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Cool CITIES

Solving Global Warming One City at a Time



Sierra Club's Guide to Local Global Warming Solutions

Cool Cities

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COVER PAGE PHOTOS:

1. Skyline of Chicago, one of the 179 cities that have pledged to reduce local heat-trapping pollution. PHOTO BY ROBERT GLUSIC

2. Iowa's Waverly Light & Power is the first municipal utility to install its own wind turbines. PHOTO BY WAVERLY LIGHT & POWER

3. Investing in clean energy not only saves taxpayer dollars and protects the environment, it also creates good jobs for the future. PHOTO BY APOLLO ALLIANCE

4. The Western Area Power Administration's 4-kilowattphotovoltaic array at its Rocky Mountain Customer Service Center building east of Loveland, Colorado. PHOTO BY WESTERN AREA POWER ADMINISTRATION

You can find this report and all the resource links referenced in the report at **sierraclub.org/globalwarming/coolcities.**

The Sierra Club's members are 750,000 of your friends and neighbors. Inspired by nature, we work together to protect our communities and the planet. The Sierra Club is America's oldest, largest and most influential grassroots environmental organization.



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Cool CITIES Solving Global Warming One City at a Time

INTRODUCTION-**Re-Energizing Our Cities**









ll over America, cities, counties and states are

launching an exciting grassroots movement to help solve one of our country's most pressing problems: global warming. Frustrated by stalling on the federal level, local leaders are moving forward with innovative energy solutions that cut our dependence on oil, benefit public health and save taxpayer dollars. These mayors, county commissioners and governors are leading the way toward a safer and more secure future.

The purpose of this guide is to provide a resource for citizens and local officials who are ready to act on the need to reduce energy waste and heat-trapping global warming pollution by taking real action in their communities. In the following pages, you will find inspiring city success stories from a broad range of cities, from larger metropolitan centers such as Salt Lake City, St. Paul and Charlotte to smaller cites like Twin Falls, Idaho and Waverly, Iowa.

The strategies that these and other cool cities are pursuing fall under three categories: cleaner vehicles, energy efficiency and renewable energy. Every one of these local solutions is already saving taxpayer dollars and improving public health by reducing energy waste and pollution. By taking innovative actions, forward-looking cities are re-energizing our nation, proving that we can solve global warming one city at a time.

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GLOBAL WARMING-

The Time to Act Is Now

The scientific community has concluded that burning fossil fuels—oil, coal, and natural gas—to power our cars, homes and businesses is causing global temperatures to rise. This heating of the earth poses a serious threat to our health, safety and environment.

The national science academies of the United States, England, France, Russia, Germany, Japan, Italy, Canada, Brazil, China and India issued the following joint declaration in June 2005: "The scientific understanding of climate change is now sufficiently clear to justify nations taking prompt action." The world's leading scientists ask us to "recognize that delayed action will increase the risk of adverse environmental effects and will likely incur a greater cost." [Source: "Joint Science Academies' Statement: Global Response to Climate Change," June 2005]



Keeping Warm, Keeping Cool—In Klamath Falls, Oregon, a geothermal district heating system keeps the sidewalks clear and dry at the Basin Transit station. The 22,000 square-foot garden on the "green" roof of Chicago's city hall helps to cool the building during the city's hot summers.

Cities Take the Lead

The good news is our cities have not become paralyzed by the threat of global climate change. Instead, they are taking the lead with the "U.S. Mayors Climate Protection Agreement" initiated by Seattle Mayor Greg Nickels. Introduced on February 16, 2005— the same day that the Kyoto Protocol international global warming treaty took effect in 141 nations worldwide—the agreement is gathering support around the country and has earned the backing of the U.S. Conference of Mayors. To date, 179 mayors representing nearly 40 million Americans in 38 states have signed on, pledging to reduce global warming carbon dioxide (CO₂) pollution in their cities to 7 percent below 1990 levels by 2012.

How will these cities accomplish these ambitious goals in the next seven years? And how can your city become a cool "Climate Protection City"?

