

Seattle Climate Action Plan

2008 PROGRESS REPORT



Photo courtesy of Moontown Foundation

Taking Action for the Climate and the Community

Four years ago, Mayor Nickels began the City's Climate Protection Initiative by pledging that Seattle would meet the greenhouse gas reductions targets of the international Kyoto Protocol by reducing citywide emissions seven percent below 1990 levels. And he challenged mayors across the country to do the same.

Today, more than 900 mayors have embraced the Kyoto Protocol, and there is beginning to be serious movement at the federal level to solve climate change. As we enter 2009, the Obama administration is looking to jump start the economy by investing in clean technology and green jobs; Congress is working to regulate greenhouse gas emissions; and the President and Congress are looking for ways to inspire climate solutions in local communities.

We're also making great progress here in Seattle. In 2008 alone, the City made significant headway implementing climate protection strategies, including adding new transit service and bike lanes, pioneering electric vehicle technology, ramping up investment in electricity conservation, and stimulating the green economy. Sound Transit is planning to expand bus and light rail service, thanks to the mass transit expansion measure that voters overwhelmingly passed in November.

While the challenge of climate change continues to loom large, momentum is on our side. People are

stepping up, ready to take action. Here in Seattle, 75 percent of survey respondents say they have taken action to reduce their carbon footprints by driving less, using public transportation, and conserving energy, and most want to do more. This willingness to take action is great news because a meaningful solution to climate change is dependent on everyone doing their part. Through efforts such as the ones highlighted in this report, the City is committed to developing the policies, programs and infrastructure that build climate-friendly communities and businesses while helping Seattleites reduce their personal climate pollution.

2008 Climate Highlights

- 20,000 hours of new bus service
- 50 miles of new bike lanes and sharrows since Bicycle Master Plan was finalized
- 40 percent reduction in fuel use by Seattle Center
- Launched Green Building Initiative to increase energy efficiency of Seattle buildings by 20 percent
- 1.4 million CFLs distributed, avoiding 23,000 tons of greenhouse gases
- Distributed 10,000 home energy kits to help residents increase the energy efficiency of their homes

TRANSPORTATION CHOICES, COMPACT COMMUNITIES

Creating transportation options and building livable neighborhoods

Car and truck emissions are the largest source of climate pollution in Seattle and one of the hardest areas of our carbon footprint to reduce. In 2005, transportation was the only emission sector in Seattle to show an increase above 1990 levels. If we are going to change this, we must offer transportation options to Seattle residents that get them where they want to go. We are moving toward a future where people consider proximity to transit lines, instead of freeways, when selecting jobs and deciding where they want to live. To encourage this kind of smart growth, we continue to improve pedestrian and bicycle access and safety, increase transit service, and keep goods and services moving.

In 2008, Seattle added bus hours, operated the first full year of new streetcar service, worked on the finishing touches for light rail, designed streets for bicyclist and pedestrian safety and supported people trying to drive less.

Building “Complete Streets”

The “Complete Streets” policy requires City staff to consider all users when designing street improvement projects: cars, trucks, bikes, and pedestrians. The goal is to make street improvements that support as many transportation modes as are appropriate for the location and street type. During the first year, the City evaluated 40 transportation projects using the “Complete Streets” framework which helps planners improve lighting for pedestrians, accommodate transit, plant trees, enhance pedestrian and bicycle access and safety, and protect freight routes. The City’s analysis resulted in a number of project improvements. For example, the 15th Avenue West paving project in Interbay incorporated business and transit lanes and sharrows—lanes marked for bike and car travel.

Adding bus service

Not only is the City making our streets work better for buses, but thanks to “Bridging the Gap” – the successful 2006 ballot measure that raised \$365 million for city-wide transportation improvements over nine years — we bought 20,000 hours of new transit service, the first such purchase ever. Buses now arrive every 15 minutes or less on many of the routes serving Ballard, Belltown, Capitol Hill, Fremont, Madison Park, Mount Baker, Queen Anne, the University District and Wallingford. When the service additions are complete in 2010, the result will be a total of 45,000 hours of new bus service per year in Seattle — the equivalent of ten buses running twelve hours per day 365 days per year. More than 45 percent of these bus service improvements are focused directly on Metro’s electric buses, which have zero greenhouse gas emissions and are approximately twice as energy efficient as diesel, diesel hybrid, or natural gas fueled buses.

