# CITY OF DORAL

## Climate Action & Implementation Plan

## 2016

## PURPOSE

The City of Doral is working to further develop, implement and track sustainability goals and initiatives identified by the City's 2008 Green Master Plan and the 2011 Green Element. The following Climate Action & Implementation Plan serves to identify both short- and long-term sustainability projects that will reduce the City's Greenhouse Gas (GHG) and natural resources consumption through 2025.

## COMMUNITY BACKGROUND

The City of Doral, incorporated on June 24, 2003, is one of thirty-four municipalities in Miami-Dade County, Florida. Doral is home to approximately 50,213 residents and regularly hosts in excess of 100,000 people who work within the City. The City of Doral occupies a land area of 15 square miles bordered on the west by the Ronald Reagan Turnpike, to the north by the Town of Medley, to the east by the Palmetto Expressway and to the South by the City of Sweetwater.

The City of Doral offers a wide range of services through its departments including the Office of the City Manager, Office of the City Clerk, Finance Department, Community Development Department, Public Works Department, Parks and Recreation Department, and Police Department.

### CITY FACTS

**Size:**
15 square miles

**Population:**
54,116 (2016)

**Annual Budget:**
$72,744,849
(FY 2017)
$50,629,924
(FY 2013)

**Climate Zone:** 2

**Heating Degree Days since 2003:**
138

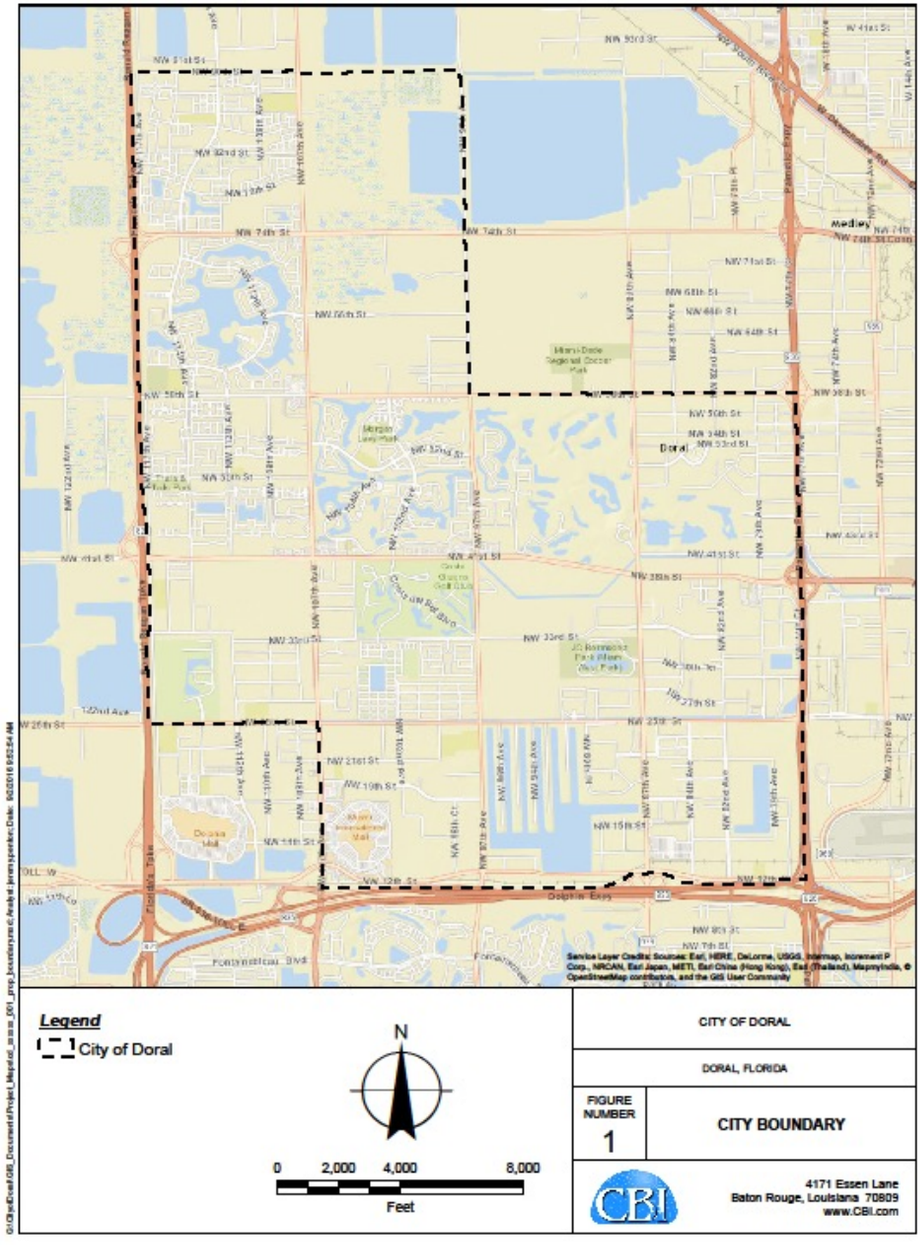
**Cooling Degree Days since 2003:**
4884

## SERVICES PROVIDED BY THE CITY OF DORAL

√ Public Works
√ Parks and Recreation
√ Doral Trolley
√ Police
√ City Administrative Services

## SERVICES PROVIDED TO THE CITY OF DORAL BY OTHER ENTITIES

√ Mass Transit – Buses
√ Fire and Emergency Medical Response
√ Solid Waste Collection and Disposal
√ Street Lighting and Traffic Signals
√ Wastewater Collection and Treatment (Miami-Dade Water & Sewer)
√ Schools – Doral is part of the Miami-Dade Public School system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City of Doral
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CITY OF DORAL
DORAL, FLORIDA
FIGURE NUMBER 1
CITY BOUNDARY
CBI
4171 Essen Lane
Baton Rouge, Louisiana 70809
www.CBI.com

The City selected operation control as the approach used to define the organizational boundary for the municipal operations GHG emission inventory. Under the Operational Control approach, an entity is required to report 100% of the emission sources that are wholly owned and/or under the control of the entity. Conversely, an entity is not required to report on those operations over which the entity has no operational or financial control.

The LGOP is a specific protocol developed to assist Cities in determining GHG emissions from municipal operations. The LGOP identifies ten government sectors that may be under the control of a City. The City of Doral staff reviewed the LGOP sectors to determine if they were applicable to the City operations and if they fell under the organizational boundary based on the operational control approach. Table 1 shows the analysis done to identify the government sectors that were applicable to City operations.

Operational Boundaries are required to separately account for direct and indirect greenhouse gas emissions, to improve transparency and to better define emission reductions objectives. The LGOP identifies three separate scopes that provide a comprehensive accounting framework for managing emissions. These scopes are defined as follows:

**a.Scope 1** emissions are direct GHG emissions from sources that are owned or controlled by the entity. Scope 1 can include emissions from fossil fuels burned on site, emissions from entity-owned or entity-leased vehicles, and other direct sources.

**b.Scope 2** emissions are indirect GHG emissions resulting from the generation of electricity, heating and cooling, or steam generated off site but purchased by the entity, and the transmission and distribution (T&D) losses associated with some purchased utilities (e.g., chilled water, steam, and high temperature hot water).

**c.Scope 3** emissions include indirect GHG emissions from sources not owned or directly controlled by the entity but related to the entity's activities, such as contracted solid waste disposal or wastewater treatment, leased space, outsourced activities, and site remediation activities.

**TABLE 1**

**LOCAL GOVERNMENT SECTORS IDENTIFIED IN LGOP**

| LGOP Sector | Sector Applicable Outside Organizational to GHG Inventory? | Inside Organizational Boundary? | Outside Organizational Boundary? |
|---|---|---|---|
| Buildings & Other Facilities | Yes | Yes | No |
| Parks & Recreation | Yes | Yes | No |
| Vehicle Fleet | Yes | Yes | No |
| Power Generation Facilities | No | -- | -- |
| Public Transit | Yes | No | Yes |
| Solid Waste Facilities | Yes | No | Yes |
| Water Delivery & Distribution | No | -- | -- |
| Wastewater Treatment | No | -- | -- |
| Streetlights | Yes | Yes | No |
| Traffic Signals | No | -- | -- |
| Ports | No | -- | -- |
| Airports | No | -- | -- |

Details regarding entities included in the GHG emissions analysis for each of the above defined scopes is provided in Table 2. The matrix provides information on type of energy, water or waste included for each of the listed buildings, facilities or parks.

