Palm Beach County League of Cities

General Membership Meeting

"Solar Powered Trash Compactors"

Presented by

Richard J. Reade, Sustainability Officer/PIO

City of Delray Beach

January 18, 2012

Green & Sustainability Successes

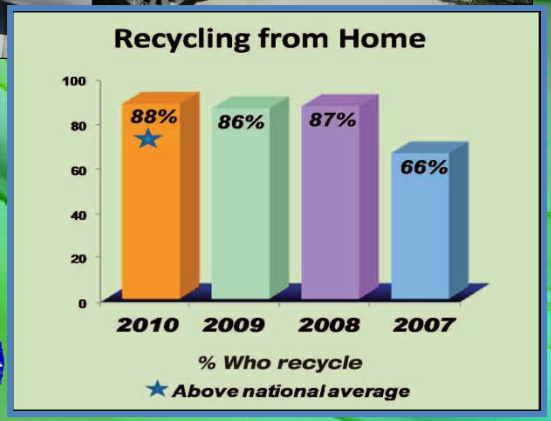
The City of Delray Beach, through its focus on being more Green & Sustainable, is working to educate our community on the importance of sustainability and take on good, energy and environmentally efficient projects with the hope of setting the example for our residential and business communities in reducing our overall costs while lowering our greenhouse gas emissions.

City of Delray Beach

What we are doing to Go Green & Protect our Environment…

Delray Beach: Becoming A Green City

Residents Rank City Above National Average In Environmental Sustainability



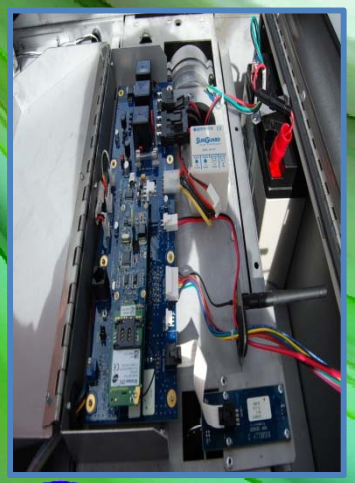
Green & Sustainability Successes
Solar Powered Trash Compactors

- 13 Total Solar Trash Compactors – Parks, Beach & Downtown
- Converted Parks to Eco-Friendly Zones
- Reduced GHG Emissions
- Reduced Personnel Time, Fuel Consumption, Equipment and Liner Costs
- Funded through Solid Waste Collection Agreement & Recycling Revenues
- Improves Surrounding Aesthetics – No Overflow

Green & Sustainability Successes
Solar Powered Trash Compactors

Small, But Maintain Huge Capacity

About the same size as a standard 35-gallon trash barrel, the Compactors have a small footprint and we are able to move them around the City when needed.

