### 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.

#### <u>Cost</u>

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.

#### <u>Cost</u>

- 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 | Agenda

Meeting:	Metro Solid Waste Advisory Committee
Date:	Wednesday, February 2, 2011
Time:	2:00 to 4:00 p.m.
Place:	Room 501, Metro Regional Center

TIME	AGENDA ITEM	PRESENTER
2:00 p.m.	1. Welcome and review of today's agenda	Matt Korot
2:05 p.m.	2. Food Waste Recovery Policies Discussion Paper Objectives: (1) Complete discussion of refined policies; (2) vote on policies to move forward for Council consideration.	All
2:35 p.m.	3. Food Rescue Policy Discussion Paper Objectives: (1) Discuss policy; (2) determine whether the policy, as described in the paper, reflects SWAC's intent; and (3) vote on whether to move policy forward for Council consideration.	All
3:10 p.m.	4. Carbon Pricing Policy Discussion Paper Objectives: (1) Discuss policy; (2) determine whether the policy, as described in the paper, reflects SWAC's intent; and (3) vote on whether to move policy forward for Council consideration.	All
3:45 p.m.	5. Public comment	
3:55 p.m.	6. Next steps	Matt Korot
4:00 p.m.	Adjourn	

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### MEETING SUMMARY METRO SOLID WASTE ADVISORY COMMITTEE (SWAC)

Metro Regional Center, Council Chambers Thursday, December 16, 2010

#### Members / Alternates Present:

Matt Korot, Chair	Bruce Walker
Rick Winterhalter	Dave White
Susan Millhauser	John Lucini
Leslie Kochan (substituting for	JoAnn Herrigel
DEQ rep. Audrey O'Brien)	

Michelle Poyourow Amy Pepper Paul Ehinger, Alternate

#### Members / Alternates Absent:

Theresa Koppang Adam Winston Scott Keller

#### **Guests and Metro staff:**

Jennifer Erickson, Metro	Maggie Wilson	Jeff Murray, Far West Fibers	
Meredith Sorenson, Harvest Pwr.	Dick Springer, WMSWCD	Ray Phelps, Allied Waste	
Segeni Mungai	Easton Cross, Allied Waste	Elizabeth Slater	
Dean Kampfer, WMO	Holly Stirnkorb, Tabor Consult.	Gina Cubbon, Metro	
Arianne Sperry, City of Portland	Greg Moore		

#### 

Mr. Korot briefly previewed the agenda, which would primarily be a continuation of the November meeting, discussing and refining recommendations for food waste recovery.

Minutes were approved with one change suggested by Leslie Kochan (incorporated into the minutes prior to the meeting).

#### 

Since the last meeting, Mr. Korot and staff further refined a possible recommendation based on that meeting's discussion and comments. He suggested discussing whether these refined options (attached) reflect the tone of the last meeting before moving forward.

Is anything missing in the refined version, Mr. Korot queried.

Dave White asked if the "homework" assigned was incorporated into this new version; Mr. Korot explained that the "homework" was to help make sure he understood the comments made at the meeting, and for members to refine their own thoughts coming into this meeting.

Rick Winterhalter commented that he would like to propose discussing options for expanding the capacity of private facilities through means other than requirements that were a focus of last month's meeting.

Mr. Korot began to lead the group through discussion of the attached "Potential Policies" sheet.

#### **Funding**

Regarding the first box, "Metro should provide financial assistance to local governments..." John Lucini asked if Metro has the funds to assist local governments. Mr. Korot replied that all funding would come from the Regional System Fee (RSF). If it's a significant investment (over \$100K), it would be presented to Council as a separate budget item for consideration. If it's a relatively small amount, it could likely be included in the overall program budget proposed to Council. Bruce Walker commented that partnering with Metro was absolutely crucial for the City of Portland for its business waste reduction programs. Without resources, nothing could have happened. He said that \$100,000 would be about what the City of Portland alone would need, so for the regional organics program to be successful, it would require something more like \$500-\$750,000.

Mr. Winterhalter added that he'd done some basic calculations, as well. If the program had \$1 million, it would be roughly one penny more for the curbside ratepayer or seven cents per cubic yard of garbage service. The environmental benefit, using Metro's calculator tool, would be about \$6 per ton of organics recycled. The group discussed numbers further. Direct impact to the RSF would be about eight cents per \$100,000 of additional expenditures.