Seattle: Cool City Model

The city of Seattle is on the forefront of global warming local solutions. Under Mayor Greg Nickels' leadership, the city government has already reduced global warming pollution by more than 60 percent by constructing green buildings and operating alternative fuel vehicles. Seattle City Light is the only electric utility in the country committed to zero net greenhouse gas emissions by the end of 2005, and the city is working to expand transportation choices, recycling, and urban forest restoration.

Mayor Nickels has also created a Green Ribbon Commission on Climate Protection, composed of business, environmental, government, community and labor leaders. The Commission is developing a plan for Seattle to meet its global warming pollution reduction targets, and identifying key economic opportunities for Seattle's transition to a clean energy future.

"By making smart choices like building sustainable buildings, replacing old vehicles with a 'Clean and Green' fleet, and setting strict 'no-net-emissions' goals for Seattle City Light, the City has shown we can take local action on global problems," said Mayor Nickels.

"There is strength in unity—we must speak and act as one."

- Keene, New Hampshire, Mayor Michael E. J. Blastos

-179 Cool Cities and Counting



As of September 23, 2005, 179 mayors representing nearly 40 million Americans in 38 states have pledged to reduce global warming carbon pollution in their cities to 7 percent below 1990 levels by 2012.



nations did to solve the problem of ozone depletion, to prevent the most devastating consequences of global climate change."

-Salt Lake City Mayor Rocky Anderson

PUTTING GLOBAL WARMING SOLUTIONS INTO ACTION

Four Steps to Become a Cool City

Step 1: Take the "Cities for Climate Protection" Pledge

The first step towards curbing global warming pollution in your community is to ask your mayor to sign the U.S. Mayors Climate Protection Agreement. This agreement sets the goal of reducing your city's global warming carbon dioxide (CO₂) pollution to 7 percent below 1990 levels by 2012. See ci.seattle.wa.us/mayor/climate.

Step 2: Conduct a Global Warming Emissions Inventory

The next step is to conduct an inventory of your city's current global warming emissions. This information will identify the city's major CO₂ sources (and the greatest opportunities for reductions), and will provide a baseline to judge the city's progress towards its goal. Technical assistance in conducting a global warming emissions inventory is available from a variety of sources, including the International Council for Local Environmental Initiatives as well as state and federal agencies. See **iclei.org.**

"Minneapolis achieved the pollution reduction necessary to meet the Kyoto Protocol, one of the first cities in the nation to do so—a strategy that has earned our city tremendous environmental and economic benefits. We are thrilled with Seattle Mayor Greg Nickels' initiative and will work hard to challenge our nation through our example."

-Minneapolis Mayor R.T. Rybak, in front of his hybrid car

Step 3: Create a Solutions Plan

After completing its global warming inventory, your city will be ready to develop a solutions plan that can reduce emissions while lowering energy costs for the city. While every city's energy solutions plan will be unique, there are three important strategies: Green Vehicle Fleets, Energy Efficiency and Renewable Energy. In some combination, these solutions, which are illustrated with specific success stories below, will form the foundation of your city's comprehensive energy-saving plan.

Step 4: Implement and Monitor Progress

Of course, a plan alone cannot cut global warming pollution. It is essential that your city put the plan into action and monitor its progress periodically. With a strong commitment, a sound plan and real action, your city will be on its way toward meeting the goals of the U.S. Mayors Climate Protection Agreement.

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Green Vehicle Solutions

The technology exists today to significantly reduce global warming pollution from America's cars, trucks, and SUVs. Improving automobile fuel economy is the biggest single step to curbing global warming, since every gallon of gasoline burned creates 28 pounds of heat-trapping carbon dioxide pollution.

Because transportation is a major source of global warming pollution in many cities, numerous cities are incorporating gas-electric hybrid vehicles and other fuel-efficient vehicles into their fleets. By using less gasoline, hybrid vehicles release a fraction of the global warming pollution emitted by conventional vehicles while saving money at the gas pump. Cities are also switching away from polluting diesel city and school buses to clean alternatives like compressed natural gas (CNG) powered vehicles.

