



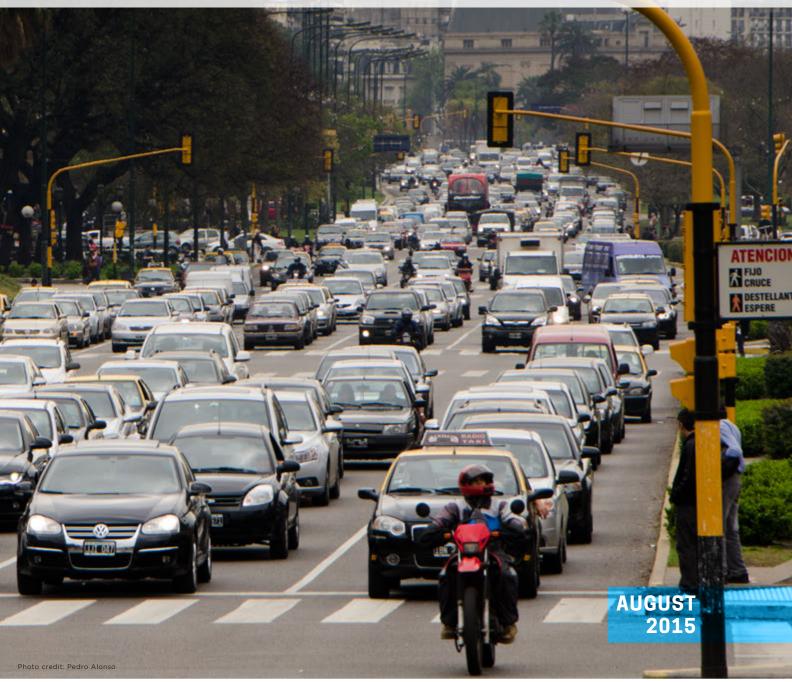
COPENHAGEN CENTRE

ON ENERGY EFFICIENCY

SE4ALL EE HUB

ACCELERATING ENERG<mark>Y EFFICIENCY INITIATIVES AND OPPORTUNITIES IN LATIN AMERICA AND CARIBBEAN</mark>

EXECUTIVE SUMMARY







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INTRODUCTION

Sustainable Energy for All (SE4All), an initiative launched by the UN Secretary-General and the President of the World Bank, has amongst its three objectives the goal of doubling the global rate of energy efficiency improvements by 2030. Meeting this ambitious energy efficiency target requires the mobilisation and partnership of government, the private sector, civil society and other stakeholders. Identifying key opportunities and taking action is critical to building momentum on energy efficiency.

Since its inception in October 2013, the Copenhagen Centre on Energy Efficiency (C2E2), which serves as SE4ALL's Energy Efficiency Hub, has been analysing and promoting opportunities for accelerating energy efficiency uptake globally. As part of this undertaking, C2E2 has focused on regional performance, engaging local partners to analyse and review the status of existing energy efficiency policies, priorities and opportunities in key countries of the following regions: Africa; Southeast Asia; Eastern Europe, the Caucasus and Central Asia; and Latin America and Caribbean.

The result is four reports that profile energy efficiency acceleration activities within constituent countries of these regions and, at the same time, aim to inform and support the future development and uptake of related policies and programmes. Executive summaries delivering a snapshot of these reports are provided here. However, we encourage you to see the full-length Accelerating Energy Efficiency reports online <u>www.energyefficiencycentre.org</u> for a comprehensive view of the targeted markets and opportunities.

- The Bariloche Foundation in Argentina for the Latin America and Caribbean Region
- The Asian Institute of Technology in Thailand for the Southeast Asia Region
- The Centre for Energy Efficiency (CENEf) in Moscow for the Eastern Europe, the Caucasus and Central Asia Region
- The Energy Research Centre at the University of Cape Town in South Africa for the African Region

We would also like to acknowledge organisations that provided the information and insights that have informed these summaries and reports.

As the global energy efficiency dialogue continues to evolve and intensify, C2E2 is looking forward to playing an active role, engaging with stakeholders and supporting the critical work on the ground.

Jyoti Painuly Head Copenhagen Centre on Energy Efficiency Tim Farrell Senior Advisor and Regional Coordinator, Latin America

John M. Christensen Director UNEP DTU Partnership



Latin American and Caribbean (LAC) countries face an urgent need to advance economic development and social welfare by enabling progress in priority areas such as health, education and infrastructure. If we add to these needs vulnerabilities in the energy sector, it is difficult to see an obvious path to the enhanced social and economic ambitions of LAC societies. Energy efficiency measures implemented in a strategic manner offer the opportunity to advance societal objectives by transforming the productivity and resilience of country energy systems.

Despite some success stories, such as the mass campaigns to replace incandescent bulbs with compact fluorescent lamps (CFLs) and the growing interest that governments have shown in promoting energy efficiency in the last ten years, there remains a large untapped potential. Some LAC countries have introduced policy, regulatory and institutional frameworks, with a number of countries already having an Energy Efficiency Act or considering its adoption. However, the implementation of energy efficiency activities has generally been limited in the LAC region, often being prioritized as a response to crises or deficits in energy supply.

