

THE CLIMATE HAS CHANGED

LATIN AMERICA & THE CARIBBEAN

WE MEAN BUSINESS

economic opportunity through bold climate action

LATIN AMERICA & THE CARIBBEAN

► PUTTING THE BRAKES ON CLIMATE CHANGE DEMANDS PRIVATE-SECTOR INVESTMENT IN CLEAN ENERGY AND LOW-CARBON SOLUTIONS. COMPANIES IN LATIN AMERICA AND THE CARIBBEAN ARE SHOWING THAT INVESTING IN POSITIVE, LOW-CARBON TECHNOLOGIES CAN BRING POSITIVE RETURNS.

If the governments gathered in Lima this week need evidence to help encourage investment in low-carbon transformation, it's close at hand. Peru and its Latin American neighbors are proving the business case for decarbonization before our eyes. Following *The Climate Has Changed* report, launched in September 2014, new research by the We Mean Business coalition has found that Latin American and Caribbean (LAC) companies are achieving an average annual internal rate of return (IRR) on their low-carbon investments of 17%. Low carbon often means high returns, as this part of the world is showing. Companies taking action range from high energy users like Brazilian chemicals company Braskem to leading consumer brands like cosmetics company Natura.

Certain LAC countries have already shaken up the international negotiations process, pushing for all countries to step up their commitment to decarbonization.¹ The clear business case demonstrated by our research

should give Peru and its partners the confidence to drive forward the ambition needed at this crucial stage of the negotiations.

A RENEWABLES ROLE MODEL

Low-carbon transformation demands full private-sector buy-in. For the switch to clean energy alone, the International Energy Agency estimates that an additional \$44 trillion of investment is needed through to 2050 to get us safely on a low-carbon pathway.² But the costs of inaction would be far higher.³ Governments need to act smartly to enable investment from a broad range of sources, including the world's businesses.

The LAC region is crucial in tackling climate change—with emissions close to 70% of those in Europe in 2010.⁴ Managing land-use change

and deforestation remains a priority. But many LAC countries are driving forward a whole range of low-carbon solutions. For example, about 54% of power demand in Latin America is met by renewable sources (including large hydro)⁵ and the region's governments are setting ambitious targets that aim to dramatically increase the share of non-conventional renewables in national energy portfolios.⁶ The 26 LAC countries are accounting for a rising share of global clean energy investment as governments in the region strengthen policy support and local supply chains expand.⁷ From 2006 to 2013, the region attracted a cumulative \$132 billion for biofuels, biomass, geothermal, solar, small hydro (up to 50MW), and wind.⁸

[http://cait2.wri.org/wri/Country%20GHG%20Emissions?indicator\[\]=Total%20GHG%20Emissions%20Excluding%20Land-Use%20Change%20and%20Forestry&year\[\]=2010&sortDir=desc®ions=true&chartType=geo](http://cait2.wri.org/wri/Country%20GHG%20Emissions?indicator[]=Total%20GHG%20Emissions%20Excluding%20Land-Use%20Change%20and%20Forestry&year[]=2010&sortDir=desc®ions=true&chartType=geo)

⁵ <http://global-climatescope.org/en/region/lac/>

⁶ *Pursuing a Green Economy: Growth Alongside Environmental Sustainability in Latin America*, ELLA (Evidence and Lessons from Latin America), January 2014, <http://ella.practicalaction.org/node/1193?autmodal=true&autmodalClose=true&autmodalReload=true>

⁷ <http://about.bnef.com/press-releases/latin-america-and-caribbean-attract-increasing-share-of-global-clean-energy-investment/>

⁸ <http://global-climatescope.org/en/region/lac/>

¹ The AILAC group of countries, which has asked for more ambitious targets, consists of Chile, Colombia, Costa Rica, Guatemala, Panama, and Peru.