**Scope 1** emissions are emitted directly to the environment from the emission source and include:

- Direct emissions from fuel combustion in the emergency generators located in City occupied buildings;
- Direct emissions from combustion in all vehicles owned and operated by the City;
- Direct emissions from combustion in on-road and off-road equipment;
- Fugitive emissions from air conditioning systems; and

**Scope 2** emissions result from the use of electricity in City owned buildings, parks and recreation areas, electricity pumps within irrigation facilities and miscellaneous lighting, such as streetlights. The City does not purchase steam, heat or chilled water – other potential sources of Scope 2 emissions.

**Scope 3** emissions include activities such as landfill gas emissions from solid waste generated by City operations. Emissions from the transport and land application of biosolids, employee commuting and public transit other than the Doral Trolley have not been included in this report.

**TABLE 2**

| | ELECTRICITY | NATURAL GAS | WATER | FUEL | WASTE |
|---|---|---|---|---|---|
| GOVERNMENT CENTER BUILDING | √ | √ | √ | √ | √ |
| POLICE DEPARTMENT BUILDING | √ | √ | √ | √ | √ |
| FLEET | √ | √ | √ | √ | √ |
| IRRIGATION SYSTEM FACILITIES | √ | √ | √ | √ | √ |
| STREETLIGHTS | √ | √ | √ | √ | √ |
| MORGAN LEVY PARK | √ | √ | √ | √ | √ |
| DORAL MEADOWS PARK | √ | √ | √ | √ | √ |
| JCB PARK | √ | √ | √ | √ | √ |
| DD PARK | √ | √ | √ | √ | √ |
| VETERANS PARK | √ | √ | √ | √ | √ |
| T&T PARK | √ | √ | √ | √ | √ |
| WAREHOUSE | √ | √ | √ | √ | √ |
| 8401 NW 53RD AVE (WATER SERVICE) | √ | √ | √ | √ | √ |
| 6100 NW 99TH AVE (FIRE HYDRANT & WATER) | √ | √ | √ | √ | √ |

## SUMMARY OF SUSTAINABILITY AND GHG RESULTS

The Sustainability and GHG inventories serve to provide baseline data to guide City planning and to identify practices and strategies that advance sustainability. The following section is a summary of the inventory results. **Table 3** provides the energy, natural gas, fuel and water consumption summary, as well as annual tons of waste disposal and recycling. Figures 2 and 3 provide an overview of 2013 and 2014 GHG emissions by scope, sector, department and type.

**TABLE 3**

**INVENTORY SUMMARY FOR 2013-2014**

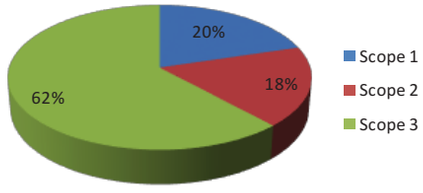
| METRIC | 2013 (BASELINE YEAR) | 2014 | TREND (2014 COMP. TO BASELINE) |
|---|---|---|---|
| Electricity (kWh) | 2,435,615 | 3,188,547 | +30.9% |
| Natural Gas (Therms) | 4,301 | 6,861 | +59.5% |
| Water (Gallons) | 4,471,492 | 6,882,348 | +53.9% |
| Fuel Gasoline (Gallons) | 133,333 | 164,151 | +23.1% |
| Fuel Biodiesel (Gallons) | 32,344 | 31,200 | -3.5% |
| Municipal Waste (Metric Tons) | 10,332 | 10,325 | -0.1% |
| Recycling (Metric Tons) | 288 | 294 | +2.1% |
| **GHG EMISSIONS (MTOF CO2e)** | **7,393** | **8,054** | **+8.9%** |

## FY2013 DORAL CITY GHG EXECUTIVE DASHBOARD

Greenhouse Gas (GHG) Emissions Inventory (*all figures presented in MT of CO2e)

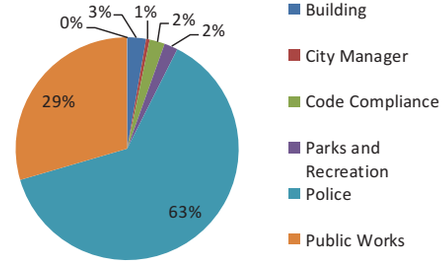
### GHG Emissions by Scope - MT of $CO_2e$

| | |
|---|---|
| Scope 1 | 1,499 |
| Scope 2 | 1,322 |
| Scope 3 | 4,571 |
| **Total (2013)** | **7,393** |



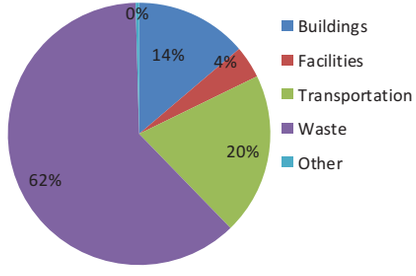

### Vehicle Fuel GHG Emissions - MT $CO_2e$

| | |
|---|---|
| Building | 40 |
| City Manager | 8 |
| Code Compliance | 33 |
| Parks and Recreation | 29 |
| Police | 931 |
| Public Works | 435 |
| Information technology | 1 |
| **Total (2013)** | **1,476** |



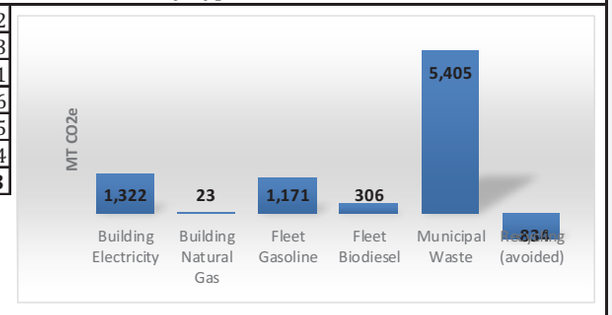

### GHG Emissions by Sector - MT of $CO_2e$

| | |
|---|---|
| Buildings | 1,019 |
| Facilities | 295 |
| Transportation | 1,476 |
| Waste | 4,571 |
| Other | 31 |
| **Total (2013)** | **7,393** |




### GHG Emissions by Type - MT CO2e

| | |
|---|---|
| Building Electricity | 1,322 |
| Building Natural Gas | 23 |
| Fleet Gasoline | 1,171 |
| Fleet Biodiesel | 306 |
| Municipal Waste | 5,405 |
| Recycling (avoided) | -834 |
| **Total (2013)** | **7,393** |

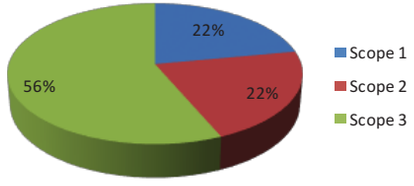



## FY2014 DORAL CITY GHG EXECUTIVE DASHBOARD

Greenhouse Gas (GHG) Emissions Inventory (*all figures presented in MT of CO2e)

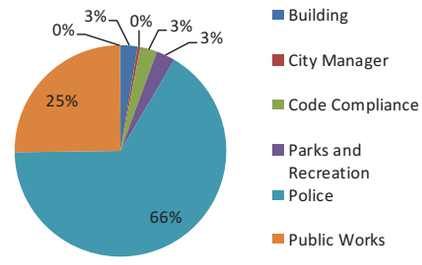
### GHG Emissions by Scope - MT of $CO_2e$

| | |
|---|---|
| Scope 1 | 1,775 |
| Scope 2 | 1,731 |
| Scope 3 | 4,548 |
| **Total (2014)** | **8,054** |



