively high level of development, it hurt its *Climatescope* score. The electrification rate indicator aims to highlight opportunities for using clean energy to bring citizens onto the grid for the first time; a higher electrification rate means fewer opportunities.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

10TWh total generation



Source: Bloomberg New Energy Finance, Autoridad Reguladora de los Servicios Públicos
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

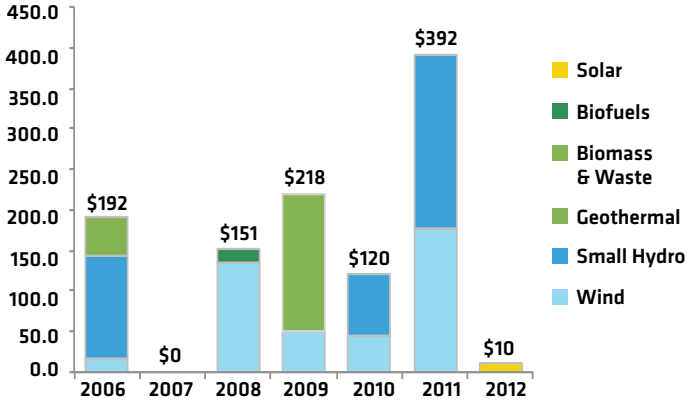
Ranking 17 / Score 0.65

Costa Rica had its biggest drop in the Clean Energy Investment and Climate Financing parameter, where it descended 14 positions from the last report and received a 0.65 score. The dramatic move was due to the almost complete absence of investment in Costa Rica's renewable energy sector in 2012 and a high interbank swap rate. Costa Rica's limited investment activity stood in stark contrast to the impressive investment growth seen in countries such as Chile, Dominican Republic, Mexico and Nicaragua.

After a record year for investments in 2011, Costa Rica received just $10m for large-scale renewable energy projects in 2012, a 97% drop in investment compared to the previous year. Virtually all of that went to finance a 1MW solar plant, and came in the form of a grant from the Japan International Cooperation Agency (JICA). Due to the limited investment, Costa Rica did not perform well in other two indicators: growth rate of clean energy investments and local investment by local players.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$1bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

Four of a total of 63 green microfinance organizations in Latin America and the Caribbean are located in Costa Rica: FOMIC, FUDECOSUR, FUNDEBASE, and FUNDECOCA. The groups have provided $257,500 in micro loans to finance clean energy initiatives to date. Costa Rican microfinance organizations offer a relatively high cost of debt, at an average of 13.8%

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	1/16
Green Microborrowers	82
Total Amount of Green Microloans Disbursed	$257,500
Average Cost of Green Microloans	13.8%
Average % of Loans Portfolio	0.5-3.5%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 16 MFIs in Costa Rica, 13 responded to the survey.

As for the cost of debt for large-scale projects, Costa Rica placed ninth among 13 countries that responded to a survey conducted by Bloomberg New Energy Finance, with an 8.4% interest rate. The Central American country had its worst performance in the swap rate indicator. Costa Rica has one of the highest interbank lending rates in the region, at 18%, suggesting borrowing rates could impede investments.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 6 / Score 1.69

On Parameter III, Costa Rica descended one position from its position in last year's report to finish sixth with a 1.69 score. Still, the country remains the leading nation in Central America, with the most complete value chain in comparison with its six neighbors.

A handful of commercial banks in Costa Rica lend to renewable energy developers. In addition, there are five types of service providers in Costa Rica, including technical consultancies, market research and specialist services.

The country's renewable energy value chain reflects the diversity of its power matrix; there is at least one segment active in all six clean energy technologies assessed in *Climatescope*. Costa Rica boasts an almost complete small hydro value chain, only lacking pipes and turbine manufacturers. Wind has the second most complete value chain among all technologies. There are four segments of wind value chain present, including construction and installation, operation and maintenance companies and project developers.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; **System Integration ; Project Development ; Power Generation**
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; **Project Development ;** O&M ; **Power Purchase**
Small Hydro	Pipes ; Turbines ; **Project Development ; Civil Works/Builder ; Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 7 / Score 1.79

GHG EMISSION REDUCTION POLICIES

Emission Reduction Target	Become carbon neutral (reduce 100% of GHG emissions) by 2021
Emission Trading System	Voluntary program which provides credits to landowners to incentivize reforestation and sell these credits to investors who want to offset their GHG emissions

Source: Bloomberg New Energy Finance

Costa Rica is one of the leading countries for carbon offset policies. It has designed a very ambitious emission reduction target, aiming to become carbon-neutral by 2021. The mandate encourages companies to report their emissions, so they can receive 'C-Neutral' certification. Since its launch in 2011, the Ministry of Environment has certified seven companies as carbon-neutral. Costa Rica is also the only Central American country signatory of the Partnership for Market Readiness (PMR) and that has a market instrument to reduce its carbon footprint.

CARIBBEAN

Dominican Republic

GDP[1]: **$98.7bn**

Seven-year economic growth rate[2]: **8%**

Population[3]: **10.2m**

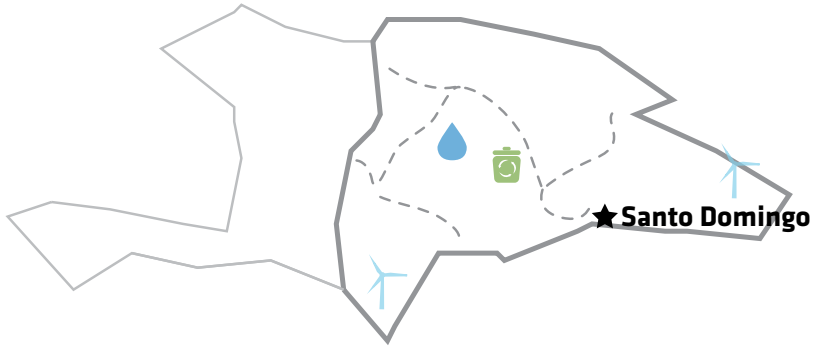
Total clean energy investments, 2006-2012[4]: **$644.5m**

Installed power capacity[5]: **3GW**

Renewable share[6]: **8%**

Total clean energy generation[7]: **935GWh**

Top energy authority: **National Energy Commission**



OVERALL RANKING 2013	2012	OVERALL SCORE 2013
8	15	1.58

PARAMETER	RANKING	SCORE
I. Enabling Framework	6	1.99
II. Clean Energy Investment & Climate Financing	6	1.57
III. Low-Carbon Business & Clean Energy Value Chains	16	0.81
IV. Greenhouse Gas Management Activities	13	1.16

SUMMARY

For the second year, the Dominican Republic was the best-ranked Caribbean country in the *Climatescope* index. It improved seven positions compared with last year's report and finished eighth in the 2013 ranking, with a 1.58 score. In spite of a troubled power market, due to high electricity losses, the Dominican Republic had a good performance in the Enabling Framework parameter. Additionally, investment commitments increased fivefold, and totaled $248m in 2012, helping increase the country's score.

The Dominican Republic has the second highest participation of renewables in the grid in the Caribbean (after Haiti), with 8% of its 3GW installed capacity coming from clean energy sources. While capacity additions were low in 2012, the island nation is poised to increase its renewable share, given the financing of a 50MW wind farm and a 30MW solar plant last year. Clean energy generation currently stands at 7%, out of 13TWh produced in 2012. However, the Dominican Republic will have to do more as it aims to achieve its 25% clean energy generation target by 2020. In addition to this policy, the island nation offers a variety of incentives to renewable energy to help spur capacity deployment. Although the country achieved sixth place in the first two parameters, it received middling scores for Parameters III and IV.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Superintendencia de Electricidad de la República Dominicana. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 6 / Score 1.99

Looking solely at the Enabling Framework parameter, the Dominican Republic finished in sixth place, with a 1.99 score. Although the country did not perform well in the power market structure indicator, its parameter score was boosted by its good marks in the clean energy policies, high electricity prices and power demand. The Dominican Republic has more clean energy capacity on line than any other nation in the Caribbean. In 2012, 8% of the country's 3GW installed capacity came from renewable sources: wind (33.5MW) and small hydro (227MW).

The Dominican Republic received the third best policy score in the clean energy policy indicator with six out of eight policy types assessed in place. The country established in 2007 a renewable energy target mandating that 10% of electricity supply must come from clean energy sources by 2015, rising to 25% in 2020. The 2015 target should be easily attainable given that the country currently generates 7% of its 13TWh total electricity production from wind and small hydro sources. However, renewable projects (except solar photovoltaic) must have a minimum size to qualify for the target: small hydro (>5MW), wind (>50MW), biomass (>80MW), solar thermal (>120MW). Under these definitions, the Dominican Republic last year generated only 1.3% of its electricity from clean sources. The country also offers more policy incentives to spur renewable deployment, including tax incentives, transmission priority dispatch, net metering and others (below).

The Dominican Republic received good marks on both price indicators. Among the 13 Climatescope countries with operating wholesale spot markets[9], the Dominican Republic had the third highest spot prices at an average of $193/MWh. Its retail prices are seventh highest, averaging $0.22/kWh.

KEY POLICIES

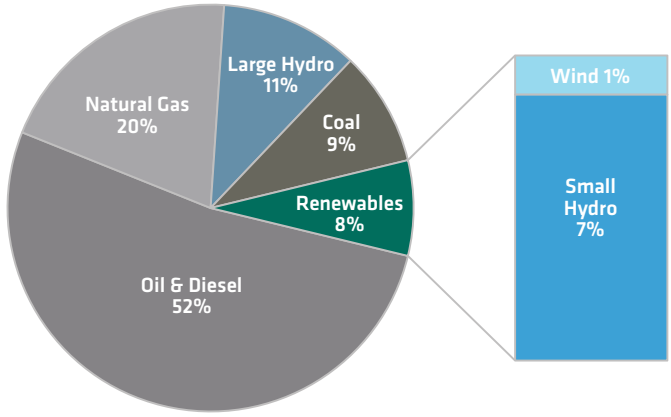
Energy Target	10% electricity generation from renewable sources by 2015 and 25% by 2020.
Feed-in Tariff	FiT legislation approved in 2007, but has not been implemented
Debt/Equity Incentives	Clean energy fund created from tax revenue from fossil fuel consumption. It aims to promote investments in renewable energy and energy efficient projects.
Tax Incentives	Clean energy investment tax credit, corporate, income, ITBIS, and import tax exemption, external financing tax reduction.
Utility Regulation	Renewable generators dispatch priority and open access to transmission and distribution.
Net Metering	Net Metering program with 59 customers connecting renewable facilities to the grid.

Source: Bloomberg New Energy Finance Policy Library

9. The 13 countries are: Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Nicaragua, Panama, Peru and Trinidad and Tobago.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

3GW total installed capacity



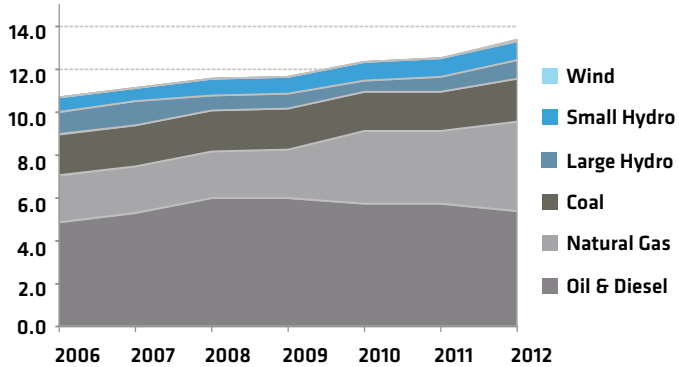
Source: Bloomberg New Energy Finance, Superintendencia de Electricidad
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Prices would be higher, were it not for a 2003 law barring distributors from raising tariffs. Meanwhile, utilities are hurt by high line losses, averaging 35-39% per year. As a result of both these factors, utilities are highly indebted and struggle to improve infrastructure for power distribution.

High power prices certainly make the economics of clean power appealing to potential projects in the Dominican Republic. However, structural problems in the country's power sector may make it difficult for new market players to enter.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

13TWh total generation



Source: Bloomberg New Energy Finance, Superintendencia de Electricidad
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

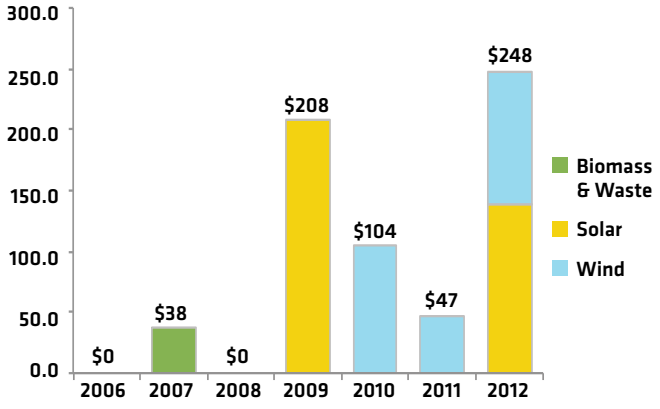
Ranking 6 / Score 1.57

The Dominican Republic finished sixth in the Clean Energy Investment and Climate Financing parameter, thanks to a 63% jump in cumulative investment from the prior year. In total, from 2006 through 2012, the Dominican Republic has attracted $644m in clean energy investment. This tops Ecuador ($432m) and Guatemala ($446m) for the same period. Those two countries have similarly sized GDPs.

In 2012, $248m was committed to wind and solar projects, up 428% from the $47m deployed in 2011. As a result, the country attained the second highest mark in the growth rate of clean energy investments, just below Peru. The largest deals financed a 30MW solar photovoltaic plant in Monte Plata and the 52MW expansion of a wind farm in Pedernales Province. The Dominican Republic also had a strong performance in the indicator measuring investments from local players. No less than 84% of the $248m committed came from Dominican organizations.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$644m total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	5/17
Green Microborrowers	243
Total Amount of Green Microloans Disbursed	$1,300,800
Average Cost of Green Microloans	10.6%
Average % of Loans Portfolio	2-5%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 17 MFIs in the Dominican Republic, 14 responded to the survey.

In the green microfinance category, the Dominican Republic received low scores. Of 17 microfinance organizations operating on the island, five offer some form of microloan involving clean energy: Asociación para el Desarrollo de la Provincia Espaillat (ADEPE), Asociación para Inversión y Empleo (ASPIRE), Banco Ademi, COOPADEPE and Fundación Sur Futuro. To date, these organizations have disbursed a total of $1.3m in green microloans to 243 borrowers. The average cost of green microloans stands at 10.6% – lower than the country's swap rate of 12.9%

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 16 / Score 0.81

The Dominican Republic had its weakest performance in the Low-Carbon Business and Clean Energy Value Chains parameter, ranking 16th, but improving one slot from last year's report. The Caribbean island hosts limited financial companies and service organizations operating in clean energy. Only commercial banks have provided loans for clean energy and the country only counts one segment of service providers – technical consultancies. As for renewable energy sector-specific value chains, the Dominican Republic has companies active in at least one segment for four sectors: biofuels, small hydro, solar and wind. Small hydro, solar and wind have two segments active, the highest number for any sector in the country.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	1	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; Inspection & Maintenance ; Specialist Services ; Testing & Certification Services
Developers & Utilities	0	Integrated Service Provider
Marketing Services	0	Distributor ; Market Research ; PR Company
Financial & Legal Services	0	Banking-Corporate ; Banking-Custody ; Trust & Deposit ; Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ; Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ;** Construction/Installation ; O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Colombia has no companies in the biomass & waste and geothermal value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 13 / Score 1.16

In the Greenhouse Gas Management Activities parameter, the Dominican Republic finished 13th place with a 1.16 score. The country did not score well in the carbon offsets category, as its offset historical activity fell below the regional average. The nation has a total of 11 projects dedicated to offsetting greenhouse gas emissions. Nine of these are focused on power generation initiatives. All Dominican Republic offset projects are registered under the UN's Clean Development Mechanism. The country also did not have a strong performance in the corporate awareness category, as it only scored in two indicators out of six assessed.

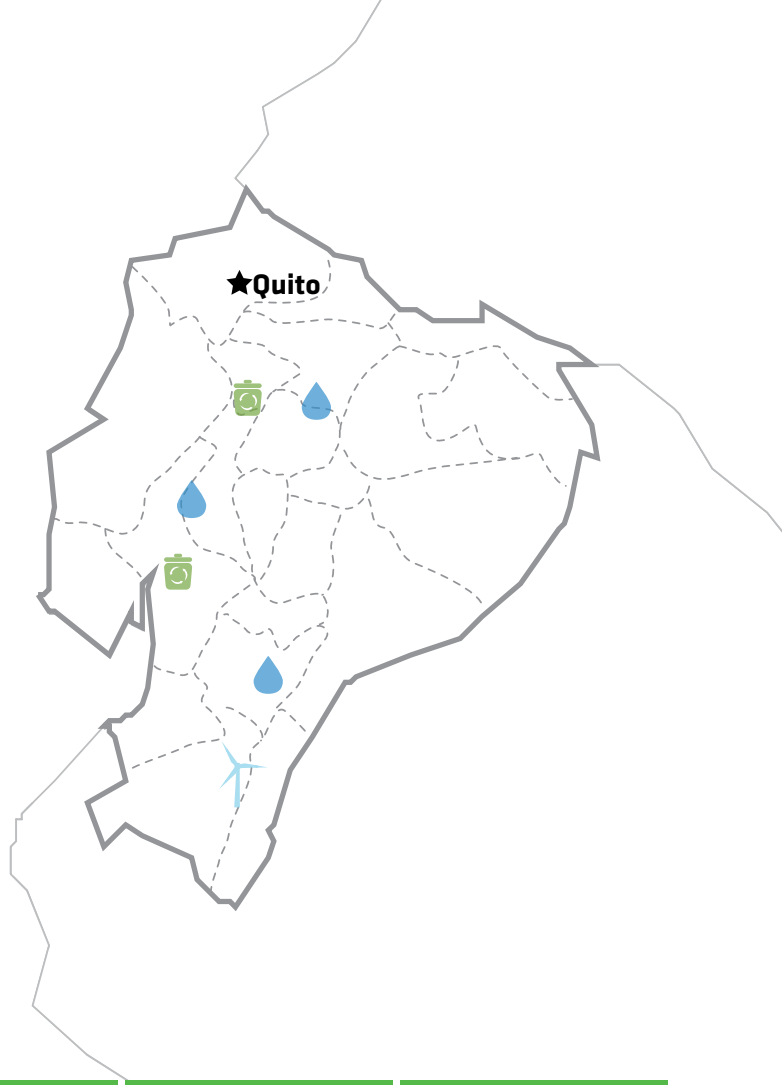
Policies to reduce greenhouse gas emissions are still a novelty in Latin America and the Caribbean. Only five countries in the region have emission reduction targets, including the Dominican Republic. In 2007, the island nation had a voluntary target to cut its greenhouse gas emissions 20% by 2020.

GHG EMISSION REDUCTION POLICIES

Emission Reduction Target	Voluntary target to reduce 20% of GHG emissions by 2020.

Source: Bloomberg New Energy Finance

Ecuador



GDP[1]: **$153.2bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **15.2m**

Total clean energy investments, 2006-2012[4]: **$432.5m**

Installed power capacity[5]: **5GW**

Renewable share[6]: **8%**

Total clean energy generation[7]: **2,042GWh**

Top energy authority:

Ministry of Electricity and Renewable Energy

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
13	14	1.27

PARAMETER	RANKING	SCORE
I. Enabling Framework	16	1.31
II. Clean Energy Investment & Climate Financing	8	1.32
III. Low-Carbon Business & Clean Energy Value Chains	17	0.75
IV. Greenhouse Gas Management Activities	10	1.37

SUMMARY

Ecuador moved up one place, to 13th, in the overall 2013 *Climatescope* ranking, with a score of 1.27. Its advance can be attributed to progress on the clean energy investment parameter, where the country gained three places based on rising activity both in the capital and microfinance indicators.

Small hydro expanded its dominance of Ecuador's renewable-generation investments. In-flows to that sector in 2012 nearly equaled the all-time annual record of $131m (non-inflation-adjusted) in 2006.

Ecuador's installed clean energy capacity returned to growth in 2012 after declining slightly in 2011. However, clean energy generation actually retreated in the face of more production from fossil fuels and large hydro. In calendar year 2013, green-power generation should again rise thanks to the commissioning in January of the 16.5MW Villonaco wind farm developed by national utility CELEC.

Looking ahead, further non-hydro clean energy development in Ecuador will likely depend on the government holding technology-specific tenders, or by implementing non-hydro clean energy mandates and carve-outs. The reason: Ecuador has embarked on the construction of a series of large hydro projects with the aim of eliminating the need for imported fossil fuels for power generation.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Consejo Nacional de Electricidad. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 16 / Score 1.31

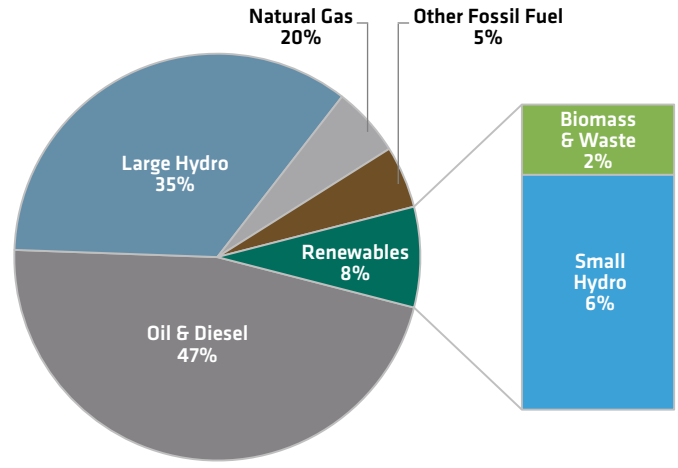
Ecuador placed 16th on Parameter I, with a score of 1.31. Its clean energy capacity increased from last year's level, but clean power generation declined slightly despite an overall increase in power production of almost 11%. A feed-in tariff that guaranteed above-market power prices for renewable generation expired in 2012. Green power production was diminished by gains in both fossil generation and large hydro, with natural gas nearly doubling from its relatively insignificant 2011 level of 778GWh.

Ecuador was rated above-average on the power sector structure indicator. That rating was based on how the country scored on a series of questions gauging power market liberalization, utility unbundling and wholesale generation market performance, barriers to participating in generation, privatization history and other criteria.

The country enjoys retail power prices below the regional average. Regardless of how beneficial such prices may be for consumers, they make it challenging for renewable generation to compete.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

5GW total installed capacity

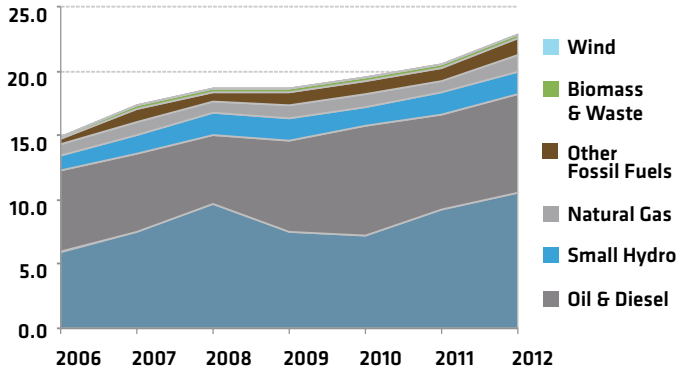


Source: Bloomberg New Energy Finance, Consejo Nacional de Electricidad
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Ecuador's policy-makers have declared that they intend for the country to become entirely self-sufficient in terms of power generation resources and have designated large hydro as the primary means for attaining the objective. The policy's exemplar is the 1,500MW Coca Codo Sinclair project, which would divert the Coca River upstream of the San Rafael waterfall, which at 146 meters is Ecuador's tallest. It is planned to come on line in 2016.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

23TWh total generation



Source: Bloomberg New Energy Finance, Consejo Nacional de Electricidad
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

As a result of its large hydro initiative, Ecuador's progress in non-hydro clean energy deployment depends to a high degree on policy support for renewables tenders, mandates and carve-outs.

KEY POLICIES

Feed-in Tariff	FiT program guaranteed power prices above average market rate to 645MW of 111 projects from biomass, solar, small hydro and wind sources. The program ended in 2012.
Biofuels Blending	5% biodiesel blend with conventional diesel
Tax Incentives	Import tax exemption to clean energy equipment and income tax exemption to renewable generators.

Source: Bloomberg New Energy Finance Policy Library

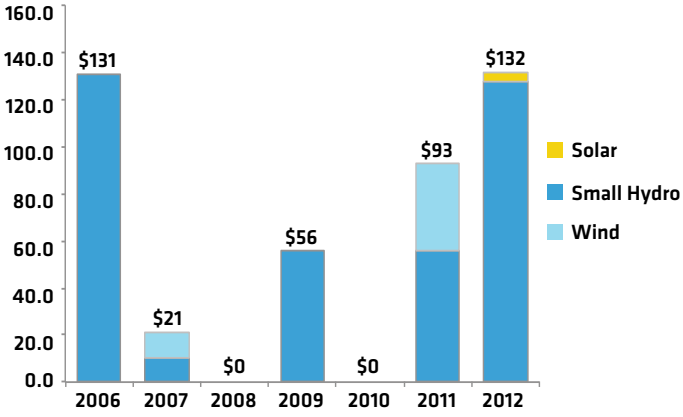
II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 8 / Score 1.32

Ecuador ranked eighth on this parameter, with a score of 1.32. Overall clean energy investment in the country rose 42% from 2011 to $132m last year. Solar joined the Ecuadorian portfolio for the first time in 2012, with Solaria's $4.4m investment in a Quito photovoltaic project. The balance of Ecuador's 2012 green investment went to small hydro, with capital in-flows doubling from previous-year levels to reach $127m.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$2bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	5/56
Total Amount of Green Microloans Disbursed	$8,506,000
Average Cost of Green Microloans	15.5%
Average % of Loans Portfolio	2-5%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 56 MFIs in Ecuador, 47 responded to the survey.

With limited activity in asset and corporate clean energy finance and no notable venture capital or private equity investment in the sector, Ecuador relies on microfinance for small-scale renewables deployment. The number of observed microfinance institutions offering green products in Ecuador rose to five in 2012, compared to three previously. They disbursed $8.5m in microloans, more than in Bolivia ($5.7m) or Colombia (none) but only a fraction of this type of lending in Peru ($253m). The average cost of microloan debt was 15.5%.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 17 / Score 0.75

Ecuador has no observed clean energy financial institutions, but 10 relevant value-chain components are present in the country and there are service providers active in technical consultancy and distribution.

Ecuador's wind and solar value chains are the best developed, corresponding to the country's historic investment activity, with three components each. Other sectors represented by Ecuadorian value-chain components are biofuels, biomass and waste and solar.

Caminos y Canales Cia., the Ecuadorian engineering company, is a representative green service provider. Caminosca manages small hydro projects such as the 27MW Elecaustro Ocana run-of-river facility commissioned on 15 March 2012.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	1	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; Inspection & Maintenance ; Specialist Services ; Testing & Certification Services
Marketing Services	1	**Distributor ;** Market Research ; PR Company

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Only type of service provider with at least one available sub-sector is displayed. Ecuador has no companies comprising developers and utilities and financial and legal services. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	**Engineering Company ; Producers ;** Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ;** Power Generation
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; **Engineering ;** O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ;** EPC ; Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; **Turbines ; Project Development ;** Construction/Installation ; O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Ecuador has no companies in the geothermal value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

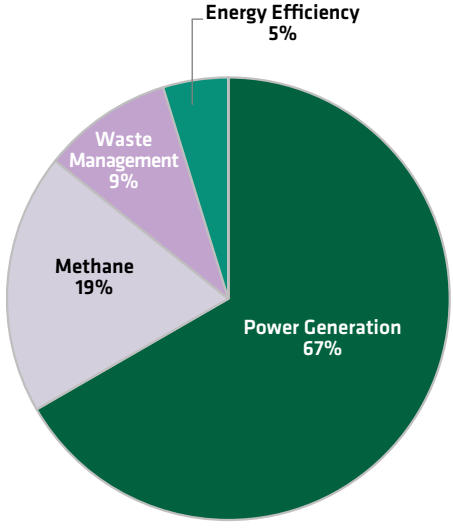
Ranking 10 / Score 1.37

Ecuador's highest parameter score came in the area of greenhouse gas management activities. It had 21 Clean Development Mechanism (CDM) offset projects, most of which were in power generation but some also addressed methane, waste management and energy efficiency. The country scored in the middle of the benchmarked range for CDM risk indicators, with the number of projects unchanged from 2011's 10.

Restraining Ecuador's progress on this parameter were the absence of greenhouse-gas reduction targets and a lack of voluntary greenhouse-gas reporting by companies.

