

# Chapter V

## Sustainable operations

### A. Introduction

As part of the RSWMP outreach in 2004, public input indicated a desire to see the solid waste system become more 'green' by engaging in broader environmental protection and resource conservation. In 2005, Metro facilitated a team of solid waste system stakeholders to develop goals for the RSWMP update that would guide system activities to become more sustainable. This chapter of the Plan reflects their work: a definition of sustainability, a framework through which potential improvements can be examined, and goals and objectives to guide progress. The goals and objectives that follow are intended to apply to any solid waste facilities and services in the region that are regulated by government.

### B. Sustainability and the solid waste system

Sustainability efforts are becoming widespread among governments and businesses in Oregon. Metro adopted its own resolution to make agency operations more sustainable in May 2003, and has since taken a leadership role in implementing sustainability practices for contracted solid waste operations. These have included the use of ultra-low-sulfur and biodiesel fuel in facility rolling stock and long-haul trucks, as well as requiring purchase of rolling stock with the latest emission control devices.

Achieving sustainable operations throughout the system will involve engaging all participants in thinking about values, behavior and business decisions over the long run. This chapter of the Plan as well as the next (Plan implementation) will enable the regional solid waste system to achieve sustainability progress in a more coordinated fashion. It will also provide a model for sustainable operations in solid waste management for other jurisdictions around the nation.

To guide the evaluation and incorporation of sustainable practices, the following definition of sustainability, consistent with that of the State of Oregon, will apply:

"Sustainability" means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives [ORS 184.421 (4)].

Application of this definition to solid waste management practices requires a framework through which to examine, develop and deploy improvements. The framework that was chosen is based on "The Natural Step" as defined below.

"The sustainable operation of the solid waste system considers economic, environmental and societal resources and is consistent with the Natural Step system conditions so that nature is not subject to systematically increasing:

1. Concentrations of substances from the Earth's crust;
2. Concentrations of substances produced by society, or
3. Degradation by physical means; and in that system
4. Human needs are met worldwide."

The following nine goals and 23 related objectives were approved by the Regional Solid Waste Advisory Committee in 2005. These goals and objectives are intended to guide evaluation and implementation of sustainable operations practices over the next 10 years.

## **Goal 1.0 Reduce greenhouse gas and diesel particulate air emissions**

Objective 1.1: Implement plans for greater energy efficiency.

Objective 1.2: Utilize renewable energy sources.

Objective 1.3: Reduce direct emissions of greenhouse gases from landfills and other facilities.

Objective 1.4: Reduce diesel particulate emissions in existing trucks, barges and rolling stock through best available control technology.

Objective 1.5: Implement long-haul transportation and collection alternatives where feasible.

Options for realizing these objectives may include: choosing renewable energy options (both in daily operations and in the procurement of new contracts); implementing new energy audit and efficiency programs to ensure incorporation of the most energy-efficient practices available; and converting facility rolling stock, collection vehicles and transport equipment to ultra-low-sulfur fuels and incorporating the cleanest exhaust technology available.

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## **Goal 2.0 Reduce stormwater run-off**

Objective 2.1: Implement stormwater run-off mitigation plans.

Options for realizing this objective may include: employing best bio-swale systems; new oil/water separation technologies; active and passive filtration systems; and best management practices for wash-down and water usage procedures.

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## **Goal 3.0 Reduce natural resource use**

Objective 3.1: Implement resource efficiency audit recommendations.

Objective 3.2: Implement sustainable purchasing policies.

Objective 3.3: Reduce disposed waste.

Options for realizing these objectives may include: achieving higher-than-minimum recovery requirements; and implementing bid and procurement procedures that allow for maximum sustainability options

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## **Goal 4.0 Reduce use and discharge of toxic materials**

Objective 4.1: Implement toxics reduction and management plans.

Options for realizing this objective may include: using non-toxic cleaning and industrial supplies; and developing education programs regarding proper product usage.

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## **Goal 5.0 Implement sustainability standards for facility construction and operation**

Objective 5.1: Implement sustainability standards for site selection.

Objective 5.2: Require new construction to meet the Leadership in Energy and Environmental Design (LEED) or equivalent program standards.

Objective 5.3: Provide incentives for existing facilities to meet LEED or equivalent program standards.

Options for realizing these objectives may include: basing new facility site acquisition on the lowest environmental and social impacts associated with site selection and facility development; providing an information source for LEED or LEED equivalent program and product research for workshops and other practical purposes; and underwriting the cost of Green/Sustainable Building program certification through system fees.

## **Goal 6.0 Adopt best practices for customer and employee health and safety**

Objective 6.1: Reduce injuries by automating operations where effective.

Objective 6.2: Implement health and safety plans that meet or exceed current minimum legal standards.

Options for realizing these objectives include: reducing task redundancy associated with moderate to high employee injury and/or toxic exposure risk; and setting safety standards above minimum requirements in the industry.

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## **Goal 7.0 Provide training and education on implementing sustainability practices**

Objective 7.1: Train key regional waste industry employees, government waste reduction staff and political officials in adopted sustainability practices.

Objective 7.2: Inform suppliers, contractors and customers of the adoption of sustainability goals and practices.

Options for realizing these objectives include: participating in training programs focused on sustainability that are designed to address business model concerns; learning peer-to-peer from businesses that have already adopted and successfully implemented sustainability practices; and developing and employing proposal and procurement standards to encourage standard evaluation criteria based on sustainability practices and programs adopted by others.

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## **Goal 8.0 Support a quality work life**

Objective 8.1: Pay a living wage and benefits to all workers.

Objective 8.2: Promote community service.

Objective 8.3: Strive to employ a diverse work force.

Options for realizing these objectives include: determining and implementing living wage compensation levels for workers; encouraging employee involvement in charitable giving and other community service projects; developing programs to “give back” to the communities in which the facility or services operates; and employing affirmative action principles in recruiting, hiring, training and promoting.

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## **Goal 9.0 Employ sustainability values in seeking vendors and contractors**

Objective 9.1: Request sustainability plans from potential vendors and contractors.

Objective 9.2: Assist vendors and contractors in achieving sustainable practices.

Objective 9.3: Support local vendors when feasible.

Options for realizing these objectives include: providing guidance and criteria standards for vendor sustainability plans or practices; promoting training and education programs to assist vendors in employing sustainable practices; and establishing affirmative purchasing policies for local companies that are able to provide needed services.

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## **Monitoring and implementation methods**

Metro will establish and coordinate a sustainable operations work group of policy and technical participants. The work group will develop priorities and strategies for achieving the objectives, and will report on progress annually to the Regional Solid Waste Advisory Committee and Metro Council.