



PLANNING PROCESS, GOALS, AND STRATEGIES

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CLIMATE CHANGE

Why is our community vulnerable?

1. Coastal community at sea level
2. Located at tip of peninsula
3. Many low-lying areas
4. Large, dense population
5. Some key economic drivers are weather dependent
 - Tourism
 - Agriculture
6. Vulnerable source of water supply



PRIORITY HAZARDS



- Shallow coastal flooding
- Tropical storm damage
 - Storm surge inundation
 - High wind impacts
- Salt water intrusion → water supply
- Inland flooding
- Erosion
- Sea level rise impacts on above hazards

What is Sustainability?

- Sustainability means “meeting the needs of the present without compromising the ability of future generations to meet their own needs”¹
- The three, interrelated pillars of sustainable development include the environment, social equity, and economic development
- To act sustainably is to balance the aims of these pillars with the need to use resources more efficiently.

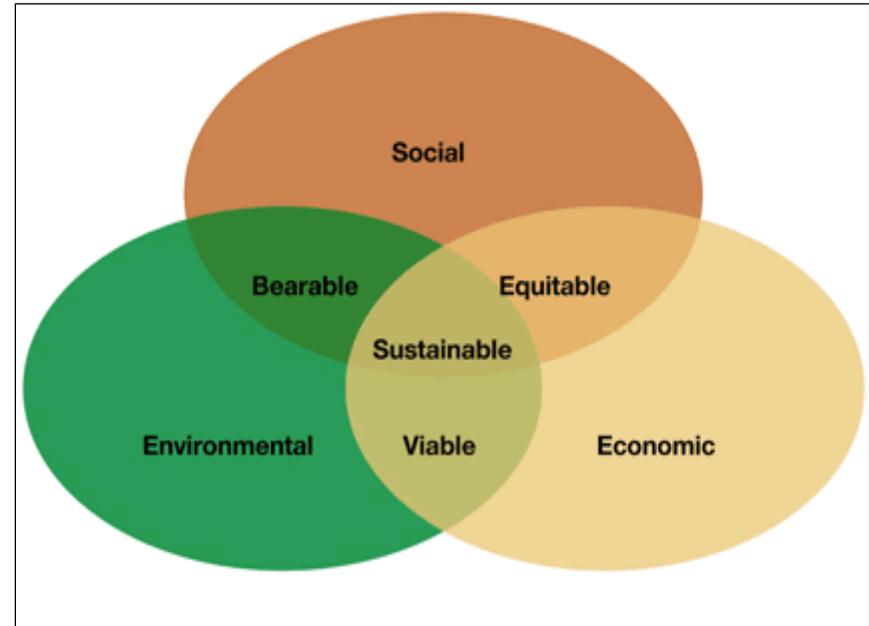


Figure 1: Three Pillars of Sustainability

¹ United Nations Commission on Sustainable Development.

WHY A SUSTAINABILITY PLAN?



- ❑ Selected by ICLEI as a pilot community
- ❑ To make certain that our community effectively addresses key sustainability and climate change issues
- ❑ To facilitate coordination of County and community existing comprehensive plans & initiatives
- ❑ To tie together environmental, economic and social equity goals
- ❑ To create a community framework for coordination and measurement
- ❑ To measure progress and success