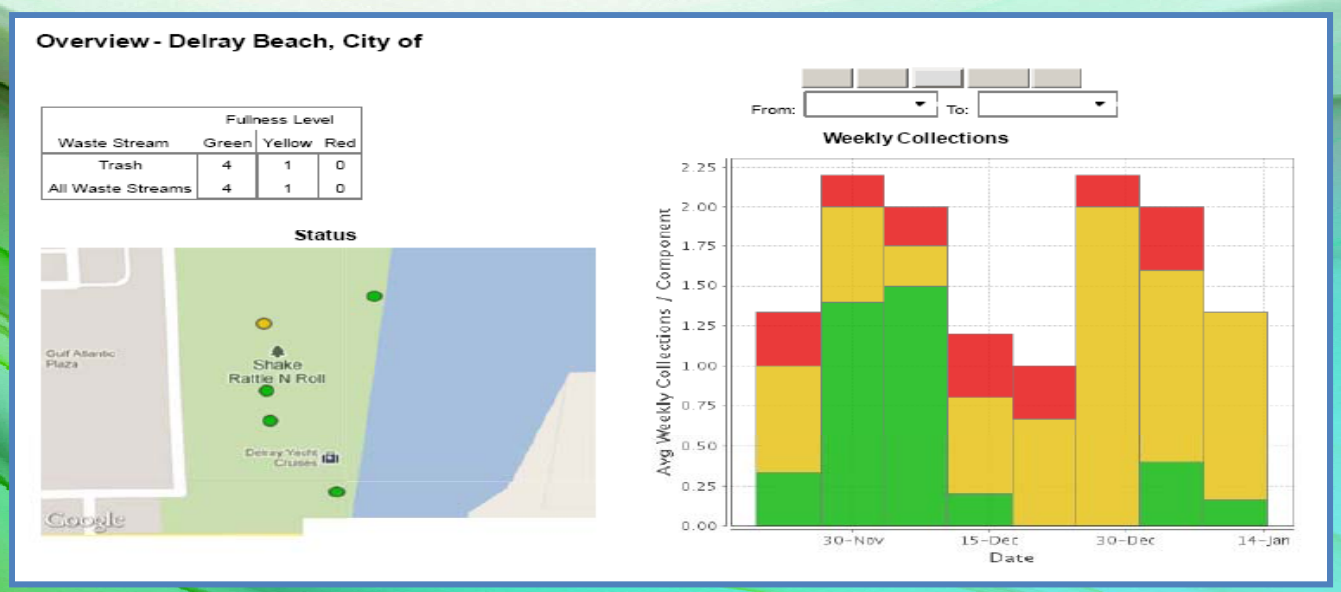


Green & Sustainability Successes

Solar Powered Trash Compactors

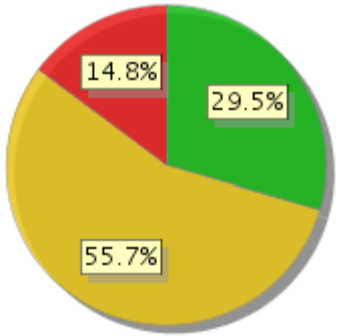
The Compactors Tell Us When They Are Full

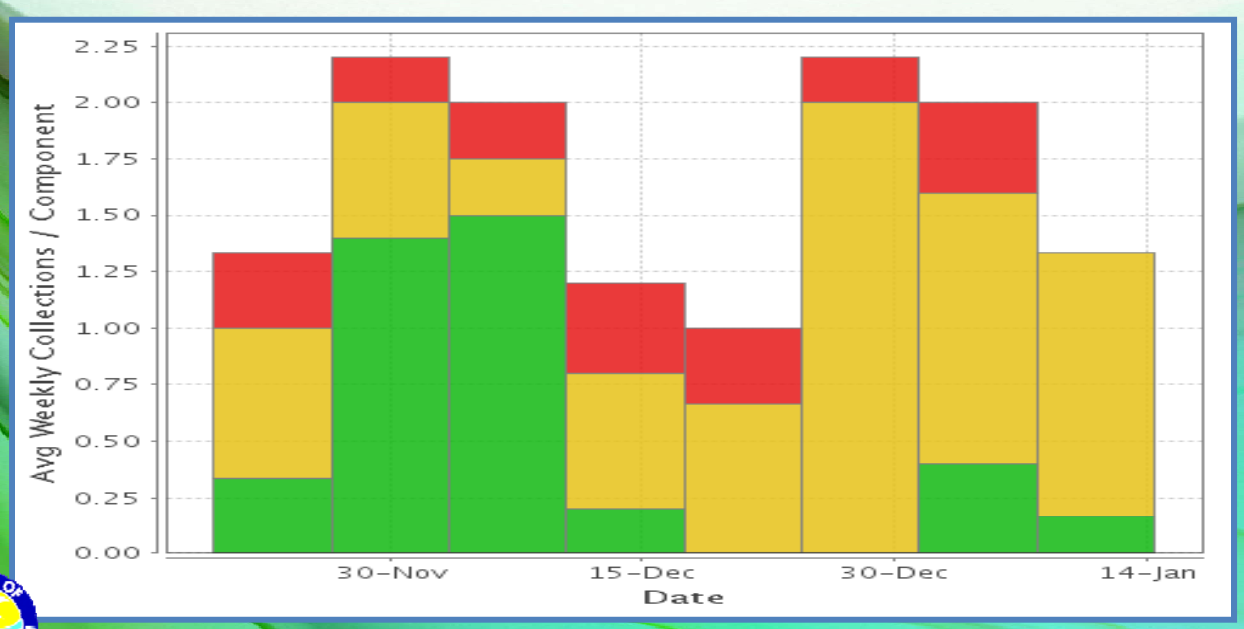
When a unit reaches capacity, an internal sensor triggers the Compactors that flattens the contents (i.e., garbage), converting 180 gallons of waste (about five times the volume of ordinary streetside trash receptacles) into easy-to-collect bags. These bags are picked up by two (2) City staff members, placed in a City vehicle and disposed.