Expanding the streetcar network

The new Seattle Streetcar celebrated its first birthday in December. The streetcar creates an important connection between the downtown retail core and the soon-to-be Westlake light rail station with Seattle’s fastest growing neighborhood, South Lake Union. During its first year, the streetcar exceeded ridership estimates by 30 percent, carrying 450,000 riders. In late 2008, Mayor Nickels and Seattle City Council endorsed a plan to develop an expanded Streetcar Network that links neighborhoods such as Ballard and Fremont to one another and downtown. Funding for the first expansion—the First Hill line—was approved as part of the successful mass transit expansion initiative.



Connecting the region with light rail

Another big milestone will be the completion of Central Link Light Rail this year. Testing is now underway. The mass transit expansion measure adds another 36 miles to the system. It also increases regional express bus and commuter rail service. Once completed, Sound Transit estimates the increased transit options will reduce regional greenhouse gas emissions by 100,000-180,000 metric tons annually.

Making street space inviting for pedestrians and bicyclists

Many people choose to travel by foot or bike and every bus ride starts with one or the other. The City is working toward the goal of being the most walkable, bicycle-friendly city in the nation. In 2008, the City completed four trail segments, including a segment of the Burke Gilman Trail, built 31 blocks of new sidewalk, and repaired more than 48,000 feet of existing sidewalks. In addition, the City constructed five school walking routes, marked 90 school crosswalks and added over 100 school zone signs, making it easier for kids to walk and bike to school. Providing more safe space for bicyclists is a major objective for the City.

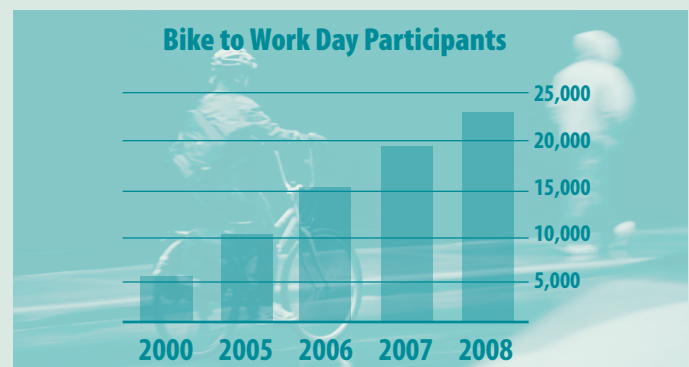
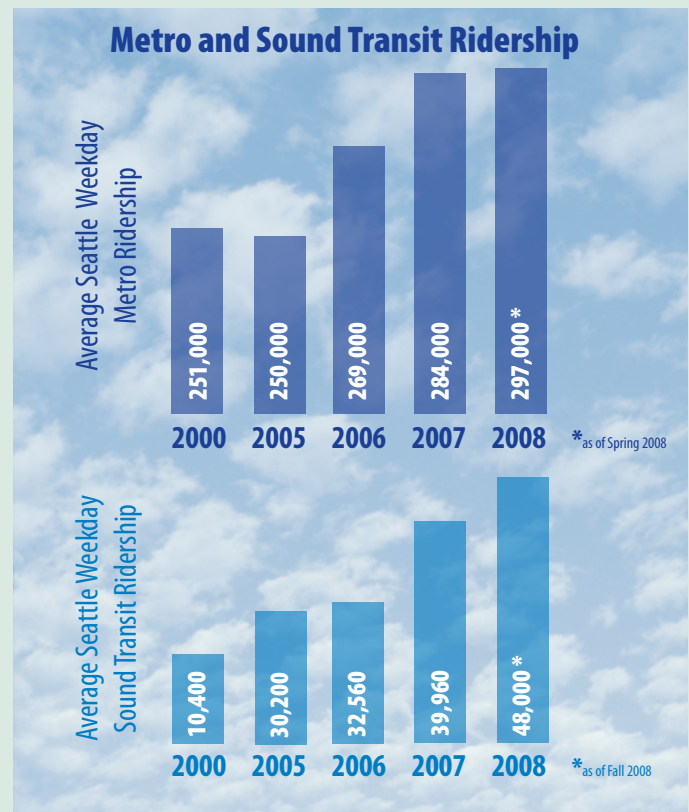