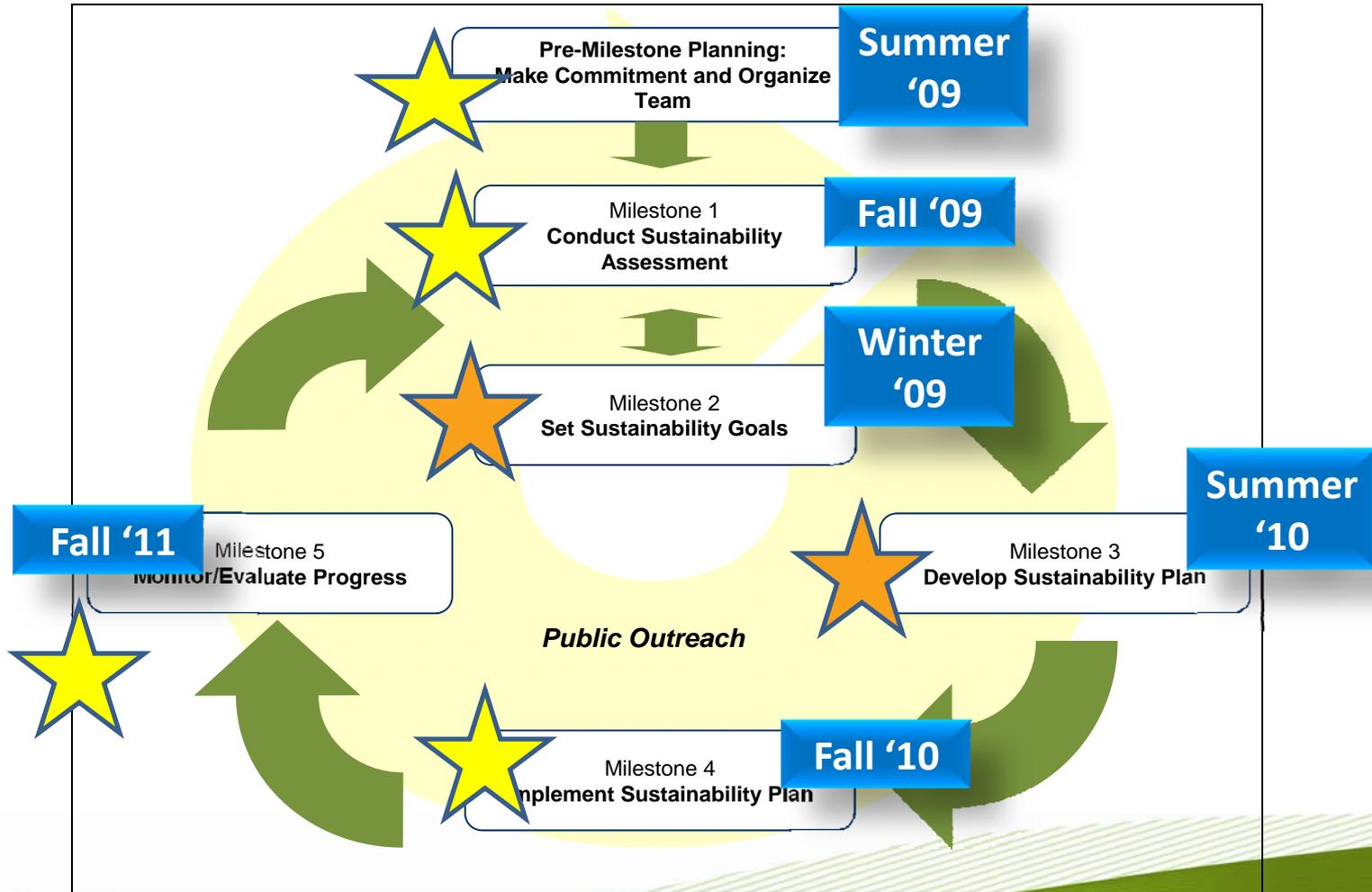
Founded in 1990, ICLEI is comprised of 1100 local governments from 70 countries who are committed to sustainable development.

- ICLEI provides **technical consulting, training, and information services** to build capacity, share knowledge, and support local government.

Members include:

New York, Chicago, Los Angeles, King County, Portland, Montreal, London, Rome, Amsterdam, Stockholm, Barcelona, Berlin, Brisbane, Curitiba, Mexico City, Rio de Janeiro, Zurich, etc.