² IEA, *Energy Technology Perspectives 2014*, Executive Summary, <http://www.iea.org/Textbase/npsum/ETP2014SUM.pdf>

³ UNEP, *Adaptation Gap Summary*, 2014, http://www.unep.org/climatechange/adaptation/gapreport2014/portals/50270/pdf/adaptation_PR.pdf

⁴ Excluding emissions from land use changes, CAIT 2.0, WRI Climate Data Explorer,

17% IRR is the average internal rate of return that companies in this study are achieving on their low-carbon investments.

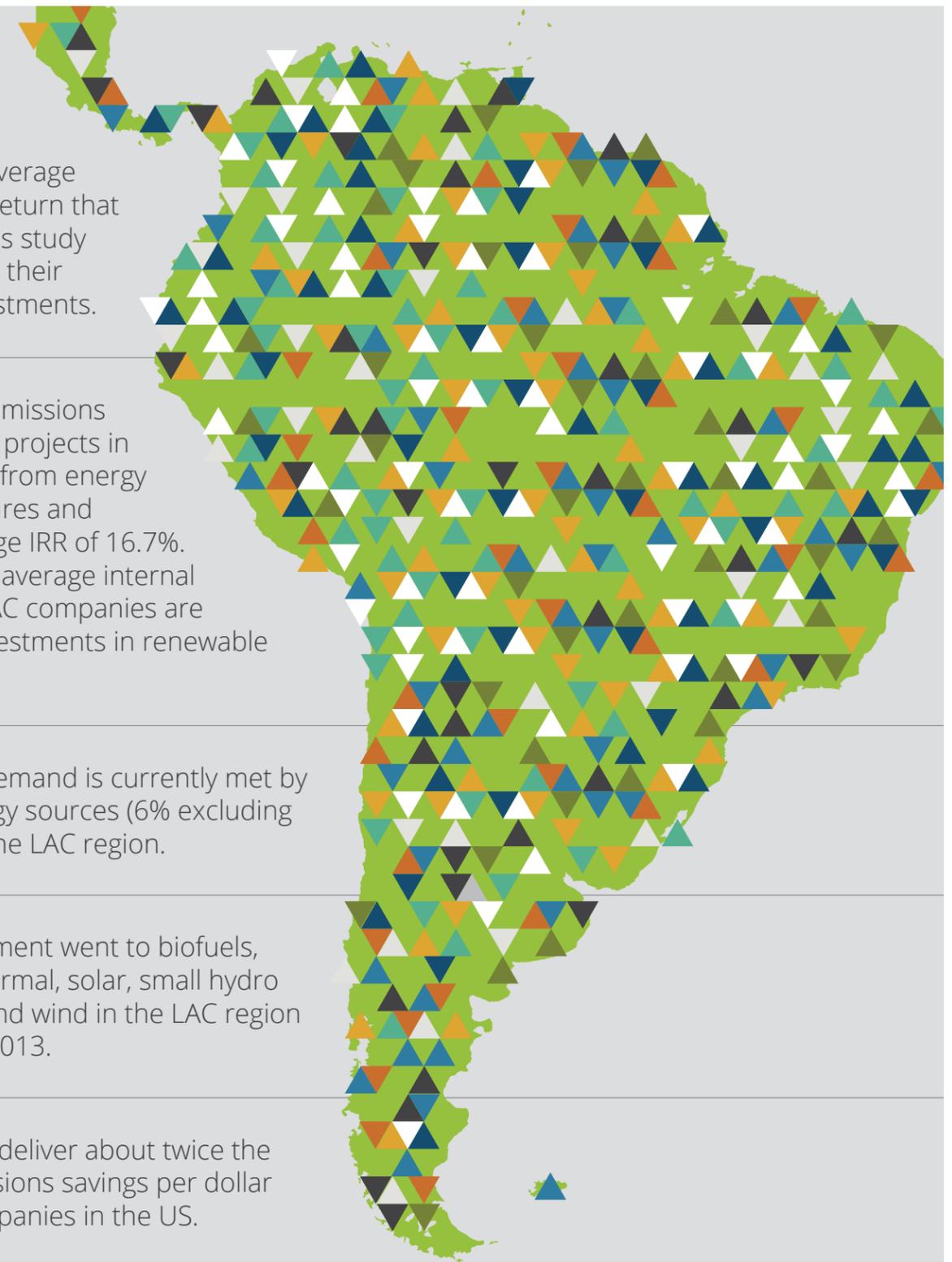
90% of carbon emissions reductions from projects in this study come from energy efficiency measures and deliver an average IRR of 16.7%. 13.4% IRR is the average internal rate of return LAC companies are achieving on investments in renewable energy projects.

