

MEETING: DATE: DAY: TIME:		METRO COUNCIL WORK SESSION June 22, 2010 Tuesday 2:00 PM	
PLACE:		Metro Council Chamber	
CALL TO OR	DER AN	ND ROLL CALL	
2:00 PM	1.	DISCUSSION OF AGENDA FOR COUNCIL REGULAR MEET [June 24, 2010]/ADMINISTRATIVE/CHIEF OPERATING COMMUNICATIONS	•
2:15 PM	2.	Making the Greatest Place (MGP): Implementation Phase Schedule/Elements of 2010 Work Program	se Robin McArthur
2:20 PM	3.	Fostering "Climate Friendly Communities" (HB 2001 G Initiative	-
		Proposed schedule and engagement process	Mike Hoglund
2:40PM	4.	Climate Prosperity Project Update and Council input on Metro role (materials included in packet)	Heidi Rahn
3:20 PM	5.	BREAK	
3:25PM	6.	Proposed Regional Framework Plan and Urban Growth Functional Plan Changes to Implement Making the Greatest Place (materials distributed under separate cover)	-
		OverviewFocusing Development in Centers and Corridors	Sherry Oeser
		 (Functional Plan Title 6) Dick Ben Increasing Housing Capacity (Functional Plan Title 1) 	ner/Sherry Oeser ner/Sherry Oeser
4:20PM	7.	COUNCIL BRIEFINGS/COMMUNICATION	
ADJOURN			

METRO COUNCIL

Work Session Worksheet

Presentation Date: June 22, 2010 Time: 2:40 pm Length: 40 minutes

Presentation Title: Climate Prosperity Update

Service, Office, or Center: Sustainability Center

Presenter: Heidi Rahn, Sustainability Center, x1535

ISSUE & BACKGROUND

This purpose of this work session agenda item is to provide an update on the Climate Prosperity Project and solicit Council feedback on the proposed strategies and Metro's role in implementation.

This project is one component of Metro's Climate Change Initiative work plan. In previous actions, the Metro Council directed the agency to take steps to define its role in reducing regional greenhouse gas (GHG) emissions and to coordinate its efforts internally and with regional partners. Subsequent discussions led to development of a work plan that included the following components:

- 1. <u>Development of a regional greenhouse gas emissions inventory, which was completed</u> earlier this year.
- 2. <u>Development of greenhouse gas emissions analysis tools</u> to apply to all Metro planning initiatives. The agency's most significant application of these tools will be in meeting the requirements of House Bill 2001 to develop two or more land use and transportation scenarios designed to reduce greenhouse gas emissions from light-duty vehicles.
- 3. <u>Investment in on-the-ground projects</u>. These investments have not yet occurred, although the Lloyd Eco-District Declaration of Cooperation can be considered a commitment to such an investment.
- 4. <u>Alignment of Metro communications</u> on greenhouse gas reduction with those of key Metro initiatives such as Making the Greatest Place, the Regional Transportation Plan, and waste reduction efforts. This has been done for each of these initiatives and staff has drafted an overall communications plan.
- 5. <u>Regional engagement</u>, which has included numerous discussions with JPACT and MPAC, including the committees' joint climate change retreat in April 2010.
- 6. <u>Regional collaboration</u>, which has included work with partners to develop a framework for climate change adaptation in the Lower Willamette River Basin and **the Climate Prosperity Project**, which is the focus of this work session agenda item.

Climate Prosperity

The objective of the Climate Prosperity Project is to align the policies, innovation, workforce, and technologies needed to grow and capture the growing economic and environmental benefits of addressing climate change.

Progress to date:

- Ongoing working group that includes representatives from Greenlight Greater Portland, Portland Development Commission, Oregon Institute of Technology, Climate Solutions, Worksystems, Inc., Nike, Formos, Regional Partners, Portland Sustainability Institute, Oregon Business Council, City of Portland Bureau of Planning and Sustainability, and Metro.
- Convening of forums in Beaverton, Lake Oswego, Portland, and Vancouver that drew 200 key stakeholders to identify priorities for coupling regional economic development with greenhouse gas emission reductions.
- Gauging political support for the priorities recommended at the forums via the JPACT/MPAC climate change survey (see attached memorandum and survey summary).
- Development of a draft Climate Prosperity roadmap that outlines strategies for the Portland Metro region to simultaneously strengthen its economy, reduce carbon emissions and maintain a focused leadership position in the global green economy.

IMPLICATIONS AND SUGGESTIONS

Please refer to the attached Portland Metro Climate Prosperity Greenprint.

Metro is identified as the potential driver for the following strategies:

- Develop regional prioritization and funding mechanisms for infrastructure investments and sustainable development projects.
- Establish greenhouse gas reduction targets for metro region.
- Adopt high-performance building and infrastructure standards for major redevelopment sites.
- Expand regional transportation funding to prioritize bicycle, pedestrian, and transit systems.

As part of the Climate Prosperity roadmap, these Metro activities would connect to the innovation, workforce, and business development needed to support such efforts.

A future Climate Prosperity leadership council has the potential to provide direct support for the community investment strategy and a platform from which to draw investment targets.

Many of the policy priorities recommended at the JPACT/MPAC climate change retreat are reflected in the proposed Climate Prosperity roadmap. These include establishing energy efficiency targets, energy performance monitoring, green building standards, and investment in renewable energy and alternative transportation options.

Next steps include finalizing the Climate Prosperity roadmap, engaging with business, government, and non-profit leaders throughout the region to gauge support for the strategies and identify potential drivers for implementation, and create a governance structure that would have wide-spread support from regional leaders.

OPTIONS AVAILABLE

- Councilors may recommend additional strategies.
- Councilors may modify or clarify the recommended strategies, particularly those with Metro identified as the potential driver.
- Councilors may identify what role Metro should play in gauging support for the strategies and input on a future governance structure from other regional leaders.

QUESTION(S) PRESENTED FOR CONSIDERATION

- 1. What questions or comments do you have regarding the strategies as currently defined?
- 2. What role do you want Metro to play in gauging support from other leaders for the Climate Prosperity roadmap and governance structure?

