



2011 APA Florida Conference

The Breakers, Palm Beach

The Green Element

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Principal

ILER PLANNING

Doral's Journey to a Green Future

- Mayor Juan Carlos Bermudez signs U.S. Mayors Climate Protection Agreement in 2006
- 2007: Annual Doral Eco-Fair initiated
- City prepares and adopts (double) award-winning “Green Master Plan” in 2008-09
- 2010:
 - * “Silver Certification Level” under the Green City Program sponsored by the Florida Green Building Coalition
 - * Preparation of the Green Element to its Comprehensive Plan
 - * LEED Silver certification for new City Hall Complex





City of Doral

GREEN MASTER PLAN

Green Design for a Sustainable Future

2009

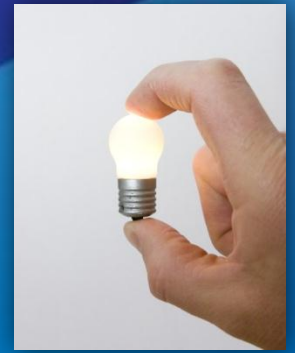
FAPA & FPZA
Award Winner

ILER
PLANNING

ADOPTED FEBRUARY, 2009

The Green Element

Doral's Green Master Plan



Guiding Principles

- #1: Reduce vehicle miles traveled
- #2: Strengthen landscape and open space standards
- #3: Create aggressive energy efficiency goals
- #4: Incentivize alternative urban energy sources
- #5: Interconnect the City's places
- #6: Conserve water
- #7: Recycle and reuse
- #8: Bring back community agriculture
- #9: Carbon neutral city government
- #10: Education and outreach



- * **Action-oriented**
- * **Leadership and direction from the top**
- * **Annual feedback and adjustments**

Doral's Comprehensive Plan

The Green Element

- **2 Components:**

- I. Goals, Objective and Policies
- II. Data, Inventory and Analysis



- **1st Element**



- **Green = Sustainability**



Green Element

Goals, Objectives and Policies

Goal: To conserve our natural resources, minimize greenhouse gas emissions, enhance community health and education, nurture city neighborhoods, and promote carbon neutral business growth thereby ensuring that a rich green community legacy will be entrusted to future generations of Doral residents.

Objective 1: Sustainable Land Use and Design

- “Green Points System” for development review
- Revise Code to incorporate sustainable practices
- Place higher densities/intensities near transit

Objective 2: Expand Mobility and Connectivity

- Traffic signal timing study with State and County
- Prepare a Bicycle and Pedestrian Plan
- Implement FDOT’s “ 12 Steps Towards Walkable Communities”
- Measures: New bike path miles and increased transit ridership