CDM OFFSET PROJECTS BY SECTOR

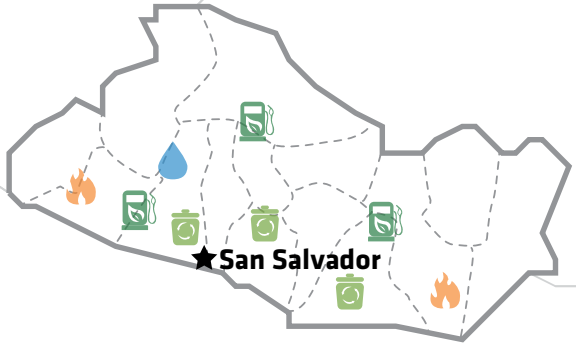
11 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

El Salvador

GDP[1]: **$46.3bn**
Seven-year economic growth rate[2]: **3%**
Population[3]: **6.2m**
Total clean energy investments, 2006-2012[4]: **$22m**
Installed power capacity[5]: **1GW**
Renewable share[6]: **23%**
Total clean energy generation[7]: **1,776GWh**
Top energy authority: **National Energy Council**



OVERALL RANKING 2013	2012	OVERALL SCORE 2013
15	13	1.08

PARAMETER	RANKING	SCORE
I. Enabling Framework	15	1.42
II. Clean Energy Investment & Climate Financing	21	0.55
III. Low-Carbon Business & Clean Energy Value Chains	12	1.25
IV. Greenhouse Gas Management Activities	14	1.12

SUMMARY

El Salvador fell two positions, to 15th, in its overall *Climatescope* ranking for 2013, with an overall score of 1.08. Its change in position can be attributed to a five-position decline on the heavily weighted Parameter I. Data for this parameter came from publicly available sources.

As is the case with its Central American neighbors, El Salvador relies heavily on fuel oil and diesel for power generation. Together these two sources accounted for 47% of the country's 1.5GW installed capacity as of the end of 2011 (the last year for which complete data were available). Another 30% of the generation base is large hydro. Renewables constitute almost a quarter of generation, and are comprised of geothermal (14%), biomass & waste (7%) and small hydro (2%).

Geothermal held its position as El Salvador's flagship renewable sector, with 204MW installed. The sector is poised to maintain its dominance thanks to sizable untapped resources and relatively well-developed local geothermal value chain.

El Salvador is embarking on a notable addition to its solar fleet. A 14.2MW photovoltaic plant has been proposed by Comisión Ejecutiva Hidroeléctrica del Río Lempa (CEL) in Usulután department. Upon commissioning, the 15 De Septiembre PV plant would be the largest in Central America.

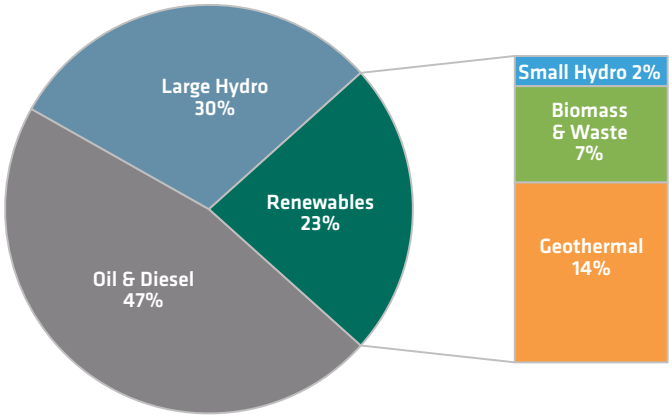
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period. .
5. Source: Superintendencia General de Electricidad y Telecomunicaciones. Notes: For 2011.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

El Salvador's 1.42 score on Enabling Framework (Parameter I) was its highest for any parameter. The score was driven largely by the country's power sector structure, price attractiveness and market size. Nevertheless, El Salvador slipped five positions from its 2012 level on Parameter I, which is *Climatescope's* most heavily weighted. Leading factors behind the decline were the absence of significant growth in installed clean energy capacity or generation.

INSTALLED POWER CAPACITY BY SOURCE, 2011 (GW)

1GW total installed capacity



Source: Bloomberg New Energy Finance,Superintendencia General de Electricidad y Telecomunicaciones
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

On Clean Energy Investment and Climate Financing parameter (II), El Salvador lost one position and scored 0.55. The country posted small increases in overall recorded clean energy investment, small distributed investment and loans and grants. However, that growth was eclipsed by several other countries, resulting in a loss of ground by El Salvador.

El Salvador's clean energy investment is poised to rise if a 14.2MW photovoltaic plant proposed by Comisión Ejecutiva Hidroeléctrica del Rio Lempa (CEL) becomes a reality. CEL in March opened pre-qualification bids for the 15 De Septiembre PV project. Upon commissioning, the plant would be the largest in Central America.

The country's rank on Low-Carbon Business and Clean Energy Value Chains (Parameter III) was down one notch from 2012, with a score of 1.25. As was the case for Parameter II, the ranking change was not a result of backsliding by El Salvador but faster growth on the parameter's indicators by other Latin American and Caribbean nations.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Geothermal	Pre-Drilling Exploration ; **Exploration/Production Drilling ;** Well & Resource Confirmation; **Turbine & Power Block ; Balance of Plant ; Project Development ;** O&M ; Power Purchase
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ;** Construction/Installation ; O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

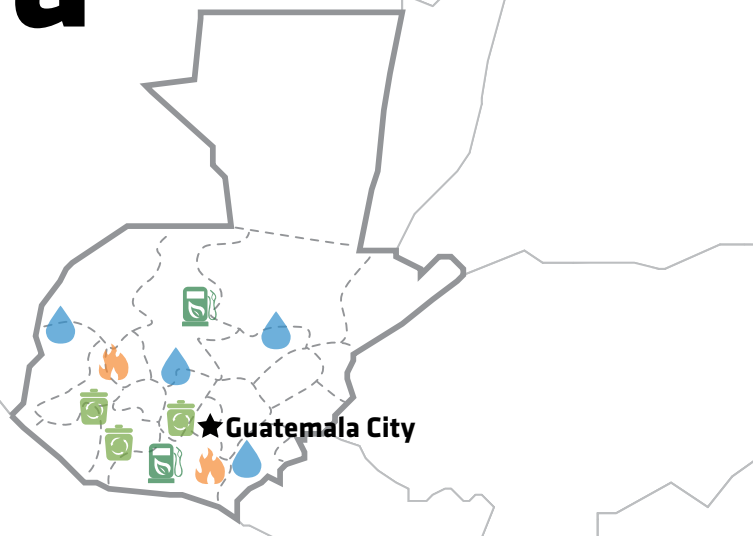
El Salvador held unchanged its 14th place position on Greenhouse Gas Management Activities (Parameter IV), where it scored 1.12. The country scored above the mean on the indicator of Clean Development Mechanism (CDM) risk, which is the ratio of projects completed to projects undertaken. El Salvador has numerous carbon offset projects, which are associated with both generation and waste-management.

KEY POLICIES

Tax Incentives	Import duty exemption to clean energy equipment and machinery and income tax exemption to renewable generators.

Source: Bloomberg New Energy Finance Policy Library

Guatemala



GDP[1]: **$78.7bn**
Seven-year economic growth rate[2]: **5%**
Population[3]: **15.1m**
Total clean energy investments, 2006-2012[4]: **$433m**
Installed power capacity[5]: **3GW**
Renewable share[6]: **23%**
Total clean energy generation[7]: **1,955GWh**
Top energy authority: **Ministry of Energy and Mines**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
12	9	1.34

PARAMETER	RANKING	SCORE
I. Enabling Framework	7	1.91
II. Clean Energy Investment & Climate Financing	22	0.51
III. Low-Carbon Business & Clean Energy Value Chains	10	1.31
IV. Greenhouse Gas Management Activities	9	1.44

SUMMARY

Guatemala finished 12th in the 2013 edition of *Climatescope*, dropping three positions compared with last year's survey. The Central American country made it to the top 10 countries in three of the four parameters assessed. It performed well on the Enabling Framework parameter, but the absence of renewable investment in 2012 brought down its overall score, to 1.34.

Guatemala has one of the highest shares of non-large hydro renewables in the region, amounting to 23% of the country's total 3GW capacity in 2012. Still, there are substantial opportunities to displace fossil-fuel-based sources of generation, which supply over half the country's power.

Since 2006, Guatemala has attracted a cumulative total of $434m in clean energy commitments. However, the country did not attract renewable investment in 2012, which should mean limited short-term deployment for renewables.

In 2012, Guatemala held its first renewable energy auction, joining eight other Latin American and Caribbean countries that have used this policy mechanism. Guatemala contracted 393MW of renewable capacity, from biomass, small hydro, solar and wind projects via 15-year power-purchase agreements. Renewable investment in Guatemala should return in the next three years, given that the auctioned projects must come online between 2015 and 2020.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Administrador del Mercado Mayorista. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

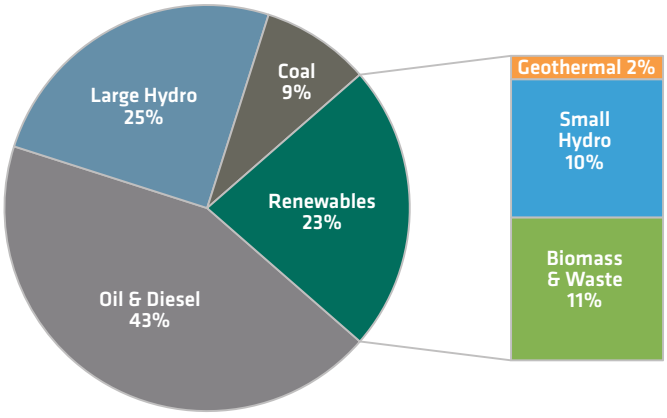
Ranking 5 / Score 1.91

Guatemala obtained 7th place in *Climatescope's* Enabling Framework parameter. Among 26 nations assessed in the report, the Central American country has the fifth-largest share of renewables in its power matrix – 23% out of a 3GW matrix in 2012. This represents a total of 636MW with about almost half accounted for by biomass and small hydro, respectively and the rest coming from geothermal. In 2011, renewables actually had a larger share, with 28% of the country's 2.5GW capacity at the time. Their share decreased because more non-renewable capacity was added than renewables: clean energy capacity grew by 15MW in 2012, while Guatemala added 168MW of oil, diesel and coal over the same period.

While renewable capacity did not experience a considerable increase last year, renewable power generation climbed 14.5% and represented 1.96TWh out of 9TWh generated in 2012.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

3GW total installed capacity



Source: Bloomberg New Energy Finance, Administrador del Mercado Mayorista
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Guatemala is already planning significant clean energy capacity additions starting from 2015. In the second half of 2012, the Central American country held a 600MW energy auction, where almost 400MW was contracted from renewables projects. The National Energy Commission (CNEE) received 57 proposals and contracted 40 for 623MW of capacity. No less than 37 of these 40 projects were represented by renewable sources: biomass, small hydro, solar and wind. Projects received 15-year contracts and must be commissioned between 2015 and 2020.

In addition to the recent auctions, Guatemala also offers tax incentives to support renewable energy deployment, which include VAT, income and industrial tax exemption to generators and import duty exemption for equipment.

With 80% of its population connected to the grid, Guatemala has the fifth-lowest electrification rate among the 26 countries assessed in *Climatescope*. There are plenty of opportunities to bridge this gap using distributed clean energy solutions and bringing sustainable electricity to around 3m Guatemalans still without access to electricity.

KEY POLICIES

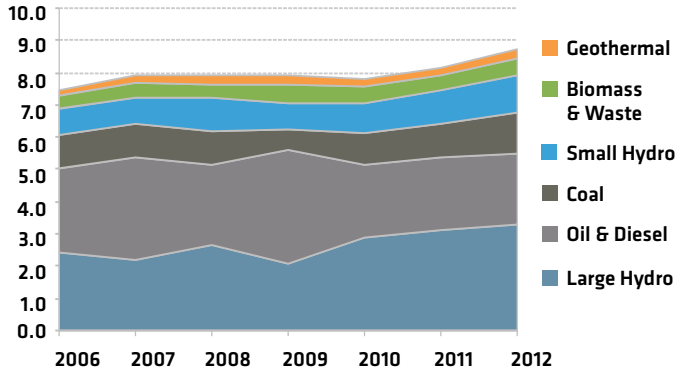
Auction	CNEE has held one auction, contracting 37 projects from small hydro (221MW), wind (101MW), solar (55MW) and biomass (16MW) sources for 15-year contracts.
Tax Incentives	Import duty exemption to clean energy equipment and machinery and VAT, income tax and industrial tax exemption to renewable generators.

Source: Bloomberg New Energy Finance Policy Library

Guatemala is one of eight Latin American and Caribbean countries to produce biofuels at a commercial scale.[9] After three years of declining biofuel production, levels increased 15.4% in 2012. The Central American country produced 130m liters of ethanol in 2012 and ranked sixth on the biofuels production indicator.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

9TWh total generation



Source: Bloomberg New Energy Finance, Administrador del Mercado Mayorista

9. The eight countries are: Argentina, Brazil, Colombia, Costa Rica, Guatemala, Nicaragua, Paraguay and Peru.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

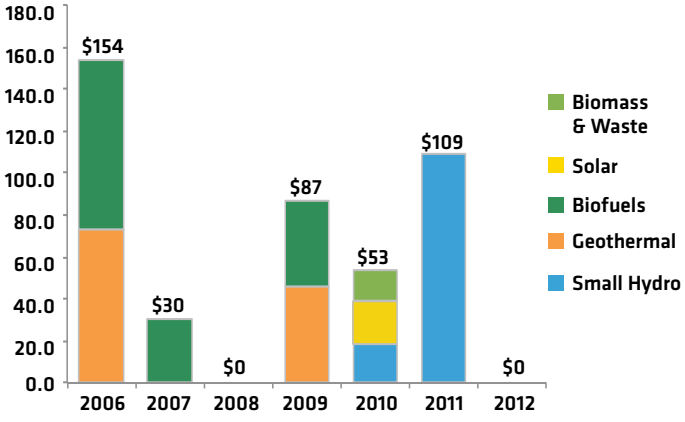
Ranking 22 / Score 0.51

Guatemala had its weakest performance on the Clean Energy Investment and Climate Financing parameter, finishing 22nd with a 0.51 score. Since 2006, Guatemala has attracted $434m in clean energy investment. The Central American country came in 11th among the 26 countries assessed in *Climatescope* in terms of cumulative renewable investment relative to the size of the country's economy. Biofuels is the country's flagship renewable sector, with $152m committed to date, followed by small hydro, with $127m.

No renewable energy investment for Guatemala was disclosed for 2012 by the end of the *Climatescope* data collection process (February 2013).[10] As a result, the country did not receive a mark for two important indicators: growth rate of clean energy investment and local investment by local players. We expect renewable financing in Guatemala to start to pick up again in the next few years, driven by the funding of the projects contracted in the 2012 auction.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$433m total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	3/22
Green Microborrowers	820
Total Amount of Green Microloans Disbursed	$180,000
Average Cost of Green Microloans	18.3%
Average % of Loans Portfolio	2-5%

Source: Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 22 MFIs in Guatemala, 18 responded to the survey.

In Guatemala, three organizations offer microcredit loans to fund clean energy projects: Asociación de Desarrollo Integral 'Cuenca del Lago de Atitlán' (ADICLA), Fundación de Asistencia para la Pequeña Empresa (FAPE) and Fundación Genesis Empresarial. To date, these organizations have disbursed a total of $180,000 in green microloans, to around 820 borrowers. The average cost of green microdebt is 18.3%, as reported by the organizations. After Nicaragua, Guatemala has the largest green microfinance presence among the seven nations of Central America.

10. Guatemala did attract a $50m investment to a 48MW wind farm in 2012, however, financial information about it was only disclosed after the end of Climatescope's data collection, on 4 March 2013. The investment was not included in Guatemala's final score and ranking.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 10 / Score 1.31

Looking solely at Parameter III, Guatemala ranks in the top 10 with a 1.31 score. The country has a significant clean energy value chain with companies present in all six sectors assessed: biofuels, biomass and waste, geothermal, small hydro, solar and wind. Small hydro has the most complete value chain, with companies in four segments ranging from project development to construction and operation and maintenance services all active. Biomass and waste, solar and wind are right below, with two segments active for each.

In terms of financial institutions operating in the clean energy space in Guatemala, it is only commercial banks such as Banco G&T and Banco Agromercantil that offer loans for large-scale projects in the country. In addition, there is a limited availability of clean energy service providers, with companies present in only two segments surveyed: technical consultancy and specialist services.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	2	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; Inspection & Maintenance ; **Specialist Services ;** Testing & Certification Services

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	**Feedstock Supply ;** Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; Project Development ; O&M ; **Power Purchase**
Small Hydro	Pipes ; Turbines ; **Project Development ; Civil Works/Builder ;** Engineering ; **O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ;** Construction/Installation ; O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

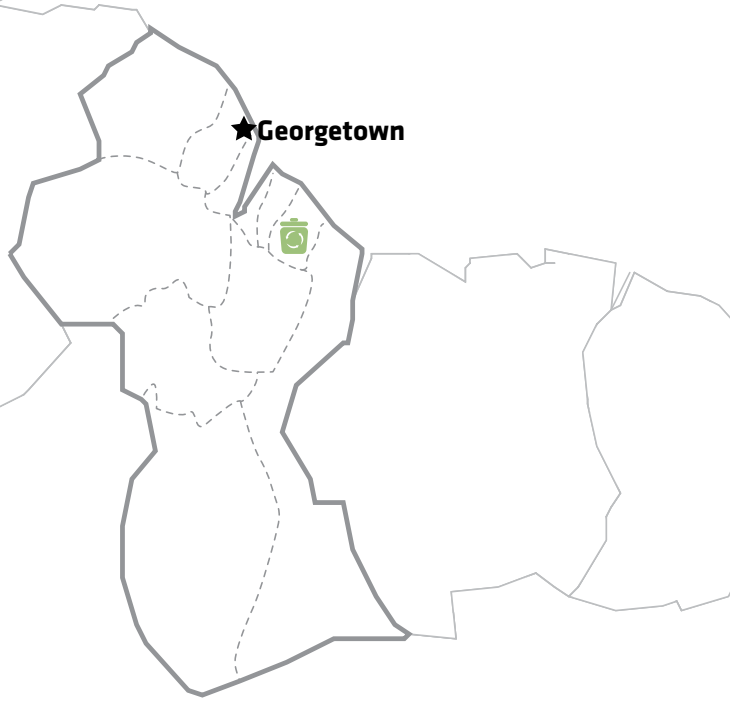
IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 9 / Score 1.44

Guatemala received a 1.44 score on the Greenhouse Gas Management Activities parameter and finished ninth, thanks largely to its performance in the carbon offsets category. There are 17 offset projects in Guatemala, of which 15 are registered under the UN's Clean Development Mechanism (CDM). The large majority of projects are focused on curbing emissions from power generation (10) or reducing methane emissions (4). Guatemala performed well on the indicator that assesses CDM risk of project development and scored above the regional average on success of projects. For the indicator that looks at potential for offset initiatives, Guatemala stood out for its forestry REDD opportunities.

The Central American country does not have any public policies aimed at offsetting greenhouse gas emissions, and thus it did not receive a score for any of the four indicators under the carbon policy category. In the Corporate Awareness category, Guatemala received the maximum score for two indicators that assess the presence of at least one environmentally focused think tank and organization that provides environmental business training based in the country.

Guyana



GDP[1]: **$6.2bn**
Seven-year economic growth rate[2]: **6%**
Population[3]: **0.8m**
Total clean energy investments, 2006-2012[4]: **$40m**
Installed power capacity[5]: **173MW**
Renewable share[6]: **9%**
Total clean energy generation[7]: **N/A**
Top energy authority: **Guyana Energy Agency**

OVERALL RANKING

2013	2012
23	24

OVERALL SCORE 2013

0.67

PARAMETER	RANKING	SCORE
I. Enabling Framework	21	1.01
II. Clean Energy Investment & Climate Financing	24	0.40
III. Low-Carbon Business & Clean Energy Value Chains	24	0.19
IV. Greenhouse Gas Management Activities	19	0.63

SUMMARY

Guyana finished 23rd in the 2013 edition of *Climatescope*, moving up one slot from last year. The second-smallest economy in Latin America and the Caribbean received a 0.67 overall score and had its best performance on Parameter IV, where it made it to 19th, given the presence of one carbon offset project and potential for more energy efficiency initiatives.

Guyana relies heavily on fossil fuels for electricity generation: 91% of its 173MW installed capacity is accounted for by oil-burning thermal plants. Guyanese customers pay the second highest electricity tariffs among the 26 countries assessed in *Climatescope*, with an average of $0.29/kWh for retail power.

The current high-price environment presents significant opportunities for clean energy development in Guyana, particularly given its rich natural resources. Nonetheless, to date only one large-scale renewable project has come on line in Guyana: a 15MW biomass plant in the northeast of the country owned by state sugar company GuySuco.

Guyana is slowly taking advantage of its position as a sugar producer to diversify its energy alternatives. In 2012, GuySuco announced the development of a pilot ethanol plant using sugarcane as feedstock. The plant should be commissioned by the end of 2013 and will produce 350,000 liters per year. This may signal the start of an important new industry in the country.

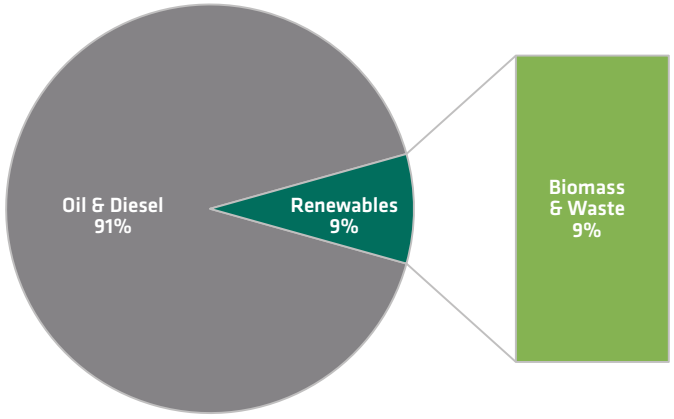
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Guyana Power & Light Company. Notes: For 2012. Installed power capacity data was revised from last edition's estimates to reflect official numbers provided by the Guyana Power & Light Company.
6. Ibid.
7. Ibid. N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

On the Enabling Framework parameter, Guyana ranked 21st with a 1.01 score. Guyana's power market is controlled by vertically integrated Guyana Power & Light Company. The country's mining region of Linden is not connected to the national grid and receives power from the Linden Electricity Company. Problems in the Guyanese power system include its high reliance on fossil fuels. Of the country's 173MW[9] installed capacity, only 9% comes from a 15MW biomass plant with the remaining capacity coming from oil-burning plants.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

173MW total installed capacity



Source: Bloomberg New Energy Finance, Guyana Power & Light Company

Guyana has the second highest electricity tariffs among all 26 countries assessed in *Climatescope*. Customers pay an average of $0.29/kWh with commercial consumers paying significantly more at an average of $0.34/kWh. Such prices make a compelling case for renewables.

On Parameter II, Guyana improved two positions to rank 24th. Last year saw the closing of financing for a 350,000-liter per year ethanol plant to be operated by state-owned sugar company GuySuco. The project is supported by a $0.6m grant from the Inter-American Development Bank. A partnership formed between US and Brazilian companies is developing the project.

Guyana ranked 24th in Parameter III, given the presence of only two value chain segments in biomass and small hydro technology sectors. The country had its best performance in the Greenhouse Gas Management Activities parameter, ranking at 19th place, given the presence of one power generation carbon offset project and its potential for more offset initiatives under energy efficiency. In addition, at least one environmentally-focused think tank is active in Guyana.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ;** Power Generation
Small Hydro	Pipes ; Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Guyana has no companies in the biofuels, geothermal, solar and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

GHG CORPORATE AWARENESS

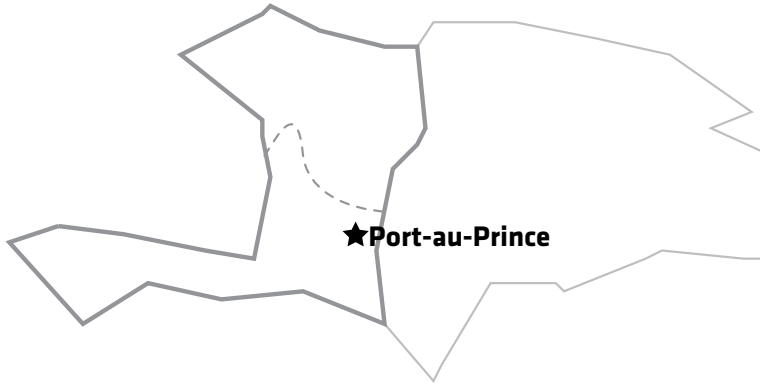
Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✗
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

9. Note: Installed power capacity data was revised from last edition's estimates to reflect official numbers provided by the Guyana Power & Light Company.

CARIBBEAN

Haiti



GDP[1]: **$12.9bn**

Seven-year economic growth rate[2]: **4%**

Population[3]: **10.4m**

Total clean energy investments, 2006-2012[4]: **$0.8m**

Installed power capacity[5]: **241MW**

Renewable share[6]: **23%**

Total clean energy generation[7]: **N/A**

Top energy authority:

Ministry of Public Works, Transportation and Communications

OVERALL RANKING 2013	OVERALL RANKING 2012	OVERALL SCORE 2013
22	22	0.71

PARAMETER	RANKING	SCORE
I. Enabling Framework	19	1.12
II. Clean Energy Investment & Climate Financing	15	0.74
III. Low-Carbon Business & Clean Energy Value Chains	23	0.25
IV. Greenhouse Gas Management Activities	26	0.08

SUMMARY

Haiti finished *Climatescope* 2013 in the 22nd position, its same standing as in last year's edition. The country received an overall score of 0.71 due to its clean energy installed capacity, high power prices and grant commitments. Haiti's final score was hurt by its weak performance in Parameter IV; there are very limited greenhouse gas offset initiatives in the country.

Haiti has a wide potential for clean energy deployment, including solar and small hydro power generations. However, its lack of infrastructure and troubled economy hamper the entry of small and medium-sized renewable energy developers. Since the 2010 earthquake, most activity related to clean energy in Haiti has been sponsored by multilateral banks or large corporations. Slowly the country is getting back on its feet. Its electrification rate rose from 12% in 2011 to 15% in 2012 and Haiti has received support to help reestablish its power sector, revamp inefficient generation plants and install distributed generation technologies. Clean energy still has an important role to play in Haiti's recuperation, especially through small hydro and solar generation.

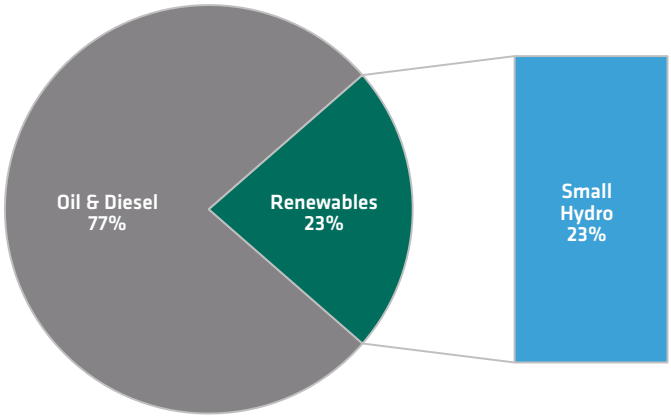
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Estimate based on Electricité d'Haiti and Inter-American Development Bank data.
6. Ibid.
7. N/A refers to no data available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

On the Enabling Framework parameter, Haiti finished in 19th place. The country is still in the process of energy reform and does not offer any policy incentives to renewables. As the poorest economy among 26 assessed in the index, Haiti struggles with major economic and infrastructural problems, which also extend to its energy sector. Vertically integrated utility Electricité d'Haiti (EDH) holds a monopoly over the country's electricity grid, apart from a few independent power producers for generation. The utility suffers from a high level of electricity theft[9] and low collection ratios. The grid relies mostly on generation from plants fueled by imported oil. In all, oil-fired generation represents 77% of the country's 241MW installed capacity. As a result, EDH offers some of the priciest electricity in the region with retail consumers paying an average of $0.28/kWh. Industrial customers pay even more, at $0.32/kWh.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

241MW total installed capacity



Source: Bloomberg New Energy Finance, Electricité d'Haiti
Note: Estimate based on Electricité d'Haiti data and IDB data.

Haiti has improved its electrification rate in recent years, although it still has the lowest by far in Latin America and Caribbean with just 15% of Haitians connected to the national grid. As a result, the country received the highest score for the survey's electrification rate indicator, which measures opportunities for clean energy deployment to new users.

Some alternatives to bridge this gap include small-scale solar. In the first half of 2013, the Clinton Foundation along with NRG Energy commissioned a 100kW photovoltaic system to power Hospital Bernard Mevs, which treats approximately 10,000 patients annually.

Haiti fared best on Parameter II, where it came in 15th. The country did well regarding the amount of loans and grants relative to its economy. From 2006 to 2012, Haiti received $26.5m in grants to fund renewable energy initiatives. In 2012, the Inter-American Development Bank provided $1.5m to conduct feasibility studies for a 32MW small hydro plant located in the Artibonite River.

The Caribbean island maintained its 23rd position on Parameter III, since no new renewable energy segments have been developed since the last edition. Currently, Haiti has one segment for service providers (distributors) and three for value chains by clean energy sector (two for small hydro and one for solar).

Haiti had its weakest performance on Parameter IV, where it placed last. There is no significant carbon offset activity in the country, and thus it only scored in one indicator out of the 13 assessed.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; **Modules ;** Balance of Plant ; Project Development ; EPC ; Owner/Operator

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Haiti has no companies in the biofuels, biomass & waste, geothermal and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

9. It is estimated that 50% of the people who are currently connected to Haiti's grid have illegal connections. Inter-American Development Bank, Haiti - Institutional Transformation and Modernization Program of the Energy Sector, 2013.

