



PRESS RELEASE

Organizations Join Hands to Pilot Low Carbon Lighting as Hong Kong Takes Part in Global Trial

Hong Kong, China, 28 April 2010: International NGO The Climate Group launched a ground-breaking LED outdoor lighting pilot program at the Hong Kong University of Science and Technology (HKUST) today. The pilot will see Hong Kong team up with ten other international cities including New York, London and Kolkata as part of The Climate Group's global "[LightSavers](#)" initiative. The program will assess the potential of **LEDs** and **smart controls** to curb greenhouse gas emission and cut energy costs, while making cities brighter and safer at night.

The pilot projects are taking place at three sites located at **HKUST, The University of Hong Kong (HKU)** and **Hong Kong International Airport (HKIA)**. The Climate Group, HKUST, HKU and HKIA will work together as partners over 6 to 12 months to test the performance of five different LED lighting products at these sites. The products are provided by Kingsun Optoelectronic Co, Ltd, Neo-Neon Enterprises Ltd, Philips Electronics Hong Kong Ltd and Ruud Lighting. Pilot results will be announced next Spring.

Globally, lighting accounts for 19% of the world's annual electricity use and nearly 10% (equivalent to 1.9 billion tons) of global CO₂ emissions. The amount of emissions is roughly equivalent to that of 70% of the world's passenger cars, or 420 million vehicles. Lighting itself accounts for about US\$19 billion (HK\$148 billion) in annual operating costs worldwide. Early trials of LED lighting are showing promising results, recording energy-use reductions of 50% to 70% when paired with smart controls. A rapid shift to LEDs has the potential to make a considerable dent in planetary carbon emissions.

LED outdoor luminaires have many advantages over conventional high pressure sodium (HPS), metal halide, and fluorescent lamps. LED chip efficiency has surpassed that of these lamps and is still improving quickly. LED luminaires can also direct more light on surfaces where it is most needed and the combination of smart controls and LEDs makes dimming easy, so energy isn't wasted at times when lighting is not really needed.

The Climate Group’s LightSavers program is aiming to transform how the world is lit by demonstrating the potential of LED lighting and smart controls, and by bringing them to scale globally. Other LightSavers cities currently include Adelaide, Guiyang, Hong Kong, Kolkata, London, Mumbai, New York, Tianjin and Toronto. Comparison of the technology across multiple sites and cities should advance the readiness and scalability of these technologies in the participating cities. The program will look into innovative financing solutions to enable significant amounts of capital to be raised to fund these solutions and overcome the barrier of initial capital costs.

“The LightSavers program is of strategic importance in advancing this key energy efficiency technology, and is in line with the HKSAR Government’s vision of developing a high-quality living area that prospers as part of a low carbon economy. In the long run, the program will facilitate broader uptake of LED outdoor lighting technologies, creating energy savings and reducing bills and carbon emissions”, said **Kalmond Ma, Head of Pearl River Delta Regional Program, The Climate Group.**

Mr Alfred Sit, Assistant Director, Electricity and Energy Efficiency of the Electrical and Mechanical Services Department, HKSAR Government sees the positivity of LED lighting. "LED is a fast developing lighting technology and the Government is pleased to see the implementation of LED outdoor lighting pilot projects in Hong Kong", said Mr Sit.

Mike Hudson, Director of the Facilities Management Office at HKUST, said, “The HKUST campus – one of the most beautiful in the world with breathtaking landscape and seascape – is also a green campus. Since its founding, about two decades ago, the University has adopted numerous policies and procedures conducive to environmental protection. This has resulted in significant energy savings and a reduction in the University’s carbon footprint. We are delighted that the newly installed LED lights will not only succeed in saving energy, but they will also made a nocturnal stroll on the seafront an environmental experience, although true romantics may just find them a little on the bright side.”