Mr. White questioned whether all jurisdictions even want an organics program. Metro needs to be sure that jurisdictions they're giving money to actually have a program to use it for, he said. Mr. Korot agreed, but he's also heard from jurisdictions who've said that it's easier to persuade their elected officials on a program if the money is already in place. That money signals a commitment by Metro.

JoAnn Herrigel agreed with Mr. White, adding that she'd like to see a timeline developed with triggers to show that when, for example, capacity is in place and local governments commit, then Metro would make funding available. If the City of Milwaukie had a program today, for instance, there would be haulers who wouldn't know where to go.

John Lucini said that if funding is to be provided, local governments need to have program goals in place and clear, defined uses for the funds in order to justify raising the RSF. Mr. Walker agreed it needs to be part of a work plan. He explained that an organics collection program requires a tremendous amount of training for restaurants, etc. because it's a behavioural change. That training will require staff from the local jurisdictions. The business recycling program is the model for that, and it worked well.

Continuing, Mr. Walker said he'd also like to see a coordinated regional campaign, working together to put out a consistent message. Leslie Kochan agreed. Programs in other parts of the state are working well, but would work much better with a coordinated effort such as Mr. Walker suggested. Mr. White requested information about how much food waste is available and how much the recovery rate will be impacted through the investment of funds being discussed.

Mr. Korot committed to getting the information Mr. White asked for, in addition to the impact on the RSF and curbside rates, and confirming market capacity per Michelle Poyourow's request. Based on the discussion, Mr. Korot said he will work to frame this policy option as a specific proposal, in hopes of getting to a thumbs-up / thumbs-down action by the group at the next meeting.

#### **Metro Facilities**

Mr. Korot moved on to the policy option category concerning Metro facilities, and referred to short-term actions and implications listed on the handout. He said that capacity at Metro Central is going to increase. Metro has already made that commitment. Continuing, he stated that Metro South could accommodate food waste, but only if self-haul or dry waste recovery service was eliminated from the site. Mr. Ehinger explained that relocating either of those would be difficult and would likely include using a facility that may not currently exist near Oregon City, and therefore be further down the timeline. Mr. White agreed,

saying that the implications are much wider than on the surface and just need to be included in the discussion.

Mr. Walker stated that he would not presuppose that Metro would need to develop a new facility. There is enough private capacity in the region to take up the slack if a decision was made to no longer accept dry waste at Metro South. John Lucini, in turn, said that Metro should do the analysis of whether it is food waste or something else that is the key material for Metro facilities to take. Mr. Walker responded that what Portland sees is there is not enough food waste capacity when balanced against efficiency and cost, e.g., Willamette Resources in Wilsonville is simply too far away to directly serve Portland. He added that we are kidding ourselves if we think we will get a lot more capacity in the short term, and that it's an absolute necessity to get more capacity at Metro Central and South, which are already permitted.

Mr. Korot asked that the members think about whether or not Metro should increase its capacity for food waste at Metro South at the expense of another service– that would definitely be a policy issue.

#### **Disposal Ban**

Mr. Korot reviewed some key points that came out of the last discussion and asked the group if the refinement shown on the handout is representative of that discussion.

Mr. Winterhalter said that the other two policies push fairly far, so it's premature to talk about a ban yet, though he thinks it may be a good idea. He suggested that the group may want to table the discussion. Ms. Poyourow offered that perhaps announcement of the intent to implement a disposal ban could be one of the triggers that Ms. Herrigel discussed earlier. Mr. Walker suggested that the first sentence of the revised policy should represent a clear and practical step. SWAC would be telling the Metro Council that it should consider a ban, but first local governments and the private sector need to get things lined up. That would send the message so that jurisdictions know what needs to be done in the short term.

Mr. White asked how we got here; recycling succeeded without even a threat of a ban, and said he didn't understand why the discussion was happening at this time – what's different about food waste? There's a sense of urgency regarding food waste, another member responded. Mr. Walker said the region has gone to a mandatory program for the business sector and that a ban would help us to send a clear message to the public. Ms. Kochan supported the value of a ban by noting that organics is still a huge portion of what goes into the landfill and creates significant greenhouse gases. Mr. White replied that he's seeing that providing information about greenhouse gas reductions and other benefits is not enough to persuade local government boards to implement food waste programs.

