

Mandatory Non-Residential Recycling Ordinance

Collier County, Florida, was able to balance regulation and market forces to generate a mandatory non-residential recycling ordinance.

By Denise Kirk and Daniel Dietch

When the Collier County Board of County Commissioners issued a “no new landfill” directive, the county needed an innovative solid waste management solution that would maximize the limited disposal capacity available at its Naples Landfill. Rather than focusing on strategies to increase the supply of landfill space, the county decided that a better long-term solution would be to reduce the demand for that space by expanding recycling programs. The low-hanging fruit, an enhanced residential recycling program, was quickly implemented. Since its inception in June 2001, recycling volume and participation has increased, as evidenced by a six percent jump in the residential recycling rate.

After the successful implementation of the residential program, the board of county commissioners directed the county’s solid waste management department to prepare an ordinance requiring non-residential (commercial) establishments to recycle a variety of recyclable materials. Estimates showed that businesses accounted for 60 percent of the waste generated in the county—about 50 percent of which was recyclable. This sector represented an opportunity to significantly reduce the amount of recyclable materials being landfilled, especially since the county’s commercial recycling participation rate hovered near a low six percent.

Recognizing that business community participation would be an integral part of developing a mandatory commercial recycling ordinance, the department involved the Greater Naples

Chamber of Commerce (GNCC) early on in the project. By engaging local businesses in the ordinance development process, the department could anticipate and address the concerns of the business community, laying the groundwork for project success. To better characterize the impacts of mandating business recycling, the department initiated a pilot study in the winter of 2001 that included four local businesses. While the county hoped that a commercial recycling program would reduce disposal costs paid by waste generators, they offset any financial barriers to participation by financing the recycling service for the duration of the pilot program.

Preliminary data from the pilot project indicated that the proposed ordinance would result in cost savings for most businesses unless they were unable to contract for reduced garbage service. Three of the four businesses in the program realized cost savings ranging from \$400 to \$1,000. Based on the success of the pilot program, the department, together with the county attorney’s office, special legal counsel, and its solid waste consultant, Malcolm Pirnie, Inc. (www.pirnie.com), moved forward with the development of the mandatory commercial recycling ordinance. The proposed ordinance was designed to balance impacts to businesses and the county’s goals of increasing commercial recycling participation and preserving landfill disposal capacity at the Naples Landfill.

In May 2002, the county attorney’s office and the department presented the proposed ordinance to the board. At

that time, the board heard opposition from business and citizen groups. Following the staff presentation and public comment, the board, by a majority vote, denied the motion to approve the proposed ordinance. However, a second motion was approved to utilize the proposed ordinance provisions as a framework for a voluntary commercial recycling program and to develop a marketing plan with established goals to monitor progress over an 18-month period. The board challenged the GNCC to develop a marketing plan with support provided by the department. The board also requested interim progress reports from the GNCC and the department on a six-month basis.

The department and the GNCC worked closely to develop and implement a marketing plan to inform and educate county businesses about the benefits of recycling. The GNCC and the department also jointly identified recycling indicators to track recycling participation and diversion under the voluntary framework. When the first joint progress report was made in January 2003, the board requested that the GNCC and the department develop performance benchmarks and goals that could be used to measure the success of the voluntary commercial recycling initiative.

When the final progress report was presented to the board in January 2004, it was clear that the voluntary initiative was unable to achieve the desired results both in terms of participation and diversion. As a result, the board instructed the department to revise the proposed ordinance for its further consideration.

“While the results of the voluntary program were disappointing, it provided valuable information about the critical need for educational and outreach programs, which we put to a positive use when revising the mandatory commercial recycling ordinance,” said David Dee, an attorney with Landers & Parsons, P.A., the county’s outside legal counsel.

Further, the results of the voluntary program encouraged the county to look to other communities that had implemented mandatory commercial recycling ordinances to understand lessons learned. To assess these communities, the county tasked Malcolm Pirnie with conducting a survey to assess critical success factors to implementing mandatory non-residential recycling.

The board outlined five guiding principles to rework the ordinance:

1. Recycle more than one item.
2. Include an educational component.
3. Limit regulatory impact on businesses.
4. Provide a proper balance of both incentive and regulation.
5. Address impact on the Land Development Code.