Solution #1—Green Fleets

Governments of all sizes regularly purchase automobiles to help provide a wide range of taxpayer services. Recognizing an opportunity for action, many cities, counties and states are saving taxpayer dollars and reducing air pollution by "greening" their fleets with hybrid gaselectric and other vehicles that go farther on a gallon of gas.

Currently, 48 U.S. towns and cities in 36 states have green fleets programs, as do 26 county and 17 state governments. From police departments and school districts to administrative agencies and taxi services, green fleets are a winning city solution. [Source: greenfleets.org]

For general overview and step-by-step advice for writing a green fleets ordinance in your city, go to **greenfleets.org/stepone.**

For a model green fleets ordinance, see the city of Denver's ordinance at greenfleets.org/denverrevised.html.

Solution #2—Hybrid Vehicle Incentives

In addition to purchasing hybrid vehicles for city fleets, local governments can encourage local citizens and businesses to buy hybrid vehicles with a wide range of incentives. Some cities are already providing incentives such as free parking for hybrid vehicles as well as lowering registration fees and taxes.

Solution #3—Clean Buses

City residents have long had to endure the sight and smell of black smoke belching from dirty diesel-engine buses. Now many cities are replacing these polluting old buses with buses that run on cleaner compressed natural gas (CNG) or with hybrid-electric diesel engines.

"Increasingly, cities are providing the answers

to some of America's toughest problems. So it's fitting that we're leading the way on global warming as well." —Madison, Wisconsin, Mayor Dave Cieslewicz

NOTE: You can find all links referenced in this report at **sierraclub.org/globalwarming/coolcities.**

Charlotte NORTH CAROLINA

When Charlotte's fleet managers found that hybrid gas-electric vehicles are less expensive to operate than conventional cars, Mayor Pat McCrory and Council members Susan Burgess and John Tabor took action. Working with city staff and with the cooperation of Mecklenburg County, the city Council supported a plan to bring the total number of hybrids in the



fleet to over two dozen by the end of 2006—more than tripling the city/county's current amount of hybrids.

Although they typically cost more initially than standard gasoline-fueled cars, gas-sipping hybrids save on gasoline, have lower maintenance costs, and retain a higher resale

value at the end of their useful life, according to Charlotte's Fleet Environmental Analyst David Friday.

Mr. Friday estimates that switching from a gas-only Ford Taurus to a hybrid Toyota Prius or Honda Civic would save city taxpayers approximately \$800-\$1200 annually per vehicle, including over \$400 in annual fuel costs.

"This results in a payback of the extra purchase cost within 2.5 to 5.5 years, depending on the model chosen and miles driven," said Friday. [Source: "Ford Taurus to Honda Civic Hybrid and Toyota Prius Comparative Analysis," David Friday, Charlotte Fleet Environmental Analyst, May 2005]

LEARN MORE

Charlotte's Fleet Environmental Analyst David Friday can be reached at dfriday@ci.charlotte.nc.us.

Houston TEXAS

In April 2005, Bill White, the mayor of the nation's 4th largest city, announced plans to convert a substantial portion of the City of Houston's fleet of cars, pickup trucks and sport utility vehicles to hybrids by the year 2010. The city estimates that 80 percent of all new vehicle purchases and over 50 percent of the City's fleet could be hybrid vehicles by the year 2010.

Considering the size of the City's light duty fleet (more than 3,500), Houston's investment in hybrids will pay big dividends down the road. Over its projected five-year life-cycle, the Toyota Prius hybrid should provide net savings of almost \$1,900, in comparison to a conventional gasoline-only full-sized sedan, according to a City of Houston study.



Because hybrids are so fuel efficient, they release a fraction of the global warming pollution emitted by conventional vehicles. Over the lifetime of the vehicle, a hybrid Toyota Prius will release 43 fewer tons of global warming pollution compared to an average sedan.

