



GREEN RIBBON COMMISSION

RECOMMENDATIONS

ACKNOWLEDGMENTS

Green Ribbon Commission

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LETTER FROM CO-CHAIRS

Dear Mayor McGinn,

Thank you for the opportunity to serve on the 2012 Seattle Green Ribbon Commission on Climate Protection. Like you, we also served on the 2005 Green Ribbon Commission. We are pleased to see that the City's commitment has remained steadfast, and we fully expect it to grow even stronger as time passes and as evidence mounts.

Climate change is a challenge of sobering magnitude and urgency. Action is required at all levels of government, and cities have a unique role to play in building low-carbon communities. In adopting the ambitious goal of carbon neutrality, the City has made clear Seattle will be at the forefront of climate action.

The Green Ribbon Commission took Seattle's climate protection goals to heart. We have developed recommendations for short- and long-term actions that will significantly reduce emissions while also providing numerous other economic, social and environmental benefits. The actions proposed in this report are ambitious. Implementing them fully will require bold City leadership and broad support from Seattle residents and businesses.

Given appropriate leadership, we are confident that Seattle is up for the challenge. Unlike what we see at the national level, the people of Seattle welcome the opportunity to be leaders. With this issue squarely in the middle of our new governor's agenda as well, the time is ripe for boldness. We have crafted recommendations to ensure that Seattle will not only lead on climate protection but will also create a prosperous, equitable, and all-around-great place to live.

The Commission is eager to play an ongoing role in helping the City move forward.

Sincerely,

Denis Hayes
Co-Chair

Doris Koo
Co-Chair

The Seattle Green Ribbon Commission was convened to advise the Mayor and City Council on the development of the 2013 Seattle Climate Action Plan with a focus on identifying priorities that advance the City's climate goals while also achieving multiple co-benefits that make Seattle a more environmentally sustainable, economically prosperous and socially just place. After substantial study and debate, the Green Ribbon Commission* has reached an enthusiastic consensus around these recommendations and we strongly support their inclusion in the 2013 City of Seattle Climate Action Plan.

NAMES & SIGNATURES

 Denis Hayes	 Doris Koo	 Sean Bagnall	 Jorge Carrasco
 Gene Duvernoy	 Dr. David Fleming	 Hilary Franz	 Dr. Howard Frumkin
 Brian Geller	 Terri Glaberson	 KC Golden	 Bert Gregory
 Peter Hahn	 Rob Johnson	 Craig Kenworthy	 Michael Mann
 Chris Martin	 Brice Maryman	 Megan Owen	 Ben Packard
 Jill Simmons	 Diane Sugimura	 Kathleen Casey Ridihalgh	
 Harold Taniguchi	 Jason Twill	 Kathy Washienko	

*Approval of these recommendations is solely an expression of support from the individual GRC members and does not constitute an endorsement by the organizations with which members are affiliated.

EXECUTIVE SUMMARY

Photo: Alicia Daniels Uhlig

Background

The City of Seattle has adopted a world-leading goal of carbon neutrality by 2050 and is updating the Seattle Climate Action Plan to put the City on the path to achieving that goal while also enhancing Seattle’s quality of life. To that end, the Green Ribbon Commission (GRC) was charged with developing climate action recommendations for inclusion in the Climate Action Plan.

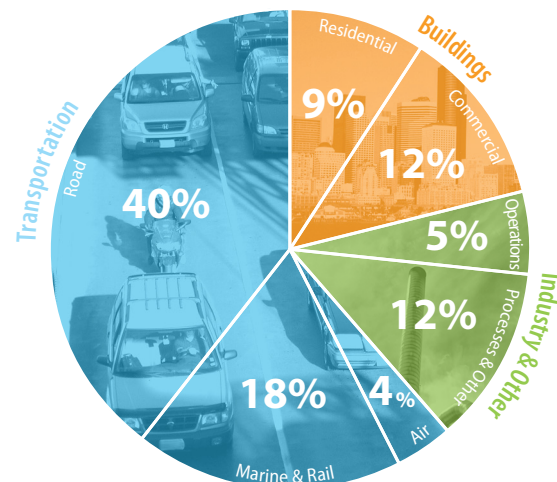
The GRC’s recommendations are focused on actions that reduce Seattle’s contribution to climate change while also advancing important community goals, including economic opportunity, shared prosperity, healthy communities, and environmental sustainability. The full set of recommendations address both broad-scale, plan-wide actions and sector-specific actions. The recommendations are summarized below.

