

Sustainable
Procurement Strategy:
A Joint City of
Portland and
Multnomah County
Effort
- 1st Annual Review - 2003

Document Prepared by
the Sustainable Procurement Steering Committee
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Sustainable Procurement Steering Committee

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Executive Summary

In April and May of 2002, the City of Portland Council and the Multnomah County Board of Commissioners approved Resolutions that adopted the “*Sustainable Procurement Strategy: A Joint City of Portland and Multnomah County Effort*.” The vision of that Strategy is to:

“...promote actions which are environmentally, and socially beneficial while also being economically intelligent.” In other words, it is the desire of both the City and the County to buy less polluting products and services from less polluting companies that also provide additional societal benefits beyond the jobs, products, and services they already deliver.

Since that time, staff from Multnomah County and the City of Portland have been working to move toward purchasing decisions that promote long-term interests of the community. This 2003 Annual Report summarizes the recommendations resulting from the first year effort.

Specifically the Sustainable Procurement effort looked at the area of paper products, office furniture, automotive vehicles and equipment, cleaning and coating products and building materials. Each area was reviewed and specific procurement and use recommendations were made as described in more detail in the attached report. In summary, the recommendations include:

- A detailed paper use policy to be presented for approval to both the City Council and a similar paper use resolution to the County Board of Commissioners;
- Recommend changes to be included in future bid specifications for paper, office furniture, vehicles, and building specifications for recycled paint;
- The research and testing of safer and more environmentally preferable graffiti remover products; and
- Changes to City Code to make the donation of surplus property easier, purchasing guidelines for used furniture clearer.

It is recommended that the joint Sustainable Procurement effort continue. During the next year, another set of specific products will be identified. Staff will then work to identify possible policies and procedures that should be changed to ensure both the purchase of sustainable products, but also the appropriate use and disposal methods.

In addition to the continued review of specific commodities, the Steering Committee is continuing to look at ways to improve and provide coordinated employee training. Also, the Steering Committee continues to be frustrated by the lack of obvious ways to corporately provide incentives for employees to “do the right thing.” With limited resources – both fiscal and staff – this continues to be a difficult task.

Over all, the first year goals and of the “*Sustainable Procurement Strategy: A joint City of Portland and Multnomah County Effort*” have been met and it is recommended that the effort continue.

Background

In April and May of 2002, the City of Portland Council and the Multnomah County Board of Commissioners approved Resolutions that adopted the “*Sustainable Procurement Strategy: A joint City of Portland and Multnomah County Effort.*” Both Resolutions are included in Appendix 1.

The Strategy set forth a process for integrating environmental, social, and economic factors into specific purchasing decisions. The Strategy also provided a blueprint to implement sustainable procurement at the City of Portland and Multnomah County and move both governments toward purchasing decisions that promote the long-term interests of the community.

The Strategy uses an inter-jurisdictional Steering Committee to oversee multiple Task Forces that would focus on specific commodity areas and determine proposed recommendations (See Table A). The Steering Committee identified what they believed to be key staff from both the City and County to participate on each Task Force (a full list of Task Force Members is included in Appendix 2).

Based on previous work done at the State level, the first five commodity areas for review were:

- Paper Products
- Office Furniture
- Automotive Vehicles and Equipment
- Cleaning and Coating Products
- Building Materials

On May 1, 2002, approximately 85 City and County staff participated in a four hour training session. The training included an introduction to the concept of sustainability from both a global, local and personal perspective, as well as short overviews of the purchasing parameters and initial Task Force assignments.

The Task Forces were charged with the responsibility to:

- Review available information about the specific commodity area and obtain any additional information needed.
- Determine focus of group effort within commodity area. For example, because the area of “Paper Products” is so broad, it was necessary to focus on copier paper in the beginning and then move on to other products as time permitted.
- Obtain feedback from industry representatives and/or subject matter experts about product availability, packaging, specifications, usage, disposal, or other aspects of a product’s life cycle.
- Identify possible quantifiable performance benchmarks that will allow the City and County to measure the increased sustainable procurement of the particular product(s).
- Produce written recommendations on how to increase sustainable procurement of the particular product(s) to the Sustainable Procurement Steering Committee.

Each Task Force provided intermittent reports to the Steering Committee to ensure that the groups were able to stay on task and complete recommendations by January 2003.

Table B represents the Task Timeline or initial schedule proposed for the Steering Committee and Task Forces and approved by Council in March 2002.

While the Task Force effort was proceeding, the Steering Committee grappled with the question of how to continuously educate approximately 10,000 City and County employees on the concept of sustainability, the purchasing rules that exist and possible product choices. During the summer of 2002, an intern provided through the Oregon Performance Intern Program was able to focus on this question. The whitepaper developed is attached as Appendix 3.

**Table A
Sustainable Procurement Strategy
Process Description**

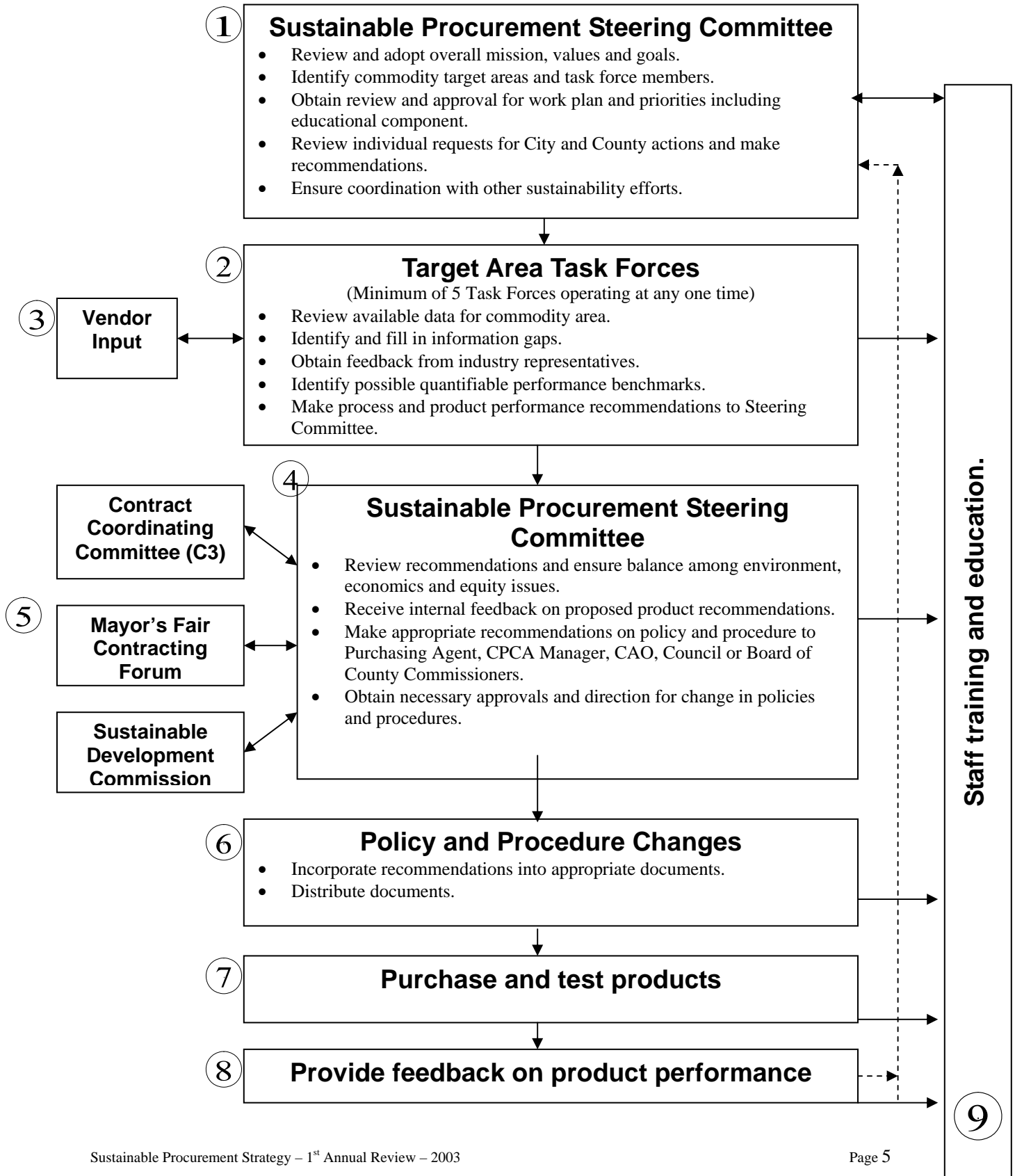


Table B – Sustainable Procurement Strategy Task Timeline as Approved by Council April 2002

Priority / Task	Jan 02	Feb	Mar	Apr	May	Jun	July 02	Aug	Sept	Oct	Nov	Dec	Jan 03	Feb	Mar	Apr	May	Jun	
Steering Committee																			
• Complete mission/ values and goals	Project Start-up																		
• Council and Board approval of Strategy		Submit for review and approval																	
• Target Area Task Force Work		Identify staff.		Design and hold initial training.				Monitor progress of Task Force effort.					Receive recommendations/ review/ receive input/ obtain approval.						
• Educational component		Design training and education proposal. Review with committees					Implement training plan												
• City and countywide coordination	Ongoing Activity																		
• Product feedback													Ongoing feedback						
• Monitoring													Monitor implementation of policy and procedure changes						
Target Areas Task Forces				Receive introductory training		Complete commodity area review and recommendations						Receive introductory training		Complete commodity area review and recommendations					

Recommendations

Each of the five Task Forces submitted interim reports during the process (all reports are included in Appendices 4 – 8). Consistent with the Strategy Process Description (Table A), the Steering Committee reviewed each of the final reports and summarized the recommendations and related action items. This summary information was then reviewed with the City of Portland’s Contract Coordinating Committee, the Mayor’s Fair Contracting Forum and the joint City/County Sustainable Development Commission. No substantive changes were made as a result of these reviews.

Recommendations fell into three major categories:

- a. Those recommendations which can be implemented with no further action by Council or Board;
- b. Those items which require Council or Board direction because of a change to Code or laws; or
- c. Those items requiring Council or Board policy direction because of fiscal or service delivery impact.

The recommendations and next steps for each of the commodity areas is summarized and included in the following pages. Because the City and County have different structures and policies or procedures, it was necessary to articulate the distinctions between both jurisdictions. However, as much as possible, consistent actions were recommended for both agencies.

Current Actions

Many of the type “a.” recommendations or those that can be implemented with no further action of the Council or Board are already being worked on. For example,

- The City and County are already collaborating on writing new specifications and an Invitation to Bid for a paper contract which will require that paper purchased by either jurisdiction meet or exceed EPA content guidelines and that the vendor report regularly on the amount of paper purchased.
- Purchases and the City Attorney’s office is currently reviewing possible code changes that will allow easier donations of surplus property between or to bureaus, other government agencies, Qualified Rehabilitation Facilities and non-profit organizations.
- County fleet services is reviewing data on use of biodiesel fuel and sharing that information with the City to determine possible future use.
- Procurement staffs for both the City and County are incorporating more sustainability information into training packages.
- The Office of Sustainable Development (OSD) is working with the Mayor’s Graffiti Task Force and external experts to research and test safer and more environmentally preferable graffiti remover products.
- Multnomah County Facilities is preparing recommendations for revisions to paint specifications to reflect pending Board action for rebled latex paint.

The remaining work elements, shown on the following pages, will be implemented by a cooperative effort between the City and the County. City Purchases Bureau, the Bureau of General Services, the Office of Sustainable Development and the City Attorney will lead the effort for the City of Portland. In the County, the Central Procurement and Contracts Administration, Sustainability, Facilities and Property Management, Central Stores, and County Attorney will all be involved.

Council and Board Actions

Many of the recommendations can be implemented with no further action by the Council or Board. Some recommendations, however, require action by the elected officials to implement. Those include:

Paper

- Purchase copy and printing paper from the Printing and Distribution Bureau.
- Increase use of City printing services and centralized office printing stations.
- Eliminate use of individual desktop printers except as allowed by exception criteria (outlined in the separate Paper Policy to be adopted by Council).
- Set printer defaults to duplex mode and require future purchases of printer, facsimile, and copier equipment to have duplex capability.
- Increase internal and external electronic communications and transactions.
- Manage mailing lists to remove duplicate and unnecessary addresses.

Automotive

- Approval of future contract for biodiesel fuel for City vehicles.
- Approval of future contract for City vehicles which meet fuel and emissions requirements.

Cleaning and Coating Products

- Approve modified City Code and County PCRB Rules which further defines language requiring use of rebleded latex paint products when latex paint is specified.

Bureau/ Department Actions Directed by Council/ Board

In addition to the specific Council or Board actions, by adoption of this 2003 annual update, the Council will be directing Bureaus and Departments to do the following:

Paper

- Increase use of centralized printing.
- Eliminate use of desktop printers except as allowed by exception criteria (outlined in the separate Paper Policy to be adopted by Council only).
- Increase internal and external electronic communications and transactions
- Manage mailing lists to remove duplicate and unnecessary addresses

Building Materials

- Continue/expand use of standard lighting best practices such as:
 - Low mercury lamps
 - Recycle all lamps at end-of-life
 - Replace T12 lamps with T8 lamps
 - LED exit signs
- Include recycling of unused paint in bid specs.
- Modify bid specs to not require gallons of extra paint.
- Educate Project Managers, contractors on new specs and best practices.

Education

- Encourage employee attendance at external sustainability training sessions – i.e. The Natural Step programs.
- Officially recognize the City’s Green Team and direct major Bureaus to provide staff time to participate in citywide Green Team activities.
- Identify sustainability priorities for each bureau and department.

Next Steps

With the adoption of this 1st Annual Review, the Joint City/County Sustainable Procurement effort will continue. The recommendations outlined will be implemented.

In addition to the ongoing review of specific commodities, the Steering Committee will carry on with efforts to look at:

- ways to improve and provide coordinated employee training;
- ways to corporately provide incentives for employees to make sustainable procurement decisions; and
- ways to better communicate the sustainable procurement efforts so as to maximize the use of “best practices.”

Paper Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Reduce consumption of paper and create efficiencies	<p>BGS/P&D</p> <ul style="list-style-type: none"> • Mandate double-sided copying as standard • Set machine defaults to double sided • Replace old equipment with multi-function devices <p>All Bureaus</p> <ul style="list-style-type: none"> • Increase use of centralized printing • Eliminate use of desktop printers except as allowed by exception criteria • Increase internal and external electronic communications and transactions • Manage mailing lists to remove duplicate and unnecessary addresses <p>Purchases/ P&D</p> <ul style="list-style-type: none"> • Complete central paper contracts (May be in conjunction with County) • Measure paper use and establish reporting method • Require vendor use reports <p>Council</p> <ul style="list-style-type: none"> • Require that all paper purchases be centralized • Approve resolution directing Bureaus to reduce consumption of paper 	Expected net savings	<p>Many aspects currently underway;</p> <p>Paper policy for consideration by Council by July 1</p>
Require that all paper purchased and used must meet or exceed EPA content guidelines.	<p>Purchases/ OSD/ P&D</p> <ul style="list-style-type: none"> • Develop new code language and bid specs to specify EPA guidelines • Educate employees on guidelines • Explore ability to identify all paper used which does not meet EPA guidelines • Identify replacement products for papers that do not meet guidelines <p>Council</p> <ul style="list-style-type: none"> • Approve new code as needed 	No fiscal impact expected	Paper policy for consideration by Council by July 1
Mandate that at least 10% of paper purchase and used within the City is alternative environmentally preferable paper (AEPP). Promote the use of AEPP wherever possible.	<p>OSD/ P&D/ Purchases</p> <ul style="list-style-type: none"> • Identify AEPP paper products, availability, costs • Replace existing noncompliant paper products with AEPP products <p>P&D</p> <ul style="list-style-type: none"> • Develop pilot project for use of AEPP products <p>Purchases</p> <ul style="list-style-type: none"> • Investigate contractor preference for firms using AEPP • Specify use of AEPP in bids when prudent 	No fiscal impact expected	Completed in conjunction with paper policy by July 1

Paper Task Force

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Reduce consumption of paper and create efficiencies	<p>Department of Business & Community Services</p> <ul style="list-style-type: none"> • Mandate double-sided copying as standard • Set machine defaults to double sided • Replace old equipment with multi-function devices • Eliminate use of desktop printers except as allowed by exception criteria. <p>All Departments</p> <ul style="list-style-type: none"> • Increase use of centralized printing • Increase internal and external electronic communications and transactions • Manage mailing lists to remove duplicate and unnecessary addresses <p>Purchasing/ Central Stores</p> <ul style="list-style-type: none"> • Complete central paper contracts (May be in conjunction with City) • Measure paper use and establish reporting method • Require vendor use reports <p>Board</p> <ul style="list-style-type: none"> • Approve resolution directing Departments to reduce consumption of paper 	Expected net savings	Many aspects currently underway; Paper policy for consideration by Board by July 1
Require that all paper purchased and used must meet or exceed EPA content guidelines.	<p>Purchasing / Sustainability Program</p> <ul style="list-style-type: none"> • Develop new PCRB rules and bid specs to specify EPA guidelines • Educate employees on guidelines • Explore ability to identify all paper used which does not meet EPA guidelines • Identify replacement products for papers that do not meet guidelines <p>Board</p> <ul style="list-style-type: none"> • Approve new PCRB rules as needed 	No fiscal impact expected	Paper policy for consideration by Board by July 1
Mandate that at least 10% of paper purchase and used within the County is alternative environmentally preferable paper (AEPP). Promote the use of AEPP wherever possible.	<p>Department of Business & Community Services</p> <ul style="list-style-type: none"> • Identify AEPP paper products, availability, costs • Replace existing noncompliant paper products with AEPP products • Develop pilot project for use of AEPP products • Investigate contractor preference for firms using AEPP • Specify use of AEPP in bids when prudent 	No fiscal impact expected	Completed in conjunction with paper policy by July 1

Office Furniture Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Donation of surplus property to in-house bureaus, other government agencies, QRFs, and non-profit organizations	Purchases/City Attorney <ul style="list-style-type: none"> • Review existing code to ensure donation ability; draft code changes as needed, similar to County FIN-13 	No fiscal impact for code changes	Can be implemented by Summer of 2003.
Develop website to view excess property	<ul style="list-style-type: none"> • Not included at this time due to funding issues. 		
Modify bid specifications to include extended/ transferable warranties; standards for deconstruction; and maintenance contracts on new furniture	BGS- Facilities/ Purchases <ul style="list-style-type: none"> • Develop specifications to include transferable warranties; deconstruction standards and ongoing maintenance • Develop warranty tracking system 	Potential price premium for additional product/services offset by reduced new furniture purchases	Can be implemented in 2003.
Modify existing used furniture policies	Purchases/City Attorney <ul style="list-style-type: none"> • Modify existing Purchasing code for the purchase of used furniture, something similar to the County PCRB rule 310-0500, this rule gives purchasing guidelines such as dollar thresholds, need to include essential criteria for used furniture, i.e., UL listed electrical, ergonomics, limited warranty. 	No fiscal impact.	Can be implemented in 2003 with adoption by City Council.
Develop used furniture contracts for multi-agency use	Purchases <ul style="list-style-type: none"> • Develop bid specifications • Release solicitation • Award contract 	No fiscal impact	Can be implemented in 2003

Office Furniture Task Force

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Donation of surplus property to in-house bureaus, other government agencies, QRFs, and non-profit organizations	Material Management <ul style="list-style-type: none"> • Review existing administrative procedure FIN-13; suggest revised donation succession, dollar threshold revisions and revise policy for selling property to employees 	No fiscal impact for code changes	Can be implemented by 2004.
Develop website to view excess property	Not including at this time due to funding issues.		
Modify bid specifications to include extended/ transferable warranties; standards for deconstruction; and maintenance contracts on new furniture	CPCA (with departmental help) <ul style="list-style-type: none"> • Develop specifications to include transferable warranties; deconstruction standards and ongoing maintenance • Develop warranty tracking system 	Potential price premium for additional product/services offset by reduced new furniture purchases	Can be implemented in 2003.
Modify existing used furniture policies	CPCA/County Attorney <ul style="list-style-type: none"> • Modify existing PCRB administrative rule 310-0500, this rule gives purchasing guidelines such as dollar thresholds, need to include essential criteria for used furniture, i.e., UL listed electrical, ergonomics, limited warranty. 	No fiscal impact	Can be implemented in 2003 with adoption by County Board.
Develop used furniture contracts for multi-agency use	CPCA <ul style="list-style-type: none"> • Develop bid specifications • Release solicitation • Award contract 	No fiscal impact	Can be implemented in 2003

Automotive Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Use biodiesel in City vehicles as a more sustainable alternative to diesel fuel	Vehicle Services <ul style="list-style-type: none"> • Identify Source • Review results of County pilot • Discussion with customers • Establish bid specs in conjunction with Purchases Council • Approval of Contract 	Additional initial costs of \$100,000 a year until market matures	Contract approval by Nov. 2003 (dependent on County results)
Develop performance specifications for administrative sedans that includes fuel and emission requirements	Vehicle Services (in conjunction with County) <ul style="list-style-type: none"> • Identify applicable EPA ratings • Review vehicle requirements with customers • Identify vehicles that meet requirements • Establish bid specs in conjunction with Purchases Council • Approval of Contract 	Will impact decisions on city car purchase (approx. 25 new cars a year)	Dependent on next vehicle purchase following completion of literature review. Expected to be implemented in next fiscal year.

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Use biodiesel in County vehicles as a more sustainable alternative to diesel fuel	Fleet Services and Sustainability Program <ul style="list-style-type: none"> • Complete pilot – compile and review results • Allocate funds in budget for FY 03-04 • Contract with Purchasing Purchasing <ul style="list-style-type: none"> • Establish bid specs and complete bid process 	Additional initial costs of \$11,000 a year until market matures	Pilot results complete March 31 Contract approval by Sept. 2003
Develop performance specifications for administrative sedans that includes fuel and emission requirements	Fleet Services (in conjunction with City) <ul style="list-style-type: none"> • Identify applicable EPA ratings • Review vehicle requirements with customers • Identify vehicles that meet requirements • Establish bid specs in conjunction with Purchases 	Will impact decisions on county car purchase (approx. 25 new cars a year)	Dependent on next vehicle purchase following completion of literature review. Expected to be implemented in next fiscal year.

Cleaning and Coating Products Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
City: Enforce Chapter 5.33.050 H of City Code regarding latex paint use and low VOC paint	<p>Purchases</p> <ul style="list-style-type: none"> • Provide awareness training for projects managers and others who influence what types of paint are used in construction and remodeling projects <p>Purchases / City Attorney</p> <ul style="list-style-type: none"> • Modify specifications in bid documents and language of City Code to further enforce the use of recycled paints. In City Code, further define “not appropriate” language limiting use of non recycled products and provide for exemption <p>Council</p> <ul style="list-style-type: none"> • Approve Code Change 	30-50% cost savings per gallon expected with extended use of recycled paints	<ul style="list-style-type: none"> • Immediate enforcement of current code • Inclusion in topic in 03-04 Project Manager training program • Code change prepared by 9-1-03.
Close recycling loop by requiring government agencies & contractors to recycle unused paints at the end of a project	<p>Construction Bureaus/ Purchases</p> <ul style="list-style-type: none"> • Include recycling of unused paint in bid specs • Modify bid specs to not require gallons of extra paint • Educate Project Managers, contractors 	No fiscal impact to City	
Conduct further research on graffiti removal product options	<p>City/ County Graffiti Task Force</p> <ul style="list-style-type: none"> • Collect inventory of graffiti removal products currently in use • Compile a comprehensive list of alternative graffiti removal products • Determine ‘best alternatives’ based on usage and do field tests • Share test results, incorporate effective products, and educate stakeholders about what type of products to avoid (i.e. most hazardous ingredients, etc.) 	No fiscal impact	<ul style="list-style-type: none"> • Test alternative products by end of July 2003 • Provide final recommendations by August 2003

Cleaning and Coating Products Task Force

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
<p>Create PCRB rules regarding latex paint use and low VOC paint</p>	<p>Department of Business & Community Services</p> <ul style="list-style-type: none"> • Create PCRB amendment • Provide awareness training for projects managers and others who influence what types of paint are used in construction and remodeling projects <p>Purchasing/ Facilities</p> <ul style="list-style-type: none"> • Modify specifications in bid documents to further enforce the use of recycled paints and provide for exemption <p>Board</p> <ul style="list-style-type: none"> • Approve PCRB Change 	<p>30-50% cost savings per gallon expected with extended use of recycled paints</p>	<ul style="list-style-type: none"> • Inclusion in topic in 03-04 Project Manager training program • PCRB change prepared by 9-1-03.
<p>Close recycling loop by requiring government agencies & contractors to recycle unused paints at the end of a project</p>	<p>Purchasing/ Facilities</p> <ul style="list-style-type: none"> • Include recycling of unused paint in bid specs • Modify bid specs to not require gallons of extra paint • Educate Project Managers, contractors 	<p>No fiscal impact to County</p>	
<p>Conduct further research on graffiti removal product options</p>	<p>City/ County Graffiti Task Force</p> <ul style="list-style-type: none"> • Collect inventory of graffiti removal products currently in use • Compile a comprehensive list of alternative graffiti removal products • Determine 'best alternatives' based on usage and do field tests • Share test results, incorporate effective products, and educate stakeholders about what type of products to avoid (i.e. most hazardous ingredients, etc.) 	<p>No fiscal impact</p>	<ul style="list-style-type: none"> • Test alternative products by July 2003 • Provide final recommendations by August 2003

Building Materials Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Ensure the City is using 'best practices' in lighting	<p>OSD (in cooperation with County Facilities and City/County stakeholders)</p> <ul style="list-style-type: none"> • Assess what's been done and areas for further work • Bring stakeholders together to: <ul style="list-style-type: none"> • Develop standards in areas such as color rendition, T5 lamp use, extended life lamps, outdoor horizontal cutoffs, auto controls, and dimmers use. • Explore incentives/budget packaging for lighting improvement projects • Integrate standards and recommendations into O&M manuals and other purchasing decision documents <p>All Bureaus</p> <ul style="list-style-type: none"> • Continue/expand use of standard lighting best practices such as: <ul style="list-style-type: none"> • Low mercury lamps • Recycle all lamps at end-of-life • Replace T12 lamps with T8 lamps • LED exit signs 	Recommended standards may involve higher initial costs, with payback over a couple of years	Ongoing
Incorporate sustainable procurement practices as renovation and new construction projects occur	<p>OSD/ All Bureaus</p> <ul style="list-style-type: none"> • Work with bureau project managers to develop purchasing decision guides and/or purchasing specifications for target building material areas such as: <ul style="list-style-type: none"> • Carpet purchasing and maintenance • Low-VOC adhesives • Wood (treatment methods and wood source) • Recycled content in concrete • Educate/train stakeholders as projects develop and produce results • Educate vendors to ensure M/W/ESB businesses remain involved • Distribute information on sustainable procurement best practices through: <ul style="list-style-type: none"> • Incorporation into purchasing decision documents • Online availability • Hard copies as needed (such as in a manual format) 	Varies according to project. Common impacts may include: lower risk exposure, higher initial costs but long-term savings, spur market development	Ongoing
Integrate recommended "green" specs and maintenance procedures into O&M manual developments	<p>BGS Facilities</p> <ul style="list-style-type: none"> • Coordinate and follow-up with OSD staff on the status of recommendation actions listed above 	No fiscal impact	During the next fiscal year.

