

## Inaugural Regional Workshop Focuses on the Transition to Energy Efficient Lighting in Latin America and the Caribbean

Latin American and Caribbean Government Officials Support the Phase-Out of Incandescent Light Bulbs

Governments Agree to Adopt the "Santo Domingo Declaration"

**Santo Domingo (Dominican Republic), 4 August 2011** –Government representatives from 26 countries in Latin America and the Caribbean have voiced their support for the phasing out of incandescent light bulbs. Such a move could save the region an estimated US\$4 billion a year in energy costs.

Participants at a regional meeting of the UNEP-backed en.lighten initiative signed the "Santo Domingo Declaration", which states that the phase out of incandescent lamps is one of the easiest ways to reduce CO<sub>2</sub> emissions and achieve significant energy and financial savings.

The meeting was held in Santo Domingo, Dominican Republic, on 4 August 2011 in conjunction with the 2011 Latin American and Caribbean Energy Efficiency Seminar by Organización Latinoamericana de la Energía (OLADE).

en.lighten is an initiative funded by the Global Environment Facility (GEF), in partnership with the United Nations Environment Programme (UNEP) and leading global lighting manufacturers (Philips and OSRAM), to accelerate market transformation of efficient lighting technologies on a global scale.

At the meeting in Santo Domingo, UNEP and partner regional organizations addressed key regional stakeholders and explored opportunities for governments to formally participate in a globally coordinated effort to transition to efficient lighting as a key efficiency and climate mitigation measure. The emphasis was on the phase-out of general purpose incandescent light bulbs, the most common type for consumers.

Energy efficiency officials and climate change focal points from 26 countries participated in the event including; representatives from the Ministries of Energy, Environment, national utilities, manufacturing, international organizations and NGOs. Bernard Jamet, Head of the UNEP Technology Transfer Unit, opened the session by introducing the en.lighten program and its role within ongoing climate change negotiations. "en.lighten's ultimate success will be gauged by the number of countries that commit to its goal of phasing-out inefficient lighting," said Mr Jamet.

The en.lighten partnership aims to restrict the global supply of inefficient light bulbs and promote market adoption of most efficient alternatives by way of an "integrated approach" including:

- Adoption of globally harmonized minimum energy performance standards (MEPS) for CFL performance by December 31, 2015, leading to the phase-out of all incandescent lamps by this date
- Setting up of monitoring, verification and enforcement (MVE) schemes in countries to ensure compliance with global standards and remove low quality products from the marketplace
- Supporting interested countries in establishing focused waste management efforts including: waste collection, disposal and/or recycling
- Country support activities in the form of communications, policies and innovative finance mechanisms to encourage and support the transition to effcient lighting
- Technical suport developed by international experts for those countries willing to develop national efficient lighting strategies and join the en.lighten partnership.

These efforts are necessary to overcome failed examples in many countries in which low quality *Compact fluorescent lamps* (CFLs) have limited the the market penetration of efficient lighting technologies. The UNEP/GEF en.lighten initiative proposes an integrated approach to ensure the success of countries in their efforts to move towards efficient lighting including providing support to set up successful end of life strategies for spent CFLs.

Country Lighting Assessments have been generated for most countries around the world to explain the significant savings potential of the transition to more efficient lighting.

In the 20 countries from Latin America and the Caribbean analyzed, 4% of total electricity consumption would be saved if incandescent lamps were substituted with compact fluorescent lamps (CFLs). This totals US\$4 billion per year of savings for consumers in energy bills, and the equivalent carbon emissions of 4 million cars. Eight large power plants (500 MW) could be closed in the region due to increased energy efficiency

Roberto Gonzalez Vale of Cuba's Ministry of Basic Industry, the official that led Cuba's prime phase out efforts in 2006, stressed the need to share best practices and lessons learned from countries within the region. "There are major gaps that exist such as in the effective development of phase-out legislation, the implementation of quality control and verification policies or the proper handling of discarded bulbs," said Vale. He demonstrated his stanch support for the en.lighten initiative by strongly encouraging representatives to participate in the UNEP partnership to ensure that the region works to effectively complete the transition.

Representatives from the Energy and Environment Ministries of several countries made presentations on their successful domestic efforts to phase-out incandescent bulbs, including Argentina, Mexico, Ecuador and Cuba.

According to Alicia Baragatti of the Argentinean Ministry of Energy, "technologies like mobile phones are advancing in the region at an incredible rate. Establishing minimum energy performance standard could help the efficient lighting sector achieve similar progress." The efficient lighting sector should be on a similarly path though the establishment of minimum energy performance standards."

