

## Review of Proposal and Progress Report Dated July 16, 2013

The review, by Henny Groschel, was conducted at the request of Jud Kurlancheek in July 2013. A third column has been added to the original table with results and/or status for each item.

### The Village of Key Biscayne Goes Green: What Government Can Do to Increase Energy Efficiency and Conserve Resources (Timeline and Budget Estimate Prepared for the Village Council and Village Manager Jackie Menendez by Dr. Henny Gröschel - Dated June 7, 2007)

**Short-term items in FY 2007** (0-3 months to start) - \$1,540.00 total estimated cost:

ITEM	ESTIMATED COST	STATUS as of July 2013
<p>1. Conduct energy audits and interpret results</p> <ul style="list-style-type: none"> <li>a. Request energy audits immediately from FPL for all municipal buildings (Village Hall, Community Center, Fire Station/Council Chamber).</li> <li>b. Work with Skyline Management Group to interpret audit results and conduct further surveys of Village energy/resource use in buildings and public areas, and by Department, as needed.</li> </ul>	<p>FREE service from FPL</p> <p>\$500.00 Skyline expert staff time</p> <p>Village Staff time</p>	<p>1a: FPL Survey conducted 2-26-2008 for Village Hall/Fire Station. Buildings as efficient as can be for when built.</p> <p>1b: Completed</p>
<p>2. Calculate the Village's carbon footprint.</p> <ul style="list-style-type: none"> <li>a. Retain the services of Roberta Fernandez, a consultant in Tampa, to help calculate the footprint and develop a emissions reduction plan.</li> <li>b. Obtain membership in ICLEI – Local Governments for Sustainability's Cities for Climate Protection Campaign (CCP) to access their emissions analysis software program and footprint reduction strategies (see attached PDF file for an overview of the program and benefits of participation).</li> <li>c. Gather data required for ICLEI emissions analysis that has not been collected in Item 1.</li> <li>d. Enter data into ICLEI program.</li> <li>e. Publicize efforts on Village website; post initial carbon footprint measurements.</li> </ul>	<p>\$440.00 consulting fee (8 hours consulting at \$30/hour plus travel expenses of \$200)</p> <p>\$600.00 per year</p> <p>Village staff time</p> <p>Village staff time</p> <p>Skyline staff time</p> <p>Village staff time</p> <p>Village staff time</p>	<p>Not implemented. VKB did not join ICLEI due to lack of elected official involvement in 2008.</p>
<p>3. Implement easy energy savers:</p> <ul style="list-style-type: none"> <li>a. Replace incandescent bulbs with compact fluorescent light bulbs (CFLs) as opportunities arise.</li> <li>b. Instruct staff to turn off lights when leaving a room.</li> <li>c. Adjust thermostats seasonally.</li> </ul>	<p>Determine initial cost vs. savings over time as part of Green Initiative</p> <p>FREE</p> <p>FREE</p>	<p>Implemented – Ongoing</p>

<p>4. Implement Village-wide "3 Rs" Program (Reduce, Reuse, Recycle) in public areas.</p> <ul style="list-style-type: none"> <li>a. Place containers for separating recyclable paper, containers, toner cartridges, etc. in offices, conference rooms, kitchens and public areas.</li> <li>b. Provide recycling containers in outdoor public areas where possible.</li> <li>c. Begin program to encourage and reward 3 Rs behavior in Village departments that do and do not currently recycle.</li> </ul>	<p>FREE or minimal cost</p> <p>Village staff time in cooperation with Waste Management (Public Works staff has initiated program)</p> <p>FREE or minimal cost</p> <p>FREE</p>	<p>4a, 4b: Implemented–Ongoing</p> <p>4c not implemented</p>
<p>5. Review Village recycling program</p> <ul style="list-style-type: none"> <li>a. Curbside service is provided as part of our solid waste contract with Waste Management Inc. Investigate fate of recyclables.</li> <li>b. Encourage greater participation in curbside recycling by having a reserve of extra recycling bags available at Village Hall for pick-up by residents.</li> <li>c. Investigate feasibility and cost of coordinating hazardous waste/electronic waste pick-up days in the Village with Miami-Dade County and/or approved vendors.</li> </ul>	<p>FREE</p> <p>Village staff time</p> <p>FREE</p> <p>Village staff time</p>	<p>5a: Implemented – Ongoing curbside residential recycling program now with CHOICE.</p> <p>5b: No longer needed with rolling bins</p> <p>5c: Implemented - Annual Electronics Recycling Drive with EScrap.</p>