LEGISLATION WOULD BE REQUIRED FOR COUNCIL ACTION __Yes _xNo DRAFT IS ATTACHED ___Yes _xNo

CLIMATE PROSPERITY: A GREENPRINT FOR THE GREATER PORTLAND REGION

Executive Summary

In the past decade, the Portland metropolitan region has emerged as a national leader in urban sustainability and clean technology. The region has witnessed a veritable explosion of activity across companies, government, non-profit organizations and educational institutions resulting in a dazzling array of new green products, policies, programs and infrastructure.

It's clear that the region's track record has generated national recognition as well as tangible environmental and economic benefit. But the region's early adopter advantage diminishes as other cities and metropolitan regions--armed with greater resources and more sophisticated strategic partnerships and coordination--adopt the green mantle.

The Portland metropolitan region's challenge is not to discover the benefits of living, working or thinking green. Rather, the challenge is to fully and strategically engage our business community, different levels of local and regional government and our citizens in ways that keep the region at the forefront of the green economy. Few in our region are satisfied with the level of progress we have made creating green jobs or deploying an innovative policy and financing architecture that can scale broadly to reach the vision we all share for a sustainable economy. Put simply, the region is not guaranteed a leadership position in the fast-moving, global green economy unless it invests in and organizes itself for success.

Business and civic leaders need to take concerted action today to create more linkages among key players around shared market interests, regional business planning and signature projects. The region must also increase its capacity to respond quickly and effectively to federal funding opportunities that will drive clean technology innovation and economic growth for years to come.

The Portland Metro Climate Prosperity Greenprint provides a roadmap to accelerate the region's leadership in green development and clean technology. It starts from the premise that the Portland metropolitan region can simultaneously strengthen its economy, reduce carbon emissions and maintain a focused leadership position in the global green economy. The Greenprint is a regional Call to Action that identifies six outcomes and recommends the strategies to achieve them. The six outcomes were developed in consultation with nearly 200 business, higher education and workforce leaders and the Greenprint Working Group over the last year. The Greenprint synthesizes the many catalytic but often disparate initiatives that are currently underway throughout the region and offers up a series of new strategies based on a scan of best practices throughout North America. In each case the strategies proposed

require true regional collaboration -- no individual jurisdiction, sector, or institution has the full range of assets and expertise to succeed on its own.

It's time for the region's business, civic and environmental leaders to pull together to accelerate green job creation and invest at scale in our region's most promising green practices.

PORTLAND METRO REGION CLIMATE PROSPERITY OUTCOMES:

- 1. ESTABLISH FINANCE MECHANISMS FOR GREEN INNOVATION
- 2. ACCELERATE ENERGY AND RESOURCE EFFICIENCY
- 3. COMMERCIALIZE GREEN TECHNOLOGIES
- 4. CULTIVATE THE REGIONAL CLEAN TECH CLUSTER
- 5. DEVELOP A PIPELINE OF GREEN TALENT
- 6. BUILD SUPPORT AND COMMUNICATE RESULTS FOR CLIMATE PROSPERITY

Outcome 1: ESTABLISH FINANCE MECHANISMS FOR GREEN INNOVATION

Finance is a dynamic field that constantly reacts, innovates and develops new financial models and products to meet society's changing needs and investment priorities. As ever more attention is paid to maximizing energy and resource efficiency and reducing carbon dioxide emissions, the financial industry will develop new and better products to accelerate investment into clean technologies and businesses. If we are successful, our region's public and private financing entities alike will lead the nation in developing these new tax structures and financing models, and will spawn new green financial institutions and products.

- <u>Establish clean energy financing programs.</u> In Oregon, a broad partnership of local and state governments, utilities, nonprofit organizations, and financial institutions aims to invest \$100 million in Clean Energy Works Oregon, building on \$20 million in federal grant funding. This strategy aims to support the growth of Clean Energy Works from a Portland-based pilot into a comprehensive service and financing program that enables energy efficiency retrofits for homes and businesses throughout the state and, ultimately, across the nation.
- <u>Develop regional prioritization and funding mechanisms for infrastructure investments and sustainable development projects</u>. Sound infrastructure and sustainable development are critical to maintaining and enhancing regional economic growth, competitiveness, productivity and quality of life but our region, state and country are vastly underfunding investments in these areas, so new and/or different funding mechanisms are needed. Furthermore, funding decisions need to be prioritized to maximize the overall impact of the available dollars.
 - METRO AS POTENTIAL DRIVER
- <u>Support utility pilot projects that apply innovative service and revenue models.</u> Utilities have a unique combination of long-range business models, access to capital, and direct relationships to energy users—their customers. Innovative finance models such as on-bill repayment of energy retrofits or fee-for-service (e.g. hot water) rather than fee-for-energy use present major opportunities to transition to clean energy, as do smart grid infrastructure projects and district heating and/or cooling systems.
- <u>Strategically invest a portion of the state treasury portfolio into Oregon clean tech companies</u> <u>through the state's Oregon Investment Council.</u>
- <u>Develop regional green bank strategy that explicitly directs a portion of its loans into energy</u> <u>efficiency and renewable energy investments</u>. Individual homeowners as well as businesses need access to capital to make investments in energy efficiency, renewable energy and other green projects, yet very few lenders are focused on making loans for these kinds of investments. The region needs a green bank.