All country delegates who presented in the meeting agreed that consumer confidence in energy efficient lighting technologies presented an important challenge. Poor performance could undermine consumer trust, making it more difficult to encourage the large-scale adoption of new CFL technology. This has been the experience in the United States, Europe and recently in Bangladesh.

UNEP has created a Centre of Excellence on Efficient Lighting, consisting of top international experts, to assist countries that partner with the en.lighten initiative to develop national efficient lighting strategies and plans. The Center of Excellence is to start providing technical support to countries that engage in this partnership. A high level event will take place at the UN Sustainable Development Conference (also known as Rio+20) in Rio de Janeiro, in June 2012, where partner countries will be publicly recognized for their efforts to move to low carbon economies and reap the benefits of efficient lighting. It is also planned to formally convey the Santo Domingo Declaration to world leaders and participants at the Rio+20 conference as a successful strategy for moving towards a low-carbon, resource efficient Green Economy. The Green Economy will be one of the central themes of Rio+20.

The governments of Uruguay and the Dominican Republic have become the first two in the region to join the en.lighten partnership. Other countries in the region are expected to formalize their participation in the very near future.

UNEP's Regional Representative, Margarita Astrálaga, asserted that Latin America and the Caribbean will become the first developing and emerging region in phasing out incandescent lamps and obtain the financial and climate benefits of this transition. She also committed to bring the "Santo Domingo Declaration" to the Environment Ministers meeting in January 2012.

The Comisión Nacional de Energia (CNE) Minister, Enrique Ramirez, closed the conference by announcing that the Dominican Republic's Presidential Palace has committed to remove all of their incandescent lamps and replace them with LEDs. CNE will lead the way in demonstrating the government's commitment to efficiency and to act as an example for the private sector and consumers. He also advocated that all Energy Ministers in Latin America and the Caribbean join the en.lighten partnership and adopt the "Santo Domingo Declaration" to achieve the phase-out of incandescent lamps in Latin America and Caribbean countries before the end of 2015.

## **Notes to Editors**

## **Key Lighting Facts:**

- The Dominican Republic will save 109 million \$ per year and the equivalent emissions of 100,000 cars if incandescent lamps were phased out. Many of the country's supply problems and regular "black outs" could be avoided.
- It is expected that Brazil will save \$ 2 billion a year and 4 million tonnes of CO2 –the equivalent emissions from 1 million cars when legislation in the country is finalized, by mid 2012.
- Ecuador will save \$46 million USD per year and cut its greenhouse gas emissions by 300,000 tonnes of CO2 annually—the equivalent of taking 75,000 cars off the road a year by switching to energy saving bulbs.
- Using current economic and energy-efficiency trends, it is projected that global demand for artificial light will be 60% higher by 2030 if no switch occurs
- The International Energy Agency (IEA) estimated in 2007, the total electricity consumption due to lighting at 2650 TWh. This represents almost 19% of global electricity use (15-17% greater than nuclear or hydro power).
- The total global GHG emissions accrued to lighting electricity consumption was estimated in 2005 by the IEA at 1,889 MtCO2 of which grid based lighting systems contribute to 1,528 MtCO2. This is equivalent to approximately 8% of world emissions or 70% of the world passenger vehicle emissions
- Up to 95% of the energy emitted by incandescent lamps is heat, and their efficiency is inherently low. In comparison, incandescent bulbs last around 1,000 hours which is significantly shorter than energy saving lamps which can last up to 12,000 hours. CFLs can now also be dimmed.
- Like all fluorescent lamps, CFLs contain mercury, which complicates their disposal. Mercury is a hazardous substance in fluorescent lamps. en.lighten will support countries in setting up sustainable end of life approaches for spent lamps.
- The average mercury content in a CFL bulb is about 3 milligrams roughly the amount it would take to cover the tip of a ball-point pen. By comparison, older thermometers contain 500 milligrams of mercury the equivalent of more than 100 CFLs

- Experts emphasize that mercury is also emitted from coal-fired power stations. Studies indicate that the level of emissions from power stations linked with lighting the world's old bulbs are far higher than those linked with the disposal of energy efficient bulbs.
- Solid State Lighting (SSL) technology is expected to achieve efficiencies at least ten times higher than incandescent lamps and up to twice as high as fluorescent lamps. Light Emitting Diode (LED) lamps, aside from not containing mercury have other advantages such as long life, warm light colour similar to incandescent lamps and low heat generation.

www.enlighten-initiative.org

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