Building Materials Task Force

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
<p>Ensure the County is using 'best practices' in lighting</p>	<p>Facilities (in cooperation with City OSD and City/County stakeholders)</p> <ul style="list-style-type: none"> • Assess what's been done and areas for further work • Bring stakeholders together to: <ul style="list-style-type: none"> • Develop standards in areas such as color rendition, T5 lamp use, extended life lamps, outdoor horizontal cutoffs, auto controls, and dimmers use. • Explore incentives/budget packaging for lighting improvement projects • Integrate standards and recommendations into O&M manuals and other purchasing decision documents <p>All Departments</p> <ul style="list-style-type: none"> • Continue/expand use of standard lighting best practices such as: <ul style="list-style-type: none"> • Low mercury lamps • Recycle all lamps at end-of-life • Replace T12 lamps with T8 lamps • LED exit signs 	<p>Recommended standards may involve higher initial costs, with payback over a couple of years</p>	<p>Ongoing</p>
<p>Integrate recommended sustainable Procurement practices and maintenance procedures into "Green Guidebook" for Facility managers.</p>	<p>Facilities (in cooperation with Sustainability program)</p> <ul style="list-style-type: none"> • Natural Step Process Improvement Team lead development with recommendations to Facilities management team. • Sustainability Program lead on any Board action required to support adoption. • Educate stakeholders as projects develop. • Educate vendors to ensure M/W/ESB remain involved. 	<p>Varies according to project. Common impacts may include: lower risk exposure, higher initial costs but long-term savings, spur market development</p>	<p>During the next fiscal year.</p>

Education Task Force

City of Portland Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
<p>Provide ongoing mechanisms to increase awareness and recognition of City sustainability accomplishments</p>	<p>OSD / Green Team</p> <ul style="list-style-type: none"> • Continue bi-weekly Green Tips emails to all employees, and include information on City policies and actions. • Continue bi-annual Green Fair • Establish monthly electronic newsletter for key Bureau contacts. This would feature current activities, training opportunities and program results. <p>OSD / Purchases</p> <ul style="list-style-type: none"> • Establish web site with information on City sustainable purchasing practices, specifications, and other resources for employees 	<p>A new monthly newsletter would require staff resources from existing OSD programs.</p> <p>The web site can be completed by existing staff.</p>	<p>Green Tips--ongoing</p> <p>Green Fair—June 2004</p> <p>Initiate newsletter June 03</p>
<p>Include sustainable product choices in ongoing training programs.</p>	<p>Purchases / OSD</p> <ul style="list-style-type: none"> • Project manager training. • Procurement training • New employee training <p>Bureaus</p> <ul style="list-style-type: none"> • Encourage employee attendance at external sustainability training sessions – i.e. The Natural Step programs 	<p>Competes for time with other material included in training.</p>	<p>Integrate with the new employee training when it is released in spring 03</p>
<p>Implement paper campaign in City bureaus to address:</p> <ul style="list-style-type: none"> ▪ paper use reduction ▪ paper specifications 	<p>Green Team</p> <ul style="list-style-type: none"> • Develop campaign approach and materials to be implemented by bureaus <p>Bureaus</p> <ul style="list-style-type: none"> • Provide a Green Team liaison to lead implementation within the bureau. 	<p>Target 10% reduction in paper costs</p>	<p>Launch campaign summer 03 in coordination with Council approval of paper policy and OSD Solid Waste & Recycling group initiatives</p>
<p>Provide technical assistance on sustainable products and designs</p>	<p>OSD/Purchases</p> <ul style="list-style-type: none"> • Provide information on sustainable products and designs. <p>Bureaus</p> <ul style="list-style-type: none"> • Identify sustainability priorities for each bureau. 	<p>Reduced resource-related costs, depends on project.</p>	<p>Ongoing</p>

Education Task Force

Multnomah County Next Steps

Recommendation	Actions Needed	Estimated Impacts	Estimated Timeline for Implementation
Provide ongoing mechanisms to increase awareness and recognition of County sustainable procurement accomplishments	<p>Green Team / Purchasing:</p> <ul style="list-style-type: none"> • Include information on sustainable purchasing work on Purchasing and Green Team MINT sites. • Partner with the City on Green Fair <p>Sustainability Program:</p> <ul style="list-style-type: none"> • Include sustainable purchasing theme for one or more of “sustainability tips” that go out monthly to all employees. • Establish monthly electronic newsletter. This would feature current activities and program results. 	The web site and newsletter can be completed by existing staff.	<p>Green Tips--ongoing</p> <p>Green Fair—June 2004</p> <p>Initiate newsletter June 03</p>
Include sustainable product choices in ongoing training programs.	<p>Purchasing / Sustainability:</p> <ul style="list-style-type: none"> • Include brief information in new employee orientation (including transportation options.) • Web-based purchasing training for managers & project managers (this will only be possible if we have additional resources). 	Requires staff time allocated to development of training materials & program.	Realistically FY-04
Conduct education and awareness blitz to reduce paper consumption.	<p>Sustainability / Pollution Prevention:</p> <ul style="list-style-type: none"> • Develop educational materials in support of potential policy changes (such as duplexing copiers etc.) • Conduct a pilot to set printers and copiers to duplexing as default setting. • Document baseline paper usage. • Work with individual departments on publication specific reduction projects (i.e., court dockets, public health inspections etc.) 	Can be completed by existing staff with support by an intern.	By end of calendar year 2003.

Changes in Strategy

Task Timeline

The original timeline called for two sessions of Task Force efforts during the 18-month period. With reductions at both the City and the County, adequate staffing has not been available to complete that level of effort. The updated timeline, shown in Table C, recommends only one session during the next 18 months. With this change, the effort should still be able to meet the original Strategy Goal of:

Complete a review and procurement policy update of at least 3 to 5 major commodity areas annually for the next five years resulting in improvements in 15 to 25 major commodity areas. Each review and update should result in commodity or contract specific guidelines and/or specification, policy, rule and/or code changes.

Changes in Process

Following the first round of Task Force recommendations, all Task Force participants were asked to complete an evaluation survey. Of the 73 people involved in the Task Force effort, 42 (57.5%) responded to the survey. While more than 90% of respondents felt that the task force created an open environment in which they could express their ideas and that the City/ County collaboration was beneficial, there were some changes recommended by the participants.

- Select the specific products to be reviewed before selecting Task Force members.
Initially, broader commodity areas were selected and the Task Force members were asked to narrow their own discussions to specific products. Based on feedback from the Task Force members, the initial screening and selection of products for review will be conducted by the Steering Committee.
- Review and revise, as needed, report format.
Although opinions were mixed about the amount of structure provided for the Task Force reports (45.2% of respondents thought the reports were too structured while 47.6% thought the structure was adequate), an effort will be made to simplify the format and allow more flexibility for different commodities
- Method for Communication
Email notices are overwhelmingly preferred by Task Force members as the method for maintaining input on the continued development/implementation of task force recommendations once Task Force final reports have been submitted.
- Task Force Leader Support
Each of the five Task Force groups had an assigned leader from either the City or the County. These leaders expressed a desire for more up-front discussion as to group expectations, more support from the Steering Committee, and assignment of a “helper” to assist in note taking and report writing. Every effort will be made to better equip the Task Force leaders within the available resources.

Table C – Sustainable Procurement Strategy Task Timeline for FY 2003 – 04

Priority / Task	May	Jun	July 03	Aug	Sept	Oct	Nov	Dec	Jan 04	Feb	Mar	Apr	May	Jun	July 04	Aug	Sept	Oct
Steering Committee																		
Council and Board approval of Updated Strategy with recommendations	Submit for review and approval																	
Council and Board approval of Paper Policy	Submit for review and approval																	
Target Area Task Force Work	Review and revise process based on feedback			Work with groups on next series of commodities and review process								Receive recommendations/ review/ receive input/ obtain approval						
Monitor Implementation of Council directives																		
Benchmark determination?????																		
City and countywide coordination	Ongoing Activity																	
Product feedback																		

Target Area Task Forces				Receive background	Complete commodity area review and recommendations				Assist Steering Committee in review of recommendations					
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Appendix 1
City of Portland Resolution
Multnomah County Resolution

RESOLUTION No. 36061

Adopt Sustainable Procurement Strategy - A Joint City of Portland and Multnomah County Effort (Resolution)

WHEREAS, In November 1994 Council adopted the Sustainable City Principles which direct the City to "purchase products based on long-term environmental and operating costs and find ways to include environmental and social cost in short-term prices;" and

WHEREAS, In April 2001, the City of Portland and Multnomah County adopted a joint Global Warming Action Plan which includes actions items addressing purchase of efficient equipment and vehicles and paper with recycled content; and

WHEREAS, The City of Portland values procurement actions that are beneficial for the environment and the natural resource capital base as well as for the health and safety of employees and the public. Changing purchasing practices is an important strategy for meeting the City's solid waste and clean river goals and the City should be a model of good practice; and

WHEREAS; The City of Portland values a strong, varied, adaptive, and diverse contracting economy that provides employment and training for all individuals; and

WHEREAS; The City of Portland values a long-term perspective in evaluating products, avoiding those that appear inexpensive, but cost more in the long run due to maintenance, operation, insurance, handling, training, disposal, or other costs; and

WHEREAS; An evaluation of alternatives is required to make recommendations for changes in how particular commodities are purchased. Identifying workable solutions will require a team approach because responsibility for purchasing within city government is very diffuse and widespread involvement and support will be needed for implementation; and

WHEREAS, A large number of employees affect the City's purchasing decisions, and many are unaware of current procurement policies, or are unclear about how to apply the City's policies; and

WHEREAS, Both the City and Multnomah County are working to promote more sustainable policies and actions, including the evaluation of the environmental, social, and economic impacts of the purchases they make. Improvements will occur faster by pooling resources and working together; and

WHEREAS, Assuming a joint leadership role and establishing a joint Strategy and shared procurement standards will increase coordination and staff ability to assess sustainable procurement information of both the City and the Multnomah County,

NOW, THEREFORE, BE IT RESOLVED

That The Sustainable Procurement Strategy: A Joint City of Portland and Multnomah County Effort, attached hereto as Exhibit A, is adopted, and that The Sustainable Procurement Strategy is Binding City Policy.

BE IT FURTHER RESOLVED

That the implementation of the Strategy in a timely fashion is imperative in order to address the many challenges identified; therefore, this Resolution shall be in full force and effect from and after its adoption by the Council.

Adopted by the Council: March 20, 2002

Mayor Vera Katz
Sue L. Klobertanz,
March 14, 2002

GARY BLACKMER
Auditor of the City of Portland

By /S/Susan Parsons
Deputy

BEFORE THE BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

RESOLUTION NO. 02-058

Approving a Joint Multnomah County and City of Portland Sustainable Procurement Strategy to Balance Environmental Issues with Economic and Equity Issues in the Expenditures of Public Funds Promoting the Long Term Interests of the Community

The Multnomah County Board of Commissioners Finds:

- a) To achieve a sustainable community, Multnomah County must balance environmental, economic and social equity values in the procurement of goods and services.
- b) Multnomah County values procurement actions that reduce adverse impacts and effects on our natural capital base and on the health and safety of our employees and the public.
- c) Multnomah County values a strong, varied, adaptive, and diverse contracting economy that provides employment and training for all individuals.
- d) An evaluation of alternatives is required to review and make recommendations for changes in how particular commodities are purchased.
- e) All decisions should be evaluated with the standard of investing funds wisely today and in the future. Wherever possible, more than the initial purchase price should be considered in the evaluation of goods and services such as evaluating the full life cycle cost of the purchase including maintenance, disposal, or other costs.
- f) Multnomah County and the City of Portland have assumed leadership roles in working together to identify a strategy to develop recommendations that would balance environment, economics and equity issues with our procurement decisions.
- g) In April 2001 by Resolution No. 01-052, Multnomah County adopted a joint Global Warming Action Plan with the City of Portland that includes actions addressing purchase of recycled content products and energy efficient equipment and vehicles.
- h) In January 2002, the Board approved Ordinance No. 972 to establish the Sustainable Development Commission to “advise and make recommendations to the Jurisdictions’ governing bodies on policies and programs to create sustainable communities and to encourage sustainable development.”
- i) This strategy is consistent with Resolution No. 01-052 and Ordinance No. 972 in recommending a sustainable procurement strategy that reduces greenhouse gases and promotes sustainable communities.

The Multnomah County Board of Commissioners Resolves:

1. The Board approves the attached Sustainable Procurement Strategy to partner with the City of Portland and advance sustainable purchasing decisions that promote the long-term interests of the community.

ADOPTED this 25th day of April, 2002.

BOARD OF COUNTY COMMISSIONERS
FOR MULTNOMAH COUNTY, OREGON

Diane M. Linn, Chair

REVIEWED:
THOMAS SPONSLER, COUNTY ATTORNEY
FOR MULTNOMAH COUNTY, OREGON

By _____
John S. Thomas, Assistant County Attorney

Appendix 2
City / Multnomah County Sustainable Procurement
Task Force Members

Proposed Sustainable Procurement Task Force Members – As of 4/2/03

✓ - Indicates where Bureau/Department representation is recommended. /* - Indicates Task Force Chair/Facilitator

	Building Materials	Automotive Vehicles and Equipment	Cleaning and Coating Products	Paper Products	Office Furniture
COP- Purchases	✓ Harry Jacocks *	✓ Buddy Jamison	✓ Willette Rasmussen*	✓ Kathleen Hinick*	✓ Denise Johnson Syd Hendrickson
COP-BGS/ Facilities	✓ Rich Attridge		✓Chuck Wiren, Bob Kieta		✓ Connie Johnson
COP-BGS/ Fleet		✓ Rodger Johnson, Jim Reynolds, Don Taylor			
COP P&D				✓ Ron Haddock	
COP – Parks	✓ Barbara Baker	✓ Tom Dufala	✓Sky Goodrich; Andy Lee	✓ Lisa Turpel	✓ Ken McClain
COP – BES	✓ Randy Tomsik	✓ Scott Turpen	✓ Roy Hovey	✓ Linc Mann	✓ Scott Turpen Aimee Dexter
COP – Water		✓ Jim Hughes	✓ Stu Greenberger	✓ Barbara Streeter	
COP – PDOT	✓ Lavinia Gordan			✓ Evelyn Jefferis	
COP–Maintenance	✓ Bill Long, Bill Clarke	✓ Terry Kelsey;	✓	✓ Willie Washington, ✓ Kent Petersen	✓
COP – OSD	✓ Mike O’Brien	✓ Curt Nichols	✓ Dick Schmidt	✓ Robin Hawley	✓ Greg Acker
COP – Police		✓ Jim Shindler			
COP – Fire		✓ Duane Bray	✓		
COP – ONI			✓ Marcia Dennis		
COP – PDC	✓ Linda Naumcheff				✓ Tanya Lawrence
COP – Auditor/ Archives				✓ Diane Betcher	
COP – Risk					✓ Jamal Abusneineh
COP – BIT				✓ Mark Deeb	
COP – OPDR	✓				
MCO – Purchasing	✓ Lyle Block	✓ Amy Joslin* Roger Bruno	✓Jan Thompson	✓Dona Gaertner	✓ Christine Moody*
MCO – Central Stores			✓Mike Dubesa	✓Mike Dubesa	
MCO – Facilities	✓ Alan Proffitt	✓Larry Whitney	✓David Aldridge		✓Martha Kavorinos
MCO – Transportation		✓Kevin Kaufman			
MCO – Fleet		✓Tom Guiney, Ron Patterson			
MCO – Weatherization	✓Tom Brodbeck				
MCO – Sheriff			✓Dave Braaksma		
MCO – Risk					✓
MCO- Green Team/Recds	✓Patrick Jones	✓Heidi Leibbrant	✓Sue Nemeth	✓Terry Baxter	✓ Christine Moody

Appendix 3
City / Multnomah County Sustainable Procurement
An Education Program for Sustainable Procurement

AN EDUCATION PROGRAM FOR
SUSTAINABLE PROCUREMENT

GOALS AND RECOMMENDATIONS

Prepared for the
Sustainable Procurement Steering Committee
August 16, 2002

Executive Summary

The City and County have adopted a Sustainable Procurement Strategy that will lead to lasting changes in agency operations. The long term success of sustainable procurement will depend on whether employees receive the guidance and resources they need to understand and apply new policies. Consequently, education is an essential component of overall implementation efforts and is a priority for the City and County.

City and County education efforts must balance two needs:

1. **Broad-based learning** should focus on the concepts and goals of sustainable procurement. All employees should receive some information on this level so they have a common understanding of City and County priorities.
2. **Specific training** is necessary for employees who implement new procurement policies or use new products.

The recommendations in this report address both immediate implementation needs of the Sustainable Procurement Strategy, and long-term education goals.

Key components of this program include:

- A lead entity to coordinate education initiatives;
- An education subcommittee of the Steering Committee to provide executive direction;
- Active agency involvement;
- Effective use of available resources;
- Steps to evaluate training effectiveness.

These components are discussed further in the following recommendations:

1. **Dedicate staff resources in City and County central procurement offices to direct implementation and education initiatives.**
 - Dedicated staff attention will ensure resources are available to coordinate overall implementation, including education programs. This position could be either a new full-time hire, or become part of the duties of an existing position.
2. **Create an education subcommittee of the Steering Committee to direct education initiatives.**
 - The Education Subcommittee will be responsible for identifying learning needs and working with agencies to meet those needs through education programs.
3. **Create a system of agency-appointed procurement coordinators to direct agency education efforts, in cooperation with the Steering Committee.**
 - Agency coordinators would be the primary contact between their agency and the Education Subcommittee and would have responsibility for helping to coordinate education efforts within their agencies. The Education Committee should write a set of expectations and tasks for these coordinators.

- 4. Establish an agency recognition program to highlight agency successes and achievements accomplished through sustainable procurement.**
 - Agencies would be recognized separately in the City and the County on a monthly or quarterly basis to showcase and reward their accomplishments. An annual report to City Council and County Board will recognize agency accomplishments.
- 5. Evaluate the effectiveness of education programs and make changes in less effective efforts based on evaluation results.**
 - Effectiveness should be measured through surveys of employee attitudes and behavior and tracking product purchasing under new procurement policies.
- 6. Introduce sustainable procurement policies in all existing education and training venues for procurement officials.**
 - While new initiatives may also be necessary, agencies can maximize resources and minimize costs by integrating sustainability messages into existing education programs.
- 7. Educate employees on a general level about sustainable procurement concepts through existing education media that reach all employees.**
 - Using existing media will provide an efficient way to educate employees on a broad level in a context they are familiar with.
- 8. Educate employees about sustainability issues related to their personal choices and behaviors within the workplace.**
 - Use of existing media should be increased to educate employees on a personal level about sustainability and product usage.
- 9. Assist agencies in educating employees about the relationships between sustainable procurement goals and other City and County sustainability policies.**
 - Education programs should clarify how sustainable procurement supports social, environmental, and economic goals of the City and County.
- 10. Create informal working groups for each of the five commodity areas where procurement officials can discuss implementation issues.**
 - The Sustainable Procurement Strategy is already building partnerships and exchange of information between the City and the County. As the Task Forces complete their initial works, the City and County should transition to a self-sustaining system for continuing this exchange.
- 11. Involve vendors in the education process to address employee questions and concerns and communicate City and County procurement goals.**
 - Vendor participation can help build relationships with new and current vendors while providing employees with information about new products.

A majority of these recommendations depend on having an entity in place that can direct and coordinate education efforts. This report suggests that dedicated staff resources be responsible for developing overall implementation programs in cooperation with the education

subcommittee. However, if resources for new staff are unavailable, the education subcommittee would be responsible for coordinating education efforts in cooperation with agency procurement coordinators.

Should resources become available, existing staff or new full-time staff should be given primary responsibility for implementation efforts, with education as a key component of their duties. The education subcommittee should continue to function in addition to full-time staff in order to lend support and executive direction to staff efforts. Agency procurement coordinators should also continue to function in order to organize agency efforts and coordinate with the education subcommittee and sustainable procurement staff.

Fortunately, many educational resources are already in place. The critical piece needed is establishing mechanisms to shape and direct these resources to meet the needs of the Sustainable Procurement Strategy.

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I. Introduction

II. Education Strategy Map

A visual summary of who needs to be educated, specific learning goals and strategies for targeting key groups of employees based on their positions.

III. Goals and Recommendations

An outline of the goals that sustainable procurement education should achieve. Goals are listed along with implementation strategies and recommendations.

IV. Challenges and Opportunities

A discussion of the key challenges and opportunities facing the City and County.

V. Case Study Analysis

Case study analysis of the education efforts in two municipalities with environmental purchasing programs.

VI. Measuring Effectiveness

Options for measuring the effectiveness of training.

I. Introduction

The City and County's commitment to sustainable procurement will lead to lasting changes in government operations. Education and training opportunities need to be focused on long-term outcomes to support these changes. The Steering Committee should consider education and training that meets immediate needs but also establishes the foundation for an educational process that can be used to meet future training requirements.

Education is necessary in order to ensure employees are aware of new policies and are prepared to implement them. Without some form of education, employees will either not be aware of new policies or be unable to apply them for lack of technical expertise.

In developing education efforts, the City and County must balance broad-based learning with specific training on new policies and products. Broad-based learning will focus on the concepts and goals involved in the Sustainable Procurement Initiative. All employees should receive some information on this level so they have a common understanding of City and County priorities. Specific training will be necessary for employees who are either implementing new procurement policies or using new products. This report identifies ways to address these varying education needs.

As this report indicates, there is considerable overlap between education strategies and implementation issues. In order to have employees use new purchasing guidelines, they need to be informed about the content and use of those guidelines. In some cases, the same entity will be responsible for education programs, as well as evaluating implementation progress. Due to this cross-cutting dynamic, a number of recommendations for education strategies in this report intersect with implementation strategies as well.

In order to develop an education process, there needs to be a lead entity responsible for coordinating education efforts on a long-term basis. The Steering Committee should not adopt this function given its primary responsibility for overseeing the task force process. However, the Steering Committee should have supervisory direction over the entity that is responsible for coordinating education efforts. This will help ensure that such efforts are properly targeted, are tied to the larger goals of the Sustainable Procurement Strategy and are balanced with other implementation issues.

To ensure program success, at least one full time staff person in both the City and the County should be responsible for coordinating education efforts. Dedicated staff will institutionalize the education function and establish direct lines of responsibility for education results rather than having this function shared among a committee. Full time staff would also facilitate consistent communication between the Steering Committee and agencies, and work with agencies on specific issues and education needs.

Lessons from other municipalities implementing environmental procurement programs, described in section VI, indicate that full-time staff dedicated to product education and support is a key component of program success. The two municipalities discussed operate environmental purchasing programs that are not directly comparable to the sustainable procurement program

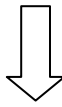
envisioned in the City and County. However, the experience of those programs suggests that full time staff could lend the necessary skill, time and energy to ensure sustainable procurement education goals are achieved.

A majority of these recommendations depend on having an education infrastructure in place to coordinate efforts. However, depending on resource availability the City and County may be unable to create a new staff position as recommended. Until resources become available, education efforts should be coordinated through the education subcommittee, in cooperation with agency procurement coordinators.

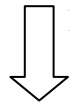
Should resources become available, full-time staff should be hired while maintaining the education subcommittee and system of agency procurement coordinators. Together these three elements will help ensure education and implementation initiatives are fully developed and coordinated

II. Education Strategy Map

Sustainable Procurement
Concepts



Ways to Access to Further
Information



<u>Target Audience</u>	<u>Learning Goals</u>	<u>Strategies</u>
Employees with procurement or contracting authority	<ol style="list-style-type: none"> 1. Content of new policies 2. New ways of evaluating product costs 3. Guidelines for identifying sustainable products 4. Sustainable procurement task force process 5. How to identify sustainable products 	<ul style="list-style-type: none"> • Purchasing 101 • Agency liaison system • Purchasing Advisory Committee (MCO) • Contract Process Team (MCO) • Contract Coordinating Committee (COP)
Procurement agents in each of the commodity areas	<ol style="list-style-type: none"> 1. How to interpret and apply new policies 2. Problem-solving methods for applying sustainable procurement concepts 3. New ways of evaluating product costs 4. How to identify sustainable products 	<ul style="list-style-type: none"> • Purchasing 101 • Agency liaison system • Specialized training (LEEDS, etc.) • Informal working groups
Procurement card users	<ol style="list-style-type: none"> 1. Guidelines for identifying sustainable products 2. New ways of evaluating product costs 	<ul style="list-style-type: none"> • New user orientation • User manual
Product Users	<ol style="list-style-type: none"> 1. What makes a product “sustainable” 2. Product usage reduction policies 3. How to address product performance issues 	<ul style="list-style-type: none"> • Product evaluations • Information sheets about products • Website information • Meetings with vendors
All City/County employees	<ol style="list-style-type: none"> 1. Why sustainability matters 2. How procurement and product usage relates to sustainability 3. How sustainable procurement relates to City/County sustainability goals 	<ul style="list-style-type: none"> • New employee orientation • Displays and events • Bureau recognition system • Green Teams • Website information
Bureau and Department Supervisors	<ol style="list-style-type: none"> 1. New approach to cost evaluation 2. Education requirements and resources 3. Data tracking requirements 	<ul style="list-style-type: none"> • Bureau liaison system • Presentations to agency staff • Standing Committees
Bureau and Department Heads	<ol style="list-style-type: none"> 1. Sustainable procurement is a political priority 2. How it contributes to agency and City/County goals 3. Necessary resource allocations 4. Learn how to implement and monitor new policies 	<ul style="list-style-type: none"> • Presentations to meetings of agency heads • Bureau recognition system • Mayoral and County Commission support • SDC planning and reporting tools
Vendors	<ol style="list-style-type: none"> 1. City/County sustainable procurement goals 2. New product specifications 	<ul style="list-style-type: none"> • Bid specification packets • Website information
Public	<ol style="list-style-type: none"> 1. City/County sustainable procurement activities and goals 2. Sustainable procurement accomplishments 	<ul style="list-style-type: none"> • Website information • Press releases • Reports and publications

III. Goals and Recommendations

Given the scale of education on sustainable procurement, it is important to consider all of the ways employees receive information about policies and products. Apart from formal classroom training, education opportunities exist among the various ways that employees interact with one another, with their agencies, with external parties and with the products they use. Education on sustainable procurement will be most effective to the extent the City and County can leverage these opportunities and explain new policies and concepts to employees in a familiar context.

The following goals envision what sustainable procurement education should achieve. A strategy for each goal is identified in order to facilitate a discussion around the best approach for meeting a particular goal.

Each goal is followed by a recommendation suggests concrete way to achieve the goal. Recommendations are then followed by a set of sub-recommendations that are specific to certain programs or strategies.

Goal 1: Coordinate implementation and education initiatives on a consistent basis.

Strategy: Formalize sustainable procurement initiatives through a dedicated staff function.

Hiring dedicated staff will emphasize the City and County's commitment to sustainability initiatives and policy implementation. This commitment will influence the long-term success of sustainable procurement by providing an organizational resource that can keep sustainability issues elevated and visible among agencies. New staff dedicated to sustainable procurement will also allow the City and County to develop technical expertise that can support agencies, coordinate efforts and assist future task forces.

Recommendation: Dedicate staff resources in City and County central procurement offices to direct implementation and education initiatives.

Existing staff or new full-time staff member should be located in the City's Bureau of Purchases and in the County's Office of Central Procurement. Placing the staff function in these organizations will emphasize the connection between procurement and sustainability. This position should be staffed by someone with competency in both procurement and sustainability concepts and programs.

Staff responsibilities would include: overseeing implementation efforts within agencies; directing education programs; conducting training within agencies; helping agency staff to identify and evaluate products; identifying and communicating with vendors; helping the Steering Committee develop implementation plans; and, collecting and evaluating purchasing data from agencies.

Goal 2: Ensure education is provided on a consistent and long term basis.

Strategy: Develop a structure to coordinate new and ongoing education initiatives on sustainable procurement.

A strong focus on education is vital to the successful implementation of sustainable procurement policies, and for measuring the impact and results of those policies. In light of its long-term focus and potential impact on procurement within the City and the County, the sustainable procurement initiative needs to have a continuing focus on education and training.

Recommendation: Create an Education Subcommittee responsible for coordinating new and ongoing initiatives and reporting to the Steering Committee on the status of those initiatives.

The Education Subcommittee will be responsible for: identifying education needs; developing strategies for meeting those needs; coordinating initiatives between the City and the County; helping City and County agencies develop education opportunities; evaluating the effectiveness of education strategies.

The Steering Committee will be responsible for appointing subcommittee members, including the chair. The subcommittee will meet on a semi-regular basis, and will report to the Steering Committee on activities and accomplishments.

Sub-recommendation:

- Develop an annual report of sustainable procurement accomplishments to educate employees about City and County successes.
- Responsible entities: Steering Committee, Education Subcommittee, agency procurement coordinators

Goal 3: Ensure agencies deliver consistent and ongoing education on sustainable procurement.

Strategy: Coordinate education efforts between City and County agencies and the Steering Committee on a structural level.

The Steering Committee can help ensure that agency education and training conforms to a uniform standard. Establishing clear lines of communication and feedback with the agencies will facilitate the Steering Committee's ability to fulfill this responsibility. Regular coordination with agencies will help ensure agency procurement officials are aware of new policies, can apply them, and know how to seek additional guidance where the criteria are unclear. It will also provide an important source of information on training effectiveness and on issues related to product procurement and usage.

Recommendation: Create a system of agency-appointed procurement coordinators to direct agency education efforts, in cooperation with the Education Subcommittee.

Agency procurement coordinators would be the primary contact between their agency and the Education Subcommittee. Responsibilities of agency coordinators would include: disseminating

guidance on new procurement policies; coordinating agency training efforts; providing feedback to the Education Subcommittee on implementation issues; and collecting data on products purchased under new guidelines. In some cases agency coordinators might be asked to conduct agency training using a curriculum developed by the Education Subcommittee. Time requirements to fulfill these duties would be minimized to the greatest extent possible to reduce impact on the agencies.

To ensure continuity within agencies, procurement coordinator duties should be written into an existing position description to be identified by agency management. Coordinators would need to have procurement expertise and be familiar with the procurement and training requirements of their agency.

Sub-recommendations:

1. Provide specialized training for agency coordinators to instruct them on their responsibilities.
Responsible entities: COP Bureau of Purchases, MCO Central Procurement
2. Establish a train the trainer program to enable agencies to develop an internal capacity for training procurement officials on technical and specialized policies.
Responsible entities: Education Subcommittee, agency procurement coordinators, Office of Sustainable Development, COP Bureau of Purchases, MCO Central Procurement
3. Develop information prompts to accompany new products so employees can learn about the products they are using.
Responsible entities: Education Subcommittee, agency procurement coordinators

Goal 4: Facilitate agency efforts in implementing and educating employees about new procurement rules.

Strategy: Assist agencies in promoting their sustainable procurement efforts and accomplishments by disseminating City and Countywide information to all employees.

Many City and County agencies have agency-specific sustainability goals. New procurement policies will provide agencies with a means of developing those goals and objectives. However, implementing new policies will require substantial agency commitment. In order to reward agency efforts, the Steering Committee should publicize agency accomplishments in ways that also educate employees about overall City and County sustainable procurement activities.

Recommendation: Establish an agency recognition program in the City and County to highlight agency successes and achievements accomplished through sustainable procurement.