54% of power demand is currently met by renewable energy sources (6% excluding large hydro) in the LAC region.

\$132B of investment went to biofuels, biomass, geothermal, solar, small hydro (up to 50MW), and wind in the LAC region between 2006-2013.

LAC companies deliver about twice the amount of emissions savings per dollar invested as companies in the US.

LAC companies are setting climate targets 14% ahead of those recommended by scientists to avoid the worst effects of climate change. The top ten companies are approximately 25% ahead of the science-based target.



LATIN AMERICA & THE CARIBBEAN

REAPING REWARDS OF LOW-CARBON ACTIONS

So what are LAC businesses doing right? We looked at more than 100 low-carbon projects reported to CDP in 2013 and 2014 (2012-2013 company data). The average internal rate of return (IRR) on these investments of 17% compares to an average of 1% in Europe, 11% in India, and 20% in the US. Digging down, we can see that investments in energy efficiency (almost 90% of the projects that reported emissions reductions) achieved an average IRR of 16.7%.

In 2013, Braskem invested over \$10M in a range of low-carbon projects—including their first green plastic plant that will sequester 500,000 metric tonnes of carbon every year. Marfrig has set ambitious goals to reduce carbon intensity by 30% by 2020 and has invested in a range of technologies to improve efficiency including thermal energy recovery, technology upgrades to increase the efficiency of their food processing plants, and energy metering to help track performance.

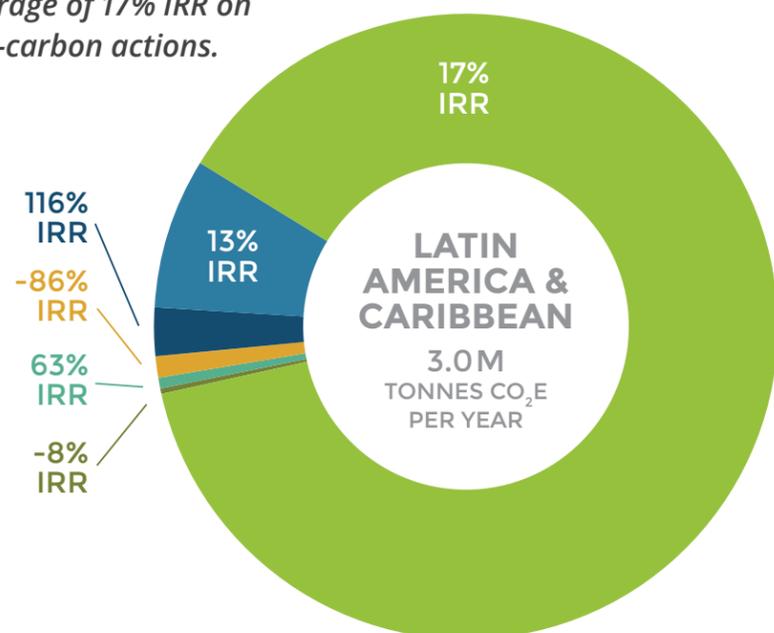
Low-carbon energy projects (solar and wind, for example) achieved an average IRR of 13.4%.⁹ More and more companies are seeing value in renewable power generation. Food company Grupo Bimbo began generating power from its wind farm in Piedra Larga, Mexico in 2012 and it is now providing electricity to most of their Mexican operations, with an estimated annual carbon savings of approximately 300,000 metric tonnes.

⁹ Transport-related investments in emissions reductions achieved an IRR of over 100%, but this is largely due to a small sample of these types of projects and is distorted by two projects which have a very high rate of return. The behavior change IRR figure is low compared with the global average figures, this is due to the small sample size.