Outcome 2: ACCELERATE ENERGY AND RESOURCE EFFICIENCY

- <u>Establish energy efficiency and greenhouse gas reduction targets for metro region</u>. The metro region is the economic engine for the state of Oregon, and without meeting regional targets it puts the state's goals in jeopardy. Further, it contextualizes regional strategies while eliminating the fragmentation caused by a variety of separate local targets. An aligned set of targets and goals helps position our region for federal funding opportunities.
 - METRO AS POTENTIAL DRIVER
- <u>Establish energy performance scores for all commercial and residential buildings.</u> Support the expansion of Energy Trust of Oregon's pilot Energy Performance Score program into a statewide program. Support its growth through inclusion in energy retrofit program Clean Energy Works.
- <u>Promote industry adoption of energy efficiency goals for energy intensive industries</u>. Food
 processing and manufacturing are two regionally significant industries that can accrue massive
 benefits from the elimination of inefficiencies and waste in their production and processes.
 These benefits create competitive advantage for companies who have eliminated the time and
 money wasted on inefficient operations, while simultaneously decreasing greenhouse gas
 emissions. This strategy supports the creation of industry-wide goals around energy efficiency,
 spurring the implementation of energy-saving processes in existing and new manufacturing
 systems.
- <u>Accelerate bulk procurement of on-site clean energy systems.</u> Spur the creation of demand for clean energy systems through bulk purchasing from a number of sectors:
 - Greatly expand metropolitan jurisdictions bulk purchase of photovoltaic and solar thermal technology for their facilities.
 - Expand Solarize Portland model to allow for region-wide residential bulk purchasing agreements.
- Establish standards for two-way energy storage (smart grid/electric vehicles) and accelerate deployment of a smart grid strategy.
- <u>Adopt high-performance building & infrastructure standards</u> for major redevelopment sites (e.g. EcoDistricts, district energy, green streets, smart grid).
 - METRO AS POTENTIAL DRIVER
- Expand regional transportation funding to prioritize bicycle, pedestrian, and transit systems.
 METRO AS POTENTIAL DRIVER

Outcome 3: COMMERCIALIZE GREEN TECHNOLOGIES

Strategies:

- <u>Create a commercialization gap fund through the state's signature Research Centers</u> to allow start-up companies to move promising ideas, products and services to market.
- <u>Develop process for businesses to submit ideas and engage in university research and</u> <u>development</u>. Our region lacks a systematic way for businesses to submit ideas for universityhoused R&D. We need to support a way to capture all of the region's good ideas into further research, not just the subset that comes from universities.
- <u>Develop a consortium of companies willing to work together on proof-of-concept new buildings</u> <u>and building retrofit projects to develop and commercialize innovative technologies</u>. We support leveraging construction and development activity to help regional firms establish and maintain a competitive advantage as innovators in the built environment. Both complementary companies and competitors need to find common ground where they can work together to ensure that they, and thus the region, become the preeminent source for the technology and know-how that will be needed to develop the next generation of buildings.

Outcome 4: CULTIVATE THE REGIONAL CLEAN TECH CLUSTER

- Support the growth of the region's emergent electric vehicle and energy storage cluster through industry organization around infrastructure investment, supportive policy, and growth of supply and demand. The electric vehicle and battery industries are positioned to grow with increasing demand for low-carbon transportation as well as low-carbon, but intermittent, sources of electricity generation such as wind and solar. Activities:
 - o Support and promote state and federal incentives for electric vehicles
 - o Educate the public on the benefits of electric vehicles
 - Accelerate deployment of charging infrastructure with financing assistance and minimization of permitting barriers
 - o Identify industry-wide critical opportunities and barriers to growth
- <u>Support the growth of the region's green building and energy efficiency clusters</u>. The cities that first develop a compelling approach to optimizing the energy performance of the existing building stock will reap significant rewards as other cities seek to utilize that expertise to achieve similar results for themselves. With the ultimate goal of spurring \$500M to \$1B of retrofit activity throughout Oregon in the coming years, Clean Energy Works Oregon represents a significant increase in this activity in the region. Activities:
 - Drive local demand for retrofitting large commercial buildings for optimized energy performance.
 - Develop a local supply-chain to provide products and materials to be used in Clean Energy Works Oregon.
 - Develop a consortium of companies willing to work together on a test-bed of new buildings and building retrofit projects to develop and commercialize innovative technologies.

- <u>Support the growth of the region's wind energy and renewable energy clusters.</u> Activities:
 - Organize manufacturers into a group that can collectively meet a wide range of replacement needs of wind farm opportunities.
 - Support training and re-tooling of local manufacturers' processes to meet wind farm supplier requirements around maintenance and supply of replacement parts.
 - Support continued connections between local manufacturers with Northwest and West Coast wind farm operators.

Outcome 5: DEVELOP A PIPELINE OF GREEN TALENT

Strategies:

- <u>Forecast Workforce needs</u>: Model the number and type of jobs to be created by policies passed state-wide and locally. Modeling policy impacts will allow workers to train for jobs that actually exist.
- <u>Strategically invest in higher education programs that will result in family wage green jobs:</u>
 - Invest significant dollars to produce a few key programs to lead the nation support first-in-nation OIT Renewable Energy Engineering program and PSU's green buildings programs.
 - Invest in "educational innovation fund" to target money to implementation of key green curriculum outcomes.
- Integrate green curriculum into metropolitan region school districts (K-12).
 - Set up innovation fund within Board of Education to fund curriculum.
 - Create a program for companies to partner/sponsor schools to fund curriculum.
- <u>Create pathways from poverty through sustainable workforce retraining programs.</u>
 - Develop career pathway maps articulate pathways for everyone within the targeted industry categories.

Outcome 6: BUILD SUPPORT AND COMMUNICATE RESULTS FOR CLIMATE PROSPERITY

- <u>Create Climate Prosperity leadership council to manage, promote and track Greenprint</u> <u>outcomes.</u> A leadership council will act as a mechanism to align outcomes, coordinate policy and scale investment across the region around the Climate Prosperity outcomes.
- <u>Create a single, regional public-private economic development strategy</u> with widespread support and buy-in from business and the public sector to lead Climate Prosperity implementation. Other leading metro regions have singular entities that provide cohesion among economic development efforts, and enable regions to compete.
 - Strategy provides mechanism for collaboration and alignment between the region's businesses, organizations and initiatives.
 - Provides a leadership structure to guide Climate Prosperity implementation and decision-making.