Green Element

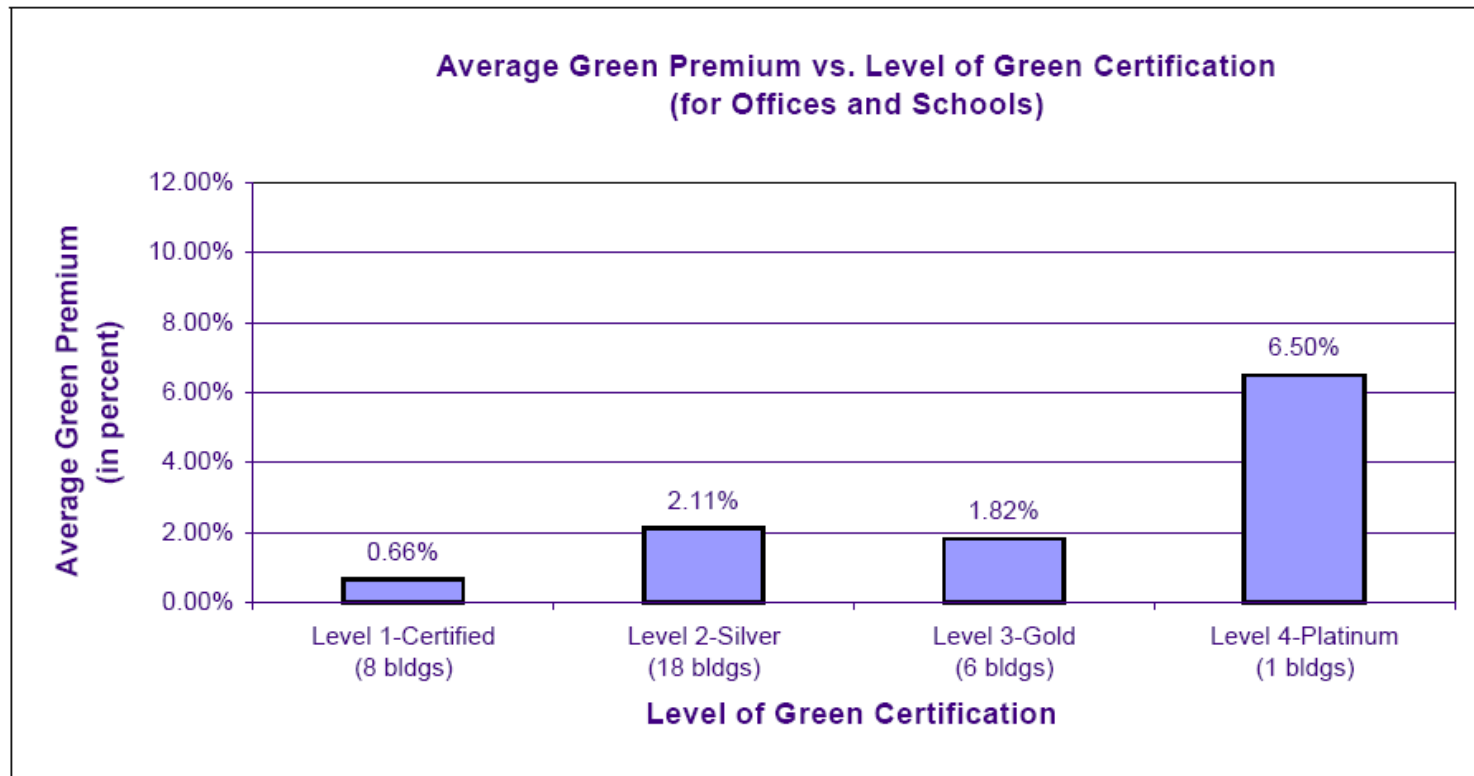
Goals, Objectives and Policies

Objective 3: Smart Buildings and Places

- Code \$ incentives for new/renovated buildings which attain LEED or other certification
- Solar orientation of homes and other buildings
- Measure: # of renewable energy systems installed



Figure III-2. Average Green Cost Premium vs. Level of Green Certification



Source: USGBC, Capital E Analysis

Financial Benefits of Green Buildings

Summary of Findings (per ft²)

Category	20-year Net Present Value
Energy Savings	\$5.80
Emissions Savings	\$1.20
Water Savings	\$0.50
Operations and Maintenance Savings	\$8.50
Productivity and Health Benefits	\$36.90 to \$55.30
Subtotal	\$52.90 to \$71.30
Average Extra Cost of Building Green	(-3.00 to -\$5.00)
Total 20-year Net Benefit	\$50 to \$65

Source: Capital E Analysis

Green Element GOPs

Objective 4: Enhance Natural Landscape and Open Space

- Preserve and enhance the City's tree canopy
- "Florida-Friendly" landscape code
- Sponsor annual tree give-a-way (2000 trees)



Objective 5: Conserve and Nurture Water Resources

- Reduce citywide per capita water use by 25% to 150 gallons by 2017
- Landscape irrigation systems with auto rain shut-off
- Maintain street sweeping program – 2,500 miles every 2 weeks



Green Element GOPs

Objective 6: Community Waste Recycling and Reuse

- Measure: Increase waste recycling by City government by 5%/year
- Increased citywide recycling bins
- Coordinate waste recycling program with business community



