NATIONAL LEAGUE of CITIES | CENTER FOR RESEARCH & INNOVATION

Sustainability International Exchange:

National League of Cities' Delegation to Hamburg, Germany

April 18- 21, 2012

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About the National League of Cities

The National League of Cities (NLC) is the nation's oldest and largest organization devoted to strengthening and promoting cities as centers of opportunity, leadership and governance. NLC is a resource and advocate for more 1,600 member cities and the 49 state municipal leagues, representing 19,000 cities and towns and more than 218 million Americans.

Through its Center for Research and Innovation, NLC provides research and analysis on key topics and trends important to cities, creative solutions to improve the quality of life in communities, inspiration and ideas for local officials to use in tackling tough issues and opportunities for city leaders to connect with peers, share experiences and learn about innovative approaches in cities.

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Foreword

Across the United States, local governments, communities, business leaders, universities and other key stakeholders are embracing and actively pursuing initiatives to promote, strengthen and advance local and regional sustainability. While the concept of 'sustainability' has often been discussed in terms of environmental stewardship, many cities are taking a comprehensive approach to apply sustainability principles to enhance economic development, promote social responsibility and enhance quality of life for residents. Local governments and their leaders recognize that healthy, prosperous and resilient communities develop not as a result of isolated initiatives, but through a combination of clear vision, strong leadership and engaged process and strategic action.

The National League of Cities is honored to lead this delegation of U.S. local elected officials to Hamburg, Germany, at the invitation and with the support of the U.S. Consulate General in Hamburg. Leaders in this delegation represent communities of varying sizes across the country that have demonstrated significant commitment and achievements in pursuing comprehensive sustainability initiatives. Their efforts are emblematic of the extensive level of engagement and activities happening in cities across the U.S.

While not often reported in the national or international media, cities across the country are on the front lines of many challenging issues and are increasingly turning to sustainable approaches to identify solutions. For example, as decision makers and first-responders, local leaders are taking direct action to increase the efficient use of energy and water resources, explore waste management and minimization strategies, protect and increase access to open space, expand opportunities for alternative transportation, identify and promote linkages to green economic development and utilize innovative technologies to maximize connectivity of resources and inform community design.

The opportunity to visit, share ideas and learn from the experiences of Hamburg, Germany is especially exciting given the city's impressive record of accomplishments in this area. As the 2011 European Green Capital winner, Hamburg is internationally recognized as a leader and model for cities on how to achieve social, economic, and environmental balance and prosperity over the long-term. We applaud the City of Hamburg for its leadership and are appreciative for this opportunity to learn and share ideas to enhance and strengthen sustainability goals of cities throughout the U.S. and Germany. The international exchange of best practices through delegations such as these furthers the knowledge, relationships and inspiration needed to continue the complex and challenging – but necessary – work of sustainability throughout cities in the U.S. and abroad.

We are especially thankful to all those who have contributed to the program of events presented during this visit, including but not limited to: The U.S. Consulate General in Hamburg, The U.S. Embassy in Berlin, The City of Hamburg, The Hamburg Port Authority, The Ministry of Urban Development and Environment, Bucerius Law School and The Hamburg Chamber of Commerce.

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Map of U.S. Cities Represented within Delegation

Baltimore, Maryland

http://www.baltimorecity.gov/

Region: Eastern U.S.
Population Size: 620,961
Mayor: Stephanie Rawlings-Blake

Summary of Baltimore's Commitment to Sustainability:

Baltimore, the largest city in the state of Maryland, sits on the tidal portion of the Patapsco River, which flows into the Chesapeake Bay. Historically, Baltimore was one of the leading ports of entry for immigrants, as well as a major manufacturing hub in the United States. In recent years, the city has transitioned to a more service-oriented economy, and the city's historic Inner Harbor has become one of the leading tourist attractions and landmarks in Maryland. Baltimore has implemented numerous environmental programs and initiatives to maintain the health and vibrancy of its waters; preserve the culture of its neighborhoods; and support an increased quality of life for its residents.

The Baltimore Sustainability Plan guides the development and implementation of various City-led sustainability initiatives. The plan was adopted in 2009 and engaged over 1,000 citizens in an eight-month public engagement process. Today, the Baltimore Office of Sustainability, within the City's Department of Planning, oversees the development and implementation of various sustainability programs and coordinates the interests of various private and public stakeholders in order to advance the city's sustainability goals. Additionally, the Commission on Sustainability-- comprised of 21 members from various environmental groups, community organizations, local non-profits, private industry, and city government -- works with the Office of Sustainability to elevate sustainability issues within Baltimore. In the last several years, the city has been active in a variety of topics, including green building and development practices, resource conservation, climate change and local food access.