LOW-CARBON ACTIONS TAKEN BY LATIN AMERICAN & CARIBBEAN COMPANIES

The colored sections on the chart represent low-carbon actions and the size of the colored section shows which actions have been used to save the most emissions reductions. The % figures on the chart show the internal rate of return (IRR) for each action. The chart tells us to what extent companies are investing in actions with the highest IRR to reduce emissions. It is based on reported data from investments in 109 projects between 2012 and 2013. The figure in the middle of the chart indicates the annual carbon savings delivered by these climate actions.

Average of 17% IRR on low-carbon actions.



LOW-CARBON ACTIONS:

- FACILITY EFFICIENCY
- LOW-CARBON ENERGY INSTALLATION
- TRANSPORT EMISSIONS
- EMISSIONS OFFSETS
- FUGITIVE EMISSIONS
- BEHAVIORAL CHANGE

LAC = Latin America and the Caribbean

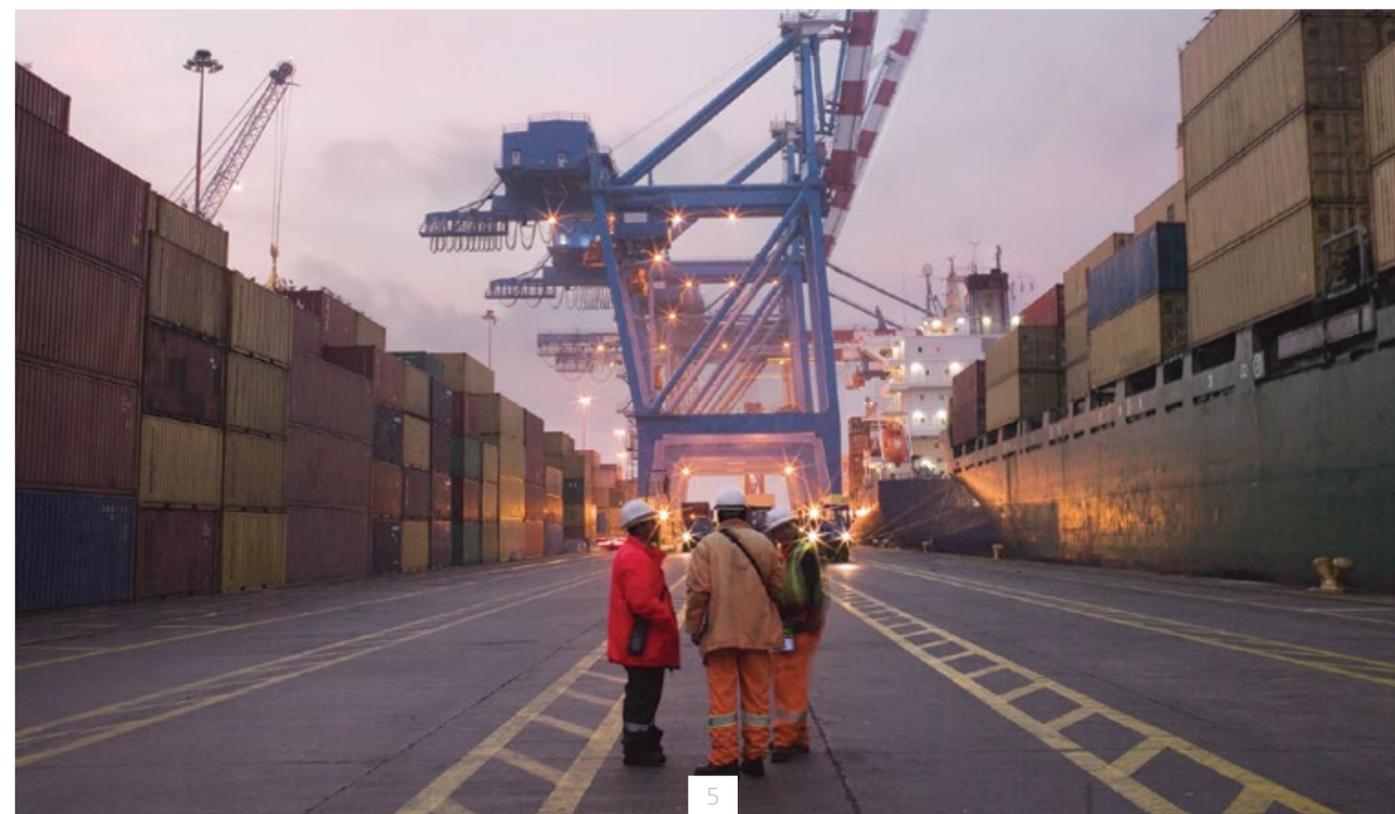
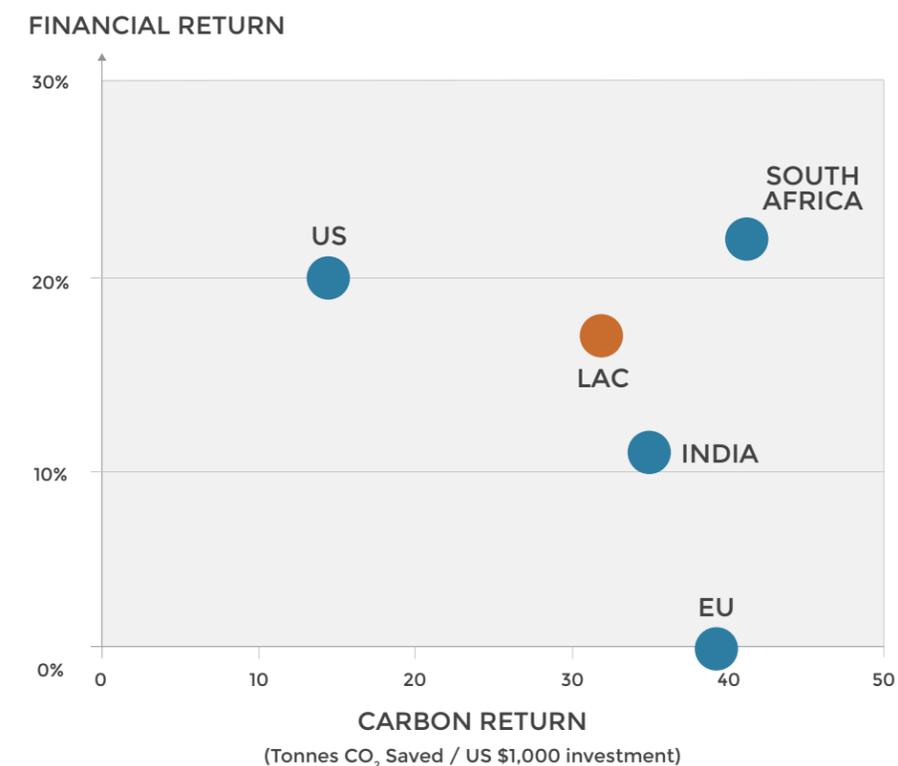
GOOD CARBON RETURNS