The Education Subcommittee will manage the program in cooperation with agency liaisons. The program will:

1. Publicize agency successes in implementing new guidelines
2. Highlight agencies that have gone beyond guidelines

Agencies would be recognized separately in the City and the County on a monthly or semi-monthly basis. Agencies should receive visible recognition of their success. For instance, the Education Subcommittee should issue an email to all City and County employees announcing the agency award. Recognizing agency awards in this manner will help educate all employees about agency sustainability activities and allow agencies to share information and best practices with one another.

Sub recommendation:

1. Promote OSD-OMF sustainability manual as a means for agencies to develop or enhance agency sustainability efforts.
Responsible entity: Steering Committee, COP Office of Sustainable Development and Office of Management and Finance
2. Responsible entity: COP Office of Sustainable Development Maintain an ongoing file of information about agency awards for use in publicizing City and County successes.
Responsible entity: Education Subcommittee
3. Develop an orientation on sustainable procurement to all employees who receive procurement cards, with follow-up education provided on a semi-annual basis.
Responsible entities: Education Subcommittee, agency procurement coordinators
4. Provide agencies with product evaluations forms they can use to share information between product users.
Responsible entity: Agency procurement coordinator

Goal 5: Ensure the quality and effectiveness of education efforts

Strategy: Evaluate the effectiveness of different education programs and make changes in under-performing programs based on evaluation results.

Some education methods will be more effective than others. As the City and County experiment with different methods, the Steering Committee should evaluate program effectiveness as a basis for making resource decisions. Education programs that demonstrate effectiveness should be maintained, and expanded where necessary. Those proving ineffective should be discontinued.

Education results should be measured based on overall effectiveness of education programs and the effectiveness of select programs. Data on overall program effectiveness can be derived from changes in the types of products that the City and County purchase. Data on the effectiveness of particular programs can be obtained from employees who benefited from the program being evaluated.

Recommendation: Evaluate the effectiveness of education programs and make changes in less effective programs based on evaluation results.

In order to measure effectiveness:

1. Conduct a follow-up survey of employee attitudes and perceptions six to twelve months after they have attended training.

Responsible entity: Education Subcommittee

2. Track those products that are covered under new procurement policies and for which data is available.

Responsible entity: COP Bureau of Purchases, MCO Central Procurement

Goal 6: Further educate City and County employees about procurement policies.

Strategy: Present new procurement policies in the context of existing policies so employees gain a better understanding of overall procurement rules.

As noted by City Council Resolution No. 36061, many employees with procurement authority “are unaware of current procurement policies, or are unclear how to apply the City’s policies.” Given the complexities of government procurement, County employees also require continuing education about procurement.

Training for employees with procurement authority should present new procurement policies alongside a review of general procurement guidelines. Sustainable procurement education can thereby accomplish the dual objective of implementing sustainability while also reinforcing existing policies. This approach will also ensure that employees realize sustainability will be a continuing feature of City and County procurement.

Recommendation: Introduce sustainable procurement policies in all existing education and training mediums for procurement officials.

Agencies can maximize resources by using existing education and training opportunities to implement new procurement policies. In some cases, it will be necessary to develop new education initiatives. However, using existing committees and training venues will help emphasize the connection between general procurement and new sustainability requirements.

Sub-recommendations:

1. Incorporate information about sustainable procurement into Purchasing 101 classes.

Responsible entities: COP Bureau of Purchases, MCO Central Procurement

2. Incorporate information about sustainable procurement into standing committee meetings, such as Purchasing Advisory Committee and Contract Process Team meetings in the County, and Contract Coordinator Committee and the Mayor’s Fair Employment Forum meetings in the City.

Responsible entities: COP Bureau of Purchases, MCO Central Procurement

Goal 7: Ensure employees develop a general level of awareness about sustainable procurement.

Strategy: Use a clear and consistent message to introduce sustainable procurement terms and concepts.

Employees will have varying levels of familiarity with the three elements of sustainable procurement. There may also be some confusion about how some terms are being redefined in relation to procurement. For example, the concept of “sustainability” is typically associated with environmental issues, rather than economic and social ones.

The message employees receive should clearly distinguish between the three elements, describe relevant terms and how each relates to procurement. Information should be on a basic level, but sufficient to give employees a common framework for understanding sustainable procurement concepts. Finally, this message should be accompanied by a definition of terms that creates a common vocabulary about sustainability between the City and County employees.

Recommendation: Introduce sustainable procurement policies in all existing education and training mediums for procurement officials.

Employees have access to a variety of education tools. Using these mediums will provide an efficient way to educate employees on a broad level. Moreover, employees will likely respond better to mediums they are familiar with than to new ones.

Sub-recommendations:

1. Solicit employee input in designing the core message, definitions and terminology that will be used in education materials and training sessions.
Responsible entity: Education Subcommittee
2. Incorporate information about sustainable procurement into new employee orientation.
Responsible entities: COP and MCO Human Resources Departments
3. Approximately ten City and County Green Tips each year should include information about a product being purchased under new procurement policies. At least two products from each commodity area should be introduced within the year.
Responsible entities: COP Office of Sustainable Development, MCO Department of Business and Community Services
4. Develop website content that describes sustainable procurement goals, programs and products, along with links to other Internet information sources.
Responsible entity: Education Subcommittee
5. Showcase lobby displays and information to employees in City and County buildings.
Responsible entities: City and County Green Teams

Goal 8: Positively influence employee attitudes and behaviors about sustainability

Strategy: Engage employees on a personal level about how they can adopt sustainable practices and behaviors within the workplace.

Sustainable procurement refers to more than simply how products are purchased. It also relates to how products are used, disposed of, or not used. An element of sustainable procurement education should emphasize these various dimensions in a way that employees can understand on a personal level.

To achieve this goal, specific education efforts should address the attitudes and norms that support sustainable behaviors. These efforts should include appropriate ways to encourage employees to consider their own attitudes and behaviors about sustainability in the workplace in relation to agency and government-wide goals.

Recommendation: Educate employees about sustainability issues related to their personal choices and behaviors within the workplace through available education tools.

The City and County use a number of tools to teach employees about sustainability from an environmental perspective. Use of these tools should be increased to educate about how procurement practices and product usage pertains to the three elements of sustainable procurement.

City and County Green Teams, email Green Tips, agency Intranet content, special events, such as Green Fairs, and informational displays should be used as venues for educating employees about how personal attitudes and behaviors relate to sustainable procurement.

Sub-recommendations:

1. Develop special projects that teach employees about the personal elements of sustainable procurement.
Responsible entity: City and County Green Teams
2. Give employees the opportunity to sign a personal pledge in which they commit to adopt sustainable behaviors and practices discussed in training and education materials.
Responsible entities: City and County Green Teams

Goal 9: Emphasize how sustainable procurement relates to overall City and County sustainability policies

Strategy: Use overall City/County sustainability policies as the basis for introducing sustainable procurement concepts.

Existing sustainability policies provide a foundation for employees to understand what sustainable procurement is designed to achieve. While sustainable procurement is a new initiative, it is an outgrowth of long standing City and County goals. It is important employees

understand this fact so they can place sustainable procurement in the proper framework. Sustainable procurement will appear more credible if presented as a continuation of the City and County's well developed commitment to economic, environmental and social sustainability.

Recommendation: assist agencies in educating employees about the relationships between sustainable procurement goals and other City and County sustainability policies.

The Education Subcommittee should develop education resources that identify existing policies that relate to the cost, environment and social elements that comprise sustainable procurement. For instance, policies and programs related to increasing contracting opportunities with the City and County should be discussed in relation to an explanation of the social elements of sustainability. Such resources will help employees understand each of the three elements and increase their awareness of other sustainability efforts in the City and County.

Sub-recommendations:

1. Solicit a letter from City Council and the County Commissioners emphasizing role of sustainable procurement in fulfilling overall sustainability goals.
Responsible entity: Steering Committee
2. Deliver presentations to agency staff on status of sustainable procurement policies and broader sustainability initiatives to meetings of agency heads.
Responsible entities: Steering Committee, Sustainable Development Commission

Goal 10: Facilitate coordination of City and County efforts to implement new procurement policies.

Strategy: Develop a mechanism for City and County employees to share information, solve problems and discuss approaches to common implementation issues.

While specific implementation issues may differ, the City and County will be impacted in similar ways through new procurement policies. As implementation progresses, City and County employees should have a means to interact with one another and share technical assistance. Such a mechanism will help the City and County coordinate efforts, create mutual learning opportunities, and provide a network for practical procurement information.

Recommendation: Create informal working groups around each of the five commodity areas for City and County procurement officials to discuss product procurement issues.

The proposed Education Subcommittee should organize the working groups once new procurement policies have been issued. The groups should be organized between the City and County to maximize the variety of information that is exchanged. Once established, the groups would become self-sustaining and not require a staff commitment.

The groups would meet informally and on a periodic basis as deemed necessary by members. Group meetings could be a forum for the Education Subcommittee to discuss procurement issues and facilitate interaction with industry representatives, current vendors and product experts. The

Education Subcommittee should periodically monitor the groups and ensure they are providing a useful function.

Sub-recommendation:

- Support the working groups through semi-annual training and feedback sessions.
Responsible entity: Education Subcommittee

Goal 11: Strengthen relationships with new and existing vendors.

Strategy: Involve vendors in the education process to address employee questions and concerns and communicate City and County procurement goals.

Vendors can play a useful role in helping to educate employees about new products purchased under sustainability criteria. Vendor participation can take the form of personal contact with employees or indirect contact through written product information and guidance. Having vendors participate in employee education can provide a means of enhancing communication and trust between each party. Increased interaction will also help communicate City and County goals and encourage new opportunities for vendors who have not yet contracted with the City or County.

Recommendation: Develop forums for vendors, procurement officials and product users to discuss issues about products purchased under new policies.

The proposed Education Subcommittee should be given responsibility for organizing informal education sessions where City and County employees can interact with vendors about specific products. The forums should be held whenever sufficient interest exists among City or County employees, and should be designed to address issues concerning product performance and usage.

Sub-recommendations:

1. Develop website content for City and County vendors explaining City and County sustainable procurement goals and activities.
Responsible entities: COP Bureau of Purchases, MCO Central Procurement
2. Develop informational materials to accompany bid specifications explaining City and County sustainable procurement goals and activities.
Responsible entity: Education Subcommittee

IV. Challenges and Opportunities

Distinct challenges will complicate how education is delivered and received. The Steering Committee must identify and address these challenges as it develops education initiatives. There are also significant opportunities that the City and County can identify for using sustainable procurement education to develop related goals and objectives. Education efforts should address both the challenges and opportunities that exist.

The following list is representative of possible challenges and opportunities. This list is not exhaustive and the task forces and other relevant parties should provide feedback on additional factors that will influence education efforts.

Challenges

- Resource availability

Developing education programs and delivering them to employees requires a significant investment of staff expertise and time. Without new resources, the Steering Committee must consider how existing resources can be used to implement the Sustainable Procurement Strategy. Asking agencies to do more with less and expecting employees to add new responsibilities to their current ones stretches agency resources and constrains the range of options for developing new education programs.

- Resistance to change

Employees may be resistant to change that forces them to change learned behaviors and skills. For instance, procurement officials may be reluctant to learn and apply new policies that conflict with previous policies they are used to following. Other employees may resent having to give up using a preferred product in place of a new, more sustainable product. These factors could influence the degree to which employees are open to learning about sustainable procurement.

- Consistency of effort

In order to implement a new approach to procurement, the City and County will have to provide education and training on a continuous and regular basis. The initial training that most employees receive will only serve to notify them of the fact procurement policies are changing. The actual content of those policies and how to implement them will require more in-depth and hands-on training, where employees have an opportunity to practice new skills and apply new policies. Maintaining training efforts over the long term is a challenge in terms of both sustaining agency support and maintaining employee attention.

- Complexity of sustainability concepts

The three elements that comprise sustainable procurement involve challenging concepts. Many employees will be unfamiliar with these concepts, or have little previous exposure to them. Even employees who are familiar with certain concepts, may not be familiar with how they relate to government procurement. Education initiatives will have to address these varying degrees of awareness and attempt to create a baseline level of understanding employees can use to implement City and County goals.

In addition to the complexity of the concepts, there are no clear guidelines the Steering Committee can draw upon to teach employees how to apply each element of sustainability to procurement decisions. In the absence of such guidelines, the Steering Committee may be required to develop its own guidelines, or instruct employees how to solve problems.

- Complexity of Purchasing Operations

The degree to which City and County procurement is decentralized complicates the Steering Committee's ability to ensure all agency employees with procurement authority receive the

training they require. The process of identifying these individuals and delivering training materials will likely be time consuming, complex and resource-intensive.

Opportunities

- Many education tools already exist

The City and County educate employees about policies related to procurement and sustainability in a variety of ways. The Steering Committee can take advantage of existing education tools to deliver a significant portion of education on sustainable procurement. Using existing tools to the greatest extent possible will maximize resources, create efficiencies and take advantage of available expertise. It will also enable employees to learn new concepts and skills through training methods they are familiar with and have used before.

- Reinforce existing rules

Employees with procurement authority need continuing education and training on changing policies and issues given the complexity of government procurement. Educating employees about new sustainable procurement policies will provide agencies with the opportunity to review the existing procurement framework and ensure that employees are aware of current policies.

- Develop agency goals

Many agencies have developed sustainability programs that relate to their specific operations and needs. Sustainable procurement will provide an opportunity for these agencies, and others with less developed programs, to add a new dimension to how they fulfill their mission and implement City or County policies. Sustainable procurement will create a new way in which agencies can develop sustainability initiatives and engage employees about the range of those initiatives. Sustainable procurement will also provide a way for agencies to develop common goals and policies, thereby further developing the depth of City and County sustainability efforts.

- Enhance City-County cooperation

Through the efforts of the Steering Committee, City and County employees will receive education on sustainable procurement in similar ways and be built around a shared message and terminology. This will provide a common framework for sharing information, coordinating efforts and solving problems. By building this framework, the Steering Committee will facilitate mutual learning and cooperation between the City and County, and deepen their level of interaction.

- Enhance employee Awareness

Education on sustainable procurement provides an opportunity to elevate employee understanding of the importance and influence of City and County procurement. Employees may not be aware of the volume of agency procurement and the impact it has on the community and the environment. Learning about new policies and procurement goals will help employees gain a better appreciation for the potential that government procurement has to contribute to City and County goals.

V. Case Study Analysis

A number of municipalities have taken steps to reduce the impact that their procurement has upon the natural environment. However, few municipalities have attempted to focus on the impact that government procurement has upon the social, in addition to the natural, environment in the same way as the City and County are considering.

The following case studies describe the education programs that the City of Santa Monica, CA and King County, WA have developed to implement their respective environmental procurement policies. The case studies briefly describe each purchasing program, along with the challenges, opportunities and lessons each municipality has encountered in developing education initiatives.

The education programs discussed in the case studies differ from the one envisioned in this report. Santa Monica and King County have focused their education efforts around specific environmentally preferable products rather than on teaching employees about the broad concepts of environmental sustainability. Education staff in each municipality believe that employees respond better to product or policy specific information, rather than to broad concepts and ideas.

Case Study #1: Santa Monica, CA

Program description: The City of Santa Monica, CA has adopted a variety of policies and initiatives to promote the purchase of environmentally preferable goods and services. The City maintains an informal policy instructing City staff to purchase recycled content products “wherever practicable”, in addition to more formal concerning the purchase of specific environmentally preferable products. Products covered by formal policy/administrative instructions include recycled content paper, non-hazardous janitorial products and clean fuel vehicles.

The Environmental Programs Division (EPD), within the Department of Environmental and Public Works Management, has primary responsibility to implement the City’s environmental purchasing policies. EPD works with the Purchasing Section of the Department of Finance and with City departments to identify and evaluate environmental products, develop bid specifications, and educate employees who use the products.

Education strategies: Santa Monica does not train all employees on its environmental purchasing policies due to the scale and cost involved. Instead, EPD organizes specific training opportunities based around specific products. Training is provided for both product users and for purchasers. Training typically consists of introductory meetings where new products and policies are presented. Following this introduction, EPD organizes informal meetings on a regular basis so employees can discuss problems they have experienced in purchasing or using a product or learn about new environmental products

Training for product users: In 1993, EPD began an effort to reduce the use of toxic materials by developing new criteria for purchasing janitorial products. Janitorial staff were involved in developing these criteria and their input contributed to the development of new bid specifications. EPD organized subsequent meetings on a semi-annual basis for janitorial staff to

discuss products purchased through the new bid criteria. Vendors were included in many of these meetings to directly address staff concerns and discuss product specific issues.

Training for purchasing agents: In 1995, the city adopted several policies to increase the purchase and use of recycled and tree-free office paper products. EPD worked with the Purchasing Section to identify purchasing officials in each department who needed training. These individuals were organized into green purchasing groups to create a forum for ongoing education about paper purchasing requirements.

Purchasing Section staff led the initial training sessions in order to provide education on a peer level, rather than from EPD staff. Group meetings were kept informal and were held on a semi-annual basis. Guest speakers, product users and vendors have been included in these meetings to provide different perspectives. A number of green purchasing groups begun informal email exchange networks to share information between meetings.

Challenges and opportunities: Employee resistance to change, reluctance to give up preferred products and resentment at having to comply with new policies has been a significant challenge for the City. There have also been perceptions that EPD initiatives represent an attempt to force its priorities onto other departments.

To address these concerns, EPD staff emphasize peer interaction in training sessions whenever possible. For example, EPD relies on Purchasing Section staff to conduct the majority of training for purchasing officials. EPD staff tries to stimulate interaction among purchasers through informal work groups. In order to train product users, EPD staff invite employees who are excited about the City's environmental program, or who are familiar with a particular product, to discuss their experience.

According to EPD staff, this has been a highly effective way to communicate with employees on their level and in a non-threatening way. Involving purchasing officials and product users in developing product specifications has been another effective tool for soliciting employee input and encouraging buy-in.

Simplifying purchasing policies is an ongoing challenge. According to EPD staff, employees are less responsive to training on broad concepts and ideas than to specific, clearly stated procedures they must follow. As a result, EPD staff attempt to simplify purchasing policies to the extent possible.

City purchasing is centralized or decentralized based on dollar thresholds. The Purchasing Section has limited ability to track department purchasing below a certain threshold. This complicates data collection and efforts to measure program effectiveness. EPD and Purchasing Section staff are currently trying to develop a capability with the Department of Finance to track the ten products used most widely by the City for which environmental purchasing criteria exist. EPD staff are also working with the City's larger vendors to help track what the City has purchased and determine what is "environmentally preferable."

Lessons:

1. Outreach is not necessary to inform vendors of new purchasing priorities. Issuing revised bid specifications is sufficient to attract vendor interest.
2. Vendor involvement in training and information sessions can be an effective tool for helping employees become familiar with new products.
3. Education and training must be consistent and regularly offered in order to communicate new purchasing information.
4. Peer education and interaction is a highly effective way to deliver training messages.

Case Study #2: King County Environmental Purchasing ProgramProgram description:

King County adopted a Recycled Product Procurement Policy in 1989 which directed County agencies to purchase recycled products "whenever practicable". This policy was expanded in 1995 to include environmentally preferable products and processes in addition to recycled products and renamed the Environmental Purchasing Program (EPP).

The EPP is located in the Procurement and Contract Services Section of the Finance Division and is staffed by two full-time employees. EPP staff identifies and researches new products, identifies-agencies which may benefit from a product and interacts with the agencies to encourage evaluation and purchase of new products. Agencies are required to designate "appropriate personnel" to coordinate with program staff for this purpose and to facilitate agency consideration of new products. Products currently purchased under the EPP program include recycled paper, remanufactured toner cartridges, recycled plastic can-liners, tire-retreading services, re-refined antifreeze and motor-oil, plastic lumber among others.

Education strategies: EPP staff does not conduct general training on new products and policies. EPP staff works with agencies directly to share information about new products and discuss alternatives to less sustainable products. They serve as product representatives in this regard, but only to the extent that they are promoting evaluation of certain types of products rather than vendors.

Education consists primarily of direct interaction with agency liaisons and purchasers. EPP staff has found direct interaction with County agencies to be the most effective way to discuss product issues and address agency concerns. EPP staff have developed other education methods to communicate with agency liaisons and County employees, such as an e-mail bulletin, Internet materials, newsletter articles, occasional product workshops, and an annual report describing the successes of County agencies.

EPP staff has found general classroom training less effective for program purposes because agencies use specific products for specific functions. However, EPP staff will conduct targeted training sessions and will share information on specialized training sponsored outside the County where it applies to specific agencies. The County also includes a brief summary of the policy and program in new employee orientation, but only at a general level.

Challenges and opportunities: Given the performance cost issues involved in evaluating and implementing product changes and new ideas agencies are frequently skeptical of new products. EPP staff has addressed this challenge by interacting with agencies on a consistent basis, while being careful to avoid putting inappropriate pressure on responsible agency staff and managers. EPP staff publicize agency efforts and successes through its annual report in order to encourage and recognize agency efforts. The report provides details about new products being used by agencies and resulting cost savings.

Presenting new policies in an interesting, non-threatening and informative way represents a continuing challenge for the County. EPP staff are persistent in working with agencies and help them address their concerns with new product alternatives. In particular, EPP staff are careful to emphasize that they understand the costs involved in evaluating and-using new products and that budget issues often constrain agency choices.

Encouraging employees to attend EPP-sponsored events has been an additional challenge. Generally, individuals who are already motivated and interested in environmental issues participate in these events. EPP staff attempt to cultivate these individuals as leaders within their work units and encourage them to share information at their agencies.

Lessons:

1. It is more effective to provide product-specific information and support than to provide general classroom training about environmental purchasing.
2. Working with product users to address their concerns requires persistent effort and attention before they are comfortable with a new policy or product.
3. Agency recognition is an effective tool for motivating employees and agencies to implement new procurement policies.
4. Direct, personal contact is the most effective means of communicating new policies to employees.

VI. Measuring Effectiveness

Measuring the effectiveness of education and training is a significant challenge. Given the overlap between education and implementation, it is difficult to isolate the effects of specific education initiatives from other initiatives. Collecting the data needed to make accurate measurements is time-consuming and requires a substantial commitment of staff and resources. Despite these challenges, it is critical to evaluate training effectiveness to the extent possible.

The best measure of effectiveness is whether education leads to changes in employee attitudes and behaviors. This requires determining how employees have used their training and whether they internalized training lessons. This can be measured through a combination of methods that provide both direct and indirect measures of effectiveness.

Employee surveys should be used to obtain direct measures of how they have used and understood training material. Tracking product purchasing data should be used as a measure of overall implementation success, and thereby an indirect measure of training effectiveness.

Survey data will provide critical insights into whether employees feel they understood the training of the content, how they have used the training, and what ideas they have for how training could be improved. Behavior change can also be measured to based on whether employees report that training influenced their product usage and habits.

Training efforts cannot be directly correlated to changes in the types and amounts of products that are purchased. For instance, training effects will be commingled with the effect of other implementation efforts and other factors such as differing agency priorities or resources. However, tracking purchasing data can provide a partial indicator of whether training has had an impact on agency operations.

In some cases it will not be possible to track purchasing data depending on the product, how widely it is used and how it is purchased. The City and County should jointly determine which products affected by new purchasing policies can be tracked and then develop data collection mechanisms. Data collection will require a considerable degree of effort over the long term. Agencies will have to be willing to collect and provide data and collection will have to be coordinated by either a full time hire or through the Steering Committee.

I. Performance measures

The following list contains potential performance objectives and measures that the City and County can use to evaluate effectiveness. Most items are focused on direct, outcome measurements so training impacts can be evaluated. However, output measures are also included in order to collect data on the scope and breadth of training efforts.

Objective: determine cost savings achieved through reduced or more efficient product usage.
Measure: percent decrease in dollar amounts of product purchased each month.

Objective: determine if employee education and training results in the purchase of new products.
Measure: percent of x product purchased through new policies measured against all units of x purchased each year.

Objective: determine how education and training affects employee attitudes.
Measure: number of employees who report they personally practice sustainable habits after receiving training.

Objective: determine whether training leads employees to search for additional resources.
Measure: Number of visits to web pages containing sustainable procurement information.

Objective: determine the thoroughness of training
Measure: Number of follow-up questions from employees after attending training

Objective: if education and training messages are persuasive

Measure: Number of employees attending training who voluntarily sign a personal pledge to be more sustainable in their daily activities

Objective: determine extent of training efforts

Measure 1: Number of training sessions of all types delivered each year

Measure 2: Number of training publications delivered

Measure 3: Number of Green Tips delivered with information about sustainable products

Objective: determine whether sustainable procurement information reaches agencies

Measure 1: Number of presentations to agencies and senior agency staff

Measure 2: Number of presentations to procurement coordinating venues

These sample measures represent one approach to determining training effectiveness. Specific measures will need to be developed based on task force recommendations and subsequent training efforts.

II. Employee surveys

The following outline identifies how employees might be surveyed and to what extent:

Survey Objectives: the primary objective would be to measure how employees have responded to training on sustainable procurement. Specific areas of inquiry would include determining whether employees:

- Understand how sustainable procurement relates to their duties.
- Know the goals and concepts of sustainable procurement.
- Believe sustainable procurement has had a positive impact on their agency.

This information would indicate whether employees have a grasp of core concepts and the larger scope of sustainable procurement beyond specific purchasing rules. This would provide a means to evaluate the City and County's overall approach to training and education.

A secondary objective would be to collect data that can be used to improve training efforts. Employees would be asked to indicate training material that was useful and information that wasn't provided but would have been useful. This feedback will give an indication of training methods that are effective and ones that can either be improved or discontinued.

Survey Theory: employee surveys can test the basic assumption that employees need to understand core concepts in order to "do" sustainable procurement. By providing training on concepts and goals, the City and County would be assuming that employees need this information to understand and implement new purchasing guidelines. This connects to a broader assumption that training on concepts and goals will enhance overall implementation efforts, which include not only new purchasing guidelines but adopting new product usage policies and habits. While these are practical assumptions, survey data will help test whether they are valid or need to be reevaluated.

Target audience: employees to be surveyed would include purchasing officials who have attended classroom training. This would include employees who attend procurement card orientations, Purchasing 101 and agency organized training. These employees can be easily targeted for follow-up surveys through course rosters.

Survey Design: two types of surveys should be administered to each employee who attends training. The first should be a course evaluation that employees receive immediately following a training session. The second should be a follow-up survey that is administered at a standardized period after training has been delivered. This periods should be set to allow employees enough time to apply sustainable procurement guidelines or concepts, while ensuring they can still remember details from the training. A period of six to nine months may be appropriate for this purpose.

Course evaluations and follow-up surveys should include similar questions and similar wording to facilitate comparisons between survey responses. Surveys should be anonymous but should be coded in a way that an employee's evaluation and follow-up survey can be compared to one another.

Delivery methods: course evaluation surveys should be delivered in person following a training session. Follow-up surveys can be administered in two ways to facilitate employee responses and survey collection. Surveys should be delivered via email, but provide employees with options for completing the survey. This could be accomplished by directing employees to a website where they can complete the survey on-line, or to a survey attachment that could be completed and returned either in writing or electronically. Giving employees a range of options should increase their willingness and ability to respond.

Appendix 4
Paper Task Force Reports

2002 Sustainable Procurement Task Force: Paper Compilation of Task Force Reports I-IV

Phase I Report

Sustainable Procurement Product Selection Worksheet

CRITERIA FOR DETERMINING SELECTION											
	Economic			Environmental		Social		Timely/Ease			
Product/ Product Area	Volume Used (0-2)*	Cost/ Cost Savings (0-2)	Effect on Busin esses (0-2)	Market readiness of Alternatives (0-2)	Impacts (0-2)	Visibility (0-2)	Established Policy (0-2)	Ease of Implem entation	Upcoming Purchases	Total Score	General comments, things to consider, parallel issues
Copy Paper	2	2	2	2	2	2	2	2	2	18	Area of primary focus from here on
Hand Towels/Toi let Tissue	2	2	2	2	2	1	1	2	2	16	
Envelopes	1	2	1	2	1	2	2	2	1	14	

*Score each product/product area on a scale from 0-2 for each criteria selected. 0=no or very low opportunity/impact, 2=best opportunity/most impact.

Criteria Selections

Economic	Volume Used	How much does the City/County purchase? How Often?
	Cost	What are the total costs of products, including purchase, operating, maintenance, liability, and disposal costs?
	Effect on Business	Would a change in practice have an impact on small or local business?
Environment	Impact	Does the continued use of this product have a highly toxic impact, regardless of volume?
	Market Readiness of Alternatives	Are there certified products or reliable standards? Are there alternatives with clear life-cycle benefits? Are there suppliers available?
Social	Visibility	Does purchasing this product educate our employees or the public?
	Established Policy	Does this product elimination support established goals of City Council or the local community? Is there pressure for government to change its purchasing of this product?
Timely/Ease	Ease of Implementation	What administrative barriers must be overcome? Who do we need to work with to implement changes?
	Upcoming Purchases	When are the supply contracts up for renewal? What upcoming capital projects present opportunities?