Notable Sustainability Achievements to Date

- ***Healthy Harbor Initiative and Plan:*** The Waterfront Partnership of Baltimore is a team of property owners, city officials, nonprofit organizations and citizens bringing a spirit of stewardship to the Baltimore Harbor and its waterfront. In 2009, the Waterfront Partnership launched the Healthy Harbor Initiative, with the goal of making the Harbor swimmable and fishable by 2020. In 2011, the Waterfront Partnership released the Healthy Harbor Plan, along with a fully detailed technical report, to provide a roadmap to

achieving this goal by reducing pollution sources including bacteria, nutrients, sediment and trash in the Harbor and its tributaries.

- ***Green Building Standards:*** In 2010, the City of Baltimore's Department of Housing and Community Development, in partnership with the Planning Department, released the Baltimore City Green Building Standards (BCGBS). The BCGBS provide green building guidelines that are relevant to Baltimore's unique building and land use issues. The standards incorporate specific aspects of the U.S. Green Building Council's LEED rating system and serve as an incentive for new green development in the city. The BCGBS apply to commercial and multi-family residential buildings over 10,000 square feet that are either newly constructed or extensively modified. In 2010, the City of Baltimore was awarded the Innovative Local Market Leadership Award from the Maryland Chapter of the U.S. Green Building Council for the creation of the BCGBS.

- ***Baltimore Neighborhood Energy Challenge:***
  The Baltimore Neighborhood Energy Challenge (BNEC) is a pilot program of the Baltimore Office of Sustainability and the Baltimore Community Foundation. BNEC combines positive reinforcement, personal interaction, and tailored resources to provide residents with incentives to reduce their energy use. In its first two years, BNEC worked with 16 Baltimore neighborhoods, 129 Neighborhood Energy Captains, and 1400 households, to spread knowledge, resources, and motivation to help residents save energy and money. BNEC distributed more than 2000 energy saving kits to residents across Baltimore, and helped reduce energy use among participants by an average of 6%.

- ***Baltimore Schools Sustainability Challenge:*** The City Schools Sustainability Challenge builds youth environmental leadership by supporting "Green Teams" of students and teachers at city public schools. A partnership of the Baltimore City Public School System, the Baltimore Community Foundation, and the Baltimore Office of Sustainability, the Challenge provides Green Teams with $1,000 grants to plan and implement projects focused on greening, resource and water conservation, and waste and energy reduction. In 2011, 37 schools participated (of 204 total schools), more than doubling the participation from 2010. Green Teams in 2011 added to their schools: new recycling bins, composting bins, vermicomposting bins, energy-saving measures, schoolyard gardens, and rain barrels. Other project results included thousands of pounds of Styrofoam trays and compostable/recyclable materials diverted from landfills. The program continues to grow, with 49 schools receiving grants for 2012.

- ***Food***: Baltimore's Food Policy Initiative is a collaboration between the City of Baltimore's Department of Planning, Office of Sustainability, and Department of Health. The aim of the initiative is to increase access to healthy, affordable, and fresh foods to Baltimore residents, specifically those living in food deserts around the city. Various initiatives completed or underway include supporting and expanding farmers markets, specifically in food deserts, supporting urban farming and urban agriculture on vacant land, transforming existing public markets into healthy food hubs, and developing a city-wide healthy eating publicity campaign.

- ***Port of Baltimore:*** The Maryland Port Authority (MPA) has initiated a number of projects and programs related to water quality, air quality, habitat, waste and recycling, and education and outreach. MPA employees participate in the Environmental Management System, which includes environmental awareness training to help prevent environmental problems and identify and fix problems when they occur. The Dredged Material Management Program involves the management and placement of dredged materials for use in environmentally beneficial projects, including wildlife habitat restoration, green schoolyards, and a nature center.

- **Baltimore Historic Districts:** For fifty years, Baltimore has been committed to the preservation and celebration of its rich history. Currently, Baltimore has 78 National Register historic districts which comprise more than 65,000 structures. National Register designation makes properties eligible for local, state and federal historic preservation tax incentives. In addition, 33 local historic districts that total more than 11,000 buildings have been designated by the Mayor and City Council. This designation provides for design review of all exterior alterations by the Commission for Historical and Architectural Preservation.

For More Information about the City of Baltimore's Sustainability Efforts:

City of Baltimore Office of Sustainability: http://www.baltimoresustainability.org/

Cleveland, Ohio

http://www.city.cleveland.oh.us

Region: Midwestern U.S.
Population Size: 396,815
Mayor: Frank Jackson

Summary of Cleveland's Commitment to Sustainability

Cleveland is the second largest city in the state of Ohio, positioned along the Cuyahoga River and next to Lake Erie. Historically one of the largest manufacturing hubs in the United States, Cleveland has in recent years been at the forefront of sustainability initiatives and has become a model of collaboration among city government, residents, and businesses to transition towards a more sustainable economy. The city has implemented numerous programs around environmental protection and preservation of the waters and open space; green economic and workforce development; and equitable practices, specifically with regard to community involvement, food access, and design.

