



Office of the Auditor

SUSTAINABILITY MANAGEMENT AUDIT FOLLOW-UP

Strong foundation created

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June 6, 2012

BACKGROUND

In 2003, the Metro Council passed a resolution to create a sustainable business model and set five long-term goals for internal sustainability at its facilities. The goals focused on preventing carbon emissions from growing, reducing water consumption and the amount of waste sent to landfills, eliminating the use of toxic products and preventing the degradation of habitat around Metro facilities. Five years later, in 2008, the Metro Council adopted sustainability as the guiding principle for all policies and programs.

The Metro Auditor released an audit of sustainability management the following year. The audit found:

- policies and goals could be clarified;
- organizational barriers were preventing Metro from putting its resources towards the areas of greatest impact; and
- tools were needed to help the organization implement a sustainable business plan.

The audit contained 11 recommendations to help improve the efficiency and effectiveness of Metro's sustainability efforts. This report assesses what has been accomplished in the three years since the initial audit was released.

SCOPE AND METHODOLOGY

The objective of this audit was to determine the status of recommendations from the 2009 audit. We interviewed management and employees who developed the sustainability plan and were involved in its implementation. We reviewed the data used to monitor and report on Metro's operations and goals. In addition, we analyzed information about the organizational structure, funding sources, expenditures and controls for sustainability management.

We conducted our follow-up audit work in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

SUMMARY

Metro made significant progress on the recommendations from the 2009 audit, **Sustainability Management: Focus efforts and evaluate progress**. We found nine of the eleven recommendations were implemented and two were in process. Metro created a strong foundation for its sustainable business model. Institutionalizing these efforts into everyday management decisions will help Metro make progress towards its long-term goals.

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RESULTS

Metro made significant progress in implementing the recommendations from the 2009 audit of sustainability management. We found that nine of the eleven recommendations were implemented and the other two were in process. The organization developed a plan, clarified roles and responsibilities, created tools to monitor progress towards goals and communicated the results of its efforts. The two recommendations that were in process, assessing the benefits and costs of activities, and continuing to develop the funding structure, remain important steps to incorporate sustainability concepts into operational decisions. Metro should also provide training and monitor the quality and completeness of data used to track progress in order to institutionalize sustainability. A list of all the recommendations and their status is on page seven.

Strong foundation created

By implementing nine of the eleven recommendations, Metro created a strong foundation for a sustainable business model. The agency-wide Sustainability Plan (plan) is the basis for developing the model and meeting the long-term environmental goals for the organization. Managers are expected to take actions to help implement it. The Metro Council adopted the plan in October 2010. The plan contained all the elements recommended in the audit:

- **Short-term goals:** Interim targets were established for each of the five sustainability goals. Performance targets were identified for 2013, 2015, 2020, 2025, and for one measure, 2050.
- **Prioritization strategy:** A preliminary hierarchy of how to prioritize projects for funding was established. Specific strategies for facilities were not outlined in the plan. Instead, it called for the development of “site-specific work plans.” Providing flexibility to managers to develop their own plans within the context of the larger agency goals was reasonable.
- **Landfill gas:** The plan included a high priority action item to address this recommendation. The Parks and Environmental Services department commissioned a study in December 2011 that evaluated options for using landfill gas. The primary purpose of the study was to determine the feasibility of building a gas-to-energy plant at St. Johns. Due to declining gas emissions, a gas-to-energy project was not recommended. Management stated that an extension of the current agreement with Ash Grove Cement was recently reached.
- **Recycling strategies:** Seven waste reduction strategies and actions were listed in the plan. There were some challenges in implementing all the strategies, but recent trends show improvement in the amount of waste recovered.

After the plan was adopted, written roles and responsibilities were developed to guide its implementation. During our interviews with management and employees, we found that there was improved understanding about expectations and accountability for results. In addition, many of the groups that work on sustainability at Metro developed charters and work plans to organize and guide their efforts.

Tools developed and progress measured

Metro developed tools to implement a sustainable business model. Employees created a greenhouse gas emissions toolkit and a protocol was selected to estimate greenhouse gas emissions resulting from Metro's operations. This information was used to develop the plan. Metro expects to use the same protocol in the future to report on its performance targets.