Plan-Wide Recommendations

1. Take Bold Action
2. Create a Great Place to Live by Taking Climate Action
3. Embed Equity in Every Solution
4. Use Systems Thinking to Design Solutions
5. Build Support for Climate Action
6. Prioritize Implementation of the Climate Action Plan and Related Plans
7. Secure Funding for Implementation
8. Put a Price on Climate Pollution

Sector Recommendations

The sector categories for climate action recommendations represent the city’s major greenhouse gas emission sources, road transportation and building energy, as well as those areas that provide opportunities for enhancing the city’s resilience to the impacts of climate change, and that will build support for climate action.



Seattle Citywide Greenhouse Gas Emissions by Sector
(Source: 2008 Seattle Community Greenhouse Gas Inventory)



EXECUTIVE SUMMARY

Sector Recommendations

The GRC makes a total of 150 recommendations in the sectors outlined below, including 70 Quick Start Actions that can be undertaken in the next 1-3 years to pilot new ideas, test new approaches, and build support for other climate actions.

All of the Quick Start Actions are presented in the tables on pages 7 through 10.

TRANSPORTATION + LAND USE (49 Recommendations)

Where we live, work, and play, and how we access daily services all impact our greenhouse gas emissions. By linking land use policies with transportation policies, Seattle can more effectively reduce its largest source of GHG emissions: road transportation.

The GRC focused its Transportation + Land Use recommendations in the following areas:

- Funding
- Road Pricing
- Policy & Planning
- Transportation Infrastructure
- Transportation Demand Management
- Parking Management
- Vehicle Fuels & Technologies

BUILDING ENERGY (34 Recommendations)

From furnaces to air conditioning units, from stove tops to light fixtures, from computers to clothes dryers, we ask our buildings to perform many energy intensive tasks, which is why it's no surprise that building energy use accounts for over 20% of our city's total greenhouse gas emissions. Relying on energy from clean, low-carbon fuel sources and improving the overall energy efficiency of our buildings, to get the most out of the fuel we do use, are essential to reducing our GHG emissions.

In particular, the GRC focused its Building Energy recommendations in the following areas:

- Pricing & Financing
- Efficient Operations
- Efficient Construction
- Infrastructure for Low-Carbon Fuels

ADAPTATION (42 Recommendations)

Seattle already experiences the types of impacts expected with climate change, such as flooding, heat events, and extreme high tides. However, climate change will affect the frequency, intensity, and timing of these events. In many cases, what we now consider an extreme event will become a more normal event. Absent effective preparation, the impacts and costs associated with these events will increase. Therefore, in addition to working to reduce greenhouse gas emissions, it is imperative that the City assess and prepare for the impacts of climate change.

The GRC's recommendations are intended to help guide City planning to enhance Seattle's resilience to the impacts of a changing climate; they are focused on the following areas:

- Comprehensive Adaptation Assessment & Planning
- Natural Systems
- Utility Systems
- Land Use & the Built Environment
- Community Preparedness

BUILDING SUPPORT FOR CLIMATE ACTION (25 Recommendations)

The actions necessary to move Seattle toward a climate-friendly future require deep and sustained commitment by the community. The connections between climate action and broader community values must be understood and consistently communicated.

The GRC recommends leveraging Seattle's history as a climate action leader and learning more about what is most important to Seattle residents and businesses in order to build support for new climate policies that also align with and support the values expressed by the community.

Next Steps

The City will consider the GRC's recommendations along with other community input received to develop the Climate Action Plan.