To address the guiding principles, the department assembled a project delivery team consisting of representatives from various county departments as well as its outside special legal council and Malcolm Pirnie. Together, the project delivery team drafted the revised ordinance.

Recycle more than one item.

1. The intent and purpose of the ordinance requires a business to segregate and recycle as many recyclable materials as practical.
2. The ordinance defines recyclable materials to include paper, cardboard, glass, plastic (#1 through #7), aluminum, and ferrous metal. The board may designate other materials such as organic waste.
3. The ordinance establishes standards for recycling on commercial property that requires that a business shall diligently attempt to recycle all of the recyclable materials that it produces.

Include an educational component.

1. The ordinance authorizes establishment and implementation of an

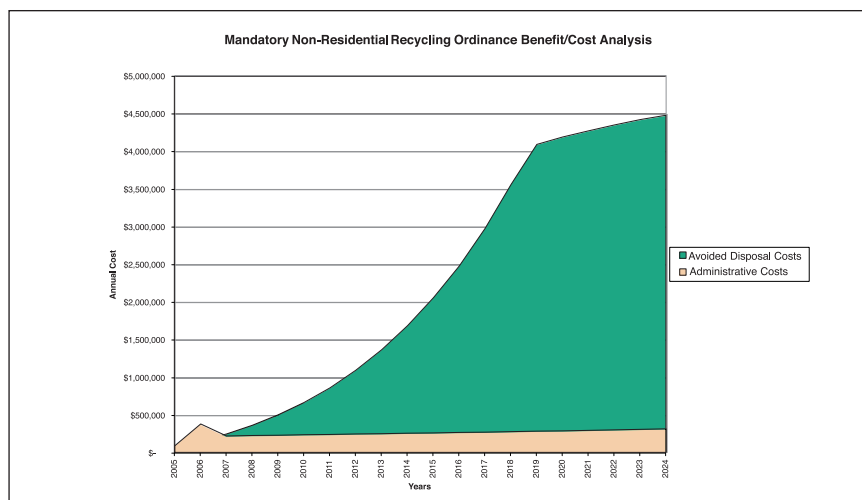


Figure 1. Financial Impact Over 20 Years

education and promotion program.

Limit regulatory impact on businesses.

1. The ordinance allows 12 months before enforcement by the code enforcement board. Enforcement will be phased and opportunistic, implemented by code enforcement, utility billing and customer service and pollution control departments with cross training provided by the solid waste management department.

2. The ordinance provides the option of self-hauling without using a contractor and requires provision, upon request, of a self-hauling certificate.

3. The ordinance exempts a business if it has the smallest (96-gal) solid waste collection container collected no more than two times per week.

4. The ordinance establishes minimum standards for recycling on commercial property giving the option of self-hauling or contracting with a recycling hauler.

Provide a proper balance of both incentive and regulation.

1. The ordinance authorizes an awards program.
2. The ordinance provides for Green Builder, Green Lodging, and Green Marina program assistance.
3. The ordinance authorizes the department to provide waste stream analysis to businesses at no cost.
4. The ordinance authorizes the department to develop a commercial recycling recognition page on their website.

5. The ordinance authorizes the department to develop recycling window stickers, a recycling logo for business letterhead, and a plaque for businesses to display.

6. The ordinance authorizes the department to serve as a media liaison.

7. The ordinance will result in landfill airspace savings, which equals disposal cost control.

Address impact on the Land Development Code.

1. The ordinance provides for administrative variances due to site-specific conditions creating a substantial hardship and precludes compliance with LDC requirements for minimum parking spaces and visual screening of collection containers.

The department assessed the county’s implementation and maintenance costs over twenty years following ordinance implementation. In general, the activities associated with implementation and maintenance include business recycling assistance, recycling education, business outreach, recycling promotion, drop-off recycling, site visit coordination, and customer service.

The department concluded that they and other cooperating departments (e.g., code enforcement department, communications and customer relations department, pollution control department, and utility billing and customer service department) could utilize existing staff throughout the implementation and maintenance phases of this ordinance.

The associated costs, on a net present value basis, associated with implementation and maintenance over a 20-year planning horizon are about \$2.7 million.