"This makes economic sense, it makes environmental sense and it is going to set an example," said Mayor White. "We're going to save on fuel costs and we're going to help save our air quality."

LEARN MORE

Details on the City of Houston's greenfleets program are available at: houstontx.gov/mayor/press/20050408.html

Gentlemen, Start Your Hybrid Engines—Houston Mayor Bill White announces the greening of his city's fleet.

Marion County FLORIDA

When gas-electric hybrid vehicles hit the market, Wyatt Earp, Director of Fleet Management for the Marion County Sheriff's Office in Florida, did some cost analysis to see whether it would be a good idea to pay a little more up front for a car that gets superior mileage. The answer?

"It costs a little more to start with, but operating expenses are less," says Earp. "Plus, we're working for the environment and showing people that we don't need to be so dependent on foreign oil."

The Toyota Prius vehicles are used by the department to deliver subpoenas, transfer prisoners, and run administrative errands. In addition, trained civilians use one of the hybrids to cruise the county checking out bridges, pipelines, and other potential terrorist targets as part of the department's "Homeland Security Patrol".

"We work to conserve as much energy as we can—that's our obligation to the American people," said Earp, a descendent of the legendary frontier lawman. "We spend taxpayers' money wisely, and that means we don't run experiments. We've got a good car here. Hope-fully American car companies will offer something similar, soon."

Earp also manages the annual procurement of cars for the Florida Sheriff's Association, which negotiates wholesale rates for about 5,000 city and county agencies. Last year it bought 100 hybrids. "Now the word is getting around. I think we'll have 10 times more orders than we had last year," Earp says.

LEARN MORE

Visit the Marion County Public Affairs department's Web site at: marioncountyfl.org

Washington D.C.

The millions of visitors who visit our nation's capitol each year to see the monuments and the museums can breathe easier because of the city's clean, natural gas buses which

improve air quality and cut global warming pollution.

Over the past four years, the Washington Metropolitan Area Transit Authority has replaced 414 of its polluting diesel buses with cleaner burning, compressed natural gas buses. Every natural gas bus replaces the need for



nearly 10,000 gallons of diesel fuel each year. Since natural gas buses releases 25 percent less global warming gases than diesel, these cleaner buses result in real cuts in global warming pollution.

Natural gas buses also help to reduce smog. Compared to traditional diesel buses, the city's natural gas buses release over 50 percent less smog-forming nitrogen oxides and 85 percent less soot pollution.

LEARN MORE

Visit the Washington's transit authority Web site at: wmata.com/about/met_news/pressroom/archived_releases/pr_cng.cfm



You Have the Right to Get Good Mileage—For Wyatt Earp, director of fleet management for Marion County Sheriff's Department in Florida, purchasing fuel-efficient hybrid vehicles and reducing dependence on oil make sense for the environment and the county budget.

Energy Efficiency Solutions

Energy efficiency means using less

energy through better technology to power buildings, light streets, and industry. Reducing energy use is one of the most cost-effective and fastest ways to save energy and reduce global warming pollution.

Every city can make substantial energy efficiency improvements by putting policies in place to promote efficient technologies and integrating them into planning decisions. The policies outlined below represent some of the most effective steps currently being taken on the city and local level.

Solution #1—Making New Buildings More Energy Efficient

Incorporating energy efficiency requirements into municipal building codes increases the overall energy efficiency of new city buildings. Many cities have chosen to adopt the Leadership in Energy and Environmental Design (LEED) standards that have been created by the United States Green Building Council—**usgbc.org**. LEED standards provide energy efficient design guidelines for a variety of building types and developments.

Solution #2—Energy Efficiency Retrofits to Existing Buildings

In addition to improving the energy efficiency of new buildings, cities can make substantial energy efficiency improvements to existing buildings. Modernizing lighting, heating, cooling, and other operations can reduce the energy requirements of existing buildings

"The International Panel on Climate Change has warned that New Orleans is the North American city most vulnerable to the effects of climate change.