Phase Two Task Force Report

Date: August 29, 2002

Task Force: Paper

Products selected for further investigation:

Products	Why Selected	Key Questions to be Answered
<p>Copier/Printer Paper:</p> <ul style="list-style-type: none"> ▪ All sizes ▪ All Colors ▪ All Paper Weights ▪ Carbonless (NCR) ▪ Card stock ▪ Labels <p>All papers that can be used in any copier or printer (including the print shop equipment)</p>	<ul style="list-style-type: none"> ▪ Used by all City Bureaus and County Departments ▪ Large quantities used ▪ Inconsistent usage / policies among agencies ▪ Can influence the market and vendors by creating demand ▪ Large environmental impact ▪ Benchmarks – current usage can be measured 	<ul style="list-style-type: none"> ▪ Can Usage be Reduced? ▪ Who purchases paper now? Why? ▪ What systems are in place now to ensure sustainable practices and policies? ▪ What is the availability of recycled paper? ▪ Can we adopt existing standards? (EPA) ▪ How will small vendors be impacted by our decisions? ▪ Is the market ready to meet the demand? ▪ How can we educate staff in the need to practice sustainability? ▪ What do we print? Why? ▪ Are existing duplexing, copying, printing, faxing, and scanning equipment compatible with 100% usage of environmentally benign products? If not, why? ▪ What would be the monetary and equipment impact resulting from establishing sustainable purchasing paper practices? Will costs increase or decrease? ▪ Why do we buy any virgin paper? ▪ How can we eliminate purchasing 100% virgin papers? ▪ If no one buys virgin paper, where does the raw material for the recycled paper come from? ▪ Is the EPP (EPA?) going to move standards for office papers to 50% recycled content? Why? How? When? <p><u>CAN WE MEASURE:</u></p> <ul style="list-style-type: none"> ▪ current paper usage ▪ types of paper being used ▪ reduction of paper usage ▪ sustainable paper purchases ▪ and identify “appropriate” uses of paper ▪ compliance by City / County agencies
<p>Hand Towels / Toilet Tissue</p>	<ul style="list-style-type: none"> ▪ Everyone uses them ▪ Large quantities purchased ▪ Large environmental impact in both manufacturing and disposal ▪ Current usage can be benchmarked ▪ Quantity purchasing may influence market and vendors 	<ul style="list-style-type: none"> ▪ Why not include facial tissue and general purpose industrial wipes? ▪ Should we adopt the EPA tissue product list / guidelines? ▪ Why not require universal dispensers for paper & tissue? ▪ Why are we still using white towels? ▪ Are there readily available alternatives? ▪ How to change the culture of the end users to accept alternatives? ▪ Can improvements be measured?

<p>Envelopes: Kraft Letter Windowed Manila Interoffice</p>	<ul style="list-style-type: none"> ▪ A main source of conveying messages to customers ▪ Used by most City Bureaus & County Departments ▪ Can be easily measured for benchmarking purposes ▪ Large environmental impact in manufacturing and disposal options 	<ul style="list-style-type: none"> ▪ Do envelopes with windows need to have a covering over the window? ▪ Is window covering recyclable ▪ Is the market ready to respond to demand? ▪ Can usage be reduced by alternative means? ▪ Do guidelines already exist that we can easily adopt? (EPA) ▪ Can we influence materials used in the glue? ▪ Do Postal regulations affect the item? ▪ Do we have to provide all employee earnings statements in special window envelopes? ▪ Can mailings to employee's homes be replaced with interdepartmental deliveries? ▪ Can postcards replace letters?
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Products that were not chosen:

Products	Reasons Not Selected
<p>Writing Papers: Post-it Notes Lined tablets Note Pads</p>	<p>Already recycled or reused to large extent Difficult to measure current and future usage Small overall impact on City / County agencies</p>
<p>Packaging Products: Padded Mailers Corrugated Containers Folding Cartons Report Covers Wrapping Papers Mailing Tubes Hanging folders Boxes</p>	<p>Already recycled or reused to large extent Difficult to measure current and future usage Good candidates for subsequent task force</p>
<p>Specialty Items: Stationary Invitations Currency Ledgers Maps Art Papers Coated / shiny covers Calendars</p>	<p>Requires high quality paper to support application We have no control over item (currency, most maps) Difficult to measure current and future usage</p>

Phase Three Task Force Report

Date: September 24, 2002

Task Force: Paper

Product: Copier/Printer Paper- All sizes, all colors, all paperweights, carbonless (NCR), card stock. All papers that can be used in any copier or printer (including the print shop equipment).

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by all groups.	20# Bond (30% PCW)-48,440 Rms. 20# Bond (Virgin)-19,700 Rms. Water Bill Stock (Virgin)-2,560 Rms. Enviro 100 (100% PCW+PCF, used mostly by BES & OSD)-11,750 Rms. General Text, Cover, Writing Papers (Partial 30% PCW)-4,950 Rms. Misc.(Partial 30% PCW)-1,710 Rms. 1-Ream = 500 8.5X11 Sheets	\$106,600 \$ 59,100 \$ 13,800 \$ 38,200 \$ 74,200 \$ 25,700 <u>\$317,600 Total</u> **Dollar value unable to be accurately tracked.	<p>-DECENTRALIZED PURCHASING through informal quotes, limited purchase orders, purchase orders and accessing citywide annual requirement contracts. The City does not warehouse paper.</p> <p>The majority of City bureaus: Purchase from P&D and the current annual requirement office supply contractor. This product includes copier/office paper and all papers used in the printing processes. Product ordered is delivered the next business day.</p> <p>Outsource printing jobs- Paper used in printing jobs outsourced through other print houses is not reflected in this report. Product description and usage figures are unavailable and are not currently being tracked.</p> <p>Assessment and Liens outsourcing: Printing and mailing of monthly bills done by private printing firm. City is charged per sheet but it includes a professional service time. Paper used has a 30% recycled content and are using the same printer as the Water Bureau.</p> <p>Office of Management and Finance, Bureau of General Services, Printing and Distribution: 20# white paper is purchased at the end of every month. Price and vendor are arrived at by an informal quote process controlled by P&D. Order is placed with the average order size being 1 to 2 pallets</p>	<p>The majority of City bureaus: support group personnel in various bureaus order product over the phone, internet or fax.</p> <p>Office of Management and Finance, Bureau of General Services, Printing and Distribution: Purchased through the Printing and Distribution Manager .</p>

	<p>*Note: Above does not include paper used by commercial printers for City print jobs that cannot be economically produced in-house.</p> <p>**Note: Assessment and Liens Division of the Auditors Office outsourcing usage- 98,873 sheets= 197.75 Rms.</p>		<p>of paper. A pallet is 400 reams. Product is delivered to P&D the next day. Billing is through P&D. Other specialty items are ordered on an as-needed basis.</p> <p>Water Bureau: Purchased in several places; Office support areas- If used in a general-purpose copier, paper is ordered & delivered via P&D the next day. All other office papers are ordered through the current annual requirement office supply contractor via internet, phone or fax and delivered the next business day. Interstate office areas- buys from office supply contractor, about 2 pallets per year through the stores operation. Data processing area- If used for customer water billing statements and or run through the “4890 printer” <i>perforated bill stock</i> the 24# virgin paper is bought from a price quote through Xerox for a one time purchase of a yearly supply of paper. Price quote includes the cost for COP Water Bureau storage of the paper at a local private storage company and delivered by the storage company on an as-needed basis (about 6 wk intervals) a pallet at a time to the bureau DT location. 3-hole punch paper, and regular 20# virgin paper, are ordered every 6 weeks, 1-pallet at a time from Xerox , again through the use of an LPO and delivered in 2-3 days delivery window from Xerox.</p> <p>Office of Transportation, Maintenance Bureau: Purchased through an informal quote process. Product is ordered at a rate of 1 pallet every 2 to 3 months, delivered to the Kerby address maintenance warehouse location.</p> <p>Office of Management and Finance, Bureau of Information Technology (BIT): Purchase 3-hole and no-hole virgin paper from Xerox. Order placed and delivered every 3 months. BIT uses 3 pallets of 3-hole paper and 1 pallet of no-hole paper every 3 months. Shipment is received at BIT next day from Seattle.</p>	<p>Water Bureau:</p> <p>Office support areas Purchased through office support group manager.</p> <p>Interstate office areas purchase through the storekeeper.</p> <p>Data processing area- Purchased all paper needs through Xerox by the data operations supervisor.</p> <p>Office of Transportation, Maintenance Bureau: Purchased, received, distributed by the storekeeper at the maintenance bureau Kerby warehouse.</p> <p>Office of Management and Finance, Bureau of Information Technology (BIT): Purchased by Data processing technician.</p>
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Product: Copier/Printer Paper- All sizes, all colors, all paper weights, carbonless (NCR), card stock. All papers that can be used in any copier or printer (including the print shop equipment).

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by all groups of employees.	20# Bond (30% PCW)- 96,050 Rms General Text, Cover, Writing Papers (Partial 30% PCW)- 2,550 Rms. Misc.(Partial 30% PCW)- 6,190 Reams Library print shop – Misc. papers for special print jobs, brochures, posters, art – quantities not known Large outsourced County print jobs that include paper (partial listing): Library print jobs Elections (ballots, pamphlets, etc) Verity health forms printing 1-Ream = 500 8.5X11 Sheets	\$216,700 \$ 38,200 \$ 92,800 \$ 32,000 <u>\$379,700 Total</u> \$ 69,385 \$ 699,033 \$ 80,000	<p>CENTRALIZED PURCHASING through Central Stores annual requirement contract. County warehouses paper. Papers used in the printing process for the County are purchased by the City printing and distribution group and those figures are reflected in the City figures.</p> <p>Purchased by the carload (22 pallets or 8800 reams) every 6 weeks. Product is purchased through the use of an in-place annual requirement contract. Product is delivered to the central warehouse location and distributed throughout the county for copier and general office equipment.</p>	<p>The storekeeper of Central Stores purchases the paper products.</p> <p>The annual requirement contracts are arrived at through a formal purchasing process in collaboration with central purchasing. The current contract has a 3-year term and will be available for re-bid in Spring 2003.</p> <p>Library has their own buyer and handles outsource of paper print jobs and purchases their own paper</p>

Product: Restroom Tissue Paper- Toilet Tissue, Tissue Seat Covers, and Hand Towels

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by all groups.	Seat Covers (30% PCW)-50 Cases Toilet Tissue (Partial PCW)-3,210 Cases Paper Towels (Partial PCW)-5,400 Cases	\$1,500 \$114,500 \$ 80,700 <u>\$196,700</u> <u>Total</u>	<p>DECENTRALIZED PURCHASING</p> <p>Office of Transportation, Maintenance Bureau: Purchased through Citywide annual requirement janitorial supply contract via storekeepers at Kerby warehouse.</p> <p>Bureau of Parks & Recreation, Parks Facilities: Products are supplied by custodial service provider at various site facilities as part of the Custodial Services contract via site director feedback on the needs of specific facilities.</p> <p>Bureau of Parks & Recreation, Parks Mt. Tabor Yard Store Facility: Product ordered and stored in the warehouse for use to City Parks employees at Mt. Tabor</p> <p>Office of Management and Finance, Bureau of General Services Facility Management Division: Purchase through Citywide annual requirement janitorial supply contract.</p>	<p>Office of Transportation, Maintenance Bureau: Storekeeper and vendor.</p> <p>Bureau of Parks & Recreation, Parks Facilities: Purchased through the site directors placing an order to the custodial contractor.</p> <p>Bureau of Parks & Recreation, Parks Mt. Tabor Yard Store Facility: Storekeeper orders items.</p> <p>Office of Management and Finance, Bureau of General Services Facility Management Division: Facility dispatch group places order with annual requirement janitorial supply vendor. Products are delivered according to specification requirements.</p>

Product: Restroom Tissue Paper- Toilet Tissue, Tissue Seat Covers, and Hand Towels.

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by all bought groups.	Seat Covers (30% PCW)-435 Cases	\$ 12,700	CENTRALIZED PURCHASING Central stores: Purchase through the county janitorial supplies annual requirement contract. Delivery is taken every 2 weeks to Central Store warehouse. Supplies are distributed through the County owned distribution channels.	Central stores: The buyer places, receives, and oversees distribution of janitorial paper products for all of the County needs. The buyer works with a Central Purchasing Specialist to put in place the term contract.
	Toilet Tissue (Partial PCW)- 2,105 Cases	\$ 79,900		
	Paper Towels (Partial PCW)-7,280 Cases	\$110,200		
	Jumbo Roll Toilet Tissue- 280 cases	\$ 7,300		
	PCW=post consumer waste	\$210,100 Total		

Product: Envelopes- Business envelopes (Letter, Windowed, Manila, Interoffice, H2O billing design)

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by all bureaus to some extent.	Std Business Eps (Partial PCW)-1,825 Boxes	\$ 27,500	CENTRALIZED PURCHASING Water Bill Envelopes: Competitive bid on an annual or semi-annual basis. Business Envelopes: Purchased along with the regular copy/office paper.	Printing and Distribution Purchased through the Printing and Distribution Manager. Purchased through the Printing and Distribution Manager.
	Water Bill Eps (100% PCW)-4,000 Boxes	\$ 34,000		
	1-Box = 500 Envelopes	\$ 61,500 Total		

Product: Envelopes- *Business envelopes (Letter, Windowed, Manila, Interoffice, H2O billing design)*

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Used by most departments	Std Business Eps (Partial PCW)-2,700 Boxes Misc. Envelopes (Partial PCW)-850 Boxes 1-Box = 500 Envelopes	\$ 40,500 \$ 24,000 <u>\$ 64,500 Total</u>	<p>CENTRALIZED PURCHASING Standard business envelopes: Letter head envelopes by P&D through an informal bid process.</p> <p>CENTRALIZED PURCHASING All other products are bid by the County. Products are stored and disbursed by the County store facility.</p>	<p>Standard business Envelopes: Pre-printed: Purchased through the City of Portland Printing and Distribution Manager.</p>

Existing sustainable practices and policies; or practices and policies to upgrade in each product area: Copier/Printer Paper

City	County
<p>1. Portland City Code 5.33.060, Section C. defines sustainable materials and products, gives preference to recycled materials under certain conditions and references the State Statute, ORS 279.545. See http://municipalcodes.lexisnexis.com/codes/portland. ORS 279.545 to 279.650 provides definitions, policies, directives for their purchasing agency, guidelines and procedures to encourage paper conservation, preference for recycled material and reporting requirements on the effect of recycling programs; content, recycled paper specifications; purchasing practices; in state preference for tax credit, state waste audit, and certain exceptions. See http://landru.leg.state.or.us/ors/279.html. The U.S. Environmental Protection Agency published its original “Procurement Guideline for Paper and Paper Products Containing Recovered Materials in 1988. These guidelines are updated each year and designate items that must contain recycled content when purchased by federal, state, and local agencies or by government contractors using appropriated federal funds. There have been great strides in buying recycled content paper, but paper is still the most predominant material in our trash. See www.epa.gov/cpg/paprman.htm.</p>	<p>1. Multnomah County Public Contract Review Board Administrative Rule, 30-0009 defines recycled materials, states policy and gives the preference for recycled materials. It also references and adheres to Oregon State Statutes, ORS 279.545 and 279.570. Link: http://www.co.multnomah.or.us/dss/cpca/laws.shtml In addition to recycled products purchased and used by the County, individual bids, RFPS and most contracts instruct vendors and contractors to use recycled materials wherever possible in carrying out contracts with the County. The Countywide IT Policies & Procedures Plan includes reducing paper use in its objectives, speaks to standardization of equipment in its policies, and encourages employees to use electronic communications and technology in County business both internally and externally. The Multnomah County Natural Step Green Team Charter outlines objectives for sustainability efforts including working with and providing information to employees.</p>

<p>2. The City provides containers for employees to recycle paper and other materials. The City encourages this effort and there is 100% compliance with this practice. The City has a decentralized purchasing process. Printing and Distribution purchases and distributes copier and printer paper for most city bureaus. For these bureaus, P & D purchases paper that has a 30% recycled content. Two bureaus, BES and the Office of Sustainable Development, purchase paper that has a 100% recycled content and is chemical free. Two bureaus, Water and BIT, purchase virgin paper that has no recyclable content. The City outsources some print jobs; there is no requirement for these vendors to use recycled paper.</p>	<p>2. Multnomah County provides containers for employees to recycle paper and other materials and encourages this practice. The County purchases 30% recycled paper centrally, stores it and distributes it to all departments. Departments order using an on-line reservation system. Based on purchasing activity review, very little decentralized paper buying occurs in the county with the exception of specialty papers purchased by the library print shop.</p>
<p>3. The committee interviewed most bureaus to determine what sustainable practices are in place. There is no city standard, but some bureaus have implemented the following:</p> <ul style="list-style-type: none"> ▪ the use of printers and copiers that print two-sided copies ▪ the use of sticky labels to send fax copies instead of a cover sheet ▪ the use of word processing templates instead of letterhead ▪ sending Interoffice mail in reusable interoffice envelopes ▪ OSD prints draft documents on used paper ▪ OSD tracks copy and printer paper used and evaluates print jobs 	<p>3. Multnomah County departments outsource print jobs for special runs that include the purchase of paper. Some of these jobs include ballots, voting envelopes, voter pamphlets, etc. The recycle content varies, from a 30/40% for pamphlets to none for ballots and special mailers. Many County departments use word processing templates instead of letterhead.</p>
<p>4. Other City sustainable practices include:</p> <ul style="list-style-type: none"> ▪ Email and Word and Excel documents are used for most formal and informal communications ▪ The City is using the Internet and Intranet to share information with the public and with its internal work force. The City has a central Website that includes bureau information or links to bureau Websites. ▪ The Parks Bureau has an online class registration and facility booking system in place. ▪ The Purchasing Department posts all formal quotes, bids and RFP opportunities on its central procurement website where interested vendors may download. ▪ The Auditor’s Office has put the City Code, Charter and Portland Policy Repository on the Internet. Ordinances and Resolutions will be available on the Internet by November 	<p>4. Other County sustainable practices include: (This list is not exhaustive, there are surely other practices we did not find.)</p> <ul style="list-style-type: none"> ▪ The County uses electronic means for most informal and formal communications. ▪ The County internal training calendar is available only online; paper copies are not mailed. ▪ Web-based forms and public folders are used both within and across departments to share information electronically and reduce the need for individual printed files. ▪ County posts all formal quote, bid and RFP opportunities on its central procurement website where interested vendors may download; saves unnecessary broadcast mailings. ▪ The Sheriff’s Office has booking records online – replaces an older paper and picture system.. ▪ Animal Control provides the public the opportunity to license pets on line, and pay for tags electronically. ▪ The library system provides on-line reservation and on-line payment will follow.

<p>2002.</p> <ul style="list-style-type: none"> ▪ The Auditor’s Office is implementing an Electronic Records Management system. This system provides catalogue information about all City records, and will allow the City to archive many of the City’s nonpermanent records. 	<ul style="list-style-type: none"> ▪ Assessment and Taxation has begun to archive on CDs. ▪ Some departments use printers and copiers that print two-sided copies. ▪ Note pads are made from used paper; some departments reuse paper in printers, copiers and fax machines. ▪ The County performs “trash audits” to get reliable data on recyclable items, including paper, that are being disposed in the trash. ▪ Inter-departmental paper communications are sent in reusable envelopes. ▪ Centralized printing of financial system reports has been reduced; however departments can print their own reports.
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Existing sustainable practices and policies; or practices and policies to upgrade in each product area: Hand Towels/Toilet tissue

City	County
<p>1. Current sustainable practices and policies by some City bureaus: Purchasing requires that custodial contracts require sustainable practices and policies. Transportation/maintenance purchases single ply paper towels. BGS purchases only unbleached paper towels.</p>	<p>1. Current sustainable practices and policies: All custodial paper products are purchased centrally, and are stored and distributed throughout the County.</p>
	<p>2. Practices to upgrade: Buying according to EPA standards for custodial papers allows the recycle content to vary from 10% to 100%. Toilet paper currently purchased has no recycle content. Paper hand towels purchased by the County are white which means they have been bleached.</p>

Existing sustainable practices and policies; or practices and policies to upgrade in each product area: Envelopes

City	County
<p>1. Printing and Distribution purchases most of the envelopes for City bureaus. These envelopes are made with virgin paper. The Water Bureau purchases envelopes that have a 100% recycled content.</p>	<p>1. Current sustainable practices and policies:</p>
<p>2. Interoffice envelopes are used by all City bureaus, but the County is responsible for purchasing them.</p>	<p>2. Practices to upgrade: Envelopes are not purchased with the highest recycle content possible; in fact many have no recycle content at all.</p>

Barriers/constraints to replacing a product or modifying product usage: Copier/Printer paper

	City	County
External	<p>There are no sustainability practices and requirements regarding paper products that apply to citizens, contractors, and vendors that do business with the city, except for the janitorial contracts. There is inadequate control over products used by vendors, such as PHC janitorial supplies.</p> <p>There is a lack of sustainable products available on the open market that can result in limited choices, a lack of alternative products and higher prices.</p> <p>There are a large number of citizens without access to email or the internet which leaves the City with no choice except to continue printing and mailing information and documents.</p>	<p>While policy, bids, RFPS and contracts speak to contractors using recycled products in the performance of County contracts, there are no measurements made to check compliance. There are no sustainability requirements specifically regarding paper products and recycle content that apply to citizens and vendors that do business with the County, other than those that might be specified in a bid.</p> <p>There are reporting requirements from the State and Federal oversight agencies that require forms and reports in particular formats; the County has to complete these in paper form rather than electronically.</p> <p>The digital divide - there are a large number of citizens without access to email or the internet which precludes this as a sole means of disseminating information.</p> <p>Higher content recycled paper products or alternatives to paper use may be cost-prohibitive when viewed at the purchase point instead of with the overall perspective of sustainability.</p>
Internal	<ol style="list-style-type: none"> 1. The committee has identified a number of internal barriers that need to be overcome in order to implement Phase IV recommendations. The first barrier is the lack of a citywide, coordinated leadership effort to develop, approve and implement recommendations for sustainable paper practices. The City structure itself presents an additional challenge; the commission form of government sometimes creates the perception that no one is responsible. 2. There are no city mandates to purchase recycled paper products. The Portland City Code gives preference to recycled materials under certain conditions, but it doesn't require the purchase of recycled paper products. 3. There is no centralized purchase process or annual supply contract in place. While the Printing and Distribution division in the Bureau of General Services purchases paper for some bureaus, other bureaus purchase their own paper from various vendors. This decentralized purchasing process makes it difficult and time consuming to benchmark the amount, type and cost of paper products purchased by the City. It also prevents the City from leveraging its buying power on the open market. 	<p>While many departments have their own sustainable policies and practices, there is no Countywide umbrella directing and standardizing these efforts.</p> <p>There is no centralized auditing ensuring that sustainable practices are being practiced in all County departments.</p> <p>While the Green Team does provide some information and scattered training, there is no county-wide training for employees in the area of sustainability (akin to the diversity training).</p> <p>There are no goals for departments regarding paper usage and no compliance measures.</p> <p>Office culture and/or public perception – changing beliefs are very difficult to achieve. Some employees do not trust electronic systems and print out reports that are not needed.</p>

	<p>4. There are no citywide sustainable goals, practices, and/or policies for the purchase, use and disposal of paper products. While two bureaus have developed goals on their own, most bureaus have not developed sustainable goals, objectives and a reporting and feedback mechanism.</p> <p>5. Most bureaus lack the knowledge, training, and internal resources of staff time and funding to develop, research and implement sustainable paper practices. In some cases, there is a lack of management commitment and sustainability is not seen as a high priority.</p> <p>6. The resistance to change in how we do business is a barrier in implementing sustainable paper practices. Change needs to occur at a corporate as well as at the individual level. The success of this effort will depend on the cooperation of management and individual employees because our recommendations will not only deal with the purchase of paper, but its everyday use in the work environment.</p>	
Technical	<p>BIT is currently working on a citywide policy, but at this time there is no citywide directive to increase the use of electronic communications. There is no electronic system in place that allows citizens to conduct city business, obtain permits and pay their bills or fees by automatic withdrawal or the use of a debit or credit card.</p> <p>There are no citywide policies, guidelines and standards regarding the purchase of computers, monitors, printers, copiers and other equipment that directly impact the use of paper products</p>	<p>There is no Countywide plan or directive to increase the use of electronic communications internally, with other agencies and with the public. None-the-less, departments may provide access to information, to filling out forms, to conducting business and to allowing citizens to obtain permits and to pay bills online.</p> <p>Communications with some outside agencies and clients are not effective because they have incompatible electronic systems.</p> <p>No cost-benefit analyses have been performed in the areas of electronic vs. printed information storage, including electronic file storage system capacity, document imaging systems, copying costs, paper storage systems and equipment, etc</p>
Financial	<p>There are no resources available to free up staff time in the bureaus so they can work on developing, implementing and monitoring sustainable practices in their work environment. There are no funds available to assist bureaus to increase their use of electronic communications. There is no funding or resources available to assist bureaus to create electronic systems that allow the public to pay their bills and services in an electronic fashion either as an automatic withdrawal, debit, or the use of credit cards.</p> <p>There is no funding available to purchase 100% recycled chemical free paper products and envelopes. There is no funding available to replace and standardize current copy machines with printer/copier machines that print on both sides.</p>	<p>There is no funded replacement plan to purchase printer/copier machines that print on both sides for all County departments. Standards are not in place to require this type of equipment when new printers are purchased.</p> <p>The cost to purchase paper that is chemical free and 100% recycled content may be prohibitive.</p> <p>There is a lack of good information regarding how paper is used, why it is used and the cost benefits of different media types.</p> <p>Due to financial constraints, investments in equipment or systems that will result in long-term savings may not be funded.</p>

Other	The accounting and payroll divisions automatically print and distribute IBIS computerized reports on a weekly, biweekly or accounting period basis. They do not provide a listing of these reports to bureaus on an annual basis to see if bureaus still need these documents in a printed format. The IBIS system does not allow users to view these summarized reports in an electronic format.	
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Barriers/constraints to replacing a product or modifying product usage: Hand towels/toilet tissue

	City	County
External	The Purchasing division requires that janitorial contracts include specific sustainable practices and policies the vendor must adhere to, but there is no reporting or enforcement mechanism built into these contracts.	Wide range of recycle content in this category.
Internal	There are no citywide sustainable goals, practices, and/or policies for the purchase of hand towels and toilet tissue. There are no City mandates that require the purchase of hand towels or toilet tissue that contain recycled content. There is no centralized purchasing process and there is no annual supply contract in place. Bureaus are allowed to purchase any type of product from various vendors.	Perception that “white” hand towels are better or cleaner.
Technical	There are no standardized hand towel or toilet tissue dispensers. This lack of standardization forces the City to purchase many different types of towels and tissue. The City is not able to leverage an advantageous price for large quantities of supplies and we are forced to keep a large stock of products in our inventory.	
Financial	There are no funds available to purchase and replace the hand towel and toilet tissue dispensers within the City.	

Barriers/constraints to replacing a product or modifying product usage: Envelopes

	City	County
External	There are no sustainable requirements included in City contracts with outside vendors.	High cost and lack of products in the recycled category.
Internal	<p>There are no citywide sustainable goals, practices, and/or policies for the purchase, use and disposal of envelopes.</p> <p>There are no city mandates to purchase envelopes that contain recycled content. There is no centralized purchasing process or annual supply contract in place. The decentralized purchasing process makes it difficult to benchmark the amount, type and cost of envelopes purchased by the City. It also prevents the city from leveraging its buying power on the open market.</p> <p>The County purchases all Interoffice envelopes; there is no established standard for Interoffice envelopes that can be used by both agencies.</p>	<p>No county-wide goals, practices or policies for purchase and use of envelopes.</p> <p>Employees are paid bi-monthly. Employees making multiple direct deposits receive multiple remuneration statements (pay stubs), each in its own specially-made envelope. For example, an employee with four direct deposit accounts would receive four statements in four envelopes, twice a month. Can our software accommodate a single statement/envelope?</p>
Technical	There is no directive to increase the use of electronic communications which would decrease the need for envelopes.	
Financial		High cost and lack of products in the recycled category.

Phase Four Task Force Report

Date: December 1, 2002

Task force: Paper

Goal to be accomplished: Reduce the environmental, economic, and social impact of governmental paper consumption through new policies and practices that seek to reduce usage and establish more sustainable purchasing requirements.

Recommendation	Priority H/M/L	Benefits	Negative Impacts
1. Reduce consumption	H	1. Environmental: Reduces pollution and the consumption of water, electricity and natural resources in the manufacturing process; reduces waste sent to landfills.	1. Environmental: If increased use of electronic media results from reduction in use of paper media there will be increased pollution, consumption of water, electricity and natural resources in the manufacturing process; and more toxic waste for disposal.
		2. Economic: Dollar savings from buying less paper can be used to off set the cost of higher-priced, more environmentally preferable paper; there are associated savings in reducing storage space and equipment, distribution, and warehouse costs; there may be related savings in toner, ink, and power used for printing technology.	2. Economic: Higher costs for electronic media equipment and power used for information storage and dissemination; costs to local economy resulting from reduced paper market; higher costs associated with the disposal of more toxic substances used to manufacture electronic equipment; data & equipment migration costs related to long-term storage of information as systems evolve.
		3. Social: Helps foster sustainability culture in employees and public by setting the example of reduced consumption. Shift from paper-based to electronic communications and transactions may benefit both government and public.	3. Social: Shifts from paper-based to electronic information technologies may heighten the digital divide [<i>see glossary</i>]. Some evidence indicates that people trust paper resources more than electronic ones.

