

DATE ISSUED: January 4, 2002

REPORT NO. 02-003

ATTENTION: Rules, Finance and Intergovernmental Relations Committee
Agenda of January 9, 2002

SUBJECT: *San Diego Sustainable Community Program*

SUMMARY

Issue - Should the City of San Diego renew the Federal-Community Partnership Agreement with the U. S. Department of Energy, adopt a resolution to reduce greenhouse gas emissions, and approve the *San Diego Sustainable Community Program* Indicators?

Manager's Recommendations –

1. Renew the Partnership Agreement between the City of San Diego and the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy.
2. Approve the set of *San Diego Sustainable Community Program* Indicators, and direct the City Manager to implement a system whereby pertinent information from City departments is compiled into an integrated report coordinated by the Environmental Services Department (ESD).
3. Resolve to fulfill the City's commitment as a "Cities for Climate Protection" Partner with the International Council for Local Environmental Initiatives to set a 15% reduction target for greenhouse gas emissions by 2010.
4. Direct the City Manager to establish an ad hoc task force comprised of members of the scientific community and City staff, coordinated by ESD, to refine and further develop the Cities for Climate Protection Action Plan to reduce greenhouse gas emissions.

Other Recommendations – None

Fiscal Impact – Based on EPA Climate Wise calculations, the City avoided approximately \$15 million in cumulative costs between 1994 and 2001 by implementing projects to conserve energy, as well as to pursue renewable energy alternatives,

transportation efficiencies, alternative fuel decisions and waste management improvements. It is anticipated that policies and programs implemented by the City of San Diego that are consistent with Mayor Murphy's Ten Goals and supported by the *San Diego Sustainable Community Program* will result in additional significant cost avoidance.

BACKGROUND

The predecessor of the *San Diego Sustainable Community Program* is the San Diego Livable Community Initiative, which was formalized in April 2000 when the Environmental Services Department (ESD) was selected by the White House and Department of Energy to represent the City of San Diego as one of twelve national demonstration sites for the national Livable Community Initiative. A framing document that confirmed a formal collaboration with DOE and identified objectives and responsibilities was signed in November 2000 by former Secretary of the United States Department of Energy, Bill Richardson, and then-Mayor Susan Golding. Additionally, a broad-based consortium of public and private sector participants were brought together under the umbrella of the Livable Community Advisory Team. In consultation with the Team, the Mission Statement and a list of 3-5 year milestones were developed.

The theme of the City of San Diego's *San Diego Sustainable Community Program* is living and working today with the future in sight. The goal is to meet the needs of San Diego's present population without compromising the ability of future San Diegans to meet their needs. The vision of our legacy is economic resilience, environmental stewardship and civic opportunity, which are three aspects of a sustainable community. One critical component is to create a system that measures progress through the use of citywide indicators.

There are better ways of doing business, providing services, and making individual decisions that will accommodate the projected growth and not deteriorate San Diego's finest qualities.

Example: For the first time in thirty years, the region is now in compliance with EPA Ozone Standards, after the county's population increased from 1.4 million in 1971 to more than 3 million today.

Example: Based on EPA Climate Wise calculations, the City avoided approximately \$15 million in costs between 1994 and 2001 by energy conservation, transportation efficiencies, alternative fuel decisions and waste management improvements. It is anticipated that policies and programs implemented by the City of San Diego, and which are consistent with the Mayor's Goals and supported by the *San Diego Sustainable Community Program* will result in additional cost avoidance.

In this calendar year, the City has continued to advance these efforts, including:

- Funding to support *San Diego Sustainable Community Program*
 - \$90,000 from DOE for two PV feasibility studies
 - \$10,000 from ICLEI for a Climate Wise business outreach campaign
 - \$10,000 from EPA for the Pacific Coast Roundtable (in progress)

- Policies/Procedures
 - Energy Star Purchasing Policy
 - Revised Green Building Policy
 - Environmentally Purchasing Policy and tracking mechanism (in process)
 - “Greener Fleet” Policy and procedures (in process)
- New Programs
 - Established “Green School’s Program” for High Schools in San Diego
 - Expanded Earth Camp for grades 2-5
 - Initiated the Pacific Coast Roundtable of Community Sustainability Programs
- Feasibility Studies
 - Feasibility of Photovoltaic (PV) Systems at Miramar Landfill
 - Comparison of Rooftop PV Installation vs. Brightfield System at Chollas landfill
- Public Outreach/ Targeted Presentations
 - Four public forums and one community event
 - Six targeted presentations to business and government groups.