Objective 7: Green Capital Improvements

- Incorporate project sustainability criteria into Annual Budget process and 5-Year SCI
- Adopt LEED certification level for all future City buildings
- Build new City Hall to LEED Silver Standard

Objective 8: Community Learning and Outreach

- Use City website designate information on Doral's green programs and track progress
- Develop "Personal Mobility" website section for transit/carpooling info.
- Recognize "best" sustainable building at the Eco-Fair

Green Element GOPs



Objective 9: Promote Green Business and Job Growth

- Work with the Chamber to develop a strategic action plan for job growth
- Examine zoning and building regulations every 2 years for stream-lining

Objective 10: Lead by Example

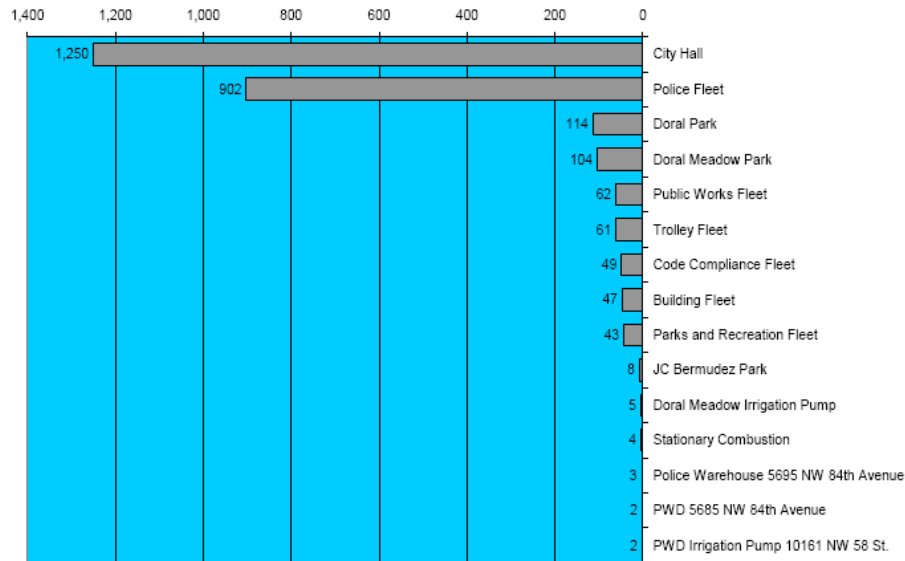
- Attain “Green City Certification” under FGBC at the “Silver” level or higher by 2012
- Designate and fund a “Sustainability Coordinator” position
- Implement an “Environmentally-preferred Purchasing Program”
- Monitor energy and water use



Green Element – Data, Inventory & Analysis

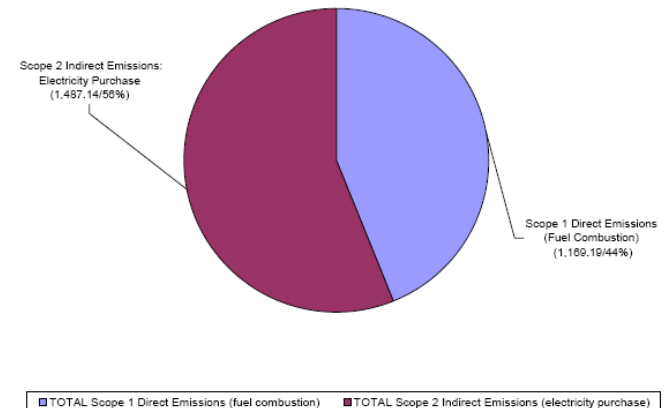
2008 Total Emissions by Source / Government Operation

(metric tons CO₂e)