Since the Bike Master Plan was finalized in 2007, 50 miles of new bike lanes and sharrows have been added. At places where bike

lanes and cars intersect, sections of bike lanes are being painted green to raise motorist awareness. The City plans to add about a dozen green bike lanes at key intersections over the next three years. These safety measures will help Seattle's increasing number of bike commuters reach their destinations safely. According to the Cascade Bicycle Club, bike commuting has increased by more than 75 percent in the past ten years, demonstrated by the increase in Bike to Work Day participants, from 5,300 participants in 2000 to 23,000 participants in 2008.

The sidewalk that lowered its carbon footprint

In 2008, the Seattle Department of Transportation started using climate-friendly "slag" cement instead of traditional cement in many of its sidewalk construction projects. Although most people don't know it, cement production releases a lot of greenhouse gas emissions—approximately four percent of the world's total emissions. But, there is some good news: cement substitutes, like slag, can cut greenhouse gas emissions from the cement production process in half. City engineers report that the slag cement performed just as well, if not better, than traditional cement. By using slag cement to build Seattle sidewalks, the City is setting an example for others that climate-friendly materials are viable options for construction projects.



CLEAN VEHICLES, CLEAN FUELS

Increasing fuel efficiency, new vehicle technology, and use of biofuels

Of course, Seattle residents and businesses need to drive some of the time. For those trips, there are still ways to reduce climate pollution through new vehicle and fuel technology. The City is paving the way by exploring electric vehicle options and building a vehicle fleet that uses significantly less fuel. In addition, the City is making sure the taxis on our streets also go green with new regulations that require a substantial increase in taxi fuel efficiency.



Plug-It In

This year, the City acquired four plug-in hybrid electric vehicles (PHEV), as part of a federally funded demonstration project to test their functionality and fuel efficiency. The City's PHEVs, which were converted from hybrid Prius cars, have gotten more than 100 miles per gallon on some trips. In addition to the demonstration project, Seattle joined the national "Plug-in Partners" campaign, a national initiative of over 500 jurisdictions with the goal of increasing the market for PHEV's and reducing development costs.

A Greener Fleet

With 4,000 vehicles in the City fleet consuming more than 2.4 million gallons of fuel in 2008, even small improvements in fuel efficiency translate into lots of savings in greenhouse gas emissions. From 2007 to 2008, the City reduced its fuel consumption by 41,000 gallons—reducing 410 tons of greenhouse gases—and set a goal of reducing citywide consumption by an additional three percent in 2009. Some departments are already leading the way with significant reductions in fuel use. Seattle Center set a high

bar by reducing its fuel use by 40 percent by converting a significant portion of its off-road fleet to electric vehicles. The Parks & Recreation Department reduced fuel consumption by five percent by using hybrid vehicles when possible, properly inflating tires, cutting down on idling, ride-sharing, and educating staff on how to be "fuel-smart" drivers.

More Taxis, Less Pollution

In August 2008, the City Council approved a proposal by Mayor Nickels to increase the number of taxis in Seattle by nearly 30 percent while reducing total greenhouse gas emissions from Seattle taxis by at least 10 percent. The new regulations, which will be phased in over the next four years, require that taxi vehicles meet specific standards for fuel efficiency and emissions in order to receive or renew a Seattle license. Considering Seattle taxis currently average around 18 miles per gallon, the new regulations will significantly increase the fuel efficiency of Seattle's taxi fleet. By increasing the number of taxis on the road, the regulations recognize that taxis provide an important transportation choice for residents, but they also make sure they are a clean transportation option.

CLEAN ENERGY, EFFICIENT BUILDINGS

Developing climate-friendly energy and enhancing the energy efficiency of Seattle's homes and businesses

The City has set a goal to make Seattle the green building capital of the United States by increasing the energy efficiency of Seattle buildings by at least 20 percent by 2020. Improving energy efficiency will not only cut greenhouse gas emissions, but it will also save Seattleites money on utility bills and expand our city's green economy by creating jobs in energy conservation. The energy efficiency goal builds on a long-standing commitment by Seattle City Light to conservation and renewable energy, a commitment that was reiterated last year with the release of an aggressive five-year plan to double City Light's investment in conservation.

