

The Benefits of Climate Action: How Cities Prosper

Hundreds of US cities are enjoying significant benefits from taking action on climate change. Cities that act to reduce global warming pollution save millions of taxpayer dollars, boost real estate values and attract new jobs and businesses.

In 2005, 160 local governments in the US participating in ICLEI's Cities for Climate Protection Campaign reported collective, annual savings for taxpayers of \$600 million in energy and fuel costs while reducing global warming pollution by 23 million tons.¹

Cities have realized billions of dollars in additional benefits from the actions that reduce global warming pollution. A city's investment in mass transit; commitment to clean, renewable energy; improved public health from cleaner air; and new partnerships with the private sector all result in greater economic prosperity for its citizens. They also make a city a cleaner, safer, more desirable place to live.

Saving Taxpayer Dollars Through Energy Efficiency

By investing in energy efficient technologies—from high-mileage or alternative fuel fleet vehicles to energy efficient public buildings, water and sewage treatment plants and streetlights—cities have dramatically reduced their energy expenses while cutting their contribution to global warming.

- ➔ Chicago is retrofitting public buildings, such as police stations, libraries, and transit facilities, with more efficient equipment for heating, cooling, lighting, and ventilation, and expects to save \$6 million per year in energy costs.²
- ➔ The city of Philadelphia installed highly efficient LED (light emitting diode) light bulbs in all 28,000 of its traffic signals, and saved \$800,000 a year in energy costs alone. LED bulbs use 83 percent less energy than traditional bulbs, last six to 10 times longer than traditional bulbs and require less maintenance – an additional source of city savings. The bulbs reduced Philadelphia's global warming pollution by over 40,000 tons of carbon dioxide per year.³
- ➔ Saint Paul, Minnesota upgraded its water treatment plant at the McCarron pumping station with modern equipment that was faster, more energy efficient and required less maintenance. The upgrade saved the city \$250,000 in annual energy costs and reduced pollution by 1,173 tons of carbon dioxide per year.⁴

Investments in Mass Transit: A 6 to 1 return

Cities that invest in public transportation realize substantial economic benefits. They include increased real estate values, investments in neighborhood development and direct savings for city residents coping with today's high prices at the gas pump.⁵ Mass transit also helps improve mobility and opportunities for the elderly—one of the highest priorities for older Americans. According to the American Public Transportation Association:

- ➔ Investments in mass transit provide an economic stimulus far exceeding the original investment, through increased jobs, income, profit and tax revenue - *as much as six dollars gained for every dollar invested.*⁶
- ➔ Washington, DC's Metrorail has generated nearly \$15 billion in private development along transit lines. Between 1980 and 1990 alone, 40% of the region's retail and office space was built within walking distance of a Metro station.⁷
- ➔ Portland, Oregon's MAX light rail system has generated over \$3 billion in development along MAX lines since the system was initiated in 1978.⁸
- ➔ The Dallas Area Rapid Transit (DART) light rail starter line has generated over \$922 million in development, surpassing the \$860 million cost of the project.⁹
- ➔ At the 2005 White House Council on Aging, access to transportation was ranked one of the top three priorities facing older Americans. The elderly also prefer public transport to driving alone by a factor of more than 4 to 1.¹⁰

New Jobs and Businesses in the Clean Energy Industry

As demand for clean, renewable energy continues to grow, cities that tap into this demand will have a competitive economic advantage. Renewable energy technologies, such as wind and solar power, generate more jobs in construction, manufacturing and installation than fossil fuel-based energy technologies.¹¹ They also create opportunities for public-private partnerships. As America's fossil fuel supply continues to decline, the importance of investing in clean energy technologies will continue to grow.

Cities promote the development of the clean energy industry in two ways: through agreements to purchase clean energy and by creating incentives for utilities, businesses and ratepayers to opt for clean energy sources.

- ➔ The City of Fargo, North Dakota partnered with Cargill Corporation to capture renewable landfill methane gas from the local garbage dump. The city paid to develop the system that captures the gas and puts it in a pipeline, and then sells the gas to Cargill, which burns the gas in its boilers. Cargill saves money on its energy costs, and the City of Fargo gets income from the sale of gas.¹²

- ➔ A report by the Wisconsin Energy Bureau found that a 75% increase in renewable energy use would result in more than 62,000 new jobs, \$1.2 billion in new income and \$4.6 billion in new sales for Wisconsin businesses. ¹³

Many businesses are realizing the economic benefit of switching to renewable energy sources. Hundreds of major US manufacturers already rely on clean, renewable energy for a growing portion of their energy needs: ¹⁴

- ➔ **Wells Fargo Bank** relies on wind power for 40% of its energy supply in the US.
- ➔ **Johnson & Johnson**, the largest health care products manufacturer in the world, relies on clean energy for 25% of its annual electricity needs. ¹⁵
- ➔ **Safeway Food Stores** runs all of its gas stations in the country on 100% wind power; all of its stores in the city of San Francisco also are 100% powered by the wind. ¹⁶
- ➔ **AMD Microchips**, a giant technology corporation, relies on clean energy for 100% of the energy used at its Austin, Texas facility. AMD officials expect clean energy will save the company \$4 million in energy bills over the next 10 years. ¹⁷

Cities and towns with policies that promote renewable energy sources will continue to attract the many businesses joining this trend.