- Immediately support creation of Oregon Sustainable Jobs War Room. The War Room is a short-term solution to the long-term problem of Oregon's slow progress towards creating "transformational" green jobs and deploying an innovative policy and financing architecture that can scale broadly to achieve our vision. Over a 9-month period, the War Room will bring together partners and accelerate the collaborative process among individuals from federal, state and local agencies, universities, sustainable business, and civic organizations to immediately jump start projects.
- <u>Set up a measurement system to track quarterly and annual progress on key economic and environmental measures</u>. Use information to educate about the concept and benefits of "climate prosperity" among the public, as well as governments, businesses, and others throughout the region and beyond.
 - METRO AS POTENTIAL DRIVER (with PSU Regional Indicators)

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Re:	Summary of Climate Change Survey Findings
From:	Kim Ellis, Metro Planning and Development Department Heidi Rahn, Metro Sustainability Center
То:	Metro Council
Date:	Wednesday, June 16, 2010

BACKGROUND AND PURPOSE

On April 2, 2010, MPAC and JPACT held a joint workshop to learn more about climate change science and policy choices related to greenhouse gas emission reduction. Nearly 200 people attended the workshop, which included other elected officials in addition to MPAC and JPACT members, local government staff, and non-government partners.

This memo summarizes key findings of an informal survey completed by workshop participants. While the survey was not intended to be a scientifically valid prioritization exercise, it will be useful for guiding future policy discussions on how the region should move forward to meet the state's greenhouse gas emissions reduction goals. The attachment includes graphs that illustrate the survey responses and additional written comments received.

SUMMARY OF SURVEY RESULTS

The policy toolbox survey was organized around the three major areas of greenhouse gas emissions for the Metro region: energy use, transportation, and material consumption.

Overall Results

At least 65 attendees responded to each policy option. All policy tools listed were identified as high or medium priority by at least 75 percent of the respondents. Each major area of greenhouse gas emission reduction opportunities received an additional 20-30 recommended policy options or comments.

The policy tools that were identified as **high priority** by more than 70% of survey respondents included:

- increased investment in green development and renewable energy;
- adoption of energy efficiency and green building standards;
- increased mixed use in centers and corridors; and
- expanded transit service.

Energy Actions

The policy option with the most support to reduce energy consumption and associated greenhouse gas emissions is the adoption of energy efficiency standards for buildings. Other recommended policy actions related to energy consumption include additional education and investment strategies, such as

forming purchasing groups for renewable energy and energy efficiency retrofits and ensuring low income communities have access to financing options.

Transportation Actions

The top three strategies supported in the land use and transportation toolbox included an increase in mixed-use development in centers and corridors, an expansion of transit service, and an increase in vehicle fuel efficiency and use of lower-carbon fuels.

Material Consumption Actions

The policy option with the most support in reducing greenhouse gas emissions from material consumption was the adoption of green building standards for construction and materials. In addition to the policy actions ranked in the survey, respondents suggested requirements and incentives for manufacturers to limit the impact of product packaging and produce more sustainable products. They also encouraged stronger education around consumption choices.

Additional Comments

Several respondents noted that they would like more data regarding the cost and greenhouse gas reduction potential of the policy options. Metro is currently developing a greenhouse gas emissions analysis tools and procedures manual to outline how to conduct additional assessment of policy options.

NEXT STEPS

The various policy options will be further evaluated via the Climate Prosperity Project and Climate Smart Communities (Greenhouse Gas Scenario Planning) work program. Staff will bring information to Council for discussion this summer.

On April 2, 2010, MPAC and JPACT held a joint workshop to learn more about climate change science and policy choices related to greenhouse gas emission reduction. Nearly 200 people attended the workshop, which included other elected officials in addition to MPAC and JPACT members, local government staff, and non-government partners. Below are the unfiltered responses to a climate change policy survey completed by many participants.

Energy Toolbox Climate Change Policy Options Survey

Rate the priority of each policy option to indicate which policies the region and local governments should focus on to achieve the region's six desired outcomes and reduce the region's greenhouse gas emissions.				
	High	Medium	Low	Response Count
Increase investment in green development and renewable energy	79.2% (57)	16.7% (12)	4.2% (3)	72
Adopt energy efficiency standards	83.3% (60)	15.3% (11)	1.4% (1)	72
Develop a system for monitoring energy use in buildings	40.6% (28)	43.5% (30)	15.9% (11)	69
	Other (please specify)			
			answered question	72
			skipped question	2

	Other (please specify)				
1	A lot of energy use is behavioral. Until yuo address how people use buildings, you can't tackle this issue. (High)	Apr 5, 2010 8:15 PM			
2	Nuclear power (High)	Apr 5, 2010 8:31 PM			
3	Fund solar house retrofits with up-front money that is paid for over time with utility bill savings. (High)	Apr 5, 2010 8:48 PM			
4	Energy conservation education.	Apr 5, 2010 8:59 PM			
5	Support local jobs-housing balance, which uses less energy (high); recycle (medium)	Apr 5, 2010 9:01 PM			
6	water conservation (high)	Apr 5, 2010 9:19 PM			
7	increase education (high); simplify regulations and don't over regulate (high)	Apr 5, 2010 9:23 PM			
8	remove obstacles to growth and expansion (high); establish equitable distribution of costs (high)	Apr 5, 2010 9:27 PM			
9	New technology R&D ("low-tech" included) (high); homeowner projects-things that owners can do for various skill levels (high)	Apr 5, 2010 9:35 PM			
10	find ways to change permitting proctices to incent energy (high)	Apr 5, 2010 9:39 PM			
11	eliminate coal burning for energy in Oregon by 2020 (high)	Apr 5, 2010 9:43 PM			
12	Form purchasing groups for residents/businesses (medium)	Apr 5, 2010 9:48 PM			
13	education to general public on energy conservation (high)	Apr 5, 2010 9:51 PM			
14	adopt a regional policy of no garbage to landfill by 2030 (medium); explore "group" buying power for solar and weatherization (medium)	Apr 5, 2010 9:57 PM			
15	incentives for promoting positive change (high)	Apr 5, 2010 10:02 PM			
16	"green" rating for homes + rentals (high); standardize, optimize building codes- goal 50% more efficient (high)	Apr 5, 2010 10:05 PM			
17	energy and conservation (eg as per New Power Plan goals) (high); education of citizens on energy /true costs of energy (high)	Apr 5, 2010 10:11 PM			
18	energy conservation in low income communities (high)	Apr 5, 2010 10:16 PM			