Sustainable Cleveland 2019 is the city's largest and most comprehensive sustainability initiative to date. Starting in 2009, this 10-year city-led initiative has engaged people from across neighborhoods, businesses, and institutions to "build an economic engine to empower a green city on a blue lake." Each year leading up to 2019, Cleveland will focus on one of the nine identified key areas fundamental to a sustainable economy. These areas include topics ranging from renewable energy and energy efficiency, to clean water, healthy neighborhoods, and green spaces. The topic area for 2012 is "local foods" and is close to the heart of many Cleveland residents who are already actively participating in over 200 community gardens and dozens of non-profit urban farms, gardens, and farmers markets. This year, the city has already hosted a local food fair, begun evaluating current urban agriculture policies, and is highlighting the success of several working groups in local food promotion, production, distribution, storage and retail.

Notable Sustainability Achievements to Date

- ***Waste Reduction:*** The city's goal is to decrease the amounts of waste generated both by the city and within city limits. In 2009, the city saved $254,000 by recycling and diverting 5,800 tons of recyclable material from landfills. Also, since the residential curbside recycling program began in 2007, the city has saved $478,626 through waste disposal cost avoidance and recycling revenues. The city will continue expanding the curbside recycling program by 25,000 residents each year until the entire city has access to curbside bins.

- ***Water Management:*** The city has given away over 1,000 rain barrels for free to Cleveland residents through a partnership between the regional sewer district and other organizations. Additionally, residents are educated on the importance of stomwater capture and water sustainability to the health of the Lake Erie Watershed. The city has also installed rain gardens throughout the community to serve as educational labs for residents and businesses.

Additionally, per requirements set by the United States Environmental Planning Agency (EPA), the city is developing a *Watercourse Protective Zone*, a document that outlines standards and best practices for managing stormwater at development projects in specified riparian areas.

- ***Energy Efficiency:*** The city partnered with ShoreBank Enterprise to create the *Greater Cleveland Energy Alliance,* which developed an energy efficiency retrofit program for commercial and residential customers in the region. Additionally, leaders from reputable Cleveland companies and organizations have created the *Cleveland Carbon Fund*, the first community-based, open-access carbon reduction fund in the United States that is meant to help combat the harmful impact of carbon emissions in the Cleveland region and on the environment worldwide. Donations to the Fund support local sustainability community projects in Cleveland. In2012, the city has launched the EnergySaver program which provides savings on energy audits and improvements for homeowners as well as low interest financing options for retrofits.

- ***Renewable Energy:*** In June 2008, the City of Cleveland adopted a citywide Advanced Energy Portfolio Standard (AEPS) to ensure that 15% of Cleveland Public Power's energy comes from advanced or renewable sources by 2015, 20% by 2020, and 25% by 2025. Additionally, the city and the state have committed to establish Cleveland and Cuyahoga County as a national leader in offshore wind power and wind power manufacturing. The city's electric utility, Cleveland Public Power has diversified its portfolio with hydro, solar, and bio digestion and has plans to pursue waste to energy gasification.

Notable Sustainability Achievements at the Port of Cleveland

The Port of Cleveland is leading key sustainability and environmental restoration initiatives in and around Cleveland Harbor. In 2011, the Port adopted a Strategic Action Plan that incorporates sustainable practices into the fabric of the organization. The Port's sustainability programs not only introduce creative solutions that improve waterfront infrastructure and sustainable transportation options, but also directly connect people with nature on Cleveland's waterfront.

- ***Waterways Infrastructure:*** The Port of Cleveland is leading efforts to fund and implement waterfront projects that include restoration and replacement of bulkheads and stabilization of at-risk riverfront slopes. Many of the infrastructure improvements will integrate the use of eco-friendly bulkheads that incorporate habitats for fish. The Port also plans to launch a program in 2012 that will remove floating debris from Cleveland's ship channel and lakefront.

- ***Sediment Management:*** For years sediment dredged from Cleveland Harbor has been considered a waste material and disposed of in large Confined Disposal Facilities (CDFs) along the lakefront. These sediments, now cleaner than those dredged in earlier years, are suitable for use in the remediation of brownfield sites and are being considered as alternative fill for certain development and construction projects.