Protecting Health and Safety and Reducing Health Costs

Over 140 million Americans, 25% of them children, live, work and play in areas where air quality does not meet national standards.¹⁸ Harmful motor vehicle emissions account for between 25 and 51% of the air pollutants in these unhealthy neighborhoods. From 2000 to 2002, the number of recorded high-ozone days in the U.S. increased 18.5%. ¹⁹ Pollution-related health ailments bring with them both a human toll and a staggering cost: \$3.2 billion is spent each year treating children under the age of 18 for asthma alone. Unhealthy air is known to trigger asthma attacks. ²⁰

By investing in technologies that reduce pollution, cities and their partners in the business community can improve air quality and decrease and prevent negative health impacts like lung and heart disease, asthma and other respiratory ailments. ^{21,22}

Climate-Safe Cities Consistently Ranked the ‘Best Places to Live’

Cities that take action to reduce global warming pollution routinely receive local, regional and national acclaim as the best places to raise a family, do business and lead a healthy lifestyle. Popular magazines such as *Money*, *Forbes* and *Reader’s Digest* consistently give the highest marks to cities that have sound and sustainable urban planning, effective mass transit, clean air and energy-efficient buildings.²³ These are the same measures that reduce global warming pollution.

Says *Forbes* Magazine:

“Being green (or clean) can have substantial benefits. Transportation, logistics and the supply chain are best practiced where they do not have to fight traffic jams, pollution and a tattered infrastructure. That goes for people’s health as well.” “America’s Greenest Cities,” Forbes Magazine, 2006

Cities that have taken action on climate change have been praised in the following magazines and newspapers:

- ➔ “Best Places to Live,” *Money Magazine* 2006; “The Top Cities for Doing Business in America,” *Inc. Magazine* 2004; “The Cleanest Cities in America,” *Reader’s Digest* 2005; “America’s Greenest Cities,” *Forbes* 2006; “Cities Ranked and Rated,” 2004.
- ➔ “Mayor has plan to clear the air” - *Seattle Post-Intelligencer*, September 27, 2006.
- ➔ “Mayor outlines plan to conserve water, use alternative fuel” - *Rocky Mountain News*, July 13, 2006.
- ➔ “Mayor steers city toward eco-friendly policies” - *Albuquerque Tribune*, April 8, 2006.

Notes

¹ U.S. Mayor’s Climate Protection Agreement; Climate Protection Handbook. ICLEI – Local Governments for Sustainability. September 2006, Oakland, CA. Available online at www.iclei.org/usa.

² ICLEI, www.iclei.org/usa.

³ Best practices for Climate protection, ICLEI, at www.iclei.org/usa.

⁴ Ibid.

⁵ “Mass Transit Still Hot After \$3 Gas,” USA Today, October 2, 2006, at http://www.usatoday.com/money/2006-10-02-mass-transit-usat_x.htm.

⁶ American Public Transportation Association, at <http://www.publictransportation.org/reports/asp/essential.asp>.

⁷ Center for Transportation Excellence, Transit Profile: The Washington Area Metropolitan Transit Authority, www.cfte.org.

⁸ “ICLEI: Cities in Action,” at www.iclei.org.

⁹ American Public Transportation Association, at <http://www.publictransportation.org/reports/asp/essential.asp>.

Notes

¹⁰ “Mobility Rated Top Priority at White House Conference,” at <http://www.publictransportation.org/resources/releases/release051219.asp>.

¹¹ Kammen D, Kapadia K, and Fripp M. (2004). Putting Renewables to Work: How Many Jobs Can the Clean Energy Industry Generate? RAEI Report, University of California, Berkeley.

¹² See <http://www.epa.gov/landfill/proj/prof/profile/cityoffargoandcargillfge.htm>.

¹³ U.S. Department of Energy, “Tomorrow’s Energy Today for Cities and Counties,” November 1996.

¹⁴ US Environmental Protection Agency, Green Power Partnership: http://epa.gov/greenpower/partners/gpp_partners.htm.

¹⁵ EPA, Green Power Partnership, at <http://www.epa.gov/greenpower/partners/top25.htm>.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ EPA, at www.epa.gov/airs/nonattn.html.

¹⁹ American Lung Association, State of the Air 2002 Report, Executive Summary, www.lungusa.org/air2001/summary02.html.

²⁰ Epstein P, Rogers C. Inside the Greenhouse: The Impacts of CO₂ and Climate Change on Public Health in the Inner City. (2004). The Center for Health and the Global Environment, Harvard Medical School.

²¹ Ibid.

²² Cifuentes L, et. Al. Assessing the health benefits of urban air pollution reductions associated with climate change mitigation (2000-2020): Santiago, Sao Paulo, Mexico City, and New York City. Environ Health Perspect. 2001 Jun; 109 Suppl 3:419-25.

²³ A news audit conducted in 2006 by Resource Media of city rankings by prominent national magazines found that cities participating in ICLEI’s Cities for Climate Protection Campaign consistently rank at the top for economic diversity, quality of life and other factors.