The rise of the Earth's temperature, causing sea level increases that could add up to one foot over the next 30 years, threatens the very existence of New Orleans. We will continue to collaborate and support efforts on global warming." —New Orleans Mayor C. Ray Nagin in a cost-effective manner, lowering energy costs and reducing pollution.

The U.S. Green Building Council has also developed LEED standards for existing buildings at usgbc.org/DisplayPage.aspx?CMS PageID=221&

The standards provide guidance on improving the energy efficiency of building operations and other systems without making major changes to the interior and exterior of the building. Cities around the country have made major strides in improving the energy efficiency of existing city office buildings, schools, police and fire stations.

Solution #3—Energy Efficient Street Lighting

Street lighting and traffic signals can use a significant amount of energy, and many cities have found that by replacing traditional light fixtures with super-efficient light emitting diode or LED bulbs, they are reaping energy and cost savings.

Solution #4—Public Benefit Funds

Cities with community-owned, local municipal utilities can integrate energy efficiency into the city's overall energy plan. If your city has a municipal utility, it can set up a local public benefits fund (PBF), where a small surcharge on consumer energy bills is used to create a fund to finance energy efficiency projects in the utility service area, thus lowering the overall energy costs for consumers.

Austin Energy—austinenergy.com—and the Sacramento Municipal Utility District—smud.org—are examples of municipal utilities that have used public benefit funds to integrate energy efficiency to lower energy use and costs.

Solution #5—Combined Heat and Power

Cities and businesses can also benefit from energy efficient, combined heat and power (CHP) systems. These systems produce both electricity and steam for heating and cooling from a single power plant located near consumers. As a result, CHP systems recover heat that is normally wasted at power plants and funnel the heat into surrounding buildings. This reduces energy costs and lowers pollution by eliminating the need for separate fuel sources for electricity and heating.

Salt Lake City UTAH

Salt Lake City has dramatically reduced its energy costs by aggressively pursuing energy efficiency measures. Currently, the city saves over \$32,000 a year on its energy costs as a result of installing 861 light emitting diode (LED) traffic signals. The city plans to expand this program to all of its 1630 red and green lights, which is expected to save over 500 tons of



heat-trapping carbon dioxide (CO₂) pollution each year with annual cost savings of \$53,000. The city has also found that LED signals require less maintenance than conventional lighting.

In addition, the city has replaced the conventional incandescent bulbs in its city and county office buildings with more energy efficient compact fluores-

cent bulbs (CFLs). These bulbs use much less energy and last significantly longer, saving the city over \$33,000 a year and reducing CO₂ emissions by 344 tons per year.

These energy efficiency measures are a part of a city wide action plan to protect the environment and reduce global warming emissions.

LEARN MORE

Read the Salt Lake City's plan at slcgov.com/environment/actionplan.htm.

Scottsdale ARIZONA

The city of Scottsdale has been a leader in the Southwest on energy efficiency for buildings. In 1998, Scottsdale introduced Arizona's first green building program which helps builders and home owners learn about how to integrate energy efficiency and water saving features into new homes. Between 1998 and 2003, the green building program worked with 99 builders and issued 230 permits for green building projects in the city.

In March 2005, Scottsdale became the first city in the nation to require



that all new city buildings and renovation projects meet LEED GOLD standards for energy efficiency and sustainability – one of the highest LEED ratings.

LEARN MORE

Get the link to Scottsdale's green building program at scottsdaleaz.gov/greenbuilding.



Harnessing the Desert Sun— New energy-efficient homes in

Scottsdale use both renewable technologies like solar panels, as well as thick adobe walls that cool the house in the summer and keep it warmer in the winter.

Twin Falls IDAHO

Like many other school districts around the country with growing numbers of students and decreasing budgets, the Twin Falls school district began searching for creative ways to reduce costs. School officials realized that the district could reduce energy costs and cut pollution by increasing the energy efficiency of its eleven schools. The upgrades included more efficient lighting, and improvements to the heating, ventilation and air-conditioning systems. The upgrades are expected to generate \$3.5 million in energy savings.