Year in Review: Milestones



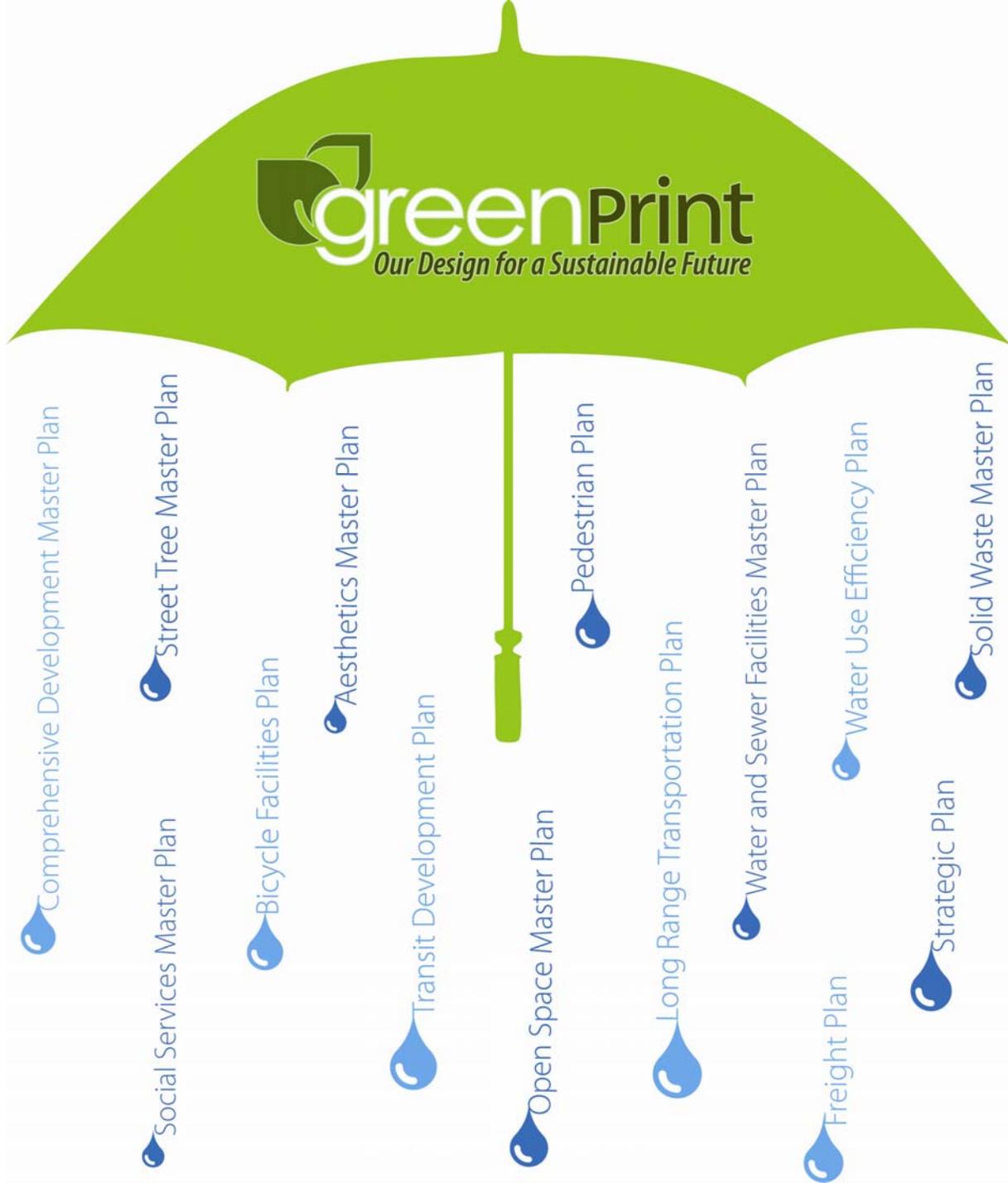
Year in Review: Accomplishments

- ❑ **United States Green Building Council South Florida Chapter “Most Outstanding Green Government” Award**
- ❑ **ICLEI 2010 Sustainability Leadership Award for Process Innovation “Southeast Florida Climate Change Compact”**
- ❑ **White House Listening Session on Climate Change**
- ❑ **First World Congress on Resilient Cities in Bonn, Germany**
- ❑ **Mayors’ Green Business Forum**
- ❑ **EECBG Successes: Homestead Library Cool Roof completed, Methane pipeline groundbreaking, Home Energy workshops**
- ❑ **Continuing LEED construction standards**



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Our Design for a Sustainable Future





1. **Strong Leadership, Connections & Commitment**
2. **Water & Energy Efficiency**
3. **Our Environment**
4. **Responsible Land Use & Smart Transportation**
5. **Vibrant Economy**
6. **Healthy Communities**
7. **Climate Change Action Plan**

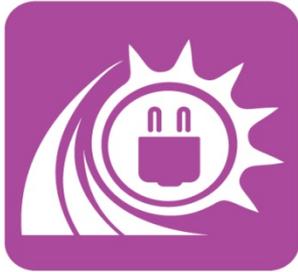


STRONG LEADERSHIP, CONNECTIONS & COMMITMENT

- **CREATE THE NEXT GENERATION OF GREEN LEADERS**

Strategies

- 1. Strengthen regional, local, and community partnerships**
- 2. Integrate sustainability into all leadership systems**
- 3. Be green government role models**
- 4. Create ongoing outreach, education, and dialogue with the community about the implications of climate change and the benefits of sustainability**



