



Introduction

On June 9, 2009, the Broward County Board of County Commissioners accepted the first [Broward County Government Operations Progress Report](#) that included actions Broward County government implemented during calendar year 2008 and progress towards achieving the County's greenhouse gas (GHG) emission reduction goal of 7 percent below 1997 levels by 2015. Early voluntary actions implemented by the County were included in the [Broward County Government Operations Climate Change Report](#).

This second annual progress report, developed by the Broward County Climate Change Government Operations Workgroup (Workgroup), describes the actions Broward County government implemented during fiscal year 2009, October 2008 through September 2009, and progress towards achieving the reduction goal. The Workgroup continues to identify and promote measures that support GHG reductions in government operations.

The newly released 2009 Clean Air and Climate Protection Software was used to calculate GHG emissions for this report. This resulted in updated emissions based on modifications that incorporated industry-based advanced technologies, cleaner fuels and engines, and recently adopted federal policies. For consistency, the new software was also used to recalculate previous inventories.

Greenhouse gases are expressed in carbon dioxide equivalents (eCO₂): 1 tonne of eCO₂ is equal to the emissions from the combustion of 112 gallons of gasoline.

Broward County's government operations 2009 carbon footprint is 256,227 tonnes of eCO₂. To meet the established 2015 target of 222,099 tonnes eCO₂, Broward County government operations must reduce an additional 34,128 tonnes eCO₂ from 2009 emissions levels

(Figure 1, page 2). This represents an annual reduction of 6,826 tonnes eCO₂, which is equivalent to emissions from the combustion of 767,829 gallons of gasoline.

During this reporting period, Broward County exceeded the annual reduction target with a reduction of 8,130 tonnes eCO₂ from 2008 levels.

2009 Highlights

In an effort to reduce its carbon footprint while increasing the efficiency of its operations, Broward County has implemented numerous measures in the past year. All these measures are included in the [Appendix, \(click here\)](#). The following are a few highlights:

- * **International Council for Local Environmental Initiatives (ICLEI) Milestone Award:** ICLEI recognized Broward County for its commitment to the Five Milestone Methodology in setting a reduction target and completing a GHG emissions inventory.



Left to right: Eli Yewdall and Cyrus Bhedwar, ICLEI; Maribel Feliciano, Broward County Pollution Prevention, Remediation and Air Quality Division; British Consul General Annabelle Malins; and Andrea Pinabell of the Home Depot Foundation.

- * **Personal Computer Replacement Energy Reduction:** Enterprise Technology Services replaced an estimated 1,500 County workstations last year. The efficiencies of new workstations are realized by reduced heat generation and electrical use resulting in an estimated reduction of 200 tonnes of eCO₂, equivalent to emissions from the electricity use of 24 homes for one year.

- * **Recycling:** County employees and facilities recycled over 1,211 tons of

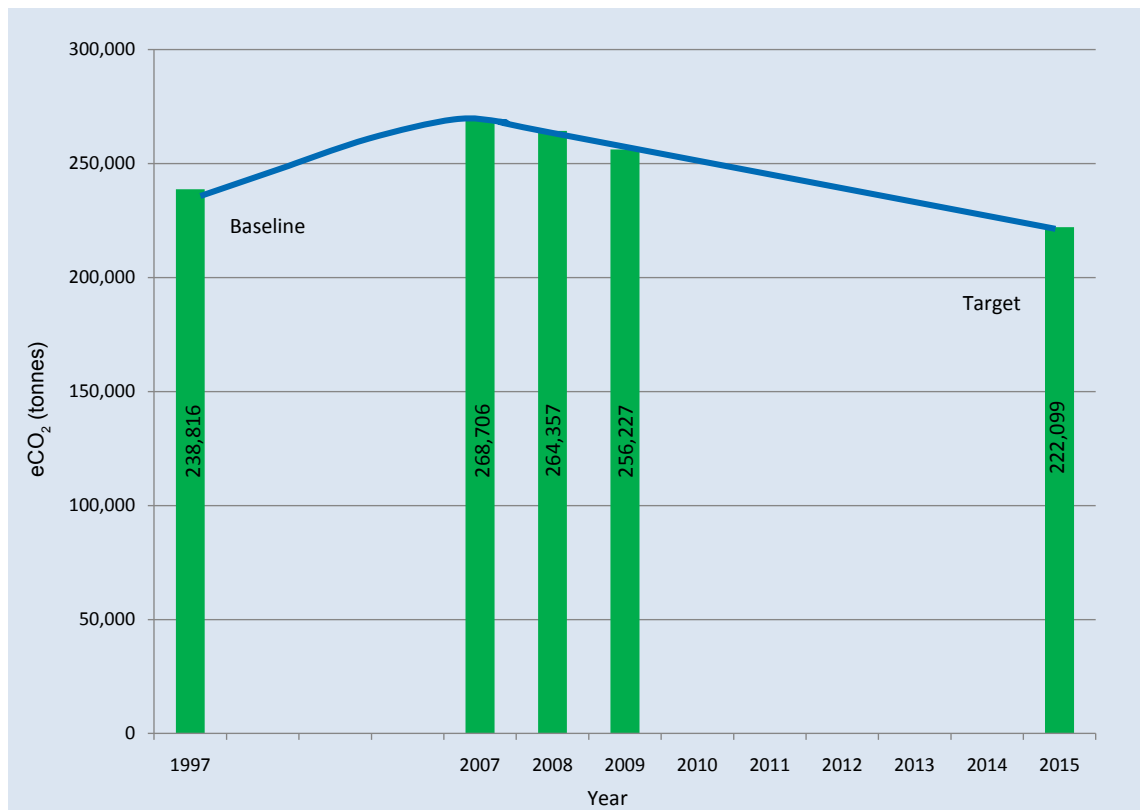
waste resulting in 3,802 tonnes of eCO₂ avoided. This is equivalent to the emissions from the combustion of 427,672 gallons of gasoline.