Metro employees put data management systems into place to track progress towards goals. They implemented a web based system to collect and analyze data about electricity, natural gas and water consumption from each of Metro's facilities. They created other data sets to track progress on the habitat improvement and toxics reduction goals. Employees were in the process of improving tracking of recycling and waste reduction information.

The first annual sustainability report was presented to the Metro Council in February 2012. The report contained data that tracked progress on each of Metro's goals. Metro exceeded its performance targets for reducing electricity use and improving the overall recycling rate. Small improvements over the baseline data occurred for the toxics reduction and water consumption measures. The report identified a negative trend for overall waste generation at Metro facilities, indicating that more work is needed to meet this target. The report also included information about innovative projects that may be of interest to other governments in the region, which was one of the recommendations from the initial audit.

Process to evaluate projects and commit funds evolving

Progress was made on implementing two other recommendations, developing a funding structure and assessing environmental benefits and costs, but more work is needed. While each recommendation presented its own challenges, we view them as being interrelated. Achievement of some of Metro's sustainability goals such as water reduction and energy efficiency may result in savings, which makes it easier to show the impact of investments. Other goals such as improved habitat, reduced toxics and waste reduction, may not directly reduce Metro's costs. Having more clarity about how to prioritize funding for these goals requires more information to determine if benefits outweigh costs.

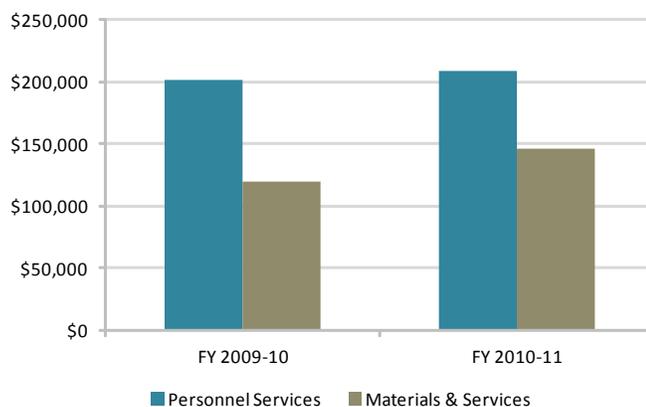
The funding structure for sustainability management was from a mix of department budgets and the capital improvement plan, which includes new capital projects as well as renewal and replacement of existing assets. Funds were used for three types of activities:

- **Agency-wide sustainability:** These expenditures were located in the Sustainability Center and consisted of the Sustainability Coordinator position, data management software, consultants and internal grants to help implement the plan.
- **Department specific:** These expenditures were located primarily in three departments: Parks and Environmental Services, Sustainability Center and Visitor Venues (Oregon Convention Center, Oregon Zoo, Portland Center for the Performing Arts and Exposition Center). Expenditures consisted of a Sustainability Coordinator at the Oregon Convention Center, capital construction projects, renewal and replacement projects and expenditures to improve the environmental performance of Metro's facilities.

- **Green Teams:** There were four green teams that led small projects to improve sustainability at some Metro facilities.

Expenditures for agency-wide sustainability and green team activities totaled about \$355,000 in FY2010-11. This was an increase of about 11% from FY2009-10. Most of the increase was for materials and services expenditures for consultants and software. Tracking expenditures for department specific actions was more challenging. In FY2010-11, departments coded an additional \$105,000 to sustainability project codes, but this total may not include all spending. Capital expenditures for projects at the Oregon Zoo and Oregon Convention Center were not included in these totals.

Sustainability program expenditures FY 2009-10 and FY 2010-11



Source: Metro Office of the Auditor's analysis of expenditure data in accounting system.

During interviews, the funding structure for sustainability was repeatedly cited as a challenge. Management and employees cited two separate, but related issues. The first was determining what source of funds should be used for sustainability projects. Managers wanted to use money in the renewal and replacement fund. Others felt sustainability activities should be funded from department budgets. The second issue raised was finding the right balance between investing in more efficient systems and technologies, and being good stewards of public resources. The renewal and replacement process was the primary place where there was uncertainty and tension between different perspectives about the appropriate balance. Some felt there was not enough flexibility in the process to invest in more efficient systems. Others felt there needed to be a verifiable savings to justify expenditures that were above the original asset value. A project was launched in April 2012 to reevaluate existing funding policies.