Conservation:

The cheapest and cleanest energy source

Seattle City Light has a 30-year history of investment in conservation, and 2008 was no different. Through its Twist & Save program, City Light has distributed more than 1.4 million compact fluorescent light bulbs (CFLs). From these CFLs alone, Seattle residents saved enough energy to avoid nearly 23,000 tons of greenhouse gases, the equivalent of taking 6,200 cars off the road. All told, City Light saved about 88.5 million kilowatt-hours through its conservation programs in 2008, exceeding its conservation goals by about 20 percent, avoiding 53,000 tons of greenhouse gases, and saving enough energy to power more than 9,800 homes in Seattle for a year.

In August 2008, City Light launched a five-year Conservation Action Plan that significantly increases the utility's investment in conservation and will save customers more than \$310 million in energy bills over five years. The energy savings from the Conservation Plan will avoid one million tons of carbon dioxide emissions, which is the equivalent of taking 219,000 cars off the road for a year. The plan will double City Light's conservation savings and create over 1,000 green jobs.

City Light's continued investment in conservation enabled the utility to continue to offer customers reliable and affordable electricity with zero net greenhouse gas emissions, which the utility has done since 2005. City Light achieves carbon neutrality by first meeting all new electricity demand with conservation and renewable energy, and then by funding carbon reduction projects to offset any remaining greenhouse gas emissions.

Soaking in the Seattle Sun

The City is also working to promote alternative sources of energy, including the use of solar energy. Solar panels in Seattle have been shown to generate as much energy as those in Germany, a world leader in solar energy generation. Last year, Seattle was one of 25 cities to be named a "Solar America City" by the U.S. Department of Energy. As part of the Solar America City award,

City Light launched the Emerald City Solar Initiative to increase the use of solar technology by incorporating solar standards into buildings and community projects and by starting a solar education and outreach program.

Green Building Task Force

While City Light's conservation commitment will go a long way toward achieving the City's building energy efficiency goal, electricity conservation alone will not get us there. Seattle buildings also consume natural gas, heating oil, and steam heat, all of which can be reduced through conservation measures. In July 2008, Mayor Nickels created a Green Building Task Force to evaluate policies aimed at improving energy efficiency in Seattle's residential and commercial buildings by 20 percent. The fifty-member task force, comprised of leaders from Seattle's real estate, development, building management, finance, affordable housing, environmental, and labor communities, provided feedback on a wide range of policy options, including energy audits, financing for energy efficiency upgrades, and energy code improvements. The yearlong examination of energy efficiency opportunities will culminate this spring with the Mayor introducing new policies.



Building the Green Economy

From Washington DC to Washington state, talk of economic stimulus is dominated by discussions of green businesses and jobs that will reinvigorate the economy and reduce dependence on fossil fuels. To stimulate the green economy in Seattle, the City's Office of Economic Development has been working to promote clean technology, careers in energy efficiency, and green industrial businesses. The City co-sponsored the first ever "Green Industrial Business and Career Expo" to highlight industrial opportunities for greener products and processes, renewable energy opportunities involving algae, geothermal, solar, wind and tidal resources, and strategies for industrial firms to save energy while reducing carbon footprints.

One of the more exciting aspects of the green economy is the potential to provide job opportunities for Seattle's low-income and low-skilled residents. In cooperation with the Moontown Foundation, the City of Seattle is piloting a door-to-door direct-installation project with "Got Green," a youth organization based in the Rainier Valley. Young adults receive training and then directly install CFLs and other energy saving devices into homes across the city. Seattle is also partnering with South Seattle Community College to develop an energy auditing training program. The training program, which is the only one in the state focused on energy efficiency, will work in tandem with the City's energy efficiency efforts to provide green jobs pathways for Seattle residents.