DISCUSSION

In its complex, multi-faceted role as consumer, public service provider, developer, and resource manager, the City has many opportunities to influence the financial, environmental, and social future of this region. Currently, the City organization does not have a formal system in place to periodically evaluate policy decisions and actions in terms of their long-term impact on the sustainability of the community. The *San Diego Sustainable Community Program* is designed to compliment ongoing City efforts, and proposes to shepherd more sustainable practices citywide; periodically evaluate policy decisions and actions in terms of their long-term impact; identify potential opportunities to provide services in a more sustainable manner; support innovative city operations where appropriate; track progress of projects selected for implementation; and assist in developing tools and guidelines for improvement. Attachment One summarizes the Program’s components.

The groundwork has already been laid, as is illustrated by the following examples.

General Services Department:

As part of the *San Diego Sustainable Community Program*, staff from ESD are assisting General Services’ Purchasing Division and Equipment Division with implementing “greener” purchasing practices. Financial savings are guaranteed for the new vehicle purchases through the Equipment Division, and this is coupled with a reduction in air pollution. The Purchasing Division has provided many opportunities to influence decisions that will support long-term environmental objectives.

Planning Department:

The *San Diego Sustainable Community Program* is positioned to augment the tremendous effort underway to complete the Strategic Framework Element and

associated community meetings by developing an educational outreach campaign that spotlights the shared responsibility of government, business, community and residents to take a longer view of the impact their decisions have on San Diego's future. The tools will include the *Legacy 2000* set of indicators, the associated annual review, and a variety of public forums.

Metropolitan Wastewater Department (MWWD):

The *San Diego Sustainable Community Program* will highlight the success of MWWD and ESD for implementation of environmental management systems, and will promote this to other City departments, as well as to municipalities throughout the region.

Engineering and Capital Improvement Department and Development Services Department:

Both Departments are key to implementation of the "green building" policy and LEED standards. *San Diego Sustainable Community Program* supports these efforts in a number of ways. First, as an information clearinghouse, innovative public policies can be shared between municipalities, and guidelines can be developed. Also, information about conservation, energy efficiency and renewable energy is delivered through public forums, and K-12 education programs.

The *San Diego Sustainable Community Program* supports many of Mayor Murphy's Ten Goals, and also tracks a broader set of individual choices and regional conditions. This includes indicators that measure civic opportunity and involvement, which is an individual's contribution to a sustainable community. The *San Diego Sustainable Community Program* also links City departments to resources within federal, state, and local agencies. The recommended components of the *San Diego Sustainable Community Program* are more completely outlined below.

1. Renew the Community Partnership Agreement between the City of San Diego and the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy.

DOE expertise and federal funding have helped to "jump-start" the City's renewable energy projects and energy conservation efforts. A revised Community Partnership Agreement has been drafted to support a continuing relationship with DOE, and reflects the evolution of the program. As shown in Attachment Two, the Community Partnership Agreement states the shared belief of each agency that community prosperity and sustainability are linked with a clean, reliable, and affordable energy supply. The City offers an ideal pilot for demonstrating how DOE's technologies, policies, and resources can be integrated to meet community "livability" challenges, and may serve as a model for other communities.

To date, DOE has completed an economic feasibility study evaluating use of alternative energy technology at a City landfill. DOE staff from both the Seattle Regional Office and Washington, D.C. Headquarters have been accessible and provided meaningful assistance. DOE has contributed more than \$90,000 toward completing a "Brightfield" feasibility study for Miramar and Chollas Landfills.

