



Memorandum

TO: TRANSPORTATION & ENVIRONMENT
COMMITTEE

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 02-20-07

Approved

Date

SUBJECT: UPDATE ON COOL COMMUNITIES AND COOL CITIES

RECOMMENDATION

Accept this staff report on Cool Communities and Cool Cities activities.

BACKGROUND

Cool Communities policies work to reduce the Urban Heat Island effect with the strategic planting of urban trees, and the installation of cool roofs and cool pavements. Cool Communities refers to the planting of trees, the use of light colored roofing and paving materials to reduce ambient air temperature, the reduction smog and energy consumption, and the improvement of storm water run-off. Recommendations for incorporating Cool Communities concepts were adopted by the City Council in January 2001. Those recommendations included:

- Implementation of a grant agreement with Pacific Gas and Electric Company to conduct a Cool Roofs Incentive Program. The grant from PG&E was for an amount not to exceed \$621,000 for the term from February 20, 2001 through March 2002. That program was very successful; training 55 local roof contractors, providing 21 businesses representing over 30 buildings with rebates exceeding a total of \$130,000 and reducing an estimated 125kW Peak Demand.
- Incorporation of Cool Communities strategies within Green Building Policies/Guidelines for City Facilities—Within the U.S. Green Building Council's LEED Rating System for city facilities, one of the credits that can be achieved relates directly to Cool Communities/Urban heat islands. That site credit deals with incorporating landscape and exterior designs that can reduce the heat island effect.
- Participation in the Cities for Climate Protection Campaign, sponsored by the International Council for Local Environmental Initiatives. The campaign encourages the adoption of policies and implementation of measures to achieve quantifiable reductions in local greenhouse gas emissions, improve air quality, and enhance urban livability and sustainability.

More recently, in 2003, the City Council initially adopted the Sustainable Energy Policies. One of the goals of those policies is to “Promote and achieve a cleaner and healthier environment, improving air quality and reducing green house gas emissions. A policy to achieve that goal is to reduce the urban heat island effect through the adoption of cool communities’ actions. Those actions have been, and continue to be part of the City’s Energy Action Plan.

Cool Cities are cities that have made a commitment to stopping global warming by signing the U.S. Mayor’s Climate Protection Agreement. The Mayors Climate Protection Agreement was first presented at U.S. Conference of Mayor’s 73rd Annual Meeting on June 13, 2005. At that meeting, the agreement was passed unanimously. Mayor Ron Gonzales participated in approving that agreement, representing the City of San José. As such, the City is listed as a signatory to the Climate Protection Agreement.

Mayors who sign on to the Agreement make a commitment to reduce greenhouse gas (GHG) emissions in their own cities and communities to 7% below 1990 levels by 2012 through actions like increasing energy efficiency, reducing vehicle miles traveled, maintaining healthy urban forests, reducing sprawl and promoting use of clean, renewable energy resources.

Under the Agreement, participating cities commit to take following three actions:

- Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system
- Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012; and
- Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns, including the following actions:

The Sierra Club has launched the "Cool Cities" campaign that encourages local leaders throughout the country to move forward with innovative solutions to reduce heat-trapping global warming pollution. The campaign urges citizens to work with their local communities by conducting a greenhouse gas emissions inventory creating a solutions plan and implementing and monitoring progress.

ANALYSIS

To demonstrate its commitment to the reduction of greenhouse gas emissions, the City has signed on to the following efforts:

- Cities for Climate Protection
- Sustainable Silicon Valley
- U.S. Conference of Mayor’s Climate Protection Agreement
- United Nations Environmental Accords

Each of these efforts has at its core the following actions:

- Establishment of a specific goal
- Implementation of actions that reduce emissions (energy reduction in facilities and transportation)
- Monitoring and evaluations.

Since 2003, the Sustainable Energy Policy Action Plan report has provided a summary of the actions that the City has conducted to reduce energy and greenhouse gas emissions. Energy reductions in city facilities, and the conversion of the City's fleet to alternative vehicles has provided the bulk of the City's reductions, and those reductions are reported to the Council as part of the Energy Action Plan. To date, the City has not established specific GHG reduction goal. Work would need to be conducted to calculate greenhouse gas emissions for a base year (e.g., 1999) and for a forecast year (e.g., 2015) based on energy consumption and waste generation. The inventory and forecast would then provide a benchmark against which the city can measure progress. These activities are being proposed as part of the Energy Action Plan for 2007-08.