Honduras

GDP[1]: **$37.8bn**

Seven-year economic growth rate[2]: **5%**

Population[3]: **8.2m**

Total clean energy investments, 2006-2012[4]: **$585.1m**

Installed power capacity[5]: **2GW**

Renewable share[6]: **22%**

Total clean energy generation[7]: **1,196GWh**

Top energy authority:

Department of Natural Resources and Environment

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
14	12	1.24

PARAMETER	RANKING	SCORE
I. Enabling Framework	13	1.57
II. Clean Energy Investment & Climate Financing	12	0.89
III. Low-Carbon Business & Clean Energy Value Chains	14	1.00
IV. Greenhouse Gas Management Activities	12	1.19

SUMMARY

Honduras ranked 14th in this year's *Climatescope*, with an overall score of 1.24. The country has fallen two positions since the 2012 edition. Despite a modest rise in small hydro generating capacity, the share of renewables in Honduras's overall generation portfolio remained approximately level at 22%. Its renewables mix is diversified, with small hydro, biomass & waste and wind capacity constituting 158MW, 137MW and 102MW, respectively.

Honduras is one of a handful of Latin American nations to have employed reverse auctions to procure new renewable power. Its state-owned utility, Empresa Nacional de Energía Eléctrica (ENEE), has awarded contracts to 37 renewable projects, from small hydro, geothermal, and biomass & waste, for 20- to 30-year contracts.

ENEE offers generous clean energy subsidies, including a feed-in tariff with a 10% price premium for renewable power. Last December, the government signed a power-purchase agreement at $0.15/kWh with the developer of a 49MW wind farm in the Choluteca department. ENEE remains a vertically integrated utility and has struggled to attract adequate investment. Honduras's electrification rate (70%) is among the lowest in the region. This offers an opportunity for sustained growth of distributed clean energy generation.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Empresa Nacional de Energía Eléctrica. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

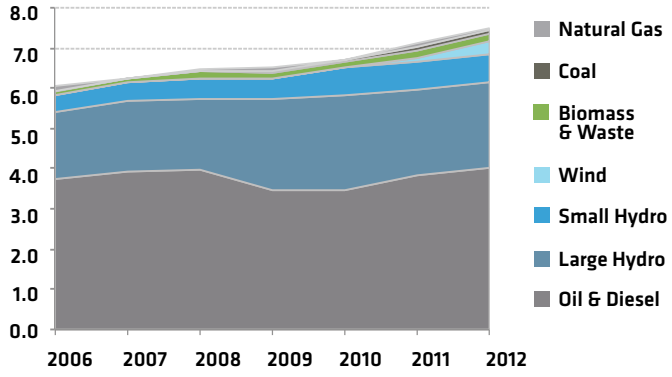
PARAMETERS AT A GLANCE

Honduras came 12th on the Clean Energy Investment and Climate Financing parameter (II), with a mark of 0.89. It received a 1.19 score on the parameter assessing Greenhouse Gas Management Activities (IV), also finishing 12th. However, it was in 13th place on the Enabling Framework parameter (I), with a score of 1.57, and on the Low-Carbon Business and Clean Energy Value Chain parameter (III), it ranked 14th with a score of 1.00.

Honduras gained a place in the finish order for Parameter I, largely because it more than doubled wind energy generation, from 117GWh in 2011 to 337GWh in 2012. In comparison, its year-over-year growth rate for total electricity generation was about 5.1%.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

7TWh total generation



Source: Bloomberg New Energy Finance, Empresa Nacional de Energía Eléctrica
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

KEY POLICIES

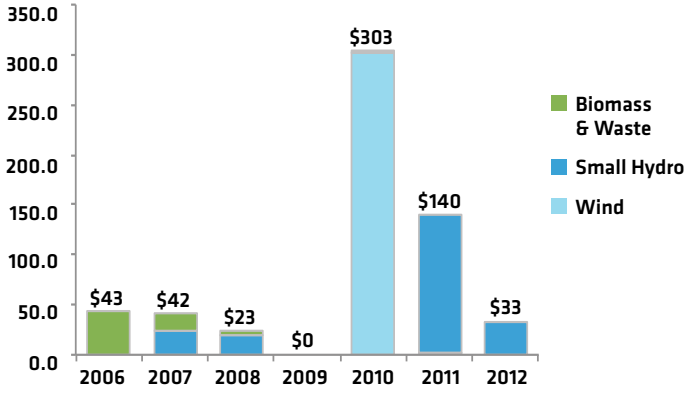
Feed-in Tariff	10% price premium for renewable projects that sell electricity to ENEE.
Auction	ENEE has held one auction, awarding contracts to 37 renewable projects, from small hydro (257MW), geothermal (35MW), and biomass & waste (33MW) for 20 to 30-years contracts.
Tax Incentives	Import duty exemption to clean energy equipment and machinery and import and sale tax exemption to renewable generators.

Source: Bloomberg New Energy Finance Policy Library

Honduras has a relatively favorable policy environment for renewables: state-owned power utility ENEE has held a reverse auction for clean electricity and offers a feed-in tariff with a 10% price premium for renewable power. Last December, it signed a power-purchase agreement at a price of USD 0.15/kWh with the developer of a 49MW wind farm in the Choluteca department.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$585m total cumulative investment

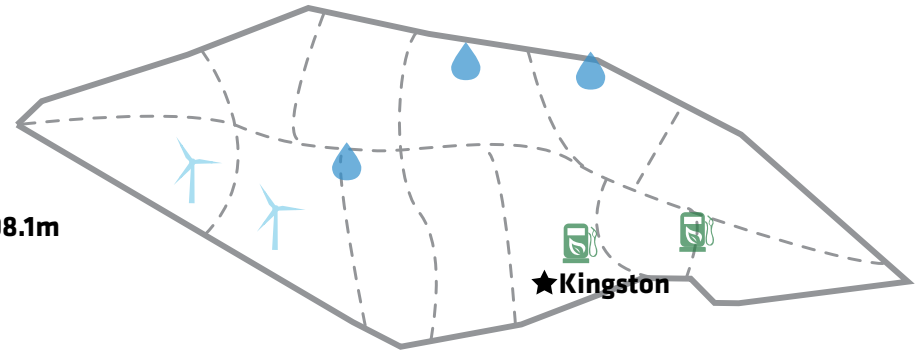


Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital/ Private Equity Commitments.

On Parameter II, Honduras fell six positions from a lofty sixth-place finish last year. Its 2013 ranking was driven by a decline in the growth rate of clean energy investment from 34% to 6%. Overall clean energy investment in Honduras fell from $140m in 2011 to only $33m in 2012. Honduras was among the few countries in the region, along with Brazil, which saw a decrease in investments last year. The country's average cost of green micro debt, at nearly 18%, is much bigger than that of the region's top scorers.

Honduras's Parameter III ranking was two steps lower than in 2012. While it added at least one clean energy sector value chain, other Central American nations recorded greater gains in both absolute and relative terms. On Parameter IV, Honduras maintained its position from 2012. The country boasts 25 CDM offset projects, of which 18 are in power generation and seven in methane.

Jamaica



GDP[1]: **$25.2bn**
Seven-year economic growth rate[2]: **1%**
Population[3]: **2.8m**
Total clean energy investments, 2006-2012[4]: **$108.1m**
Installed power capacity[5]: **1GW**
Renewable share[6]: **7%**
Total clean energy generation[7]: **258GWh**
Top energy authority: **Ministry of Energy and Mining**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
17	16	0.94

PARAMETER	RANKING	SCORE
I. Enabling Framework	14	1.52
II. Clean Energy Investment & Climate Financing	23	0.41
III. Low-Carbon Business & Clean Energy Value Chains	15	0.94
IV. Greenhouse Gas Management Activities	22	0.56

SUMMARY

In *Climatescope* 2013 Jamaica took 17th place with an overall score of 0.94 – a decline of one position from last year's report. The country's performance was hindered by the lack of activity in its clean energy sector in 2012, with no new significant investment recorded or clean energy capacity commissioned. Still, Jamaica had the second strongest score of any Caribbean nation in the index.

Like other Caribbean countries, Jamaica imports significant amounts of oil for power generation. This represents a major burden, given that 93% of its 938MW grid relies on fossil fuels for power generation. As a consequence, Jamaican customers pay the highest electricity prices among all 26 countries assessed in *Climatescope*.

The share of renewables in Jamaica's power matrix has also declined. In 2012, clean energy accounted for 7% of overall capacity, down from 8% in 2011. However, this now appears poised to change. Last year, Jamaica became the first Caribbean country to announce a renewable energy auction. The Office of Utilities Regulation (OUR) will contract 115MW of clean energy capacity to be commissioned by 2015. This is intended to help the country achieve its target of having 20% renewable energy installed by 2030 and becoming the Caribbean country with the greenest power matrix.

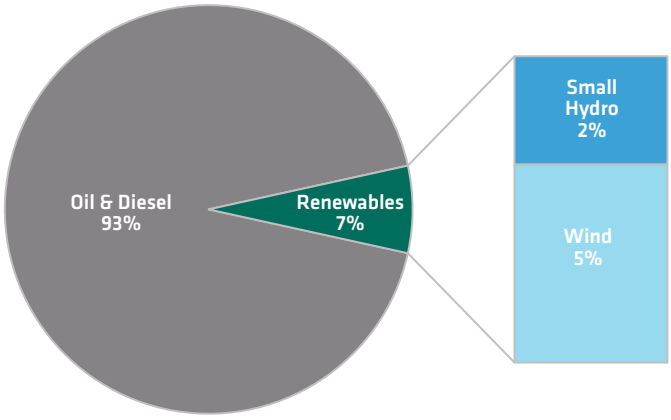
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Office of Utilities Regulation. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Jamaica failed to repeat last year's strong performance on the Enabling Framework parameter in 2013, falling from seventh to 14th place. Its reliance on imported oil for power means retail consumers pay an average of $0.41/kWh – by far the highest among all the 26 countries assessed in the report.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

1GW total installed capacity



Source: Bloomberg New Energy Finance, Jamaica Public Service Company.

Jamaica's National Energy Policy has set a target of 20% renewable energy by 2030 with an eye toward diversifying energy supply while reducing oil dependence. Progress has been slow so far, however. In 2012, the only new capacity added to the country's 938MW matrix was a 65.5MW oil-fired plant. The share of renewable energy capacity actually dropped to 7% as a result.

Jamaica's first renewable energy tender may accelerate progress toward the mandate. In November 2012, the public service regulator, OUR, announced plans for a reverse auction at which clean power contracts totaling 115MW would be on offer. In June 2013, foreign and local developers submitted 28 plant proposals, mostly focused on solar. Of the 874MW in projects proposed, 91% represented solar photovoltaics. Should the upcoming auction come to fruition and all projects get built, Jamaica would become the Caribbean country with the most solar capacity and greenest power matrix.

The island nation had its worst performance in Parameter II, ranking 23rd. For the second consecutive year, Jamaica saw no significant funds committed to its clean energy sector. In addition, the country has one of the highest swap rates in the region, at 18.4%, suggesting very high financing costs for projects.

Jamaica has the most complete value chain among its Caribbean peers, putting it in 15th place on Parameter III. It now has companies present in the biomass and waste and small hydro segments that did not exist last year. In addition, Jamaican organizations are present in at least one segment of the biofuels, solar and wind value chains. The country did not fare well on Parameter IV, due to its limited number of carbon offset projects (only two) and no policy initiatives to reduce greenhouse gas emissions. It finished 22nd for this parameter, behind countries such as Venezuela and Barbados.

KEY POLICIES

Energy Target	20% renewable installed power capacity by 2030.
Auction	OUR is holding its first renewable energy tender, expected to contract 115MW in 2013.
Net Metering	Pilot net metering program, with 11 clients connecting renewable facilities to the grid.

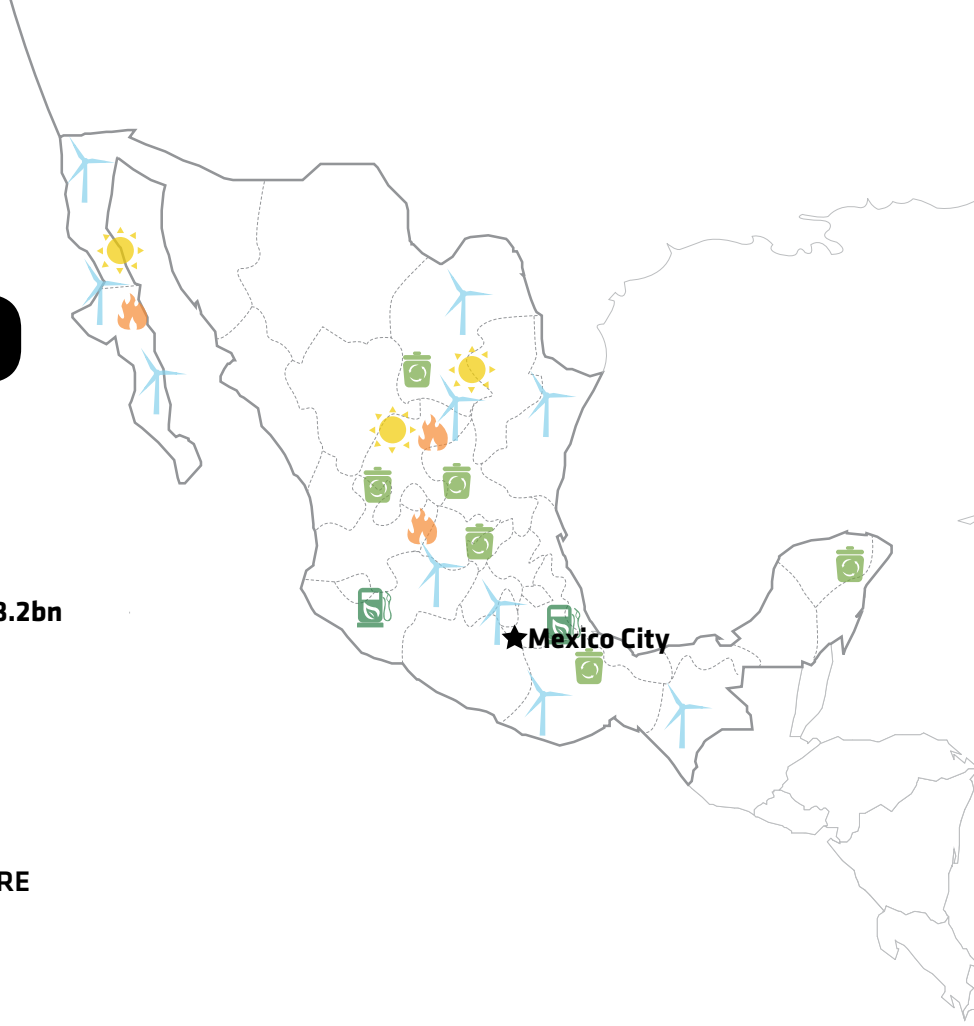
Source: Bloomberg New Energy Finance Policy Library

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ;** Construction/Installation ; O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Jamaica has no companies in the geothermal value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

Mexico



GDP[1]: **$1,758.9bn**
Seven-year economic growth rate[2]: **4%**
Population[3]: **114.9m**
Total clean energy investments, 2006-2012[4]: **$8.2bn**
Installed power capacity[5]: **62GW**
Renewable share[6]: **4%**
Total clean energy generation[7]: **12,215GWh**
Top energy authority: **Secretariat of Energy**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
5	6	2.19

PARAMETER	RANKING	SCORE
I. Enabling Framework	8	1.82
II. Clean Energy Investment & Climate Financing	4	1.79
III. Low-Carbon Business & Clean Energy Value Chains	4	2.63
IV. Greenhouse Gas Management Activities	2	3.30

SUMMARY

Mexico emerged among the top five in the 2013 *Climatescope* ranking. It moved up one position compared to last year, landing fifth with a 2.19 score. Mexico held fourth position, or better, in three of four parameters assessed.

It placed eighth, but moved up nine positions, on the Enabling Framework parameter, its weakest performance. It improved its stance from last year, due to a comprehensive clean energy policy framework and a 28% jump in renewable generation from 9,553GWh in 2011 to 12,215GWh in 2012.

Low-carbon investments grew by an impressive 499% from $532m in 2011 to $2.9bn last year. The bulk went into wind, which is poised to surpass geothermal as Mexico's flagship clean energy source. Wind installations reached the 1.3GW mark last year. Solar is also primed for growth; next year Mexico will likely be the only country in the region to host a photovoltaic cell manufacturing plant.

Due to the size of its economy and the presence of multinationals, Mexico fared especially well on the Greenhouse Gas Management Activities parameter, particularly on indicators comprising the corporate awareness category. The presence of credible offtakers and sustainability-focused companies in Mexico has helped the country advance in greening its economy.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3. Source: Ibid. Notes: Population for 2012 period in millions.
4. Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Comisión Federal de Electricidad, Comisión Reguladora de Energía and Secretaria de Energía. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 8 / Score 1.82

Mexico scored 1.82 on the Enabling Framework parameter ranking eighth – a marked improvement from last year's 17th spot. A 28% growth in renewable generation from last year was a driving indicator. Mexico's clean energy policy framework encourages independent power producers to enter the market despite its single-buyer power market structure. Experts considered its clean energy policy framework to be relatively comprehensive. The country has four of eight possible policy types in place.

KEY POLICIES

Energy Target	35% of electricity generation coming from renewable sources (including large hydro and nuclear) by 2024.
Debt/Equity Incentive	Funds support clean energy grants for Mexican research institutes and renewable energy electrification programs.
Tax Incentives	Accelerated depreciation for renewable energy projects and machinery.
Net Metering	Retail electricity consumers may connect their renewable facilities to the national grid, delivering surplus generation and obtaining billing credit for excess electricity provided.

Source: Bloomberg New Energy Finance Policy Library

In June 2012 Mexico established a non-binding target of 35% of electricity generation from clean energy sources, including large hydro and nuclear, by 2024. Last year, electricity generation totaled 343,667GWh with 15% stemming from renewables, large hydro and nuclear combined. Renewables alone accounted for just 4% of total generation in 2012. Experts found the target to be moderately ambitious; the panel scored this metric a 3 out of 5.

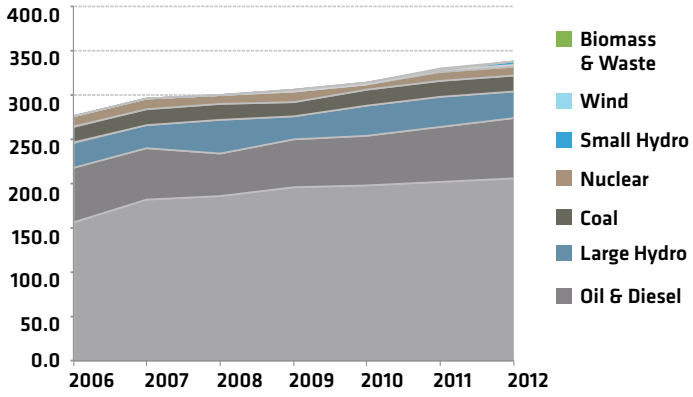
Since 2010, net metering has allowed Mexican retail power consumers to feed self-generated electricity from solar and other distributed renewable sources into the grid.

Mexico placed 16th on the indicator tracking average electricity end-user tariffs, which averaged $0.14/kWh last year. Mexico has no less than 31 retail power tariffs. About 3.5m commercial and 0.5m high-consumption residential Mexican customers pay electricity tariffs of $0.30/kWh and $0.27/kWh, respectively. These consumers have arrived at "socket parity" – meaning that installing a PV system makes economic sense without subsidies.

The Mexican power market is tightly controlled by the state-owned vertically integrated utility CFE; it scored low on the power market indicator. Still, the country placed fourth on the indicator tracking growth in renewable energy generation thanks to the activity of independent power producers (IPPs) in wind. Wind installed capacity grew from 675MW in 2011 to 1.3GW in 2012, an impressive 93% jump.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

344TWh total generation

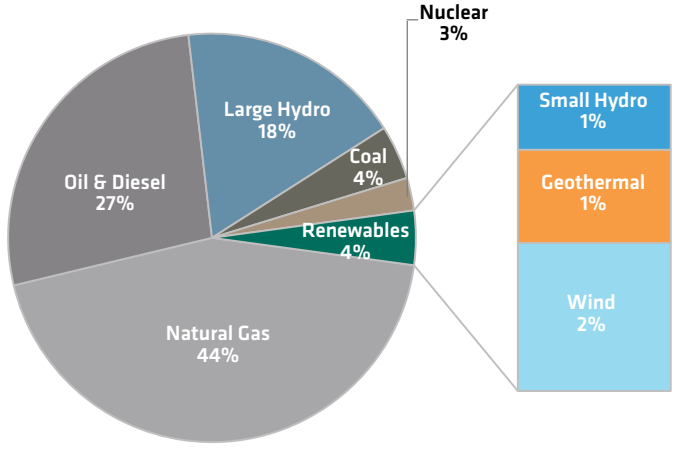


Source: Bloomberg New Energy Finance, Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaria de Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

State-owned CFE is currently leading the way on solar development. Last year, it commissioned 5MW of utility-scale photovoltaic plants in Baja California state. Mexico took in 10th place on the indicator of electrification rate, with 98% penetration. Nevertheless, the country still has 2.3m people without access to power. This situation presents a good opportunity for clean energy expansion.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

62GW total installed capacity



Source: Bloomberg New Energy Finance, Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaria de Energía
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 4 / Score 1.79

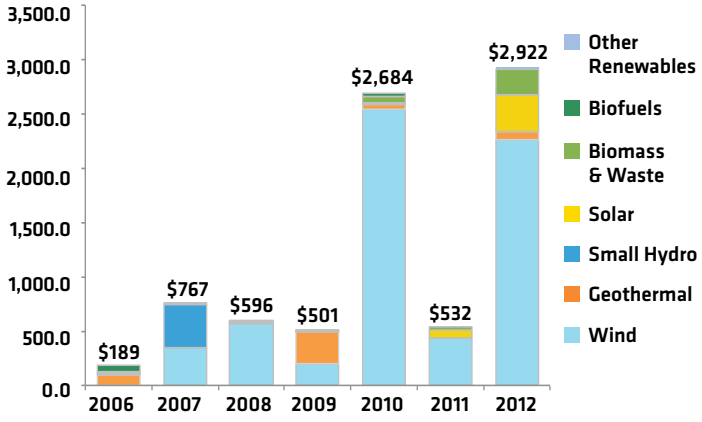
Mexico scored 1.79 on the Clean Energy and Climate Financing parameter, finishing fourth. Its low average cost of debt, rapid clean energy investment growth, active local players investing in the sector and large presence of green microlenders helped the country make it to top five on Parameter II.

The region's second largest economy received $2.9bn in clean energy investment in 2012, representing close to a 500% jump over the $532m committed in 2011. Despite displaying the highest growth rate in investment from 2011 to 2012, Mexico's compound annual growth rate for the last seven years amounted to 48%. As a result it placed third, behind Peru and the Dominican Republic, on the indicator tracking clean energy investment growth.

Close to 78% of the total $2.9bn invested into the sector last year flowed into wind, which is poised to surpass geothermal as Mexico's flagship renewable energy sector. Solar attracted the second highest level of funding last year, some $329m, or 11%, of total investment. A 58MW landfill gas plant in Mexico City was financed last year, explaining a 161% jump in investment into biomass and waste from 2011 to 2012. A total of four utility-scale PV plants deals received financing last year from IPPs and CFE. The 50MW phase III of a CFE geothermal plant in the state of Michoacán received $69.8m in financing.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$8bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

Local players, including financial institutions, utilities and corporations, disbursed some $915m into Mexican clean energy assets in 2012. The North American country placed sixth among 26 countries on the indicator tracking commitments by local players.

The cost of debt for financing large-scale renewable energy projects in Mexico is the lowest in the region at about 4.35%, according to a survey conducted with the main financial lenders in the region. Mexico's inter-bank lending rate, another proxy for cost of debt, at 5.84% was also among the lowest in Latin America and the Caribbean.

LOCAL INVESTMENTS BY LOCAL PLAYERS

2012 Total Local Investments	$722m

Top Three Local Investors, 2012 ($m)

1st	Government of Mexico City	$242m
2nd	Banco Nacional de Obras y Servicios Publicos	$192m
3rd	Comisión Federal de Electricidad	$101m

Top Three Asset Finance Deals, 2012 ($m)

Rank	Sector	Project (MW)	Developer	Value
1st		Marena Portfolio (396MW)	Macquarie Group Ltd	$961m
2nd		Bordo Poniente Landfill Gas (58MW)	Govt. of Mexico City	$242m
3rd		Oaxaca III (102MW)	Acciona SA	$165m

Source: Bloomberg New Energy Finance
Notes: Notes: Figures refer to asset finance investments committed in 2012 and include balance sheet commitments.

Microfinance institutions in Mexico are relatively active, with some six institutions offering green microproducts, placing Mexico in fourth spot on the indicator tracking the presence of green MFIs. However, the country did not fare well in other parameters comprising the green microfinance category. It placed 13th on the indicator counting the number of green microborrowers and 15th on the indicator assessing the cost of green microdebt.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	6/52
Green Microborrowers	1,460
Total Amount of Green Microloans Disbursed	$150,000
Average Cost of Green Microloans	19.8%
Average % of Loans Portfolio	1-5%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 52 MFIs in Mexico, 42 responded to the survey.

Nor was Mexico a main destination for grants and loans from foreign donors, placing it 16th on this indicator. This can be attributed to the fact that it is one of the more developed economies in the region.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 4 / Score 2.63

Mexico finished fourth on the Low-Carbon Business and Clean Energy Value Chains parameter, with a 2.63 score. The country fared relatively well in two of the three categories assessed for this parameter: service providers and sector value chains.

On the third indicator, financial institutions, somewhat limited diversity was observed in lenders doing business with clean energy companies. Lenders supporting Mexico's low-carbon assets were development banks, utilities, or private corporations. Although Mexico has a relatively developed capital market, no pure-play Mexican funds, corporate finance institutions or private equity and venture capital organizations were noted investing in the renewable energy space.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Biomass & Waste	**Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation**
Geothermal	**Pre-Drilling Exploration ; Exploration/Production Drilling ;** Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; **Project Development ;** O&M ; Power Purchase
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; **Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; **Modules ; Balance of Plant ; Project Development ; EPC ; Owner/Operator**
Wind	Bearings ; Gearboxes ; **Generators ; Blades ;** Turbines ; **Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

As might be expected from the second largest economy in the region, the clean energy service providers sector is fairly well developed in Mexico. The country has at least one provider in nine ancillary products and services, examples of which are consulting firms, inspection and maintenance firms, training facilities, and certification specialists. It has five of seven sub-sectors in the category for financial and legal services; there are several law firms and insurance firms serving the low-carbon sector in Mexico.

CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	6	**Consultancy-O&M ; Consultancy-Technical ; Contract Maintenance ; Contract Manufacturing;** Control Room Systems ; **Education & Training ;** Inspection & Maintenance ; **Specialist Services ;** Testing & Certification Services
Developers & Utilities	0	Integrated Service Provider
Marketing Services	1	**Distributor ;** Market Research ; PR Company
Financial & Legal Services	5	**Banking-Corporate ;** Banking-Custody ; Trust & Deposit ; **Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ;** Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

Mexico's technology-specific value chains are relatively complete, as indicated by its high penetration of renewable energy installed capacity. Mexico has at least three sub-sectors available for all renewable power generation technology. The biofuels value chain is the least developed sector, with producers as the only sub-sector present in the country.

The biomass and waste value chain is 100% complete and results in 260MW of installed capacity for this technology. The wind and geothermal value chains also are fairly well developed, with few missing sub-sectors. Mexico has the region's most developed solar value chain; this year it may inaugurate the region's fist cell manufacturing facility.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

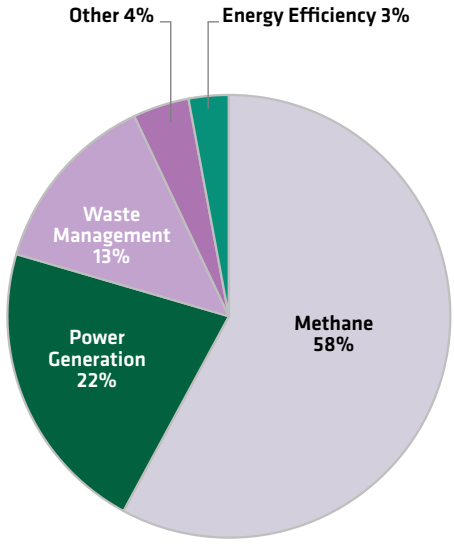
Ranking 2 / Score 3.30

Mexico had its best performance in the Greenhouse Gas Management Activities parameter, finishing second with a 3.30 score. The country ranked in the top five in 12 of 13 indicators assessed on Parameter IV.

In all, there are some 174 emission offset projects registered in Mexico, of which 171 are registered with the UN's Clean Development Mechanism (CDM), with the remaining registered in two other standard schemes (Gold Standard and VCS). Mexico, after Brazil, is the country in the region with the largest number of projects registered with CDM. About 58% of all registered CDM projects are methane reduction projects. Power generation projects follow, with 37 registered projects or 22% of total registered projects.

CDM OFFSET PROJECTS BY SECTOR

171 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Mexico's weakest-performing indicator of Parameter IV was the indicator assessing carbon offset future potential. It ranked 18th in this regard largely because this sector is relatively well developed and thus has less potential. Offset potential from forestry is the least developed of the four sectors, and thus offers the largest potential for carbon offset project development. Mexico fared relatively well, placing fourth, in the CDM risk indicator judging the number of project failures, restarts and duration of approval. It performed better than the regional average in all three CDM risk metrics.