2. Approve the set of *San Diego Sustainable Community Program* Indicators, and direct the City Manager to pursue a reporting system whereby pertinent information from City departments can be recorded into an integrated report, to be coordinated by the Environmental Services Department (ESD).

Two sets of indicators are presented. Table One has been organized to correspond with Mayor Murphy’s top ten goals. The second set includes a broader scope of questions to analyze, and is meant to capture an individual’s contribution to a sustainable community. Placed side by side, the two sets of indicators reveal the combined effect of government influence and individual decisions.

A significant benefit of a City department-wide reporting mechanism for the *San Diego Sustainable Community Program* Indicators is that it integrates previously compartmentalized information. This will be coordinated by Environmental Services Department, which will work in concert with other City Departments. To the extent possible, baseline data beginning with 1996 will be used for comparison. Conclusions will be developed and recommendations will be presented in an annual overview.

The initial process for selecting the indicators was very inclusive. It began in 1999 with a series of five public outreach forums entitled “The Dashboard Series.” The forums offered the public a chance to select what they felt were the most important issues to track over time. Outlined in the table below are those indicators, which can be directly linked with the Mayor’s 10 stated goals. Following the table are those indicators that are also recommended for further development as they complete the areas identified by Dashboard Series participants as critical for our community’s sustainability. As an educational tool, the *San Diego Sustainable Community Program* Indicators and associated report will have greater impact if it includes those elements that capture the interest of the public, in addition to indicators the City would like to highlight.

TABLE ONE: *San Diego Sustainable Community Program* Indicators

| <i>Mayor’s Goals</i> | San Diego Sustainable Community INDICATORS |
|---|---|
| Goal # 2- Reduce traffic congestion | <ul style="list-style-type: none"> • Annual number of days exceeding the California standard for Ozone air pollution • Vehicle miles traveled per capita per year • Percent of residents within 0.25 miles of a retail store • Percent of residence within 0.25 miles of public transit • Number of cars per household • Percent of San Diegans who rideshare to work (carpooling, transit) |
| Goal # 3- Create neighborhoods we can be proud of | <ul style="list-style-type: none"> • Number of affordable housing units available • Rate of home ownership within the city as compared with the national average • Average number of trees per mile of street • Per capita spending for public infrastructure • Number of households on waiting list for subsidized housing assistance (Sec. 8) |

| | |
|---|---|
| Goal # 4- Clean up our beaches and bays | <ul style="list-style-type: none"> • Annual number of beach closures and postings |
| Goal # 8- Make San Diego America's safest city | <ul style="list-style-type: none"> • Incidents of violent crime committed by adults per year • Incidents of violent crime committed by children per year • Participation in school-sponsored after school childcare programs for grades K-8 |
| Goal # 9- Pursue energy independence | <ul style="list-style-type: none"> • KWh consumed per capita per year • Percent KWh renewable energy in residential and commercial buildings • Number of City facilities using alternative energy sources • Number of City facilities at which the "Green Building Policy" is fully implemented • The number of submittals to Development Services Dept. that include renewable energy • Dollars saved through City fleet management fuel-reduction strategies • Number of vehicles converted from standard diesel fuel, a significant air pollutant, in the City fleet and other large fleets |
| Goal # 10- Complete MSCP open space acquisition | <ul style="list-style-type: none"> • Percentage and number of species that are covered by the Multiple Species Conservation Program moving from the designation of "unprotected" to "protected" • Percent completion of the City of San Diego target open space acquisitions by 2007 which will provide increased interconnecting linkages for wildlife movement, protect San Diego's unique biodiversity, and enhance the region's quality of life |

The broader set of indicators listed below serve as an educational tool that track personal choices, regional conditions, and City actions that are outside the scope of the Mayor's Ten Goals. Most of the outcomes are not within the City's ability to control. However, their inclusion is beneficial because of the context they provide by which to understand the City's progress. It is recommended that this data be collected to capture a fuller sense of the region's path toward sustainability. Also, by including these indicators, the report respects the original recommendations provided by residents who participated at the public forums.

