

CHENACT Presents:



Watts New- Bright Ideas #4 Energy Efficient Lighting

Watts New-Bright Ideas is a new series feature being sponsored by the CHTA based on the lessons learned from the CHENACT project. The Caribbean Hotel Energy Efficiency Action (CHENACT) project is designed to improve the competitiveness of small to medium sized hotels in the Caribbean through the introduction of energy efficiency and on-site renewable energy. In addition to the energy related cost savings at the property level, CHENACT will determine the potential for reducing greenhouse gas (GHG) emissions and imported oil at the national level associated with utility electricity generation.

Resulting from the detailed energy audit of a 34-room hotel in Barbados, the audit team identified 10 projects which would help reduce the hotel's annual electricity consumption by 29% or 181,585 kWh annually. In addition, these measures would reduce Carbon Dioxide (CO₂) emissions by 107 tons per year. At a cost of US\$157,781 the hotel will save US\$70,514 annually, with an overall payback period of 2.2 years.

Did you know ...

... that new technologies for lighting are more energy efficient and last longer than conventional options. Compact fluorescent lamps (CFLs) replace incandescent bulbs and light emitting diode (LED) tube lamps replace T-12 fluorescent tubes.

By replacing the 60W and 40W bulbs with 13W and 10W CFLs, the property would see a significant saving in their electricity bill. An initial investment of US\$1,085 will yield savings of over 18,585 kWh and US\$4,568 per year, a payback period of less than 3 months.



Compact Fluorescent Lamps



Light Emitting Diode tubes

Replacing the 40 W T12 fluorescent tube lamps with more efficient 15 W LED tubes is another attractive lighting retrofit. An initial investment of US\$3,774 will yield savings of 10,822 kWh and \$2,260 per year, a payback period of 1.4 years.

For more information please contact: Loreto Duffy-Mayers, Project Manager, CHENACT Project, Caribbean Hotel and Tourism Association, 4th Avenue, Belleville, St. Michael Barbados. Tel: 246-435-0847, Fax: 246-435-0845, E-mail: CHENACTProject@gmail.com