



DEPARTMENT OF ENVIRONMENT  
CAYMAN ISLANDS GOVERNMENT

# SDU News

## Sustainable Development Unit Newsletter

Issue 4 — Earth Week Review 2009



This Issue we review the Earth Week activities undertaken by the SDU for April 2009, get some info on sustainable goings-on in other Caribbean Overseas Territories and take a look at a newly built environmentally responsible development in West Bay.

### Earth Week Activities, 2009

#### “Go Green Cayman” event at Books & Books

The SDU was involved in lots of events during Earth Week, the first of which was a **children's presentation** on what we can do to make the Cayman Islands “Greener”, on April 16th at Books & Books in Camana Bay. Sophie Halford talked to the kids about **swapping incandescent light bulbs for the more energy efficient compact fluorescent light bulbs (CFL)**, and the importance of using **re-usable bags** instead of single use plastic bags to reduce waste. She also discussed simple ways in which they could lend a hand to **save energy at home**, which reduces electricity bills and helps the environment. Also at the Eco-event were Tammy Kelderman and Renata Kecskes from Walkers Global, who presented information on going green on-island from their **Cayman Eco Earth Day newsletter**. Cayman Eco is a non-profit organization based in the Cayman Islands whose mission is to **educate & motivate** people of all ages to **raise awareness on environmental issues**. For more info and a copy of the newsletter, go to [www.caymaneco.org](http://www.caymaneco.org). **Environmentally themed children's stories** were also read and the kids learned how to **re-use waste** by making some useful household items out of empty cereal boxes and milk cartons.

#### DOE staff scavenger hunt

This year's annual DOE staff event was an **environmentally themed scavenger hunt** around our office. With a lists in hand and a time limit, each team raced around the department counting lights, looking for **energy efficient**



Clinton does a serious job of aluminum can collection



Sophie explains the differences between an incandescent light bulb and an energy efficient CFL to the kids (top); Tammy and Renata from Walkers Global give a presentation on environmental issues in the Cayman Islands

**lighting** and **Energy Star®** equipment, collecting **aluminum cans** for recycling (it's amazing how many you can find when you have to!) and generally putting their environmental know-how to the test. The teams were also pitted against each other in a bonus round to see who could **empty the two rain barrels** installed for last year's Earth Day first, giving the **trees planted last year a good watering** in the process. The team with the most points won a Cayman Islands goody bag courtesy of the Department of Tourism, our partner on other sustainable development initiatives.



### Chamber of Commerce and Department of Environment “Green Generation” Fair

The DOE collaborated with the Chamber of Commerce in putting together a fair to showcase local companies that provide environmentally responsible products and services, held after the Chamber of Commerce Annual Earth Week Island Clean-up on 25th April. The aim of the fair was to promote the environmentally responsible alternatives to every-day products that are available on-island. An impressive array of companies participated, demonstrating how the “green” sector has grown here—there is more available than you might think. This was organized in line with the international theme for Earth Day 2009: the “Green Generation” which promotes responsible and sustainable consumption patterns, and the creation of “green” jobs and a “green” economy. Participating at the fair were:



HE The Governor Stuart Jack and Mrs. Mariko Jack helped clean up Public Beach and attended the fair afterwards.

**Mega Systems**, showcasing super energy efficient LED lighting; **Cayman Biofuels**, providing samples of their bio-fuel and bio-diesel mix made from used cooking oil; **ElectraTech**, showcasing solar photovoltaic cells, used to generate renewable electricity; **Island Supply**, demonstrating their “Green Solutions” line of biodegradable disposable plates, cups and more; **Home Gas**, providing

information on their propane-fuelled products; the **Central Caribbean Marine Institute**, providing copies of the second part of its [Green Guide to the Cayman Islands – “Climate Change and the Sea Around Us”](#); **DiveTech**, providing information on the construction of its new environmentally conscious dive center, Lighthouse Point; **Citrus Clean** showcasing biodegradable, environmentally safe cleaners and degreasers made with a citrus base d’limonene; **Pittsburgh Paint**, displaying its line of environmentally responsible paints, which contain no Volatile Organic Compounds (VOCs); **Pools By Us**, showing their solar reflective PoolSun Paint; **Robert Wood Lighting & Design**, displaying environmentally conscious household items and fixtures such as energy efficient lighting, flooring and linens made from environmentally responsible materials, e.g. cork, bamboo and super water efficient toilets with only 0.815



Sophie Halford and Janice Blumenthal distribute JNCC climate change educational materials and energy saving checklists in reusable canvas bags at the DOE-Chamber ‘Green Generation’ Fair.

gallons of water used per flush; **Cayman Automotive**, showing its model of electric car now available on-island, and **Hew’s Restaurant Supplies**, showcasing green janitorial products. Hews also supplied the Chamber with biodegradable plates made from sugar cane for their post-clean up brunch, as well as biodegradable rubbish bags for the clean-up itself.