WATER AND ENERGY EFFICIENCY

- **USE LESS WATER AND ENERGY**

Strategies

- 1. Reduce water and energy consumption through increasing efficiency**
- 2. Improve energy planning through public-private partnerships**
- 3. Launch energy and water efficiency and conservation campaigns**
- 4. Expand alternative fuel (bio-diesel/waste-based bio-diesel) and renewable energy industries**
- 5. Be government leaders in energy efficiency**



ENVIRONMENT

- PROTECT AND ENHANCE BISCAYNE BAY, THE EVERGLADES AND VITAL ECOSYSTEMS
- MAINTAIN EXCEPTIONAL QUALITY OF AIR, DRINKING WATER, AND COASTAL WATERS USED FOR RECREATION
- REINVENT OUR SOLID WASTE SYSTEM

Strategies

1. Implement wastewater reuse to provide future water supply and benefit the environment
2. Address salt water intrusion that threatens drinking water well fields and sensitive natural areas
3. Protect, enhance, and restore our natural resources
4. Protect environmental and other lands that may be important for ecosystem and community resilience
5. Develop a sustainable Solid Waste System and Master Plan, using waste to benefit our economy and environment



RESPONSIBLE LAND USE AND SMART TRANSPORTATION

- USE OUR LAND WISELY, CREATING AND CONNECTING STRONG SUSTAINABLE NEIGHBORHOODS
- PROVIDE MORE TRANSPORTATION OPTIONS, REDUCING THE TIME WE SPEND IN OUR CARS.

Strategies

1. Better integrate planning and prioritize investment
2. Support existing communities and value neighborhoods
3. Increasing bicycling and walking
4. Increase transit ridership
5. Improve connectivity and mobility of the system



VIBRANT ECONOMY

- CREATE GREEN JOBS
- BUILD ON OUR INTERNATIONAL REPUTATION AS A GREEN ENTERPRISE DESTINATION

Strategies

1. Build a sustainable economy and promote green business
2. Expand our successful tourism and trade industries
3. Enhance our educational system to develop our current and future workforce for a sustainable economy
4. Increase the sustainability agricultural practices



HEALTHY COMMUNITIES

- LIVE HEALTHY BY BEING MORE ACTIVE AND EATING MORE LOCAL FOODS
- PLANT TREES TO COOL, SHADE, AND ADD VALUE TO OUR NEIGHBORHOODS

Strategies

1. Facilitate active and safe lifestyles for residents through the Open Space Master Plan and other community initiatives
2. Plant more trees
3. Promote fresh, local, or organic food in all neighborhoods through grocers, farmers' markets and community gardens