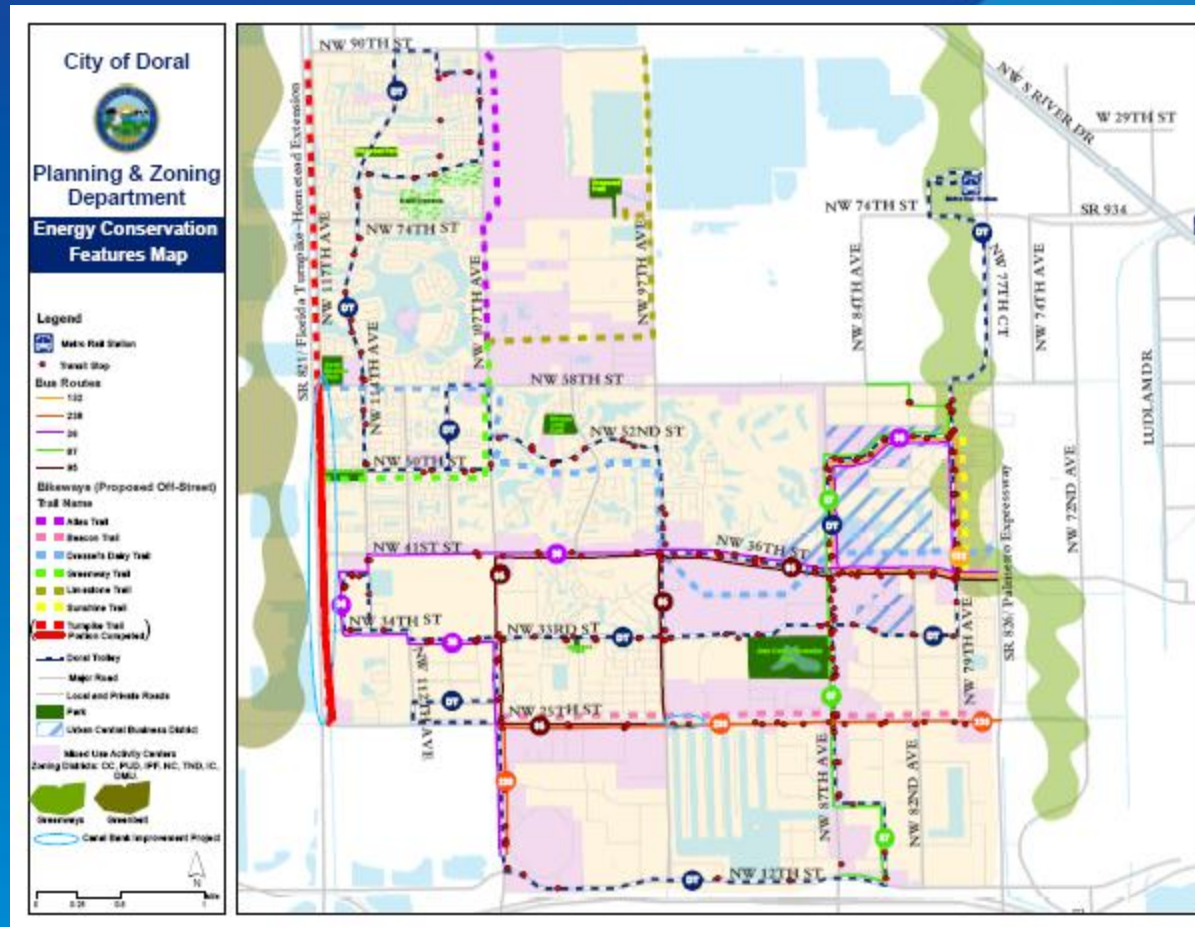


Total City Greenhouse Gas Emissions

Total Scope 1 and Scope 2 CO₂e Emissions (metric tons/%)
Total Emissions: 2,656 metric tons



Green Element – Data, Inventory & Analysis



Green Element – Data, Inventory & Analysis



Keys to Doral's Approach

- City mission = Sustainability
- Comprehensive
- Action-oriented
- Less emphasis on measurement and quantitative targets
- Also involves residents and businesses
- Coordination with Regional and State efforts



Effective Implementation

- Place program direction in Manager's Office
- Make Green Standards part of Annual Budget process
- Monitor accomplishments and savings
- Celebrate successes and give awards





Thank You!

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