Recommendation	Priority H/M/L	Benefits	Negative Impacts
2. Require all paper purchased and used to meet or exceed EPA content guidelines <i>[see EPA document EPA530-F-00-013].</i>	H	1. Environmental: Reduces the use of pulp trees and encourages the use of recycled materials; reduces the amount of paper waste going to landfills.	1. Environmental: None.
		2. Economic: Creating the demand for more environmentally preferable products will eventually encourage their production, availability, and lower pricing. Adopting and using a national standard insures a broader base of available products. Currently, there is no real price penalty for using EPA content guidelines.	2. Economic: Initial purchases of higher content papers (EPA will increase the requirement for recycled content of these papers at some point) will probably come at a price premium. Transition to standardized higher content papers may initially cause production inefficiencies for existing equipment, and could increase maintenance costs.
		3. Social: Helps foster sustainability culture in employees and public by setting the example of purchasing recycle content products.	3. Social: May exclude local vendors and producers who do not offer higher recycle content papers or alternative products.

Recommendation	Priority H/M/L	Benefits	Negative Impacts
3. Mandate that at least 10% of paper purchased and used within the City and County is alternative environmentally preferable paper <i>[AEPP; see glossary].</i> Promote the use of alternative environmentally preferable paper wherever possible.	H	1. Environmental: Reduces pollution (especially to water), the use of pulp trees and encourages the use of alternatives (including recycled material, different manufacturing processes, other fiber sources); reduces the amount of paper waste going to landfills.	1. Environmental: Impact of shipping (packaging, fuel, pollution) from greater distances if products are not available locally.
		2. Economic: Creating the demand for more environmentally preferable products will eventually encourage their production and availability, and lower pricing. Cleaner manufacturing will reduce clean-up costs for dioxin contamination.	2. Economic: More environmentally preferable paper is currently much more expensive and not always readily available in quantity; purchasing these products can send local dollars out of our region, especially if paper is manufactured elsewhere. Transition to more environmentally preferable papers may initially cause production inefficiencies for existing equipment, and could increase maintenance costs.
		3. Social: Helps foster even greater sustainability culture in employees and public by setting the example of purchasing a certain percentage of environmentally preferable products that go beyond current practice.	3. Social: In some applications, alternative papers may not provide a high-enough quality product; there may be some reductions in product choice. Will require a change in employee mindset.

Recommendation	Priority H/M/L	Benefits	Negative Impacts
4. Provide for and support product research, employee training and evaluation of success in the implementation of the goal.	H	1. Environmental: Will create a long term systematic approach to reducing the environmental impact of our current practices and set targets for continued improvement.	1. Environmental: None.
		2. Economic: Savings from successful implementation of this program could be used to fund the program, much like actual energy savings are used to pay for energy conservation programs	2. Economic: Cost of program implementation and continuing support will be an addition to budgets already in trouble if off-setting savings cannot be achieved.
		3. Social: Creates an educated workforce over time and provides information that can be used to foster even greater efforts.	3. Social: Requires change and people may be resistant.

Actions needed to implement recommendations:**1. Recommendation: Reduce Consumption**

Recommended actions	Implementation steps	Jurisdiction/who does it?	Estimated timeline (after implementation)
A. Mandate double-sided copying	a) Set printers/copiers/fax defaults to duplex (double-sided) mode where capable.	a) P&D (for their devices); BIT; ITO; users; vendors	a) 6 months
	b) As equipment is replaced or contract expires, replace single function printers/copiers/ faxes with multifunctional reproduction devices.	b) P&D; users; BIT; ITO; users; CPCA; BOP	b) 5 years
	c) Require double-sided printing for all contracted multi-page work products where possible.	c) CPCA; BOP; P&D; users	c) 6 months
	d) Work towards standardization of duplication peripherals.	d) P&D; BIT; ITO; CPCA; BOP	d) 5 years
B. Reduce unnecessary copying/printing	a) Increase use of centralized printing services, decrease use of desktop printers; reduce outside printing services.	a) Users; P&D; ITO; BIT	a) 1 year
	b) Increase internal electronic business communications and transactions.	b) Users; P&D; ITO; BIT	b) 1 year
	c) Increase external electronic business communications and transactions.	c) Users; P&D; ITO; BIT	c) 1 year
	d) Manage internal and external mailing lists by removing outdated, unnecessary, and duplicate addresses.	d) Users	d) 6 months

Recommended actions	Implementation steps	Jurisdiction/who does it?	Estimated timeline (after implementation)
C. Measure paper used and establish reporting structure	a) Develop baseline for use of paper products.	a) P&D: Central Stores; BOP; CPCA	a) 6 months
	b) Develop system for regular paper use measurement and quarterly reporting.	b) P&D: Central Stores; BOP; CPCA	b) 6 months
	c) Require vendor usage reports (quarterly) for all paper products.	c) P&D: Central Stores; BOP; CPCA; vendors	c) 1 year
D. Centralize city and county paper purchasing efforts.	a) Require that all paper purchases (both stand alone and in conjunction with printed products) be centralized through P&D and Central Stores.	a) P&D: Central Stores; BOP; CPCA	a) 1 year
	b) Support the implementation of a cooperative city/county large-volume purchasing effort.	b) P&D: Central Stores; BOP; CPCA	b) 1 year

2. Recommendation: Require all paper purchased and used to meet or exceed EPA content guidelines (*see EPA document EPA530-F-00-013*)

Recommended actions	Implementation steps	Jurisdiction/who does it?	Estimated timeline (after implementation)
A. Review and revise City and County policies to specify all papers used in the performance of City/County work shall meet or exceed current EPA guidelines	a) Locate codes, rules, policies and procedures that address recycled paper and develop new language specifying EPA guidelines for minimum content. Present to Council and Commissioners for approval.	a) CPCA; BOP; City Council and County Commissioners	a) 6 months
	b) Review existing quote, bid, RFP and contract boilerplates and revise areas where paper use meeting EPA guidelines should be specified.	b) CPCA; BOP	b) 6 months
	c) Educate employees and vendors about changes.	c) CPCA; BOP; COOL; vendors; users	c) 6 months
B. Identify all paper used that does <i>not</i> meet current EPA guidelines.	a) Identify centrally procured paper and non-centralized paper product purchases that do not meet current EPA guidelines.	a) P&D; CPCA; BOP; Central Stores	a) 6 months
	b) Identify outsourced/contracted work products produced on paper that do not meet current EPA guidelines.	b) P&D; CPCA; BOP; Central Stores	b) 6 months
C. Identify replacement products for the non-compliant paper products identified above.	a) Survey market for replacement products that meet mandated guidelines.	a) P&D; CPCA; BOP; Central Stores	a) 6 months
	b) Create a list or database of recommended replacement products available to all City and County employees.	c) P&D; CPCA; BOP; Central Stores; BIT; ITO	c) 1 year
D. Insure that all paper purchased and used meets or exceeds EPA content guidelines	a) When purchasing products, use the list above to replace non-compliant products with products that meet or exceed EPA content guidelines.	a) BOP; CPCA; Central Stores	a) 1 year

3. Recommendation: Mandate that at least 10% of paper purchased and used within the City and County is alternative environmentally preferable paper (AEPP). Promote the use of alternative environmentally preferable paper wherever possible.

Recommended actions	Implementation steps	Jurisdiction/who does it?	Estimated timeline (after implementation)
A. Identify AEPP products, their availability through local vendors, and their costs.	a) Develop list or database of existing AEPP products, availability, and costs.	CPCA; BOP; Central Stores; vendors	a) 6 months
	b) Analyze current paper uses and make recommendations about where AEPP would have the best impact.	b) CPCA; BOP; Central Stores	b) 1 year
B. Insure that at least 10% of paper purchased and used is AEPP.	a) When purchasing products, use the list above to replace existing products with AEPP products as recommended.	a) BOP; CPCA; Central Stores	a) 1 year
C. Conduct and evaluate pilot projects that utilize AEPP.	a) Develop list of prioritized pilot projects.	a) CPCA; BOP; OSD; SD	a) 6 months
	b) Develop criteria for all pilot projects, including: definite performance standards, measurement tools, clearly identified objectives, and scopes of work.	b) CPCA; BOP; OSD; SD; users	b) 18 months
	c) Review pilot project results and recommend either discontinuation of project or conversion to ongoing status.	c) CPCA; BOP; OSD; SD; auditors; users	c) 18 months
D. Promote contractor use of AEPP.	a) Investigate the possibility of providing contract preference to contractors who use AEPP.	a) CPCA; BOP; county and city counsels	a) 1 year
	b) Specify the use of AEPP in bids and contracts when prudent.	b) CPCA; BOP	b) 1 year

4. Recommendation: Provide for and support research, training and evaluation of success in the implementation of the goal.

Recommended actions	Implementation steps	Jurisdiction/who does it?	Estimated timeline (after implementation)
A. Designate county and city sustainability programs as bodies responsible for research, training, and evaluation.	a) Executive order from council and commission making designation.	a) City Council and County Commission	a) 6 months
	b) Publicize both programs and their missions.	b) OSD; SD; public affairs offices	b) 6 months
	c) Formalize a city-county subgroup of the two sustainability programs to synchronize their efforts.	c) OSD; SD	c) 6 months
B. Develop training program to insure that all city and county employees have been familiarized with sustainability concepts and their application in the workplace.	a) Include sustainability in city and county orientation training presentations.	a) OSD; SD; COOL; city training department	a) 1 year
	b) Develop and deliver formal training courses offered though county and city training programs.	b) OSD; SD; COOL; city training department	b) 18 months
	c) Develop additional training resources accessible to city and county programs and employees. Should include a library, a list of training providers and courses, and a website.	c) OSD; SD; COOL; city training department; ITO; BIT	c) 18 months
C. Evaluate city and county sustainable practices and make recommendations for positive change.	a) Have city and county performance audits include an evaluation of sustainable practices.	a) City and county auditors	a) 6 months
	b) Develop format for annual city-county sustainability report; to include evaluation of sustainable purchasing, sustainability training, and pilot projects.	b) OSD; SD; P&D; BOP; City Auditor; SDC	b) 1 year
	c) Insure that procurement practices in the city and county match the recommendations of this report.	c) Sustainable Procurement Steering Committee, expanded to include vendor, public and user representation	c) 1 year

Actions needed to monitor implementation:**1. Recommendation: Reduce consumption**

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Reduce total volume of paper used by 10% within five years. This includes office papers, envelopes, and janitorial paper.	Annual measurement of paper used against baseline and previous year measurement of paper used.	P&D; BOP	Midterm: 6/30/2004 Final: 6/30/2008
County	Reduce total volume of paper used by 10% within five years. This includes office papers, envelopes, and janitorial paper.	Annual measurement of paper used against baseline and previous year measurement of paper used.	CPCA; Central Stores; P&D	Midterm: 6/30/2004 Final: 6/30/2008

2. Recommendation: Require all paper used to meet or exceed EPA content guidelines (see EPA document EPA530-F-00-013).

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines (after implementation)
City	All paper used by city employee and contractors will meet or exceed EPA recycled content guidelines.	Compare inventory of paper used against most recent EPA recycled content guidelines.	P&D; BOP	Midterm: 9/1/2003 Final: 1/1/2004
County	All paper used by county employee and contractors will meet or exceed EPA recycled content guidelines.	Compare inventory of paper used against most recent EPA recycled content guidelines.	CPCA; Central Stores; P&D	Midterm: 9/1/2003 Final: 1/1/2004

3. Recommended practice: Mandate that at least 10% of paper purchased and used within the City and County is alternative environmentally preferable paper (AEPP). Promote the use of alternative environmentally preferable paper wherever possible.

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines (after implementation)
City	10% of paper used will be alternative environmentally preferable paper.	Analyze all paper used by type and determine percentage that is AEPP.	P&D; BOP	Midterm: 1/1/2004 Final: 6/30/2004
County	10% of paper used will be alternative environmentally preferable paper.	Analyze all paper used by type and determine percentage that is AEPP.	CPCA; Central Stores	Midterm: 1/1/2004 Final: 6/30/2004

4. Recommendation: Provide for and support research, training and evaluation of success in the implementation of the goal.

Jurisdiction	Target	Indicators	Reporting Entities	Reporting Deadlines (after implementation)
City	Make sustainability training mandatory for all city employees.	Sustainability training is part of mandatory training package for new employees. Measure percentage of existing employees who have received sustainability training.	City training department; employees; supervisors	Midterm: 6/30/2004 Final: 1/1/2005
County	Make sustainability training mandatory for all county employees.	Sustainability training is part of mandatory training package for new employees. Measure percentage of existing employees who have received sustainability training.	COOL; employees; supervisors	Midterm: 6/30/2004 Final: 1/1/2005

Accomplishments/improvements achieved as a result of task force efforts in addition to final recommendations:

1. *Reduction in office paper storage room and equipment.* The reduction in paper use has a direct effect on the need to store and dispose of it. In addition to the reduction in space used to store paper in offices, onsite storage areas, offsite storage areas, records centers, and archives; a reduction in paper use also has a direct effect on paper storage supplies and equipment, including: file folders, hanging folders, storage boxes, various types of shelving, and file cabinets. In addition, costs for the disposition of paper through centralized destruction processes (like the county and city records centers) or through decentralized processes using onsite or contracted shredding services are reduced.
2. *Creation of a viable market for environmentally preferable paper.* The city and county purchase large volumes of paper products. Requiring the use of papers that meet or exceed EPA recycling content guidelines and promoting the use of alternative environmentally preferable papers will encourage the production of these papers. Providing a market for local producers of these papers will also enhance the local job market, which promotes the social equity component of sustainable development.
3. *Fostering a work culture that values sustainability.* Changes to work culture are often slow and incremental. The combination of required behaviors, like purchasing and use of prescribed paper, with ongoing and comprehensive employee training will ensure that the transition of city and county workplaces to ones that value sustainability will be as quick and as smooth as possible. Once the transition is complete, city and county workplaces can serve as models for other sectors of the workforce.
4. *Standardization of paper and paper-dependant technologies.* Centralizing county and city purchase of paper will standardize the types of paper used. Additionally, paper standardization may allow purchasing programs to standardize technologies that use paper. From paper towel dispensers to multifunction printer-copiers, the standardization these technologies allows for bulk purchases, interchangeable consumables like toner or ink, and easier maintenance.

Acronyms

AEPP: Alternative Environmentally Preferable Paper
 BIT: Bureau of Information Technology (city)
 BOP: Bureau of Purchasing (city)
 COOL: Countywide Office of Organizational Learning (county)
 CPCA: Central Procurement and Contract Administration (county)
 EPA: Environmental Protection Agency (federal)
 EPP: Environmentally Preferable Products
 ITO: Information Technology Organization (county)
 OSD: Office of Sustainable Development (city)
 P&D: Printing and Distribution (city)
 SD: Division of Sustainability (county)

Annotated Glossary

Alternative Environmentally Preferable Papers (AEPP): The EPA defines environmentally preferable products (EPP) as products or services that “have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.” [EPA EPP Final Guidance Report, August 1999]. Alternative EPP (AEPP) are papers which fit the definition of EPP’s but are more restrictive in nature than the minimum EPA recycling content requirements. <http://www.rmi.org/sitepages/art7037.php> identifies the following alternative papers in descending order of preference: agricultural residues, post-consumer recycled paper, certified sustainably-harvested wood fiber, purpose-grown non-wood fiber crops. Also indicates paper that is unbleached if possible, not genetically modified, and lighter in weight.

Digital Divide: “The term 'digital divide' describes the fact that the world can be divided into people who do and people who don't have access to - and the capability to use - modern information technology”[www.whatis.com; accessed 11/25/2002] “By ‘digital divide,’ we refer to inequalities in access to the Internet, extent of use, knowledge of search strategies, quality of technical connections and social support, ability to evaluate the quality of information, and diversity of uses. [“Social Implications of the Internet,” Paul DiMaggio et al, *Annual Review of Sociology*, 2001, 27:307–36]

Appendix 5
Office Furniture Task Force Reports

2002 Sustainable Procurement Task Force: Office Furniture Compilation of Task Force Reports I-IV

Phase I Report

Sustainable Procurement Product Selection Worksheet											
CRITERIA FOR DETERMINING SELECTION											
	Economic			Environmental		Social		Timely/Ease			
Product/ Product Area	Volume Used (0-2)*	Cost/ Cost Savings (0-2)	Effect on Busin esses (0-2)	Market readiness of Alternatives (0-2)	Impacts (0-2)	Visibility (0-2)	Established Policy (0-2)	Ease of Impleme ntation	Upcoming Purchases	Total Score	General comments, things to consider, parallel issues
New Systems Furniture	2	1	1	0	0	0	2	2	1	9	See following comments
Disposal & Reuse of Existing Excess Furniture	1	2	2	1	0	0	2	1	1	10	
Used Systems Furniture Specifications	1	0	2	2	0	1	2	1	1	10	

*Score each product/product area on a scale from 0-2 for each criteria selected. 0=no or very low opportunity/impact, 2=best opportunity/most impact.

Comments for Furniture Task Group Matrix

1) New Systems Furniture

The group had a big discussion on the topic of new systems furniture. We discovered the City and County buy Herman Miller off of the State price agreement. The Office Furnishing Work Group Report done in May of 2001 recommended adding sustainable specifications in the State's RFP and ITB for Systems Furniture. The state put out a solicitation for systems furniture in early 2002. After some research we found out that the work group recommendations were never adopted by the Governor, therefore not included in the solicitation.

The group discussed adopting the sustainable specifications and including them in a joint City/County solicitation. We thought this could be a problem, because our procurement would not have the volume of purchase and would not be able to get better pricing than what already exists on the state price agreement, along with the committee members being discouraged that the recommendation was not adopted by the Governor. We will not be working on this target area.

2) Disposal and Reuse of Already Existing Excess Furniture

The committee realized that since both agencies no longer get rid of their excess furniture to the State that this is becoming a problem. The City is currently storing excess furniture on the 3rd floor of the Portland Building. The County is currently storing excess furniture at various locations. Both agencies have no idea what excess furniture is available and might be reused; instead a lot of times, new furniture is being bought. This is an interesting target area to look at, because we might be able to combine and save money on storage and the buying of new furniture.

3) Used Systems Furniture Specifications

Some times both agencies have the need to outfit a temporary office. Because of the amount of staff involved with the project the option is to buy new furniture or buy used furniture. Buying of new furniture for a temporary project/office is not usually wanted or recommended. Buying of used furniture would require a formal solicitation. The committee would like to create specifications that can be adopted into a solicitation including the interests of local government agencies. If any agency had the need to outfit a temporary office they would have the option of a contract they could use instead of writing up new specifications. The committee will be working on this target area also.

Phase Two Task Force Report

Date: July 1, 2002

Task Force: Office Furniture

Products selected for further investigation:

Products	Why selected (effective/easy/timely)	Key questions that need to be answered
Used Systems Furniture Specifications	<p>Outfit temporary office(s) with large staff numbers. Buy new or buy used?</p> <p>Establish a contract for government agencies to use</p>	<p>Does this require a formal solicitation? (City/County Policy)</p> <p>How do ergonomics come into play with the specifications?</p> <p>Can we use ANSI durability testing instead?</p>
Disposal and Reuse of Existing Surplus Furniture	<p>At this point, big surplus of office furniture at both COP and Multco.</p> <p>This effort would be sustainable as well as save money.</p> <p>Recycle furniture within local agencies/partnerships (not to landfill).</p>	<p>How to centralize the ownership of furniture?</p> <p>How to allocate money when needed (between agencies).</p> <p>Where to store it & how long?</p> <p>Feasibility of a central warehouse?</p> <p>Cost for COP/Multco: Staff, Resources</p> <p>Outsource (Contractor, non-profits)</p> <p>Auction</p> <p>Repair damaged furniture(contract for repairs and upholstery work)</p>

Products that were not chosen:

Product	Reasons for not choosing
New Systems Furniture	<p>The majority of the systems furniture used by the City and County is Herman Miller bought off of the Oregon State Price Agreement. The state put out a solicitation for systems furniture in early 2002. This RFP implements most of the 23 recommendations for sustainable specifications done by the Office Furnishings Work Group in May 2001. The exceptions were water-based adhesives, water-based solvents, TVOC and formaldehyde and hazardous material. The exceptions are specifications that exceed the manufacturer's ability to carry out at the present time. The longevity of systems furniture is very high and Herman Miller is covered by a lifetime warranty. Both the Portland Building and Multnomah Buildings were recently reconfigured with new systems furniture and do not anticipate replacement in the near future.</p>
Remanufactured Furniture	<p>A solicitation will be released in 2002 by the state to procure re-furnished office systems furniture. This secondary market has only recently been in existence and the state intends to minimize impact of destruction or disposal of used office systems furniture items by this method of re-use of the materials. The refurbished furniture market does not exist on a scale that provides a greater benefit than the current method of disposal (property transfer between agencies). No local manufacturer provides this type of furniture.</p>

Phase Three Task Force Report**Date:** October 15, 2002**Task Force:** Office Furniture**Product:** Disposal and Reuse of Existing Surplus Furniture**Goal to be accomplished:** User friendly, cost effective, consistent means to dispose of surplus property, resulting in extending furniture life, sustainability and cost savings.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	Who are key people in the purchasing process?
Any City Bureau	<p>Maint/Transportation Storing excess furniture from a recent refit, plan to reuse but will only keep in storage for 2 – 5 years, then will give to State.</p> <p>BES None</p> <p>BGS Storing in the garage, 3rd and 13th floors of the Portland Building. Garage – systems partitions, carpet, staging area for construction, not secured or monitored. 3rd floor – carpet tiles, light fixtures, computers, file cabinets, systems partitions, chairs, tables. Belongs to: Water, Parks, Cable Access, BGS, not monitored. 13th floor – Systems furniture, file cabinets, surplus furniture not storing for reuse. Belongs to: Purchasing</p> <p>Water Bureau Interstate building – Storing systems furniture, useable ergonomic furniture and misc. chairs. Portland Building – Store surplus here, but do not track it.</p> <p>PDC No surplus at this time uses state to dispose of surplus. PDC stores parts of systems furniture for reuse.</p>	<p>Costs = Maint/Trans Stored on site in two 600 sq. ft. storage areas plus excess furniture not in storage area. No cost.</p> <p>BES No cost associated with surplus.</p> <p>BGS Garage Portland Bldg. - 750 sq. ft., 375 sq. ft. actual 3rd floor Portland Bldg. - 9000 sq. ft. available, 2250 sq. ft. actual @ \$20.73 (lease rate) = \$46,642.00 13th floor Portland Bldg. 4500 sq. ft. available, 1125 sq. ft. actual @ \$20.73 (lease rate) = \$23,321.00</p> <p>Water Bureau Interstate has 1500 sq. ft, but only use 500 – 600 sq. ft. for surplus. Portland Bldg info above combined with BGS numbers.</p> <p>PDC Warehouse is 8000 sq. ft., estimate of 800 sq. ft. used to store surplus.</p>	<p>Water Bureau Jim Hughes Dave Mozuch</p> <p>BES Scott Turpen</p> <p>Maint/Transportation Gary Halverson</p> <p>Fire Bureau Mike Speck</p>

Product: Disposal and Reuse of Existing Surplus Furniture

What County departments buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	Who are key people in the purchasing process?
Any County department	<p>Sheriff: Storing odds and ends, office furniture, Hanson Bldg, Inverness Jail, the Farm, approx.300 sq.ft., not disposing at this point, not a priority.</p> <p>Aging Svc: Office furniture, office equipment.</p> <p>Health/Various Dept : McCoy Bldg storing systems furniture, office furniture, machines, tables, chairs, medical furniture and equipment.</p> <p>Facilities: Ford/Blanchard bldgs storing office furniture, office equipment, institutional furniture.</p> <p>DBCS: Multnomah bldg storing misc. office furniture.</p> <p>Transportation: Yeon bldg</p>	<p>Costs = Sheriff: Nothing</p> <p>Aging Svc: 2 locations, approx 400 sq ft.</p> <p>Health/Various Dept: McCoy Building, approx 8155 sq. ft, only using 2238 sq. ft. for surplus @ approx \$12 sq. ft. = \$26,856</p> <p>Facilities 1000 sq. ft. for surplus @ \$4.80 = \$4,800.</p> <p>DBCS - 400 sq. ft.</p> <p>Transportation: 500 sq. ft. at Yeon</p>	<p>Materials Management/ Facilities Brian Lewis</p> <p>Property Managers Sheriff Stephen Wright Mark Gustafson</p> <p>Library Matt Newstrom</p> <p>Aging Svc Esther Lugalina</p> <p>Health Bob Lilly</p> <p>DBCS/Transportation Stephen Kelly</p>

Product: Disposal and Reuse of Existing Surplus Furniture**Existing sustainable practices and policies:**

City	County
External: PDC Green Building Policy, LEEDS rating system	External: PDC Green Building Policy, LEEDS rating system
Internal: Environmentally Preferred Purchasing, City Purchasing Manuel (Recommend amend policy)	Internal: Environmentally Preferred Purchasing, City Purchasing Manuel(Recommend amend policy)
Technical: Green product specifications including post consumer recycled content and reusability.	Technical: Green product specifications including post consumer recycled content and reusability.
Financial: Cost analysis, Life cycle analysis, Regulations	Financial: Cost analysis, Life cycle analysis, Regulations

Product: Disposal and Reuse of Existing Surplus Furniture**Barriers/constraints to replacing a product or modifying product usage:**

	City	County
External	Disposal of inoperable furniture, Policy against selling of surplus property to employees (State statute?)	Disposal of inoperable furniture, Policy against selling of surplus property to employees (State statute?)
Internal	Ergonomic requirements City Code for surplus property Educational barriers to end users	Ergonomic requirements County Policy for surplus property Educational barriers to end users
Technical	Outsource: Furniture Broker (Sundeleaf already has existing contract for disposal) Transfer of Property: <ul style="list-style-type: none"> • To other bureaus/departments • To other government agencies Sale of property to organizations(public & private)	Outsource: Furniture Broker (Sundeleaf already has existing contract for disposal) Transfer of Property: <ul style="list-style-type: none"> • To other bureaus/departments • To other government agencies Sale of property to organizations(public & private)
Financial	Cost of warehouse space Cost of internal staff Rate Payers (water bureau)	Cost of warehouse space Cost of internal staff
Other	City/County Coordination of project Other government agency usage	City/County Coordination of project Other government agency usage

Product: Used Systems Furniture Specifications

Goal to be accomplished: To promote the increased use of used furniture as well as providing a tool to end users while modifying the guidelines to existing City/County policies.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
<p>Utility Bureaus that need to set up construction offices</p> <p>Bureaus that have budget restrictions</p> <p>Outside government agencies in the metro area (IGA)</p>	<p>Used furniture = BES – 20 to 30 workstations</p> <p>PDC – 22 workstations</p> <p>Water Bureau – None</p> <p>New furniture = Water Bureau – 10 to 20 workstations</p> <p>BES – None, only components</p> <p>Maint/Transportation -46 workstations</p> <p>Fire Facilities – Workstations, possibly for the admin remodel in 2004. Mostly purchase beds, recliners and conference room furniture, not modular.</p> <p>PDC – 10 workstations</p>	<p>Costs/Used = BES - \$30 - \$50,000</p> <p>PDC - \$30,000</p> <p>Costs/ New = Water Bureau – \$60 - \$70,000</p> <p>Maint/Transportation - \$103,500.00</p> <p>Fire Bureau – \$50,000.00 (not systems furniture, includes beds, recliners, etc.)</p> <p>\$200 - \$400,000 for the 2004 admin remodel, depending on funding and if they will move to a new building.</p> <p>PDC – \$40,000.00</p>	<p>Used: PO's LPO's Procurement Card</p> <p>New: IGA's Annual contracts PO's LPO's Procurement Card</p>	<p>Water Bureau Jim Hughes Dave Mozuch</p> <p>BES Scott Turpen</p> <p>Maint/Transportation Gary Halverson</p> <p>Fire Bureau Mike Speck</p>

Product: Used Systems Furniture Specifications

What County departments buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
<p>Departments that have budget restrictions</p> <p>Outside government agencies in the metro area (IGA)</p>	<p>Used furniture =</p> <p>Aging Services – A01 Herman Miller panels, Conference furniture & seating</p> <p>New furniture =</p> <p>Sheriff – Wapato 45 – 50 workstations</p> <p>Aging Services – None</p> <p>Facilities – 8 – 10 workstations Blanchard Bldg</p> <p>DA’s Office - 10 workstations Courthouse, 6th floor</p> <p>DBCS/Various Dept 30 - 35 workstations Multnomah Building, 5th floor</p>	<p>Costs/Used =</p> <p>Aging Services – \$15 - \$20,000</p> <p>Costs/New =</p> <p>Sheriff – \$160 - \$200,000</p> <p>Facilities – \$40,000</p> <p>DA’s Office - \$40,000</p> <p>DBCS/Various Dept Multnomah Bldg – \$120 - \$140,000</p>	<p>Used: PO’s LPO’s Procurement Card</p> <p>New: IGA’s Annual contracts PO’s LPO’s Procurement Card</p>	<p>Sheriff Gwen Tyler Stephen Wright</p> <p>Aging Svc Debra Meyers</p> <p>Health Stacey Widick</p> <p>DBCS Martha Kavorinos</p> <p>Library – Sue Robinson</p>

Product: Used Systems Furniture Specifications

Existing sustainable practices and policies:

City	County
<p>External: ORS 279, Industry Standards, DEQ Emissions, OSHA</p>	<p>External: ORS 279, Industry Standards, DEQ Emissions, OSHA</p>
<p>Internal: New City code to buy used furniture (this code is pretty vague, this group will be writing guidelines for the existing policy, i.e., need to meet certain criteria, meet UL listed electrical, some type of limited warranty)</p>	<p>Internal: County PCRB administrative rule 310-0500 addresses the purchase of used personal property. This administrative rule has a few guidelines such as purchases \$5,000 - \$75,000 get quotes were feasible and over \$75,000 shall be a formal procurement. This group feels there needs to be additional guidelines added.</p>

Product: Used Systems Furniture Specifications

Barriers/constraints to replacing a product or modifying product usage:

	City	County
External	OSHA Regulations ANSI Regulations	OSHA Regulations ANSI Regulations
Internal	City Bid Process Ergonomics Policies Compatibility with existing furniture Note: We would like to implement new furniture specifications to include manufacturer to provide a transferable warranty to the new owners.	County Bid Process Ergonomics Policies Compatibility with existing furniture Note: We would like to implement new furniture specifications to include manufacturer to provide a transferable warranty to the new owners.
Technical	Availability & reach-ability of products that meet COP furniture standards. Outsource: space planner/office designer Manufacturer rep. Installer	Availability & reach-ability of products that meet COP furniture standards. Outsource: Space planner/office designer Manufacturer rep. Installer
Financial	Accounting for assets	Accounting for assets
Other	Determine the vendors that would provide this product Hazardous discharge of fumes form outdated materials	Determine the vendors that would provide this product Hazardous discharge of fumes form outdated materials

Phase Four Task Force Report**Date:** December 1, 2002**Task force:** Office Furniture**Product:** Furniture Disposal and Reuse**Goal to be accomplished:** Consistent and environmentally responsible means of disposal of surplus property.