CLIMATE CHANGE ADAPTATION

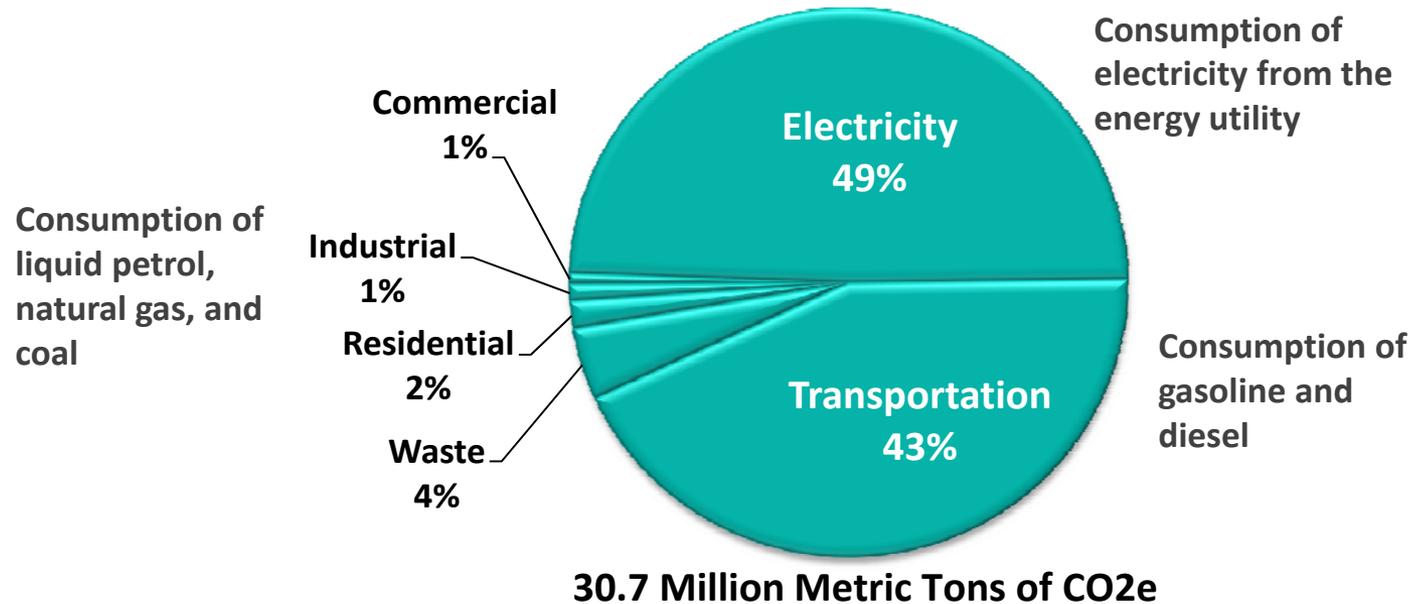
- UNDERSTAND AND RESPOND TO CURRENT AND FUTURE CLIMATE CHANGE IMPACTS

Strategies

1. Monitor regional and regional climate change indicators and trends
2. Develop local and regional climate change impact scenarios depicting various impacts and time frames
3. Integrate future climate change impacts into community and government decision-making for capital, operational, and land-use issues

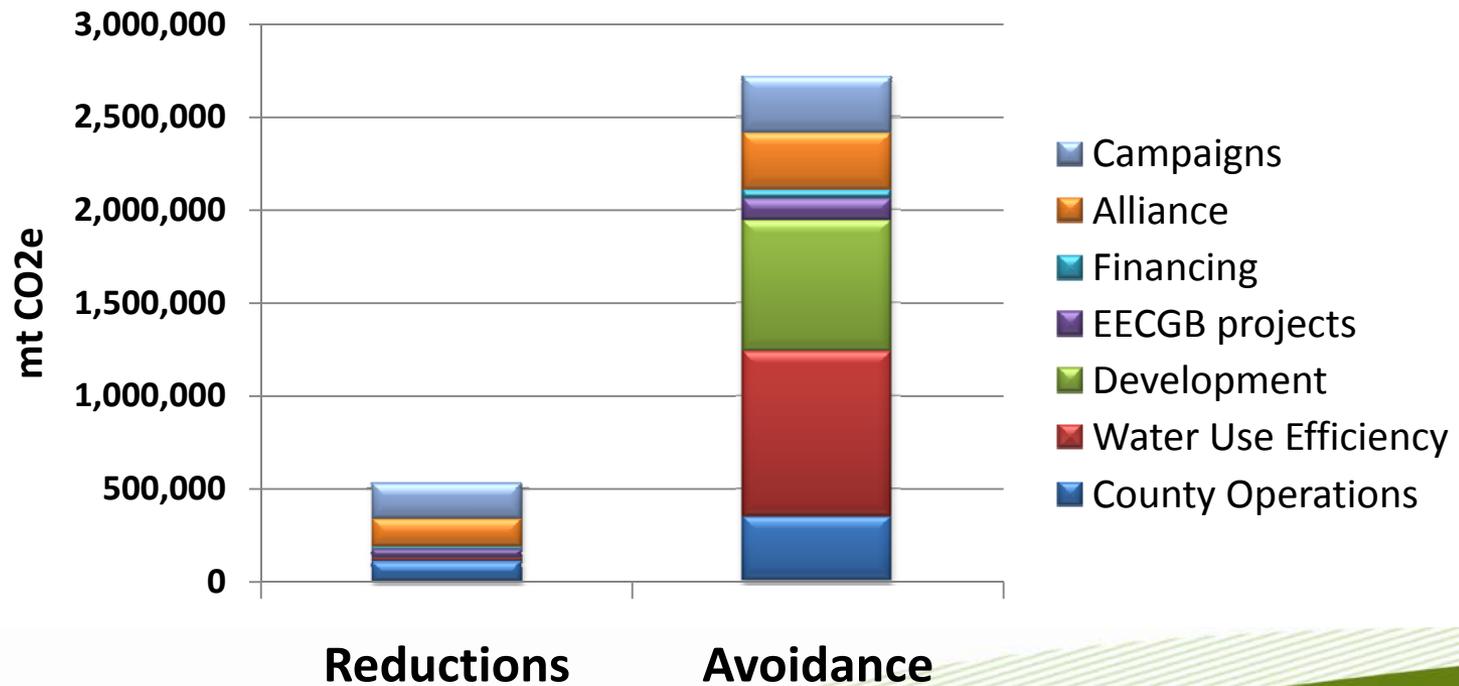
CLIMATE CHANGE MITIGATION

Miami-Dade County 2005 Baseline Community-wide Emissions By Consumption Source & Sectors