In an innovative financing agreement, the school district signed an energy savings performance contract with Minnesota-based Honeywell Corporation. Under a performance contract, a private company pays to make energy efficient improvements and is then reimbursed with the money saved through lower energy bills over the lifetime of the project.

According to Dr. John Miller, the Director of Operations for the Twin Falls School District, the performance contract gave the school district "the capital to accomplish in months, what would have normally taken us a decade to complete because of budget constraints."

LEARN MORE

The Twin Falls school district project Web site is available at newsite.schoolfacilities.com/cd_1695.aspx

St. Paul MINNESOTA

During the long, cold Minnesota winters, the majority of the buildings in downtown Saint Paul stay warm using District Energy's energyefficient combined heat and power (CHP) system. Providing heating service to over 80 percent of downtown Saint Paul and adjacent areas, including the Minnesota State Capitol and nearly 300 homes, the system uses heat drawn from a biomass-fired power plant located in the heart of the city. At the same time, this system feeds electricity into the grid. The district energy system not only reduces energy costs, but it also reduces overall energy consumption and pollution by using a renewable fuel as its primary heat source to meet customer needs.

LEARN MORE

Details of Saint Paul's CHP system are available at districtenergy.com/CurrentActivities/chp.html



Heat and Power—

By producing both heat and electricity from one power plant, the District Energy plant helps save money and cut pollution.

Renewable Energy Solutions

By harnessing natural sources of energy like the sun and the wind, renewable energy sources can replace our reliance on outdated, polluting power plants that rely on fossil fuels. Today's solar panels efficiently transform sunlight into electricity while blending into the design of homes and office buildings. Modern

wind turbines rise high above the ground, capturing the strongest winds to produce reliable electricity. Currently, dirty fossil fuel power plants account for over a third of the nation's total global warming emissions. Meeting our energy needs with clean, renewable energy can move the country towards a brighter, cleaner, and

cheaper energy future. Cities around the country are discovering that investing in innovative renewable energy sources reduces global warming emissions and creates a reliable source of clean, homegrown electricity.

Solution #1—Renewable Energy Standards

A renewable energy standard requires that a certain percentage of all electricity sold in a city or a utility area come from clean, renewable energy sources such as wind and solar power by a specific target date. These standards are phased in over time so that renewable energy capacity can be built and incorporated into the necessary energy management and reliability plans. For instance, a 20 percent Renewable Energy Standard could be phased in over ten years, requiring an additional 2 percent of electricity generation to come from renewable sources each year. In particular, cities that operate municipal utilities have been able to set renewable energy standards for their community-owned utilities.

Solution #2—Solar and Wind Installations

Some cities are moving forward by financing the construction of renewable energy projects themselves. In some cases, cities are working with local municipal utilities to construct wind turbines. In other cases, cities are working with privately owned utilities and renewable energy developers to construct solar arrays on city buildings, schools, and homes.

Solution #3—City Utility Contracts

Some cities are beginning to incorporate renewable energy requirements into their contract renewals with privately owned local utilities. For example, Denver, Colorado is working with its local utility, Xcel Energy, to meet modest renewable energy goals for the city.





Clean Energy, Good Jobs—Investing in clean energy not only saves taxpayer dollars and protects the environment, it also creates good jobs for the future. One example is the rooftop solar panels powering Northeastern University's Eli Student Center in Boston.

Fort Collins colorado

Sitting along the eastern edge of the Rocky Mountain Front, the city of Fort Collins has embraced renewable energy and energy efficiency as a key component to meeting the city's energy needs. In 2003, the City Council adopted the Electric Energy Supply Policy which aims to "maintain high system reliability, maintain competitive electric rates and reduce the environmental impact of electricity generation."

This program sets strong clean energy targets, and is working to produce 15 percent of the city's electricity with renewable energy by 2017 and reduce per capita energy consumption 10 percent by 2012. Over the full time frame of the program, Fort Collins expects to reduce its global warming carbon dioxide emissions by 472,000 tons.