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. Donation of surplus property to in-house dept./bureaus, other government agencies, QRF's and non-profit organizations	H	1. Environmental: Reusing furniture; less waste to landfill	1. Environmental: Loss of chain of custody; could end up in landfill
		2. Economic: Not purchasing new furniture resulting in cost savings; disposal costs reduced	2. Economic: Not purchasing new furniture impacts regional economy
		3. Social: Increases social harmony between public and non-profit agencies; eases costs for agencies in budget crisis	3. Social: Loss of regional jobs at manufacturing companies
2. Website to view excess property	H	1. Environmental: Not driving to view surplus; paperless	1. Environmental: None
		2. Economic: Easily maintainable, same cost no matter how many employees reached	2. Economic: Pay staff, potential software or licensing costs (minimal)
		3. Social: Wide distribution of information	3. Social: None
3. Employee education on sustainability and proper disposal methods	H	1. Environmental: Keep furniture out of landfill	1. Environmental: None
		2. Economic: Save money on new purchases; fewer non-standard & non-sustainable purchases	2. Economic: Education materials & training expenses, staff time
		3. Social: Setting an example of educating our employees on proper sustainable & disposal methods	3. Social: Fewer purchases of new products from local businesses

4. Extended/transferable warranties on new furniture	H	1. Environmental: Keep furniture out of landfill	1. Environmental: None
		2. Economic: Extend the lifecycle of furniture	2. Economic: Could increase overall product cost with limited overall value
		3. Social: Manufacturer hires local company to provide warranty work	3. Social: Could increase overall product cost with limited overall value, that may not be visible to taxpayers
5. Deconstruction of furniture component parts	L	1. Environmental: If recycled appropriately less waste to landfill	1. Environmental: No market for some of the parts
		2. Economic: Less disposal costs; income from recycling broke down material	2. Economic: Time and money for staff wages; potential injuries and toxic liabilities
		3. Social: Creates jobs for disassembly	3. Social: None
6. Maintenance contracts	L	1. Environmental: Less breakdown; stay out of landfills	1. Environmental: None
		2. Economic: Upkeep of furniture life; less new purchases	2. Economic: Cost for maintenance contract
		3. Social: Maintenance contract with local company, possibly underutilized vendor	3. Social: Increased cost translated into taxpayer dollars and may take away from in-house workers

Product: Furniture Disposal and Reuse
Actions needed to implement changes:

Recommended Practice	Actions to implement	Jurisdiction/who does it?	Estimated timeline
1. Donation of surplus property to in-house dept/bureaus, other gov't agencies, QRF's and non-profit orgs.	1. Modify existing donation policies	a) City Purchasing/Risk Management & County Materials Management/Risk Management	a) FY 2003
	2. Facility, staff, access to vehicle	b) City Purchasing/Surplus & County Materials Management (Central Stores)	b) FY 2003/2004
2. Website to view excess property	a) Set up website & site maintenance	a) City Purchasing/Surplus & County Materials Management	a) FY 2003
3. Employee education on sustainability and proper disposal methods	a) Develop Training	a) City Purchasing/Surplus & County Materials Management	a) FY 2003/2004
	b) Market Training	b) City Purchasing/Surplus & County Materials Management	b) FY 2003/2004
4. Extended/transerable warranties on new furniture	a) Develop Specifications	a) City Purchasing & County Central Procurement	a) FY 2003
	b) Work with furniture manufacturers for transferable warranties	b) City Purchasing & County Central Procurement	b) FY 2003
	c) Tracking furniture warranties	c) City bureaus & County departments	c) FY 2003
5. Deconstruction of component parts	a) Facility, staff, access to vehicle	a) City Purchasing/Surplus & County Materials Management (Central Stores)	a) FY 2003/2004
	b) Outsourcing	b) City Purchasing/Surplus & County Materials Management (Central Stores)	b) FY 2003/2004
6. Maintenance contracts	a) Develop specifications and release solicitation	a) City Purchasing & County Central Procurement	a) FY 2003

Actions needed to monitor implementation:**Product:** Furniture Disposal and Reuse**3. Recommended practice:** Donation of surplus property to in-house dept./bureaus, other government agencies, QRF's and non-profit organizations

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	City Purchasing/Surplus	Midterm: December, 2003 Final: June, 2004
County	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	County Materials Management (Central Stores)	Midterm: December, 2003 Final: June, 2004

Product: Furniture Disposal and Reuse**4. Recommended Practice:** Website to view excess property

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	City Purchasing/Surplus	Midterm: December, 2003 Final: June, 2004
County	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	County Materials Management (Central Stores)	Midterm: December, 2003 Final: June, 2004

Product: Furniture Disposal and Reuse

3. Recommended practice: Employee education on sustainability and proper disposal methods

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	City Purchasing/Surplus	Midterm: December, 2003 Final: June, 2004
County	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	County Materials Management (Central Stores)	Midterm: December, 2003 Final: June, 2004

Product: Furniture Disposal and Reuse

4. Recommended practice: Extended/transferable warranties on new furniture

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	<ul style="list-style-type: none"> ▪ Meet with furniture manufacturers ▪ Develop specifications ▪ Develop warranty tracking system 	<ul style="list-style-type: none"> ▪ Committee recommendation ▪ Specifications developed ▪ Tracking system developed 	City Purchasing	Midterm: February, 2003 Final: August, 2003
County	<ul style="list-style-type: none"> ▪ Meet with furniture manufacturers ▪ Develop specifications ▪ Develop warranty tracking system 	<ul style="list-style-type: none"> ▪ Committee recommendation ▪ Specifications developed ▪ Tracking system developed 	County Central Procurement	Midterm: February, 2003 Final: August, 2003

Product: Furniture Disposal and Reuse**5. Recommended practice:** Deconstruction of component parts

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	City Purchasing/Surplus	Midterm: December, 2003 Final: June, 2004
County	Facility, staff, access to vehicle for surplus property warehouse	Committee recommendation	County Materials Management (Central Stores)	Midterm: December, 2003 Final: June, 2004

Product: Furniture Disposal and Reuse**6. Recommended practice:** Maintenance contracts

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Research existing specifications and possible vendors	<ul style="list-style-type: none"> ▪ Committee recommendation ▪ Specifications developed ▪ Solicitation released 	City Purchasing	Midterm: February, 2003 Final: August, 2003
County	Research existing specifications and possible vendors	<ul style="list-style-type: none"> ▪ Committee recommendation ▪ Specifications developed ▪ Solicitation released 	County Central Procurement	Midterm: February, 2003 Final: August, 2003

Product: Furniture Disposal and Reuse**Accomplishments/improvements achieved as a result of task force efforts in addition to final recommendations:**

1. Identified three potential partners (City, County, PDC) for a combination surplus warehouse that will provide services to other local governments, underutilized vendors and non-profit agencies.
2. Identified the need of warehouse space (est. 10,000 sq. ft.) with loading area, outside fenced area with adequate parking, office space with access to computer, telephone and alarm system. Also, needed is material handling equipment and access to a vehicle.
3. Identified cost savings and sustainability from reuse of existing furniture and surplus property that includes easy access to inventory by a web based system as well as cost savings from a centralized storage area.
4. Identified possible revenue from sales of surplus property with 100 % retained

Phase Four Task Force Report**Date:** December 1, 2002**Task force:** Office Furniture**Product:** Used Systems Furniture**Goal to be accomplished:** Promote increased use of used furniture while modifying guidelines to existing City/County policy.

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. Modify existing policies	H	1. Environmental: Keeps furniture out of landfill & reduces consumption of natural resources for new product	1. Environmental: Paper consumption
		2. Economic: Create a market & encourage competition	2. Economic: None
		3. Social: Promote environmental goals and social benefits	3. Social: Take business away from small businesses that sell new furniture
2. Develop used furniture contracts for multi-agency use	H	1. Environmental: Keeps furniture out of landfill & reduces consumption of natural resources for new product	1. Environmental: Paper consumption
		2. Economic: Volume savings; long term relationships	2. Economic: None
		3. Social: Less work; more efficient streamlined process	3. Social: Long term contract eliminates other bidders (vendors)
3. Reuse & redistribution of furniture	H	1. Environmental: Refer back to disposal & reuse goals of furniture task group.	1. Environmental: Refer back to disposal & reuse goals of furniture task group.
		2. Economic: Refer back to disposal & reuse goals of furniture task group.	2. Economic: Refer back to disposal & reuse goals of furniture task group.
		3. Social: Refer back to disposal & reuse goals of furniture task group.	3. Social: Refer back to disposal & reuse goals of furniture task group.

Product: Used Systems Furniture

Actions needed to implement changes:

Recommended Practice	Actions to implement	Jurisdiction/who does it?	Estimated timeline
1. Modify existing policies	a) City to modify existing Purchasing code	a) City Purchasing	a) Can be implemented in 2003 with adoption by City Council
	b) County to modify existing PCRB administrative rule 310-0500	b) County Central Procurement	b) Can be implemented in 2003 with adoption by County Board
2. Develop used furniture contracts for multi-agency use	a) Develop bid specifications and release solicitation	a) City or County Procurement office	a) Can be implemented in 2003
3. Reuse & redistribution of furniture	a) Adoption of any disposal & reuse recommendations from the furniture task group	a) Responsible parties of disposal & reuse recommendations	a) Can be implemented in 2003

Actions needed to monitor implementation:

Product: Used Systems Furniture

1. Recommended practice: Modify existing policies

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	City to modify existing Purchasing code	Committee working on re-write	City Purchasing	Midterm: February, 2003 Final: July. 2003
County	County to modify PCRB administrative rule	Committee working on re-write	County Central Procurement	Midterm: February, 2003 Final: July. 2003

Product: Used Systems Furniture

2. Recommended Practice: Develop used furniture contracts for multi-agency use

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Develop used furniture contracts for multi-agency use	Solicitation released	City Purchasing	Midterm: March, 2003 Final: July, 2003
County	Develop used furniture contracts for multi-agency use	Solicitation released	County Central Procurement	Midterm: March, 2003 Final: July, 2003

Product: Used Systems Furniture

3. Recommended practice: Reuse & redistribution of furniture

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Adoption of any disposal & reuse recommendations from the furniture task group	None	Responsible parties of disposal & reuse recommendations	Midterm: Final: Can be implemented in 2003
County	Adoption of any disposal & reuse recommendations from the furniture task group	None	Responsible parties of disposal & reuse recommendations	Midterm: Final: Can be implemented in 2003

Product: Used Systems Furniture

Accomplishments/improvements achieved as a result of task force efforts in addition to final recommendations:

1. Identified that the City and County used furniture policies need revisions.
2. The need to identify base furniture standards of agency acceptability.
3. Identified the need for internal clearinghouse.
4. Multiple agencies working together for a common goal.

Appendix 6
Automotive Task Force Reports

**2002 Sustainable Procurement Task Force: Automotive
Compilation of Task Force Reports I-IV**

Phase I Report

Sustainable Procurement Product Selection Worksheet

CRITERIA FOR DETERMINING SELECTION											
	Economic			Environmental		Social		Timely/Ease			
Product/ Product Area	Volume Used (0-2)*	Cost/ Cost Savings (0-2)	Effect on Busin esses (0-2)	Market readiness of Alternatives (0-2)	Impacts (0-2)	Visibility (0-2)	Established Policy (0-2)	Ease of Implem entation	Upcoming Purchases	Total Score	General comments, things to consider, parallel issues
Biodiesel	2	1	2	1	2	2	2	1	1	14	County piloting currently – results not available. Immediate application gives high potential for success.
Hybrid Vehicles	2	0	1	2	2	2	2	0	1	12	City has purchased hybrid vehicles however no policy in place to continue commitment. Successful application could get County to go there.
Performa nce-based Vehicle Specs	2	1	1	2	2	1	2	0	0	11	Area with most impact, but least amount of work done already. Larger commitment. Concerns over “right-sizing”. Not limited to administrative vehicles.
Vehicle Sharing	1	1	0	1	1	0	2	0	0	6	Limit to business use. Sharing between agencies less opportunity than sharing within own organizations. “Optimize vehicle usage” or “Better utilization of existing vehicles” better description. Flex car ruled out.
Ultra Low Sulfur Diesel	2	0	0	0	2	2	2	0	1	9	Federal requirement by 2006. Not available in Oregon – WA using in Puget Sound

*Score each product/product area on a scale from 0-2 for each criteria selected. 0=no or very low opportunity/impact, 2=best opportunity/most impact.

Criteria Selections

Economic	Volume Used	How much does the City/County purchase? How Often?
	Cost	What are the total costs of products, including purchase, operating, maintenance, liability, and disposal costs?
	Effect on Business	Would a change in practice have an impact on Minority, Women or Emerging Small Businesses?
Environment	Impact	Does the continued use of this product have a highly toxic impact, regardless of volume?
	Market Readiness of Alternatives	Are there certified products or reliable standards? Are there alternatives with clear life-cycle benefits? Are there suppliers available?
Social	Visibility	Does purchasing this product educate our employees or the public?
	Established Policy	Does this product elimination support established goals of City Council or the local community? Is there pressure for government to change its purchasing of this product?
Timely/Ease	Ease of Implementation	What administrative barriers must be overcome? Who do we need to work with to implement changes?
	Upcoming Purchases	When are the supply contracts up for renewal? What upcoming capital projects present opportunities?

Phase Two Task Force Report

Date: August 13, 2002

Task Force: Sustainable Automotive Procurement Task Force

Products selected for further investigation:

Products or Practices	Why selected (effective/easy/timely)	Key questions that need to be answered
Alternative Fuel Vehicles	Fleet vehicles were chosen due to readily available hybrid vehicle technology. With City and County vehicles commuting all over the metropolitan region – high visibility associated with choice of vehicle. Our choice of fleet vehicle also has significant environmental impacts. Recent pilot applications at the City have provided successful model that hope to build upon.	<ul style="list-style-type: none"> • Since hybrid technology is relatively new, what performance data do we have available from the City pilot that can be used in our analysis? • Is there data from other jurisdictions we can use? • How to balance increased dollar costs with decreased cost to environment? • Can we quantify the health benefits of reduced emissions for triple bottom line analysis (to expand beyond strictly economic decision-making)? • Can we build in flexibility to allow for future purchase of alternative fuel vehicles (such as fuel cells) when they become available?
Alternates to Diesel Fuel or Practices to Reduce Diesel Fuel Emissions	Significant environmental and human health impacts associated with diesel vehicles. Provides opportunity to focus on other major automotive product area that frequently ignored: heavy equipment. Could leverage results from upcoming pilot at County to gain support. High market development opportunity for both supply and demand.	<ul style="list-style-type: none"> • Is there an opportunity to partner with other major diesel users to develop local market? • What are the actual emission reductions that can be expected from biodiesel? • Would particulate traps be a better alternative to biodiesel? • How to balance increased dollar costs with decreased cost to environment?
Performance Based Specs	Area with most impact due to quantity, visibility and high usage of sedans at both the City and County. Focus on sedan due to common terminology and opportunity for consistency for large number of similar vehicles. Ability to transfer among government agencies (increasing impact). Finally, methodology to incorporate environmental impacts into vehicle purchases.	<ul style="list-style-type: none"> • Do we address “right-sizing” to purchase appropriate vehicle for appropriate usage. • Can we create meaningful performance specifications in the timeframe given? • Are there other organizations using performance specifications? • How will performance specifications be received by suppliers/manufacturers? • How do we get user input and driver acceptance?

Products that were not chosen:

Product	Reasons for not choosing
Ultra low Sulfur Diesel	Not available in Oregon. Significant cost premium. Requires modification to existing vehicle fueling infrastructure.
Electric Vehicles	Limited product availability, limited range and high initial cost. Limited application vs. ease of use with new hybrid technology.
CNG Vehicles	Limited availability of refueling stations and significant cost to building refueling station barrier to successful application. High initial cost. Space concerns (limits storage space in vehicles) and range.

Note: Still under discussion particulate traps and life cycle cost analysis.

Phase Three Task Force Report

Date: October 4, 2002

Task Force: Sustainable Automotive Procurement

Product: Diesel

Goal to be accomplished: Identify a more sustainable alternative to diesel fuel for City and County vehicles.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Diesel fuel is used primarily by Maintenance, Fire, Water, Parks and Environmental Services Bureaus. However, all purchases are coordinated through Vehicle Services.	FY-02 City total use 609,840 gallons diesel fuel Biggest Users By Bureau: Maintenance 341,765 Fire 102,025 Water 97,921 Parks 46,656 BES 14,798 Police 3,851 Vehicle Services 2060	\$380,000 cost for fuel provided at in-house refueling sites in FY-02. Ave cost \$0.75/gallon. (~504,000 gallons) Contractor provided fuel costs additional \$90,000 in FY-02. Ave cost \$0.85/gallon. (~104,000)	Contract agreement with provider. Contractor can change with each annual supply bid. Contract with Jubitz for Pacific Pride locations.	Vehicle Services, Bureau of Purchases, and Maintenance Bureau.

What County departments buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Department of Business & Community Services (DBCS), FREDS division currently purchases diesel fuel for Multnomah County. Use is primarily DBCS and Sheriff Office.	83,587 gallons diesel in FY-01 and 75,442 gallons in FY-02	\$40,376 cost for fuel provided at in-house refueling sites in FY-02. Ave cost \$0.70 / gallon. (~ 57,280 gallons) Contractor provided fuel costs additional \$14,694 in FY-02. Ave cost \$0.81/gal (~18,162 gallons)	Contract agreement with Don Thomas (varies year to year.) Contract with Jubitz / Pacific Pride (shared with the City of Portland).	Fleet Services (Tom Guiney), Transportation (Terrie Weisz), and Central Procurement.

Product: Diesel**Barriers/constraints to replacing diesel or modifying diesel usage:**

	City	County
External	Limited competition and availability of biodiesel. Currently one significant supplier that provides to multiple distributors. Also currently limited availability for card lock purchases which has significant ramifications for some bureaus such as Fire.	Limited competition and availability of biodiesel. Currently one significant supplier that provides to multiple distributors. Also currently limited availability for card lock purchases.
Internal	Concern about perceived performance problems with biodiesel and simple fact that change in practice might also be a barrier.	Concern about perceived performance problems with biodiesel and simple fact that change in practice might also be a barrier.
Technical	Possible increased frequency in filter changes required initially after conversion to biodiesel use.	Possible increased frequency in filter changes required initially after conversion to biodiesel use.
Financial	Price premium for biodiesel. Current premium for B-20 blend is about \$0.20 / gallon. Total cost premium for FY-03 would be about \$100,800 for entire in-house Fleet.	Price premium for biodiesel. Current premium for B-20 blend is about \$0.20 / gallon. Total cost premium for FY-03 would be about \$11,450 for entire in-house Fleet.
Other	Lack of details on possible other alternatives that offers greater “bang for the buck” for environmental and community health benefits gained.	Lack of details on possible other alternatives that offers greater “bang for the buck” for environmental and community health benefits gained.

Product: Administrative Sedans**Goal to be accomplished:** Identify a more sustainable alternative to conventionally fueled administrative sedans.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Vehicle Services buys all of these vehicles and all bureaus use them.	30 vehicles per year. (Based on 276 sedans in City Class 1001. Vehicles have 9-year life. Average purchase per year was determined by dividing 276 vehicles by 9-year life.)	\$420,000. (Based on 30 vehicles multiplied by average cost per vehicle of \$14,000.) (Cost of an electric hybrid sedan is \$19,000.)	By City competitive bid or State Price Agreement.	Vehicle Services and Purchases.

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Fleet Services buys all of these vehicles and all departments use them.	25 new vehicles per year. (Based on 225 administrative sedans, most with a 9-year life. Purchasing is not done at 25 per year, but is done in larger quantities less frequently.)	\$325,000. (Based on 25 vehicles multiplied by an average cost per vehicle of \$13,000.)	By County competitive bid or State Price Agreement.	Michele Gardner and Tom Guiney (Fleet Services) and Central Procurement.

Product: Administrative Sedans

Barriers/constraints to replacing administrative sedans with or modifying administrative sedan usage:

	City	County
External	Limited number of responsible manufacturers of reliable alternative fuel vehicles. Limited quantities of reliable alternative fuel vehicles in Portland/Multnomah County area.	Limited number of responsible manufacturers of reliable alternative fuel vehicles. Limited quantities of reliable alternative fuel vehicles in Portland/Multnomah County area.
Internal	Driver training to increase awareness of unique characteristics of some alternative fuel vehicles. Drivers often assume alternative fuel is associated with less power, less reliability, and less convenience.	Driver training to increase awareness of unique characteristics of some alternative fuel vehicles. Drivers often assume alternative fuel is associated with less power, less reliability, and less convenience.
Technical	New technology will require increased training for mechanical service and repair employees. (If electric hybrid,) Battery replacement and old battery disposal will create new problems. Lack of a reliable performance history when introducing new technology.	New technology will require increased training for mechanical service and repair employees. (If electric hybrid,) Battery replacement and old battery disposal will create new problems. Lack of a reliable performance history when introducing new technology.
Financial	Alternative fuel vehicles normally include a higher purchase price. (If electric hybrid,) Battery replacement and old battery disposal will increase costs. The resale value of an alternative fuel vehicle may be less than a conventional vehicle.	Alternative fuel vehicles normally include a higher purchase price. (If electric hybrid,) Battery replacement and old battery disposal will increase costs. The resale value of an alternative fuel vehicle may be less than a conventional vehicle.
Other	Potential changing technology could speed the obsolescence of alternative fuel vehicles purchased today. If tax credit advantages (or similar credits) are used to obtain alternative fuel vehicles, administrative costs increase.	Potential changing technology could speed the obsolescence of alternative fuel vehicles purchased today. If tax credit advantages (or similar credits) are used to obtain alternative fuel vehicles, administrative costs increase.

Product: Administrative Sedans**Goal to be accomplished:** Develop performance specifications for administrative sedans that include fuel and emission requirements.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Vehicle Services buys all of these vehicles and all bureaus use them.	30 vehicles per year. (Based on 276 sedans in City Class 1001. Vehicles have 9-year life. Average purchase per year was determined by dividing 276 vehicles by 9-year life.)	\$420,000. (Based on 30 vehicles multiplied by average cost per vehicle of \$14,000.) (Cost of an electric hybrid sedan is \$19,000.)	By City competitive bid or State Price Agreement.	Vehicle Services and Purchases.

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Fleet Services buys all of these vehicles and all departments use them.	25 new vehicles per year. (Based on 225 administrative sedans, most with a 9-year life. Purchasing is not done at 25 per year, but is done in larger quantities less frequently.)	\$325,000. (Based on 25 vehicles multiplied by an average cost per vehicle of \$13,000.)	By County competitive bid or State Price Agreement.	Michele Gardner and Tom Guiney (Fleet Services) and Central Procurement.

Product: Administrative Sedans**Barriers/constraints to replacing a product or modifying product usage:**

	City	County
External	Dealers may have some additional work to research compliance with performance specifications.	Dealers may have some additional work to research compliance with performance specifications.
Internal	Using a new set of performance specifications may cause some purchasing and headache issues, but we currently are not aware of any. There are perception issues to deal with such as a new vehicle standard that will lead to less satisfactory vehicle, and accommodating individual needs while incorporating flexibility. Vehicle function will require multiple performance specifications and the bid cycle will be longer.	Using a new set of performance specifications may cause some purchasing and headache issues, but we currently are not aware of any. There are perception issues to deal with such as a new vehicle standard that will lead to less satisfactory vehicle, and accommodating individual needs while incorporating flexibility. Vehicle function will require multiple performance specifications and the bid cycle will be longer.
Technical	Developing the proper set of performance specifications may require some learning and experience.	Developing the proper set of performance specifications may require some learning and experience.
Financial	If the specifications were to be restrictive enough to prevent competition, there could be some financial impact. Overall the move toward performance specifications for more fuel efficient and potentially smaller vehicles should have a positive financial impact. Some additional staff time has financial implications (takes longer to complete first time around.)	If the specifications were to be restrictive enough to prevent competition, there could be some financial impact. Overall the move toward performance specifications for more fuel efficient and potentially smaller vehicles should have a positive financial impact. Some additional staff time has financial implications (takes longer to complete first time around.)
Other	Existing State contract does not include environmental performance criteria such as ACEEE standards which limit use of State contracts for vehicle purchasing.	Existing State contract does not include environmental performance criteria such as ACEEE standards which limit use of State contracts for vehicle purchasing.

Existing sustainable practices and policies:

City	County
<ol style="list-style-type: none"> 1. Use of retread tires to extend life of existing tires. 2. Purchase re-refined motor oil & hydraulic oil creating closed loop system. 3. Use of recycled antifreeze. 4. Establish retrofit program to move away from ozone containing refrigerants 5. Reusing parts from damaged vehicles and auxiliary equipment from vehicles at end of vehicle life. Purchasing remanufactured parts where appropriate 6. Seeking ecological certification for automotive services. 7. Use of bio-based cleaning chemicals and recycled water for vehicle cleaning. 8. Providing fleet bike for business travel to reduce emissions. 9. Share maintenance equipment with other local governments to reduce the need to purchase redundant equipment. 	<ol style="list-style-type: none"> 1. Use of retread tires to extend life of existing tires. 2. Purchase re-refined motor oil & hydraulic oil creating closed loop system. 3. Use of recycled antifreeze. 4. Establish retrofit program to move away from ozone containing refrigerants 5. Reusing parts from damaged vehicles and auxiliary equipment from vehicles at end of vehicle life. Purchasing remanufactured parts where appropriate 6. Seeking ecologic certification for automotive services. 7. Use of bio-based cleaning chemicals and recycled water for vehicle cleaning. 8. Providing fleet bike for business travel to reduce emissions. 9. Share maintenance equipment with other local governments to reduce the need to purchase redundant equipment.
<p>In the addition the City has:</p> <ol style="list-style-type: none"> 1. Established paint policies to purchase low VOC paint and equipment that uses less paint. 2. Adopted practice of refurbishing bumper covers rather than purchasing new. 3. Revised purchasing standard for batteries to buy “no-maintenance” batteries to extend life of battery. 4. Purchased maintenance van that uses solar power to run equipment. 5. Initiated an alternative vehicle (hybrid) test project. 	<p>In addition the County has:</p> <ol style="list-style-type: none"> 1. Adopted practice of using water for parts cleaning instead of chemicals. 2. Adopted practice of purchasing used vehicles from rental agencies and other local governments instead of new vehicles. 3. Adopted practice to use ultrasonic air filter cleaning instead of replacing and disposing with each use. 4. Initiated a biodiesel test project.

Phase Four Task Force Report

Date: December 2, 2002

Task force: Sustainable Automotive Procurement

Product: Diesel

Goal to be accomplished: Identify a more sustainable alternative to diesel fuel for City and County vehicles.

Recommendation	Priority – H/M/L	Benefits	Negative Impacts
<p>1. Use biodiesel in City and County vehicles as a more sustainable alternative to diesel fuel.</p>	M	<p>1. Environmental:</p> <ul style="list-style-type: none"> • Tailpipe emission reductions including particulate matter, carbon monoxide and air toxics. • Life cycle carbon dioxide reductions (most significant greenhouse gas contributing to global warming) • If waste product is used, environmental benefit of diverting from landfill 	<p>1. Environmental:</p> <ul style="list-style-type: none"> • Transportation trade-offs associated with shipping in product from out-of-state
		<p>2. Economic:</p> <ul style="list-style-type: none"> • Market development potential for local production of biodiesel (including support for local farmers to raise crops for biodiesel production and/or alternative use for existing waste vegetable oils) and development of local manufacturing capability • Reduction in dependence on foreign oil 	<p>2. Economic:</p> <ul style="list-style-type: none"> • Cost premium currently (can change, particularly if waste vegetable oil product became available)
		<p>3. Social:</p> <ul style="list-style-type: none"> • Potential emerging small business opportunity • Reduced community dependence on foreign oil • Health benefits – reducing carcinogens from diesel exhaust and helping reduce climate change from global warming 	<p>3. Social:</p> <ul style="list-style-type: none"> • Competition for tax dollars – money spent on biodiesel is money not spent on other community projects

Product: Administrative Sedans

Goal to be accomplished: Identify sustainable purchasing recommendation for City and County administrative sedans.