EXECUTIVE SUMMARY

Quick Start Actions

TRANSPORTATION + LAND USE	LEAD AGENCY
Renew and extend the duration of the Bridging the Gap levy and prioritize revenues for multimodal transportation strategies, including investments in transit, pedestrian and cycling improvements and system maintenance.	Transportation
Understand the benefits of pricing policies on climate protection, transportation, and community goals, and their potential social equity impacts and solutions.	Transportation
Look at pricing opportunities on non-highway arterials. Use crowd sourcing to help identify an area of Seattle that has significant traffic congestion and/or vehicle diversion on to city streets from limited access highways. Develop a pilot project.	Transportation
Develop a tool to embed consideration of GHG emissions impacts and reduction opportunities when updating and implementing transportation and land use plans and policies.	Sustainability & Environment
Develop a Freight Master Plan incorporating goals to improve the efficiency and reduce the GHG emissions impact of goods movement.	Transportation
Develop a Public Space Management Strategy to creatively activate the public right-of-way.	Transportation
Reallocate a portion of the public right-of-way to a public/pedestrian space such as a plaza or parklet.	Transportation
Develop and implement a comprehensive land use and multi-modal corridor plan in a high priority transit and bicycle corridor.	Transportation
Build separated bicycle lanes in the Center City.	Transportation
Travel Information: Increase the number of real-time dynamic signage to share up-to-the minute estimates on bus arrivals.	Transportation
Build on the Safe Routes to Schools program and implement Safe Routes projects to improve pedestrian connections to transit and neighborhood business districts.	Transportation
Create a grant program to support mobility projects in business districts with paid parking.	Economic Development
Replace the entire trolleybus fleet with newer, more energy efficient technology.	King County Metro
Pilot test an all-electric battery powered bus.	King County Metro
Expand the City's municipal electric vehicle (EV) fleet.	Fleets & Facilities
Support private adoption of EVs through codes and streamlined permitting, and by assessing and planning for demand, access, and utility impacts.	Sustainability & Environment

BUILDING ENERGY

LEAD AGENCY

<p>Outcome-Based Incentives: Seattle City Light should coordinate with other utilities to pilot a performance-based utility incentive program.</p>	<p>City Light</p>
<p>Innovative Financing Options: Launch a working group of downtown property owners and managers to evaluate financing tools for commercial buildings and identify those which are most likely to promote the deepest energy-efficiency investments. Develop a plan to bring the financing tools to market.</p>	<p>Sustainability & Environment</p>
<p>Public Funding for Additional Incentives: Define the elements of an incentive program that a bond initiative would support.</p>	<p>Sustainability & Environment</p>
<p>Rental Housing Energy Efficiency Property Tax Exemption: Pass legislation for the authority to establish a property tax exemption program for existing rental housing owners who undertake significant energy retrofits.</p>	<p>Sustainability & Environment</p>
<p>If pilot results are positive, identify resources to scale up and expand Seattle City Light’s retro-commissioning pilot program.</p>	<p>City Light</p>
<p>Develop a strategy for retro-commissioning City facilities.</p>	<p>Sustainability & Environment</p>
<p>Establish a long-term program to provide assistance, financing and other tools to building owners, which helps them identify and implement more comprehensive energy-efficiency upgrades.</p>	<p>Sustainability & Environment</p>
<p>Support the rapid deployment of advanced metering infrastructure.</p>	<p>City Light</p>
<p>Define and test core program elements for a home energy rating requirement at the point of sale.</p>	<p>Sustainability & Environment</p>
<p>Work with the Seattle School District to create the greenest, healthiest, most energy-efficient portfolio of schools.</p>	<p>Sustainability & Environment</p>
<p>Evaluate the findings of the existing outcome-based energy code pilot between the Preservation Green Lab and the City and develop a strategy for building upon the pilot.</p>	<p>Sustainability & Environment</p>
<p>Work with stakeholders to continue improving the Living Building and Deep Green Pilot Program to promote deep green buildings in Seattle.</p>	<p>Planning & Development</p>
<p>Support development of a district energy pilot and ensure its commitment to low-carbon fuel sources.</p>	<p>Sustainability & Environment</p>
<p>Low Carbon Energy Master Plan: Develop a master plan to guide the establishment of low-carbon energy systems in the City.</p>	<p>Sustainability & Environment</p>
<p>Maintain Seattle City Light commitment to meet load growth with conservation and renewables, as well as to providing zero net emission electricity.</p>	<p>City Light</p>