Energy Toolbox

	Other (please specify)					
19	Monetize opportunity, in other words create a way for people to afford a \$60,000 solar panel (medium)	Apr 5, 2010 10:19 PM				
20	education for public = supportive of govt efforts and regulations (high)	Apr 5, 2010 10:30 PM				
21	Remove barriers to "selling" energy to the grid (medium); reconsider our allergy to nuclear power (high)	Apr 5, 2010 10:31 PM				
22	energy efficiency incentives- first energy efficiency, then non-utility remewables (high); local renewable generation, utility scale (high)	Apr 5, 2010 10:36 PM				
23	Education. Tax transportation (gas) more. (High)	Apr 5, 2010 10:45 PM				
24	Finance retrofits of existing buildings regionwide. (High)	Apr 5, 2010 10:50 PM				
25	provide incentives for installation/use of renewable energy (medium)	Apr 5, 2010 10:53 PM				
26	Incent low energy use for buildings and require low energy use vehicles (high); design plan incent and regulate to make our growth and development sustainable (high)	Apr 5, 2010 10:55 PM				
27	Create a uniform, statewide green building code. (High)	Apr 5, 2010 10:57 PM				
28	invest in green jobs training/workforce development; build local economy and capacity to do green energy work in our region (high)	Apr 5, 2010 11:00 PM				
29	existing building retrofits/improvements (high)	Apr 5, 2010 11:03 PM				
30	make sure any new methods do not cost more- energy that they save ie solar panels take 5 years to offset energy used in production (high) (high)	Apr 5, 2010 11:06 PM				
31	encourage place-based utility costs, where cost/unit increases with usage (high)	Apr 5, 2010 11:08 PM				

Land Use and Transportation Toolbox Climate Change Policy Options Survey

Rate the priority of each policy option to indicate which policies the region and local governments should focus on to achieve the region's six desired outcomes and reduce the region's greenhouse gas emissions.				
	High	Medium	Low	Response Count
Increase mixed-use development in centers and corridors	72.7% (48)	24.2% (16)	3.0% (2)	66
Charge user fees	53.5% (38)	29.6% (21)	16.9% (12)	71
Expand commuter trip reduction and traveler information programs	41.8% (28)	46.3% (31)	11.9% (8)	67
Improve system efficiency	56.5% (39)	30.4% (21)	13.0% (9)	69
Expand bike, pedestrian and trail connections	58.8% (40)	36.8% (25)	4.4% (3)	68
Expand transit service	70.0% (49)	28.6% (20)	1.4% (1)	70
Manage parking	41.2% (28)	38.2% (26)	20.6% (14)	68
Increase vehicle fuel efficiency and use of lower-carbon fuels	70.8% (46)	23.1% (15)	6.2% (4)	65
Implement truck diesel retrofits and truck stop electrification	48.5% (32)	42.4% (28)	9.1% (6)	66
Increase freight rail capacity and fix freight rail system bottlenecks	50.0% (33)	34.8% (23)	15.2% (10)	66
			Other (please specify)	21
			answered question	74
			skipped question	0

	Other (please specify)				
1	Check Out: Jevon's Paradox increasing the efficiency of a natural (carbon) resource increases its total usage. To decrease actual resource consumption, you have to increase its price.	Apr 5, 2010 8:18 PM			
2	Increase fees/taxes associated with things that produce GHG e.g. carbon tax or similar (High)	Apr 5, 2010 8:35 PM			
3	Incorporate in early education curriculum, e.g. bus passes, heath infromation. (High)	Apr 5, 2010 8:45 PM			
4	Stop using freight as a rationalization for greater VMT. Advance walking everywhere. Strive to be region we can inhabit as pedestrians. (High)	Apr 5, 2010 8:54 PM			

Land Use and Transportation Toolbox

	Other (please specify)	
5	support local jobs-housing balance-reduces commuting in the region (high); encourage telecommuting (high); plant more trees (high)	Apr 5, 2010 9:03 PM
6	better housing/jobs balance (medium)	Apr 5, 2010 9:25 PM
7	mandate cost-effective use of multi-modal funds (high)	Apr 5, 2010 9:28 PM
8	monitor energy and GHG impact of transportation projects (high)	Apr 5, 2010 9:40 PM
9	push businesses to adopt flex time + telecommuting	Apr 5, 2010 9:49 PM
10	bring neighborhood walkable destinations to suburbs (high)	Apr 5, 2010 9:58 PM
11	adoption criteria (for both land use issues + transportation) should include carbon emissions and energy reduction (high)	Apr 5, 2010 10:03 PM
12	flexible zoning, fast tracking for higher density, higher efficiency building types eg work/live, p.a.d.s., co-housing (high)	Apr 5, 2010 10:06 PM
13	address school (medium)	Apr 5, 2010 10:19 PM
14	land assembly and positive "write down' to incent location efficient buildings	Apr 5, 2010 10:31 PM
15	Utilize rivers for instate freight more. (Medium)	Apr 5, 2010 10:48 PM
16	property tax incentives for constructing sidewalks or improving street and row infrastructure to meet city goals (stormwater, trees, as well as pavement) (high)	Apr 5, 2010 10:50 PM
17	improve reliability (not capacity) for trucks or freight routes, fix freight roadway bottlenecks (medium)	Apr 5, 2010 10:54 PM
18	We don't have the information to rate some of the priorities listed (see paper survey for comments)	Apr 5, 2010 10:56 PM
19	incentives for non-SOV commuting; cash-out employee parking	Apr 5, 2010 10:59 PM
20	Greater emphasis on renovation and reuse of existing inventory. (High)	Apr 5, 2010 11:04 PM
21	education (high); correct/reinforce subregional jobs/housing balance (high)	Apr 5, 2010 11:08 PM

Materials Toolbox Climate Change Policy Options Survey

Rate the priority of each policy option to indicate which policies the region and local governments should focus on to achieve the region's six desired outcomes and reduce the region's greenhouse gas emissions.				
	High	Medium	Low	Response Count
Expand food composting and other waste reduction programs	44.8% (30)	44.8% (30)	10.4% (7)	67
Promote local food production	50.0% (35)	40.0% (28)	10.0% (7)	70
Adopt green building standards for construction and materials	79.7% (55)	18.8% (13)	1.4% (1)	69
Promote product stewardship and producer responsibility	50.7% (35)	33.3% (23)	15.9% (11)	69
			Other (please specify)	27
			answered question	74
			skipped question	0