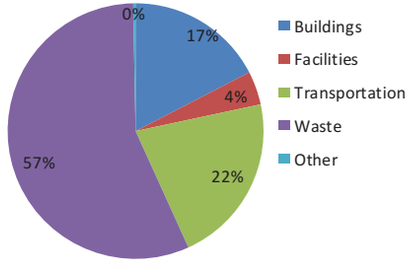

### Vehicle Fuel GHG Emissions - MT $CO_2e$

| | |
|---|---|
| Building | 45 |
| City Manager | 7 |
| Code Compliance | 45 |
| Parks and Recreation | 50 |
| Police | 1,152 |
| Public Works | 437 |
| Information technology | 1 |
| **Total (2014)** | **1,738** |



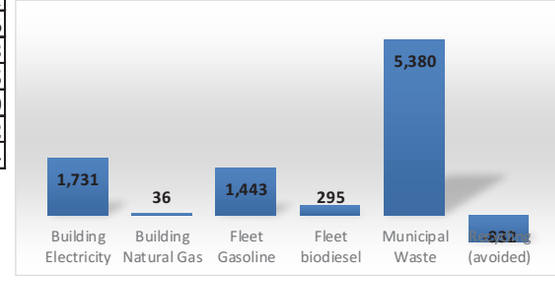

### GHG Emissions by Sector - MT of $CO_2e$

| | |
|---|---|
| Buildings | 1,402 |
| Facilities | 341 |
| Transportation | 1,738 |
| Waste | 4,548 |
| Other | 24 |
| **Total (2014)** | **8,054** |




### GHG Emissions by Type - MT CO2e

| | |
|---|---|
| Building Electricity | 1,731 |
| Building Natural Gas | 36 |
| Fleet Gasoline | 1,443 |
| Fleet biodiesel | 295 |
| Municipal Waste | 5,380 |
| Recycling (avoided) | -832 |
| **Total (2014)** | **8,054** |




## 2013 GHG EMISSIONS

The calculated GHG emissions for 2014 was in the amount of 8,054 tons of CO2e. Transportation derived emissions equal approximately 1,738 tCO2e (22%), municipal buildings 1,402 tCO2e (17%), waste equals 4,548 tCO2e (57%), facilities 341 tCO2e (4%), and lastly other operations such as street lights 24 tCO2e (less than 1%). The figures below provide a summary of the GHG emission findings. The City of Doral 2014 GHG emissions compared to the baseline increased by approximately 9%. It was determine that a small increase in GHG emissions was experienced in most sectors, with the most impact observed within the buildings utility sector.

## GHG EMISSIONS BY SCOPE - MT of CO2e

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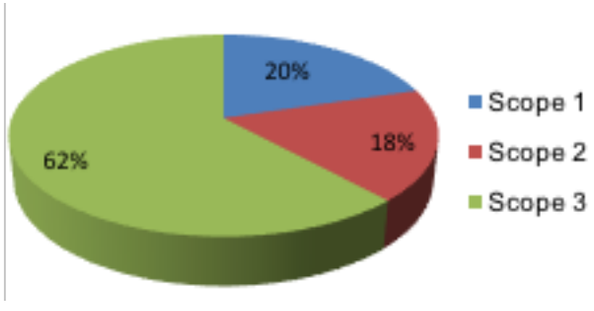


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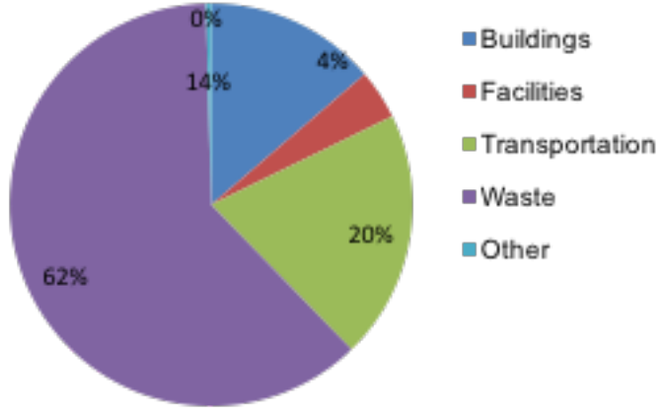


## 2014 GHG EMISSIONS

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## GHG EMISSIONS BY SCOPE - MT of CO2e

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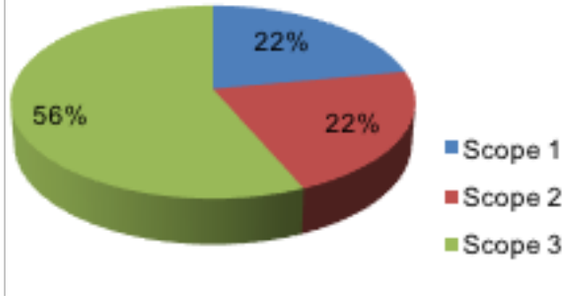


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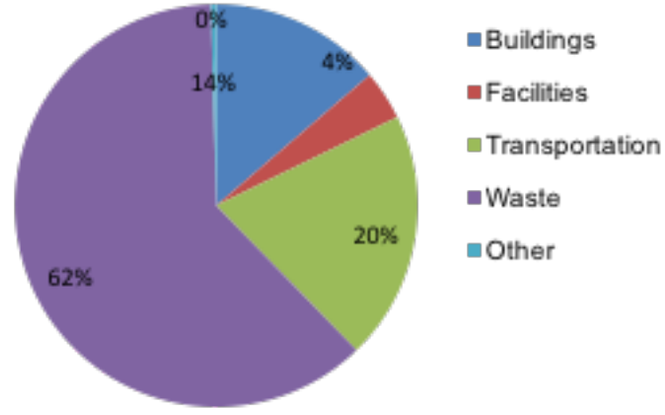



## COMPARISON TO OTHER CITIES

For comparison, **Table 4** provides several examples of GHG emissions for municipalities with 50,000 or less residents.