**Medium-term to long-term items in FY 2008** (3+ months to start) - \$1,700.00 to \$2,200.00 estimated cost (higher amount is if a water use consultant is retained):

ITEM	ESTIMATED COST	
<p>1. Calculate the Village's carbon footprint (cont'd) and develop a strategic goal-based energy efficiency plan:</p> <ul style="list-style-type: none"> <li>a. Using results of calculations made with the ICLEI software (see above), set reduction goals with timetables for the Village public areas with assistance from Roberta Fernandez and ICLEI.</li> <li>b. Implement public awareness program for individual carbon reduction (participation opportunities for residential and commercial properties).</li> <li>c. Post footprint measurements on the Village website.</li> </ul>	<p>\$600.00 for consultant for FY 2008 (20 hours at \$30/hour plus travel expenses of \$300)</p> <p>Village staff time</p> <p>Involve FPL to offset costs</p>	<p>Not implemented. VKB did not join ICLEI due to lack of elected official involvement.</p>

<p>2. Integrate carbon footprint reduction goals into a strategic energy efficiency implementation program.</p> <ul style="list-style-type: none"> <li>a. Work with Skyline Management Group staff, including their LEED expert, to articulate options for the extent and/or timing of new or improved use of green products and practices (utilities, materials expendables, etc.) in existing and new buildings.</li> <li>b. Implement energy savers, for example: <ul style="list-style-type: none"> <li>1) Replace incandescent bulbs with compact fluorescent light bulbs (CFLs).</li> <li>2) Install motion sensor light switches.</li> <li>3) Install programmable thermostats.</li> <li>4) Replace existing HVAC systems with highest-efficiency models</li> </ul> </li> </ul>	<p>Village staff time</p> <p>\$500.00 Skyline expert staff time</p> <p>Determine Initial cost vs. savings over time as part of Green Initiative.</p>	<p>2a: LEED Working Group met in 2007 to explore green building initiatives. Disbanded since this is regulated by FL Building Code</p> <p>2b(1), 2 b(4): Completed</p> <p>2b(2), 2b(3): Not implemented though Village Hall has underutilized central control system</p>
<p>3. Implement Village-wide Green Purchasing policy. Each department currently does its own purchasing and vendors are paid by the Finance Department.</p> <ul style="list-style-type: none"> <li>a. Review supply lists and find most green product alternatives.</li> <li>b. Consider centralizing efforts to reduce duplication, waste and cost (materials and delivery).</li> </ul>	<p>Village staff time</p>	<p>3a: Pursued on an individual basis. Use green printer for VGGI-related materials.</p> <p>3b: Partially completed. One vendor for office supplies though each Department orders own supplies</p>
<p>4. Review water use in public areas: Assess current Village irrigation program vs. water needs of plantings.</p> <ul style="list-style-type: none"> <li>a. Promote zoned plantings (plant water-hungry items near each other) and xeriscaping to save water and money in this era of water restrictions.</li> <li>b. Develop resident-friendly plan showing extent of planned purple pipe (reuse water) irrigation.</li> <li>c. Explore methods for rainwater harvesting and use.</li> </ul>	<p>Village staff time combined with outside consulting advice if necessary (\$500.00 estimate for consulting fees)</p>	<p>4a: Xeriscaping no longer seems a priority based on recent plantings</p> <p>4b: Completed</p> <p>4c: Not implemented</p>
<p>5. Coordinate regular meetings with Miami-Dade County, City of Miami and other municipalities to share ideas/solutions/ coordinated efforts</p>	<p>Local governments take turns hosting meetings to share costs</p>	<p>Not implemented</p>

6. Communicate program efforts and results to the community. Encourage individual participation among Village residents, business owners and others.	Village staff time; recruit community partners to help offset costs	Completed for programs that have been implemented. VKB co-sponsored Green Expo in 2-2008
6. Renew yearly ICLEI membership.	\$600.00	Not implemented