EXECUTIVE SUMMARY

Quick Start Actions

ADAPTATION	LEAD AGENCY
Conduct a citywide assessment of the impacts of temperature, precipitation, and sea level rise.	Sustainability & Environment
Develop a comprehensive strategy to enhance resilience to changing climate conditions.	Sustainability & Environment
Use thermal imaging to identify areas that are likely to be more heavily impacted by heat events and use data to inform development of urban forest and tree planting priorities and programs.	Public Utilities
Keep on pace to restore all 2500 acres of forested parkland by 2025 through the Green Seattle Partnership.	Parks & Recreation
Implement projects in several urban creeks that connect floodplains, increase stormwater storage capacity and improve culverts to minimize flooding and improve habitat.	Public Utilities
Use applied research and modeling to evaluate climate change impacts on Seattle City Light's electricity resources and future energy demands beyond the 20-year planning horizon.	City Light
Research the impacts of climate change on hydroelectric projects.	City Light
Maximize the City's conservation programs to promote cost-effective energy-efficiency measures.	Public Utilities
Implement Advanced Metering to begin the transition to a "smart grid."	City Light
Work with federal and academic research groups to generate the next generation of climate data downscaled to the watersheds supplying the city's water.	Public Utilities
Continue to invest in water conservation programs reducing regional per capita water use.	Public Utilities
Continue to lead the Water Utility Climate Alliance.	Public Utilities
Adopt a green stormwater infrastructure policy and develop an implementation plan.	Sustainability & Environment
Evaluate the impacts of sea level rise on shoreline development and habitat and consider implications for shoreline management strategies.	Planning & Development
Collaborate with regional partners in addressing the impacts of sea level rise: Evaluate the full range of impacts based on best available science. Prepare a worst case scenario response strategy.	Sustainability & Environment
Assess climate change impacts on transportation infrastructure and operations.	Transportation
Pilot an advanced green building standard, such as the Living Building Challenge, on a City facility.	Sustainability & Environment
Review development codes and incentives, and identify barriers and potential opportunities, to encourage private development to become more resilient.	Planning & Development
Assess the public health impacts of climate change.	Public Health - Seattle & King County
Continue to assess climate change impacts and factor projections into City emergency preparedness planning.	Emergency Management
Consider the impacts of climate change on access to healthy, affordable food.	Sustainability & Environment

BUILDING SUPPORT FOR CLIMATE ACTION

LEAD AGENCY

- Conduct local message and values testing.
- Develop a compelling climate action narrative that is connected to what people care about.
- Use the narrative consistently and frequently in elected official and City department communication.
- Build a regional network of organizations and individuals committed to using the narrative.
- Develop images, info-graphics, and videos to illustrate the outcomes of implementing the Climate Action Plan.
- Connect climate change to projected local impacts that people relate well to.
- Explore how new media strategies, such as Facebook, Twitter, and video game technology can tell the compelling story of climate action.
- Use crowd-sourcing and other emerging technologies to provide opportunities for the public to participate in designing climate policies and actions.
- Host a bright ideas contest to tap into the community’s creativity.
- Partner with higher education institutions to provide opportunities for students and faculty to apply their knowledge to policy, planning, and technical challenges.
- Develop neighborhood profile case studies detailing the on-the-ground impact of climate actions in specific neighborhoods.
- Develop “strategies in action” profiles that highlight the outcomes of individual climate actions.
- Activate a network of leaders to advise and assist the City in implementing the Climate Action Plan, commit to take action and serve as allies in the community.
- Identify new and unexpected messengers, including youth to spread the word about the benefits of climate action.
- Create an ongoing program to support community-initiated climate action projects.
- Work with a school-focused community organization on a project that increases student engagement in climate action.
- Create or build on an existing social media tool to provide a venue for people and organizations to share the actions they have taken and offer assistance to others.
- Create a mechanism to provide feedback on the impact of collective actions to reinforce the value of individual efforts.

Sustainability & Environment is the lead agency for all Quick Start Actions in this sector.