Mexico performed especially well on all indicators comprising the carbon policy category of Parameter IV. In 2009, Mexico launched the Special Climate Change Program 2009-2012 (Programa Especial de Cambio Climático - PECC) in which it announced a target of cutting 30% of national greenhouse gas emissions by 2023, compared to 2000-year levels. This ambitious target will require a profound transformation of how Mexican companies use energy and employ energy efficiency measures. Mexico placed fifth in this indicator.

GHG EMISSION REDUCTION POLICIES

Emission Reduction Target	Voluntary target to reduce 30% of GHG emissions by 2020.
GHG Registry	Voluntary registry which includes 115 Mexican companies reporting GHG emissions.
Crediting Mechanism	Voluntary Mexican carbon market focused on forestry projects

Source: Bloomberg New Energy Finance

Mexico is one of six countries in the region that participate in the preparation phase for the Partnership for Market Readiness. It has proposed to design a market-based mechanism for urban-housing and refrigeration that generates tradable offset credits; it is also looking to develop a system for collecting emissions data. There is currently a voluntary emissions registry in Mexico called the Registro Nacional de Emisiones.

Five Mexican corporations are disclosing emissions to the Global Reporting Initiative (GRI), a comprehensive Sustainability Reporting Framework used globally to enable greater transparency, including: Praxair México and Accor México. Some 22 out of 799 Mexican companies on the Bloomberg terminal have implemented energy efficiency programs, including: America Movil, Banamex, Cemex, Coca-Cola Femsa, Grupo Bimbo and Walmart, among others. Seventeen of the 799 Mexican companies have implemented voluntary emission reduction programs, several of which are the same companies with energy efficiency programs in place.

Nicaragua

GDP[1]: **$26.7bn**
Seven-year economic growth rate[2]: **5%**
Population[3]: **6m**
Total clean energy investments, 2006-2012[4]: **$1.5bn**
Installed power capacity[5]: **1GW**
Renewable share[6]: **36%**
Total clean energy generation[7]: **1,446GWh**
Top energy authority: **Ministry of Energy and Mines**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
3	2	2.26

PARAMETER	RANKING	SCORE
I. Enabling Framework	1	2.49
II. Clean Energy Investment & Climate Financing	1	3.02
III. Low-Carbon Business & Clean Energy Value Chains	13	1.06
IV. Greenhouse Gas Management Activities	11	1.24

SUMMARY

Nicaragua finished third in *Climatescope* 2013, with a 2.26 score. Despite being the country with the second lowest GDP per capita in the region it finished in the top three, just below Brazil and Chile, thanks to the high penetration of renewables in its power matrix and significant flow of investment relative to its small economy. The Central American country placed first in two of the four parameters assessed: Enabling Framework and Clean Energy Investments and Climate Financing. However, its weak performance on Parameters III and IV brought down its score. Thus, the country dropped one position compared to the 2012 edition.

Unlike other small economies in the region, Nicaragua has attracted a constant volume of finance in the past five years. Since 2006, $1.5bn has been invested in the country's renewable energy sector, representing 5.6% of its $26.7bn GDP.

As a result, in 2012 renewables represented 36% of Nicaragua's 1GW power matrix, with the presence of small hydro, wind, biomass and geothermal plants. The country's clean energy share is poised to increase as it aims to achieve an ambitious target of 94% renewable installed capacity by 2017.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Instituto Nicaraguense de Energía and Ministerio de Energía y Minas. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

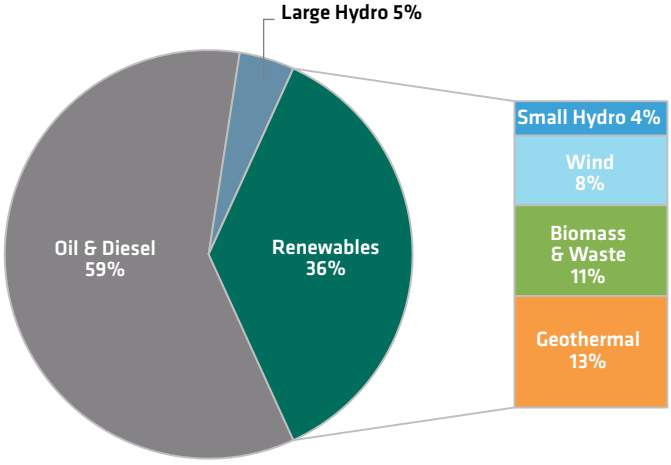
I. ENABLING FRAMEWORK

Ranking 1 / Score 2.49

For the first time, Nicaragua topped the Enabling Framework parameter, moving up four spots from last year's ranking. It finished with a 2.49 score thanks to a sizeable share of renewables in its power matrix and significant potential for future clean energy deployment.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

1GW total installed capacity



Source: Bloomberg New Energy Finance, Instituto Nicaraguense de Energía and Ministerio de Energía y Minas
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Nicaragua fared well in all indicators in this parameter, except for clean energy policies and power market structure. In 2012, it established an aggressive 94% clean energy mandate, to be fulfilled by 2017. *Climatescope's* clean energy policy expert committee voiced concern that this target may be overly ambitious. However, the Nicaraguan government appears keen on increasing clean energy capacity and replacing fossil fuel-based generation.

KEY POLICIES

Energy Target	94% renewable installed power capacity (including large hydro) by 2017.
Tax Incentives	Import duty exemption for clean energy equipment, VAT, income tax, and natural resources tax exemption to renewable generators

Source: Bloomberg New Energy Finance Policy Library

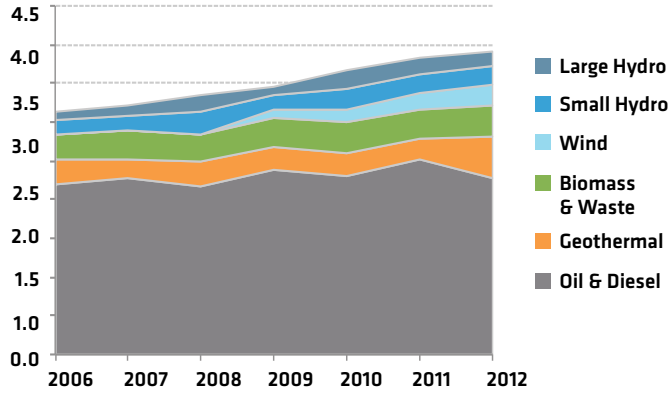
Nicaragua performed well on all four indicators that assess clean electricity, having achieved the highest year-on-year growth of renewable capacity and generation relative to its matrix. In 2012, the country saw a 40MW wind farm commissioned in the Rivas department while a 72MW two-phased geothermal project started operations in the northern department of León. These plants contributed to a 40% jump in clean energy capacity compared to the prior year. Currently, 36% of Nicaragua's 1GW capacity is represented by renewables: small hydro (4%), wind (8%), biomass & waste (11%) and geothermal (13%).

There remains vast further potential in the country, both for utility- and small-scale clean generation. Nicaragua has the highest wholesale spot and industrial electricity prices in Central America. High rates make renewables an attractive option for companies looking for bilateral contracts to reduce their electricity expenses.

Nicaragua has one of the lowest electrification rates in Latin America (75%) and clean energy is playing an important part in bringing citizens electricity. With a goal of achieving at least 85% electrification and bringing electricity to 702,000 additional residents, Nicaragua instituted in 2010 the National Program for Sustainable Electrification and Renewable Energy (PNESER). So far, the electrification rate has risen 5 percentage points since 2010 and the program has funded numerous renewable projects, including a 1MW solar plant in the Carazo department.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

4TWh total generation



Source: Bloomberg New Energy Finance, Instituto Nicaraguense de Energía and Ministerio de Energía y Minas
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 1 / Score 3.02

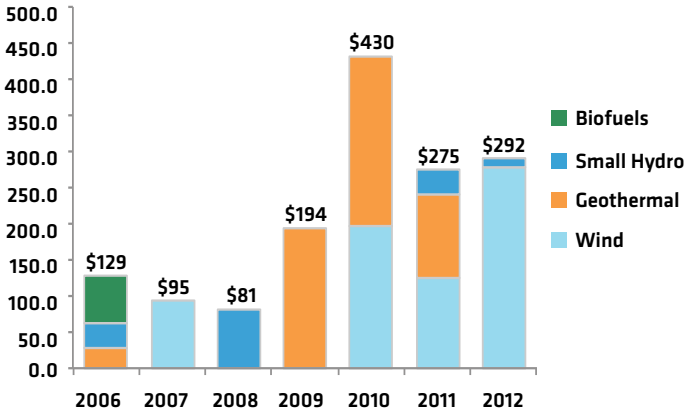
For the second consecutive year, the Central American nation came first on Parameter II, placing above countries like Peru and Chile. Nicaragua has the second lowest GDP per capita among all 26 Latin American and Caribbean countries assessed in *Climatescope* (after Haiti). Nonetheless, the nation has been successful in both developing micro-financing services for renewables and attracting large-scale clean energy investment to its $26.7bn economy.

Nicaragua enjoyed $1.5bn of cumulative investment in 2006-2012. This figure may seem small in absolute terms. However, this total represents 5% of Nicaragua's total GDP – the highest relative value to a country's economy in the whole region.

In 2012, some $292m was invested in Nicaragua's renewable energy sector, 94% of which went to wind projects. The biggest financing that year, $114m, was allocated to a 44MW wind farm on the southeast coast of Lake Nicaragua. Besides wind, small hydro was the only other sector to receive financing in 2012, with $14m committed to a 5MW plant in the department of Matagalpa.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$1.5bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

The Central American nation also stood out as the country to benefit from the largest volume of loans and grants to support clean energy. The flagship initiative – the PNESER – has received $419m from a range of international donors, including the Inter-American Development Bank, World Bank and International Finance Corporation, among others.

Microcredit plays a key role in small economies and Nicaragua is no different. Microfinance has a 38% penetration rate in the country. Out of the 64 green microcredit institutions present in Latin America and the Caribbean, eight are based in Nicaragua. These organizations disclosed that they have disbursed $1.2m to finance clean energy solutions.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	8/30
Green Microborrowers	2,295
Total Amount of Green Microloans Disbursed	$1,212,000
Average Cost of Green Microloans	16.8%
Average % of Loans Portfolio	0.5-5%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 30 MFIs in Nicaragua, 24 responded to the survey.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 13 / Score 1.06

In spite of its good performance on the first two Climatescope parameters, Nicaragua did not fare as well on the Low-Carbon Business and Clean Energy Value Chains portion and maintained the position achieved in last year's edition, 13th place. This result should come as little surprise, considering that Nicaragua relies heavily in its agricultural sector and has yet to fully develop products and services in the clean energy sector.

Nicaragua has few financial institutions acting in the clean energy sphere. To date, most investment in the country's renewable sector has come from multilateral organizations.

When looking at value chains by clean energy sectors, there has been an improvement in Nicaragua's small hydro and wind value chains. Having commissioned more capacity of these two technologies in recent years, the Central American country now has four segments for small hydro and wind. It has at least one company active in operations & maintenance and construction for these two technologies, as well as developers and power generators. Nicaragua continues to have at least one segment for biomass and waste, geothermal and solar.

Nicaragua did not see any improvement on the last indicator of Parameter III – clean energy service providers. It was one of the bottom-tier countries, since to date, it had no companies active in any of the segments.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; Producers ; Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ;** Power Generation
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; **Project Development ;** O&M ; Power Purchase
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; **Engineering ; O&M ; Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; Project Development ; **EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ; Construction/Installation ; O&M ; Power Generator**

Source: Bloomberg New Energy Finance
Note: Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

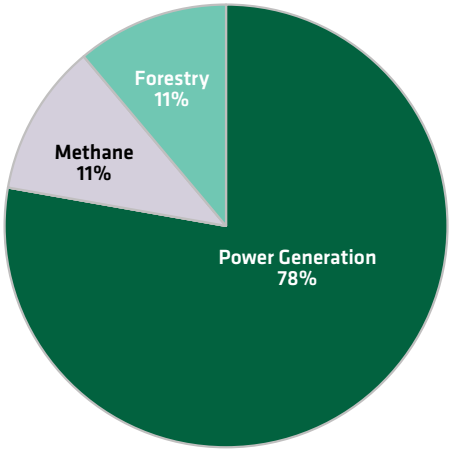
Ranking 11 / Score 1.24

Nicaragua placed 11th on the parameter assessing initiatives to reduce greenhouse gas (GHG) emissions. The country's score of 1.24 was due to the small number of offset projects and the absence of government and corporate policies to reduce carbon emissions.

The country has nine projects registered under the UN's Clean Development Mechanism (CDM), of which seven focus on power generation. Considering these projects, Nicaragua ranked 18th on the indicator assessing the risk involved in developing a CDM project. When looking at the potential to develop new emissions reduction projects, the Central American country reached 8th place, with more opportunities for REDD projects, given Nicaragua's high deforestation rate.

CDM OFFSET PROJECTS BY SECTOR

9 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance

Nicaragua's score on this parameter was brought down by its weak performance in the carbon policy and corporate awareness categories. Similar to other Latin American countries, policies to curb emissions are still a novelty in Nicaragua, and so far, there has been no public initiative to reduce GHG emissions.

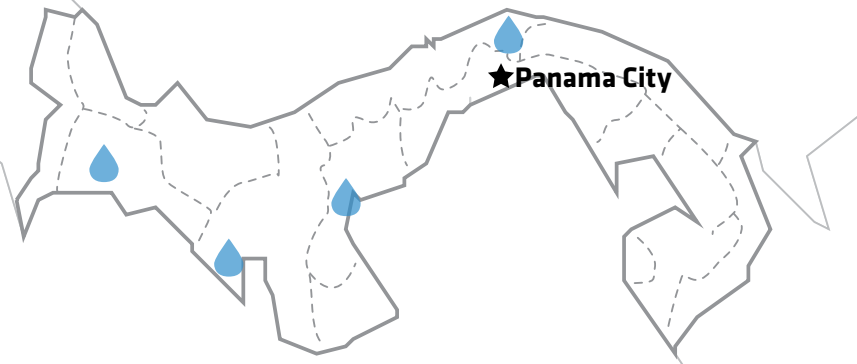
Likewise, there is no company based in the country that discloses information on its GHG emissions, or that participates in the Principles for Responsible Investment program. In the corporate awareness category, Nicaragua only achieved a positive score for the last two indicators, since there is at least one environmental business training and think tank organization present in the country.

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Panama



GDP[1]: **$57.1bn**
Seven-year economic growth rate[2]: **11%**
Population[3]: **3.7m**
Total clean energy investments, 2006-2012[4]: **$1.3bn**
Installed power capacity[5]: **2GW**
Renewable share[6]: **13%**
Total clean energy generation[7]: **1,086GWh**
Top energy authority: **National Secretariat of Energy**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
10	3	1.45

PARAMETER	RANKING	SCORE
I. Enabling Framework	9	1.73
II. Clean Energy Investment & Climate Financing	5	1.59
III. Low-Carbon Business & Clean Energy Value Chains	10	1.31
IV. Greenhouse Gas Management Activities	18	0.73

SUMMARY

In this second edition of *Climatescope*, Panama amassed a 1.45 score slipping from third to 10th position in the 2013 ranking. Panama's fallback was due to its performance on the Greenhouse Gas Management Activities parameter – for which the methodology was significantly revised. Still, the country displayed substantial improvement in the Clean Energy and Climate Finance parameter, its weakest last year, moving up seven positions to sixth place. The intensity of local-investor support for in-country projects drove the gain, as this indicator carries a strong 3% weighting in the *Climatescope* methodology.

Last year, investment into Panama's clean energy sector totaled $159m, all in small hydro, while cumulative investments reached $1.3bn. Small hydro at this time is Panama's only source of renewable power, and the technology's share of the overall portfolio is expanding. From 2011 to 2012, renewable capacity grew 2% from 274MW to 280MW while the share of non-renewables declined 2.7% from 1,965MW to 1,912MW. Four wind projects with 158MW of combined capacity should come online this year barring a rapid acceleration of small hydro development, wind energy will become Panama's flagship clean energy source in the near future.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Autoridad Nacional de los Servicios Públicos. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 9 / Score 1.73

Panama received a 1.73 score on the Enabling Framework parameter, placing ninth among all 26 *Climatescope* countries. It did particularly well on indicators comprising the price attractiveness and market-size-expectations categories.

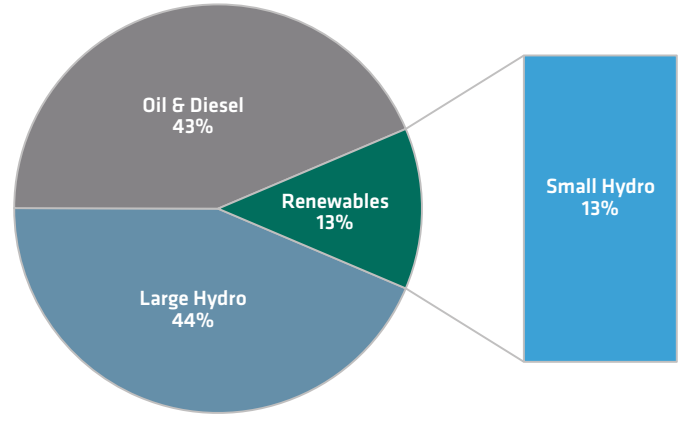
High priced electricity is generally a positive criterion for clean energy development. Panama has the region's highest electricity spot price, averaging $222/MWh last year. Retail rates averaged $146/MWh last year, the 14th highest in the region. Panama features another driver of generation investment, demand growth. In 2012, the country's power use expanded 7.76% to reach 1,386TWh, the region's second highest demand growth rate (after Paraguay's).

The Central America economy placed between 10th and 19th place in all other Parameter I indicators. It placed 11th on the indicator of electrification rate, with 88% penetration. Panama has 3.2m people without access to electricity who could benefit from distributed or small-scale clean energy solutions.

At present, Panama sources all of its renewable power capacity from small hydro plants. From 2011 to 2012, small hydro capacity grew by 2% from 274MW to 280MW. Panama has the most oil-fired capacity in Central America, but the share of non-renewables in its matrix is declining. About 53MW of non-renewable capacity was decommissioned last year, taking non-renewable installed capacity down 2.7% from 1,965MW to 1,912MW.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

2GW total installed capacity

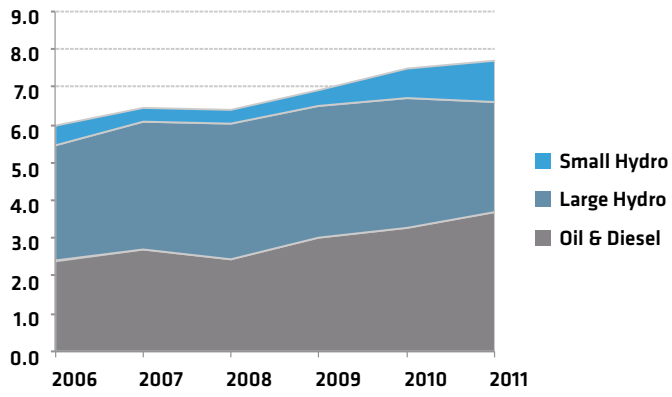


Source: Bloomberg New Energy Finance, Autoridad Nacional de los Servicios Públicos

Four wind projects, with a combined 158MW of capacity, which won contracts under Panama's first wind auction in November 2011, are expected to come online this year to comply with wind auction rules. An additional 168MW from one wind project in the Coclé province secured financing this year and is expected online by 2014. Panama should be generating renewable power from wind for the first time this year; wind is poised to surpass small hydro as Panama's flagship clean energy source in the near future.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

8TWh total generation



Source: Bloomberg New Energy Finance, Autoridad Nacional de los Servicios Públicos

Panama has four of eight policy types and received a 3 out of 5 score for the metric of policy framework comprehensiveness. It is one of nine nations in the region to use reverse auctions to procure clean capacity and *Climatescope's* panel of experts gave Panama's reverse power auction a 2.63 score out of 5.

Panama's tax incentives were rated a 1.67 out of 5. Futher, it got a low mark on the political risk indicator which ultimately led it to place 11th on the clean energy policy indicator. Independent power producers and private concessions dominate the generation and distribution segments of Panama's power market. There is a well-functioning wholesale power market active in the country, supporting its placement of ninth out of 26 countries on the indicator assessing power market liberalization.

KEY POLICIES

Feed-in Tariff	10% price premium for renewable projects that sell electricity to ETESA.
Auction	ETESA has held 1 auction, specifically for wind, which contracted 4 plants with a total capacity of 158MW.
Biofuels	7% biodiesel blend with conventional diesel and 5% ethanol blend with conventional gasoline.
Tax Incentives	Import duty exemption to clean energy equipment and machinery, and transmission and distribution tax exemption to generators.

Source: Bloomberg New Energy Finance Policy Library

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

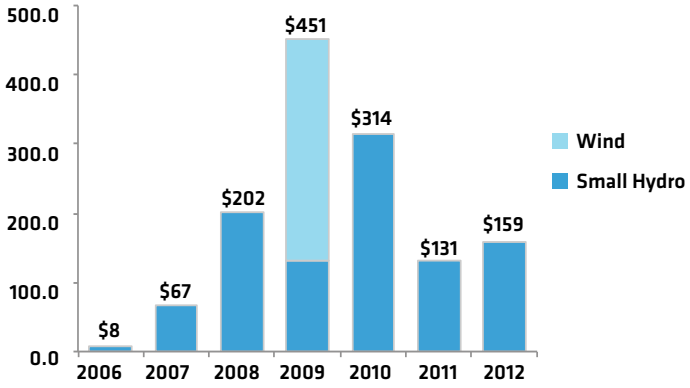
Ranking 5 / Score 1.59

Panama received a 1.59 score, its highest mark, on the Clean Energy and Climate Finance parameter. It climbed seven positions in the ranking and placed sixth in this second edition of *Climatescope*.

Although not among the larger economies in the region, Panama topped the list on the indicator tracking commitments made by local players to the local low-carbon sector. In 2012, Panama attracted $159m of capital to a clean energy project from the balance sheet of the project sponsor – a Panama-based small hydro developer.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$1.3bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

While wind did not attract any investment in 2012, the sector in 2013 has won balance sheet commitments from local developers for the first phase of a 168MW wind farm.

Panama presents attractive swap rates at around 6.7%, the sixth lowest rate among 26 *Climatescope* countries. No financial institution in Panama responded to the cost of debt survey, thus swap rates were considered as a proxy for cost of debt for utility-scale renewable projects.

Only one microfinance institution in Panama offers green micro credit, at the relatively high rate of 14%, placing it eighth on the indicator tracking the cost of green microcredit. Panama was not a popular destination for foreign loans, grants and grant programs. Last year only $9.35m entered its low-carbon economy via those means, placing it on 22nd spot on this indicator.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	1/12
Average Cost of Green Microloans	14%
Average % of Loans Portfolio	0-5%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 12 MFIs in Panama, 10 responded to the survey.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 10 / Score 1.31

Panama was ranked 10th on the Low Carbon Value Chain parameter, with a score of 1.31. Its ranking in this *Climatescope* was unchanged from the previous edition.

The nation placed fifth on the indicator tracking the activity of different financial institutions in lending to the clean energy space, thanks to its well-developed financial service sector. Panama hosts both banks and private equity and venture capital firms actively lending to clean energy.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds	✓	**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

Although small hydro is the only source of clean power active, Panama has one sub-sector represented in all sector value chains except biofuels. It boasts two active subsectors in small hydro, wind, and biomass and waste.

The breadth of active subsectors suggests that Panama could develop as a hub for sector and service providers tapping into the Central American clean energy market. Panama placed 11th on the indicator tracking the presence of clean energy service providers; technical consultants, clean energy distributors, and financial and legal advisors were all detected servicing the country's low-carbon economy.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; Producers ; Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Geothermal	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; **Project Development ;** O&M ; Power Purchase
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; **Engineering ;** O&M ; Power Purchase
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ;** EPC ; Owner/Operator
Wind	Bearings ; Gearboxes ; **Generators ;** Blades ; Turbines ; **Project Development ;** Construction/Installation ; O&M ; Power Generator

Source: Bloomberg New Energy Finance
Note: Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 18 / Score 0.73

In the first edition of *Climatescope*, Panama was among the top-three-ranking countries largely due to its performance on the Greenhouse Gas Management Activity parameter (IV).

The methodology for Parameter IV was enhanced for the second edition. From last year's base of seven indicators, the parameter now tracks 13 indicators spanning carbon offsets, carbon policy and corporate awareness. When subject to the significantly more differentiating indicators of this edition of *Climatescope*, Panama slid 15 spots to 18th place, with a score of 0.73.

Panama's best performance on the parameter was in the indicator assessing CDM risk, one of three indicators comprising the parameter's carbon offset category. It placed 20th out of 26 countries in the indicator tracking carbon offset project historic activity and risk. Panama has 13 projects registered under CDM and no carbon offset projects registered with the other three carbon registries assessed. All 13 carbon offset projects registered in Panama were power generation projects, pointing to a relative lack of diversification compared to other countries in the region.

Panama did not fare well in the carbon policy category, as it has not announced any greenhouse gas emission reduction targets, has no GHG registries and has not implemented any market-based instruments for reducing emissions. On the corporate voluntary side, Panamanian entities have not been active. Panama scored below the regional average in four of six indicators comprising the corporate awareness category. The country hosts environmentally focused business training and think tanks, for which it trended positively on this metric.

Paraguay

GDP[1]: **$26bn**
Seven-year economic growth rate[2]: **1%**
Population[3]: **6.7m**
Total clean energy investments, 2006-2012[4]: **$160m**
Installed power capacity[5]: **8.8GW**
Renewable share[6]: **N/A**
Total clean energy generation[7]: **N/A**
Top energy authority: **Vice Ministry of Mines and Energy**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
18	18	0.90

PARAMETER	RANKING	SCORE
I. Enabling Framework	18	1.22
II. Clean Energy Investment & Climate Financing	20	0.55
III. Low-Carbon Business & Clean Energy Value Chains	20	0.38
IV. Greenhouse Gas Management Activities	15	1.04

SUMMARY

In *Climatescope* 2013, Paraguay remained in 18th place, with an overall score of 0.90. The country's performance is indicative of its relatively modest progress in developing clean power generation though its biofuels sector has achieved significant growth.

Large hydro power generation accounts for virtually all of Paraguay's 8.8GW of installed power capacity. That represents more than three times the country's own maximum power demand of 2.4GW, allowing it to export significant excess generation to its neighbors Argentina and Brazil. Paraguay has effectively lacked motivation to add renewable energy capacity as it already has far more generation than it requires to meet domestic needs.

Despite the lack of investment in clean power capacity, Paraguay held its position in the *Climatescope* rankings from 2012 based on the strength of its biofuels sector. The country produced 210m liters of biofuels in 2012 – an increase of 43% from 2011. The sector's growth was driven by 5% biodiesel and 24% ethanol mandates for blending into the country's conventional diesel and gasoline supplies, respectively. In 2013, the biofuels sector is closing on a total annual capacity of approximately 270m liters of production, suggesting that biofuels again will play a key role in driving clean energy investment in the country and determining Paraguay's future *Climatescope* score.

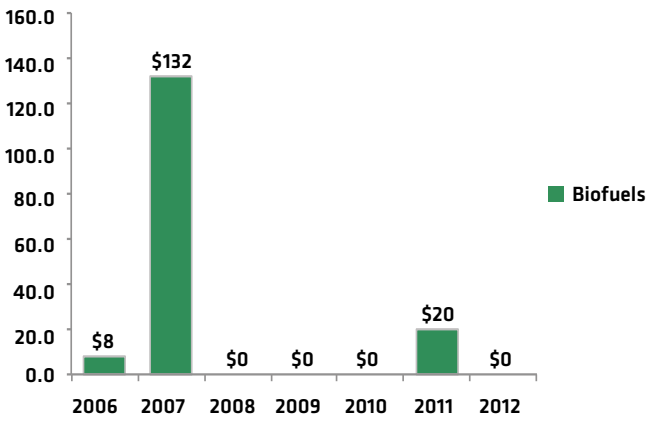
1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Administración Nacional de Electricad. Notes: For 2012.
6. Ibid. Note: N/A refers to no renewable installed capacity.
7. Ibid. Note: N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

In *Climatescope* 2013, Paraguay improved its standing by two positions on the Enabling Framework parameter (I), reaching 18th place. This was driven primarily by significant growth in its biofuels production together with a rise in local power demand – two out of 13 indicators comprising Parameter I. On both indicators, Paraguay ranked first out of 26 *Climatescope* countries. In 2011, Paraguay received around $20m of investment into its biofuels sector which explains the production expansion in 2012.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$160m total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

Paraguay registered 2.4GW maximum power demand in 2012, an increase of 11.6% from 2011. Still, thanks to excess local hydro resources available this resulted in virtually no new capacity being added. In fact, Paraguay could maintain last year's annual rate of electricity growth until 2024 before local supplies would become tight[9]. With few opportunities for new clean power development, the country ranks in the bottom five on most of the other *Climatescope* indicators.

As a result of no annual growth in combination with a historically modest cumulative investment of $160m between 2006 and 2012, Paraguay dropped 15 positions on the Clean Energy Investment & Climate Financing Parameter (II) to 20th position. The country just avoided a bottom five finish thanks to its two green microfinance institutions and its attractive cost of micro debt (5.5%).