The **Department of Environment** also took part in the fair, distributing leaflets from the Joint Nature Conservancy Committee (JNCC) climate change education packs, which were launched by the DOE on Earth Day and promoted throughout Earth Week. Designed to inform the general public, organizations and government on the issues surrounding climate change in the British Overseas Territories (OTs), the pack consists of four summary leaflets addressing the main issues and targeting specific interest groups, a DVD, two books and a PowerPoint presentation. The Cayman Islands feature throughout as the DOE had input on the production of the pack through the steering and editorial committee, and individual contributions.

In layman terms the leaflets speak about the science, evidence and causes of climate change, its potential impacts in the OTs, and the actions we can all take to adapt to these impacts and combat the causes of climate change. They also focus on the particular challenges facing the Overseas Territories in addressing and adapting to climate change, as the potential impacts are expected to pose risks that will be keenly felt by small islands such as the Cayman Islands. For example risks of greater storm surge, flooding events and storm damage to property, infrastructure and communities from rising sea levels and more intense tropical storms and hurricanes. The materials can be downloaded from <http://www.jncc.gov.uk/page-4362>

**Did you know?** Germany has the largest installed capacity of grid-connected solar photovoltaic electricity generation by country, 5.4GW at the end of 2008

Source: Ren21, Renewables Global Status Report 2009





## Business Bite: Sustainability at Lighthouse Point

DiveTech of Grand Cayman officially opened their new Lighthouse Point development in West Bay on June 27<sup>th</sup>, and with over 500 people attending the opening festivities, interest was high. Built with sustainability in mind, this development has an **array of environmentally responsible features** to reduce the environmental impact of the building and those who live in it.

Every area has been considered for effective environmental management - not only is the building's electricity needs met by **renewable energy technology**, but much of the construction materials are **reclaimed, recycled** or from **sustainable sources** and water use is kept to a minimum through **water reclamation and efficiency**. Nancy Easterbrook, owner of DiveTech, explained the original aim of the project was to build condos and a dive shop that would reduce DiveTech's impact on the marine environment, but it soon turned into much more. She feels they have done as much as they can to **achieve environmental and financial goals** using a combination of products and solutions that **reduce their environmental impact as far as possible**, as well as increase their self sufficiency and control over their costs. She is also happy to be making use of some of **Cayman's abundant indigenous energy resources**, such as sun and wind.

**Renewable Energy features:** Electricity at Lighthouse Point is provided by **15kW of solar photovoltaics** installed on the roof of the building, consisting of 10 arrays of solar modules with 4 days battery storage and a **1.5kW capacity Skystream wind turbine**. Both systems have monitoring software attached and Nancy explained that so far they have had days where these **capacity values have been exceeded**. Calculated with today's energy prices, they expect the solar and wind technology to **pay for themselves within 4 years**, and if oil prices rise again as predicted, this **payback period will be even shorter**. Solar powered lights have also been installed on the dock and are used for street lamps.

**Energy saving features:** Super efficient lighting has been installed throughout the development such as **Light Emitting Diode (LED) lights** and **Compact Fluorescent Lights (CFLs)** to cut electricity consumption, as well as Energy Star® rated equipment, **double pane windows**, and a highly efficient **Energy Star® rated SEER 16** air conditioning system. **Solar tubes** have also been installed for the windowless bathrooms, to provide natural light during the day which negates the need to use indoor lighting.



Rooftop solar array at Lighthouse Point

**Water conservation features:** **Gray water** from bathroom sinks and showers is filtered and **reused for toilet**

1.5kW Skystream wind turbine



**flushing**. This same water is then passed through a **state of the art sewage treatment facility** where it is filtered to such a high degree that the **waste water is plumbed through to sprinklers for landscaping purposes**. A **6,000 gallon cistern** for reclaiming rain water is also in place. The water is used in washing machines, outdoor hoses and in the dive operation's rinse tanks and outdoor showers. The toilets installed are extremely efficient, using only **0.8 gallons per flush**.

**Environmentally responsible materials & products:** Materials used in the construction were carefully selected by the Easterbrooks to minimize the associated environmental impact of their production and transport. Nancy explained she felt it was important to make their consumption of products as **sustainable and responsible as possible**. Interior woodwork for example was from a plantation of Forest Stewardship Council certified **fast growing and sustainable white pine** in the Southern US - there is no hardwood used in the development. In addition, the exterior stone is **recycled concrete**, the railings and balustrades are made of **recycled plastic bottles** and the decking of **recycled composite material**. All products and materials were **sourced as close to Cayman as possible**, if not on Cayman, in order to reduce the distance traveled.

