UNEP

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ENERGY-EFFICIENT COOLING PRODUCTS IN LATIN AMERICA AND THE CARIBBEAN:

AN OPPORTUNITY TO COOL DOWN THE PLANET AND ACCELERATE THE REGIONAL ECONOMY

EFFICIENT APPLIANCES AND EQUIPMENT

GLOBAL PARTNERSHIP PROGRAMME

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I. FOREWORD

The UN Secretary-General, Mr. Ban Ki-moon, launched the Sustainable Energy for All (SE4ALL) initiative during the 2011 General Assembly in order to promote actions aimed at achieving three goals by 2030:

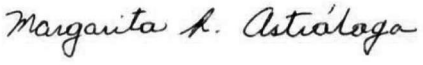
- providing universal access to modern energy services;
- doubling the global rate of improvement in energy efficiency; and
- doubling the share of renewable energy in the global energy mix.

SE4ALL provides an opportunity for Latin America and the Caribbean to strengthen the impact of the energy sector on economic growth and poverty reduction. Seizing this opportunity requires the commitment of governments, the financial sector, industry, and civil society leaders. Latin America and the Caribbean is a region with extensive capabilities and experience to coordinate joint actions and achieve shared sustainability goals. Progress in energy efficient lighting shows an example of best practice in the development of national and regional strategies, while capitalizing on the collaboration and input from government entities, regional bodies, lighting manufacturers, financial institutions and civil society. In this regard, Central America and the Dominican Republic are pioneers in the harmonization of energy efficiency standards for lighting products as a result of a coordinated effort between the leaders of the ministries of energy and environment of each country.

The transition to efficient refrigerators, air conditioners and fans in Latin America and the Caribbean would save 138 TWh annually, amounting to almost $ 20,000 million US dollars, and would avoid the release of approximately 44 million tons of CO_2.

Brazil, Cuba, Ecuador and Mexico stand out as countries with more active policies to accelerate the use of efficient air conditioners, refrigerators and fans. Today, the challenge for the region is to advance from conceptualizing the transition to implementation and, above all, developing minimum energy performance standards (MEPS); reducing the cost involved in monitoring, verification, and enforcement; minimizing the redundancy of standards in the region; and facilitate the penetration of highly efficient products in the regional market.

The United Nations Environment Programme (UNEP) and its international partners in the framework of the Efficient Appliances and Equipment Partnership Programme are ready to support countries in the region to develop and implement policies and concrete actions to accelerate the transition to more efficient products, providing a path to sustainable development.



Margarita Astrálaga

Regional Representative for Latin America and the Caribbean
United Nations Environment Programme

When OLADE was founded 40 years ago, it embodied the concern for the conservation of the region's natural resources, with that specific mandate contained in its charter document. In this regard, one of OLADE's key actions, taken more 25 years ago, is the inclusion of permanent work on the promotion and development of energy efficiency in Latin America and the Caribbean. The region has abundant energy resources of all kinds, including renewable resources with a 25% share of its energy mix, based on the priority use of hydraulic energy, so that energy efficiency is the supplement for sustainable energy.

At the OLADE annual meeting, the Ministers of Energy from all 27 member countries have recognized their commitment to energy efficiency by establishing actions by all countries to work towards reduction in energy resources. Further, these commitments reflect that energy efficiency is the best contribution of the region to the global effort towards reducing the effects of climate change. Based on its effort, OLADE has now become the regional reference on energy efficiency. The regional seminar organized by OLADE each year is mandatory for those who want to be kept abreast of advances in the development of energy efficiency and to learn about the latest experiences both in Latin America and the Caribbean as well as elsewhere.

The regional seminar has served for motivating and encouraging innovative initiatives, such as the UNEP Regional Efficient Lighting Programme launched at the IV Energy Efficiency Seminar for Latin America and Caribbean, which helped to mobilize both the energy and the environment sectors to conduct sustainable actions. As a result, there have been measurable results in several countries across the region. Another concern is the long-term sustainability of energy efficiency programs in the region; OLADE has worked, with the financial support from the Austrian Development Cooperation, in two Central America countries and two Caribbean countries to develop the Institutional Framework for Energy Efficiency as a contribution to the continuity and coordination of national efforts.

The Latin American and Caribbean Network for Energy Efficiency, sponsored by OLADE, is a dynamic group of professionals, governments and businesses, who wish to maintain permanent contact with their counterparts in other countries and to share experiences.

OLADE estimates show that 3,700 billion dollars could be saved in oil at $ 100 dollars per barrel in 25 years, while also avoiding the emission of 2 000 million tonnes of CO_2. This makes it essential for cooperative institutions to join efforts with those of the UN Sustainable Energy for All (SE4ALL) programme.

OLADE has the experience and relationships with the energy sector in all countries in Latin America and the Caribbean, and is hence in a privileged position to act as liaison for the coordination of initiatives.

Fernando César Ferreira
Executive Secretary of OLADE.

II. ACKNOWLEDGMENTS

This regional report was developed by the United Nations Environment Programme (UNEP) within the framework of the Efficient Appliances and Equipment Global Partnership Programme, and the energy efficiency accelerator of the UN Sustainable Energy for All (SE4ALL) initiative. The Latin American Energy Organization (OLADE, by its acronym in Spanish) led the collection and validation of country data, and convened the VI Seminar on Energy Efficiency in Latin America and the Caribbean, where officials from the ministries of energy and the environment in the region reviewed the regional situation and contributed additional information for the development of this report.

The Mexican manufacturer MABE, the International Copper Association (ICA), and the ministries of energy and environment of Latin America and the Caribbean countries provided technical data for cooling products used in each country, as well as data on the status of energy efficiency policies related to these products.

To conduct the analysis, CLASP employed the Policy Analysis Modeling System (PAMS) – an impact-modelling tool designed by Lawrence Berkeley National Laboratory, in collaboration with CLASP. The results of the model show the economic, financial and environmental benefits of transitioning to efficient cooling products in Latin America and the Caribbean.

The Government of Spain provided financial support for conducting the studies presented in this report through the project Regional Gateway for Technology Transfer and Action on Climate Change (REGATTA), implemented by UNEP in Latin America and the Caribbean.

III. EXECUTIVE SUMMARY

The UN Secretary-General, Ban Ki-moon, launched the global initiative Sustainable Energy for All (SE4ALL) in 2011 to increase global action on renewable energy, energy efficiency and access to energy. For energy efficiency, SE4ALL established the accelerator of efficient appliances and equipment, and appointed the United Nations Environment Programme (UNEP) to coordinate, along with other actors, the activities of this accelerator. On August 20, 2014, OLADE hosted the VI Seminar on Energy Efficiency in Latin America and the Caribbean in Managua, Nicaragua. Within the seminar, UNEP and its partners presented the Efficient Appliances and Equipment Global Partnership Programme to the governments of Latin America and the Caribbean. The results are an analysis of the status of energy-efficiency policies for cooling equipment (air conditioners, refrigerators and fans) in the region refrigerators, followed by air conditioners and fans. Of the 33 countries of the region, less than half have efficiency standards for the three products studied. Only 13 countries have established MEPS for refrigerators, 12 countries for air conditioners and two countries for fans. It is imperative that these countries continue promoting the advancement of the standards and keep existing standards up-to-date, in line with advancement in technological. It is