Lack of clean energy demand also affected Paraguay's performance on the Low-Carbon Business and Clean Energy Value Chains Parameter (III) where it ranked 20th. Again, the country would have finished in the bottom five were it not for biofuel producers such as INPASA[10].

9. Provided stable hydropower generation.
10. INPASA refers to Industria Paraguaya de Alcoholes, the largest bioethanol producer in Paraguay with its 140m liters per year Nueva Esperanza Bioethanol Plant.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	2/8
Green Microborrowers	500
Total Amount of Green Microloans Disbursed	$1,200,000
Average Cost of Green Microloans	25.2%
Average % of Loans Portfolio	1-2%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of eight MFIs in Paraguay, six responded to the survey.

Paraguay improved its standing from 2012 on the Greenhouse Gas Management Activities Parameter (IV) but performed below average on the CDM risk indicator. While it has capacity-building initiatives in place, those have yet to translate into wider corporate awareness and nationwide carbon policy commitments.

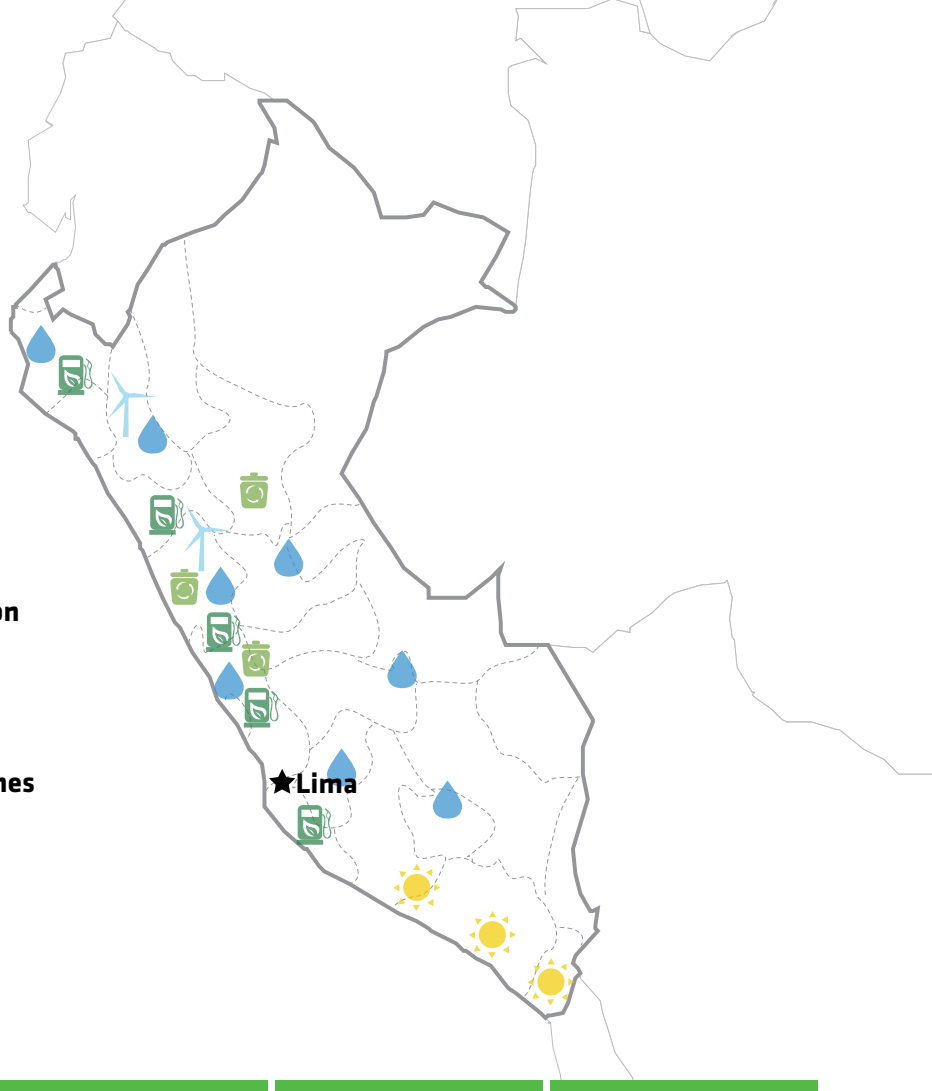
CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	**Engineering Company ; Producers ;** Distribution and Blending
Biomass & Waste	Feedstock Supply ; Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Small Hydro	Pipes ; Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ;** EPC ; Owner/Operator

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Paraguay has no companies in the geothermal and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

SOUTH AMERICA

Peru



GDP[1]: **$326.7bn**

Seven-year economic growth rate[2]: **9%**

Population[3]: **30.5m**

Total clean energy investments, 2006-2012[4]: **$2.5bn**

Installed power capacity[5]: **9GW**

Renewable share[6]: **8%**

Total clean energy generation[7]: **4,119GWh**

Top energy authority: **Ministry of Energy and Mines**

OVERALL RANKING

2013 4

2012 4

OVERALL SCORE

2013 2.25

PARAMETER	RANKING	SCORE
I. Enabling Framework	5	2.15
II. Clean Energy Investment & Climate Financing	2	2.52
III. Low-Carbon Business & Clean Energy Value Chains	5	1.94
IV. Greenhouse Gas Management Activities	6	2.21

SUMMARY

As one of the fastest growing Latin American economies, Peru repeated its strong performance on last year's *Climatescope*, landing fourth in this year's survey with a 2.25 score. The country performed well in all four parameters and placed no lower than sixth in each.

Thanks to high economic growth and to local tenders held for clean energy power contracts, the South American country had an impressive year for clean energy investment and installations. It saw the fourth highest renewable installation growth in the region and the biggest jump in clean energy financial commitments.

In 2012, Peru became the Latin American country with the most solar installed capacity. A total of 80MW was commissioned in the arid south of the country. An additional 62MW of biomass and small hydro capacity was added that year, resulting in a 24% increase in clean energy participation of total national capacity.

Peru doubled its cumulative clean energy investment in 2012, to $1.2bn compared with $1.3bn over the whole 2006-2011 period. This was the first time that Peru passed the $1bn annual mark in financing.

In the short term, we expect the marked increase in installations to continue, as the country's first wind farms get commissioned in 2013 and energy demand continues to rise, powered by economic growth and the mining industry.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Ministerio de Energía y Minas. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 5 / Score 2.15

Peru's policy framework for renewables, liberalized power market and high clean energy installations helped the country make the top five in the Enabling Framework parameter, with a 2.15 score.

The country received the third best mark for its clean energy policies, below only Brazil and Uruguay. Peru's renewable auctions have contracted 651MW of clean energy capacity and have driven most of the renewable investment and installations in the country in the last two years. After struggling to meet its biofuels blending mandate, Peru is now on track and in 2012 produced 590m liters, 230m liters of ethanol and 360m liters of biodiesel. In addition, the country offers a few other tax and transmission incentives listed below.

KEY POLICIES

Energy Target	5% renewable consumption by 2013 - achieved in 2010.
Auction	OSINERGMIN has held two auctions, contracting a total of 39 projects from small hydro (184MW), wind (144MW), solar (84MW) and biomass & waste (29MW) sources, for 20-year contracts.
Biofuels	5% biodiesel blend with conventional diesel and 7.8% ethanol blend with conventional gasoline.
Tax Incentives	Accelerated depreciation of up to 20% for renewable energy generation investments in machinery and equipment.
Utility Regulation	Priority transmission dispatch to electricity generated from renewable sources.

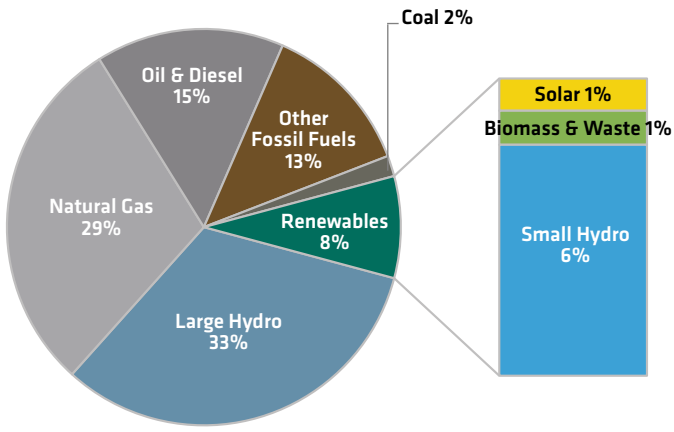
Source: Bloomberg New Energy Finance Policy Library

The auctions organized by electricity regulator Organismo Superior de la Inversión en Energía y Minería (OSINERGMIN) are also responsible for making Peru the leading country for solar installations. In 2012, 80MW from four solar photovoltaic projects were commissioned, all located in the country's southern coastal desert. In total, Peru added 142MW of renewable capacity last year – a 24% cumulative increase. Now, renewables make up 8% of the country's 8GW energy matrix.

Renewable energy capacity should continue to grow given the country's policy incentives and strong economic growth, as well as intense energy demand from the local mining industry. Peru is the seventh largest economy among all 26 Climatescope countries and has been growing at a 7% compound annual rate for the past seven years. Power demand has risen at a 6% compound annual rate over the same period, giving Peru the fourth highest power demand in the region.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

9GW total installed capacity

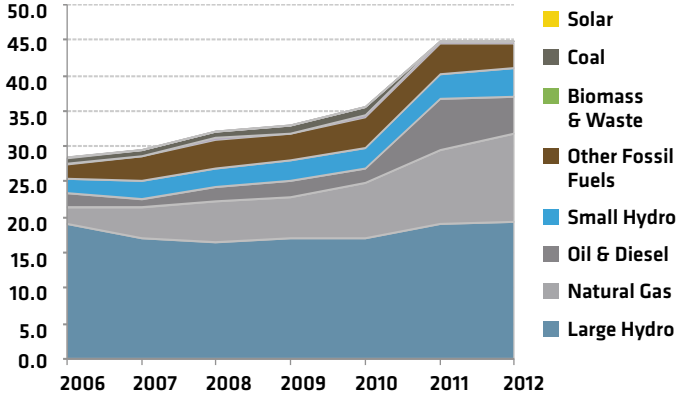


Source: Bloomberg New Energy Finance, Ministerio de Energía y Minas

Demand for small-scale projects is also poised to rise in the country. In July 2013, the Ministry of Energy and Mines announced a program that aims to boost the country's electrification rate from 86% to 95% by 2016 through the deployment of solar photovoltaic systems. The program should benefit at least 0.5m low-income Peruvian households.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

45TWh total generation



Source: Bloomberg New Energy Finance, Ministerio de Energía y Minas
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Peru lost points for the indicators looking at electricity prices, given its relatively low spot prices of $30.8/MWh and subsidized retail rates averaging $0.10/KWh. While subsidies reduce the economic burden on low-income consumers, they ultimately distort the market and make it more challenging for new entrants to sell power at a reasonable margin.

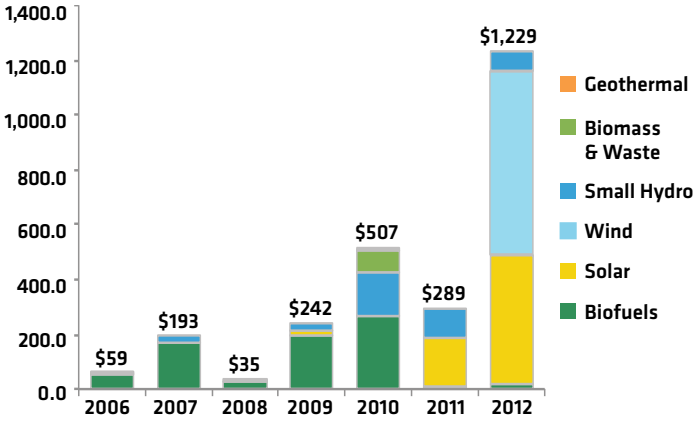
II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 2 / Score 2.52

Peru had its best performance in the Clean Energy Investment and Climate Financing parameter, finishing second with a 2.52 score. The fast-growing Peruvian clean energy economy received $1.2bn in investment in 2012, representing a 93% cumulative jump in financing since 2006. As a result, Peru finished first for growth on the clean energy investment indicator. The impressive amount of financing last year almost doubled cumulative clean energy investment, which totaled $1.3bn from 2006 through 2011. Of the total invested in 2012, $644m went to build three new projects, $563m to acquire three projects and $23m for one project refinancing.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$2.5bn total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

Last year, the wind sector attracted the most investment thanks to the $667m acquisition and financing of a 112MW project due online by the end of 2013. Solar came next, with $468m in commitments. The large majority (84%) of 2012 renewable funds came from international investors. As a result, the country did not perform well in the indicator gauging local investment by local players, only making it to ninth place.

LOCAL INVESTMENTS BY LOCAL PLAYERS

2012 Total Local Investments	$200m

Top Three Local Investors, 2012 ($m)

1st	Volcan Cia Minera SA	$47m
2nd	Banco Internacional del Peru	$17.5m
3rd	Cascade Hydro	$5m

Top Three Asset Finance Deals, 2012 ($m)

Rank	Sector	Project (MW)	Developer	Value
1st		Talara Cupisnique Portfolio (112MW)	ContourGlobal Latam SA	$250m
2nd		Panamericana & Tacna PV Portfolio (40MW)	Conduit Capital, Solarpack, Gestamp, CAF	$180m
3rd		Canchayllo Plant (5MW)	Cascade Hydro Ltd	$11m

Source: Bloomberg New Energy Finance
Notes: Figures refer to asset finance investments committed in 2012 and include balance sheet commitments.

Peru did particularly well in Parameter II's green microfinance category. The country was either first or second in three of four indicators assessed. There are 63 Latin American microfinance organizations offering loans to support clean energy, 10 of which are based in Peru. Microfinance institutions such as Caja Metropolitana Lima, Caja Señor de Luren and Prisma reported that around 12,590 borrowers have benefited from green microloans.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	10/63
Green Microborrowers	3,870
Total Amount of Green Microloans Disbursed	$250,000,000
Average Cost of Green Microloans	17.3%
Average % of Loans Portfolio	5-10%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 63 MFIs in Peru, 51 responded to the survey.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 5 / Score 1.94

Peru finished fifth on the Low-Carbon Business and Clean Energy Value Chains parameter, with a 1.94 score. The country placed between fourth and sixth on all three indicators assessed in this parameter.

In Peru, only commercial banks such as Banco Internacional del Peru have invested in renewable energy projects. Although the South American country has attracted investment from private equity firms, there is no local organization that focuses on this type of financing as yet.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

Peruvian organizations offer a range of clean energy services. The country is home to companies fulfilling nine of 20 value chain service segments assessed by *Climatescope*. Peru has companies active in consultancy and inspection, as well as distributors and a diverse range of specialized lawyers.

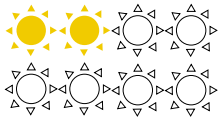
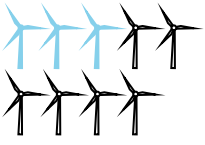
CLEAN ENERGY SERVICE PROVIDERS

Sector	Quantity	Available Sub-Sector, Unavailable Sub-Sector
Ancillary Products & Services	3	Consultancy-O&M ; **Consultancy-Technical ;** Contract Maintenance ; Contract Manufacturing ; Control Room Systems ; Education & Training ; **Inspection & Maintenance ; Specialist Services ;** Testing & Certification Services
Developers & Utilities	0	Integrated Service Provider
Marketing Services	1	**Distributor ;** Market Research ; PR Company
Financial & Legal Services	5	**Banking-Corporate ;** Banking-Custody ; Trust & Deposit ; **Insurance Provider ; Lawyer-Commercial ; Lawyer-Financial Markets; Lawyer-Project Finance ;** Recruitment/Search

Source: Bloomberg New Energy Finance
Note: Refers to key service segments for clean energy. Numbers indicate quantity of active sub-sectors. Highlighted text represents that at least one company in the sub-sector is active in the country.

Peru's technology-specific value chains are also fairly complete, with companies present for at least one segment for all six renewable sectors assessed (biofuels, biomass and waste, geothermal, small hydro, solar and wind) and a total of 16 out of 40 analyzed by the report. Small hydro has the most complete value chain, which includes turbine manufacturers, engineering, builders and project developers. This comes as no surprise given that 5% of the country's 8GW installed capacity comes from small hydro plants. Biomass and waste and wind are the next two sectors with significant active segments in the country at three each. Although Peru does not have any commissioned wind capacity yet, it does have 144MW under construction – enough to justify the presence of project developers, power generators and construction and installation companies.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels 	**Engineering Company ; Producers ;** Distribution and Blending
Biomass & Waste 	**Feedstock Supply ;** Manufacturing Equipment ; System Integration ; **Project Development ; Power Generation**
Geothermal 	Pre-Drilling Exploration ; Exploration/Production Drilling ; Well & Resource Confirmation; Turbine & Power Block ; Balance of Plant ; **Project Development ;** O&M ; Power Purchase
Small Hydro 	Pipes ; **Turbines ; Project Development ; Civil Works/Builder ; Engineering ; O&M ; Power Purchase**
Solar 	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind 	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ; Construction/Installation ;** O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector are displayed. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

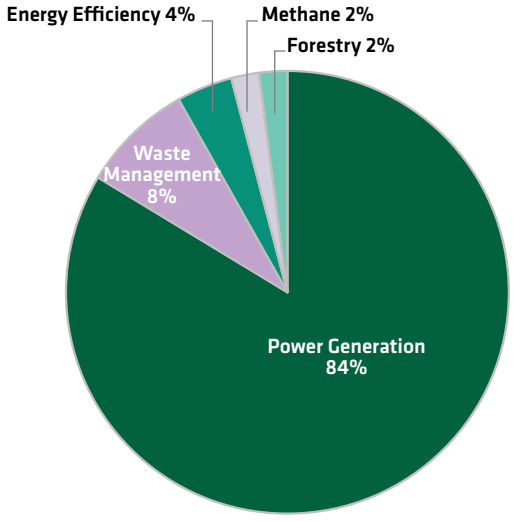
Ranking 6 / Score 2.21

In the last parameter assessed in *Climatescope*, Greenhouse Gas Management Activities, Peru placed sixth, with a mark of 2.21. The South American country performed well in the carbon offsets category; however, Peru's weak standing in the carbon policy category depressed its parameter score.

There are 61 emission offset projects in Peru, of which 49 are registered under the UN's Clean Development Mechanism (CDM). 84% of these projects are focused on power generation, but there are also projects aimed at reducing emissions from waste management (8%), energy efficiency (4%), methane (2%) and forestry (2%). Peru was at the top of the list in the CDM risk indicator, which assesses the number of project failures, restarts and duration of approval period. Peru was one of two countries that performed better than the regional average for all these three metrics.

CDM OFFSET PROJECTS BY SECTOR

49 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✓

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Peru has no major public policies aimed at reducing greenhouse gas emissions and thus did not score in three of four indicators assessed in the carbon policy category. It only scored in the PMR & NAMA indicator since the country is registered in the preparation phase of the Partnership for Market Readiness.

In the corporate awareness category, Peru fared somewhat better and scored in all indicators assessed. However, there is still a limited number of companies reporting or involved in reducing their carbon footprint.

Four organizations in Peru are part of the Global Reporting Initiative (GRI): one is the energy company Electroperu, and the other three are non-profit organizations: Fundación Romero, Instituto SASE, Peru 2021. There is one Peruvian company, Macrocapitales SAFI, that is a signatory of the Principles for Responsible Investment (PRI). The cement company Union Andina de Cementos (UNACEM) is the only Peruvian company that has reported both emission reduction and energy efficiency initiatives.

Suriname

GDP[1]: **$6.8bn**

Seven-year economic growth rate[2]: **6%**

Population[3]: **0.5m**

Total clean energy investments, 2006-2012[4]: **N/A**

Installed power capacity[5]: **379MW**

Renewable share[6]: **N/A**

Total clean energy generation[7]: **N/A**

Top energy authority: **Ministry of Natural Resources**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
26	26	0.33

PARAMETER	RANKING	SCORE
I. Enabling Framework	26	0.34
II. Clean Energy Investment & Climate Financing	25	0.37
III. Low-Carbon Business & Clean Energy Value Chains	24	0.19
IV. Greenhouse Gas Management Activities	25	0.33

SUMMARY

Suriname repeated its standing from last year's report to remain last among 26 nations surveyed in *Climatescope*, with an overall 2013 score of 0.33. The fourth-smallest economy among the 26 *Climatescope* countries finished in the bottom three in all four parameters assessed. It had its best performance in the Low-Carbon Business and Clean Energy Value Chain parameter, where its renewable value chain earned it 24th place.

Suriname has a total installed capacity of 379MW, half of which is accounted for by a single large hydro plant with the other half from fossil-fueled thermal plants. Nonetheless, in 2011, peak power demand only represented 48% of the country's current capacity. Retail consumers also pay relatively low tariffs for electricity (an average of $0.04/kWh), which makes the business case for renewables a difficult one.

While non-large hydro renewable power generation may not be cost competitive in Suriname today, the country has been looking into the production of fuel alternatives. State-owned oil company Staatsolie is currently developing a pilot ethanol plant in the northwest of the country. If successful, the project may offer the initial push for an ethanol blending mandate in Suriname, which would be the first of its kind among its Caribbean peers.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: N.V. Energiebedrijven Suriname. Notes: For 2011.
6. Ibid. Note: N/A refers to no renewable installed capacity.
7. Ibid. Note: N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

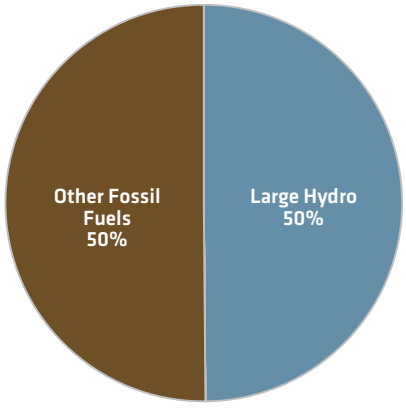
PARAMETERS AT A GLANCE

Suriname came in last in *Climatescope* 2013 – the same position it achieved in last year's report. No improvements were captured between 2011 and 2012, which justifies the country's low standing.

In the Enabling Framework parameter, Suriname also placed at the bottom of the list. The country has no renewable policy incentives, and its power market is controlled by the state-owned vertically integrated utility N.V. Energiebedrijven Suriname (NV EBS). Suriname has no significant clean energy capacity installed and relies on one 189MW large hydro plant located in the Suriname River and 190MW of fossil fuel plants.

INSTALLED POWER CAPACITY BY SOURCE, 2011 (GW)

379MW total installed capacity



Source: Bloomberg New Energy Finance, N.V. Energiebedrijven Suriname

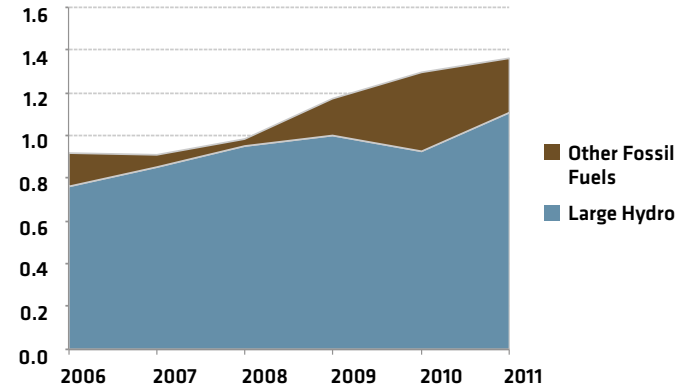
Consumers in Suriname pay relatively low power prices. Retail customers pay an average of just $0.04/kWh for power, with commercial consumers paying highest rates at 0.05/kWh. This is a far cry from what some of its Caribbean neighbors pay. For instance, by comparison Guyanese consumers face an average of $0.29/kWh for retail power.

While renewable energy solutions are not largely explored in Suriname, the state-owned oil company Staatsolie is currently looking at a pilot ethanol plant due to be developed in the second half of 2013. The plant will be located in Wageningen, in the northwest region and will have a total size of 14,000 hectares, where sugarcane will be planted. The aim is for the plant to begin producing ethanol by 2015, with a capacity of 40m liters per year.

Suriname made to 25th place on Parameter II. Since 2006, the country has not received any large-scale financial commitments to renewable energy. It scored well in two indicators in this parameter: loans, grants and grant programs and swap rate.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2011 (TWh)

1.4TWh total generation



Source: Bloomberg New Energy Finance, N.V. Energiebedrijven Suriname

To date, a total of $9.2m in grants have been committed in the country, with the last one, approved in April 2013 to explore the country's bioenergy, small hydro and solar industries. Suriname has a mid-range swap rate, at 11.8%.

The country achieved its best ranking on Parameter III, where it took 24th place thanks to the presence of companies that cater to small hydro projects, with two segments active. However the country has no financial or service companies related to renewable energy.

On Parameter IV, Suriname placed 25th and only scored on two indicators out of the 13 assessed. The country was among the average of the region on the carbon offsets future potential indicator, with a special opportunity for energy efficiency and forestry (REDD) projects.

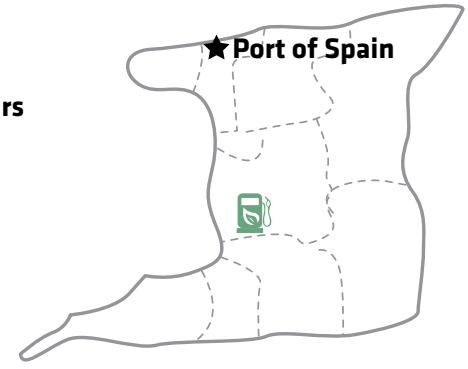
CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ;** Distribution and Blending
Small Hydro	Pipes ; Turbines ; Project Development ; Civil Works/Builder ; Engineering ; **O&M ; Power Purchase**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Suriname has no companies in the biomass & waste, geothermal, solar and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

Trinidad & Tobago

GDP[1]: **$26.7bn**
Seven-year economic growth rate[2]: **2%**
Population[3]: **1.3m**
Total clean energy investments, 2006-2012[4]: **$222.6m**
Installed power capacity[5]: **4GW**
Renewable share[6]: **N/A**
Total clean energy generation[7]: **N/A**
Top energy authority: **Ministry of Energy and Energy Affairs**



OVERALL RANKING

2013	2012
24	23

OVERALL SCORE
2013
0.54

PARAMETER	RANKING	SCORE
I. Enabling Framework	25	0.44
II. Clean Energy Investment & Climate Financing	19	0.62
III. Low-Carbon Business & Clean Energy Value Chains	17	0.75
IV. Greenhouse Gas Management Activities	23	0.51

SUMMARY

Trinidad and Tobago ranked 24th among Latin American and Caribbean countries in this year's *Climatescope*, with an overall score of 0.54. The country's 2013 ranking is one position below last year's.

Trinidad and Tobago relies on locally produced fossil fuels for electricity production. Natural gas makes up 98% of its generating capacity. This wealth of fossil energy has enabled the country to become the Caribbean's leading manufacturing hub.

At least one entity so far has sought to leverage the country's industrial infrastructure for clean energy manufacturing. SiTek, a Trinidadian company, is collaborating with InvesTT, a government office promoting economic development outside the hydrocarbon sector, to evaluate the feasibility of establishing a domestic photovoltaic production industry.

It was reported earlier this year that Trinidad and Tobago's government is preparing a solar tender offer. Local media said that the photovoltaic generation would power schools and water treatment on both the country's main islands.

Should either initiative come to fruition, it should address the reason for Trinidad and Tobago's low *Climatescope* ranking: there has been no meaningful clean energy investment in the country since 2008, when about $223m was spent on a facility to dehydrate ethanol imported from Brazil for shipment to the US.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Regulated Industries Commission. Notes: For 2012.
6. Ibid. Note: N/A refers to no renewable installed capacity.
7. Ibid. Note: N/A refers to no renewable power generation available.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Trinidad and Tobago's abundance of local fossil fuels has, to date, suppressed the development of a national clean energy sector. It scored 0.75 and came in 17th on the Low-Carbon Business and Clean Energy Value Chains parameter (III). It received a 0.62 score and finished 19th on the Clean Energy Investment and Climate Financing parameter (II). On the Greenhouse Gas Management Activities parameter (IV), Trinidad and Tobago ranked 23rd with a score of 0.51, while it was in 25th place on the Enabling Framework parameter (I), with a mark of 0.44.

The island nation dropped one position on Parameter I this year. Its average retail electricity prices in 2012 were among the lowest of any country in the Latin American and Caribbean region. Thus, it offered few economic points of entry for clean power developers.

The country maintained its ranking on Parameter II. There was no significant year-on-year change in clean energy investment, asset financing or government loans and grants.

On Parameter III, Trinidad and Tobago finished in the same position as in 2012. The number of financial institutions and value chains in clean energy did not change last year. Clean energy service providers operated in technical consulting, contract maintenance, distribution, corporate banking and custody and deposit banking.