**Waste management features:** **Recycling bins** for batteries, cans, glass and paper have been situated. The cans and batteries are collected by DEH and taken to the landfill, where the **cans are crushed and shipped to the US** to be recycled. Empty scuba tanks are also recycled in this fashion. Used **paper** is taken to the **Humane Society** and glass bottles are taken to the landfill to be crushed to reduce their volume. DiveTech also tries to be as sustainable as possible in their general operations, for example by using Flowers large water dispensers on boats and in their dive shop, which can be refilled, instead of single use small plastic bottles. A **reusable sports bottle** is also given to guests on arrival – Nancy estimates that they have used **9,000 less plastic bottles** through these actions since last year.

Lighthouse Point is an excellent example of **sustainable development in action** in all areas of operations for sustainable tourism and living. Finding the right alternatives took time and research, which Nancy is happy to share. Contact Nancy at [divetech@candw.ky](mailto:divetech@candw.ky).

[www.lighthouse-point-cayman.com](http://www.lighthouse-point-cayman.com)



## Environmental Assessment in the OCTs

SDU members Lisa-Ann Hurlston-McKenzie and Joni Kirkconnell, and Planning Department and Ministry of Tourism Environment, Investment & Commerce representatives traveled to Brussels to attend a two day workshop from 27-28 April. The subject of the workshop was the use of **Environmental Impact Assessments (EIA) and Strategic Environmental Assessments (SEA)** in making decisions regarding **development applications, national plans and policies** in the Overseas Countries & Territories (OCTs). This was the third workshop in the Sustainable Development series organized by the **Overseas Countries & Territories Association (OCTA) of the European Union**, the previous two having focused on Sustainable Energy Policies and Water Sanitation & Waste Management.

Nearly 50 delegates from 14 of the European OCTs were in attendance to hear EIA and SEA experts speak on the **importance of having EIA and SEA systems**, and provide an **overview of current systems** in place in the OCTs. Delegates learnt of the similarities and differences in their countries' approaches to implementing EIA and SEA processes and the efficacy of incorporation into **national planning processes** meant to facilitate sustainable development by creating frameworks for **addressing environmental issues within political decision making**. The experts offered recommendations for instituting or improving various systems in each OCT grouping and in break-out sessions delegates discussed how to ensure the right projects are assessed and EIA studies are of good quality.

### Overseas Territories Corner

#### Legislative progress in Anguilla



On the eve of Earth Day this year, the Government of Anguilla passed three landmark pieces of environmental legislation that will ensure meaningful integration of the environment in development practices in this Caribbean Overseas Territory.

The Anguilla National Trust Act 2009 and The Biodiversity and Heritage Conservation Act 2009 will enable the preservation of landscapes and seascapes, and the establishment of protected areas and parks pursuant to commitment 2 of its Environment Charter signed in 2001. The passing of the Trade and Endangered Species Act 2009 also meets commitment 6, the effective implementation of obligations under Multilateral Environmental Agreements such as the Convention on International Trade in Endangered Species (CITES).

A number of delegates presented **country case studies**, amongst whom was Lisa from the Cayman Islands, whose topic was **the EIA process as proposed in the draft National Conservation Law (NCL)**. If passed by the Legislative Assembly, this law would set provisions for environmental assessments, criteria for what triggers a full EIA, and the process to be followed in that event. Current **informal and nonobligatory** arrangements such as **consultation with and advice given by the DOE** on development proposals, plans and policies are among the **procedural reforms** addressed in the NCL. In all, the law would assist in **placing environmental considerations on an equal footing** with social and economic considerations in various approval processes.



Lisa gives a presentation on the EIA framework proposed in the Cayman Islands' draft National Conservation Law.

Recommendations suggested by delegates included **further networking** to continue sharing examples and good practices, regular annual or bi-annual meetings and **capacity building and training** of OCT officials dealing with EIA/SEA matters. The **establishment of legislation** was also identified as being key to the integration of EIA and SEA processes into the planning system in small islands.



Cayman Islands delegates at the workshop: Mr. Kenneth Ebanks, Director of Planning, Mrs. Joni Kirkconnell, Senior Sustainable Development Officer at the DOE, Mrs. Lisa Hurlston-McKenzie, Manager of the Sustainable Development Unit and Mr. Samuel Rose, Deputy Chief Officer for the Ministry of Tourism Environment Investment & Commerce.

For further information regarding the work being undertaken by the SDU, please contact us at [doe@gov.ky](mailto:doe@gov.ky) or by phone on 949-8469. You can also learn more about the DOE through our website [www.doe.ky](http://www.doe.ky)