	Other (please specify)					
1	You need policy that encourages the reflection of individual consumption of goods. (High)	Apr 5, 2010 8:19 PM				
2	Adopt local sustainablity performance measures each city. (High)	Apr 5, 2010 8:45 PM				
3	Require manufacturers to receive and recycle 100% of all products and packaging. (High)	Apr 5, 2010 8:49 PM				
4	require recycling (high); institute incentives for energy saving products (high)	Apr 5, 2010 9:03 PM				
5	Less packaging, better quality.	Apr 5, 2010 9:09 PM				
6	Doesn't know how important the first question in this series is.	Apr 5, 2010 9:13 PM				
7	ensure that TRUE costs in energy, environment, and labor are paid (high)	Apr 5, 2010 9:28 PM				
8	need on-site or near site greywater, collected water supplies (high); energy efficient water & sewer systems (high)	Apr 5, 2010 9:36 PM				
9	pomote home & community gardens (high); metro "toolkit"	Apr 5, 2010 9:42 PM				
10	push adoption of standards that define materials such as LEED-NC + LEED0Home (medium); form purchasing groups that allow businesses and residents to buy in bulk (medium)	Apr 5, 2010 9:50 PM				
11	4 day work week- alternative work week schedules for public/private industry (high)	Apr 5, 2010 9:52 PM				
12	adopt statewide building codes for green results (high); finance incentives for houses/businesses to use (medium)	Apr 5, 2010 9:58 PM				
13	adopt zero waste target program, use waste for energy production (low)	Apr 5, 2010 10:06 PM				
14	education to get people to buy local products and only what you really need	Apr 5, 2010 10:16 PM				
15	develop comprehensive materials and waste reporting in manufacturing to identify waste stream opportunities (high); promote local manufacturing for goods needed locally- promote increased lifespan for goods (high)	Apr 5, 2010 10:25 PM				

Materials Toolbox

	Other (please specify)				
16	native landscaping (medium); tree planting (medium)	Apr 5, 2010 10:32 PM			
17	build and leveraged purchasing (high); green procurement assessment and implementation to reduce consumption (high)	Apr 5, 2010 10:36 PM			
18	Promote new designs that reduce square feet/person or per jobs. Programs to reduce overall consumption. Stop watering lawns in the summer. (High)	Apr 5, 2010 10:41 PM			
19	Encourage reuse of building materials.	Apr 5, 2010 10:49 PM			
20	incentives and zoning to encourage building more 20 minutes neighborhoods where they don't exist today (high)	Apr 5, 2010 10:50 PM			
21	Educate the public about GHG impacts of food choice. (Medium) Aggressive education and support around reducing comsumption. (High)	Apr 5, 2010 10:52 PM			
22	need costs and benefits to rank some items on survey	Apr 5, 2010 10:56 PM			
23	Promote purchase goods through both providing incentives, supporting local businesses and regulation of non-local businesses. (High)	Apr 5, 2010 10:57 PM			
24	public education / awareness campaign on this segment of emissions (medium)	Apr 5, 2010 11:00 PM			
25	system information approach, Eco infrastructure metrics	Apr 5, 2010 11:03 PM			
26	Promote local consumption	Apr 5, 2010 11:05 PM			
27	thoughtful consumption/buy less stuff, more durable, reusable, reparables (high); food source choice- red meat vs. fruit-veg, is more of a priority than food miles (medium)	Apr 5, 2010 11:05 PM			

Missing Policy Options Climate Change Policy Options Survey

What policy options are missing that should be considered?			
		Response Count	
		40	
	answered question	40	
	skipped question	34	

Response Text		
1	The biggest single chunck of the GHG inventory is personal consumption, which is politically toxic to talk about. Until you address personal descrentionary consumption (ex. how many 2010 airplane miles are represented in this room today?), you just planning on the edges. How do you talk about reducing personal comsumption on an individual level? I dunno. Perhaps encourage the purchase of services (local, equitable, low carbon) over "things" (global, inequitable, high carbon)?	Apr 5, 2010 8:23 PM
2	 Need high speed rail sooner. Engage youth/education/generational change. Urban forestry - carbon sequestration Oregon Tax structure needs radical overhaul less tax on income and property ownership and more move on consumption (reverse current paradigm) 	Apr 5, 2010 8:30 PM
3	Emphasizing pricing that doesn't require much monitoring to enforce (and that doesn't cost much to enforce)	Apr 5, 2010 8:38 PM
4	Increase funding for transit, so it can be expanded.	Apr 5, 2010 8:51 PM
5	 Replace or build new infrastructure only when it promotes the urban transformation associated with creating resilient urbanism. Plan for high(er) speed inter-region rail. Complete regional trails to coast and Cascades. And don't pay people to do what they ought to do, price resource use accurately and make what you want easy, what you don't want hardreward "smart use" and smart locational choices. 	Apr 5, 2010 8:58 PM
6	Technology - Where does it fit in? For example: electric vehicles, phone apps. Best Management Practices (BMPs) - How do we capitalize/leverage good models and examples that currently exist?	Apr 5, 2010 9:01 PM
7	Planning and support of local (defined by walking/short bike trip distance) Jobs/housing balance this will reduce motorized transportation	Apr 5, 2010 9:07 PM
8	 Energy: Develop new utility pricing and delivery models. De-couple utilities, dynamic pricing, smart grid and district energy. Energy: Develop new sources of revenue to fund infrastructure e.g. consumption tax (reduces consumption-related GHG emissions while funding infrastructure improvements). Focus on efficiency of "stuff" production: support efficiency in manufacturing and food processing operations (ex. see NWFPA + NEEA goals for Regional Food Processors and point person: Sergio Dias.) 	Apr 5, 2010 9:08 PM