We concluded that the intent of one of the recommendations related to funding was implemented, even though the Metro Council did not formally specify the price premium it was willing to pay for sustainability. The purpose of the original recommendation was to make sure the agency's sustainability goals were considered during the annual budget process. Based on our review of Metro's recent program budgets and analysis of recent program expenditures, the intent of the recommendation was implemented. In recent years, departments were required to provide information about how their work contributed to meeting Metro's sustainability goals as

part of the budget process. This showed that the Metro Council and the public were provided with information about each program's efforts to achieve agency-wide goals. Providing this information was a good control to help ensure Metro was allocating resources to meet its objectives.

Assessing benefits and costs

Management completed some basic assessments of potential economic and environmental benefits, but they were not consistently done for all facilities and their value for decision making varied. The most common analysis was done as part of energy audits of many Metro facilities. The audits focused on evaluating the potential energy savings and expected return on investment from proposed projects. The Sustainability Coordinator used the results of the audits to make budget recommendations to departments.

Several interviewees mentioned the challenge of quantifying some of the potential environmental benefits of projects, such as improved habitat and reduced toxics. They also pointed out that achieving Metro's sustainability goals will not always result in savings. There were few guidelines to help managers assess these potential environmental benefits. Without clear standards and criteria about how to prioritize projects that provide benefits that are hard to quantify, it was difficult for management to know how much funding to seek.

Developing standards and criteria would help improve managers' understanding about how funding requests will be evaluated. In addition, it would help them know how much time and effort is needed to provide information about the potential benefits and costs of proposed projects.

Continue to incorporate sustainability goals into operational decisions

Metro has made progress in making its operations more sustainable. As Metro's efforts continue to evolve, it is important to continue to develop standards and tools to inform funding decisions. Addressing the funding process and continued refinement of some controls will help incorporate environmental sustainability objectives into operational decisions.

We recommend that Metro continue to implement the two recommendations that were in process. Reevaluating existing policies is a good first step toward clarifying the funding structure. Determining how to assess environmental costs and benefits and incorporate them into funding decisions remains a challenge. Comprehensive assessments of potential costs and benefits may not be possible, but developing standards and criteria would be helpful. Management should also gather information about the actual results of its projects to improve future efforts.

Metro should institutionalize the progress it made in the last three years to avoid possible setbacks, if personnel or funding changes. In general, controls were in place to institutionalize sustainability but they will need to be monitored and maintained to ensure long-term goals are met.

We identified two areas where management should focus its efforts in the future. The first was data quality and reporting. There were some gaps in Metro's performance data. Some of the gaps were outside of Metro's control, such as the availability of data from some solid waste haulers. Other gaps, specifically for water consumption, were the result of not having meters to monitor well water use at Glendoveer Golf Course. Water consumption data was estimated for this facility, which accounted for 27% of total water use at Metro. The second area was training for employees. An internal survey was recently completed to assess training needs for sustainability. To address these two areas Metro should:

- monitor and improve data quality and note changes in data when comparing year-to-year results in the annual report; and
- continue to solicit feedback about training needs and provide training when appropriate.