The carbon return that LAC companies are achieving (i.e., their reduction in emissions per dollar invested) is also solid—double that of companies in the US and similar to levels in India and South Africa. The highly-regulated EU companies also perform well when it comes to carbon returns.

FINANCIAL AND CARBON RETURNS IN LATIN AMERICA & THE CARIBBEAN COMPARED TO OTHER REGIONS

This chart shows how companies headquartered in Latin America and the Caribbean compare to those in four other key regions in terms of the overall internal rate of return on their low-carbon investments (shown on the vertical axis) and the amount of emissions savings they achieve per US\$1,000 invested (shown on the horizontal axis).

LAC = Latin America and the Caribbean



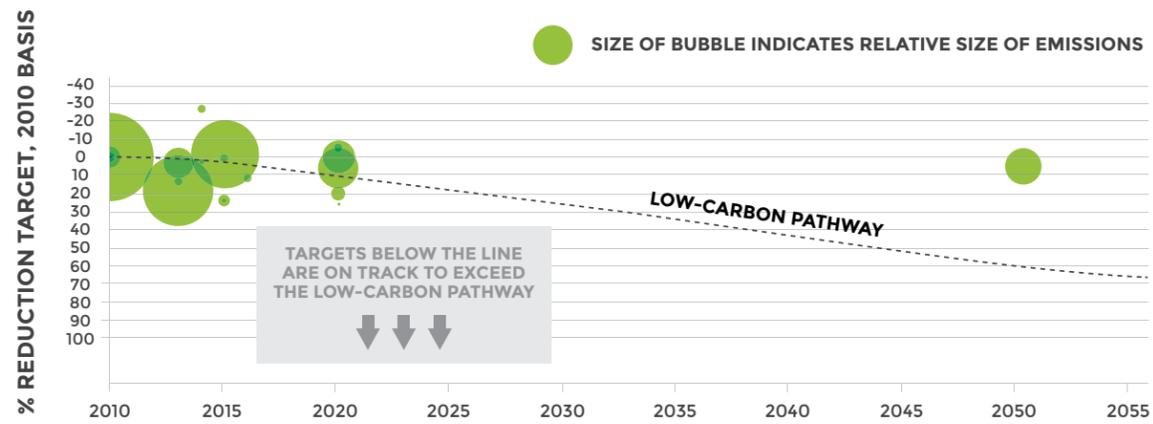
AIMING HIGH

LAC companies that have established emissions reduction targets have done so ambitiously—averaging 14% deeper emissions cuts than those recommended by scientists.¹⁰ The 10 companies with the strongest targets are even bolder, setting carbon emission reduction targets that are approximately 25% ahead of the science-based target. We found two major LAC companies, Marfrig and CEMEX—that have both set targets that are in line with the science—also reduced emissions intensity from 2012-2013. There's plenty of scope for companies across Latin America to learn from these peers. Of course, clear, long-term policies at the national and international level are also needed to provide a framework which supports more ambitious target-setting by companies.

¹⁰ The pathway used is generic and not specific to the Latin America region. For an explanation on how this was done, please refer to the science annex in *The Climate Has Changed* report.

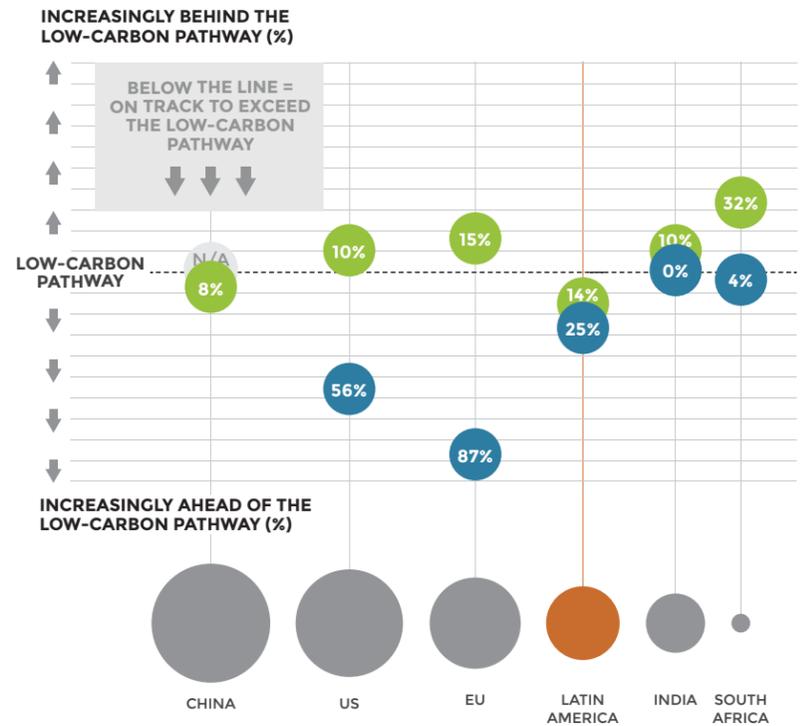
COMPANY TARGETS - FOCUS ON LATIN AMERICA & THE CARIBBEAN

This chart shows the targets of companies headquartered in Latin America and the Caribbean against the low-carbon pathway. The dotted line shows the minimum reduction targets companies must set to get onto a safe, low-carbon pathway. (See *The Climate Has Changed* report for more information on the science.) Each bubble represents a company target; the size of the bubble shows the amount of emissions the target covers; and the placement of the bubble in relation to the pathway shows how good the target is. If the bubble is below the line, the target is good—representing emissions reductions beyond the minimum requirements. The chart is based on 31 reported targets and the pathway is global and not specific to the region.