Dr Clement Wong, Senior Assistant Director, Estate Office of the University of Hong Kong (HKU) stated that HKU attaches great importance to sustainable development, with energy efficiency being one of the key focus areas. “Lighting amounts to about 17% of electricity consumption at HKU (more than 14 million kWh per year). At HKU, we have introduced various

energy saving lighting installations. These installations, together with the application of renewable energy and other initiatives, have resulted in a reduction of 100,000 tons of CO₂ emissions over the past 18 years, and a saving of \$166 million of electricity bill. As LED is one of the promising low carbon alternatives to the traditional lamps for outdoor lighting, HKU is glad to take part in the LightSavers program, and looks forward to sharing our experience with other participating organizations.”

Ricky Leung, General Manager, Technical Services of the Airport Authority Hong Kong said Hong Kong International Airport (HKIA) strives to achieve high environmental standards by minimizing pollution, using energy and other resources efficiently, recycling and reusing wherever possible. “Eight sets of outdoor LED lighting have been installed and tested at one of our car parks since January 2010. Those eight sets of LED lighting consume only half of the energy compared to existing lighting and it is estimated that about 2,500 kg of carbon emission can be reduced each year. HKIA always supports the use of LED lighting to reduce energy consumption. Over 1,000 LED lighting units have been installed at airport passenger terminals and office buildings. Carbon emission reduction will continue to be the airport’s environmental management focus,” he further added.

LightSavers is supported by the [HSBC Climate Partnership](#). The program aims to promote the deployment of more advanced technologies such as LED lighting and smart adaptive controls, and through implementing pilot projects, generate credible performance information on illumination, lumen durability, economics and public attitudes across multiple cities. Through the support of HSBC Climate Partnership, The Climate Group will accelerate its programs in a number of world cities, engaging the most influential businesses and city governments to lead a coalition of the willing against climate change. More information on LightSavers can be found at www.theclimategroup.org/lightsavers.

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Notes to Editors:

About The Climate Group

The Climate Group (www.theclimategroup.org) is an independent, not-for-profit organization working internationally with government and business leaders to advance smart policies and technologies to cut global emissions and accelerate a low carbon economy. Its global coalition of companies, states, regions and cities around the world recognize the economic and environmental imperatives of taking decisive action now. The Climate Group was founded in 2004 and has operations in Australia, China, Europe, India and North America.

The Climate Group is registered in Hong Kong as The Climate Group (Hong Kong) Limited, Charity Registration Number: 91/9162.

About LightSavers

LightSavers (www.theclimategroup.org/lightsavers) is the first international program to test how LEDs and smart controls perform in real world applications while working with its members to plan for scale up and to encourage LED friendly policies and financing products. Light-emitting diode (LED) lamps, combined with smart controls, can cut CO₂ emissions 50 to 70%. LED lighting also reduces costs, enhances public safety, minimizes light pollution and makes public spaces friendlier at night.

In LightSavers' first phase, The Climate Group is mounting a global trial of LED luminaires to produce credible, comparable data that helps remove the barriers to acceptance of the technology, such as concerns on performance, durability, energy savings, environmental benefits, and costs. Each pilot test will be conducted over a period of 12 months, covering all the seasonal variations in weather conditions. Parameters including illuminance level, uniformity of light, power consumption, and color temperature will be measured for both the baseline and LED luminaires.

The second phase of LightSavers will address these financial questions, the final barriers to significant scale-up worldwide. The Climate Group will work with financial institutes to explore innovative models to finance large-scale retrofits and new constructions, after trial results are available to help determine the payback, as well as pros and cons of the technology.

LightSavers is funded by the HSBC Climate Partnership.



About HSBC Climate Partnership

The HSBC Climate Partnership is a five-year partnership from 2007-2012 between HSBC and The Climate Group, Earthwatch Institute, Smithsonian Tropical Research Institute and WWF, to inspire action on climate change.

(<http://www.hsbc.com.hk/sustainability>)

Since 2007, we have been working around the world - with a focus on Brazil, China, India, the UK and USA - to:

- Reduce the carbon emissions of major cities
- Measure the effects of climate change on the world's forests
- Help prepare major rivers and waterways - and the millions of people who depend on them - for climate change
- Engage thousands of people in climate action and research, equipping them to act as 'climate champions' in their workplace and community
- Build HSBC employees' capability and commitment to sustainable business practice.