Recommendation	Priority – H/M/L	Benefits	Negative Impacts
<p>2. Develop performance specifications for administrative sedans that includes fuel and emission requirements.</p>	<p>M</p>	<p>1. Environmental:</p> <ul style="list-style-type: none"> • Capture City and County trying to meet environmental goals by establishing standards for air emissions and fuel usage. 	<p>1. Environmental:</p> <ul style="list-style-type: none"> • Potential that performance specifications will result in vehicle purchases that do not have as high of environmental benefits as policy to purchase hybrids.
		<p>2. Economic:</p> <ul style="list-style-type: none"> • Not clear if economic impacts from this recommendations will be +/- but clearly focused attempt to achieve social and environmental goals at the “greatest bang for the buck.” 	<p>2. Economic:</p> <ul style="list-style-type: none"> • Cost premium for hybrids currently.
		<p>3. Social:</p> <ul style="list-style-type: none"> • Improving fuel efficiency in administrative sedans would reduced community dependence on foreign oil • Improving air emissions from administrative sedans would reduce air toxics and greenhouse gas emissions from exhaust, helping reduce climate change from global warming • Clearly communicating to community goals in this area – educational. • Picked performance rating system that easily accessible to all bidders to promote competition. 	<p>3. Social:</p> <ul style="list-style-type: none"> • Competition for tax dollars – money spent on higher efficiency vehicles is money not spent on other community projects

Actions needed to implement changes:**Product:** Diesel**1. Recommendation (City):** . Use biodiesel in City vehicles as a more sustainable alternative to diesel fuel.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Identify source for biodiesel	a) Review smaller business & ability to meet standards	a) Vehicle Services	a) Jan 15 th , 2003
	b) Address distribution concerns – availability for direct purchase tanks and card-locks	b) Vehicle Services	b) Jan 15 th , 2003
B. Review results of County pilot and results reported by Biodiesel User Group	a) Review actual emission reduction results	a) Vehicle Services & Office of Sustainable Development	a) March – April 2003 (dependent on County provision of results).
	b) Review maintenance & operational experience	b) Vehicle Services	b) March – April 2003 (dependent on County provision of results).
C. Educate stakeholders	a) Develop educational materials	a) Vehicle Services and Office of Sustainable Development with input from Biodiesel User Group	a) April 2003 (dependent on County provision of results).
	b) Discussion with customer bureaus including benefits, impacts, cost etc.	b) Vehicle Services & OSD	b) End of June 2003 (dependent on County provision of results).
D. Establish contract for biodiesel	a) Develop bid specifications	a) Vehicle Services & OSD	a) July 2003 (dependent on County provision of results).
	b) Get City Council approval	b) Vehicle Services & OSD	b) Nov 2003 (dependent on County provision of results).

Product: Diesel**1. Recommendation (County):** Use biodiesel in County vehicles as a more sustainable alternative to diesel fuel.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Complete pilot – compile & review results	a) Complete air emissions testing	a) FREDS – Fleet Services	a) January 2003
	b) Discuss with operators performance. Compare to performance results reported by others.	b) FREDS – Fleet Services & Transportation Biodiesel User Group	b) February 2003
	c) Review maintenance requirements & costs	c) FREDS – Fleet Services	c) February 2003
	d) Make recommendation based on pilot results	d) FREDS – Fleet Services & Sustainability Program	d) March 1 st 2003
B. Allocate funds in budget for FY-04	a) Gain department approval for funding requirement	a) FREDS – Fleet Services & Sustainability Program	a) March – May 2003
	b) Seek Board approval as part of budget process	b) FREDS – Fleet Services & Sustainability Program	b) June 2003
C. Contract with Purchasing	a) Develop bid specifications	a) Purchasing & FREDS – Fleet Services	a) July – August 2003
	b) Determine bidding requirements (RFP, exemption, or renewal)	b) Purchasing & FREDS – Fleet Services	b) July – August 2003

Product: Administrative Sedans

2. Recommendation (City and County combined): Develop performance specifications for administrative sedans that includes fuel and emission requirements.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Identify applicable EPA ratings (emissions and mileage)	Review most current EPA ratings	City – Vehicle Services (VS) County – Fleet Services (FS)	Dependent on vehicle purchasing schedules – once identified need to purchase vehicle - 2 weeks this step.
B. Review basic requirements for vehicle.	a) Review customer requirements.	a) Customer & VS (City) or FS (County)	a) 3 months dependent on customer
	b) Write specification and review with customer.	b) Customer & VS (City) or FS (County)	b) 2 months
C. Identify vehicles that meet basic requirements and then identify EPA ratings for those vehicles.	Review current literature	City – Vehicle Services (VS) County – Fleet Services (FS)	2 weeks
D. Determine maximum rating that meets basic requirements and allows competition.	Vehicle comparison for these factors	City – Vehicle Services (VS) County – Fleet Services (FS)	2 weeks

Actions needed to monitor implementation:**Product:** Diesel**5. Recommendation:** Use biodiesel in City and County vehicles as a more sustainable alternative to diesel fuel.

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Reduce use of nonrenewable diesel fuel by 10% by end of 2004.	# gallons biodiesel fuel as compared to # gallons petrodiesel fuel.	Vehicle Services	June 2004
County	Reduce use of nonrenewable diesel fuel by 10% by end of 2003.	# gallons biodiesel fuel as compared to # gallons petrodiesel fuel	Fleet Services	Assuming pilot results are successful, November 2003 as part of Global Warming Action Plan Implementation Update

Product: Administrative Sedans**2. Recommendation:** Develop performance specifications for administrative sedans that includes fuel and emission requirements.

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City and County	Receive bids that meet specifications.	# bids receive that meet specifications	Vehicle Services (City) Fleet Services (County)	Dependent on next vehicle purchase.
County	Determine if this process resulted in more sustainable purchase than if purchased off State contract (current method).	Mpg and emission standards higher in performance specifications than available on State vehicle price agreement.	Fleet Services and Sustainability	Dependent on next vehicle purchase.

Appendix 7
Cleaning and Coating Products Task Force Reports

2002 Sustainable Procurement Task Force: Cleaning and Coating Compilation of Task Force Reports I-IV

Phase I Report

Sustainable Procurement Product Selection Worksheet

CRITERIA FOR DETERMINING SELECTION											
	Economic			Environmental		Social		Timely/Ease			
Product/ Product Area	Volume Used (0-2)*	Cost/ Cost Savings (0-2)	Effect on Businesses (0-2)	Market readiness of Alternatives (0-2)	Impacts (0-2)	Visibility (0-2)	Established Policy (0-2)	Ease of Implementation	Upcoming Purchases	Total Score	General comments, things to consider, parallel issues
Interior & Exterior Paint	2	2		2	1	2	2	2	2	15	
Graffiti Remover	1	2		1	2	2	2	2	1	14	
Hand Soaps	2	2		2	1	0	0	2	2	11	

*Score each product/product area on a scale from 0-2 for each criteria selected. 0=no or very low opportunity/impact, 2=best opportunity/most impact.

Criteria Selections

Economic	Volume Used	How much does the City/County purchase? How Often?
	Cost	What are the total costs of products, including purchase, operating, maintenance, liability, and disposal costs?
	Effect on Business	Would a change in practice have an impact on small or local business?
Environment	Impact	Does the continued use of this product have a highly toxic impact, regardless of volume?
	Market Readiness of Alternatives	Are there certified products or reliable standards? Are there alternatives with clear life-cycle benefits? Are there suppliers available?
Social	Visibility	Does purchasing this product educate our employees or the public?
	Established Policy	Does this product elimination support established goals of City Council or the local community? Is there pressure for government to change its purchasing of this product?
Timely/Ease	Ease of Implementation	What administrative barriers must be overcome? Who do we need to work with to implement changes?
	Upcoming Purchases	When are the supply contracts up for renewal? What upcoming capital projects present opportunities?

Phase Two Task Force Report

Date: July 1, 2002

Task Force: Cleaning and Coating Products

Products and practices selected for further investigation:

Product or practice	Why selected (effective/easy/timely)	Key questions about products or practices that need to be addressed
<p>Latex paint (interior/exterior)</p>	<p>Large volume used by both City and County, ready availability of alternatives, and committee expertise in this area.</p> <p>By using more sustainable product at City/County facilities, have opportunity to be an example for the public.</p> <p>Potential cost savings by purchasing paint in bulk.</p>	<ul style="list-style-type: none"> ▪ Are there existing environmental standards for use of this product? (review MSDS, VOC requirements, and other documents regarding toxicity) ▪ What is economic impact of alternatives? ▪ What are existing codes/policies? ▪ Implementation of existing codes/policies? ▪ What are issues/barriers to using recycled paint? <ul style="list-style-type: none"> - Color selection and availability - Acceptance by architects & contractors - Durability - Ease of application - Coverage - If City/County start specifying recycled paint, can METRO recycled paint facility meet product demand? ▪ What are restrictions on use at specific-use facilities (i.e., Corrections, Health)?
<p>Graffiti Removal Products</p>	<p>High toxicity, visibility in the community, ease of implementation, and committee expertise in this area. Complements efforts with latex paint, as paint is typically last alternative for graffiti removal.</p> <p>Not a large volume of product purchased, but significant environmental impact. Generally, products are highly toxic in order to be effective.</p> <p>City and County looked at as leaders in the area of graffiti removal. Good opportunity to be a leader in use of sustainable products.</p>	<ul style="list-style-type: none"> ▪ Are there existing environmental standards for use of this product? (review MSDS and other documents regarding toxicity) ▪ Is it possible to determine how much product we are using? ▪ How is graffiti removed? <ul style="list-style-type: none"> - different graffiti media (i.e. paint, markers) - different surfaces (i.e. wood, brick) ▪ Who outside the city/county are involved in graffiti removal efforts? (i.e., contractors, volunteers) ▪ What are user safety issues? ▪ What is economic impact of alternatives? ▪ Are alternative products effective? ▪ What are restrictions on product use at specific-use facilities (i.e., Corrections, Health)? ▪ How does Mayors 24-hour graffiti removal guideline affect choice of products?

Products and practices that were not chosen:

Product or practice	Reasons for not choosing
Hand soaps	High volume of usage by both City and County but City and County needs very different; in particular, the specific security restrictions on products by County Health and Corrections facilities.
Janitorial cleaning products	Several “green” efforts already underway in this area. To committee’s knowledge, large volume of sustainable products already in use at City/County.
Laundry detergents	City uses contractors for laundry services who are already required to meet State and Federal discharge standards. County has specific product requirements for Corrections, Animal Control and Health facilities.
HVAC coil cleaners	Specialized applications, low volume, limited alternative products.
Wood stains/finishes	Low volume and a limited selection of alternative products.

Phase Three Task Force Report

Date: October 14, 2002

Task Force: Cleaning & Coating Products

Product: Latex Paint

Goal to be accomplished: Find an environmentally friendly alternative that is durable and cost-effective. Review existing policies.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
PDOT Parks BGS BES Water Maintenance ONI	1250 gallons/yr. (Parks bureau) This data is for paint purchased directly by the City Parks Bureau only and is not complete. Unable to gather complete data as purchase of paint is decentralized. The vast majority of paint used at City facilities is purchased by painting contractors. The City currently maintains approximately 158 staffed buildings and 267 “out” buildings, i.e. Parks restrooms.	\$25,000/yr.	Decentralized, purchased by using bureau or purchased by contractor.	Bureau users & storekeepers Contractors Architects/Designers Project Managers

What County bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Facilities Management Corrections Work Crews	110 gallons/yr. This data is for paint purchased directly by County only and is not complete. Unable to gather complete data as purchase of paint is decentralized. The vast majority of paint used at County facilities is purchased by painting contractors. County currently maintains approximately 110 County facilities.	\$2,200/yr.	Decentralized, purchased by using department* or purchased by contractor. *(County-wide annual contract for paint was executed in 11/02.)	Central Procurement, Senior Buyer Contractors Project Managers Architects/Designers

Product: Latex Paint

Existing sustainable practices and policies:

City	County
1. BES conducted and implemented Enhanced Chemical Management System (ECMS) study. Zero Waste Alliance was consultant for this study.	1. Natural Step Committee – Tasked to come up with new standards for use of recycled, solvent-free or low VOC paints. Trades and project managers are testing products.
2. Informally, attempt to use low VOC product where possible.	2. Informally, project managers are using solvent-free and low VOC paints for special use areas. Attempting to use latex paints in areas where traditionally only oil-based paints have been used before.
3. Parks is recycling paint.	3. Currently recycling latex paint (in house).
4. <u>Use of recycled paint.</u> Parks testing use of recycled paint. BGS specified recycled paint on the Horse Barn project.	
<p>5. Chapter 5.33 of the City Code sets forth policy for purchase of reprocessed and low VOC paint but it appears that this policy has yet to be implemented in any City bureaus. The policy is as follows:</p> <p>5.33.050 Purchasing Policies H. Purchasing of Reprocessed Latex Paint and/or Low VOC Paint General Policy: As collected, re-blended, and made available for sale by Metro Regional Services or other local suppliers, reprocessed latex paint shall be used for all interior and exterior architectural applications where appropriate. Where not appropriate the use of Low or Zero VOC (Volatile Organic Compounds) paint shall be used.</p> <p>5.33.060 Procedures to Implement Purchasing Policies. H. Purchasing of Reprocessed Latex Paint and Low or Zero VOC Paint Products. 1. Definition: Reprocessed latex paint means surplus good-quality latex paints that have been re-blended into a recycled paint product as part of Metro’s recycled latex paint program or other recycled paint program. 2. Any interior or exterior architectural application of latex paint shall, where appropriate colors are available, be specified using reprocessed latex paint products. 3. When reprocessed latex paint is not appropriate, the City of Portland shall specify and use Low or Zero VOC latex paint. 4. Cost Differential: While reprocessed latex paint products are currently available for a fraction of the cost of virgin paint products, should the price differential change so that reprocessed paint prices exceed virgin paints by five percent or more, the City will no longer be obligated to purchase and use reprocessed latex paints.</p>	

Product: Latex Paint

Barriers/constraints to replacing a product or modifying product usage:

	City	County
External	<ul style="list-style-type: none"> ▪ Architects/Designers reluctant to specify recycled paint due to limited color palette. ▪ Contractors’ concerned about warranty issues when using alternative products (i.e. recycled paint). ▪ Availability of recycled paint in desired color(s). 	<ul style="list-style-type: none"> ▪ Architects/Designers reluctant to specify recycled paint due to limited color palette. ▪ Contractors’ concerned about warranty issues when using alternative products (i.e. recycled paint). ▪ Availability of recycled paint in desired color(s).
Internal	<ul style="list-style-type: none"> ▪ Limiting color selection in City facilities to allow for use of recycled paint. ▪ How to implement policies already set forth in City Code. 	<ul style="list-style-type: none"> ▪ Limiting color selection in County facilities to allow for use of recycled paint.
Technical	<ul style="list-style-type: none"> ▪ Perception that recycled paint less durable. ▪ Difficulty in the past using recycled paint in paint sprayers (problem has been corrected). ▪ Requires a little more effort to apply (need to stir recycled paint occasionally during application to keep mixed). ▪ Limited availability of popular off-white colors. 	<ul style="list-style-type: none"> ▪ Perception that recycled paint less durable. ▪ Difficulty in the past using recycled paint in paint sprayers (problem has been corrected). ▪ Requires a little more effort to apply (need to stir recycled paint occasionally during application to keep mixed). ▪ Limited availability of popular off-white colors.
Financial	<ul style="list-style-type: none"> ▪ Solvent-free or low VOC products cost more. 	<ul style="list-style-type: none"> ▪ Solvent-free or low VOC products cost more.
Other	<ul style="list-style-type: none"> ▪ Resistance to change. ▪ Negative previous experiences with recycled products and low VOC products. 	<ul style="list-style-type: none"> ▪ Resistance to change. ▪ Negative previous experiences with recycled products and low VOC products.

Product: Graffiti Removal Products

Goal to be accomplished: Reduce environmental impact at an effective cost while continuing to meet community commitment.

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
PDOT Parks BGS BES Water Maintenance ONI*	Unable to gather complete data as a fair amount of graffiti removal is performed by contractors and volunteer groups.	\$7,500 for product purchased by City.	Decentralized, purchased by using bureau, contractor, or volunteer group. City provides product to volunteer groups in some cases.	Bureau storekeepers Contractors Volunteer groups

*through contracts with Youth Employment Institute, Portland Business Alliance

What County departments buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
Corrections Work Crews	The estimated use by the Sheriff's office is about 108 aerosol cans of product annually.	The cost is estimated at only \$700 per year.	Through local hardware stores using open purchase orders	Inmate Work Crew Sergeant Phil Anderchuck.

Product: Graffiti Removal Products

Existing sustainable practices and policies:

City	County
1. None	1. None 2. Informally, try to use least toxic approach for each project.

Product: Graffiti Removal Products

Barriers/constraints to replacing a product or modifying product usage:

	City	County
External		
Internal	Safety to user. Mayor's 24-hour graffiti removal guideline	Safety to user.
Technical	Effectiveness of alternative products.	Effectiveness of alternative products.
Financial	Use of products with lower toxicity results in higher labor costs.	Use of products with lower toxicity results in higher labor costs.
Other		

Phase Four Task Force Report

Date: December 5, 2002

Task force: Cleaning and Coating Products

Product: Latex Paint

Goal to be accomplished: Through new usage policies and practices, reduce the economic and environmental impact of using latex paints made from virgin materials or having a high levels of Volatile Organic Compounds (VOCs).

Recommendation	Priority – H/M/L	Benefits	Negative Impacts
<p>1. In the City, enforce Chapter 5.33 of the City Code which outlines the use of recycled latex paint for all interior and exterior architectural applications where appropriate. At the County, adopt by resolution the same mandate.</p>	H	<p>1. Environmental:</p> <ul style="list-style-type: none"> a) Reduces consumption of natural resources used in the manufacture of new latex paint. b) Recycling paint into a reusable product decreases dumping into landfills. 	<p>1. Environmental: None.</p>
		<p>2. Economic: Less expensive than new paint.</p>	<p>2. Economic:</p> <ul style="list-style-type: none"> a) Higher use of recycled materials may impact retailers of new paint. b) High demand colors such as off-white may be in short supply.
		<p>3. Social:</p> <ul style="list-style-type: none"> a) As demand increases, so do the business opportunities within the community. (Possible MWESB opportunities?) b) Educate employees, public and contractors in the benefits and possibilities in using recycled paints. 	<p>3. Social: None</p>
<p>2 In the City, enforce Chapter 5.33 of the City Code which outlines the use of low VOC paint for all interior and exterior architectural applications where appropriate. At the County, adopt by resolution the same</p>		<p>1. Environmental:</p> <ul style="list-style-type: none"> a) Less VOCs released into the Atmosphere. b) Lower dependency on petroleum based products. c) Low VOC products meet or exceed EPA and Green Building standards (LEEDS) 	<p>1. Environmental: None.</p>
		<p>2. Economic:</p> <ul style="list-style-type: none"> a) Reduction in use of expensive personal protective equipment (PPE) during application. b) Healthier work environment for employees thus reducing possible sick time due to fume issues. 	<p>2. Economic: Some low VOC paints can be significantly more expensive.</p>

mandate.		3. Social: Demonstrate to employees and community a commitment to environmentally sound practices.	3. Social: None.
3. Close the recycling loop by requiring government agencies and contractors to recycle unused paints at the end of a project.		1. Environmental: a) Reduce landfill space needed. b) Improve water quality. c) Further lower reliance on natural resources.	1. Environmental: None.
		2. Economic: a) Disposal costs reduced. b) Provides more resources for recyclers to turn out more recycled paint.	2. Economic: When larger quantities are submitted to recyclers, fees may be imposed. (categorized as hazardous material)
		3. Social: Demonstrate to employees and community a commitment to environmentally sound practices	3. Social: None.

Actions needed to implement changes:

Product: Latex Paint

1. Recommendation (City): In the City, enforce Chapter 5.33 of the City Code which outlines the use of recycled latex paint for all interior and exterior architectural applications where appropriate.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Provide awareness training and education for project managers and others who influence what types of paint are used in construction and remodeling projects.	a) Establish awareness campaign regarding availability of recycled paint.	a) Purchasing	a)
	b) Include topic in project manager training classes to facilitate project manager's understanding of City Code 5.33	b) Purchasing	b)
B. Modify specifications in bid documents and language of City Code to further enforce the use of recycled paints. In City Code, further define "not appropriate" language limiting use of non recycled products.	a) In cases where recycled paint is not chosen, make Contractor/ Project Manager file some form of exemption.	a) Purchasing/ Project Managers	a)
	b) Determine the legal implications for the above exemptions and for the modifications to City Code.	b) City Attorney's Office	b)

Product: Latex Paint

1. Recommendation (County): Adopt by resolution purchasing language similar to Chapter 5.33 of the City Code which outlines the use of recycled latex paint for all interior and exterior architectural applications where appropriate.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Create additional language to be included in the County's PCRB rules, amending PCRB rule 30-0009, "Preferences-Recycled Materials-Resident Bidders."	a) Create amendment	a) Purchasing Manager	a)
	b) Present to Board of County Commissioners	b) Purchasing Manager	b)
	c) Board adoption	c) County Board	c)
B. Modify specifications in bid documents to further enforce the use of recycled paints. Limit use of non-recycled products, by requiring an exemption for virgin material use.	a) In cases where recycled paint is not chosen, make Contractor/ Project Manager file some form of exemption.	a) Purchasing/ Project Managers	a)
	b) Determine the legal implications for the above exemptions and for the inclusion of proper language in bid documents.	b) County Attorney's Office	b)

Product: Latex Paint

2. Recommendation (City): In the City, enforce Chapter 5.33 of the City Code which outlines the use of low VOC paint for all interior and exterior architectural applications where appropriate.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Provide awareness training and education for project managers and others who influence what types of paint are used in construction and remodeling projects.	a) Establish awareness campaign regarding use of low VOC Paints.	a) Purchasing	a)
	b) Include topic in project manager training classes to facilitate project manager’s understanding of City Code 5.33	b) Purchasing	b)
B. Modify specifications in bid documents and language of City Code to further enforce the use of low VOC paints.	a) In cases where low VOC paint is not chosen, make Contractor/ Project Manager file some form of exemption.	a) Purchasing/ Project Managers	a)
	b) Determine the legal implications for the above exemptions and for the modifications to City Code.	b) City Attorney’s Office	b)

Product: Latex Paint

2. Recommendation (County): Adopt by resolution purchasing language similar to Chapter 5.33 of the City Code which outlines the use of low VOC paint for all interior and exterior architectural applications where appropriate.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Create additional language to be included in the County’s PCRB rules, Division 40, “Public Improvement Contracts.”	a) Create amendment	a) Purchasing Manager	a)
	b) Present to Board of County Commissioners	b) Purchasing Manager	b)
	c) Board adoption	c) County Board	c)
B. Modify specifications in bid documents to further enforce the use of low VOC paints.	a) In cases where low VOC paint is not chosen, make Contractor/ Project Manager file some form of exemption.	a) Purchasing/ Project Managers	a)
	b) Determine the legal implications for the above exemptions and for the inclusion of proper language in bid documents.	b) County Attorney’s Office	b)

Product: Latex Paint

3. Recommendation (for both City and County): Close the recycling loop by requiring government agencies and contractors to recycle unused paints at the end of a project.

Actions needed to implement recommendation	Steps needed to complete action	Jurisdiction - who does it?	Estimated timeline
A. Include recycling of unused paint in bid specifications.	a) Modify boilerplate bid language to include these requirements.	a) Purchasing	a)
	b) Educate project managers so that they are aware of new requirements.	b) Purchasing	b)
	c) Ensure paint recycling is being done by contractors.	c) Project Managers	c)
B. Work to remove “High Level Hazardous Waste Generator” status from contractors turning in large quantities of paint for recycling.	a) Modify laws exempting contractors from this status so as to not penalize them for recycling unused product.	a) Legislature?	a)

Phase Four Task Force Report

Date: December 5, 2002

Task Force: Cleaning and Coating Products / Graffiti Removers

Goal to be accomplished: Through new usage policies and practices, reduce the environmental impact of using graffiti removal products while, at the same time, effectively removing graffiti in a cost-effective manner.

The Task Force determined that it lacked sufficient information and expertise to form specific product and/or practices recommendations. The Task Force recommends that further work be done in this area and suggests the following actions:

1. Compile a comprehensive list of graffiti removal products. Further research products currently in use; develop a list of alternative products; test alternative products on various surfaces and mediums.
2. Educate/inform staff, contractors, volunteers about sustainable graffiti removal products and methods. Develop a hand-out outlining recommended sustainable graffiti removal products and methods.
3. Ongoing sharing of knowledge and resources to determine what products are most effective on what surfaces and the material to be removed. Refer the topic of sustainable products and practices to the Graffiti Removal Task Force. This task force consists of representatives from various public agencies, contractors, and citizen groups who are involved in graffiti removal efforts in the metro area. It appears that this would be an excellent forum to discuss the topic of more sustainable graffiti removal practices.

Appendix 8
Building Materials Task Force Reports

**2002 Sustainable Procurement Task Force: Building Materials
Compilation of Task Force Reports I-IV**

Phase I Report

Sustainable Procurement Product Selection Worksheet

CRITERIA FOR DETERMINING SELECTION											
Product/ Product Area	Economic			Environmental		Social		Timely/Ease		Total Score	General comments, things to consider, parallel issues
	Volume Used (0-2)*	Cost/ Cost Savings (0-2)	Effect on Busin esses (0-2)	Market readiness of Alternatives (0-2)	Impacts (0-2)	Visibility (0-2)	Established Policy (0-2)	Ease of Impleme ntation	Upcoming Purchases		
Lighting	2	2	0	2	2	2	2	2	2	16	Area of primary focus from here on.
Energy Star roofs	0	2	1	2	2	2	2	2	2	16	
Carpet and Backing	2	1	2	2	2	2	2	1	2	16	
Green Spec for remodels	2	1	1	2	2	2	2	1	2	15	
Certified wood products	2	1	1	1	2	2	2	1	2	14	
Low VOC adhesives	1	0	0	2	0	2	2	2	2	11	
Replace CCA wood with alternative	1	0	0	0.5	2	2	2	2	1	10.5	
Fly ash in concrete products	1	0	0	2	2	0	2	2	1	10	

*Score each product/product area on a scale from 0-2 for each criteria selected. 0=no or very low opportunity/impact, 2=best opportunity/most impact.

Criteria Selections

Economic	Volume Used	How much does the City/County purchase? How Often?
	Cost	What are the total costs of products, including purchase, operating, maintenance, liability, and disposal costs?
	Effect on Business	Would a change in practice have an impact on small or local business?
Environment	Impact	Does the continued use of this product have a highly toxic impact, regardless of volume?
	Market Readiness of Alternatives	Are there certified products or reliable standards? Are there alternatives with clear life-cycle benefits? Are there suppliers available?
Social	Visibility	Does purchasing this product educate our employees or the public?
	Established Policy	Does this product elimination support established goals of City Council or the local community? Is there pressure for government to change its purchasing of this product?
Timely/Ease	Ease of Implementation	What administrative barriers must be overcome? Who do we need to work with to implement changes?
	Upcoming Purchases	When are the contracts going to be let? What upcoming capital projects present opportunities?

Phase Two Task Force Report**Date:** July 1, 2002**Task Force:** Building Materials**Products selected for further investigation:**

Products	Why selected (effective/easy/timely)	Key questions that need to be answered
1. (a.) Specify Low Mercury Lamps	Reduce mercury production and waste in our landfills. Easy to specify and market available.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	Lower energy consumption, cost savings for building operations. Easy to specify and available on the market.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (c.) Specify / Replace Auto/Motion Controls	Easy to specify, available on the market and cost effective and lower energy consumption.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	Will begin change-over to cost effective, low energy products and cost effective over time.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (e.) Develop Extended Life Lamp Specifications	Reduces waste, less labor, cost effective	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (f.) Replace HID with High-output T-5 Lamps	Low energy consumption, cost effective and available. Produces better light.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (g.) Replace High-pressure Sodium with Metal Halides	Lower energy consumption, cost effective and available.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (h.) Outdoor Fixture Horizontal cut-off	Reduces light pollution, easy to specify.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (i.) Dimmer Standards	Reduces energy usage by allowing daylight to be used to its maximum potential, cost effective, easy to specify	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.
1. (j.) Color Rendition Standards	Newer fluorescent bulbs produces excellent color rendition at a lower wattage, Easy to specify, available on the market and cost effective.	Owner's Project Manager/Architect/Engineer/Consultants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.