The benefits of implementing the ordinance to the county, excluding the potential cost benefits to individual businesses, can be measured in terms of avoided disposal costs. The avoided disposal cost considers the savings associated with not disposing of the incremental tons recycled. For the purposes of this analysis, it was assumed that businesses will incrementally recycle up to 35 percent of their waste stream over the next 20 years. The underlying premise of this analysis is that, at some point the Naples Landfill will reach capacity, and the costs for alternate disposal will be considerably higher than the current approach on a relative basis.

Using this approach, the avoided cost associated with the disposal of the estimated incremental recyclable material quantity at an out-of-county landfill (the avoided cost) over a 20-year planning horizon is approximately \$18 million. The financial impact over the 20-year planning horizon is shown in Figure 1.

Further, the revised ordinance is part of an overall integrated solid waste management program. Therefore, it is important to note that the impact of the revised ordinance, when combined with other solid waste management elements, will have a cumulative positive impact on disposal capacity over the life of the Naples Landfill.

The revised mandatory commercial recycling ordinance was adopted by Collier County on July 27, 2004. The process was long, owed to debate and concerns about the most effective way to encourage business to recycle as a means to help the county achieve its goal of extending the life of the Naples Landfill. The result, in the end, was based on careful evaluation, public input, and consideration of what is best for the county's solid waste management program in the long run. GE

Ms. Kirk is Project Manager and Waste Reduction and Recycling Manager, Collier County, Florida, Solid Waste Management Department and Mr. Dietch is Senior Project Scientist, Malcolm Pirnie, Inc.

Lessons Learned

Through the survey it was learned that the approach to recycling compliance and enforcement varies among the surveyed cities and counties; however most of them experience similar challenges.

The three Florida counties that participated in the survey indicated that while they have sufficient enforcement provisions, education and outreach is the preferred method to bring businesses into compliance. Another interesting finding was that these counties placed a higher priority on residential recycling programs, with trained inspectors for the residential sector, but none for the commercial sector, which means that businesses are not routinely inspected for compliance.

And the Florida counties were not alone in their lax enforcement of commercial recycling—while other municipalities in the United States have enforcement officers, their numbers are limited, making routine inspections of businesses almost impossible. In other instances, enforcement problems relate to inexpensive fines, which do not impose a significant financial burden on businesses cited for violations. Some ordinances contain fines that range between \$25 and \$100 per incident. Such fines may not provide enough incentive for a business that might prefer not to comply rather than invest the time and money in a recycling plan. Nonetheless, education remains an important tool in all cases to bring businesses into compliance.

Some of the most successful programs were a result of enforcement starting at the licensing stage for both businesses and the haulers. Although this does not guarantee that recycling is actually taking place in each establishment, it does guarantee that all businesses are officially contacted and informed of the proper way in which they are expected to handle their recyclables. For example, during the licensing renewal process in Chicago, non-residential establishments are required to provide evidence of their recycling programs including the use of proper recycling containers and the type of materials they recycle, as well as provide evidence of their contract with authorized haulers. In addition, haulers must provide evidence of their recycling activities to obtain a license. Chicago also requires businesses to either recycle three items or recycle two while providing two source reduction methods.

Another method that has proven to be effective has been enforcement by imposing fines on the haulers as well as the businesses. By inspecting the trucks at landfill locations, some cities have forced the haulers to pay close attention to their clients' waste. The result is that if the business does not recycle properly, the haulers will not take their waste.

Indirect incentives provided by some of the recycling programs include the assessment of annual solid waste fees. Some counties must pay an annual fee for their solid waste depending on the amount of material they dispose. Therefore, by reducing the amount of waste that goes into the landfill they also lower the annual fee they pay the county for garbage production. Another indirect incentive arises from not having to pay tipping fees at the recycling facilities. In some areas, the businesses only pay for the collection of their recyclables, but not for the tipping fees associated with recycling facilities.

It was observed that almost all the cities and counties surveyed do not share revenues on the sale of commercial recyclables and the businesses must privately contract with haulers. Therefore, the cities and counties only serve as facilitators of information and enforcement, but do not enjoy any revenue from the sale of recyclables. GE