Green & Sustainability Successes
Solar Powered Trash Compactors

- Software System provides up-to-minute information on Solar Trash Compactors remaining capacity
- Provides historical data electronically to assist in determining cost savings





Collections	
Total	61
Red	9
Yellow	34
Green	18
Avg Weekly Collections per Component	1.7

Green & Sustainability Successes

Solar Powered Trash Compactors

Vastly Reduces City Waste Collection Expenses

Because it has five times greater capacity, the Compactors have reduced the number of collection trips that staff has made by almost 80%. Fewer collections have led to a drop in fuel, labor and maintenance costs as well as greenhouse gas emissions.

Green & Sustainability Successes
Solar Powered Trash Compactors

Veterans Park
Solar Powered Trash Compactor Cost Savings Analysis
City of Delray Beach, Florida

	Prior to Installation of Solar Trash Compactors	Following Installation of Solar Trash Compactors
No. of Trash Containers	12	0
No. of Compactors	0	5
No. of Staff Collections per Week	5	2
Staff Collection Hours per Week	10	2
Annual Financial Costs:		
Annual Staff Labor Costs - Salary & Benefits	$24,497	$4,899
Annual Vehicle Costs - Fuel & Maintenance	$1,230	$492
Total Annual Financial Costs	$25,727	$5,391
Estimated Annual Financial Savings		**$20,336**

Green & Sustainability Successes

Solar Powered Trash Compactors

Various City Locations
Solar Powered Trash Compactor Cost Savings Analysis
City of Delray Beach, Florida

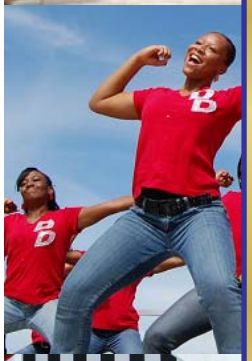
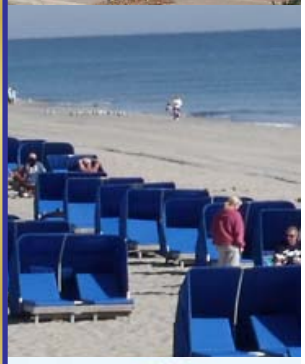
	Prior to Installation of Solar Trash Compactors	Following Installation of Solar Trash Compactors
No. of Trash Containers	20	0
No. of Compactors	0	13
No. of Staff Collections per Week	5	2
Staff Collection Hours per Week	20	4
Annual Financial Costs:		
Annual Staff Labor Costs - Salary & Benefits	$48,994	$9,799
Annual Vehicle Costs - Fuel & Maintenance	$5,311	$2,124
Total Annual Financial Costs	$54,305	$11,923
Estimated Annual Financial Savings		**$42,382**

Note: Solar Powered Trash Compactors have been located at various locations around the City: Veterans Park (5), Pompey Park (1), Miller Park (2), Seacrest Soccer Complex (1), Orchard View Park (1), City Beach (2), Atlantic Avenue (1)



Keeps Our City Cleaner

The City's Solar Trash Compactors have made it easier for residents and visitors to use the receptacles and eliminate the concern of overflowing. The City's Solar Powered Trash Compactors holds five times as much refuse and signals when it's ready for pick-up.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