1. (k.) Recycling Standards	Develop procedure to make standard policy for lamp replacement. Can be incorporated into specifications.	County and City should produce a bid/contract together for this implementation and use of this service.
1. (l.) LED Exit Signs	Low energy consumption, cost effective and available.	
2. Energy Star Roofs Specifications	By implementing and using Energy Star rated roofing specifications/products in all City/County/PDC remodeling and new construction projects where practical. We will and can aide in the reduction of interior heating & cooling costs. These two reasons alone will provide sufficient enough reasons to stand by these future policies let alone the environmental benefits derived from consuming less power by each structure. The products accomplish this by utilizing color/reflectivity such as silver/white/light green colors. In addition to the above, the elimination of exterior urban heat islands will also help with the surrounding areas saving in cooling costs. Easy to specify and market ready.	Can the products be incorporated in the design or can the design be modified to utilize the products? Can a cost/benefit analysis be utilized to show the benefits derived from using Energy Star rated products?
3. Carpet & Backing Specifications	Standardizes City/County/PDC's approach to carpet recycling and specification for recycled content. Carpet, cushion and adhesives can be large contributors to indoor air pollution by off gassing hazardous chemicals, unless safe products are specified.	Will each agency create there own specification or can this be a joint effort?
4. Green Specifications for Remodeling (LEED for Commercial Interiors)	Standardizes City/County/PDC's approach to Remodeling specification for all structures. LEED CI guidelines in pilot phase; will be available next year.	LEED ratings are time consuming and expensive for the documentation required. Is the cost benefit ratio acceptable? Or should we follow all the guidelines and not submit documentation? OSD has created a green TI Guide; could it be applied in the interim until LEED is ready?
5. Certified Wood Products	Promotes the use of wood from conservation oriented suppliers that meet certain criteria regarding managing and maintaining renewable forests harvested in a way that reduces environmental damage combined with the ability to provide a "Chain of Custody" showing the product as it moves from the forest to the ultimate user. Specifying of this type of product will build demand for wood from sustainable forests.	Is the supply of "Certified Wood" sufficient to meet the City/County/PDC needs? What are the costs or savings to be realized from the use of "Certified Wood"?
6. Low VOC Adhesives	Reduce harmful vapors in the interior of a building, promotes good health, easy to specify, market ready.	Owner's Project Manager/Archiect/Engineer/Consulants need to implement changes consistently from project to project. Not business as usual practice until fully accepted by participants.

7. Replace CCA Wood with alternatives	Reduce arsenic seepage and waste in the dirt/sand and ground water supply. Helps to keep children safe at playgrounds made of wood. Easy to specify and available. EPA is banning consumer purchase of CCA wood so communities will be aware of restrictions.	Certain projects may need to use these types of products but should only be allowed when no other alternative method can be used. Restrictive standards should be incorporated.
8. Fly Ash in Concrete Specifications	This is a proven substitute for a percentage of the cement called for in various concrete mixes. It improves workability; Decreases permeability which increases resistance to freezing and thawing; Reduces the heat of hydration, taking longer to achieve ultimate strength which, generally, is higher than that provided by the cement it replaced.	Is the supply of fly ash available to local concrete vendors sufficient to meet the City/County needs? What are the costs or savings possible with fly ash being substituted for concrete? Will the percentage of use be determined by each project or application? By whom? Architect/Engineer/Owner?

Products that were not chosen:

Product	Reasons for not choosing
1. Acoustic Tile - Recycle content	Not enough time to analyze this subject.
2. Steel Stud - Recycle content	Not enough time to analyze this subject.
3. Eco Roofs	Not enough time to analyze this subject.

Phase Three Task Force Report

Date: October 24, 2002

Task Force: Building Materials

Products: As follows

What City bureaus buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
1. (a.) Specify Low Mercury Lamps	Twenty-five (25) lamps per year.	1.90 ea. material costs only / excludes labor	Through specifications in construction bid.	Architect and City Project Manager.
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	Three hundred (300) units per year.	51.00 ea. material costs only / excludes labor	Through specifications in construction bid.	Architect and City Project Manager.
1. (c.) Specify / Replace Auto/Motion Controls	Seventy-five (75) per year.	73.13 ea. material costs only / excludes labor	Through specifications in construction bid.	Architect and City Project Manager.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	City uses Environmental Building News "Green Spec" guidelines for standards.			Architect and City Project Manager.
1. (e.) Develop Extended Life Lamp Specifications	City uses Environmental Building New "Green Spec" guidelines.			Architect and City Project Manager.
1. (f.) Replace HID with High-output T-5 Lamps	Fifteen (15) units per year.	300.00 ea. material costs only / excludes labor	Through specifications in construction bid.	Architect and City Project Manager.
1. (g.) Replace High-pressure Sodium with Metal Halides	Twenty (20) units per year.	175.00 ea. material costs only / excludes labor	Through specifications in construction bid.	Architect and City Project Manager.
1. (h.) Outdoor Fixture Horizontal cut-off	Fifty (50) units per year.	275.00 ea. material costs only / excludes labor	Through specification in construction bid.	Architect and City Project Manager.

1. (i.) Dimmers Standards		15.00 ea. Material costs only / excludes labor		
1. (j.) Color Rendition Standards				
1. (k.) Recycling Standards	City of Portland requirements and LEED Guidelines.		Through specification in construction bid.	Architect and City Project Manager.
1. (l.) LED Exit Signs	Thirty (30) units per year.	40.00 ea. material costs only / excludes labor	Through specification in construction bid.	Architect and City Project Manager.
2. Energy Star Roofs Specifications	Five (5) roof per year.	Less then 10% more in price then a standard roof.	Through specification in construction bid.	Architect and City Project Manager.
3. Carpet & Backing Specifications	Thirty-five thousand (35,000) square feet per year.		Through specification in construction bid.	Architect and City Project Manager.
4. Green Specifications for Remodeling (LEED)	City of Portland mandates the use of LEED Certification.		Through specification in construction bid.	Architect and City Project Manager.
5. Certified Wood Products	Fifty (50) units of 2 X 6 hem-fir certified wood.	Approx. \$230,000.00 per year	Supervisor purchases from bureau store or purchases directly from supplier.	Supervisor or purchasing agent from bureau store.
6. Low VOC Adhesives	3,600 “tubes” per year or approximately 150 cartons.		Through specification in construction bid.	Architect and City Project Manager.
7. Replace CCA Wood with alternatives	100-150 6’ guardrail posts (BOM)	\$2350-\$3525	Supervisor purchases from bureau store or purchases directly from supplier.	Supervisor or purchasing agent from bureau store.
8. Fly Ash in Concrete Specifications	City – Maint, Parks, Water Use 3,700 yds. average	\$65.00 per yd = \$240,500.00 annual	Individual Supervisors order from menu provided by vendor who won the annual supply contract.	Purchasing Agent responsible for bid invitation for annual supply contract. Engineers who provide specifications.

Products: As follows

What County departments buy or use this? FM	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
1. (a.) Specify Low Mercury Lamps	125 Units per year, but no low Mercury lamps. Not proven technology yet.	1.90 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	500 Units per year	51.00 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (c.) Specify / Replace Auto/Motion Controls	100 units per year	73.13 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling			Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect
1. (e.) Develop Extended Life Lamp Specifications			Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (f.) Replace HID with High-output T-5 Lamps	200 Units per year	300.00 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (g.) Replace High-pressure Sodium with Metal Halides	No Sodium Available/ All have been previously switched over.	175.00 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (h.) Outdoor Fixture Horizontal cut-off	15 Units per year	275.00 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (i.) Dimmers Standards	25 Units per year	15.00 ea. Material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (j.) Color Rendition Standards			Specification/Product/Project Bid	Central Procurement & Facilities Management

1. (k.) Recycling Standards			Specification/Product/Project Bid	Central Procurement & Facilities Management
1. (l.) LED Exit Signs	25 Units per year	40.00 ea. material costs only / excludes labor	Specification/Product/Project Bid	Central Procurement & Facilities Management
2. Energy Star Roofs Specifications	3 Roofs per year	Less than 10% more in price over a standard roof. Price varies by size & complexity	Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect
3. Carpet & Backing Specifications	26,000 sq ft per year.	.	Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect
4. Green Specifications for Remodeling (LEED)			Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect
5. Certified Wood Products	Hillsdale Lib. Project The County's first project using this product.	134,000.00 total costs. Less than 18% more in price over standard wood pricing. As market supplies more products price will continually drop.	Specification/Product/Project Bid	Central Procurement & Facilities Management
6. Low VOC Adhesives	2,600 "tubes" per year or approximately 100 cartons		Specification/Product/Project Bid	Central Procurement & Facilities Management
7. Replace CCA Wood with alternatives	Guard Rail & Sign Posts	\$ 10,500.00 est. per year	Specification/Product/Project Bid	Central Procurement & Facilities Management
8. Fly Ash in Concrete Specifications	4,500 cubic yards (average)	65.00 per yd. \$ 292,500.00 annual	Specification/Product/Project Bid	Central Procurement & Facilities Management & Project Manager/ Architect

What <u>PDC</u> Departments buy or use this?	Actual (or estimated) annual use	Actual (or estimated) annual cost	How is the product purchased?	Who are key people in the purchasing process?
1. (a.) Specify Low Mercury Lamps	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.	Unable to estimate. Some direct purchase but design input/requirements on large projects provided with funding.	Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (c.) Specify / Replace Auto/Motion Controls	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (e.) Develop Extended Life Lamp Specifications	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (f.) Replace HID with High-output T-5 Lamps	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (g.) Replace High-pressure Sodium with Metal Halides	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (h.) Outdoor Fixture Horizontal cut-off	PDC uses greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders

1. (i.) Dimmers Standards	PDC uses Greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (j.) Color Rendition Standards	PDC uses greening Portland Affordable Housing Criteria & Maint. Manual.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (k.) Recycling Standards	PDC uses greening Portland Affordable Housing Criteria & Maint. Manual, LEED req.		Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
1. (l.) LED Exit Signs			Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt.	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
2. Energy Star Roofs Specifications			Direct bid/ Value Engineered/Contractor Design/	Professional Services & Project Manager/Architect & Contractors/Bidders
3. Carpet & Backing Specifications			Direct bid/ Value Engineered/Contractor Design	Professional Services & Project Manager/Architect & Contractors/Bidders
4. Green Specifications for Remodeling (LEED)	PDC mandates use of LEED Certification		Direct bid/ Value Engineered/Contractor Design	Professional Services & Project Manager/Architect & Contractors/Bidders
5. Certified Wood Products			Direct bid/ Value Engineered/Contractor Design	Professional Services & Project Manager/Architect & Contractors/Bidders
6. Low VOC Adhesives			Specification/Product/ Direct bid/ Value Engineered/Contractor Design/Outsource Mgmt	Professional Services & Project Manager/Architect & Property Managers & Contractors/Bidders
7. Replace CCA Wood with alternatives			Direct bid/ Value Engineered/Contractor Design	Professional Services & Project Manager/Architect & Contractors/Bidders
8. Fly Ash in Concrete Specifications			Direct bid/ Value Engineered/Contractor Design	Professional Services & Project Manager/Architect & Contractors/Bidders

EXTERNAL Barriers/constraints to replacing or modifying product usage:

External	City	County	PDC
1. (a.) Specify Low Mercury Lamps	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met..
1. (c.) Specify / Replace Auto/Motion Controls	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	Bureau of General Services is developing standards based on Environmental Building News “Green-Spec” technical specifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (e.) Develop Extended Life Lamp Specifications	Bureau of General Services is developing standards based on Environmental Building News “Green-Spec” technical specifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (f.) Replace HID with High-output T-5 Lamps	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.

1. (g.) Replace High-Pressure Sodium with Metal Halides	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (h.) Outdoor Fixture Horizontal cut-off	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (i.) Dimmers Standards	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (j.) Color Rendition Standards	No specifications being developed.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met..
1. (k.) Recycling Standards	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.
1. (l.) LED Exit Signs	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Some outsource Architects/Contractors do not encourage standards. Architect/developer follow through to ensure specs. met.

2. Energy Star Roofs Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications.
3. Carpet & Backing Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications.
4. Green Specifications for Remodeling (LEED)	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications.
5. Certified Wood Products	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications. Limited supply
6. Low VOC Adhesives	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications
7. Replace CCA Wood with alternatives	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications
8. Fly Ash in Concrete Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. City of Portland has mandated LEED Certifications.	Architects/Consultants do not specify or encourage a standard/policy for specifying use. Use of the existing specifications. Why change what is not broke.	PDC has mandated LEED certifications Longer curing time may slow project if not specified clearly prior to bid/value engineering.

INTERNAL Barriers/constraints to replacing or modifying product usage:

Internal	City	County	PDC
1. (a.) Specify Low Mercury Lamps	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (c.) Specify / Replace Auto/Motion Controls	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (e.) Develop Extended Life Lamp Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (f.) Replace HID with High-output T-5 Lamps	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (g.) Replace High-Pressure Sodium with Metal Halides	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (h.) Outdoor Fixture Horizontal cut-off	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (i.) Dimmers Standards	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (j.) Color Rendition Standards	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.

1. (k.) Recycling Standards	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
1. (l.) LED Exit Signs	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
2. Energy Star Roofs Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.
3. Carpet & Backing Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.
4. Green Specifications for Remodeling (LEED)	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.
5. Certified Wood Products	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.
6. Low VOC Adhesives	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications. Technical standards need to be developed for some areas.
7. Replace CCA Wood with alternatives	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.
8. Fly Ash in Concrete Specifications	No barriers or restraints. It is important to specify product prior to bid for best cost results. COP has mandated LEED.	No standard/policy for specifying, purchasing, installation. Use of the existing specs. Why change what is not broke.	No barriers. PDC has mandated LEED Certifications.

TECHNICAL Barriers/constraints to replacing or modifying product usage:

Technical	City	County
1. (a.) Specify Low Mercury Lamps		No existing policy or specifications for Architects/Consultants/Department.
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts		No existing policy or specifications for Architects/Consultants/Department.
1. (c.) Specify / Replace Auto/Motion Controls		No existing policy or specifications for Architects/Consultants/Department.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling		No existing policy or specifications for Architects/Consultants/Department.
1. (e.) Develop Extended Life Lamp Specifications		No existing policy or specifications for Architects/Consultants/Department.
1. (f.) Replace HID with High-output T-5 Lamps		No existing policy or specifications for Architects/Consultants/Department.
1. (g.) Replace High-Pressure Sodium with Metal Halides		No existing policy or specifications for Architects/Consultants/Department.
1. (h.) Outdoor Fixture Horizontal cut-off		No existing policy or specifications for Architects/Consultants/Department.
1. (i.) Dimmers Standards		No existing policy or specifications for Architects/Consultants/Department.
1. (j.) Color Rendition Standards		No existing policy or specifications for Architects/Consultants/Department.
1. (k.) Recycling Standards		No existing policy or specifications for Architects/Consultants/Department.

1. (1.) LED Exit Signs		No existing policy or specifications for Architects/Consultants/Department.
2. Energy Star Roofs Specifications		No existing policy or specifications for Architects/Consultants/Department.
3. Carpet & Backing Specifications		No existing policy or specifications for Architects/Consultants/Department.
4. Green Specifications for Remodeling (LEED)		No existing policy or specifications for Architects/Consultants/Department.
5. Certified Wood Products		No existing policy or specifications for Architects/Consultants/Department.
6. Low VOC Adhesives		No existing policy or specifications for Architects/Consultants/Department.
7. Replace CCA Wood with alternatives		No existing policy or specifications for Architects/Consultants/Department.
8. Fly Ash in Concrete Specifications		No existing policy or specifications for Architects/Consultants/Department.

FINANCIAL Barriers/constraints to replacing or modifying product usage:

Financial	City	County
1. (a.) Specify Low Mercury Lamps		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (b.) Specify / Replace T12 Bulbs & Magnetic Ballasts with T8 Bulbs & Electronic Ballasts		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (c.) Specify / Replace Auto/Motion Controls		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (e.) Develop Extended Life Lamp Specifications		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (f.) Replace HID with High-output T-5 Lamps		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (g.) Replace High-Pressure Sodium with Metal Halides		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (h.) Outdoor Fixture Horizontal cut-off		Low initial or negligible cost impact
1. (i.) Dimmers Standards		Low initial or negligible cost impact, but definitely a cost pay back over time
1. (j.) Color Rendition Standards		Low initial or negligible cost impact
1. (k.) Recycling Standards		Medium initial cost impact, but definitely will drop over time, but definitely a health benefit

1. (1.) LED Exit Signs		Low initial or negligible cost impact, but definitely a cost pay back over time
2. Energy Star Roofs Specifications		Low initial or negligible cost impact, but definitely a cost pay back over time
3. Carpet & Backing Specifications		Medium initial cost impact, but definitely will drop over time, but definitely a health benefit
4. Green Specifications for Remodeling (LEED)		Medium to large initial cost impact, but definitely a cost pay back over time
5. Certified Wood Products		Medium initial cost impact, but definitely will drop over time
6. Low VOC Adhesives		Low initial or negligible cost impact, but definitely a health benefit
7. Replace CCA Wood with alternatives		Medium initial cost impact, but definitely will drop over time, but definitely a health benefit
8. Fly Ash in Concrete Specifications		Low initial or negligible cost impact, but definitely a cost pay back over time with higher structural strength.

Existing Sustainable Practices and Policies

City	County	PDC
<ol style="list-style-type: none"> 1. Use of recycled paint to cover graffiti on concrete surfaces. 2. The Bureau of Maintenance crushes approximately 60,000 cubic yards of old sidewalk and curb into gravel for use as roadbed & fill. 3. 720 cu yd of wood waste from maintenance activities annually is recycled into hog fuel for paper production. 4. The Bureau of Maintenance sells approximately 75,000 cubic yards of asphalt grindings back to asphalt plants. The asphalt plants recycle the grindings into new asphalt mix. 	<ol style="list-style-type: none"> 1. Use of Recycled concrete for back filler on retaining walls, side walks etc..(Trans) 2. May use recycled asphalt grindings in new asphaltic concrete pavement according to the approved engineered mix design. (Trans) 3. Adopted sustainable carpet standards for new construction & tenant improvements. (FM) 4. Switched to more environmentally friendly ice melt(Trans) 5. Piloting both Metro recycled paint and low-VOC paint to evaluate performance for future standards. (FM) 6. Maintenance personnel switched to more environmentally friendly graffiti remover. (Trans) 7. Adopted energy executive rule setting performance levels for energy in new construction & tenant improvements. (FM) 8. Adopted energy star requirement for all appliance purchases. (FM) 9. Use of latex paints were feasible for maintenance applications. (Bridge) 10. Use of less toxic and natural based cleaners were possible.(Bridge) 11. Recycle oils removed from gear boxes, etc., for maintenance.(Bridge) 12. Shop fabricate repair/replacement parts were possible to eliminate welding over the water.(Bridge) 13. Prior to Bridge shop when flushing out drain lines and sump pits, pick up and sweep bridges, installed vacuum tubes to pick up debris in lieu of allowing sumps to pump debris into river, experiment with vacuum flush equipment in lieu of water flush, use of bio-bags around catch basins and drains prior to flushing. (Bridge) 14. New specification implementation for Bridge Section on construction projects: Waste Management Plan required by all contractors. The plan requires recycling of all removed materials (Steel, Asphalt, Concrete and Paint). (Bridge) 	<ol style="list-style-type: none"> 1. Greening Portland's Affordable Housing 2. PDC Green Building Policy 3. Internal Sustainable Bldg. Committee

Phase Four Task Force Report

Date: November 14, 2002

Task force: Building Products and Practices

Goal to be accomplished:

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. (a) Specify Low Mercury Lamps	L	1. Environmental: Reduce mercury production and waste in our landfills.	1. Environmental: The current life of the product does not last as long as a T8 bulb at present time. This could produce more lamps needing recycling.
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time. More study of this product could serve useful.	2. Economic: Could cost more in funds to replace then standard T-8 lamps.
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation. Improve health by keeping mercury out of air & water supply.	3. Social: Could produce more lamps and mercury for landfills and our environment.
1. (b) Specify / Replace T12 Lamps & Magnetic Ballasts with T8 Lamps & Electronic Ballasts	H	1. Environmental: Lower energy consumption, cost savings for building operations. Less product going to landfills.	1. Environmental: None known
		2. Economic: : Low initial or negligible cost impact, but definitely a cost pay back over time	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known
1. (c) Specify / Replace Auto/Motion Controls	H	1. Environmental: Cost effective and lower energy consumption.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. (d) Develop Lighting Design Standards for Tenant Improvements and Remodeling	H	1. Environmental: Will begin change-over to cost effective, low energy products and cost effective over time. Reduces electrical consumption and use of natural resources for generation.	1. Environmental: None known
Both 1.(d) and 1(e) are related closely together.		2. Economic: Definitely a cost pay back over time. Lower energy costs.	2. Economic: Medium initial or low cost impact over normal practices. More specific task lighting is needed for individual work areas. May have higher initial cost.
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known
1. (e) Develop Extended Life Lamp Standards/Specifications	H	1. Environmental: Reduces waste, less labor, cost effective.	1. Environmental: None known
Both 1.(d) and 1(e) are related closely together.		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known
1. (f) Replace HID with High-output T-5 Lamps	H	1. Environmental: Low energy consumption, cost effective and available. Produces a more pleasurable visible light.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time.	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. (g) Replace High-pressure Sodium with Metal Halides	H	1. Environmental: Lower energy consumption, cost effective.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time. Replace when failure occurs or use in new construction.	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation and light pollution.	3. Social: None known
1. (h) Outdoor Fixture Horizontal cut-off	L	1. Environmental: Reduces light pollution.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding pollution including lighting of exterior locations.	3. Social: May reduce amount of light directed toward large expanses, i.e., a parking lot.
1. (i) Dimmers Standards	H	1. Environmental: Reduces energy usage by allowing daylight to be used to its maximum potential, cost effective.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time.	2. Economic: None known
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
1. (j) Color Rendition Standards	H	1. Environmental: Newer fluorescent lamps produces excellent color rendition at a lower wattage, Easy to specify, available on the market and cost effective.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact	2. Economic: None known
		3. Social: Shows all stakeholders/taxpayers that energy conversation can benefit employees work environment. Easy on a person eyes through focusing, reduction of headaches, nausea and winter “Blues”, a more positive and healthier environment.	3. Social: None known
1. (k) Recycling Standards	H	1. Environmental: Develop procedure to make standard policy for lamp replacement.	1. Environmental: None known
		2. Economic: Medium initial cost impact, but definitely will drop over time	2. Economic: Medium initial cost impact, but definitely will drop over time.
		3. Social: Shows taxpayers we are looking at all avenues regarding landfill and health benefit issues by exploring all avenues of recycling.	3. Social: None known
1. (l) LED Exit Signs	H	1. Environmental: Low energy consumption.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time	2. Economic: May have initial cost impact.
		3. Social: Shows taxpayers we are looking at all avenues regarding energy conservation.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
2. Energy Star Roofs Specifications	H	1. Environmental: We will and can aid in the reduction of interior heating & cooling costs. These two reasons alone will provide sufficient enough reasons to stand by these future policies let alone the environmental benefits derived from consuming less power by each structure. The products accomplish this by utilizing color/reflectivity such as silver/white/light green colors. In addition to the above, the elimination of exterior urban heat islands will also help with the surrounding areas saving in cooling costs.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time.	2. Economic: None known
		3. Social: Benefits our surrounding environment by utilizing our limit energy resources. Shows taxpayers that we care about saving money.	3. Social: None known
3. Carpet & Backing Standards/Specifications	H	1. Environmental: Carpet, cushion and adhesives can be large contributors to indoor air pollution by off gassing hazardous chemicals, unless safe products are specified.	1. Environmental: None known
		2. Economic: Medium initial cost impact, but definitely will drop over time.	2. Economic: Medium initial cost impact, but definitely will drop over time
		3. Social: Health benefit to employees and client /taxpayers that we serve.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
4. Green Specifications for Remodeling (LEED)	H	1. Environmental: Standardizes City/County/PDC’s approach to Remodeling specification for all structures. LEED City guidelines in pilot phase; will be available next year. Will result in reduction in the depletion of natural resources.	1. Environmental: None known
		2. Economic: Medium to large initial cost impact, but definitely a cost pay back over time. Mainly reduces energy and water consumption.	2. Economic: Medium to large initial cost impact, but definitely a cost pay back over time
		3. Social: Makes a statement that we care about managing our limit natural resources wisely. Helps contribute to a sustainable environment.	3. Social: None known
5. Certified Wood Products	H	1. Environmental: Promotes the use of wood from conservation oriented suppliers that meet certain criteria regarding managing and maintaining renewable forests harvested in a way that reduces environmental damage combined with the ability to provide a “Chain of Custody” showing the product as it moves from the forest to the ultimate user. Specifying of this type of product will build demand for wood from sustainable forests.	1. Environmental: None known
		2. Economic: Medium initial cost impact, but definitely will drop over time	2. Economic: Medium initial cost impact, but definitely will drop over time. Availability of some dimensional lumber may be limited.
		3. Social: Makes a statement that we care about old growth forest and managing our limit resources wisely.	3. Social: None known

Recommended Practice	Priority – H/M/L	Benefits	Negative Impacts
6. Low VOC Adhesives	H	1. Environmental: Reduce harmful vapors in the interior of a building, promotes good health, easy to specify, market ready.	1. Environmental: None known
		2. Economic: Low initial or negligible cost impact, but definitely a health benefit	2. Economic: None known
		3. Social: Healthy choice for employees and clients/taxpayers we serve.	3. Social: None known
7. Replace CCA Wood with alternatives	H	1. Environmental: Reduce arsenic seepage and waste in the dirt/sand and ground water supply. Helps to keep children safe at playgrounds made of wood.	1. Environmental: None known
		2. Economic: Medium initial cost impact, but definitely will drop over time, but definitely a health benefit.	2. Economic: Medium initial cost impact, but definitely will drop over time., but definitely a health benefit
		3. Social: Makes a statement that we care about polluting our water and land. EPA is banning consumer purchase of CCA wood so communities will be aware of restrictions.	3. Social: None known
8. Fly Ash in Concrete Specifications	H	1. Environmental: This is a proven substitute for a percentage of the cement called for in various concrete mixes. Takes this by product from burning coal and puts it to good use and keeps it out of landfills.	1. Environmental: None Known
		2. Economic: Low initial or negligible cost impact, but definitely a cost pay back over time.	2. Economic: Slower cure time then non-fly ash concrete mix, but when strength is achieved it is stronger then normal mix.
		3. Social: Takes this by product from burning coal and puts it to good use and keeps it out of landfills.	3. Social: None Known

Actions needed to implement changes:

Recommended Practice	Actions to implement	Jurisdiction/who does it?	Estimated timeline
1. (a.) Specify Low Mercury Lamps	a) Develop Policy / Specification.	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (b.) Specify / Replace T12 Lamps & Magnetic Ballasts with T8 Lamps & Electronic Ballasts	a) Develop Policy / Specification & Standards	b) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	b) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (c.) Specify / Replace Auto/Motion Controls	c) Develop Policy / Specification & Standards	c) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	c) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (d.) Develop Lighting Design Standards for Tenant Improvements and Remodeling	d) Develop Policy / Specification & Standards	d) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	d) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (e.) Develop Extended Life Lamp Specifications	e) Develop Policy / Specification & Standards	e) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	e) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (f.) Replace HID with High-output T-5 Lamps	f) Develop Policy / Specification & Standards	f) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	f) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (g.) Replace High-pressure Sodium with Metal Halides	g) Develop Policy / Specification & Standards	g) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	g) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (h.) Outdoor Fixture Horizontal cut-off	h) Develop Policy / Specification & Standards	h) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	h) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (i.) Dimmers Standards	i) Develop Policy / Specification & Standards	i) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	i) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (j.) Color Rendition Standards	j) Develop Policy / Specification & Standards	j) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	J) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (k.) Recycling Standards	k) Develop Policy / Specification & Standards	k) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	k) Can implement by end of '03, after City/County/PDC governing body adoption.
1. (l.) LED Exit Signs	l) Develop Policy / Specification & Standards	l) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	l) Can implement by end of '03, after City/County/PDC governing body adoption.

Recommended Practice	Actions to implement	Jurisdiction/who does it?	Estimated timeline
2. Energy Star Roofs Specifications	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
3. Carpet & Backing Specification	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
4. Green Specifications for Remodeling (LEED)	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
5. Certified Wood Products	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
6. Low VOC Adhesives	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
7. Replace CCA Wood with alternatives	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.
8. Fly Ash in Concrete Specifications	a) Develop Policy / Specification & Standards	a) City/County/PDC: Capital Impvmnt / Facility Mgmnt / Architect / Consultant / Engineer	a) Can implement by end of '03, after City/County/PDC governing body adoption.

Actions needed to monitor implementation:**6. Lighting Products and Practices:**

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

2. Energy Star Roofs Specifications:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

3. Carpet & Backing Specifications:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

4. Green Specifications for Remodeling (LEED):

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

5. Certified Wood Products:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

6. Low VOC Adhesives:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

7. Replace CCA Wood with alternatives:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

8. Fly Ash in Concrete Specifications:

Jurisdiction	Target	Indicator	Reporting Entities	Reporting Deadlines
City	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
County	Implementation of developed specification & standards into all procurements.	Specification and Standards are apart of all procurements and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003
Portland Development Commission	Implementation of developed specification & standards into all procurements/ contracts.	Specification and Standards are apart of all procurements/contracts, and work.	City/County/PDC – Capital Improvement / Facility Management / Architect / Consultant / Engineer / Purchasing	Midterm: July 2003 Final: December 2003

Accomplishments/improvements achieved as a result of task force efforts in addition to final recommendations:

1. Education in Sustainability Practices of Task Group Members.
2. Develop resources for sustainability between Task Group Members.