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	**Available Sub-Sector,** Unavailable Sub-Sector
Biofuels	**Engineering Company ;** Producers ; Distribution and Blending
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ;** EPC ; Owner/Operator

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Trinidad and Tobago has no companies in the biomass & waste , geothermal, small hydro and wind value chains. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

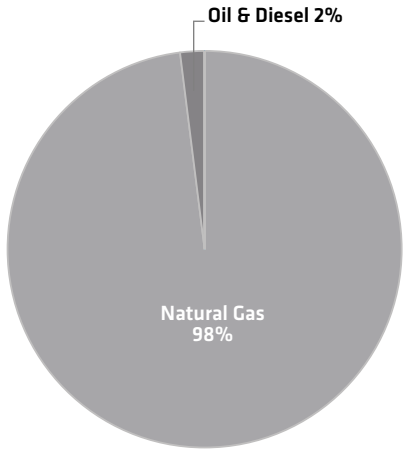
FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

4GW total installed capacity



Source: Bloomberg New Energy Finance, Regulated Industries Commission

The country slipped one place on Parameter IV. While it has no reported GHG management activities, its potential for carbon offset activity is considered strong based on the level of domestic industrial activity and the existence of established value chains and financial organizations.

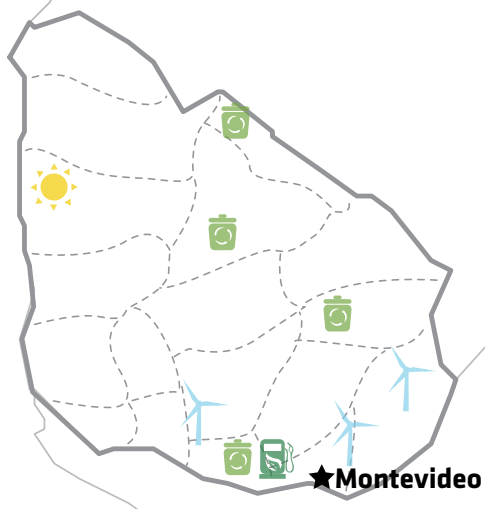
With the discontinuation of US import tariffs on ethanol, which obviates biofuels processing in Trinidad and Tobago, solar replaces biofuels as the most likely growth sector. The country's initiatives under way on both the demand and supply side of the solar business offer the means to diversify modestly from its heavy reliance on fossil energy.

GHG CORPORATE AWARENESS

Indicator	Performance
Global Reporting Initiative	< LAC Average
Principles of Responsible Investment	< LAC Average
Energy Efficiency Initiatives	< LAC Average
Emission Reduction Policies	< LAC Average
Environmentally Focused Business Training	✓
Environmentally Focused Think Tanks	✗

Source: Global Reporting Initiative, Principles for Responsible Investment, Environmental Social & Governance, Bloomberg New Energy Finance

Uruguay



GDP[1]: **$53.8bn**

Seven-year economic growth rate[2]: **8%**

Population[3]: **3.4m**

Total clean energy investments, 2006-2012[4]: **$393m**

Installed power capacity[5]: **3GW**

Renewable share[6]: **11%**

Total clean Energy generation[7]: **616GWh**

Top energy authority: **Ministry of Industry, Energy and Mines**

OVERALL RANKING 2013	OVERALL RANKING 2012	OVERALL SCORE 2013
6	10	1.67

PARAMETER	RANKING	SCORE
I. Enabling Framework	3	2.20
II. Clean Energy Investment & Climate Financing	11	1.06
III. Low-Carbon Business & Clean Energy Value Chains	8	1.50
IV. Greenhouse Gas Management Activities	8	1.59

SUMMARY

Uruguay advanced four slots from last year's *Climatescope* to finish sixth this year, with a 1.67 overall score. Its improvement is largely due to its excellent standing in the Enabling Framework parameter, where it was among the top three.

Despite being the second smallest country in South America by area, Uruguay is home to 304MW of clean energy, representing 11% of the country's overall capacity of 3GW. It now aims to achieve a 15% share of renewables by 2015 and appears on track to fulfilling that target in part by becoming a dynamic wind market. No less than 630MW of new wind capacity was contracted for development through reverse auctions in 2010 and 2011.

From 2006 through 2012, Uruguay received a cumulative $393m in investment for clean energy projects. Since 2010, wind has been the country's flagship sector, attracting more than half of the total financial commitments.

Solar photovoltaics now also appears ready to shine. State-owned utility Administración Nacional de Usinas y Trasmisiones Eléctricas (UTE) is currently conducting a tender which aims to contract 200MW of solar capacity by September 2013. Significant renewable capacity and investment is expected in Uruguay in the coming years.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Ministerio de Industria, Energía y Minería. Notes: For 2012
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

I. ENABLING FRAMEWORK

Ranking 3 / Score 2.20

Uruguay made the top three countries on the Enabling Framework parameter, scoring 2.20, and finishing only behind Nicaragua and Brazil. The South American country boasts a relatively strong and diversified policy framework for renewables and thus received the second highest score in this indicator. Out of eight possible policy types assessed in *Climatescope*, Uruguay has five in place, including a clean energy target of 15% by 2015, of biofuel blending mandate of 5% for biodiesel and 5% for ethanol in 2015, reverse-auction mechanisms for renewables, and tax incentives and net metering for distributed generation.

Thanks to tenders held for wind power contracts in 2010 and 2011, Uruguay has contracted 630MW of capacity, which should come online in the next two years. Just in the first half of 2013, two equipment manufacturers inked a total of 250MW in wind turbine contracts for six projects in Uruguay.

Wind is poised to become the main renewable source in Uruguay soon but as of 2012, the largest source of clean capacity was biomass and waste. Renewables represented 11% of Uruguay's 2.8GW power matrix, with 252MW coming from biomass plants and 52MW from wind.

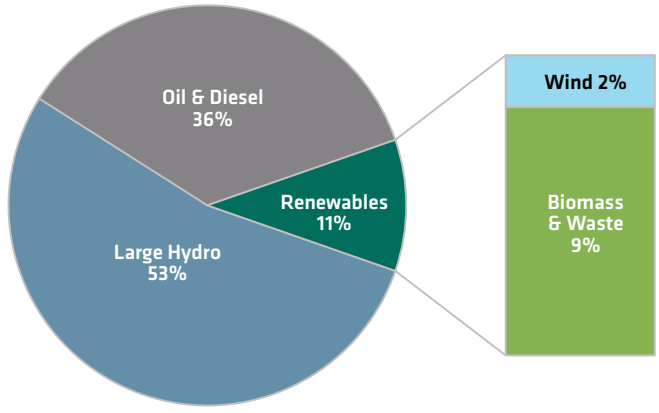
KEY POLICIES

Energy Target	15% renewable power installed capacity by 2015.
Auction	UTE has conducted three auctions, contracting 13 wind projects (630MW) for 20-year contracts.
Biofuels	5% biodiesel blend with conventional diesel and 5% ethanol blend with conventional gasoline by 2015.
Tax Incentives	Income tax reduction for renewable generators and VAT exemption for wind equipment.
Net Metering	Net metering program with 24 customers connecting 140kW of renewable capacity to the grid and delivering surplus power generation.

Source: Bloomberg New Energy Finance Policy Library

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

3GW total installed capacity

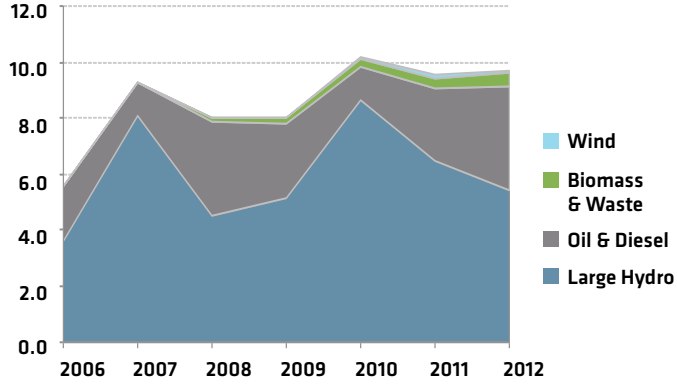


Source: Bloomberg New Energy Finance, Ministerio de Industria, Energía y Minería
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Uruguayan retail consumers pay the fourth highest electricity tariff among all countries assessed in *Climatescope* and the highest in South America, at an average of $0.26/kWh. Wholesale customers pay the second highest prices in the region at an average of $208/MWh. Given the high price environment, bilateral power contracts with renewable utility-scale projects hold potential appeal for large-scale consumers. For their part, retail customers may exploit the country's net metering policies to install small-scale solutions.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

10TWh total generation



Source: Bloomberg New Energy Finance, Ministerio de Industria, Energía y Minería
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

II. CLEAN ENERGY INVESTMENT AND CLIMATE FINANCING

Ranking 11 / Score 1.06

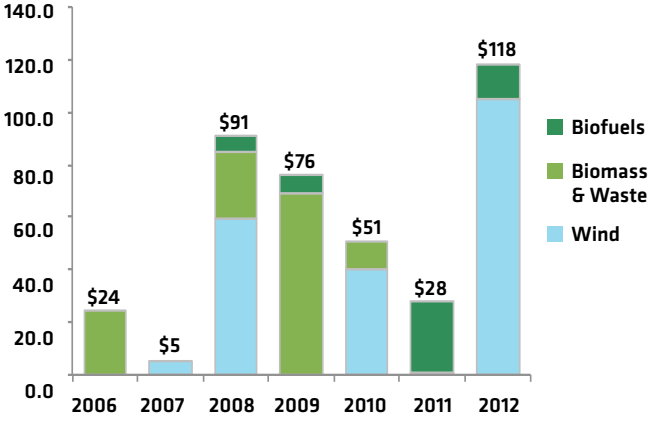
Uruguay finished 11th on the Clean Energy Investment and Climate Financing parameter with a score of 1.06. From 2006 through 2012, it attracted $394m in clean energy investment. In 2012, the South American country saw its cumulative total grow by 43% as $118m in new funds were committed that year. Of this, $104m went to finance a 50MW wind project located in the Departamento de Tacuarembo, in the north of Uruguay. The remaining $14m went to finance a stake in the acquisition of a 70m-liter per year ethanol plant with 8MW co-generation capacity in Paysandú, near the border with Argentina.

Renewable investment is expected to grow even further in 2013, as wind projects that won contracts through auctions close on financing.

All funds committed in 2012 came from international institutions. As a result, Uruguay did not score in the local investments by local players indicator. The country has a relatively high swap rate, at 11% – the 10th highest among Climatescope countries.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$393m total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

GREEN MICROFINANCE HIGHLIGHTS

Summary Green MFI Survey 2013	
Green Microfinance Institutions / Total MFIs	1/5
Green Microborrowers	720
Average Cost of Green Microloans	24%
Average % of Loans Portfolio	2-5%

Source:Bloomberg New Energy Finance
Note: Figures based on survey conducted by BNEF from November to December 2012, with a total of 465 microfinance institutions based in LAC. 80% response rate. Of 5 MFIs in Uruguay, 4 responded to the survey.

The green microfinance sector in Uruguay is relatively underdeveloped. Of five organizations offering microcredit in the country, only one, FUNDASOL, provides loans to support clean energy projects. To date, that organization has provided green loans to 720 borrowers, at a reported interest rate of 24%.

III. LOW-CARBON BUSINESS AND CLEAN ENERGY VALUE CHAINS

Ranking 8 / Score 1.50

Looking solely at Parameter III results, Uruguay received a 1.50 score and remained in the same spot as in last year's report – eighth place. Only commercial banks in Uruguay provide loans to renewable energy, among them the Banco de la República Oriental del Uruguay. As for service providers, there are four segments active in the country, with Uruguayan companies providing services such as technical consultancies, insurance and law assistance to project finance.

Uruguay boasts a complete value chain for biomass and waste projects, which includes companies active in all segments from feedstock supply to power generation and system integration. The second most complete is the wind value chain, with Uruguayan companies active in three sector segments.

Given Uruguay's borders with Argentina and Brazil, it is likely that local developers take advantage of this proximity to import equipment as opposed to producing it locally. As a result, a complete value chain for other technologies may never be developed in Uruguay.

FINANCIAL INSTITUTIONS IN CLEAN ENERGY

✓	**Banks**		**Corporate Finance**
	Funds		**Private Equity/Venture Capital**

Source: Bloomberg New Energy Finance
Note: Refers to types of institutions that finance clean energy projects. Check means that at least one institution is active in that segment in the country

CLEAN ENERGY VALUE CHAINS BY SECTOR

Sector / Quantity	Available Sub-Sector, Unavailable Sub-Sector
Biofuels	Engineering Company ; **Producers ; Distribution and Blending**
Biomass & Waste	**Feedstock Supply ; Manufacturing Equipment ; System Integration ; Project Development ; Power Generation**
Small Hydro	Pipes ; Turbines ; **Project Development ;** Civil Works/Builder ; **Engineering ;** O&M ; **Power Purchase**
Solar	Polysilicon/Ingots ; Wafers ; Cells ; Modules ; Balance of Plant ; **Project Development ; EPC ;** Owner/Operator
Wind	Bearings ; Gearboxes ; Generators ; Blades ; Turbines ; **Project Development ; Construction/Installation ;** O&M ; **Power Generator**

Source: Bloomberg New Energy Finance
Note: Only sector value chains with at least one available sub-sector is displayed. Uruguay has no companies in the geothermal value chain. Uncolored icons, on the left, refer to each sub-sector of a complete value chain for a given sector, spelled out on the right. Colored icons represent the number of available sub-sectors for a given clean energy sector value chain. Bold text, on the right, illustrates at least one organization in that sub-sector is active in the country.

IV. GREENHOUSE GAS MANAGEMENT ACTIVITIES

Ranking 8 / Score 1.59

On the last *Climatescope* parameter, Uruguay came eighth, with a 1.59 score. The country had a good performance in the carbon offsets category but did not score as well in Parameter IV's remaining categories: carbon policy and corporate awareness.

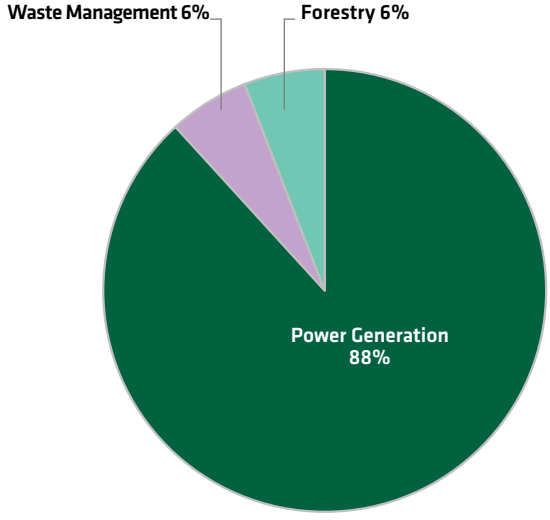
There are 24 carbon offset projects in place in Uruguay, of which 17 are registered under the CDM standard. Most (88%) offset emission projects come from power generation, while the remaining address waste management and forestry.

Uruguay offers wide opportunities for the future development of offset projects, especially to curb methane and emissions from high global warming potential gases (HPC, PFC and SF6). Its beef and milk production and large livestock population are largely responsible for these emissions.

Uruguay does not have any public or private initiatives to curb greenhouse gas emissions, and as a result it did not receive a score in eight out of 10 indicators that comprise the last two categories in Parameter IV.

CDM OFFSET PROJECTS BY SECTOR

17 CDM projects



Source: UNEP Risoe, Bloomberg New Energy Finance
Notes: Other include HFCs, PFCs and SF6, and CO2 usage project types.

SOUTH AMERICA

Venezuela

GDP[1]: **$401.9bn**

Seven-year economic growth rate[2]: **5%**

Population[3]: **29.5m**

Total clean energy investments, 2006-2012[4]: **$354.6m**

Installed power capacity[5]: **28GW**

Renewable share[6]: **0.001%**

Total clean energy generation[7]: **115GWh**

Top energy authority: **Ministry of the People's Power for Electricity**

OVERALL RANKING 2013	2012	OVERALL SCORE 2013
20	25	0.81

PARAMETER	RANKING	SCORE
I. Enabling Framework	22	0.88
II. Clean Energy Investment & Climate Financing	18	0.65
III. Low-Carbon Business & Clean Energy Value Chains	9	1.38
IV. Greenhouse Gas Management Activities	20	0.62

SUMMARY

Endowed with major hydrocarbon reserves, Venezuela has to date eschewed the kind of supportive clean energy policies other Latin American governments have pursued. The country has maintained policies of subsidized domestic prices for oil and refined products. Despite making fuel widely available locally at discounted prices, Venezuela is still the largest crude oil exporter in the region.

Venezuela ranks 20th overall out of the 26 *Climatescope* nations, with a score of 0.81. While that represents an improvement of five places from 2012, Venezuela remains the largest economy in the bottom half of the rankings. Venezuela's installed power generating capacity is roughly divided between fossil fuels (petroleum and natural gas) and large hydro. The country has a negligible but rising level of small hydro generation.

The outlook for clean energy in Venezuela is mixed. On the positive side, the post-Chávez government has moved to re-establish dormant diplomatic channels with potential investor nations in Europe and the Americas, including the US. On the negative side, Standard and Poor's in June 2013 downgraded Venezuela's sovereign credit rating on concerns about the country's financial condition following years of selling petroleum at below-market prices.

1. Source: International Monetary Fund, World Economic Outlook, April 2013
Notes: Gross domestic product based on purchasing power parity (PPP) valuation of country GDP (current international dollar) for 2012.
2. Source: Ibid. Notes: Calculation based on a compounded annual economic growth rate for the 2006 to 2012 period.
3.Source: Ibid. Notes: Population for 2012 period in millions.
4.Source: Bloomberg New Energy Finance. Notes: Cumulative clean energy investments in this period.
5. Source: Ministerio del Poder Popular para Energía Eléctrica. Notes: For 2012.
6. Ibid.
7. Ibid.
8. Symbols on map reflect approximate locations of comissioned plants from RE sources.

PARAMETERS AT A GLANCE

Venezuela performed best in the Low-Carbon Business and Clean Energy Value Chains parameter. It scored 1.38 and came in ninth on Parameter III. It ranked 22nd on the Enabling Framework parameter, with a score of 0.88. It had a score of 0.65 and finished 18th on Parameter II, Clean Energy Investment and Climate Financing. On the Greenhouse Gas Management Activities parameter (IV), Venezuela scored 0.62 and came in 20th.

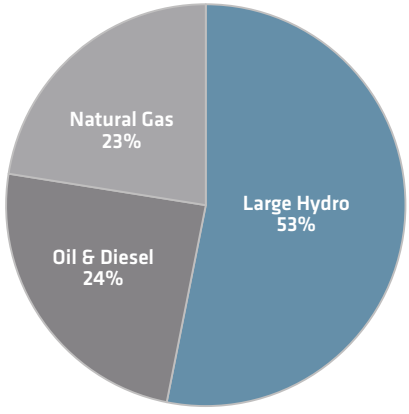
In general, Venezuela has employed its sizable oil and natural gas and large hydro resources to the near-exclusion of cleaner technologies. Venezuelan consumers enjoy access to fuel at prices subsidized down to some of the lowest levels in the world. That has all but obviated economic demand for alternative sources of energy.

A relative dearth of enabling policies and regulations explains the country's poor showing on Parameter I, the most heavily weighted in the index. Yet Venezuela saw its small hydro capacity rise from 26MW to 33MW between 2011 and 2012.

Venezuela advanced eight positions on Parameter II, as its overall clean energy investment level increased 27%, to about $355m in 2012.

INSTALLED POWER CAPACITY BY SOURCE, 2012 (GW)

28GW total installed capacity

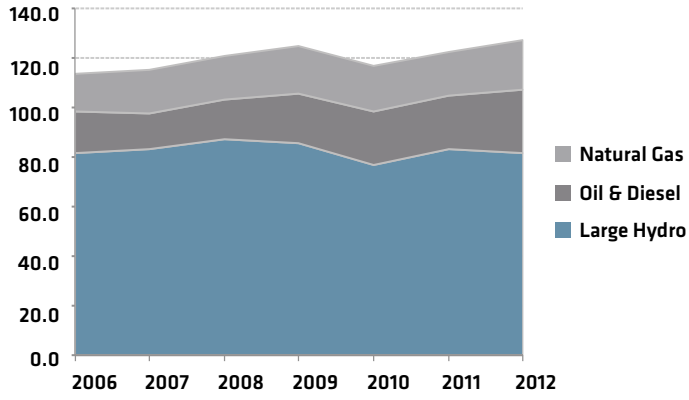


Source: Bloomberg New Energy Finance, Ministerio del Poder Popular para la Energía Eléctrica
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Venezuela scored best on Parameter III, rising six spots from the first *Climatescope*. The number of segments it fulfilled in the various clean energy value chains more than doubled to five, with activity noted in biofuels production, small hydro projects and power purchasing and wind project development and generation.

ANNUAL ELECTRICITY GENERATION BY SOURCE, 2006-2012 (TWh)

128TWh total generation

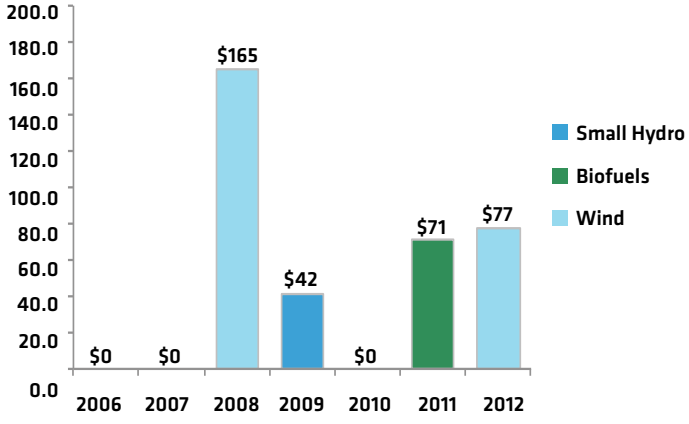


Source: Bloomberg New Energy Finance, Ministerio del Poder Popular para la Energía Eléctrica
Note: Some values cannot be graphically represented due to scale, please see source data for the complete numbers.

Venezuela has moved to re-open diplomatic channels with countries. At the same time, investors are concerned about the economic stability of a country that has opted not to monetize its most significant natural resources – fossil fuels – to their full market value. Looking forward, it remains to be seen whether Venezuela's new leadership will be open to diversifying further its energy matrix to non-fossil sources.

ANNUAL INVESTMENT IN CLEAN ENERGY, 2006-2012 ($m)

$355m total cumulative investment



Source: Bloomberg New Energy Finance
Notes: Total investments includes: Asset Finance, Corporate Finance and Venture Capital / Private Equity Commitments.

APPENDICES

Mexico - On March 2013, Popocatépetl Volcano released ash plume reaching roughly 1,500 meters (4,900 feet) above the volcano crater, or about 7 kilometers (4 miles) above sea level.

APPENDIX A
SUMMARY METHODOLOGY CHANGE

PARAMETER	CATEGORY/INDICATOR	2012 METHODOLOGY	2013 METHODOLOGY
I. Enabling Framework	Clean energy policy indicator	Six external experts judged policy frameworks of 26 countries based on ambition and effectiveness.	Two to four external experts judged a specific policy type based on six cross-cutting factors: stability, predictability, transparency, effectiveness, ambition and longevity. An external metric of political risk was taken into account. Comprehensiveness based on how many policy types were available in a given country was included. A total of 18 external experts judged the policy frameworks of 26 countries.
	Power market structure indicator	10 questions with binary responses measured power market liberalization.	Questions were enhanced to better take into account nuances on how different power markets have been liberalized. At least three possible answers were available for each question.
	Average electricity price indicator	Took into account average residential end-user tariffs only.	Greater depth related to price availability for different end-users, including: residential, commercial and industrial.
II. Clean Energy Investment and Climate Financing	Cost of debt category	One indicator tracking sovereign risk	Two indicators: • Cost of debt for large-scale clean energy projects based on a survey with lenders in each country. • Swap rate as a second proxy for cost of debt.
	Green microfinance category	Three indicators comprising: number of green MFIs, amount of green micro-loans, and number of green micro-borrowers.	Four indicators comprising: cost of green microdebt, number of MFIs, green microloans, and green microborrowers. These green microfinance indicators now have a lower combined impact on the overall *Climatescope* score.
III. Low-Carbon Business and Clean Energy Value Chains	Sector value chain indicator	Biofuels value chain contained feedstock supplier as a sub-sector. Small hydro value chain did not contain pipes suppliers as a sub-sector.	Removed feedstock provider as a sub-sector on the biofuels value chain. Added pipe suppliers as a sub-sector in the small hydro value chain.
IV. Greenhouse Gas Management Activity		Seven indicators comprising a few metrics of carbon offset projects and two metrics on corporate awareness.	Methodology completely revamped it now includes 13 indicators comprising three categories: carbon offset, carbon policy and corporate awareness.

Colors show methodology subdivisions and changes by year

PARAMETER | CATEGORY | INDICATOR | MET.2012 | MET.2013

APPENDIX B
CLEAN ENERGY POLICY EXPERT COMMITTEE

CLEAN ENERGY POLICY COMMITTEE	EXPERT	POSITION	ORGANIZATION
TARGETS	Federico Renjifo	Minister	Colombia Ministry of Mines and Energy
	Gilbert E. Metcalf	Professor of Economics	Tufts University
	Marcelo de Andrade	Partner	Earth Capital Partners
	Philipp Hauser	VP Carbon Markets	GDF Suez Energy Latin America
AUCTIONS	Isabel Blanco	Head of Markets Regulation	Gamesa
	Marco Antonio Morales	Head Latin America Development	Enerfin
	Nicola Borregaard	Manager Energy and Climate Change	Fundación Chile
	Philipp Hauser	VP Carbon Markets	GDF Suez Energy Latin America
FEED-IN TARIFF / PRICE PREMIUM	A.J. Goulding	President/Adjunct Assistant Professor of Electricity Markets	London Economics International / Columbia University
	Marcelo de Andrade	Partner	Earth Capital Partners
	Philipp Hauser	VP Carbon Markets	GDF Suez Energy Latin America
BIOFUELS BLENDING MANDATE	Arnaldo Vieira de Carvalho	Sustainable Energy Lead Specialist	Inter-American Development Bank
	Matthew Rudolf	Regional Director, Americas	RSB Services
DEBT/EQUITY FINANCE INCENTIVES	Ben Caldecott	Head of Policy	Climate Change Capital (up to July 2013)
	Carlos St James	President	Latin America and Caribbean Council on Renewable Energy
	Jeremy Martin	Director of Energy Program	Institute of the Americas
	Philipp Hauser	VP Carbon Markets	GDF Suez Energy Latin America
TAX INCENTIVES	John Paul Moscarella	Senior MD	Emerging Energy and Environment LLC
	Philipp Hauser	VP Carbon Markets	GDF Suez Energy Latin America
NET METERING	Geraldo Guimaraes Jr	CEO	GA Guimaraes Consultoria
	Alice Carrasco	Regulatory Director, EMEA Region	Siemens
UTILITY REGULATIONS	Riquel Mitma	Technical Advisor	Peru Organismo Supervisor de la Inversión en Energía y Minería
	Sylvia Stojilkovic	Manager Strategy and Markets	EnBW Erneuerbare Energien GmbH

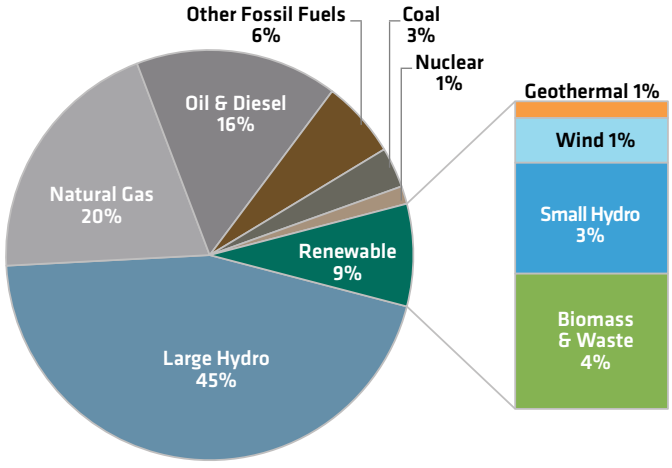
APPENDIX C
LATIN AMERICA AND CARIBBEAN CLEAN ENERGY POLICIES

	ENERGY MARKET						EQUITY FINANCE				DEBT FINANCE				TAX-BASED						CARBON MARKET			
	Energy target	Feed-in tariff	Auction	Biofuels blending mandate	Net Metering	Other	Grant	Incubators	Infrastructure fund	Other	Funding	Export trade credit	Green Bond	Other	Accelerated depreciation	Tax relief	Income tax	Import duty	Tax rebate	Other	Domestic cap-and-trade	Emissions reduction target	Project-based carbon credit	Other
Argentina	●	●	●	●											●				●					
Bahamas																								
Barbados	●				●																			
Belize																								
Bolivia																								
Brazil			●	●	●	●			●		●					●		●	●			●		
Chile	●				●															●		●		
Colombia	●			●												●								
Costa Rica			●		●											●						●		
Dominican Republic	●	●			●				●							●	●	●				●		
Ecuador		●		●												●								
El Salvador																	●	●						
Guatemala			●													●	●	●						
Guyana																								
Haiti																								
Honduras		●	●													●	●	●						
Jamaica	●		●		●																			
Mexico	●				●	●	●								●							●		
Nicaragua						●											●	●		●				
Panama		●	●	●												●		●		●				
Paraguay				●																				
Peru	●		●	●																				
Suriname																								
Trinidad & Tobago																								●
Uruguay	●	●	●	●												●								
Venezuela																								

APPENDIX D
INSTALLED POWER CAPACITY BY SUB-REGION AND BY SOURCE, 2012 (GW)

Latin America and Caribbean Installed Power Capacity by Source, 2012 (GW)