COMMUNITY ENGAGEMENT

Helping residents and businesses be part of the solution to climate change

Here in Seattle, the City is not alone in wanting to take action on climate change. Residents and businesses have consistently told us that they too want to be part of the solution to global warming. But, for many Seattleites, the question remains: "What can I do?" Through two innovative programs—Seattle Climate Action Now and the Seattle Climate Partnership—the City is helping residents and businesses answer that question and get started taking action.

Inspiring Action at Home and on the Go

Seattle Climate Action Now is the City's outreach program to help residents identify what they can do at home, at work, and on the road to be a part of the climate change solution. In 2008, Seattle Climate Action Now focused on actions that residents can take to reduce home energy and transportation emissions. Combined, building energy and transportation make up more than three quarters of Seattle's carbon footprint and are the areas where individual action can have the biggest impact.

One of the cornerstones of Climate Action Now is to put resources directly into the hands of residents to make it easier for them to reduce their impact on climate change. To that end, last year, the City distributed 10,000 home energy efficiency kits, which included a how-to DVD on home weatherization, as well as CFLs, shower timers, and coupons for energy smart power strips. Seattle Climate Action Now asked residents to "Give Your Car the Summer Off," and provided transit information, bike maps, bus tickets, discounts for transit riders' local recreational destinations, and kits to help neighbors throw summer street parties. In addition, the City offered incentives to residents who cut down on driving trips, stopped driving alone to work, or sold their car, encouraging citizens to walk, bike, and use transit more often. Seattle Climate Action Now also has a website of resources—www.SeattleCAN.org—that includes a community events calendar, a carbon calculator, and carpooling resources.



Going Green, One Business at a Time

The Seattle Climate Partnership is a voluntary agreement among Seattle-area businesses to take action to reduce their greenhouse gas emissions. Founded in 2006, the number of partners has grown from 12 to 113, and range from large businesses, such as Starbucks, REI and Group Health Cooperative, to smaller companies like Macrina Bakery & Café.

The Partnership, run out of the City's Office of Sustainability & Environment, provides tools, resources, and technical assistance to facilitate greenhouse gas reductions. The resources focus on how businesses can make changes in operations, transportation, waste disposal and materials to lower their carbon footprint, save energy, and cut costs. In 2008, the Partnership released a new version of its carbon footprint tool, held workshops on climate reduction strategies, published sector-specific resource guides, and developed case studies of Seattle businesses who have taken action to reduce their footprint.

Partners are beginning to see results of their efforts. HomeStreet Bank reduced electricity consumption through actions such as reducing the number of servers in their office. In addition, they reduced paper use by 15 percent and have a goal to reduce by another 15 percent this year. The University of Washington Medical Center implemented an innovative water reuse system for laundry, which saved almost 12 million gallons of water, \$140,000 in water costs and \$79,000 in natural gas costs within two years. Partners have found that reducing their carbon footprint can also inspire employee loyalty, strengthen their brand, and improve their record of corporate responsibility.

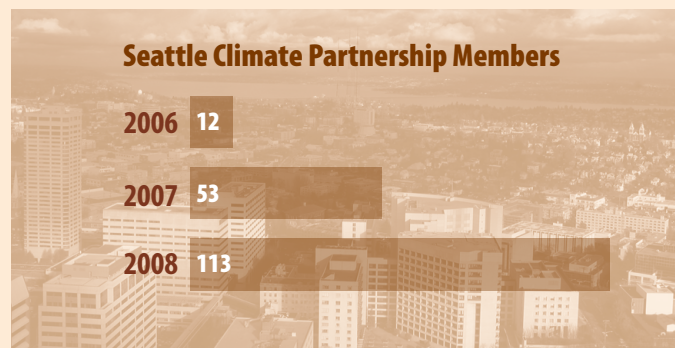
GETTING THE WORD OUT: USING ART AND THE WEB TO INSPIRE ACTION

Climate Action Now asks Seattle students: "What's Your Climate Solution?"

