Metro Solid Waste Advisory Committee
Food Waste Recovery Policies
February 2, 2011

Recovery Rate Impact
The region's recovery rate would increase by approximately one percentage point for each 22,000 tons of additional recovery.

Greenhouse Gas Emissions Impact
Diverting one ton of food waste from landfilling to composting reduces greenhouse gas emissions by approximately one ton of carbon dioxide equivalent.

The estimated economic value of reducing greenhouse gas emissions by diverting food waste from landfilling to composting is $42 per ton.

Policy 1 – Funding

Policy
Metro should provide financial assistance to local governments for two to three years to help them pay for staff needed to implement organics collection programs.

Cost
Approximately $80,000 to $100,000 for each position, including salary, benefits and local government overhead costs.

Regional System Fee (RSF) Impact
For FY 2011-12, up to approximately $340,000 could potentially be offset by reductions elsewhere in the Metro budget, so there would be no direct impact on the RSF from these costs. Without these reductions, the RSF would increase by approximately 27 cents per ton for the full $340,000, representing an increase of about 0.3% on the current total tip fee. The Metro Council would need to approve both the budget costs and changes to the tip fee.

Policy 2 – Metro Facilities

Policy
Metro should increase organics transfer capacity at its facilities by:

1. Increasing capacity at Metro Central.

2. Pursuing options to divert dry waste loads or self-haul customers to other facilities in order to provide organics transfer service at Metro South.

Cost
1. Approximately $500,000 in capital costs to double capacity at Central.

2. No estimate yet on costs associated with changes to South to accommodate organics, or with managing dry waste or self-haul customers at other facilities.

Policy 3 – Disposal Ban

Policy part A – *Option 1*
If the milestones listed below are not achieved by December 31, 2012, Metro should declare its intent to ban the disposal of commercial sector food waste, effective January 1, 2015.

Policy part A – *Option 2*
If the milestones below are not achieved by December 31, 2012, Metro will conduct a feasibility analysis for a disposal ban. That analysis will be completed by June 30, 2013 and presented to SWAC. SWAC will then vote on whether to forward the 2015 disposal ban policy option to Council.

Milestone 1
Adequate transfer or processing capacity exists within a travel time range roughly equivalent to that for garbage, yard debris and recyclables.

Milestone 2
Commitment, through resolution or adoption of rates, to implementing commercial organics collection programs by each jurisdiction that contains areas with high concentrations of food waste-generating businesses.

Policy part B
If Metro declares an intent to ban, it will work with local governments and the solid waste industry to develop the details of how the ban will be implemented.

Policy part C
Metro approves a ban on the disposal of commercial sector food waste, effective January 1, 2015.

Metro Solid Waste Advisory Committee

Food System Policy Discussion Paper: *Food Rescue Infrastructure*

February 2, 2011 (this is the same as the 11-18-10 version, except for the italicized section below)

Policy Identified by SWAC

Support and expand the region's food rescue infrastructure.

Purpose Relative to the Food System

To increase the amount of edible food diverted from disposal and recycling to those in need.

What would adoption of this policy by Council do?

This policy would likely be adopted through Council approval of funding for grants to food rescue agencies. *For example, the policy option provided to Council by SWAC could be:*

> *Provide one-time [or ongoing] grant funding to food rescue agencies to increase the amount of donatable food recovered and distributed.*
>
> *or, more narrowly*
>
> *Provide one-time [or ongoing] grant funding to food rescue agencies for capital equipment purchases to increase the amount of donatable food recovered and distributed.*

Context

Oregon has historically been one of the hungriest and most food insecure states in the country. According to the Oregon Food Bank, in fiscal year 2008-09 more than 240,000 people per month ate meals from an emergency food box and 3.8 million meals were served by soup kitchens and shelters--an all-time high. Factors such as the reduction in Federal USDA foods, and the growth of secondary markets coupled with increased unemployment, medical expenses and the growing income gap, resulted in stocks of food declining at the same time as demand for assistance increased. Food rescue agencies are striving to source increased amounts of food.