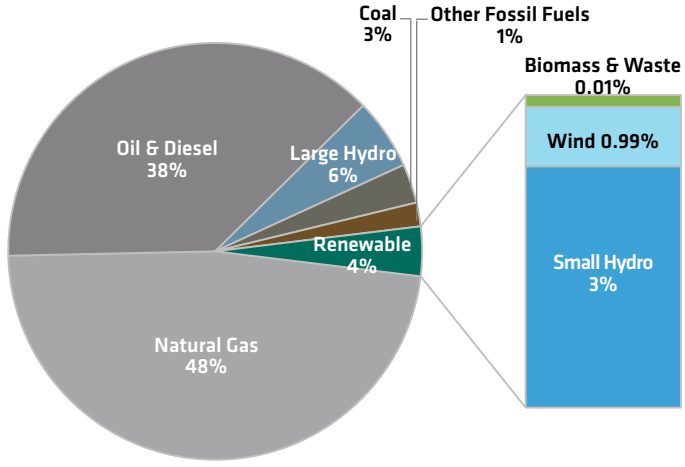
329.5GW total installed capacity



Source: Bloomberg New Energy Finance

Caribbean Installed Power Capacity by Source, 2012 (GW)

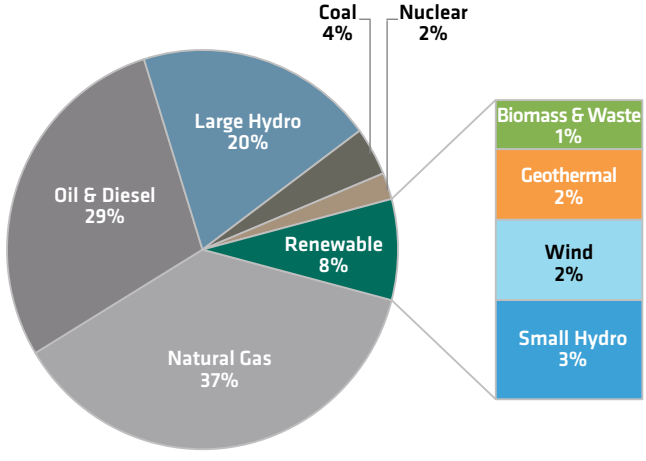
10.3GW total installed capacity



Source: Bloomberg New Energy Finance

Central America and Mexico Installed Power Capacity by Source, 2012 (GW)

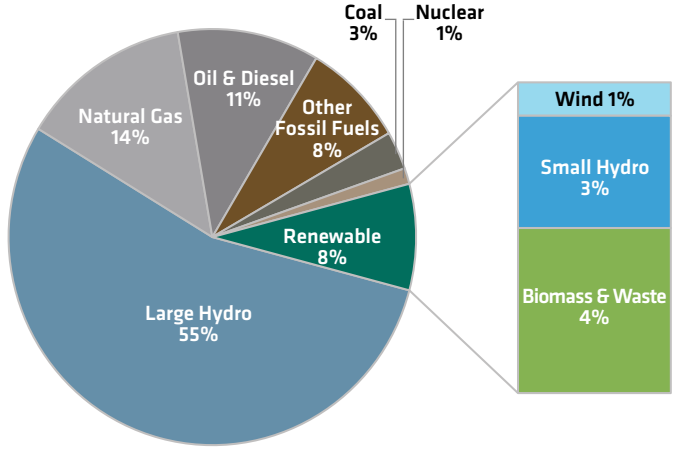
74.8GW total installed capacity



Source: Bloomberg New Energy Finance

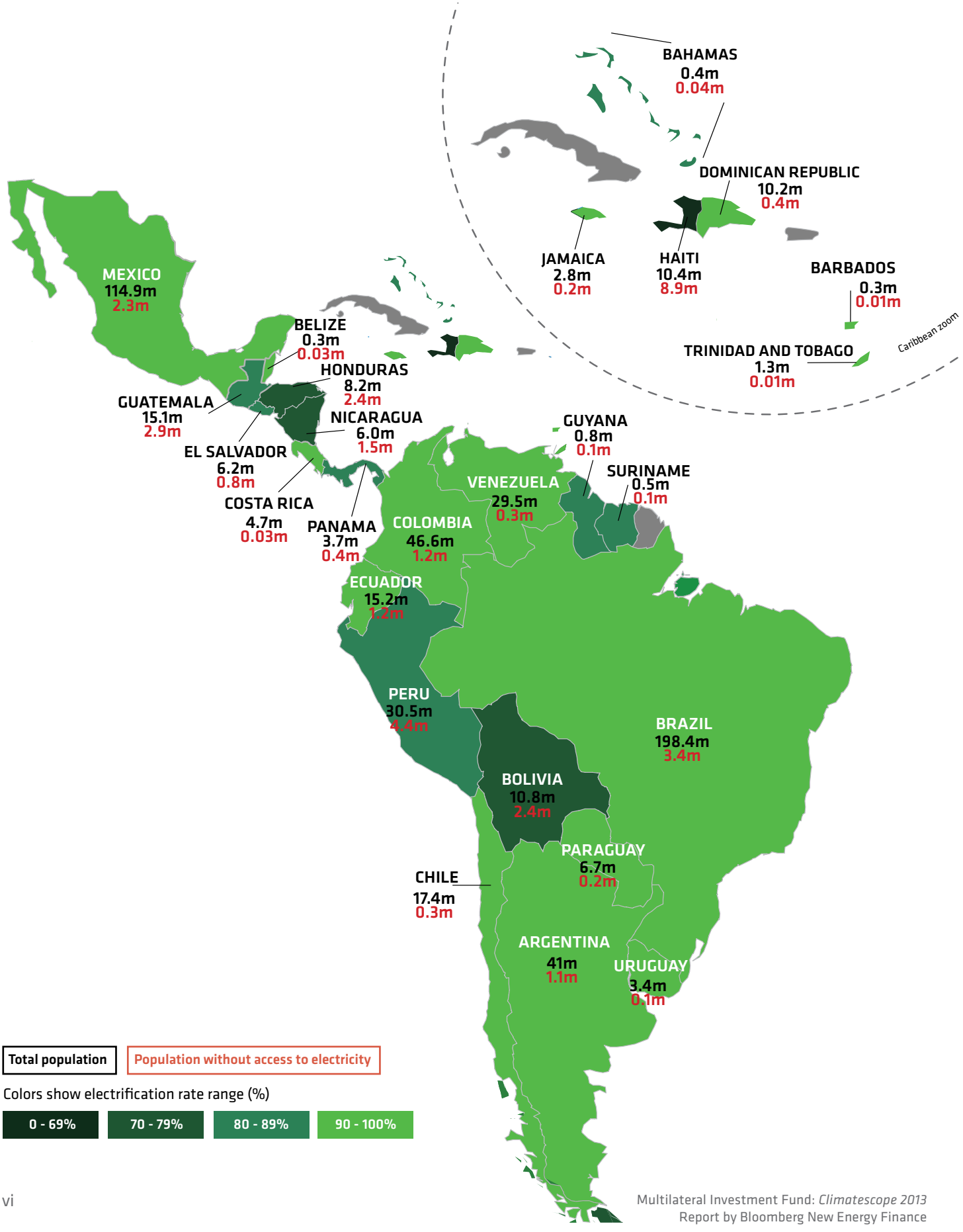
South America Installed Power Capacity by Source, 2012

244.4GW total installed capacity



Source: Bloomberg New Energy Finance

APPENDIX E
LATIN AMERICAN AND CARIBBEAN ELECTRIFICATION RATE



APPENDIX F

LEAGUE TABLE
LOCAL INVESTMENTS BY LOCAL PLAYERS (BANKS AND PROJECT SPONSORS), 2012

2012 Total Local Investments	$8bn

Top 20 Latin American and Caribbean Local Investors ($m)

RANK	COUNTRY	INVESTOR / PROJECT SPONSOR	TOTAL COMMITMENTS ($M)
1	Brazil	Banco Nacional de Desenvolvimento Economico e Social	$2,676.9
2	Brazil	CPFL Energia	$663.2
3	Brazil	Fundo de Investimento em Participacoes Da Serra	$470.4
4	Brazil	Rio Bravo Investimentos	$314.7
5	Brazil	Centrais Eletricas Brasileiras	$314.7
6	Mexico	Municipal Government of Mexico City	$242.5
7	Mexico	Banco Nacional de Obras y Servicios Publicos	$191.6
8	Panama	Hidro Burica	$129.1
9	Ecuador	Corp Electrica del Ecuador	$119.7
10	Chile	Alba	$108.4
11	Argentina	Banco de Inversion y Comercio Exterior	$108.3
12	Dominican Republic	Empresa Generadora de Electricidad Haina	$107.8
13	Mexico	Comision Federal de Electricidad	$101.3
14	Mexico	Nacional Financiera	$93.4
15	Mexico	Grupo Financiero Banorte	$93.4
16	Venezuela	Corpoelec	$75.4
17	Argentina	Banco de la Nacion Argentina	$69.8
18	Chile	Electrica Nueva Energia	$56.5
19	Peru	Volcan Cia Minera	$55.6
20	Chile	Corp Nacional del Cobre de Chile	$55.2

APPENDIX G
GREEN MICROFINANCE ORGANIZATIONS

	COUNTRY	ORGANIZATION	TELEPHONE	WEBSITE
1	Argentina	Emprenda	(54) 11 4642 5802	www.emprenda.com.ar
2	Bolivia	Banco FIE	(591) 2248 5222	www.bancofie.com.bo
3	Bolivia	CIDRE	(591) 4425 1685	www.cidre.org.bo
4	Bolivia	Diaconia	(591) 2284 4299	www.diaconia-frif.org
5	Bolivia	Emprender	(591) 2215 2390	www.emprender.org.bo
6	Bolivia	IDEPRO	(591) 2243 0615	www.idepro.org
7	Bolivia	Banco Los Andes - ProCredit	(591) 2231 3133	www.losandesprocredit.com.bo
8	Brazil	Accion Microfinanças	(55) 92 3307 4550	www.accion.org
9	Brazil	Empresta Capital	(55) 11 3284 9816	www.emprestacapital.com.br
10	Chile	BancoEstado	(56) 22 970 0902	www.bancoestado.cl
11	Costa Rica	Fondo de Microproyectos Costarricense (FOMIC)	(506) 2226 1557	www.fomicsc.org
12	Costa Rica	FUDECOSUR	(506) 2771 6131	www.fudecosur.org
13	Costa Rica	Fundación para el Desarrollo de Base (FUNDEBASE)	(506) 2234 8534	www.fundebasecr.org
14	Costa Rica	Fundación Unión y Desarrollo de las Comunidades Campesinas (FUNDECOCA)	(506) 2460 6035	www.fundecoca.cr
15	Dominican Republic	Asociación para Inversión y Empleo (ASPIRE)	(1-809) 688 5101	——
16	Dominican Republic	Banco ADEMI	(1-809) 683 0203	www.bancoademi.com.do
17	Dominican Republic	Fundación Sur Futuro	(1-809) 472 0611	www.surfuturo.org
18	Dominican Republic	Asociación para el Desarollo de la Provincia Espaillat (ADEPE)	(1-809) 578 2811	www.adepe.org.do
19	Dominican Republic	Cooperativa de Servicios ADEPE (COOPADEPE)	(1-809) 578 6060	www.coopadepe.com
20	Ecuador	Cooperativa de Ahorro y Crédito Fernando Daquilema	(593) 3296 5186	www.coopdaquilema.com
21	Ecuador	Cooperativa de los Pueblos Ltda (CODESARROLLO)	(593) 2255 4728	www.codesarrollo.fin.ec
22	Ecuador	Cooperativa de Ahorro y Crédito (COOPROGRESO)	(593) 2235 1215	www.cooprogreso.fin.ec
23	Ecuador	Banco Pichincha	(593) 2223 2443	www.pichincha.com
24	Ecuador	Banco ProCredit - Ecuador	(593) 2600 3820	www.bancoprocredit.com.ec
25	El Salvador	Integral Sociedad de Ahorro y Crédito	(503) 2250 6090	www.integral.com.sv
26	Guatemala	ADICLA	(502) 7955 2525	www.adicla.org.gt
27	Guatemala	Fundación de Asistencia para la Pequeña Empresa (FAPE)	(502) 2250 7800	www.fundacionfape.org
28	Guatemala	Genesis Empresarial	(502) 2383 9000	www.genesisempresarial.com
29	Honduras	Asociación para el Desarrollo Integral Comunitario de Honduras (ADICH)	(504) 2785 1542	www.adich.hn
30	Honduras	Central American Bank for Economic Integration	(504) 2240 2220	www.bcie.org
31	Honduras	Fondo para el Desarrollo Local de Honduras (CREDISOL)	(504) 2440 0577	——

APPENDIX G1
GREEN MICROFINANCE ORGANIZATIONS

	COUNTRY	ORGANIZATION	TELEPHONE	WEBSITE
32	Honduras	Fundación para el Desarrollo de Honduras (FUNED - Vision Fund)	(504) 2221 4080	www.funedvf.org
33	Honduras	Fundación Microfinanciera Hermandad de Honduras	(504) 2663 4218	www.hermandadopdf.org
34	Jamaica	Nation Growth Microfinance	(1-876) 906 7625	www.nationgrowth.com
35	Mexico	Financiera CONSER	(52) 961 600 0986	www.conser.com.mx
36	Mexico	FinAmigo	(52) 55 5322 3770	www.finamigo.com.mx
37	Mexico	Te Creemos	(52) 55 5584 2233	www.tecreemos.com
38	Mexico	Unión de Crédito Interestatal Chiapas (UNICREICH)	(52) 96 1602 5534	——
39	Mexico	Cibanco	(52) 55 1103 1103	www.cibanco.com
40	Nicaragua	Asociación para el Fomento al Desarrollo de Nicaragua (AFODENIC)	(505) 2277 3543	www.afodenic.com
41	Nicaragua	Cooperativa de Servicios Múltiples 20 de Abril	(505) 2735 5128	www.cooperativa20deabril.coop
42	Nicaragua	Cooperativa de Ahorro y Crédito Avances	(505) 2519 2156	——
43	Nicaragua	Cooperativa de Ahorro y Crédito Financiera Moderna	(505) 2713 5115	——
44	Nicaragua	Fondo de Desarrollo Local (FDL)	(505) 2277 4245	www.fdl.org.ni
45	Nicaragua	Financia Capital	(505) 2276 8920	www.financiaenlinea.com
46	Nicaragua	PRESTANIC	(505) 2268 5230	www.prestanic.org.ni
47	Nicaragua	PRODESA	(505) 2512 2955	——
48	Panama	CEPAS	(507) 958 7063	——
49	Paraguay	Financiera El Comercio	(595) 21 440 880	www.elcomercio.com.py
50	Paraguay	Vision Banco	(595) 21 415 3383	www.visionbanco.com
51	Peru	Caja Huancayo	(51) 6448 1000	www.cajahuancayo.com.pe
52	Peru	Caja Municipal Sullana	(51) 7350 1920	www.cmac-sullana.com.pe
53	Peru	Caja Municipal Tacna	(51) 5258 3636	www.cmactacna.com.pe
54	Peru	Caja Metropolitana	(51) 1619 7573	www.cajametropolitana.com.pe
55	Peru	Caja Rural de Ahorro y Crédito Profinanzas	(51) 1581 2318	www.profinanzas.com.pe
56	Peru	Caja Señor de Luren	(51) 9739 24612	www.cajaluren.com.pe
57	Peru	Caja Sipan	(51) 7422 4676	www.cajasipan.com.pe
58	Peru	FONDESURCO	(51) 5428 3715	www.fondesurco.org.pe
59	Peru	IDESI Lambayeque	(51) 7422 8073	www.idesilambayeque.org.pe
60	Peru	PRISMA	(51) 1616 5500	www.prisma.org.pe
61	Uruguay	FUNDASOL	(598) 2400 2020	www.fundasol.org.uy
62	Venezuela	Fundación Eugenio Mendoza	(58) 212 993 0438	www.fundacioneugeniomendoza.org.ve
63	Venezuela	Fundación Programa Andes Tropicales	(58) 274 263 8633	www.mibanco.com.ve

APPENDIX H
LOCALLY-BASED ACTIVE VENTURE CAPITAL AND PRIVATE EQUITY INVESTORS, 2006-2012

COUNTRY	COMPANY NAME	SECTOR INVESTED	WEBSITE
Argentina	Ax Ventures	Biofuels	www.axventures.com
Brazil	Banco Bradesco	Biofuels	www.bradesco.com.br
Brazil	Banco Votorantim	Wind	www.bancovotorantim.com.br
Brazil	Banco Nacional de Desenvolvimento Economico e Social	Biofuels, Wind	www.bndes.gov.br
Brazil	Banco Santander Brasil	Biofuels	www.santander.com.br
Brazil	BTG Pactual Holding	Small hydro, Wind	www.btgpactual.com
Brazil	Bolognesi Participacoes	Wind	——
Brazil	Caixa Economica Federal	Biomass & Waste, Wind	www.caixa.gov.br
Brazil	DGF Investimentos	Biofuels, Energy Efficiency	www.dgf.com.br
Brazil	Estater Gestao de Investimentos	Wind	——
Brazil	Explora Investimentos Gestao de Recursos	Wind	www.explorainvest.com.br
Brazil	Fundacao de Amparo a Pesquisa do Estado de Sao Paulo	Biofuels, Fuel Cells	www.fapesp.br
Brazil	Grupo Stratus	Biofuels	www.stratusbr.com
Brazil	Itau Unibanco Holding	Biofuels	www.itau.com.br
Brazil	Patria Investimentos	Small Hydro	www.patriainvestimentos.com.br
Brazil	Pragma Gestao de Patrimonio	Solar	www.pragmapatrimonio.com.br
Brazil	Promon	Small Hydro, Carbon Capture & Storage	www.promon.com.br
Brazil	Tarpon Investimentos	Biofuels, Small Hydro	www.tarponinvest.com.br
Brazil	Winbros Participacoes Gestao e Empreendimentos	Small hydro	——
Chile	Energia Renovable Andes	Small hydro	——
Panama	Grupo ECOS	Biofuels, Biomass & Waste, Solar	www.grupoecos.com

APPENDIX I
LOCALLY-BASED CLEAN ENERGY CREDIT PROVIDERS, 2006-2012

COUNTRY	COMPANY NAME	SECTOR INVESTED	WEBSITE
Argentina	Banco de Inversión y Comercio Exterior	Solar, Wind	www.bice.com.ar
Argentina	Banco de la Nación Argentina	Wind	www.bna.com.ar
Argentina	Nuevo Banco de Entre Rios	Biofuels	www.nuevobersa.com.ar
Brazil	Banco Bradesco	Biofuels, Small hydro	www.bradesco.com.br
Brazil	Banco da Amazônia	Biofuels, Small hydro	www.bancoamazonia.com.br
Brazil	Banco de Desenvolvimento de Minas Gerais	Biofuels, Biomass & waste, Small hydro	www.bdmg.mg.gov.br
Brazil	Banco do Brasil	Biofuels, Small hydro, Wind	www.bancobrasil.com.br
Brazil	Banco do Estado do Rio Grande do Sul	Small hydro	www.banrisul.com.br
Brazil	Banco do Nordeste do Brasil	Biofuels, Biomass & waste, Small hydro, Wind	www.banconordeste.gov.br
Brazil	Banco Nacional de Desenvolvimento Econômico e Social	Biofuels, Biomass & waste, Small hydro, Wind	www.bndes.gov.br
Brazil	Banco Pine	Biofuels	www.pine.com
Brazil	Banco Santander Brasil	Wind	www.santander.com.br
Brazil	Caixa Econômica Federal	Biofuels, Small hydro, Wind	www.caixa.gov.br
Brazil	Conselho Integrado de Desen-volvimento de Minas Gerais	Biofuels	www.conselhos.mg.gov.br/coind
Brazil	Finexim	Solar	www.finexim.com
Brazil	Itau Unibanco Holding	Biomass & waste, Small hydro, Wind	www.itau.com.br
Brazil	Superintêndencia do Desen-volvimento do Nordeste	Wind	www.sudene.gov.br
Chile	Banco Bice	Biofuels, Small hydro, Wind	www.bice.cl
Chile	Corporación de Fomento de la Producción	Biofuels, Small hydro, Solar	www.corfo.cl
Chile	Grupo Aval Acciones y Valores	Energy efficiency	www.grupoaval.com
Colombia	Banco de Costa Rica	Wind	www.bancobcr.com
Costa Rica	Banco Nacional de Costa Rica	Small hydro	www.bncr.fi.cr
Guatemala	Banco Agromercantil	Wind	www.bam.com.gt
Guatemala	Banco G&T	Wind	www.gytcontinental.com.gt
Honduras	Banco Financiera Comercial Hondurena	Small hydro	www.ficohsa.com
Honduras	Banco Lafise Honduras	Small hydro	www.lafise.com
Mexico	Banco Nacional de Comercio Exterior	Wind	www.bancomext.com

APPENDIX I1
LOCALLY-BASED CLEAN ENERGY CREDIT PROVIDERS, 2006-2012

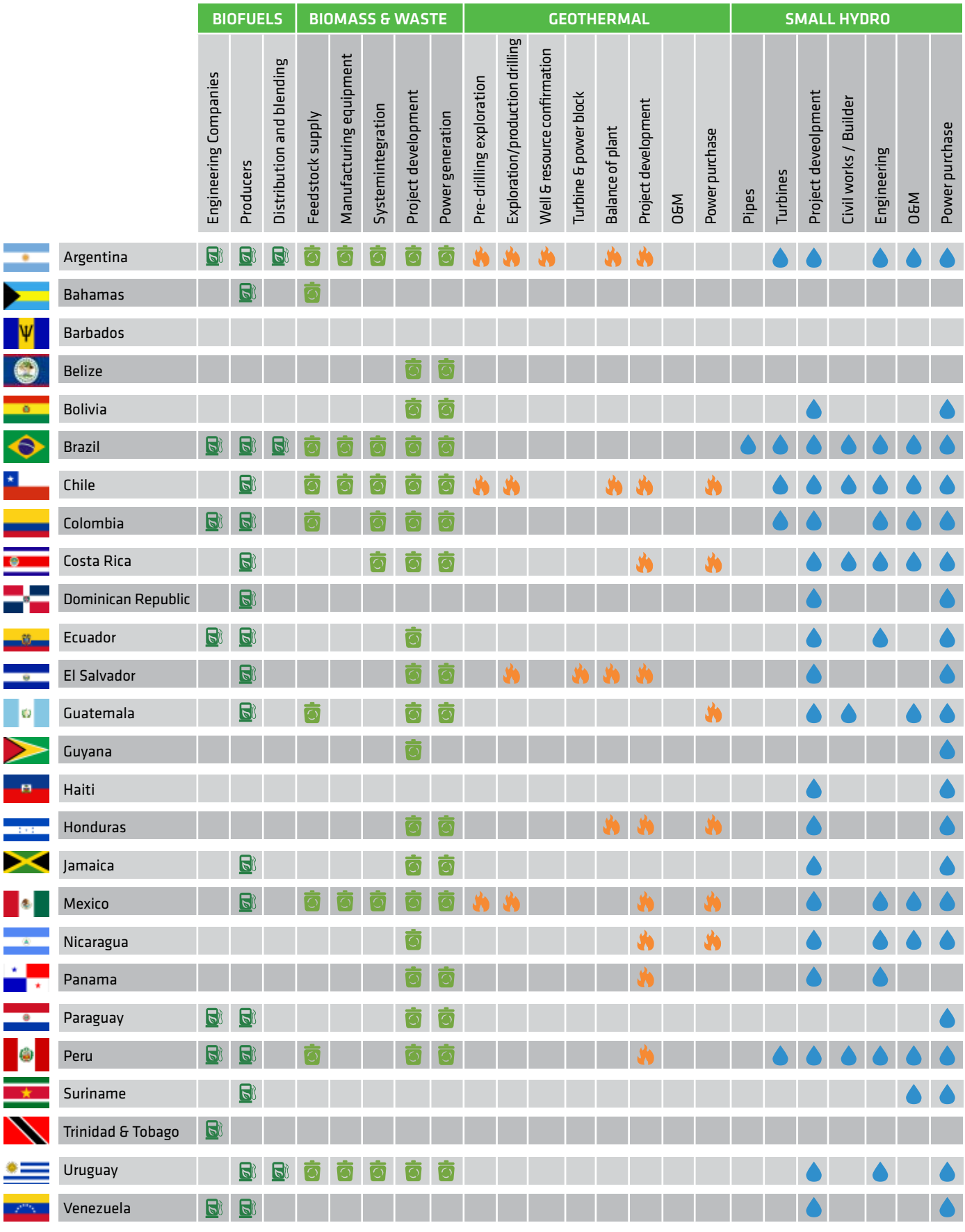
COUNTRY	COMPANY NAME	SECTOR INVESTED	WEBSITE
Mexico	Banco Nacional de Obras y Servicios Publicos	Geothermal, Small hydro, Wind	www.banobras.gob.mx
Mexico	Grupo Financiero Banorte	Wind	www.banorte.com
Mexico	Nacional Financiera	Small hydro, Solar, Wind	www.nafin.com
Peru	Intercorp Financial Services	Biofuels	www.ifs.com.pe
Trinidad & Tobago	RBTT Merchant Bank	Small hydro	www.rbtt.com
Argentina	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Bolivia	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Brazil	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Colombia	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Ecuador	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Panama	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Peru	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Uruguay	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Venezuela	Corporación Andina de Fomento	Biofuels, Wind	www.caf.com
Costa Rica	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org
El Salvador	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org
Guatemala	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org
Honduras	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org
Nicaragua	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org
Panama	Central American Bank for Economic Integration	Geothermal, Small hydro, Wind	www.bcie.org

APPENDIX J
LOCALLY-BASED CLEAN ENERGY-FOCUSED FUNDS, 2006-2012

COUNTRY	FUND NAME	FUND MANAGER	INVESTMENT FOCUS
Argentina	Argentine Carbon Fund	Argentine Secretariat of Environment and Sustainable Development	Carbon Emissions Trading
Brazil	AG Angra Infra-Estrutura Fundo de Investimento em Participações	AG Angra Investimentos	Energy & Infrastructure
Brazil	ASM CER Fund	ASM Asset Management	Carbon Emissions Trading
Brazil	BNDES Biotechnology and Nanotechnology Venture Capital Fund	Banco Nacional de Desenvolvimento Econômico e Social	Clean Energy
Brazil	BNDES Brazil Sustainability Fund	Latour Capital do Brasil	Carbon Emissions Trading
Brazil	BR Investimentos Clean Energy Fund	BR Investimentos	Clean Energy
Brazil	Brazil Agro Energy Fund	Cia Paulista de Empreendimentos Energéticos	Clean Energy
Brazil	Brazil Energy Fund	Banco BTG Pactual	Clean Energy
Brazil	Brazil Mezzanine Infrastructure Fund	Darby Stratus Administração de Investmentos	Energy & Infrastructure
Brazil	Brazilian National Climate Change Fund	Banco Nacional de Desenvolvimento Econômico e Social	Climate Change
Brazil	Bunge Methane Investment Company ("BMIC")	Ecopart Investimentos	Carbon Emissions Trading
Brazil	Clean Technology Fund LP	GDF Suez Energy Latin America	Clean Energy
Brazil	EcoEnergia Fundo de Investimentos	Multi Commercial Bank	Carbon Emissions Trading
Brazil	FIP Caixa Ambiental	Caixa Econômica Federal	Environment / Cleantech
Brazil	FIP Infraestrutura BB Votorantim Energia Sustentavel I, II & III	Votorantim Asset Management	Clean Energy
Brazil	FIP Terra Viva	DGF Investimentos	Clean Energy
Brazil	Fundo de Investimento do Fundo de Garantia do Tempo de Servico (FI-FGTS)	Caixa Econômica Federal	Energy & Infrastructure
Brazil	Fundo de Investimento em Participacao FIP Floresta do Brasil	Claritas Investimentos E Participacoes	Environment / Cleantech
Brazil	Fundo de Investimento em Participação Sita Sonar Energia	Sita Sonar Gestão de Recursos	Clean Energy
Brazil	Green Capital Agrotech	Green Capital Investimentos	Energy & Infrastructure
Brazil	InfraBrasil	Banco Santander Brasil	Energy & Infrastructure
Brazil	Performa Investimentos	Performa Investimentos	Environment / Cleantech
Brazil	Rio Bravo Fip de Energia I	Rio Bravo Investimentos	Clean Energy
Brazil	Tagus Clean Energy	Mercatto Investimentos	Clean Energy
Brazil	The Bioenergy Development Fund	Bioenergy Development Management	Clean Energy
Chile	Aurus Bios Fund	Aurus	Clean Energy
Chile	EPower Nevasa Fund	Latitud Sur	Clean Energy
Venezuela	CAF-Netherlands CDM Facility	Corporación Andina de Fomento	Carbon Emissions Trading
Venezuela	Latin American Carbon Initiative	Corporación Andina de Fomento	Carbon Emissions Trading

*Funds are divided by investment focus, defined as:
Clean Energy: Funds that seek investment in clean energy, including wind, solar, biofuels, biomass & waste, geothermal and energy efficiency.
Environment/Cleantech: Represents funds with a more diversified theme that in addition to clean energy, actively invest in areas such as water, recycling, pollution mitigation, etc.
Climate Change: Represents funds that invest in companies or programs that are involved in developing solutions to address the challenge of climate change.
Energy & Infrastructure: Funds that primarily invest in power generating assets, but which has considerable focus on renewable power assets.
Carbon Emissions Trading: Funds that invest in CDM/JI projects and emission reduction instruments such as CERs, ERUs, EUAs and AAUs.