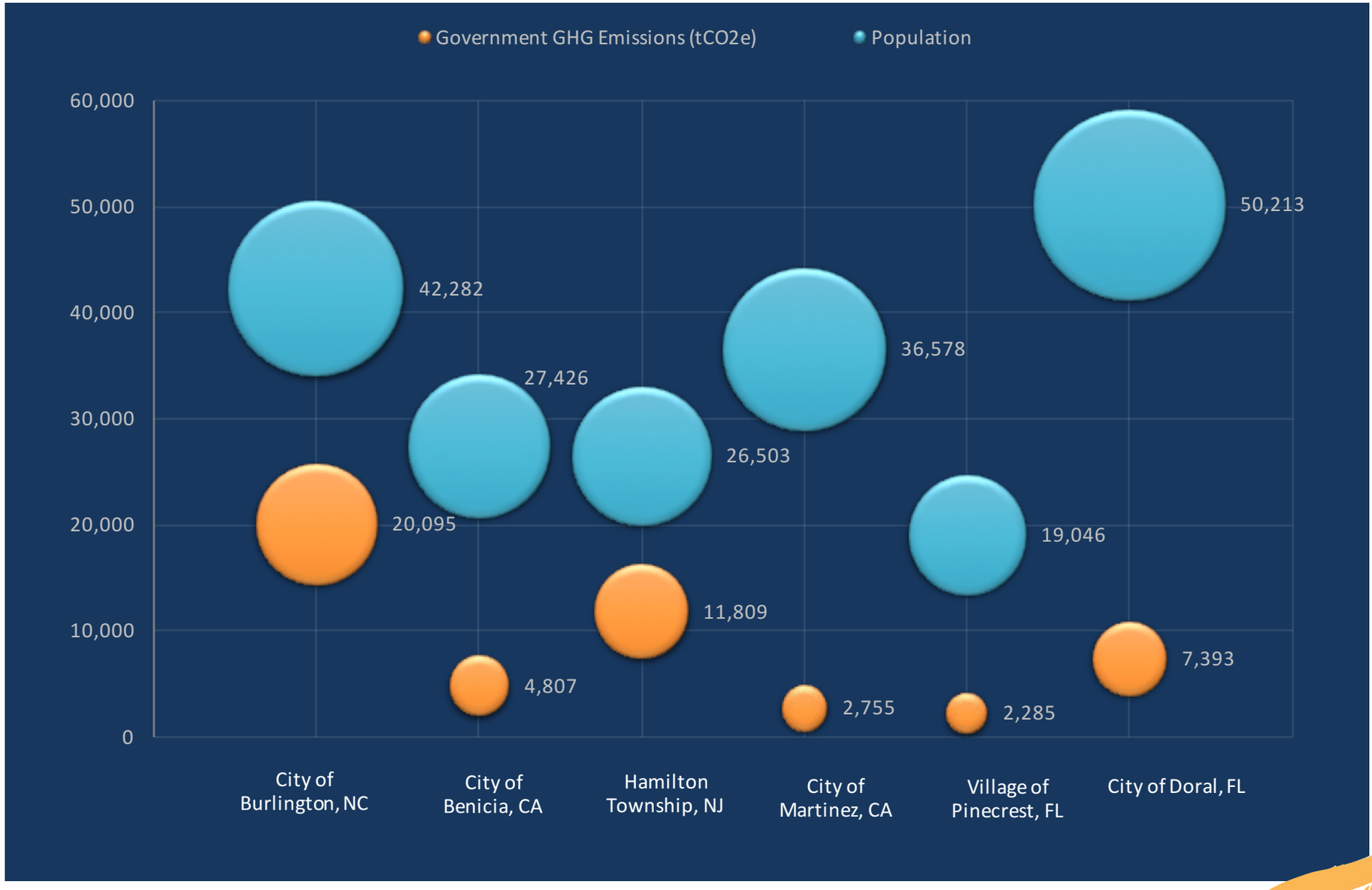
**TABLE 4**

**GHG EMISSIONS COMPARISON**

| | Population | Territory Size (mi2) | Government GHG Emissions (tCO2e) |
|---|---|---|---|
| CITY OF BURLINGTON, NC | 42,282 | 15 | 20,095 |
| CITY OF BENICIA, CA | 23,272 | 37 | 6,399 |
| HAMILTON TOWNSHIP, ATLANTIC COUNTY, NJ | 26,503 | 40 | 11,809 |
| CITY OF MARTINEZ, CA | 36,578 | 13 | 2,755 |
| VILLAGE OF PINECREST, FL | 19,046 | 7.5 | 2,285 |
| CITY OF DORAL, FL | 50,213 | 15 | 7,393 |

As seen in Figure 4, the City of Doral GHG government emissions can be considered as average compared to other municipalities of similar size. For example, the City of Martinez and City of Benicia, CA appear to have higher performances looking at the population size versus GHG government emissions, while the City of Burlington, NC or Hamilton Township, NJ appear to have higher GHG emissions derived from government operations in comparison with the City of Doral. Differences can be attributed to sustainability programs implemented by each community.

**Figure 4: GHG Emissions Comparison**



## SUSTAINABILITY AND GHG REDUCTION TARGETS

The City of Doral is a growing community and its population has grown approximately 3.7% per year from 2010-2014 . It is expected that this growth will increase to approximately 5% in the next several years and will result in increased GHG emissions due to waste and transport. If no action is taken for GHG reduction (i.e. under business as usual or BAU case), estimated GHG emissions in 2025 will be approximately 10.839 mtCO2e, an increase of approximately 46.6%.

In 2007, the State of Florida established greenhouse gas emissions reduction goals with Executive Order 07-126, which sets near-term GHG goals for state agencies at a 10 percent reduction from 2007 levels by 2012, 25 percent by 2017, and 40 percent by 2025.

A realistic goal for the City of Doral is to start with a 10% reduction of GHG emission over BAU (i.e. considering the growth in the City) in CY 2017 and achieve 21% reduction over BAU by 2020 and ~25% reduction over BAU by 2025. In real terms, this reduction plan will represent approximately 1,818 mtCO2e reduction in 2020 and 3,035 mTCO2e reduction by 2025, based on most recent population data and growth estimates.. Table 5 and Figure 5 show the year by year projected GHG emissions for BAU case and the reduction plan.

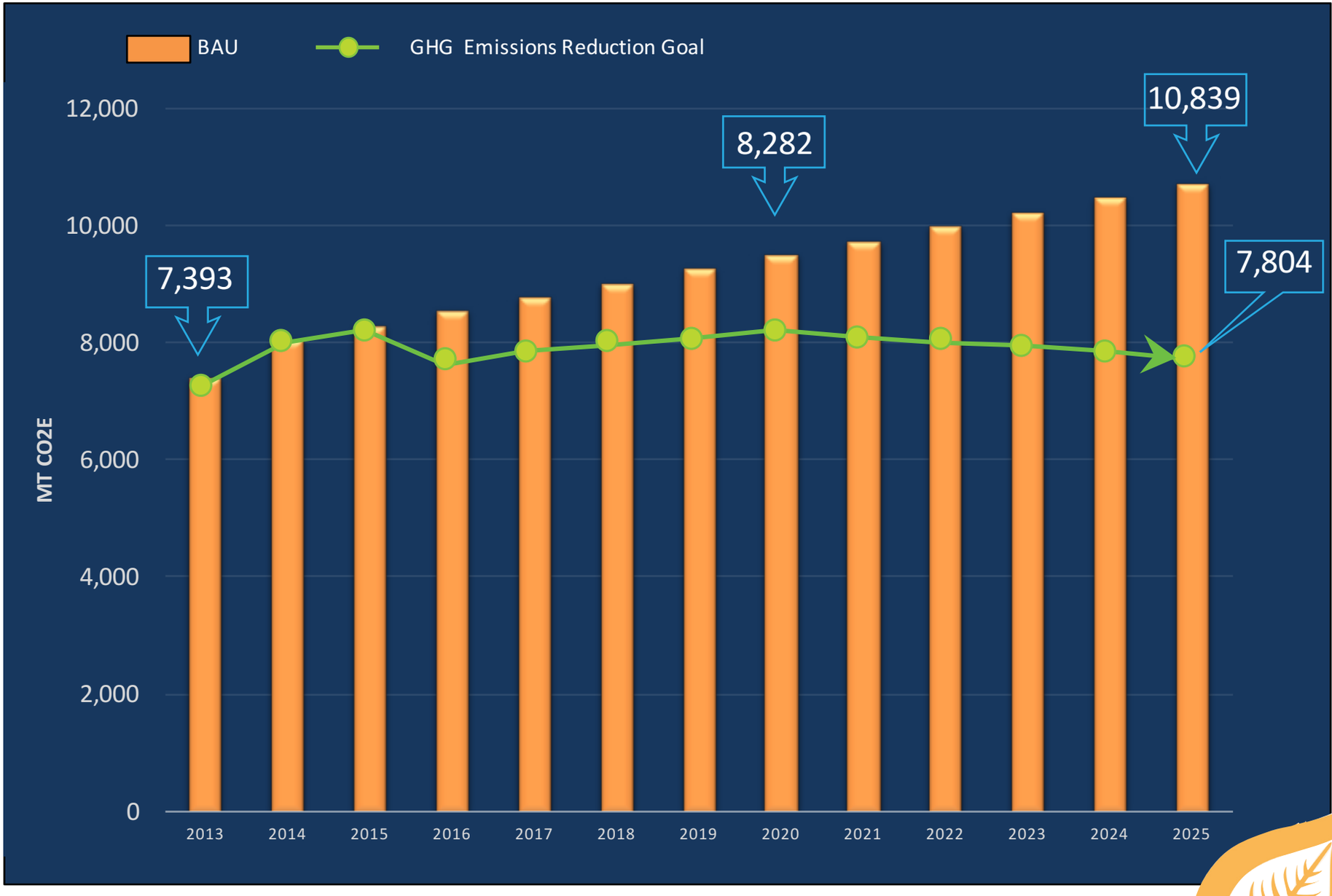
**TABLE 5**

**GHG EMISSIONS REDUCTION GOAL BY 2025**

| CY | Business as Usual (BAU) (mTCO2e) | GHG Emissions Reduc-tion Goal (mTCO2e) | Reduction Over BAU (%) | Annual Reduction (%) |
|---|---|---|---|---|
| 2013 | 7,392 | 7,393 | 0% | 0% |
| 2014 | 8,053 | 8,053 | 0% | 0% |
| 2015 | 8,285 | 8,285 | 0% | 0% |
| 2016 | 8,613 | 7,752 | 10% | 10% |
| 2017 | 8,985 | 7,906 | 12% | 2% |
| 2018 | 9,356 | 8,046 | 14% | 2% |
| 2019 | 9,728 | 8,172 | 16% | 2% |
| 2020 | 10,100 | 8,282 | 18% | 2% |
| 2021 | 10,233 | 8,187 | 20% | 2% |
| 2022 | 10,374 | 8,091 | 22% | 2% |
| 2023 | 10,521 | 7,996 | 24% | 2% |
| 2024 | 10,676 | 7,900 | 26% | 2% |
| 2025 | 10,839 | 7,804 | 28% | 2% |

http://www.census.gov/quickfacts/table/PST120215/1217935

**Figure 5- Annual Projected GHG Reduction Over BAU**



In addition, the City's Green Master Plan identifies sustainability policies and guidelines with the following categories:

- Sustainable land use and design
- Expand mobility and connectivity
- Smart buildings and places
- Natural open space and landscape
- Healthy water resources
- Waste recycling and reuse
- Green capital improvements
- Community learning and outreach
- Green business and job growth
- Leading by example

Several of these policies address energy and water monitoring and reporting, fuel reduction, increased recycling. These programs and initiatives will lead to both government operations as well as city-wide GHG emissions reductions.