- ***Water Transportation Advocacy:*** The environmental advantages of water transportation are well documented. The Port of Cleveland was a founding member of Green Marine, a bi-national initiative along the St. Lawrence Seaway and across the Great Lakes to strengthen maritime environmental performance through the voluntary adoption of best management practices. The

Port is leading the development of alternative transportation solutions for people and cargo that are aimed at reducing congestion and improving air quality. For example the Port is working in collaboration with partners in Ontario, Canada to launch an international ferry service. It also plans to pursue development of a liner service to Cleveland that would provide direct access between Europe and America's heartland. Additionally, as an advocate of wind energy, the Port is working to be a regional leader in the handling of wind energy cargoes.

- ***Connecting People with Nature:*** In February 2012, the Port of Cleveland opened the Cleveland Lakefront Nature Preserve, an 88-acre man-made peninsula on Lake Erie's shoreline and home to a variety of important birds, animals, insects and plants. In addition, the Port is undertaking a "Greening of the Port" effort that is aimed at improving on-site aesthetics with more greenery and natural land enhancements at its maritime facilities. It is also considering options for creating multi-purpose trails that connect to the lakefront.

For More Information about the City of Cleveland's Sustainability Efforts:

City of Cleveland Office of Sustainability:
http://www.city.cleveland.oh.us/CityofCleveland/Home/Government/CityAgencies/PublicUtilities/Sustainability

Sustainable Cleveland 2019:
www.cleveland2019.org

City of Cleveland Port Authority:
www.portofcleveland.com

Dubuque, Iowa

http://www.cityofdubuque.org/

Region: Midwestern U.S.
Population Size: 57,637
Mayor: Roy D. Buol

Summary of Dubuque's Commitment to Sustainability:

After serving 10 years on the City Council, Roy D. Buol ran for the office of Mayor in 2005. His platform was based upon "engaging citizens as partners," and what he heard from thousands of citizens was a consistent theme surrounding water quality, recycling, green space, public transit, cultural vitality, accessibility, and downtown revitalization. During the 2006 City Council goal-setting process, Mayor Buol proposed and received full support from his council colleagues to focus on sustainability as a city top priority, stating "cities that get out in front on sustainability will have competitive economic advantages in the future." What soon became known as *Sustainable Dubuque* is a City Council adopted, community-created, and citizen-led initiative whose story officially begins in 2006. A City Council priority each year since, the city is working to expand awareness, create partnerships, and encourage initiatives involving all sectors of the community.

Sustainable Dubuque seeks to make Dubuque a community that meets the environmental, economic, and social equity needs of its residents today without reducing the ability of future generations to meet their needs. This approach is unique in Dubuque in that it is guided by a vision and principles developed by its citizens.

Notable Sustainability Achievements to Date

Smarter Sustainable Dubuque: *Smarter Sustainable Dubuque* is a public/private partnership between the City of Dubuque and IBM Research, the division of IBM responsible for its "Smarter Planet" campaign. The project was initiated in September 2009 when the City of Dubuque and IBM announced their intentions to make Dubuque one of the first "smarter" sustainable cities in the U.S. The programming has grown into a collaboration that includes over two dozen industries and eight state and federal agencies. In a nutshell, it is the development of new "smarter" technologies coupled with community outreach and implementation strategies to create a replicable, international model of sustainability for communities of 200,000 and under, where over 40 percent of the U.S. population resides. The model will integrate community engagement and education, more energy-efficient ways of operating municipal services and buildings, decreased carbon emissions, new job creation, increased financial savings, resource conservation and a higher quality of life for the entire community. It will also document the improvement to competitive opportunities that comes through "smarter" resource utilization.

- ***Water:*** Dubuque's *Smarter Water* project is a unique partnership of local, state and federal funding. It is a multi-million dollar community project to upgrade the water system, implement innovative technologies, and empower citizens and businesses with the

information and tools needed to significantly reduce water consumption. IBM technology is interfacing with the city's system to process water consumption data and provide near real-time visibility into the overall city water consumption. The results of the first pilot study showed an eight-fold increase in the detection and repair of water leaks and a 6.6% overall reduction in water utilization by households participating in the pilot.

- ***Energy:*** Working in partnership with IBM, Alliant Energy, and the Iowa Office of Energy Independence, the community is deploying a multi-million dollar *Smarter Electricity* pilot. Involving nearly 1,000 volunteer households, Alliant Energy has installed new Advanced Metering Infrastructure (AMI) meters and is providing anonymous customer electricity usage data to the City and IBM for analysis. IBM is using the data to develop a consumer interface system to enable study participants to better understand their electricity use in real-time so they can consider changes to save energy, reduce costs, and reduce carbon emissions. By reviewing historical data and real-time current usage and analyzing the opportunity for energy savings through the Smarter Electricity pilot, IBM determined that roughly 26% of average household usage in Dubuque is presently "phantom power" (electricity which is being consumed by appliances when not in use). The savings opportunity is significant.