This chart shows how the targets of companies in LAC and those of the top ten target setters compare to those being set in the five other key regions.

- Size of region bubble represents relative CO₂e emissions (excluding emissions from land-use changes) in 2010.
- All reporters
- Weighted average gap between emissions targets and the low-carbon pathway.
- Top 10 target setters



SMART POLICIES

Smart policy can support and enable the high-carbon return investments that companies will need to take to meet more ambitious targets. Renewable energy policy, product efficiency regulation, and cap and trade are all examples of policies that were identified as opportunities by LAC companies. If policy-makers can build on these successful policies, it could enable LAC companies to make the bigger, bolder investments in high-carbon return actions that are needed.

MOTIVATION FOR BUSINESS ACTION IN LATIN AMERICA & THE CARIBBEAN



This chart shows various reasons for corporate climate action grouped into color-coded categories. It shows how many companies identified each driver as being important (the higher it is on the vertical axis, the more companies reported it) and the emphasis they placed on it being a risk (to the right of the broken line) versus an opportunity (to the left of the broken line).

- INDICATES EQUAL RISK & OPPORTUNITY LEVELS
- REPUTATION
- CUSTOMER DEMAND
- POLICY
- INTERNATIONAL AGREEMENTS
- VOLUNTARY AGREEMENTS
- CHANGING WEATHER
- IMPACT ON NATURAL RESOURCES
- SOCIAL IMPACTS

LOW CARBON BECOMING BUSINESS AS USUAL?

The positive business case in Latin America and the Caribbean backs up what we have found in other regions. In September, we published *The Climate Has Changed* to show that businesses are already investing in climate solutions and getting a good rate of return. It already makes financial sense for companies in many regions to follow suit. In the US, for example, investments in energy efficiency achieve an extraordinary average return of 81% and South African companies are earning an average return of 22% on investments in low-carbon energy generation.

But we also showed that companies could do even more by taking a portfolio approach to low-carbon investment. Rather than setting an absolute hurdle rate (i.e. IRR) that individual projects must achieve, companies can apply that IRR threshold to the entire portfolio. This would mean investments in projects that deliver high-carbon returns but have a low IRR piggyback on the investments that have a higher IRR but deliver lower carbon savings. Governments that put in place smart policies like carbon pricing and feed-in tariffs make it even more attractive for

businesses to invest in more expensive, high-carbon return projects..

With the right policy in place at the national level and a binding international agreement to back them up, We Mean Business believes that low-carbon business action in Latin America and elsewhere could simply become business as usual. When leading the negotiations at the COP this year, officials from Peru and other Latin American countries can draw confidence from their national low-carbon opportunities and use this to push for the bold climate agreement that the world needs.

WE MEAN BUSINESS

economic opportunity through bold climate action

We Mean Business is a coalition of organizations working with thousands of the world's most influential businesses and investors. These businesses recognize that the transition to a low-carbon economy is the only way to secure sustainable economic growth and prosperity for all. To accelerate this transition, we have formed a common platform to amplify the business voice, catalyze bold climate action by all, and promote smart policy frameworks.

**OUR PARTNERS: BSR, THE B TEAM, CDP, CERES, THE CLIMATE GROUP,
THE PRINCE OF WALES'S CORPORATE LEADERS GROUP, AND WBCSD**

w: wemeanbusinesscoalition.org | twitter: [@WMBtweets](https://twitter.com/WMBtweets) | [#wemeanit](https://twitter.com/#wemeanit)



CDP
www.cdp.net

Counter Culture
www.thisiscounterculture.com

POINT380
www.point380.com