Based on the Green Master Plan, the City developed a Sustainability Matrix that tracks programs and initiatives to-date and provides a reporting and tracking framework for future projects. The Matrix is provided in Appendix A. These projects were cross-referenced with the goals of the City's Green Master Plan to complement the City's GHG reduction goals. Through this analysis, it was determined that the City of Doral should focus on a number of GHG reduction initiatives in three main areas: 1) building electricity consumption (city hall and police); 2) transportation and 3) waste. These target actions have been identified in the Project Implementation Plan listed in Table 6. The plan identifies projects, timeframes, and metrics to help the city achieve their GHG emission goals.

## Table A- Project Implementation Plan

| Department | Project | Actions | Time Frame | Policy | Sustainability | Energy | Resiliency | Economic | Social | Metrics |
|---|---|---|---|---|---|---|---|---|---|---|
| **Certifications & Assessments** | | | | | | | | | | |
| Public Works | FGBC recertification | Implement a work plan for certification. Pursue silver certification for local governments. | 1-2 months (work plan) 8-12 months recertification | 1.10.1 | ✓ | ✓ | ✓ | ✓ | ✓ | Certification achieved (yes/no) |
| Public Works | Vulnerability Assessment/ Scenario Planning | Conduct a risk and vulnerability assessment addressing, environmental, social, and economic shocks and stressors | 10-12 months | 1.10.4 | ✓ | ✓ | ✓ | ✓ | ✓ | Risks & mitigation measures identified |
| All Departments | LEED Certification for all new facilities | Certify all new construction to meet LEED green building standards; (Legacy Park, Police Substation, PD/PW Building or Facility Expansion) | On-going | 1.7.2 | ✓ | ✓ | ✓ | ✓ | ✓ | Certification level |
| **Transportation** | | | | | | | | | | |
| Public Work | Bike share program | Implement a bike share program city-wide based on the 2014 feasibility study | 6-9 months | 1.2.8 | ✓ | | | | ✓ | # of bikes provided<br># of bikes used per year |
| All Departments | Hybrid/Electric Car Replacement Program | Price contract options for electric car fleets | 6 -9 months | 1.10.8 | ✓ | ✓ | | ✓ | | Reduction in fuel consumption per year |
| | | Phase out gasoline cars with hybrid/electric cars (dependent on previous contract end) | 12+ months | | | | | | | # of electric cars in the fleet |
| Public Works | Trolley Ridership Marketing Project | Continue to market and incentivize public transportation ridership | on-going | 1.2.2 | ✓ | ✓ | | ✓ | ✓ | # of riders on the Doral Trolley per quarter |

| Department | Project | Actions | Time Frame | Policy | Sustainability | Energy | Resiliency | Economic | Social | Metrics |
|---|---|---|---|---|---|---|---|---|---|---|
| Public Works | Electric vehicle charging stations | Conduct a feasibility study to install additional electric vehicle charging stations on public places | 12+ months | 1.10.8 | ✓ | ✓ | ✓ | | | # of charging stations in the city |
| Public Works | Bike rack installation program | Require all commercial, industrial and multi-family developments to have adequate and secure bike racks. (Ord. #2016-05; Sec 86-83) | 2-3 months | 1.2.7 | ✓ | | | | ✓ | # of secure bike rakes installed per year |
| **Energy** | | | | | | | | | | |
| Public Work | Solar & Energy Storage feasibility program | Conduct a feasibility assessment for the use of solar and/or energy storage for critical facilities (EOC/City Hall) | 10-12 months | 1.3.2 | ✓ | ✓ | ✓ | | | % energy from renewables |
| Public Works) | Energy Audits/Retro Commissioning | Evaluate potential incentives to assist existing buildings in the City to upgrade high energy usage systems like air-conditioning and water heating to energy efficient units with high Energy Star or other recognized ratings. | 10-12 months | 1.3.4 | | ✓ | ✓ | ✓ | | # of projects and buildings<br>Decreased % in electricity consumption |
| Public Works | Home & Business Energy Savers program | Continue to promote efficiency programs to help homeowners and businesses make existing building shells more energy-efficient through better insulation, sealing cracks and replacement of windows. | 10-12 months | 1.3.4 | | ✓ | | ✓ | ✓ | # of homes/business participating in FPL EE programs |

| Department | Project | Actions | Time Frame | Policy | Sustainability | Energy | Resiliency | Economic | Social | Metrics |
|---|---|---|---|---|---|---|---|---|---|---|
| Public Works | Green Power Purchasing | Evaluate opportunities to purchase green power to reduce scope 2 emissions | 3-4 months | 1.1.3 | ✓ | ✓ | | | | % power purchased |
| Public Works | Lighting Retrofit (indoor) | Check with local utility for LED light bulb incentives | 3-4 months | 1.10.3 | | | | | | |
| | | Determine number and type of lights that require replacement by floor or room in the circumstance that lights need to be replaced as needed | 10-12 months | 1.10.3 | | ✓ | ✓ | ✓ | | # of lights identified for replacement |
| | | Replace lights for low consuming bulbs | 10-12 months | 1.10.3 | | | | | | Decreased % in electricity consumption |
| Parks Department & Public Works | Lighting Retrofit (outdoor) | Look into energy efficient outdoor lighting options that are available (metal halide vs. LED) | 4-6 weeks | 1.10.3 | | | | | | |
| | | Determine number and type of lights that require replacement by park or street | 4-6 weeks | 1.10.3 | | ✓ | ✓ | ✓ | | Decreased % in electricity consumption |
| | | Implement a light replacement program | 5-7 months | 1.10.3 | | | | | | |
| **Healthy Communities** | | | | | | | | | | |
| Parks Department | Increase community gardens | Identify locations for 1-2 new community gardens (Doral Glades Park, 2017) | 12+ months | 1.10.6 | ✓ | | | | ✓ | # of new community gardens installed |
| Parks Department | Conduct a Tree Inventory | Update the city's tree inventory in support of their Tree City USA certification | 6-9 months | | ✓ | | ✓ | | | Conducted (yes/no) |

| Department | Project | Actions | Time Frame | Policy | Sustainability | Energy | Resiliency | Economic | Social | Metrics |
|---|---|---|---|---|---|---|---|---|---|---|
| Parks Department | Expansion of "Get Fit Doral Program" | Expand the "Get Fit Doral Program" to include program elements from "Healthy Communities" Program | 12-24 months | 1.10.6 | ✓ | | | ✓ | ✓ | # of participants |
| Parks Department | Local farmers market | Review opportunities to increase local farmers markets | 12+ months | 1.1.8 | ✓ | | | ✓ | ✓ | # of markets coordinated per year |
| Public Works | Odor Monitoring | Continue to conduct odor monitoring to improve air quality | On-going | 1.6 and 1.10 | ✓ | | | | ✓ | # of complaints per year |
| **Water** | | | | | | | | | | |
| Public Works | Green ROW and Alleyways program | Review current assets, future needs and trends and implement Low Impact Development (LID) practices per City Ordinance | on-going | 1.4; 1.8.4 | ✓ | | ✓ | ✓ | | # and type of LID Projects, broken down by residential, business and municipal |
| | | Review facilities that would benefit from rainwater harvesting for irrigation | 6-12 months | 1.5.2 | ✓ | ✓ | ✓ | | | % reduction in water use/irrigation cost |
| Public Works | Retrofit municipal water facilities | Conduct water audits of municipal facilitates to find opportunities to reduce water consumption | on-going | 1.10.3 | ✓ | ✓ | | | | % reduction in consumption |
| **Waste Minimization** | | | | | | | | | | |
| Public Works | Waste Minimization | Implement a strategy to increase programs and reduce waste streams | 6-12 months | 1.6.3 | ✓ | | ✓ | ✓ | ✓ | Strategy developed (yes/no) |