APPENDIX K
LATIN AMERICAN AND CARIBBEAN CLEAN ENERGY SECTOR VALUE CHAINS



APPENDIX K1
LATIN AMERICAN AND CARIBBEAN CLEAN ENERGY SECTOR VALUE CHAINS

	SOLAR								WIND									TOTAL					
	Polysilicon/ingots	Wafers	Cells	Modules	Balance of plant	Project development	EPC	Owner/operator	Bearings	Gearboxes	Generators	Blades	Turbines	Project development	Construction/installation	O&M	Power generator	Biofuels (3)	Biomass & waste (5)	Geothermal (8)	Small hydro (7)	Solar (8)	Wind (9)
Argentina						☀	☀				✈		✈	✈	✈	✈	✈	3/3	5/5	5/8	5/7	2/8	6/9
Bahamas							☀											1/3	1/5	0/8	0/7	1/8	0/9
Barbados																		0/3	0/5	0/8	0/7	0/8	0/9
Belize							☀											0/3	2/5	0/8	0/7	1/8	0/9
Bolivia																		0/3	2/5	0/8	2/7	0/8	0/9
Brazil	☀	☀	☀	☀		☀	☀			✈	✈	✈	✈	✈	✈	✈	✈	3/3	5/5	0/8	7/7	6/8	8/9
Chile						☀	☀	☀				✈	✈	✈	✈	✈	✈	1/3	5/5	5/8	6/7	3/8	6/9
Colombia						☀	☀							✈	✈	✈	✈	2/3	4/5	0/8	5/7	2/8	4/9
Costa Rica						☀	☀							✈	✈	✈	✈	1/3	3/5	2/8	5/7	2/8	4/9
Dominican Republic						☀	☀							✈			✈	1/3	0/5	0/8	2/7	2/8	2/9
Ecuador						☀							✈	✈			✈	2/3	1/5	0/8	3/7	1/8	3/9
El Salvador						☀	☀							✈			✈	1/3	2/5	4/8	2/7	2/8	2/9
Guatemala						☀	☀							✈			✈	1/3	3/5	1/8	4/7	2/8	2/9
Guyana																		0/3	1/5	0/8	1/7	0/8	0/9
Haiti				☀														0/3	0/5	0/8	2/7	1/8	0/9
Honduras							☀							✈			✈	0/3	2/5	3/8	2/7	1/8	2/9
Jamaica						☀	☀							✈			✈	1/3	2/5	0/8	2/7	2/8	2/9
Mexico				☀	☀	☀	☀	☀			✈	✈		✈	✈	✈	✈	1/3	5/5	4/8	4/7	5/8	6/9
Nicaragua							☀							✈	✈	✈	✈	0/3	1/5	2/8	4/7	1/8	4/9
Panama						☀					✈			✈				0/3	2/5	1/8	2/7	1/8	2/9
Paraguay						☀												2/3	2/5	0/8	1/7	1/8	0/9
Peru						☀	☀							✈	✈		✈	2/3	3/5	1/8	6/7	2/8	3/9
Suriname																		1/3	0/5	0/8	2/7	0/8	0/9
Trinidad & Tobago						☀												1/3	0/5	0/8	0/7	1/8	0/9
Uruguay						☀	☀							✈	✈		✈	2/3	5/5	0/8	3/7	2/8	3/9
Venezuela														✈			✈	2/3	0/5	0/8	2/7	0/8	2/9

Note: On the total column fully shaded boxes refer to 100% complete value chains. Ratios reference the number of active sub-sectors in a given country over total possible sub-sectors for a given sector value chain.

APPENDIX L
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Argentina	Arcos Dorados Argentina	Retail-Restaurants			Yes	Yes
Argentina	Gas Natural BAN	Utility Networks			Yes	Yes
Argentina	Ledesma	Food Manufacturing			Yes	Yes
Argentina	YPF	Energy				
Barbados	Portland Private Equity	Financials		Investment Manager		
Brazil	Abengoa Bioenergia	Energy	Fully			
Brazil	Aditus Consultoria Financeira	Consulting Services		Professional Service Provider		
Brazil	AES Elpa	Energy - Utility			Yes	Yes
Brazil	AES Tiete	Energy - Utility			Yes	Yes
Brazil	Africa	Advertising	Fully			
Brazil	Alpargatas	Consumer goods			Yes	
Brazil	Amil Participações	Managed Care			Yes	Yes
Brazil	Ampla Energia e Serviços	Utility Networks			Yes	Yes
Brazil	Ampla Investimentos e Serviços	Power Generation			Yes	Yes
Brazil	Angra Infraestrutura Gestão de Infor-mações e Investimentos Ltda	Financials		Investment Manager		
Brazil	Anhanguera Educacional Participações	Educational Services			Yes	Yes
Brazil	Astra Investimentos	Financials		Investment Manager		
Brazil	Austin Rating	Ratings Agency		Professional Service Provider		
Brazil	Banco Bradesco	Banks			Yes	Yes
Brazil	Banco da Amazonia (BASA)	Banks			Yes	Yes
Brazil	Banco do Brasil	Banks			Yes	Yes
Brazil	Banco do Estado do Rio Grande do Sul (Banrisul)	Banks			Yes	
Brazil	Banco do Nordeste do Brasil	Banks			Yes	Yes
Brazil	Banco Industrial e Comercial	Banks			Yes	Yes
Brazil	Banco Santander Brasil	Banks				Yes
Brazil	Banesprev	Financials		Asset Owner		
Brazil	BM&FBOVESPA	Security & Comodity Exchange	Fully	Professional Service Provider	Yes	Yes
Brazil	BR Foods	Food Manufacturing			Yes	Yes
Brazil	Bradesco Asset Management	Financials		Investment Manager		
Brazil	Braskem	Basic & Diversified Chemicals			Yes	Yes
Brazil	BRZ Investimentos	Financials		Investment Manager		
Brazil	C&A Brazil	Retail	Fully			
Brazil	Caixa Econômica Federal - Viter	Financials		Investment Manager		
Brazil	CAMBUCI	Consumer Discretionary			Yes	Yes
Brazil	CCR	Infrastructure Concessions			Yes	Yes
Brazil	Celpos	Financials		Asset Owner		

APPENDIX L1
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Brazil	Celusose Irani	Materials - Containers & Packaging				Yes
Brazil	Centrais Eletricas Brasileiras (Eletrobras)	Power Generation			Yes	Yes
Brazil	Centrais Eletricas de Santa Catarina (CELESC)	Utility Networks			Yes	
Brazil	Centrais Eletricas do Pará (Celpa)	Utility Networks			Yes	
Brazil	Centrais Eletricas Matogrossenses (CEMAT)	Power Generation			Yes	Yes
Brazil	Central Nacional Unimed	Medical Services	Fully			
Brazil	Centrus	Financials		Asset Owner		
Brazil	Cia Celg de Participações (CELGPAR)	Other Financial Services			Yes	
Brazil	Cia de Bebidas das Americas (AMBEV)	Beverages			Yes	Yes
Brazil	Cia de Gas de São Paulo (Comgas)	Utility Networks			Yes	Yes
Brazil	Cia de Saneamento Basico do Estado de São Paulo	Utility Networks				Yes
Brazil	Cia de Saneamento do Parana	Utility Networks			Yes	Yes
Brazil	Cia de Transmissão de Energia Elétrica Paulista	Utility Networks			Yes	Yes
Brazil	Cia Distribuidora de Gas do Rio de Janeiro (CEG)	Utility Networks				Yes
Brazil	Cia Eletricidade da Bahia (COELBA)	Utility Networks			Yes	Yes
Brazil	Cia Energética de Minas Gerais (CEMIG)	Utility Networks			Yes	Yes
Brazil	Cia Energetica de Pernambuco (Celpe)	Utility Networks			Yes	Yes
Brazil	Cia Energética de São Paulo (CESP)	Power Generation				Yes
Brazil	Cia Energetica do Ceará (Coelce)	Utility Networks			Yes	Yes
Brazil	Cia Estadual de Geração e Transmissao de Energia Eletrica (CEEE-GT)	Utility Networks			Yes	Yes
Brazil	Cia Paranaense de Energia (Copel)	Utility Networks			Yes	Yes
Brazil	Cia Saneamento Minas Gerais (Copasa)	Utility Networks			Yes	Yes
Brazil	Cia Vale do Rio Doce (Vale)	Mining			Yes	Yes
Brazil	Claritas Administração de Recursos	Financials		Investment Manager		
Brazil	Copa Investimentos	Financials		Investment Manager		
Brazil	Copagaz	Energy	Fully			
Brazil	Cosan	Refining & Marketing			Yes	Yes
Brazil	CPFL Energia	Utility Networks	Fully		Yes	Yes
Brazil	CRP Companhia de Participações	Financials		Investment Manager		
Brazil	CTE	Consulting Services		Professional Service Provider		
Brazil	Cyrela Brazil Realty	Homebuilders			Yes	Yes
Brazil	DGF Investimentos	Financials		Investment Manager		
Brazil	DLM Invista Asset Management	Financials		Investment Manager		
Brazil	DM9DDB	Advertising	Fully			
Brazil	Duratex	Construction Materials	Fully			Yes
Brazil	Ecofrotas	Energy	Fully			

APPENDIX L2
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Brazil	Economus	Financials		Asset Owner		
Brazil	Ecorodovias Infraestrutura e Logistica	Infrastructure Construction			Yes	Yes
Brazil	EDP - Energias do Brasil	Power Generation				Yes
Brazil	Elekeiroz	Refining & Marketing	Fully		Yes	Yes
Brazil	Eletricidade de Serviços (Elektro)	Utility Networks			Yes	Yes
Brazil	Eletropaulo Metropolitana	Utility Networks			Yes	Yes
Brazil	Embraer	Commercial Aircraft			Yes	Yes
Brazil	Energisa	Power Generation			Yes	Yes
Brazil	Equatorial Energia	Utility Networks			Yes	
Brazil	Ernst & Young Brazil	Consulting Services	Fully			
Brazil	Eternit	Cement & Aggregates			Yes	Yes
Brazil	ETH Bioenergia	Energy	Fully			
Brazil	Even Construtora e Incorporadora	Homebuilders	Fully		Yes	Yes
Brazil	Evergreen investimentos Gestão de Recursos Ltda	Financials		Investment Manager		
Brazil	FAELBA	Financials		Asset Owner		
Brazil	FAMA Investimentos	Utility Networks		Investment Manager		
Brazil	FASERN	Financials		Asset Owner		
Brazil	Fator Corretora	Broker-dealer		Professional Service Provider		
Brazil	Fibria Celulose	Pulp & Paper			Yes	
Brazil	FIR Capital Partners	Financials		Investment Manager		
Brazil	Fleury	Health Care Services			Yes	Yes
Brazil	Forluz	Financials		Asset Owner		
Brazil	Funcef	Financials		Asset Owner		
Brazil	Fundação Brasileira para o Desenvolvi-mento Sustentável	NGO		Professional Service Provider		
Brazil	Fundação CESP	Financials		Asset Owner		
Brazil	Fundação Unibanco	Financials		Asset Owner		
Brazil	Gafisa	Real Estate Operations & Services			Yes	
Brazil	Gerdau	Steel Producer			Yes	
Brazil	Gol Linhas Aereas	Passanger Transportation			Yes	Yes
Brazil	Grupo Itautec	Information Services	Fully		Yes	Yes
Brazil	Grupo Libra	Diversified Operations	Fully			
Brazil	Grupo Viralcool	Sugar & Ethanol	Fully			
Brazil	Infaprev	Financials		Asset Owner		
Brazil	Inseed Investimentos	Financials		Investment Manager		
Brazil	Instituto Infraero de Seguridade Social -INFRAPREV	Pension Fund	Partially			
Brazil	International Paper do Brasil	Paper & Related Products	Fully			
Brazil	Investimentos Itau	Other Financial Services			Yes	Yes

APPENDIX L3
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Brazil	Itaú Asset Management	Financials		Investment Manager		
Brazil	Itau Unibanco Holding	Banks			Yes	Yes
Brazil	JBS	Food Manufacturing			Yes	Yes
Brazil	JSL	Transportation Logistic Services				Yes
Brazil	JSL	Transportation Logistic Services			Yes	
Brazil	Kaeté Investimentos	Financials		Investment Manager		
Brazil	KEY Consultoria e Treinamento	Consulting Services	Fully	Professional Service Provider		
Brazil	KeyAssociados	Consulting Services		Professional Service Provider		
Brazil	Kimberly-Clark Brasil	Household Products	Fully			
Brazil	Klabin	Pulp & Paper			Yes	Yes
Brazil	KPMG Brazil	Consulting Services	Fully			
Brazil	Latinvest Capital Partners	Financial Advisor		Professional Service Provider	Yes	Yes
Brazil	Liberum Ratings Serviços Financeiros Ltda	Ratings Agency		Professional Service Provider		
Brazil	Light	Utility Networks			Yes	Yes
Brazil	LLX Logistica	Transport Support Services				Yes
Brazil	Lojas Rener	Retail	Fully			
Brazil	Lupatech	Flow Control Equipment			Yes	
Brazil	LUZ Engenharia Financeira	Engineering		Professional Service Provider	Yes	
Brazil	Mahle-Metal Leve	Auto Parts			Yes	
Brazil	Marfrig Alimentos	Food Manufacturing			Yes	Yes
Brazil	Marisol S.A. Industria do Vestuario	Textile			Yes	Yes
Brazil	Mongeral Aegon Seguros de Previdência	Financials		Asset Owner		
Brazil	Multiplan empreendimentos	Financials			Yes	
Brazil	Natura Logística e Servicos	Consumer goods	Fully		Yes	Yes
Brazil	NEXPAR	Financials		Investment Manager		
Brazil	NSG Capital	Financials		Investment Manager		
Brazil	OdontoPrev	Managed Care			Yes	Yes
Brazil	Oi	Telcom	Fully		Yes	Yes
Brazil	Origami Consultoria em Gestão de Negócios Sustentávei	Consulting Services		Professional Service Provider		
Brazil	Pão de Açucar	Food Retailers			Yes	Yes
Brazil	Paranapanema	Financials				Yes
Brazil	Performa Investimentos	Financials		Investment Manager		
Brazil	Petrobras	Energy - Integrated Oils			Yes	Yes
Brazil	Petros	Financials		Asset Owner		
Brazil	Portbank Asset Management	Financials		Investment Manager		
Brazil	Portoseguro	Life Insurance			Yes	Yes

APPENDIX L4
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Brazil	Positivo Informatica	Computer Hardware			Yes	Yes
Brazil	Pragma Patrimônio	Financials		Asset Owner		
Brazil	PREVI	Financials		Asset Owner		
Brazil	PROCANA	Sugar & Ethanol	Fully			
Brazil	Quintessa	Consulting Services		Professional Service Provider		
Brazil	Randon Participações	Auto Parts				Yes
Brazil	Real Grandeza	Financials		Asset Owner		
Brazil	Rede Empresas de Energia Eletrica	Utility Networks			Yes	Yes
Brazil	Redecard	Consumer Finance	Fully			Yes
Brazil	Resultante Consultoria Estratégica	Consulting Services		Professional Service Provider		
Brazil	Riviera Gestora de Recursos	Financials		Investment Manager		
Brazil	Rodarte Nogueira consultoria em estatística e atuária	Consulting Services		Professional Service Provider		
Brazil	Rossi Residencial	Homebuilders			Yes	
Brazil	Santa Fé Portfolios	Financials		Investment Manager		
Brazil	Santander Brasil Asset Management	Financials		Investment Manager		
Brazil	Santos Brasil Participações	Transport Support Services			Yes	Yes
Brazil	Sistel	Financials		Asset Owner		
Brazil	SITAWI – Finance for Good	Microfinance Institution		Professional Service Provider		
Brazil	Socopa Corretora Paulista	Broker-dealer		Professional Service Provider		
Brazil	Sonae Sierra Brasil	Financial			Yes	Yes
Brazil	Souza Cruz	Tobacco			Yes	Yes
Brazil	Stratus	Financials		Investment Manager		
Brazil	Sul America	Insurance		Investment Manager	Yes	Yes
Brazil	Suzano	Pulp & Paper				Yes
Brazil	TAM Linhas Aereas	Passanger Transportation			Yes	Yes
Brazil	Tecnisa	Construction Services			Yes	Yes
Brazil	Tele Norte Leste Participações	Telecom Carriers			Yes	Yes
Brazil	Telefonica Brasil	Telecom Carriers			Yes	Yes
Brazil	Telemar Norte Leste Participações	Telecom Carriers			Yes	Yes
Brazil	Tim Participções	Telecom Carriers			Yes	Yes
Brazil	Totem Investimentos	Financials		Investment Manager		
Brazil	Tractabel Energia	Utility Networks			Yes	Yes
Brazil	Ultrapar Participações	Energy - Refining & Marketing			Yes	Yes
Brazil	Unimed do Brasil	Medical Services	Partially			
Brazil	Usina Colombo S/A Açucar e Álcool	Sugar & Ethanol	Fully			
Brazil	Usinas Siderurgicas de Minas Gerais (Usiminas)	Steel Producer			Yes	Yes

APPENDIX L5
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Brazil	Valia	Financials		Asset Owner		
Brazil	Via Gutenberg	Consulting Services		Professional Service Provider		
Brazil	Victoire Brasil Investimentos	Financials		Investment Manager		
Brazil	Vinci Partners Investimentos	Financials		Investment Manager		
Brazil	Votorantim Asset Management DTVM	Financials		Investment Manager		
Brazil	Votorantim Industrial	Metal Diversified	Fully			
Brazil	Wal-Mart Brasil	Mass Merchants	Fully			
Brazil	WEG	Industrial Machinery			Yes	Yes
Brazil	Whirlpool	Home Improvement			Yes	Yes
Chile	Banco Bilbao Vizcaya Argenta	Banks			Yes	Yes
Chile	Banco Santander Chile	Banks			Yes	Yes
Chile	Chilectra	Power Generation			Yes	Yes
Chile	Cia Cervecerias Unidas	Beverages			Yes	Yes
Chile	Empresa Nacional de Electricidad (Endesa -Chile)	Utility Networks			Yes	
Chile	Empresa Nacional de Telecom	Telecom Carriers			Yes	Yes
Chile	Empresas CMPC	Pulp & Paper				Yes
Chile	Enersis	Utility Networks			Yes	Yes
Chile	Home Center Sodimac	Retail	Fully			
Chile	LATAM Airlines Group	Passenger Transportation	Fully		Yes	Yes
Chile	Masisa	Construction Materials			Yes	Yes
Chile	Metro de Santiago	Passanger Transportation	Fully			
Chile	SOC Quimica y Minera Chile	Agricultural Chemicals			Yes	Yes
Chile	Soquimich Comercial	Agricultural Chemicals			Yes	Yes
Chile	Telefonica Chile	Telecom Carriers			Yes	Yes
Colombia	AFP Proteccion	Financials - Investment Management			Yes	
Colombia	Almacenes Exito	Retail	Fully		Yes	Yes
Colombia	Bavaria Colombia	Beverages	Fully			
Colombia	Ecopetrol	Energy - Integrated Oils	Fully		Yes	Yes
Colombia	Empresa de Energia de Bogota	Utility Networks			Yes	
Colombia	Gas Natural Colombia	Energy	Fully			
Colombia	Grupo de Inversiones Suramericana (Grupo Sura)	Energy	Fully			
Colombia	Indupalma	Agriculture	Fully			
Colombia	Interconexion electrica	Utility Networks			Yes	Yes
Colombia	ISAGEN	Utility Networks				Yes
Colombia	Metropolitan Capital	Financial		Professional Service Provider		
Colombia	Organización Terpel	Energy	Partially			

APPENDIX L6
CORPORATE AWARENESS TABLE

COUNTRY	COMPANY	SECTOR	GRI	PRI SIGNATORIES BY CATEGORY	ENERGY EFFICIENCY	EMISSION REDUC-TION
Colombia	Pacific Rubiales Energy Corp	Energy - Eploration & Production			Yes	Yes
Colombia	Servientrega	Services	Fully			
Mexico	Accor México	Travel, Lodging & Dining Operators	Fully			
Mexico	Alesea	Travel, Lodging & Dining Operators			Yes	Yes
Mexico	Arca Continental	Beverages			Yes	Yes
Mexico	Axtel	Telecom Carriers			Yes	Yes
Mexico	Bio Papel	Materials - Containers & Packaging			Yes	Yes
Mexico	CEMEX	Cement & Aggregates			Yes	Yes
Mexico	Coca-Cola Femsa	Beverages			Yes	Yes
Mexico	Controladora Comercial Mexicana	Mass Merchants			Yes	Yes
Mexico	Corporacion Moctezuma	Cement	Fully			
Mexico	Empresas ICA	Homebuilders			Yes	
Mexico	Fomento Economico Mexicano (FEMSA)	Beverages			Yes	Yes
Mexico	Fresnillo	Precious Metal Mining			Yes	Yes
Mexico	Grupo Aeroportuario del Centro Norte	Transport Support Services			Yes	Yes
Mexico	Grupo Aeroportuario del Sureste	Transport Support Services			Yes	Yes
Mexico	Grupo Alfa	Materials - Basic & Diversi-fied Chemicals	Fully		Yes	Yes
Mexico	Grupo Bimbo	Food Manufacturing			Yes	Yes
Mexico	Grupo Financiero Banorte	Banks			Yes	Yes
Mexico	Grupo Mexico	Metals & Mining			Yes	Yes
Mexico	Grupo Modelo	Beverages			Yes	Yes
Mexico	Industrias Penoles	Metals & Mining			Yes	Yes
Mexico	Instituto del Fondo Nacional de la Vivien-da para los Trabajadores (INFOAVIT)	Pension Fund	Fully			
Mexico	Kimberly-Clark Mexico	Household Products			Yes	Yes
Mexico	Masisa	Construction Materials	Fully			
Mexico	Mexichem	Basic & Diversified Chemicals			Yes	Yes
Mexico	PEMEX	Energy	Fully			
Mexico	Praxair México y Centro America	Consulting Services	Fully			
Mexico	Urbi, Desarrollos Urbanos	Homebuilders			Yes	
Mexico	Wal-Mart Mexico	Mass Merchants			Yes	Yes
Peru	Barrick Perú	Metals & Mining	Fully			
Peru	COPEINCA	Food	Fully			
Peru	COSAPI Ingenieria y Construccion	Construction	Fully			
Peru	Grupo El Comercio	Media	Fully			
Peru	Macrocapitales SAFI	Financial		Investment Manager		
Peru	Repsol Peru	Energy	Fully			
Peru	Tecnológica de Alimentos (TASA)	Food	Fully			
Peru	Union Andina de Cementos	Cement & Aggregates	Fully		Yes	Yes

INDICATORS - INDIVIDUAL RANKINGS


PARAMETER II
PARAMETER III
PARAMETER IV
Green micro-borrowers
Avg cost of green micro debt
Avg cost of debt
Swap rate
Financial institutions
Value chains by sector
Service providers
Offsets historic activity
CDM risk
Offsets future potential
GHG reduction target
GHG country registry
GHG market-based instruments
PMR & NAMA
Corp GHG reporting
PRI signatories
Corp energy efficiency initiatives
Corp emission reduction
Env. business training
Think tanks
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EXECUTIVE SUMMARY

Latin America and the Caribbean net renewable capacity additions, 2007-2012 (GW)

Source: Bloomberg New Energy Finance, Argentina Secretaria de Energía, Belize Public Utilities Commission, Bolivia Autoridad de Fiscalización y Control Social de Electricidad, Brazil Agência Nacional de Energia Elétrica, Chile Comisión Nacional de Energía, Colombia Ministerio de Minas y Energía, Costa Rica Autoridad de los Servicios Públicos, Dominican Republic Superintendencia de Electricidad, Ecuador Consejo Nacional de Electricidad, El Salvador Superintendencia General de Electricidad y Telecomunicaciones, Guatemala Administrador del Mercado Mayorista, Guyana Power & Light Company, Honduras Empresa Nacional de Energía Eléctrica, Jamaica Public Service Company, Mexico Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaría de Energía, Nicaragua Instituto Nicaraguense de Energía and Ministerio de Energía y Minas, Panama Autoridad Nacional de los Servicios Públicos, Peru Ministerio de Energía y Minas, Uruguay Ministerio de Industria, Energía y Minería, Venezuela Ministerio del Poder Popular para la Energía Eléctrica.

Clean energy policies and renewable energy installed capacity by source, 2006-2012 (MW)

Brazil

Source: Bloomberg New Energy Finance, Brazil Agência Nacional de Energia Elétrica.

Uruguay

Source: Bloomberg New Energy Finance, Uruguay Ministerio de Industria, Energía y Minería

Peru

Source: Bloomberg New Energy Finance, Peru Ministerio de Energía y Minas

Central America & Caribbean installed power capacity, 2012

Source: Bloomberg New Energy Finance, Bahamas Electricity Corporation and Grand Bahamas Power Company, Barbados Light & Power Company, Belize Public Utilities Commission, Costa Rica Autoridad de los Servicios Públicos, Dominican Republic Superintendencia de Electricidad, El Salvador Superintendencia General de Electricidad y Telecomunicaciones, Guatemala Administrador del Mercado Mayorista, Guyana Power & Light Company, Haiti Electricité d'Haiti, Honduras Empresa Nacional de Energía Elétrica, Jamaica Public Service Company, Nicaragua Instituto Nicaraguense de Energía and Ministerio de Energía y Minas, Panama Autoridad Nacional de los Servicios Públicos, Suriname N.V. Energiebedrijven Suriname, Trinidad and Tobago Regulated Industries Commission.

Average spot power prices in Latin America and the Caribbean by country, 2012 ($/MWh)

Source: Bloomberg New Energy Finance, Argentina Compañía Administradora del Mercado Mayorista Eléctrico Sociedad Anónima, Bolivia Autoridad de Fiscalización y Control Social de Electricidad, Brazil Câmara de Comercialização de Energia Elétrica, Chile Centro de Despacho Económico de Carga del Sistema Interconectado del Norte Grande de Chile and Centro de Despacho Económico de Carga del Sistema Interconectado Central, Colombia Compañía Administradora del Mercado Mayorista Eléctrico Sociedad Anónima, Sistema Único de Información de Servicios Públicos and Ministerio de Minas y Energía, Dominican Republic Superintendencia de Electricidad, Ecuador Consejo Nacional de Electricidad , El Salvador Superintendencia General de Electricidad y Telecomunicaciones, Guatemala Administrador del Mercado Mayorista, Nicaragua Centro Nacional de Despacho de Carga, Panama Autoridad Nacional de los Servicios Públicos, Peru Comité de Operación Económica del Sistema Interconectado Nacional, Uruguay Administración del Mercado Eléctrico.

Top 10 retail electricity tariffs by end-user segment and country, 2012 ($kWh)

Source: Bloomberg New Energy Finance, Bahamas Electricity Corporation and Grand Bahamas Power Company, Belize Public Utilities Commission, Chile Comisión Nacional de Energía, Dominican Republic Superintendencia de Electricidad, El Salvador Superintendencia General de Electricidad y Telecomunicaciones, Guyana Power & Light Company, Haiti Electricité d'Haiti, Jamaica Office of Utilities Regulation, Nicaragua Instituto Nicaraguense de Energía, Uruguay Administración del Mercado Eléctrico.

Selected LAC countries' swap rate versus cost of debt, 2012 (%)

Source: Bloomberg New Energy Finance, Bloomberg

Country leaders in active wind value chain sub-sectors, installed wind capacity and GDP, 2012

Source: Bloomberg New Energy Finance, International Monetary Fund, Argentina Secretaria de Energía, Brazil Agência Nacional de Energia Elétrica, Chile Comisión Nacional de Energía, Colombia Ministerio de Minas y Energía, Costa Rica Autoridad de los Servicios Públicos, Mexico Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaría de Energía, Nicaragua Instituto Nicaraguense de Energía and Ministerio de Energía y Minas.

Country leaders in active small hydro value chain sub-sectors, installed small hydro capacity and GDP, 2012

Source: Bloomberg New Energy Finance, International Monetary Fund, Argentina Secretaria de Energía, Brazil Agência Nacional de Energia Elétrica, Chile Comisión Nacional de Energía, Colombia Ministerio de Minas y Energía, Costa Rica Autoridad de los Servicios Públicos, Guatemala Administrador del Mercado Mayorista, Mexico Comisión Federal de Electricidad, Comisión Reguladora de Energía, Secretaría de Energía, Peru Ministerio de Energía y Minas

Latin America and Caribbean total existing UN CDM projects by sector, 2012

Source: Bloomberg New Energy Finance, United Nations Environment Programme

Carbon offsets historic activity

Source: Bloomberg New Energy Finance, United Nations Environment Programme, American Carbon Society, Gold Standard, Verified Carbon Standard

GHG Corporate Awareness

Source: Bloomberg New Energy Finance, Bloomberg, Global Reporting Initiative, Principles for Responsible.

ACKNOWLEDGEMENTS

This report was commissioned by the Multilateral Investment Fund (MIF), part of the Inter-American Development Bank Group (IDB), under its Climate Change Initiative and was produced in collaboration with Bloomberg New Energy Finance.

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SPECIAL THANKS

MULTILATERAL INVESTMENT FUND

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Photography: NASA's Earth Observatory

THE MULTILATERAL INVESTMENT FUND

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