The success or failure of past policy and programs in the LAC region can help to overcome barriers and explore opportunities for increased action on energy efficiency. Quantified short-, medium- and long-term targets can also help to accelerate the uptake of energy efficiency measures. The evaluation of energy efficiency programs has typically not been prioritized in the region and improved data collection will help to draw firmer conclusions about the success of national programs. The institutional framework should define the responsible authority for delivering the outcomes along with the required instruments, resources and capacities. Increased cooperation and coordination between different ministries is required to increase the effectiveness of energy efficiency policies and programs. Appropriate economic and financial management and support is needed to sustain activities which are lacking in many countries that depend on international funds, thus producing a "stop and go" on policies. This situation does not provide sufficient motivation to the private sector to invest in energy efficiency, a key step in enabling durable financial flows for energy efficiency. Utilities could increase their efforts on promoting energy efficiency in the LAC region contributing to reduced losses, improved productivity, and the uptake of new technologies. Energy Service Companies (ESCOs) are not well-developed in the LAC region, and introducing generalized subsidies reduces the benefits of energy efficiency over the long-term while sending the wrong signal to consumers.

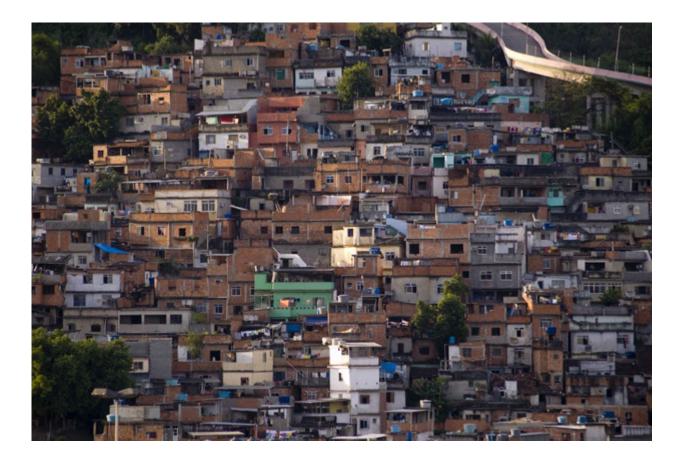
This report provides observations on energy efficiency efforts in several countries in the LAC region with the aim of informing and supporting the future development and acceleration of energy efficiency policies and programs. The status of energy efficiency in 14 LAC countries was considered through highlighting barriers to increased uptake as well as examples of past, present and planned energy efficiency initiatives. This report highlights that there are many common barriers and opportunities shared by LAC countries. For example, while there has been increased action and interest to establish standards and labelling programs for equipment and appliances in the LAC region, the region faces a lack of adequate testing laboratories. The transport sector is highlighted as another high priority sector in the region where massive opportunities exist for increased efficiency. Lack of financing for energy efficiency improvement and innovation is an example of the common barriers shared by a number of LAC countries.

Enhanced regional collaboration and coordination is highlighted as an important factor that will contribute to increased energy efficiency action in the LAC region. A number of LAC countries are engaged in a range of regional and sub-regional initiatives and networks to promote energy efficiency. For example, in 2011 European Commission for Latin America and Caribbean (ECLAC) launched Base Indicators for Energy Efficiency (BIEE) to improve the quality of statistics and performance indicators to quantify the results of national energy efficiency programs. Today 19 LAC countries have joined the initiative and are represented by a country focal point. Another initiative established in 2011 by the Latin American Energy Organization (OLADE) is the Latin American and Caribbean Network for Energy Efficiency. This network also includes 19 LAC countries which promote energy efficiency in the region by facilitating the exchange of technical, legal and regulatory information between institutions and interested professionals.

This report also establishes a set of criteria that could be used to identify the progress of countries on energy efficiency related to the following areas:

- Institutional issues
- Legal and regulatory frameworks
- Financing resources and mechanisms
- Scarcity of resources or funding
- Sectors or uses of significant magnitude and specific weight
- Milestones of structural changes in energy policy
- Potential technological niche development
- Replicating actions in other countries in the region
- Degree of progress and local capacity
- The lack of a favourable policy environment and an abundance of energy resources.

These criteria was used to group countries on the enabling conditions for the implementation of energy efficiency measures. The first group of countries consists of Argentina, Brazil and Mexico. They were not identified as priority recipients for technical assistance but rather as potential providers of technical support to other LAC countries. In particular, Brazil and Mexico have programs in advanced stages of implementation and development, and sufficient domestic technical capacity to address the major challenges associated with the implementation of policies and strategies for energy efficiency.



The second and third groups of countries could be considered for technical assistance. Countries in the second group include Chile, Colombia, Costa Rica, Ecuador, Panama and Uruguay. Technical assistance and collaboration in energy efficiency may result from a country request according to various factors including country priorities, level of commitment and existing technical capabilities. These considerations could increase the effectiveness and impact of technical assistance. Also, experience from this group of countries could be adopted by, or modified for, other countries in the region.

Finally, the third group is where energy efficiency action is limited and includes countries such as Bolivia, the Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Nicaragua and Paraguay. This lack of energy efficiency activity can be expressed by the paucity of an adequate legal framework and institutional structures, absence of human and financial resources and a gap in information and data collection. However, in all of these countries energy efficiency is considered a priority that should be high on the national energy agenda. It is likely that the experiences in accelerating energy efficiency among countries in the third group could generate lessons that could easily be extrapolated to other countries.

This report analysed a diverse set of criteria important for accelerating energy efficiency in the LAC region, and it highlights a range of possible interventions that have been prioritized for a number of LAC countries. Some of these energy efficiency measures need to be initiated and led by governments at the national, regional or local levels. For example, this report could inform the development or update of National Action Plans on Energy Efficiency. In addition, this report provides criteria, priorities and progress of energy efficiency in selected LAC countries. This information could inform governments, Regional Organizations, Development Banks, Global Alliances, Energy Industry, Private Sector Development Banks and other stakeholders interested in designing targeted technical assistance programs in the region. The information provided in this report also highlights the possible interventions in LAC countries that could support the SE4ALL goal of doubling the improvement rate of energy efficiency globally by 2030.





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