  Also in the energy sector, the community has partnered with IBM and Black Hills Energy on *Smarter Natural Gas*. This pilot project of 250 volunteer homes involves the implementation of Advanced Meter Reporting (AMR) technology for natural gas, providing residents with near real-time information of utilization and the ability to assess the return on investment they would see from adoption of energy-efficiency technologies and appliances in their home. Natural gas is the primary source of energy for heating in the Dubuque community. The opportunity for energy savings and greenhouse gas emissions reduction is significant.

- ***Health and Wellness:*** In addition to saving money, conserving resources and improving the environment, citizens are also interested in improving quality of life and health outcomes for themselves and their families. Incorporating data on how an individual's health and wellness is affected by his or her interaction with resources is also a critical vision. For example, how does reduction in vehicle miles traveled by biking or walking improve personal health outcomes? How does incorporating local foods decrease carbon footprints and improve key health indicators? How does the adoption of Green and Healthy Homes programming not only improve energy efficiency, but also reduce chronic childhood health conditions? The link between income, environment, and health is undeniable.

For More Information about the City of Dubuque's Sustainability Efforts:
Sustainable Dubuque: http://www.sustainabledubuque.org

Los Angeles, California

http://www.lacity.org/index.htm

Region: Southwest U.S.
Population Size: 3,792,621
Mayor: Antonio Villaraigosa

Summary of Los Angeles' Commitment to Sustainability

Los Angeles is the most populous city in the state of California and the second most populous city in the United States. It sits on the Pacific Rim and is home to the Port of Los Angeles, one of the busiest ports in the world and the largest trade gateway in North America. Through the leadership of Mayor Villaraigosa, Los Angeles is quickly emerging as one of the greenest large cities in the nation. Nearly every city department has its own sustainability plan that focuses on greening city operations, as well as providing sustainability programs for residents. Additionally, the city's departments -- including the Department of Water and Power (LADWP), the Department of Public Works and others -- work to actively implement GREEN L.A., the city's action plan to fight global warming.

Through the concerted efforts of civic leaders, businesses and residents, Los Angeles was able to meet Kyoto targets for reducing greenhouse gases four years ahead of schedule. Some notable achievements include removing over 2,000 diesel trucks off the road and greening city fleets; getting 20% of the city's electrical energy from renewable sources; and implementing a strong green building program. Additionally, the Mayor's Green Agenda focuses on specific measures to encourage clean technology; continue fighting global warming; improve air and water quality; conserve water; and promote strong environmental stewardship.

Notable Sustainability Achievements to Date

- ***Clean Tech:*** Clean Tech Los Angeles is an innovative collaboration between LA's premier academic institutions, the business community and the city to make Los Angeles a global capital of clean technology. This partnership between LA's centers of innovation (UCLA, USC, Caltech), and proactive government agencies (LADWP, Community Redevelopment Agency, the Mayor's Development Corporation, LA Area Chamber of Commerce), is a key part of the City's strategy to grow LA's green economy and create new green collar jobs. Clean Tech LA partners work together to support new technology research, advocacy for federal grants, and economic growth. In 2012, the City also opened the Los Angeles Cleantech Incubator (LACI) to accelerate and support the development of cleantech startups in Los Angeles. The Los Angeles Department of Water and Power invested $11 million to purchase the property that will house the permanent incubator, the La Kretz Innovation campus, located in the city's four-mile Clean Tech Corridor. The LACI will grow young companies in renewable energy, energy conservation, water conservation and other areas of clean technology as a means to create both new "green" jobs and tax revenue for the city. The Port of Los Angeles has successfully employed similar strategies

specific to port operations and marine environment through its Technology Advancement Program and PortTech LA, a green technology business incubator. Projects have included an electric hybrid tugboat, electric hybrid cranes, and heavy-duty electric trucks.

- ***Clean Port:*** The city and Port have developed a wide variety of policies and programs to advance port sustainability. To address air emissions and public health impacts generated from cargo movement through the Port and into the region, in 2006 the Port of Los Angeles and neighboring Port of Long Beach jointly adopted a Clean Air Action Plan (CAAP). As part of the CAAP, in 2008 the Mayor started the Clean Trucks Program (CTP) to replace older, high-polluting trucks with newer, cleaner trucks through the use of a concessions system, grants, and financial incentives.