JOHN STUFFLEBEAN
Director
Environmental Services Department

For questions, contact Mary Tucker, Supervising Environmental Services Specialist,
at 975-2581

Attachment: Sierra Club "Cool Cities" Fact Sheet



Explore, enjoy and protect the planet

Cool CITIES

Solving Global Warming One City at a Time



sierraclub.org/coolcities

COOL CITIES TAKE THE LEAD

Communities all over America are responding to the threat of global warming with smart energy solutions. These “Cool Cities” are taking decisive action to reduce heat-trapping emissions, lower energy bills, save taxpayer dollars, and protect our environment.

At a time when the federal government is failing to act, mayors and other local leaders are taking the lead to curb global warming. Beginning with Seattle Mayor Greg Nickels, more than 200 mayors representing 42 million Americans in 38 states have signed the U.S. Mayors Climate Protection Agreement to reduce global warming carbon dioxide (CO₂) pollution in their cities to

7 percent below 1990 levels by 2012 (see seattle.gov/mayor/climate).

These Cool Cities are working to meet this goal with practical and innovative energy solutions that reduce energy waste and pollution, and thereby cut our dependence on oil, benefit public health, and save money.

GLOBAL WARMING: NOW IS THE TIME TO ACT

Scientists have concluded that burning fossil fuels—like 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, economy, and environment.

The good news is that we have the tools

today to reduce global warming pollution, and cities of all sizes are pursuing innovative energy solutions.

While every city’s energy solutions plan will be unique, there are three key common Cool City strategies: **Green Vehicle Fleets, Energy Efficiency, and Renewable Energy.**

GREEN VEHICLE SOLUTIONS

The biggest single step we can take to curb global warming is making our cars, trucks, and SUVs go farther on a gallon of gas. Many cities are cutting their global warming emissions by purchasing gas-electric hybrid cars and SUVs for their city vehicle fleet.

By using less gasoline, hybrid vehicles release a fraction of the global warming and



air pollution emitted by conventional vehicles while saving money at the gas pump. Some cities are also providing incentives, such as free parking and lower registration fees, to encourage the purchase of hybrids by local residents and businesses.

ENERGY EFFICIENCY SOLUTIONS

Energy efficiency means using less energy through better technology to light streets and power buildings and industrial facilities. Reducing energy use is one of the most cost-effective and fastest ways to meet our energy needs. Lowering energy costs enables communities to invest more in schools, job creation, and new infrastructure.

Since fossil fuel power plants account for more than one-third of U.S. global warming emissions, saving energy also means



Clean Harvest: Waverly Light & Power in Iowa has installed wind turbines on land leased from local farmers, creating clean electricity for the city and additional income for farmers.



Cool Mayor: Mayor Joseph Adams, of University City, Missouri, accepts the Sierra Club's Cool City award for signing the U.S. Mayors Climate Protection Agreement.

less pollution. From high-tech interior and street lighting, energy-efficient building standards and retrofits, to efficient combined heat-and-power, cities in every region of the country are modernizing lighting, heating, cooling, and other systems.

RENEWABLE ENERGY SOLUTIONS

Cities across the nation are investing in clean and renewable power like solar and wind energy to lower global warming emissions and create a reliable source of safe, homegrown electricity.

Many cities are adopting "renewable energy standards" that require a specific percentage of the electricity sold in a city or utility area to come from renewable sources by a specific target date.

Other cities are incorporating renewable energy technologies, such as solar photovoltaic panels, into the design of public buildings. Renewable power and energy efficiency are essential solutions for replacing electricity from dirty, fossil-fuel-burning power plants.

COOL CITIES: BRINGING COMMUNITIES TOGETHER

The most successful Cool Cities are engaging the entire community to help

meet the goals of the U.S. Mayors Climate Protection Agreement. Local businesses, builders, faith groups, environmentalists, and labor unions are working together to make their cities more livable and vibrant while lowering energy bills, creating good jobs, and tackling a global problem.

RE-ENERGIZING YOUR CITY

As the news of successful city solutions spreads, more cities are joining in the Cool Cities movement to lead our country and our world into a new energy future. Cool Cities are literally re-energizing our nation, proving that we can solve global warming one city at a time.

Now it's your city's turn.

COOL CITIES

TAKE ACTION: BECOME A COOL CITY

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 money-saving energy-efficiency technology
4. Invest in clean and safe renewable energy

LEARN MORE:

For a list of cities that are becoming "cool," and for resources and specific examples of smart energy city solutions and model action plans, go to sierraclub.org/coolcities.