Missing Policy Options

	Response Text	
9	 Regulate products that are environmentally damagine. Education to reduce consumption Population growth is a huge issue - not easily addressed at the local level but education (esp. for women) and access to birth control is very important. 	Apr 5, 2010 9:11 PM
10	Tax policy to incent behavior gas tax, carbon tax, energy tax not necessarily to raise money byt to price behavior.	Apr 5, 2010 9:14 PM
11	nothing said/no conversation about the energy impact of water, maybe because Portland's exposure is likely low, but for the "burbs" it can be huge	Apr 5, 2010 9:21 PM
12	Government policy should be to ensure that TRUE costs of energy and production of goods and services be borne by ALL.	Apr 5, 2010 9:30 PM
13	The focus of our public education to understand the relationship between density and transportation efficiency should be "what's in it for existing residents" not just how it will help the future	Apr 5, 2010 9:44 PM
14	Might have to look at statewide growth policy- how people and areas are distributed throughout state- what's the tradeoff of one more person in PDX vs Eugene vs Lakeview vs Coos Bay. Examine policy that strives to minimize greenhouse emissions per capita- where is it easiest to achieve this?	Apr 5, 2010 9:46 PM
15	The role of water/waste water in energy use. Workforce-jobs location Brownfield redevelopment	Apr 5, 2010 9:47 PM
16	Maybe green views a requirement of all depts and for appointment to committee include green/GHG requirements and evaluations in all projects Promote/incent remodels over new builds, for industry, commercial, and residential	Apr 5, 2010 9:51 PM
17	high-speed rail- our regional impacts are not included in RTP beyond UGB RR freight- it wasn't included in RTP electric vehicle infrastructure was not included in RTP	Apr 5, 2010 9:55 PM
18	Coordinate a regional implementation of electric charging opportunities	Apr 5, 2010 9:59 PM
19	Education: of contractors, building trades, retail related to construction	Apr 5, 2010 10:04 PM
20	education: re-instate home economics classes that include training in energy efficiency, home food prep, etc. Add strategies into RTP, RFP- regional consistency is important	Apr 5, 2010 10:10 PM
21	Reduce individual/person energy consumption	Apr 5, 2010 10:14 PM
22	Planting	Apr 5, 2010 10:15 PM
23	Encourage housing IN malls Integrated habitat bldg approaches Preserve and restore open spaces and forests urban forestry eliminate "level of service" requirements for roads, replace w/ context sensitive solutions	Apr 5, 2010 10:18 PM
24	incentives for replacing inefficient appliances for low-moderate income people cash up front and tax credit doesn't work for low-moderate income more use of "gray water" low interest loans	Apr 5, 2010 10:21 PM
25	jobs and housing balance for a community gray water recycle retrofits and new builds	Apr 5, 2010 10:22 PM
26	My priorities here are based on a preferance for managing demand first- then addressing supply issues next. Based on emission model/reporting goods/materials seem to be the highest priority. Recommend land use, also address how goods are manufactured as how their process inputs, outputs and waste can be integrated accross companies.	Apr 5, 2010 10:27 PM

Missing Policy Options

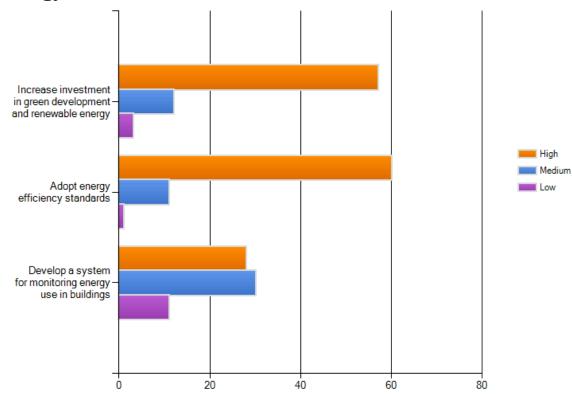
	Response Text		
27	Two criterion not really included in options 1) reversibility- if something can be done today that may have less immediate carbon reductions but influences in large ways the future; i.e. sprawl will force more driving and once built, will be very hard to reverse 2) life cycle cost analysis should be required to sort out what we prioritize for action	Apr 5, 2010 10:29 PM	
28	Adopt sustainability policies by local govts Require meaningful increased outreach by power/energy industry	Apr 5, 2010 10:30 PM	
29	Separate signal turning from transit signal priority	Apr 5, 2010 10:33 PM	
30	Education for public	Apr 5, 2010 10:35 PM	
31	PUC aspects related to useful feed in tariff, smart grid applications and other	Apr 5, 2010 10:38 PM	
32	rating system for residential buildings like LEED to recognize existing buildings that are resource efficient Targeted loans for efficiency improvements (clean energy works, solarize	Apr 5, 2010 10:53 PM	
	portland) Target re-building sites that are already developed and have infrastructure in place (streets, sewers) to develop more efficient buildings (like Headwaters Building in SW Portland- replaced an old eagles lodge with higher density efficient multi family development and green streets)		
33	 District energy Conprehensive adaptation strategy Aggressive affrestation and presentation of mutual systems. 	Apr 5, 2010 10:54 PM	
34	The amount of staff resources this region puts into the use of a dwindling financial resource, TIP, could better be used by spreading these staff and their time into and over exploring the myriad of other resource/planning choices and solutions presented at this session. This would be a huge shift, resulting in huge change which is completely within your/our control- a unique opportunity	Apr 5, 2010 10:58 PM	
35	regional parking tax to fund transit car sharing incentives no UGB expansion	Apr 5, 2010 10:59 PM	
36	regional green jobs policy framework including funding and training strategy equity needs to be made a priority: impacts of climate change should not be disproportionately distributed and the benefits of a clean/green economy should be equitably distributed	Apr 5, 2010 11:01 PM	
37	 4 day work week, telecommunting in more regional jurisdications. More opportunities for online transaction with government so residents needn't travel to government office buildings everytime one needs a service. Move forward in development of energy efficiency finance fund to improve retrofits of public and private buildings so they use less energy. 	Apr 5, 2010 11:03 PM	
38	education/outreach/community engagement	Apr 5, 2010 11:05 PM	
39	allocations should include some analysis of energy used to save energy, be sure the end result is positive	Apr 5, 2010 11:07 PM	
40	Understanding that climate change requires a transformational culture change, leading to substantial individual and collective impact. The Portland region tends to over-regulated 1) substantial compliance expense that may or may not achieve goals 2) a confrontational rather than collaborative effort on the part of government and private/non-profit sectors 3) discouragement of creativity. To affect this transformational cultural change, governments at all levels need to develop the appropriate balance of regulation, incentive and education	Apr 5, 2010 11:12 PM	