  As of May 2011, over 10,000 2007-compliant trucks have enrolled in the CTP. The program has been honored with the U.S. EPA's 2009 Environmental Justice Achievement Award and the 2010 Federal Maritime Commission Chairman's Earth Day Award for innovation and environmental leadership. The CAAP was updated in 2010 to provide a policy map for the next five years which includes technology-forcing performance standards to meet future air quality and health risk reduction goals. Additionally, in 2007, the Port's Environmental Management Division created a Climate Action Plan (CAP) for municipally controlled services. Consistent with *Green LA*, the City's climate action plan, the Port's CAP sets the goal of reducing greenhouse gas (GHG) emissions 35% below 1990 levels by 2030, and 80% below 1990 levels by 2050. Other achievements at the Port include:

  - Creation of almost 100 new acres of public open space as part of the Port's waterfront redevelopment efforts.
  - Approval of seven major capital improvement projects that reflect the Port's green growth approach, with construction contracts and lease agreements that implement the CAAP and the WRAP and reflect extensive mitigation measures to reduce environmental impacts to the greatest extent feasible.
  - Collaborating with other ports to share best practices and green technologies. These efforts include being a founding member of the World Ports Climate Initiative (WPCI); drafting a carbon footprinting guidance document and carbon calculator for ports; and leading the effort at the International Standards Organization (ISO) to standardize the ship to shore connection for Alternative Maritime Power (AMP) technology, which reduces vessel emissions while at berth.
  - In March 2012, the Port received the inaugural Climate Leadership Award from the Environmental Protection Agency in recognition for outstanding leadership in response to climate change.

- ***Green Building:*** On April 22, 2008, Mayor Villaraigosa signed into law the Los Angeles Green Building Ordinance to promote green building practices in the private sector. Developed by the Mayor's Office in partnership with City Council, the ordinance creates a series of requirements and incentives for developers to meet the US Green Building Council's Energy and Design (LEED) standards. This ordinance is one of the many action items that aim to reduce the City's carbon footprint by 35% below 1990 levels by 2030. The Port has its own Green Building Policy, requiring all new buildings over 7,500 square feet to be certified LEED GOLD.

- ***Renewable Energy:*** The Los Angeles Department of Water and Power (LADWP) has an aggressive initiative to integrate more renewable energy to into the power supply, while reducing the city's dependence on coal. In 2003, three percent of the city's power came from renewable energy source; by 2010, 20% of the City's energy came from renewable energy sources. At the same time, LADWP also encourages residents and businesses to reduce overall energy consumption using various strategies, including cash rebates for more efficient appliances and exchange programs for inefficient appliances. At the Port of Los Angeles, a 1 mega-watt photovoltaic system was installed in 2010 on the roof of the Port's Inner Harbor Cruise Terminal.

- ***Electric Vehicles:*** The LADWP provides rebates to residential customers for the cost of electric vehicle (EV) chargers and installation. The rebate covers up to $2,000 of residents' expenses when they purchase or lease a new EV. Additionally, the EV program is directly linked with the Smart Grid Demonstration Program that studies customer behavior, demand response, and cyber security. The LADWP is partnering with the Department of Energy, UCLA, USC, and JPL for the demonstration program, which involves retrofitting 117 city-owned public chargers, a fleet of the city-owned EVs, and the installation of 16 DC fast chargers around Los Angeles.

For More Information about the City of Los Angeles' Sustainability Efforts

City of Los Angeles' Environmental Affairs Department:
http://www.ci.la.ca.us/ead/ead_sustainability.htm

The Port of Los Angeles:
http://www.portoflosangeles.org/

Port of Los Angeles Sustainability Report 2011
http://www.portoflosangeles.org/DOC/REPORT_Port_Sustainability_Report_2011.pdf

Los Angeles Cleantech Incubator:
http://laincubator.org/

Saint Paul, Minnesota

http://www.stpaul.gov/

Region: Midwestern U.S.
Population Size: 285,068
Mayor: Chris Coleman

Summary of the City of Saint Paul's Commitment to Sustainability

Through the leadership of Mayor Chris Coleman, Saint Paul has become a national leader in sustainable, urban living. The city is achieving its goals through strategies such as working with energy providers to reduce carbon dioxide emissions; improving and expanding recycling service for residents and businesses; constructing green buildings that set the example for others in the city; retrofitting current buildings to reduce energy demand; promoting of transit-oriented development and transit alternatives such as light rail and pedestrian friendly streets; improving the city's system of parks, green spaces, bikeways, and trails; an aggressive reforestation plan; and improvements to the water quality for the city's residents. An ethic of and commitment to sustainability informs all city's investments and operations and has become an overarching theme of the 2010 Saint Paul Comprehensive Plan. Additionally, environmental policy statements are found in more than twenty chapters of the City Code.