In partnership with Seattle Public Schools, the Seattle Art Museum, and Nordstrom, Seattle Climate Action Now held an art contest for students, who were asked to use art to answer the question: "What's Your Climate Solution?" The winning design can now be seen on shirts on sale at SAM SHOP and the 12 finalists can be seen in the 2008-2009 school calendar that was distributed to students and is available online. To download the calendar, visit www.seattlecan.org/downloads/calendar.pdf

Getting Downtown Just Got Easier

There is now a one-stop shop for Seattle residents and workers to connect with commuting resources, www.CommuteSeattle.com. Developed by the City in partnership with King County Metro Transit and the Downtown Seattle Association, CommuteSeattle.com helps Seattle commuters, employers, and property owners plan bus trips, learn about events impacting traffic, request tailored consultations for implementing employee and tenant commuter programs, and much more. The goal of CommuteSeattle.com is to reduce drive-alone commuter trips in order to improve access to and mobility through downtown, with the aim of reducing daily vehicles in downtown Seattle by at least 4,000 in 2011 and 15,000 in 2015. To jump-start the reductions, 44 downtown organizations have committed to helping reach this goal by signing a pledge to reduce the number of drive-alone commuters in their building or office.



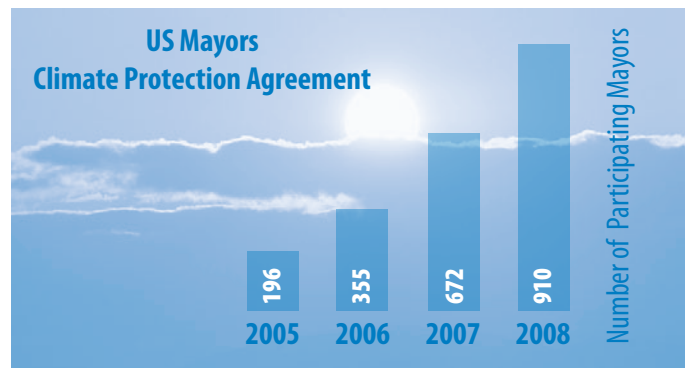
LEADERSHIP, LEVERAGE

Leading by example, sharing best practices, and advocating strong climate policy

While it's critically important that Seattle do its part to reduce climate pollution, if others across the nation don't join with us, our actions will have little impact on the problem. Through the Mayors' Climate Protection Agreement, 910 mayors, representing nearly 82 million Americans—27 percent of the United States—have signed the Agreement, and are taking action in their communities to reduce climate pollution.

For local communities to be successful, supportive state and federal climate policy is critical. In 2008, the City was active at the federal level, working to promote the creation of the Energy Efficiency and Conservation Block Grant and to advance a federal cap-and-trade program that puts firm regulatory limits on greenhouse gases.

In June, a US Conference of Mayors resolution passed that was the most comprehensive statement to date by local elected officials on the preferred design of a federal cap-and-trade program. The resolution called for a declining cap that is consistent with the science—80 percent reduction by 2050—and a system of allocating permits that is fair to consumers and provides resources to local governments. Closer to home, Seattle has been an active participant in the stakeholder process for the Western Climate Initiative, a regional effort to develop a cap-and-trade program in Washington, surrounding states, and Canadian provinces. Seattle was also a member of the Governor's 2008 Climate Action Team, which made recommendations on ways the state and local governments could meet their climate goals.



MEASURING OUR PROGRESS

The overall measure of progress for the Climate Protection Initiative is whether we are reducing our community-wide carbon footprint consistent with the City's 2012 and 2050 climate goals. In 2007, we released a 2005 community carbon footprint which showed that Seattle was on the right track: we'd reduced greenhouse gases 8 percent below the 1990 baseline. However, that progress is unlikely to last without further action. We know that more people, homes, jobs and businesses in Seattle between 2005 and 2012 will mean more demand for energy to power and heat our buildings, and more demand for transportation services. And, we know that the City's 2012 goal is just the beginning—over the long-term we need to reduce our climate emissions 80 percent below 1990 levels.

The next community-wide footprint will be released in 2010, reporting 2008 data, and will tell us whether we're still headed in the right direction. In the meantime, the City has identified a collection of measures that can be tracked more frequently than the carbon footprint itself to give us early indications of progress. These measures tell us whether we're driving less, using less energy, and living in climate friendly communities. Many of these measures are shown throughout this report, and the full set of measures can be found at www.seattle.gov/climate.

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City of Seattle

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