| Department | Project | Actions | Time Frame | Policy | Sustainability | Energy | Resiliency | Economic | Social | Metrics |
|---|---|---|---|---|---|---|---|---|---|---|
| Public Works | Composting Program | Create a city-wide composting pilot program for residents | 6-12 months | 1.6.3 | ✓ | | ✓ | | ✓ | % waste diverted from landfill |
| Planning | Ordinance for banning the use of plastic bags | Review opportunity to develop an ordinance to ban the use of plastic bags within City limits | 12+ months | 1.6.3 | ✓ | | ✓ | ✓ | ✓ | Adopted (yes/no) |

# APPENDIX A

| | Policy Number | Policy Description | Activities to-date | Value Measured | Through 2015 |
|---|---|---|---|---|---|
| Sustainable Land Use and Design | **Policy 1.1.1** | Continue to provide for, and promote, viable mixed use development opportunities in downtown Doral and outlying traditional neighborhood centers on the City‟s Future Land Use and Zoning Maps. | This is in effect through the implementation of the MUC and carried out by Comprehensive and through the process of site plan approval and the master development agreements for the Downtown Doral. | # of projects implemented | |
| | **Policy 1.1.2** | Complete the comprehensive revision of the City's LDC to incorporate green polices regulation and standards for all types of development approvals. | Green Element<br>Ordinance Ordinance No. 11-15 | # of additional policies adopted | 2 |
| | **Policy 1.1.3** | If the data is available, by July 2016, develop a system of “Community Sustainability Indicators” to measure Doral's progress in maximizing energy efficiency, reducing greenhouse gas emissions and increasing resource conservation. Measure the indicators and report the results in the Annual Budget each year starting in 2016. | Green Element and sustainability project (baseline 2013 and 2014) | Measured every 3 years (yes/no)<br>% GHG reduction per Year<br>Develop sustainability goals per year (yes/no)<br># of goals achieved per year | |
| | **Policy 1.1.4** | Where appropriate, place higher densities in close proximity to transit stops. By January 2015, complete a study with recommended actions of land use and zoning densities near transit access points in Doral measuring them against a minimum transit viability density standard of 7 units per acre. | Complete Mobility Study; pedestrian, bike, public transportation<br>(prepared in 2014; presented to council in oct 2015 for implementation) Corondino Group<br>Transportation Master Plan (update in 2015- every 5 years)<br><br>**FY2016** the City will conduct a corridor study of Doral Blvd. to identify appropriate land use and zoning that would allow to increase density adjacent to transit stops. The City will also evaluate the use of transit oriented development near the County’s proposed East-West corridor. | Land Use and Zonig Density Study completed (yes/no) | pending for 2016 |
| | **Policy 1.1.5** | Search for evolving opportunities in the Future Land Use Element (FLUE) and LDC for additional cluster residential development and energy-efficient, multi-story homes on smaller lots. | | implemented (yes/no) | |
| | **Policy 1.1.6** | By January 2014, consider an ordinance to expand options for accessory live/work spaces in appropriate land use categories and zoning districts. | | adopted (yes/no) | |
| | **Policy 1.1.7** | For mixed use and commercial areas, ensure flexible regulations are in place to increase appropriate sidewalk commerce like street vendors, sidewalk dining and walk-up windows. | These regulations are incorporated in our Community Mix Use and our Downtown Mix Use. | # of street vendors;<br># sidewalk windows;<br># walk up windows | |
| | **Policy 1.1.8** | Continue to allow multi-vendor farmers markets in commercial areas and remove any unnecessary zoning barriers to sale of local farm produce by street vendor‟s downtown and in selected mixed use locations. | Farmer’s Markets (FM): the ordinance was revised to provide for a more comprehensive process to permit FM in the City. Currently, the City has two approved FM operating within our boundaries. | # of farmer's markets within the city | 2 |
| | **Policy 1.1.9** | Ensure that solar facilities, rain collection systems and small wind turbines for homes and other buildings in appropriate locations are permitted and can be sited under City zoning regulations without undue delay. Review side/rear yard setback and height requirements in all zoning districts and determine ways these renewable facilities can be installed with the least impact on neighbors. | | # of renewable projects and rain collection systems installed wihtin the City | |
| | **Policy 1.2.1** | To the greatest extent possible, implement the road and multi-modal capital projects contained in the CIE 5-Year Schedule of Capital Improvements herein. | Implemented by CIP | # of projects implemented | |
| | **Policy 1.2.2** | Work with MDTA and MPO to increase transit service. Expand the Doral Trolley Circulator System according to ridership needs, future growth and coordination with the County transit system. | ridership numbers from 2013- 2015 (Trolley performance report) | # of riders per year<br>% increase per year | |

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| Expand Mobility and Connectivity | **Policy 1.2.3** | Work with FDOT and MDC Public Works to prepare a study of the traffic signalization system in Doral including comprehensive signal timing recommendations to optimize traffic flows and reduce congestion and energy usage. Also, work with MDC Public Works on a replacement program for all older incandescent signals and streetlights in Doral with LED or other types of low energy light sources. | in discussion 2015 (Rita carbonel- transit manager); target date 2016-2017 | Traffic Signalization implemented (yes/no) | |
| | **Policy 1.2.4** | Incorporate criteria into the LDC requiring multi-modal connectivity to the adjacent and areawide mobility system for all new or amended development projects. | This Policy is promoted thru Development agreements with the developers. | # of projects implemented | |
| | **Policy 1.2.5** | Officially appoint a Bicycle and Pedestrian Coordinator on staff to monitor the implementation of the Bicycle and Pedestrian Master Plan for the City. | appointed 2014 | Appointed (yes/No) | Yes |
| | **Policy 1.2.6** | Continue to give high priority in the Capital Improvements Element and annual City Budget to the construction of bicycle paths and supporting facilities recommended in the approved Parks Master Plan. | Bikeway Network Master Plan<br>Resolution 07-01 | # of bike paths<br># of outreach programs | 22 miles out of 36.5 miles approved |
| | **Policy 1.2.7** | By July 2014, review LDC standards to ensure bicycle and pedestrian facilities are fully integrated into each project, and interconnected with adjacent and area bikeways and sidewalks. Require all commercial, industrial and multi-family developments to have adequate and secure bike racks. | Reviewed by planning and zoning departments | Policy Adopted/ Implemented (yes/no) | |
| | **Policy 1.2.8** | By July 2014, implement the principles of FDOT‟s "12 Steps Towards Walkable Communities" and "Healthy Street Design" into the City‟s Land Development Code (LDC), 5-Year Capital Improvement Program and development review criteria. | This policy is under review as part of the update of the City's Comprehensive Plan. | Incorporated (yes/no) | No |
| | **Policy 1.2.9** | Review the City‟s local road system to identify local half-section and quarter section line road corridors that are currently discontinuous, but could be connected in the future. By 2014, develop a prioritized program to fill in gaps in discontinuous local road corridors. | Based on Transportation Master Plan-- several location to connection corridors; in progress | Prioritized List of corridors (yes/no) | |
| Smart Buildings and Places | **Policy 1.3.1** | By January 2013, adopt new Code incentives for new or renovated buildings and/or developments which attain LEED, USGBC or other recognized „green‟ certification. Incentives must have a minimum value of $300/home; $1,000/commercial or industrial building; and $2,500/land development project. | Ordinance #2013-37 | # of policies adopted | 1 |
| | **Policy 1.3.2** | Investigate possible incentives that would encourage all new buildings in the City to obtain a certain percentage of its average daily energy usage from renewable sources. | | # of incentives offered | 0 |
| | **Policy 1.3.3** | Incorporate site design standards into the LDC requiring private development projects to orient and landscape homes and other buildings to minimize direct daily sunlight on walls and windows in the rainy season, and maximize rooftop solar exposure year-round. | This policy is being promoted through the development agreement process. Currently, the City is working on a low impact Master Development Plan that would create binding new policies to promote environmentally friendly designs. | Policy Adopted/ Implemented (yes/no) | |
| | **Policy 1.3.4** | Evaluate potential incentives to assist existing buildings in the City to upgrade high energy usage systems like air-conditioning and water heating to energy efficient units with high Energy Star or other recognized ratings. Also, examine ways to help homeowners and businesses make existing building shells more energy-efficient through better insulation, sealing cracks and replacement of windows. | | Evaluation complete (yes/no) | |
| | **Policy 1.3.5** | Work with FPL to expand the utilization of its Energy Audit Program by Doral businesses and residents. | | # of outreach programs to residents re: FPL Energy Audit Program<br># of residents using FPL Energy audit Program | |
| | **Policy 1.4.1** | Preservation and enhancement of the City‟s tree canopy is paramount. Review the Code by July 2013 and recommend, if necessary, changes to strengthen protections against illegal and/or premature tree removal. Ensure that retention of existing tree cover and close coordination with the County‟s DERM is a high priority in development review by the City. | tree ordinance ; city adopted in 2010- chapter 71 section 5<br>(Street Tree Master Plan 2005) | adopted and enforced (yes/no) | yes |
| | **Policy 1.4.2** | Evaluate the City‟s current Landscape Code in comparison to the Florida Friendly (FF) Landscape Irrigation and Design Standards prepared by the Florida Department of Environmental Protection. By January 2014, adopt by ordinance any new or amended provisions necessary to bring the Code into full compliance with FF principles and standards. The revision should also include stronger requirements for shading of paved surfaces such as walkways, sidewalks and parking lots. | tree city USA 7 yrs in a row | Tree City Certiciation (yes/no) | yes |
| | **Policy 1.4.3** | Adopt Florida Friendly Landscape Standards for all City parks and public building sites. Prepare an assessment by January 2015 of landscape improvements needed to ensure the landscapes in all parks and other significant City parcels are Florida Friendly. | Required of all City vendors | adopted (yes/no) | |