There is precedent for Metro working in this area. In 1996, informed by input from the region's food rescue agencies, Metro implemented a grant program that assisted food rescue agencies with the purchase of equipment that helped them to safely collect, store and distribute fresh and perishable foods. Over a period of nine years, Metro granted more than $950,000 for the purchase of refrigerated trucks, coolers, freezers and other equipment. A conservative estimate based on reports received from grant recipients, found that these grants enabled the collection and distribution of over 9,000 tons of food—worth $30 million to a food rescue agency[1]. In 2002, Metro evaluated the program and found that the average benefit per dollar of grant funds distributed was $31—illustrating a high level of return for the funds distributed.[2]

In addition, Metro conducted a barrier/benefit study in 2003 to better understand what compels businesses to donate surplus food as well as what they view to be the biggest barriers. In response to the findings of this study, Metro developed and implemented the *Fork it Over!* program. *Fork it Over!* is a peer-to-peer initiative that helps food businesses donate surplus prepared, perishable foods that have not been served, by showing that it is safe, simple and the right thing to do. It recruits food businesses to make commitments to donate food regularly. It also leverages partnership support from key industry leaders and associations to reinforce the social and cultural value of food donation, and provides regular

[1] Based on $1.67 per pound dollar value of the recovered food to a food bank, calculated by America's Second Harvest—now Feeding America, the nation's food rescue network.

[2] Calculations were based on avoided collection and disposal cost of $125 per ton and a $1.67 per pound dollar value of the recovered food to a food bank.

reinforcement for participating through free publicity. To increase the convenience of donation, Metro also developed an interactive on-line tool for donors. The system asked donors to simply enter their location and the food they wished to donate, then it displayed the contact information for the closest food rescue agencies along with information about the agencies, who they served and if they would come to pick up the donation.

Metro's Regional Solid Waste Management Plan (RSWMP) outlines goals and objectives that guide the direction of key program areas to reduce the amount and toxicity of solid waste in the region. One of the key objectives in the organics sector is to support and increase organic waste prevention and diversion practices, primarily focusing on food donation.

Potential alignment with other efforts

The Oregon Food Bank has recently convened a steering committee of food industry executives on which Metro has a seat. This group is looking at creative and constructive ways to improve the food rescue system in partnership with the food industry. OFB's desire is to maximize the fresh and perishable foods it receives and redistributes throughout the state in a strategic manner. The group is working to identify the gaps in the existing system and collaborate on ways to close them.

Feasibility

It would be highly feasible for Metro to implement a policy to support and expand the region's food rescue infrastructure through grants to food rescue agencies.

Anticipated Effects

Environmental Effects

- Diverting one ton of food waste from landfill disposal to reuse reduces greenhouse gas emissions by approximately one ton of carbon dioxide equivalent.
- Diverting one ton of food waste from composting to reuse reduces greenhouse gas emissions by approximately.01 ton of carbon dioxide equivalent.[3]

Economic and Fiscal Effects

- The current value of one ton of food diverted to reuse is estimated to be $3,000[4].
- Each $100,000 of Metro expenditures to support the region's food rescue infrastructure would increase the Regional System Fee (applied to each ton of disposed waste) by 10 cents.

Stakeholder Effects

- Direct benefit to food rescue agencies and those who utilize their services.
- Expansion of food rescue system capacity may allow new businesses to participate, with potential savings through decreased disposal costs and tax deductions for charitable donations.
- Program costs would be funded by regional solid waste ratepayers.
- Increased food rescue system capacity may lead to more requests from businesses to local government waste reduction programs for assistance with donation program implementation.

Metro Authority

The Metro Council can appropriate funds to be used to support the food rescue infrastructure and the Chief Operating Officer has the authority to distribute these funds through agreements with food rescue agencies.

---

[3] Estimate is based on maximum emissions from compost piles representing 2.5 percent of the initial carbon and 1.5 percent of the initial nitrogen. If compost contains 75% organic matter with a C:N ratio of 30:1, one ton of carbon would evolve as methane for each 100 dry tons of organic matter. Emissions from well-managed and monitored aerobic composting operations could be an order of magnitude lower. Static pile compost systems have the potential to have greater GHG impacts. Source: Sally Brown & Scott Subler, Composting and Greenhouse Gas Emissions: A Producer's Perspective, Biocycle Magazine, March 2007.

[4] Based on revised food bank value of $1.50 for every pound of food received. Source: Oregon Food Bank.

Metro Solid Waste Advisory Committee

Food System Policy Discussion Paper: *Carbon Pricing*

February 2, 2011 (same version as used for November 18, 2010 meeting)

Policy Identified by SWAC

Advocate for a carbon price signal across the life cycle of products and materials, including imports. This price signal could be through an emissions cap and/or a carbon tax *(this policy is taken from the Oregon Global Warming Commission's Interim Roadmap to2020)*.