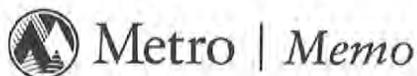
STATUS OF METRO AUDITOR RECOMMENDATIONS

2009 Recommendations	Status
1. To develop clear policies and goals for agency sustainability:	
a. The Metro Council should specify the price premium it is willing to pay for sustainability activities related to its internal business operations.	<i>IMPLEMENTED</i>
b. Create an agency-wide sustainability plan that includes: <ol style="list-style-type: none"> 1. Measurable short-term goals and objectives. 2. A strategy to prioritize, by facility and utility type, the highest impact areas. 3. Options to expand the use of landfill gas from St. Johns Landfill gas recovery system when the current lease agreement expires in 2012. 4. Strategies to ensure that Metro is meeting or exceeding regional recycling goals. 	<i>IMPLEMENTED</i>
2. To reduce organizational barriers, Metro should establish:	
a. Written roles and responsibilities for the various groups working on sustainability management at Metro.	<i>IMPLEMENTED</i>
b. A funding structure that enables effective sustainability management.	<i>IN PROCESS</i>
3. To ensure it has the tools needed to implement a sustainable business model, Metro should:	
a. Develop a data management system that can track the major sources of greenhouse gas emissions and water use.	<i>IMPLEMENTED</i>
b. Assess costs and potential economic and environmental benefits of sustainability activities.	<i>IN PROCESS</i>
c. Standardize the protocols used to estimate greenhouse gas emissions for internal operations and projects.	<i>IMPLEMENTED</i>
d. Utilize staff expertise and resources in the Sustainability Center to help managers develop strategies to increase recycling.	<i>IMPLEMENTED</i>
4. To measure progress towards meeting objectives and disseminate results of its efforts, Metro should:	
a. Issue regular sustainability report.	<i>IMPLEMENTED</i>
b. Collect and analyze data to measure progress towards its sustainability goals.	<i>IMPLEMENTED</i>
c. Publish results of its innovative demonstration projects to help inform best practices for sustainability management and provide leadership in the region.	<i>IMPLEMENTED</i>

MANAGEMENT RESPONSE

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Date: June 1, 2012

To: Suzanne Flynn, Metro Auditor

From: Martha Bennett, Chief Operating Officer
Scott Robinson, Deputy Chief Operating Officer
Jim Desmond, Director, Sustainability Center

CC: Matt Korot, Program Director, Resource Conservation & Recycling
Molly Chidsey, Sustainability Coordinator
Margo Norton, Director of Finance and Regulatory Services

Re: Sustainability Management Audit Follow-up

This memorandum is management's response to the final audit report transmitted by your office on May 17, 2012. We appreciate this thoughtful review and the recommendations you make for Metro's management of its internal sustainability program. We agree with the finding that Metro made significant progress in implementing the recommendations from the 2009 audit on sustainability management and believe that Metro's actions since the Sustainability Plan was adopted in 2010 demonstrate how those recommendations helped build a strong foundation for the program.

Response to Recommendations in the Auditor's Follow-up Report

The following summarizes the Sustainability Center's response to the specific recommendations in the Auditor's follow-up report.

Recommendation: Continue in-process work to establish a funding structure that enables effective sustainability management.

Response: We agree. Existing policies for financing sustainability-related facility operations and maintenance projects are not clear on how these projects might be funded. As noted by the Auditor, the Sustainability Program is working with Finance & Regulatory Services to review existing Capital Asset Management Policies for opportunities to clarify the application of existing funding sources for sustainability related capital and renewal projects. We plan to submit recommendations to Metro's Chief Operations Officer later this year.

Recommendation: Continue in-process work to assess costs and potential economic and environmental benefits of sustainability activities.

Response: We agree. While the Sustainability Plan includes prioritization criteria for sustainability projects at Metro, these criteria are not yet utilized fully in the agency's budget process for facility operations, capital projects and renewal and replacement. We are addressing this with the funding structure work noted above. These recommendations will include how to

apply cost-benefit tools to project budgeting as well as noting how a project supports Metro's adopted environmental sustainability goals beyond cost savings.

Recommendation: Monitor and improve data quality and note changes in data when comparing year-to-year results in the annual sustainability report.

Response: We agree that well water consumption data for Glendoveer Golf Course can be improved. With the installation of a flow meter on one of two wells at the golf course last year, water consumption data is markedly improved, though not complete. We plan to install a flow meter on the second well at Glendoveer Golf Course during FY 12-13 to further improve data collection on water consumption at that facility

Recommendation: Continue to solicit feedback about training needs and provide training when appropriate.

Response: We agree. A recent survey of staff involved with the sustainability program revealed that there are a variety of training topics that would build staff capacity to implement Metro's Sustainability Plan and led us to make revisions to our intended training plan. We intend to implement these trainings during FY 12-13 throughout the organization.