Clean energy is not only reducing global warming emissions in Fort Collins, but it is also saving money by reducing costs. According to the city's municipal utility, the cost of meeting energy needs through energy efficiency is about 1.7 cents per kWh, while the cost of providing energy is about 3.7 cents per kWh. That means that in Fort Collins energy efficiency is meeting citizens' needs at half the cost of energy coming from existing power plants.

According to Michael B. Smith, Fort Collins' Utilities General Manager, "We are pleased that some of our future energy growth will come from renewable energy sources. The Electric Energy Supply Policy is a positive blueprint for the future."

Funding for the city's efficiency and renewable energy programs comes from a 2 percent increase in customer rates. Even with these increases, Fort Collins continues to enjoy electricity rates below the state average, and will see lower energy costs as a result of the energy efficiency programs.

LEARN MORE

Read Fort Collins' Electric Energy Supply Policy at ci.fort-collins.co.us/utilities/energypolicy.php.

Columbia MISSOURI

Last year, with 78 percent of the vote, the citizens of Columbia, Missouri overwhelmingly approved a plan to require the city to increase its use of renewable energy sources, like wind and solar power, over the next 20 years. The measure will create a "Renewable Energy Standard" for Columbia requiring that the city's municipal utility company obtain 2 percent of its power from renewable energy by 2007, ramping up to 15 percent by 2022.

Columbia's successful ballot initiative is part of a growing national trend of voter-driven policies to increase the use of clean, renewable energy sources. Like Columbia, voters in Colorado recently approved a statewide Renewable Energy Standard with 53 percent of the vote, requiring utilities in Colorado to produce 10 percent of their electricity with clean energy sources like wind and solar power by 2015.

LEARN MORE

Additional information about Columbia's renewal energy standard is available at 65.108.172.154/E-Alerts/12-3-04.html



Blowin' in the Wind— The strong winds that blow across the Rocky Mountain west are being harnessed to create clean energy for Fort Collins.

Waverly IOWA

Wind energy is not only generating pollution-free energy to the town of Waverly, but it is also providing local economic development. As the first municipal utility in the United States to install its own wind turbines, Waverly Light & Power serves 4,300 customers in a 33 squaremile area. The utility has constructed wind turbines on land leased from local farmers, creating electricity for the city and additional income for the farmers.

Waverly Light & Power's Board of Trustees has set a goal of increasing wind production to 10 percent of the total local power supply, and is advancing quite well towards that target. Currently, the city's wind turbines generate 5.52 percent of the area's total electricity generation, and provide enough electricity to meet the needs of 761 homes each year. That translates into reducing the city's annual carbon dioxide (CO₂) emissions by nearly 6,850 tons.

LEARN MORE

Read more on Waverly Light & Power's Web site at waverlyia.com/.





"This is not only an environmental

protection issue, but also an economic development and sustainability issue. Protecting our environment, we are protecting our resources and preserving them for future generations to come."

—Hallandale Beach, Florida, Mayor Joy Cooper

CONCLUSION— Re-Energizing Your City

As the success stories in this guide prove, cities are making real progress cutting global warming pollution. No longer waiting for the federal government to act, mayors and other local leaders are putting into place winning energy solutions right now. By using the innovative technologies of cleaner cars, energy efficiency and renewable energy, cities across America are protecting our health and environment, while saving taxpayer dollars.

As the news of these successful city solutions spreads, more cities are joining in the "cool cities" movement. Together, they are helping to lead our country and our world into a new energy future. And that's cool.

Now it's your city's turn.

LEARN MORE: sierraclub.org/globalwarming/coolcities

TAKE ACTION:

1. Join the U.S. Mayors Climate Protection Agreement to reduce global warming pollution

2. Green Your City's Vehicle Fleets with Hybrid and other cleaner cars

3. Modernize City Buildings with moneysaving energy efficiency technology

4. Invest in Clean and Safe Renewal Energy