Purpose Relative to the Food System

To reduce greenhouse gas emissions associated with the production, transportation and end-of-life management of food products by using a price signal to influence producer practices and consumer decisions.

Context

The Portland metropolitan region is a national leader in arresting the rise in greenhouse gas emissions; however, our current efforts fall far short of what is needed to meet carbon reduction goals established in state law. Moreover, within 25 years, we can expect to be joined by one million new neighbors. Energy instability and climate change require us to rethink everything from where we live, to where we get our food, to how we get around.

To refocus the region's efforts to address climate change, the Metro Council adopted Resolution #08-3931outlining the need to convene stakeholders for the purpose of developing greenhouse gas emission reduction strategies. Given the scope and complexity of this task, the Metro Council adopted Resolution #08-3971 in August 2008 designating the Climate Initiative as a Council project.

In order to identify where to focus the region's efforts, Metro conducted a Greenhouse Gas Inventory for the Portland metropolitan region. The inventory was intended to establish a snapshot of the region's greenhouse gas emission sources in order to make investment decisions that can have the greatest effect in reducing greenhouse gas emissions. Fourteen percent of the Metro region's greenhouse gas emissions are associated with the production, transportation, and end-of-life management of food consumed by residents and business operators. Most food-related emissions result from the growing of food (especially feed for animals) and, to a lesser extent, food processing.

What would adoption of this policy by Council do?

- It would signal the Metro Council's interest in weighing in on regulatory options to reduce the carbon intensity of products.

- It would require Council to determine what its advocacy would actually look like, e.g.,:
    - Direct advocacy for state legislation
    - Direct advocacy for federal legislation
    - Direct advocacy for international agreements
    - Advocacy through the Governor or Oregon Congressional Delegation for federal legislation
    - Advocacy through the Governor or Oregon Congressional Delegation for international agreements

Potential alignment with other efforts
The recommendation completely aligns with a key action identified in the Oregon Global Warming Commission's *Interim Roadmap to 2020* adopted last month. The *Roadmap* offers recommendations for how Oregon can meet its 2020 greenhouse gas reduction goal (10% below 1990 levels) and get a head start toward its 2050 goal (at least 75% below 1990 levels). The recommendations are addressed to the next Governor and Legislature, the Oregon Congressional delegation, local governments, businesses and Oregonians generally. They will be incorporated into the Commission's upcoming report to the 2011 Legislature.

The policy being considered by SWAC is drawn directly from the *Roadmap*, which states that:

> A price on carbon across the full life cycle (resource extraction, manufacturing, transport, use, and end-of-life) offers the potential for significant reductions in greenhouse gas emissions associated with the life cycle of products and materials. The Materials Management Committee did not evaluate the relative advantages and disadvantages of capping emissions (either via "cap-and-trade", "cap-and-dividend" or some variation) vs. taxing emissions. However, given the global nature of many supply chains, and keeping with the Committee's vision of not penalizing Oregon or other domestic producers (relative to foreign competition), it will likely be important to apply a "border adjustment mechanism" to help ensure a level playing field. This mechanism, often discussed in the form of a carbon tariff, adds to the price of products that are made in locations whereby some or all of their upstream emissions are not covered by a carbon cap and/or tax.

The Oregon Global Warming Commission identified the lead parties on implementing this recommendation as the Oregon Congressional delegation, Governor's Office, and the Commission itself.

Feasibility

The action itself – advocacy – is highly feasible. The desired outcome of adoption of a regulatory framework, in which the life cycle costs of carbon are incorporated into the costs of products, is likely to be much less feasible over at least the short-term.

Anticipated Effects

Environmental Effects

- No direct effect from Council advocacy.
- Implementing policies to incorporate a carbon price signal would potentially result in significant reductions in greenhouse gas emissions.

Economic Effects

- No direct effect from Council advocacy.
- Implementing policies to incorporate a carbon price signal would impact the costs of producing food due to increased costs for energy used in production and fuel used for transportation.

Stakeholder Effects

- There does not appear to be either a high level of regional knowledge or consensus about policies to incorporate a carbon price signal, so there could be political implications for the Council in advocating for such policies.

Metro Authority

The Metro Council has the authority to advocate for legislation.