This work is carried out by staff in all departments of the city, and by its citizens. The Mayor's Environmental Policy Director, together with the Sustainable Saint Paul Working Group, helps to co-ordinate these efforts.

Notable Sustainability Achievements to Date

- In early 2009, the Energy Innovation Corridor (EIC) launched. The EIC is a partnership of public, private, and non-profit organizations working together to advance clean energy and alternative transportation projects along the eleven-mile Central Corridor Light Rail route. The EIC and its partners are engaging local citizens to achieve goals such as achieving 50% higher energy efficiency savings than mandated by state goals, achieving 9.5 GWh of renewable energy supplied or generated, and advancing the deployment of electric vehicles.

- In October 2009, the City and District Energy St. Paul were awarded a $1 million grant from the United States Department of Energy to install a solar thermal system at the Saint Paul RiverCentre. The federal funds will be matched by $1.2 million from District Energy. District Energy is a 501(c)(3) nonprofit utility that heats and cools more than 80% of the buildings in Downtown Saint Paul and is committed to making substantial investments in renewable energy.

- In January 2010, the Cities of Saint Paul and Minneapolis, through the Minnesota Blue-Green Alliance, received a $5 million GreenPower grant from the U.S. Department of Labor to train workers for jobs in the clean energy economy. One particular targeted group will be displaced auto workers, such as those affected by the closing of the Saint Paul Ford Plant.

- In February 2010, the Northwest Area Foundation awarded a $75,000 grant to Employment Opportunities in Energy Conservation and Deconstruction program. The program trains low income workers for green industry jobs in energy conservation and building materials recycling. The initiative is a collaborative effort between the City of Saint Paul, Neighborhood Energy Connection, Better Futures Enterprises, and the Twin Cities Local Initiatives Support Corporation.

- The Environmental Services division of Parks and Recreation, in partnership with the Summit Hill Association, installed a 700 square foot rain garden at the Linwood Recreation Center with assistance from community volunteers, the Minnesota Conservation Corps, the Youth Job Corps Program, and funding from the Capitol Region Watershed District.

- In December 2009, The City Council and Housing and Redevelopment Authority (HRA) unanimously adopted a green building policy for all municipal buildings and for all new construction that receives at least $200,000 in City funding. The policy requires projects to meet either Leadership in Energy and Environmental Design (LEED) Silver, Green Globes – 2 Globes, Minnesota Buildings, Benchmarking, and Beyond (B3), or Saint Paul Port Authority Green Design Review standards. The policy becomes effective July 1, 2010. This is the culmination of over two years of planning, which were funded in part by a grant from the Minnesota Pollution Control Agency.

- Saint Paul's Climate Change Action Plan, the Environmental-Economic Partnership Project (E-EPP), was initiated as part of the Urban CO2 Reduction Project. The Plan's objectives are to reduce carbon dioxide emissions while improving public health and safety, improving the City's fiscal performance through energy and water cost savings, generating employment, and reducing urban sprawl.

- Parks & Recreation demolition projects at the Prosperity Recreation Center, the Sylvan Recreation Center, and the Front Recreation Center included a requirement that a minimum of 75% of the demolished materials be recycled. The contractor estimated that over 90% of demolished materials were ultimately recycled. The demolition also included salvaging wood beams and structural decking for reuse in the replacement restroom buildings.

- In January 2010, United States Transportation Secretary Ray LaHood visited Saint Paul to announce that the federal government would provide funding for three additional light rail stations along the Central Corridor at Western, Victoria, and Hamline Avenues. In May 2010, the Central Corridor project received permission to enter final design, the last step before full funding is awarded.

- In May 2010, the City Council approved the Bike Walk Central Corridor Action Plan, which is designed to create a safe and inviting bicycle and pedestrian environment around the Central Corridor.

- In 2010, City of Saint Paul partnered with the City of Minneapolis and the City of Saint Cloud to form the Upper Mississippi Source Water Protection Project program to improve source water quality along the Upper Mississippi River. The City also worked with the Vadnais Lake Area Water Management Organization to improve source water quality throughout the East Metro.

- The City of Saint Paul adopted the Water Resources Management Plan as a part of the 2010 Saint Paul Comprehensive Plan. The Plan contains significant sustainability language and makes a number of recommendations of ways to improve water quality in Saint Paul, including coordinating with the State and local governments to develop and implement a source water protection plan, reducing erosion into local water bodies, reducing the negative impacts of roof runoff, and creating a wetlands management plan.

- The City of Saint Paul worked with Capitol Region Watershed District and others to develop a 9,000 square foot Green Roof Interpretive Center and Garden Classroom atop of City's new Fire Department Headquarters building on Randolph and West Seventh. The Green Roof has over 80 species of native and ornamental plants, as well as a vegetable garden and several educational stations. The roof further incorporates a supplemental stormwater reservoir layer to maximize stormwater storage capacity and reduce runoff. The educational stations were funded by a $32,000 grant from the Capitol Region Watershed District.