Climate Action Plan: Water and Energy Efficiency

Emissions Impact Benefits of Communitywide strategies



Climate Action Plan: Our Environment



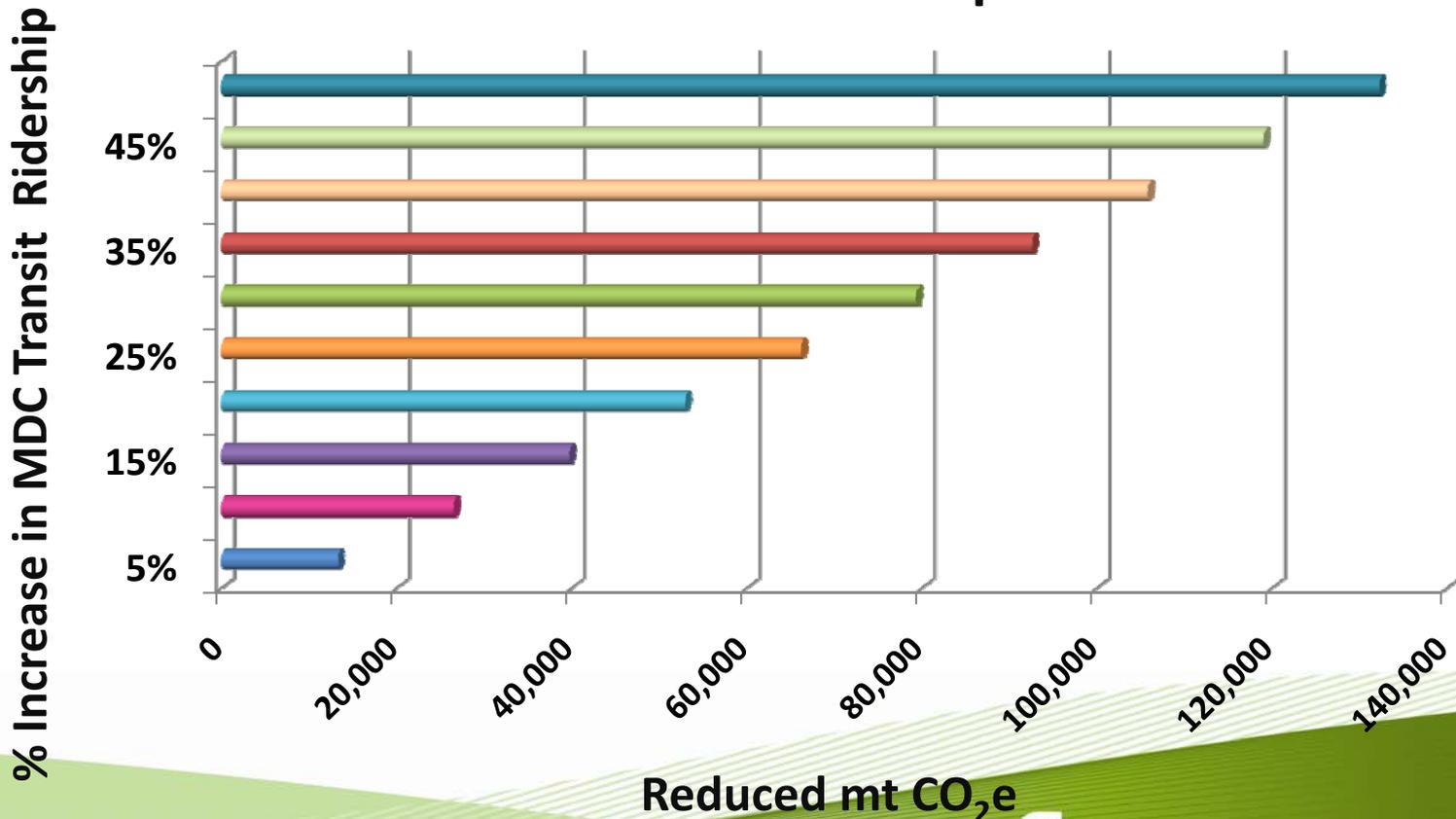
The connection between environmentally valuable lands and carbon storage and sequestration:



- ❑ Over 212 million metric tons of carbon is stored in our wetlands
- ❑ Over 5 million metric tons is stored in our Environmentally Endangered Lands program

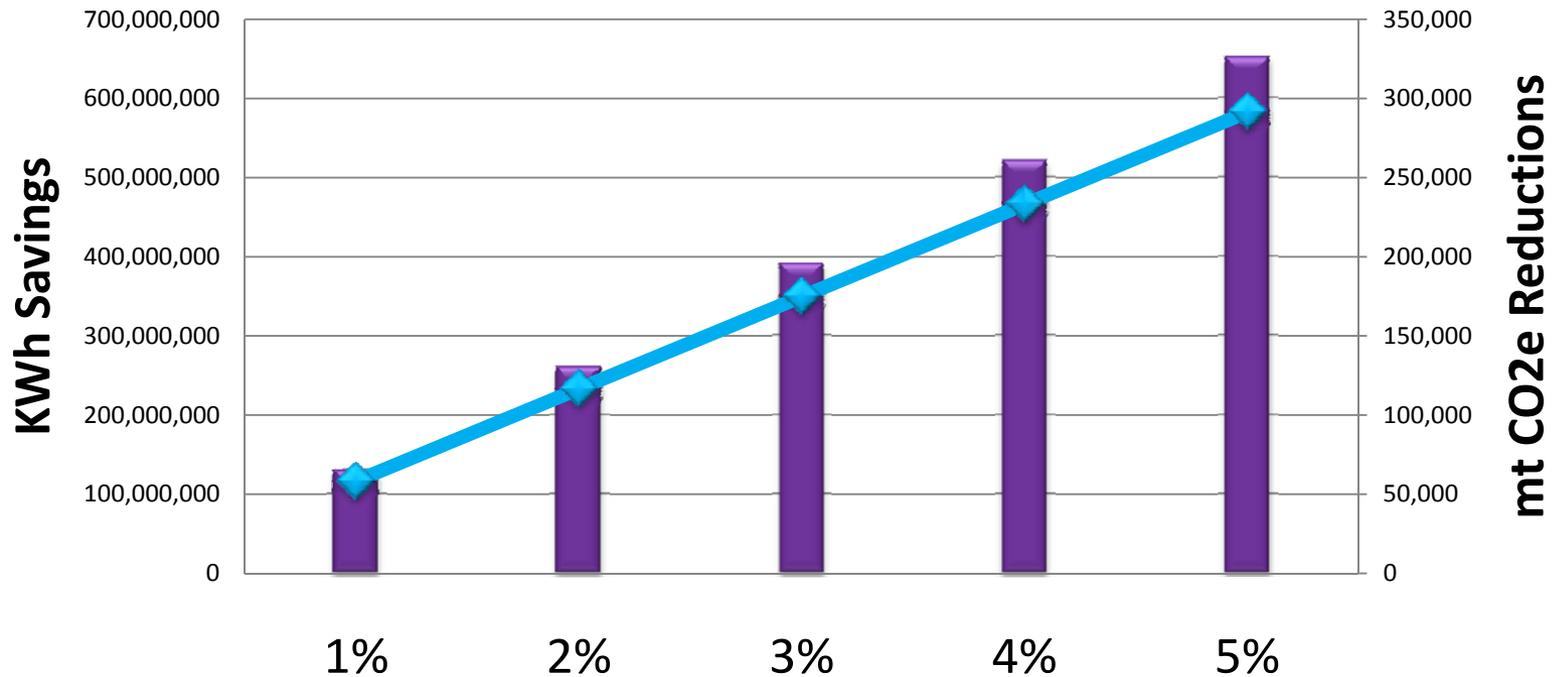
Climate Action Plan: Responsible Land Use & Smart Transportation

CO₂e Reduced Relative to Increases in Transit Ridership



Climate Action Plan: Vibrant Economy

Potential Energy and Emissions Savings as Commercial Businesses Become More Energy Efficient



Estimated percentage savings based on energy consumption reduction by businesses registered through the Miami-Dade County Tax Collector Office achieving County Green Business Certification Standards