Mr. Winterhalter commented that regarding no bans being necessary for the recycling program, his jurisdiction has been fighting with a company since 1996 that insists it won't do any recovery until they start getting fined. Bans have a purpose. Mr. Lucini said that the opportunity model for recycling would likely be the same for food waste. Ms. Kochan added that DEQ supports consideration of a ban if the other necessary system elements are n place. Perhaps, Ms. Poyourow said, bans should have been instituted for recycling; maybe recovery rates would have improved much faster. She added that she understands the practical reasons for bans, but has concerns.

Mr. Korot checked with the group that they don't need more information on this issue, and is positioned to finish discussion of food waste recovery at the next meeting.

#### III. Public Comment on Agenda Item II......All

Jeff Murray agreed that people don't like bans, and added that it would be embarrassing if a ban deadline came before the infrastructure is in place. Also, it's better to gain program momentum first through willing participation by users. It's too soon to talk about a ban publically.

Ray Phelps opined that there's a need to distinguish between residential and commercial programs. Residential can be top down, but commercial has to be a bottom up process, otherwise the material put out by unwilling generators will be garbage. As a second point, he said to be careful about increasing tip fees because local governments are pushing back on rates. He added that he's convinced that Recology can supply more capacity at Metro Central and that his firm, Allied Waste, could do it at Metro South.

Meredith Sorensen told the group that she attended the Washington Organic Recycling Council (<u>www.compostwashington.org</u>) conference and that the presentations will be online, including one by Thurston County, which is starting its organics program.

Dan Blue stated that the City of Gresham would likely support all three policies and that funds from Metro would definitely help to get approval from his Council and get a program up and running. He agreed that Metro South should be included. He struggles with the idea of a ban, but would like to see bans included in the dialogue, because it could help get food waste out of the system more quickly.

Arianne Sperry said she's worked with other jurisdictions, some of which do mandate. It does increase recovery, but also causes increased contamination, so we would need to be prepared to address that. She added that bringing people on voluntarily is ultimately more effective.

Dean Kampfer commented that he agrees that local governments should have plans in place before being provided with funding and that local government elected officials need to be fully engaged. If comparing requirements of local governments versus bans as policy options, he prefers requirements because they add engagement. He added that contaminants can be a problem, so bringing on more volume isn't a solution if processing doesn't result in good product. Mr. Blue responded that any new program has contamination out of the gate, but continuous feedback and education – whether by bans or opportunity – improve the product. Dean agreed, stating that the quality of material in our region is far superior to that in other regions, but that there's a high cost associated with that outreach.

Mr. Ehinger mentioned that at Metro Central, Recology has achieved a dry waste recovery rate of 38%; at the same time, Allied Waste is reaching the highest levels at Metro South, as well.

Mr. Korot announced that the Metro Council approved a franchise for Columbia Biogas to accept food waste for conversion into energy, as well as compost and liquid fertilizer. It's a very significant step forward for the region's food waste system.

The remaining agenda items were tabled until the next meeting, and the meeting adjourned.

Prepared by:

Gina Cubbon Assistant to the Director Metro Parks & Environmental Services

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February 2, 2011

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#### 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<sup>1</sup>. 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.<sup>2</sup>

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

<sup>&</sup>lt;sup>1</sup>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.

 $<sup>^{2}</sup>$ 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.<sup>3</sup>

#### 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.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

# Metro | Agenda

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Time:	2:00 to 4:00 p.m.
Place:	Room 501, Metro Regional Center

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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<sup>1</sup>. 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.<sup>2</sup>

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

<sup>&</sup>lt;sup>1</sup>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.

 $<sup>^{2}</sup>$ 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.<sup>3</sup>

#### 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.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> 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.

# Metro Solid Waste Advisory Committee Food System Policy Discussion Paper: *Carbon Pricing*

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#### 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.

#### Metro Solid Waste Advisory Committee Food System Policy Discussion Paper: *Food Rescue Infrastructure* February 17, 2011

*Revisions from the previous version are in italics and reflect SWAC's discussion at its last meeting on February 2, 2011.* 

#### **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 Council adoption of this policy do?

Metro staff will complete work by June 2011 to identify current gaps in the food rescue system and options for Metro's potential role in closing those gaps. SWAC may choose to endorse the general policy identified above now and then discuss more specific options later in the year, or make no comments now, pending that later discussion.

#### 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<sup>1</sup>. 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.<sup>2</sup>

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 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

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rescue agencies along with information about the agencies, who they served and if they would come to pick up the donation.

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#### Feasibility

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

#### **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.<sup>3</sup>

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 approximately 10 cents.

Stakeholder Effects

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- 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.
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