What immediate actions are you willing and/or able to take in your community to address climate change?	
	Response Count
	25
answered question	25
skipped question	49

	Response Text		
1	 Plant trees Use transit more Turn off lights in daytime Would buy a smaller more efficient house if I could sell the one I own (need some market recovery). 	Apr 5, 2010 8:30 PM	
2	All. We need to ramp up our ambitions. We are too tentative.	Apr 5, 2010 8:58 PM	
3	In Cornelius, we are 1) planning and constructing toward a jobs-housing balance 2) encouraged a new business, Summit Biofuel, that makes ethanol fuel from berry processing 'waste' 3) planting trees in award winning numbers, adopting a local (construction excise) tax discount incentive for building at higher densities 4) educating developers in green construction options, winning the County recycling award	Apr 5, 2010 9:07 PM	
4	Analyze, organize and implement strategies to increase livablity, reduce emissions, grow jobs, and increase prosperity (not just growth).	Apr 5, 2010 9:08 PM	
5	Buy less, buy better quality, talk about these issues in my community. I do not own a car. Support local businesses.	Apr 5, 2010 9:11 PM	
6	Code changes are happening committment to active transport is happening we would LOVE more transit already working with chamber on commute reduction options We have robust community support for all of these	Apr 5, 2010 9:19 PM	
7	building code, comprehensive plan, community development code run through an environmental sustainability lens before adopting changes to code/plan. Ensure that decisions help the environment Public outreach and education	Apr 5, 2010 9:27 PM	
8	Reduce obstacles to private enterprise production of business creation or expansion which will produce more local employment. Encourage agriculture which is community based and supported. Shift government services to utilize community based local volunteer 501-3(c), faith based, etc. organizations. Provide more local government services.	Apr 5, 2010 9:30 PM	
9	4-day work week, tree canopy, restoration, bike-ped improvements, more charging stations, TDM	Apr 5, 2010 9:47 PM	
10	 we are doing tree code in unincorporated urban area we are purchasing more electric vehicles in fleet we have a commitment to all new bldgs we build or renovate to be LEED certified We are revising our code to be promoting sustainable bldg practices We are putting our RRA energy retrofits and to residential and commercial and small business 	Apr 5, 2010 9:55 PM	

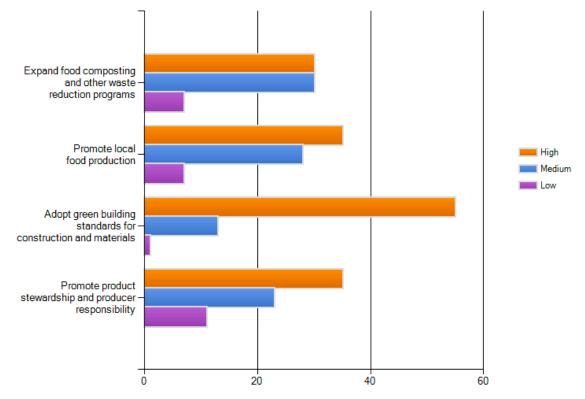
Immediate Action Willing/Able To Take

	Response Text		
11	Lead action groups to take on information sharing Lead political groups to explore expansion of our purchasing power	Apr 5, 2010 9:59 PM	
12	Appointing Climate change advocates to local committees and decision-making Boards and Commissions Adopt city goals with performance standards and metrics	Apr 5, 2010 10:04 PM	
13	Appoint people to commissions etc that are committed to addressing climate change and other sustainability issues (planning, parks, oversight, etc) Fund continued work on regional Climate Strategy- especially climate prosperity Replace fleet with more efficient, alternative fuel vehicles	Apr 5, 2010 10:10 PM	
14	developing new building codes redevelopment of streets "green"	Apr 5, 2010 10:21 PM	
15	increase green power purchasing plant more trees and shrubs communicate existing programs of energy efficiency to my community	Apr 5, 2010 10:22 PM	
16	First and foremost education and advocacy- Support. Tell this story to move in the region.	Apr 5, 2010 10:27 PM	
17	Hard to check boxes rather than thinking about systematic approach looking at cost benefit of solution, win-win solutions, and how the solutions work together to create synergistic benefits that are more than the sum of their parts	Apr 5, 2010 10:33 PM	
18	 Land use changes Promote transit and construction Improve operations for energy efficiency and better materials use 	Apr 5, 2010 10:35 PM	
19	Completed GHG inventory (local govt operations) Implementing energy efficiency retrofits, street and signal timing, solar PV installations, EV charging stations, LEED certified buildings, high density multi- amenity planning, developing climate action plan, community sustainability task force, city sustainability plan, alternative fuel vehicle fleet (CNG hybrid, all-electric when available)	Apr 5, 2010 10:38 PM	
20	Stop teh CRC in its present form; I just need 3 more votes.	Apr 5, 2010 10:42 PM	
21	Clean energy works Solarize Southwest Portland Green Streest / bike and sidewalk infrastructure (co-benefits) = triple win	Apr 5, 2010 10:53 PM	
22	I look forward to improving on current Portland, regional, and state efforts to reduce GHG.	Apr 5, 2010 10:54 PM	
23	assist Metro in making a transition to climate-friendly government operations	Apr 5, 2010 11:01 PM	
24	 Factor in long-tern costs, local sourcing of materials When analyzing contract bids Switch out my appliances with more energy efficient appliances. 	Apr 5, 2010 11:03 PM	
25	 I am a private planner, so the answer is individual rather than governmental: 1) ask myself is this car trip necessary? Can I combine trips? Can I bike or take transit instead? 2) turn off lights, heat, computers and other appliances when not in use 3) consider buying new appliances, bathroom fixtures, light bulbs, cars even when the ones I have still have life in them. Balancing energy/water conservation against cost savings 	Apr 5, 2010 11:12 PM	



Energy Toolbox (number of responses out of 72 survey responses)

Materials Toolbox (number of responses out of 74 survey responses)



Land use and Transportation Toolbox (number of responses out of 74 survey responses)