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| Enhance Natural Open Space and Landscap | **Policy 1.4.4** | Look for opportunities to preserve and expand open green space in the City. Revisit current standards for open space, parking, and local roadway dimensions with an eye toward reducing impervious area. Incentives for multi-story, cluster housing and structured parking should also be explored. Also, consider reducing parking space requirements for private developments within ½ mile of a transit stop. | | % green space increased | |
| | **Policy 1.4.5** | Review, and amend as necessary, the Street Tree Master Plan to focus on effective shading of the sidewalk system in the City. | | included in Street Tree Master Plan (yes/no) | |
| | **Policy 1.4.6** | By January 2014, amend the City Code to require at least 10% of all required surface parking be pervious and/or heat-reflective using techniques and materials such as open cell pavers, managed turf, porous pavement and other viable options. | | City Code amended (yes/no) | no |
| | **Policy 1.4.7** | Analyze the paved area coverage in the City and identify the larger "heat islands." Revise the City"s Street Tree Master Plan to include large paved parking fields and work with property owners of those facilities to incorporate landscape islands and borders. | | analyzed (yes/no)<br>% reduction in heat islands | no |
| | **Policy 1.4.8** | Coordinate with the Florida Department of Environmental Protection (FDEP) and Miami-Dade County Department of Environmental Resources Management to develop a program to remove non-native, invasive plant species from City lands. | maintained - no invasives | implemented (yes/no) | yes |
| | **Policy 1.4.9** | Beginning in July 2014, sponsor an annual 'Tree Giveaway' event with the goal to distribute at least 2,000 Florida Friendly native trees per year to local residents along with planting and care suggestions. | with county and city only; 1x yr; about 4,000 trees; $30K | # of trees adopted? | 4,000 |
| Conserve and Nurture Healthy Water Resources | **Policy 1.5.1** | Implement the recommendations of the City"s 10-Year Water Supply Facilities Work Plan adopted in 2010 and use its long-range conservation strategies as the basis to reduce water usage citywide by 25% to 150 gallons per capita per day or lower by 2017. | Water Supply Facility Master Plan; Ordinance #2015-25 | % reduction per year | |
| | **Policy 1.5.2** | Ensure that the LDC allows buildings to incorporate and/or retrofit structural rain water harvesting features such as cisterns and rain barrels. Make such features a high priority in the Green Points System to be developed for future review of land development projects. Permit limited administrative building setback encroachments for such features. | Ordinance #2013-37 | policy implemented (yes/no) | yes |
| | **Policy 1.5.3** | Review water-saving strategies and standards recommended by the U.S. EPA Water Sense Program, and implement any appropriate revisions to the City"s applicable building policies and procedures to meet the Program goals and objectives. | water supply facility master plan | review conducted and implemented (yes/no) | |
| | **Policy 1.5.4** | Require that all automatic landscape irrigation systems in the City be equipped with a fully-operational rain shut-off device. Create an inspection and enforcement program by July 2013 for existing irrigation systems and inspect 25 systems per year. | in place | implemented (yes/no) | yes |
| | **Policy 1.5.5** | Work with the MDC Water and Sewer Department to examine opportunities within Doral to utilize reclaimed water on area golf courses, parks and medians, and if feasible, identify an initial public demonstration project. | have 1 project- doral central park; 10,000 gall tank for reclaimed water | gal reclaimed per year | |
| | **Policy 1.5.6** | Coordinate with the South Florida Management District (SFWMD) and other agencies responsible for canals within the City to protect and improve surface water quality. The City Engineer will assess water quality in area water bodies by January 2012 and identify any projects or policies to manage and treat urban runoff the City can implement to assist State, regional and local agencies. | SW improvements and canal stabilization program (6 yr program) started about 2009 | % quality improved<br># of projects<br>$ invested | |
| | **Policy 1.5.7** | The City currently sweeps over 2500 miles of local roadways every 2 weeks. Maintain this program, and expand as necessary, in order to keep pollutants out of Doral"s waterways and produce steady improvement in surface water quality | city sweeps every other week | # of miles swept per week | |
| | **Policy 1.5.8** | Ensure, by ordinance if necessary, that all new car washes in Doral utilize best management practices as provided in Chapter 62-660-803, Florida Statutes, and recommended by the MDC Department of Environmental Resources Management (DERM). | DERM permit; This is being enforce by our Code Compliance Dept | implemented (yes/no) | yes |