For More Information about the City of Saint Paul's Sustainability Efforts:

Sustainable Saint Paul http://www.stpaul.gov/sustainablestpaul

Salt Lake City, Utah

http://www.slcgov.com/

Region: Western U.S.
Population Size: 186,440
Mayor: Ralph Becker

Summary of Salt Lake City's Commitment to Sustainability

Sustainability is a term that underpins all that Mayor Becker does on behalf of Salt Lake City residents. Specific initiatives that accelerate efficient development and use of clean energy sources and other resources are of utmost importance for the long-term livability of the region. The city's spectacular natural setting distinguishes the community and offers unparalleled recreational opportunities for residents and visitors.

Notable Sustainability Achievements to Date

- ***Net-Zero Public Safety Building*** (under construction; scheduled for completion in Spring 2013): Slated to be the first net-zero public safety building in the United States, this highly efficient building will generate at least as much energy as it consumes through the use of advanced energy reduction strategies and renewable energy generation using photovoltaic and solar thermal arrays. For more information and a "virtual tour" please visit: http://www.mocamanage.com/slcweb/

  Mayor Becker is committed to continuing to seek balance in resource protection and working toward making Salt Lake City the finest example of wise resource use in the nation. To that end, plans are underway to create goals to transform all city government buildings into net-zero facilities, utilizing only power that comes from renewable, city-based power sources; streamlining the process for accessing public funds for energy efficient projects and incentivizing private development to maximize efficiency, materials re-use, recycling and whole-building adaptive re-use to go "beyond LEED."

- ***Code Revision Project***: A groundbreaking initiative to adopt the most comprehensive sustainability ordinance revision in the country by incorporating sustainability provisions into zoning and subdivision ordinances across ten issue areas. The Sustainable City Code Initiative will make changes to the City's zoning and subdivision ordinances, which will shape the development patterns necessary for Salt Lake City to become the country's most sustainable city. For more information please visit: http://www.slcclassic.com/slcgreen/code/

- ***Alternative Transportation:*** Salt Lake City is committed to mobility and has been a national leader in providing eco-friendly transit options for residents and visitors. The city has established more than 150 miles of bike and pedestrian ways, a robust car share program, and incentives and access to efficient vehicles and alternative fuels. A nationally-recognized

lightrail program, coupled with bus rapid-transit (BRT), and the return of streetcars provide the community with a unique blend of transportation options. Recently Salt Lake City received $26 million dollars from the U.S. Department of Transportation for the Sugar House streetcar, and a $500,000 grant to explore alignment options for this downtown trolley system.

- ***Zero-waste***: Through a robust recycling program, Salt Lake City has reduced its volume of residential waste by 30% in 2011. The city has now set out to redefine and advance its conventional recycling and re-use approaches through a zero-waste initiative with the goal to reduce waste by 50% by 2015, 70% by 2025, and 100% by 2040.

  Zero-waste is a philosophy and design principle that goes beyond recycling, taking a whole system approach to the vast flow of resources and waste in our society and moving to eliminate waste. Focusing on zero waste simultaneously promotes a healthy local environment and creates local green jobs and sustainable sources of economic revenue.

- ***Reduction of Greenhouse Gas (GHG) Emissions***: Salt Lake City's consumption of electricity has grown steadily over the past 40 years due to the city's increased growth. Through a comprehensive set of environmental goals and initiatives, the city is working to reduce energy use in city buildings, put in place quantifiable energy monitoring systems, generate 10% of new building energy use with renewable energy, and reduce the carbon footprint of new construction by 50%. The city has implemented high performance building codes for all city-owned new construction or major renovations, and is facilitating community development of high performance buildings and renewable energy through code revisions, permitting incentives, and loans to businesses for energy efficiency upgrades.

  Salt Lake City is also aggressively working to reduce vehicle emissions and improve air quality through programs that conserve electricity and natural gas, encourage individuals to drive down their personal motor vehicle miles, and reduce other sources of air pollution. The city has been working to reduce both its own internal fleet emissions, and the vehicle emissions generated by the community.

For More Information about Salt Lake City's Sustainability Efforts:

Salt Lake City Office of Sustainability: www.slcgreen.com

"Vision for a Green City: Salt Lake City's Sustainable City Code Initiative"
http://www.slcclassic.com/ced/planning/documents/SCCI/SCI_Visiondoc.pdf

"Mayoral Agenda: Livability in Salt Lake City 2012-2016"
http://www.slcclassic.com/links/livability.pdf