■ Emissions Avoided ◆ Electricity Savings

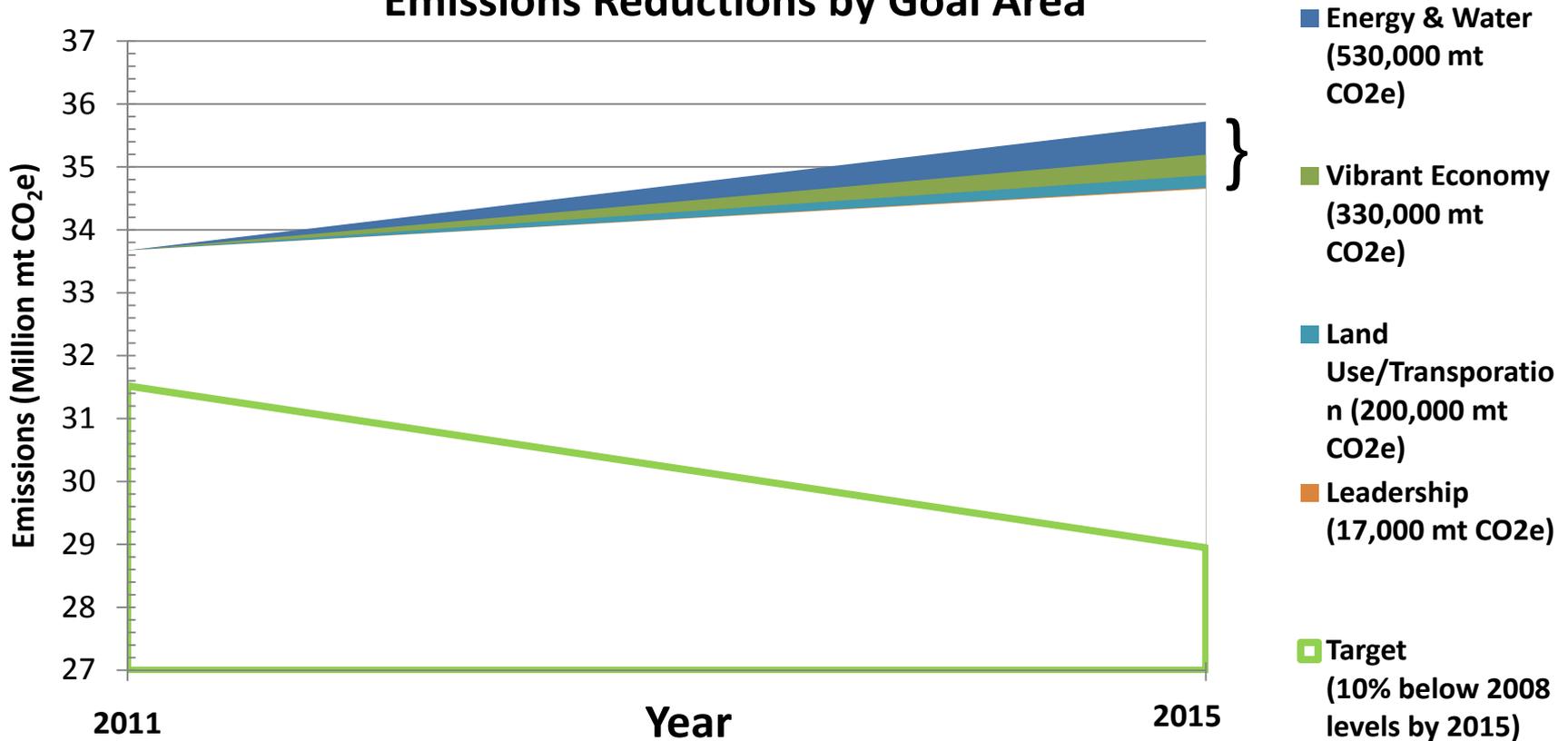
Climate Action Plan: Healthy Communities

Million Trees Miami Initiative

Achieve a 30% tree canopy by 2020	PLANTINGS	
	County	Partners
Million Trees 30%/70% Breakdown	300,000	700,000
Known Plantings FY 08-10	60,000	
Total Remaining to be Planted	240,000	700,000
Annual Commitment FY 11 - 20	24,000	70,000

Climate Action Plan: Summary

Emissions Reductions by Goal Area



Implementation Table



Thank You!
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