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| Community Waste Recycling and Reuse | **Policy 1.6.1** | Coordinate with the MDC Solid Waste Authority, which assesses the current recycling and reuse rates and practices in the City, and provides cost-feasible recommendations to substantially increase future reuse of waste products by City government and in the wider Doral community. | coordinate - they keep track and share info with city;<br>conducted recyling workshop for employees | % waste reduced per year | |
| | **Policy 1.6.2** | Increase the number of citywide recycling bins in commercial, public and mixed use areas, Incorporate bin and enclosure designs that are aesthetically-pleasing. | recyling bins in public ROW increased from 50 (2013) to over 100 by 2015 | # of recycling bins<br>tons recycled per year | 100 |
| | **Policy 1.6.3** | Work with the MDC Solid Waste Authority to assess the effectiveness of curbside recycling in the City, and identify strategies and programs to increase the volume of recyclable waste citywide. | review of information from county<br>outreach of "trash can talking" | work with MDC (yes/no) | yes |
| | **Policy 1.6.4** | By January 2014, challenge local business groups to work together to survey local members and develop a coordinated program to significantly increase waste recycling and reuse in the Doral business community. Possible ideas include: a “Best Business Recycler” of the year award as well as, participation in the City‟s Annual Eco-Fair. | outreach through website; email blasts<br>outreach at eco-fair (april) | implemented (yes/no) | yes |
| | **Policy 1.6.5** | Ensure that the latest deconstruction best management practices are employed at all demolition and redevelopment sites in the City, and investigate incentives for the recycling of all construction debris from demolition and building sites. | | enforced (yes/no)<br>incentives available (yes/no) | |
| Green Capital Improvements | **Policy 1.7.1** | At the start of the budget preparation process each year, department heads will include, among existing criteria, sustainability factors such as low greenhouse gas emissions, energy savings, conservation of natural resources and long-term cost-effectiveness when considering programs and projects. | not implemeted | implemented (yes/no) | no |
| | **Policy 1.7.2** | All planned City buildings and facilities will be constructed and/or rebuilt to meet, at a minimum, the LEED Certification Standard or higher. | City hall; Police station all LEED;<br>planned substation- needs to be LEED | implemented (yes/no) | yes |
| | **Policy 1.7.3** | Construct the new City Hall Complex in compliance with LEED Silver Certification standards and requirements. Create an informative walking tour within the complex highlighting the various sustainable features built into the design. | complete | implemented (yes/no) | yes |
| | **Policy 1.7.4** | Ensure that the annual Capital Improvements Element Update required by the State contains projects which are consistent with this Element and consideration given to a high level of sustainability in terms of greenhouse gas emissions, energy savings and resource conservation. | yes- update to CIP plan | implemented (yes/no) | yes |
| | **Policy 1.7.5** | Identify and pursue all feasible federal, State and regional grant funding opportunities for green capital improvements such as the Energy Efficiency and Conservation Block Grant sponsored by the U.S. HUD and DOT. | as-required/needed<br>review local incentive programs | identified additional funding (yes/no) | |
| Community Learning and Outreach | **Policy 1.8.1** | Utilize the City's website to inform and advocate for Doral's Green City projects, policies and achievements. By January 2014, create a website area to track Doral's green progress, and provide education and suggestions on best green practices, such as recycling and water conservation. Provide list of green educational videos, and local seminars and speakers on sustainable living. Disseminate this information also at the annual Eco-Fair, and at public parks and governmental offices. | To be developed in 2016 | website available (yes/no) | no |
| | **Policy 1.8.2** | By July 2013, develop a 'Personal Mobility' section on the City's website with easy-to-use links to Miami-Dade County information on ride-sharing and car pooling opportunities; transit routes, times and connections; and bicycle and pedestrian paths | include on website | available (yes/no) | no |
| | **Policy 1.8.3** | As part of the City's annual Eco-Fair starting in 2013, recognize sustainable residential, commercial and mixed use buildings constructed or renovated in Doral over the past year. | recognition on the green website and Eco-Fair | create recognition program (yes/no) | no |
| | **Policy 1.8.4** | Pursue low-impact, passive development of the City's 51-acre Environmental Park to demonstrate and inform City adults and school about our natural resources and their vital importance to community sustainability. | The Doral North Park: Under the Capital Improvement Element Update (Page 26) | # of acres dedicated | 25 |
| | **Policy 1.8.5** | Work with the Miami-Dade County School Board and local charter and private schools to incorporate educational modules into the basic curriculum that address natural, community and personal sustainability principles and practices. | arbor day visit elementary schools and plant in grounds,<br>science clubs engage in city projects,<br>participate in Eco-fair | # of programs per year | 3 |
| | **Policy 1.8.6** | Provide a wide array community education opportunities for residents and businesses on green building maintenance practices, Florida Friendly landscape programs, energy-saving techniques and resource conservation ideas. | ecofair - to educate and provide info,<br>arbor day | # of events | 2 yearly |
| | **Policy 1.8.7** | Give residents and businesses multiple easily-accessible venues to learn about feasible water-conserving techniques and concepts. Encourage them to take advantage of regional and county water conservations programs including Residential Plumbing Fixture Kit, Shower Head Exchange and other similar programs. | ecofair<br>yearly workshops to residents- show water and energy relationship | # of events | 1 |

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| | **Policy 1.8.8** | Through the website and other means, regularly inform Doral citizens on what the City is doing to conserve resources, and ways residents and businesses can recycle more and save money. Readily advertise conservation opportunities like free, recycled mulch at the County‟s Waste-to-Energy Plant Facility on NW 58th Street. Summarize monthly recycling “happenings and ideas” in the City newsletter. | info to be placed on green website | website available (yes/no) | no |
| **Promote Green Business and Job Growth** | **Policy 1.9.1** | In coordination with local business groups such as the Chamber of Commerce, work to assess the City‟s current employment trends and resources, and recommends specific joint projects and programs to keep the Doral business sector competitive and sustainable. | Managed by economic development | # of programs for business sector<br>% change in employment statistics | |
| | **Policy 1.9.2** | Every 2 years starting in 2013, the City will examine its planning, zoning and building regulations to clarify any unclear or conflicting regulations, remove unnecessary requirements and expedite development approvals | Currently the City evaluates its Comprehensive Plan and Zoning Code | reviewed every 2 years (yes/no) | yes |
| | **Policy 1.9.3** | Based on available studies, the City Manager will develop a reliable estimate of employment within Doral by industry beginning in 2014. | Implemented by economic development | employment estimate developed (yes/no) | |
| **Lead by Example** | **Policy 1.10.1** | Achieve the Silver Level or higher by January 2012 under the Green City Certification program administered by the Florida Green Building Coalition. | pending | achieved silver (yes/no) | no |
| | **Policy 1.10.2** | For mixed use and commercial areas, ensure flexible regulations are in place to increase appropriate sidewalk commerce like street vendors, sidewalk dining and walk-up windows. | P&Z has assigned the duties of a “green” coordinator to the City Planner | assigned/hired (yes/no) | yes |
| | **Policy 1.10.3** | Beginning in July 2014, monitor energy use by the City on a bi-annual basis and provide a report to the City Council in July every year. Identify areas of City buildings and operations where long-term energy savings can be achieved and/or resources conserved. Propose energy-saving projects for City buildings, parks and other facilities during the budget process starting in 2015 including conversion of incandescent light fixtures to LED or other energy-saving type. | baseline developed in 2015; pending recommendations | Total Energy & Water consumption / year<br># of computers under the policy?<br># of hours off | |
| | **Policy 1.10.4** | Miami-Dade County has adopted a Climate Action Plan. Actively work with the County and area cities on regional sustainable projects and programs. | participate in county programs (flooding, Emergency management, transit and mobility (MPO) | coordinate with MDC (yes/no) | no |
| | **Policy 1.10.5** | By July 2014, develop and implement an Environmentally-preferred Purchasing (EPP) Program based on EPA‟s 5 guiding EPP principles. Following EPP policy approval and adoption, document the implementation by each applicable department of EPP into their actual purchasing process for credit towards Green City certification. | taken into consideration<br>office depot green link sent to department (yearly reminders by email) | ID purchasing contract<br># of resuable utensils material of old items | 0 |
| | **Policy 1.10.6** | Enhance community health by continuing to sponsor and expand the 'Get Fit Doral' Program, which encourages adults and kids to exercise and play on a regular basis, and sponsors activities and programs focused on that goal through the Parks Department. | done yearly<br>add to green website | implemented (yes/no) | yes |
| | **Policy 1.10.7** | By July 2012, the Parks and Recreation Department will develop a 7-year landscaping program to achieve full compliance with, and implementation of, Florida Friendly landscape and irrigation principles in all Doral community parks and other City-owned properties. | Implemented by Parks Department | developed and implemented (yes/no) | |
| | **Policy 1.10.8** | Continue to expand Doral‟s commitment to “Green Fleet” principles in the operation of its vehicle fleet including use of alternative fuel and hybrid vehicles, and green maintenance practices. | under facility anager (fuelling)<br>purchase hybrids | # of hybrid vehicles<br>adoption of green maintenance practices (yes/no) | |
| | **Policy 1.10.9** | Assess the feasibility of organizing and operating a carpool and preferred parking program for City employees which would facilitate the development of carpools and offer preferred parking at City Hall and other potential benefits for carpoolers. Preferred parking could also be offered to employees driving hydrids and other very efficient vehicle types to work. | work with S.Fl commuter services to install signage (designated parking) in 2016 | # of participants in carpool propgram | 0 |