Water Conservation

- Potable water consumed per capita per year
- Gallons of reclaimed water used per year

Environmental Management Systems in Public Programs

- Number of municipal facilities in the region certified as ISO 14001, such as Landfill Operations (ESD) and Sewage Conveyance and Treatment (Metro Wastewater Department)
- Combined annual savings (energy, fuel, etc...) resulting from the use of City environmentally preferable purchasing policies, such as Energy Star, Green Building, Recycled products, and others

Civic Engagement

- Percent voter participation for ages of 18-35 per year
- Number of donations to San Diego Red Cross Blood Bank per year
- Assessment of volunteerism within the region per year

Expanding City-Provided Educational Opportunities

- Annual number of City-sponsored environmental education venues for youth, grades K-12
- Annual number of City-sponsored Community Forums

Further Developing the San Diego/Tijuana Information Exchange

- The number of meetings per year of cross-border information exchanges between San Diego and Tijuana
- Number of border-related forums related to energy, environment, public works, and public health
- The number of “hits” per year of the City’s Border Wastewise website

Residents Earning a “Living Wage” (Based on Local Cost of Living Factors)

- Percent of people under 25 with at least 2 years of specialized education after high school
- Percent of workers with middle income wages of \$20-45K per year
- Percent of families with children that are below the poverty level

3. Resolve to fulfill the City’s commitment as a “Cities for Climate Protection” (CCP) Partner with the International Council for Local Environmental Initiatives (ICLEI) to set a 15% reduction target for greenhouse gas emissions by 2010.

In 1997, the City of San Diego joined a select group of international cities in the CCP model program developed by ICLEI. The objective is to identify sources, quantities, and reduction strategies of two greenhouse gas emissions, carbon dioxide (CO₂) and methane. Sources of CO₂ and methane emissions are the same as those that diminish air quality and contribute to global warming and climate change.

The CCP commitment from each participating city includes the following steps:

- 1) Establish a baseline year (1990), complete an inventory of projects that have reduced CO₂ and methane from baseline to present, and quantify greenhouse gas (GHG) emission reduction using an Environmental Protection Agency software program.
- 2) Set an emission reduction target for 2010, then develop and implement a Local Action Plan to meet that target.
- 3) Monitor and verify emission reductions.

Attachment Three is a resolution that declares the City’s target of reducing greenhouse gas emissions by 15% by 2010.

ESD staff have completed the first phase of analysis. This includes establishing the 1990 baseline data and a rationale for three emission reduction scenarios: 7%, 15%, and 60%. A list of GHG emission reduction projects implemented by the City of San Diego between 1994-2000 is shown in Attachment Four. The cumulative impact of these projects represents tremendous financial and environmental benefits. The City realizes an estimated \$15 million cost avoidance annually, and an annual reduction of approximately 836,000 tons of CO₂. This equals the emissions that would have been released from burning 77 million gallons of gasoline, or equivalent to 150,000 households using no energy for one year.

4. Direct the City Manager to establish an ad hoc task force comprised of City staff and members of the scientific community to refine the CCP Action Plan and expand the projects to reduce greenhouse gas emissions, to be coordinated by ESD.

A community-wide assessment of projects remains to be done. It is recommended that the City Manager establish an ad hoc task force comprised of City staff and members of the scientific community to review and further develop the City's Local Action Plan. This is to be coordinated by the Environmental Services Department.

CONCLUSION

The City of San Diego is able to create a clearer path toward more sustainable practices. The *San Diego Sustainable Community Program* is one of many collaborative efforts that demonstrate a strong resolve to leave the legacy of a city worthy of affection for many generations to come.

Respectfully submitted,

Richard L. Hays
Environmental Services Director

George I. Loveland
Senior Deputy City Manager

LOVELAND/HAYS/LGP

Attachments: [1. Attachment One- San Diego Sustainable Community Overview](#)
[2. Attachment Two- Federal-Community Partnership Agreement](#)
[3. Attachment Three- Resolution to Reduce Greenhouse Gas Emissions](#)