- * **South Regional Courthouse LEED-EB Certification Project:** Coordinated by the Facilities Maintenance Division. A GHG reduction of approximately 139 tonnes of eCO₂ per year is expected after the project is completed. This is equivalent to the emissions from the electricity use of 17 homes for one year.
- * **AgendaQuick:** The implementation of this system has streamlined the agenda preparation process for Broward County Commission meetings, thereby effectively eliminating the use of hundreds of pounds of office paper. Once implemented county-wide, the expected annual reductions are estimated to be more than 11,023 pounds of eCO₂, equivalent to the carbon sequestered by 128 tree seedlings grown for ten years.
- * **"Go Green" Education:** Broward County government agencies organized multiple outreach events to educate its employees and residents about ways to reduce their carbon footprint. In June 2009, Broward County Public Communications developed an educational video called ["Broward County...Our Green Government"](#). The video discusses the County's green initiatives.



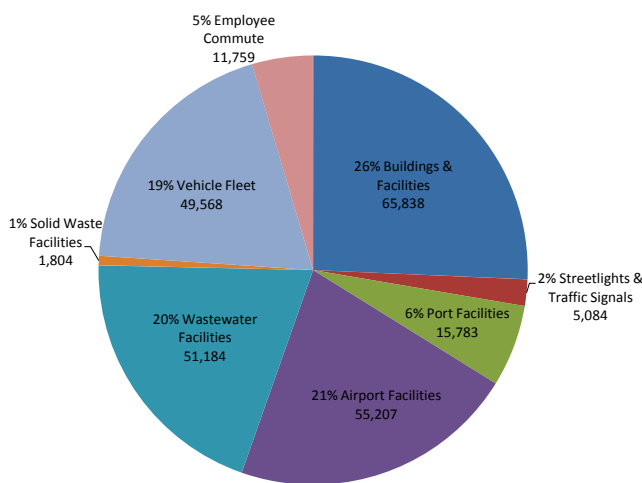
During the Go Green Employee Workshop, employees had the opportunity to see one of BCT's Hybrid-Electric Buses.

Figure 1: Broward County Government Operations GHG Emissions and Reduction Target



A Word on Greenhouse Gases

Human-produced GHG emissions, such as carbon dioxide and methane, are the primary cause of climate change. A key element of any GHG reduction program is the quantification of GHG emissions and reduction measures. The new ICLEI 2009 Clean Air Climate Protection software was used to calculate the GHG generated by energy use, fuel use, and solid waste. 2009 GHG emission results for government operations are below:



Broward County's government operations 2009 carbon footprint is 256,227 tonnes of eCO₂, a reduction of 8,130 tonnes eCO₂ from 2008. Over 75 percent of the emissions are from electricity use at Port Everglades, the Fort Lauderdale-Hollywood International Airport, Wastewater Services, and other county facilities.

Challenges to Meeting the Reduction Target

To meet the reduction target by 2015, Broward County government electricity use will have to decline by approximately 13 percent from 2009 levels (357,000,000 kWh). However, the County's energy demand is expected to increase substantially over the next few years, especially due to new projects and enhancements that will ultimately increase the square footage of County owned facilities including those at the Port and judicial center. Additional energy will also be necessary to accommodate new mandates for wastewater services. According to Facilities Maintenance Division, all agencies must continue to aggressively address and identify ways to reduce GHG emissions if we are to meet this challenge. If not, the trend currently being experienced could actually reverse as we get closer to the target year.

The [Broward County Climate Change Government Operations Workgroup](#) includes representatives from many county agencies that are organized into committees in the areas of buildings/ infrastructure, waste, transportation, natural systems, and policies. The Workgroup Steering Committee meets monthly to identify potential emission reduction actions, propose implementation of selected actions, and learn about their progress.

For questions or information call the [Pollution Prevention, Remediation and Air Quality Division](#) at 954-519-1260 or visit www.broward.org/gogreen.