



# REPORT TO COUNCIL **27**

## City of Sacramento

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**STAFF REPORT**  
**April 3, 2007**

**Honorable Mayor and  
Members of the City Council**

**Title: Update on the Sustainability Master Plan – *Creating a Sustainable City***

**Location/Council District:** Citywide

**Recommendation:** Staff recommends that the City Council: 1) Review and comment on the City of Sacramento's draft Sustainability Master Plan – *Creating a Sustainable City*; 2) review, comment and direct a public outreach process for the Master Plan; 3) direct staff to return with the City's Sustainability Master Plan for final adoption in Summer 2007 integrating City Council and community comments; and 4) direct staff to return in Summer 2007 with recommended priority targets for the first phase implementation of the Master Plan based on feasibility and financial analyses.

**Contact:** Jonathan Rewers, Program Manager, 808-7590; Reina Schwartz, Director of General Services, 808-7195

**Presenters:** Jonathan Rewers, Program Manager, 808-7590; Reina Schwartz, Director of General Services, 808-7195; Genevieve Shiroma, Sacramento Municipal Utilities District (SMUD)

**Department:** General Services

**Division:** Facilities & Real Property Management

**Organization No:** 3289

**Description/Analysis:**

**Issue:** From concerns over climate change, to drought-related water shortages, to air quality, society faces serious environmental issues locally, regionally, nationally and even globally. Environmental issues affect the quality of life within the City of Sacramento, the region, state, nationwide and around the world.

In June 2005, the City Council directed staff to develop a Sustainability Agenda with goals and objectives that move the City toward using natural resources efficiently to prevent pollution and improve the economic, environmental and social well-being of current and future generations. When a process is



sustainable, it can be carried out over and over without negative environmental effects or high costs.

On April 4, 2006, City Council held a workshop to review elements of the Agenda including draft focus areas and goals, as well as an inventory of current City programs. The City Council also took action in support of the United Nations (UN) Urban Environmental Accords, which provide a basis for the City's Sustainability Agenda.

Staff is now bringing forward a Sustainability Master Plan – *Creating a Sustainable City* with identified focus areas, goals and targets for implementation. Staff is recommending that City Council review and comment on the draft. Staff is also recommending that the Sustainability Master Plan be shared with various neighborhood, community and business organizations to solicit comments before the final plan is adopted. Staff will also work to analyze and develop recommendations for a first phase of implementation for later review and approval by City Council.

**Policy Considerations:** The proposed Sustainability Master Plan is meant to serve as a policy framework for the City of Sacramento to ensure that sustainability concerns are incorporated into the City's decision making processes. Staff's recommendation is consistent with the City's Strategic Plan goal to achieve sustainability and livability within the City of Sacramento.

The Sustainability Master Plan is intended to be a means for *Creating a Sustainable City*, not an end. The plan is a tool for future operational and policy decisions. To proceed in a sensible way to change long-standing environmental practices, it is necessary to develop focus areas, goals and targets to be achieved.

**Environmental Considerations:** This report concerns administrative/policy activities that will not have any negative effect on the environment, and does not constitute a "project" as defined by the California Environmental Quality Act (CEQA) [CEQA Guidelines Sections 15061(b)(3); 15378(b)(2)]. Generally, moving toward sustainability will have a more positive impact on the environment.

**Rationale for Recommendation:** As a major landowner, employer, building manager, fleet operator, utility owner and operator, consumer of goods and services, and service provider, the City of Sacramento has both the opportunity and the capacity to bring about significant improvements in environmental quality in and around the region.

By integrating environmentally sustainable practices into City policies, procedures, operations, and fostering collaboration across City government, the City's Sustainability Master Plan – *Creating a Sustainable City*, will work to protect and

enhance the quality of life for current and future generations in the City of Sacramento. Leading by example, the Sustainability Master Plan promotes responsible management and effective stewardship of the City's built and natural environments; transforming the City of Sacramento into a model government agency that is clean, healthy, resource-efficient, and environmentally conscientious.

**Financial Considerations:** As part of the FY2006/07 Budget Process, the City Council approved an appropriation of \$150,000 for the development of the Sustainability Master Plan. The cost of developing and finalizing the plan itself will be covered within the \$150,000 allocated by the City Council for this purpose in June 2006.

It is important to note that many of the targets recommended in the Sustainability Master Plan can be implemented at little or no additional cost to the City by using existing staff and resources. Additionally, other goals and targets that may have an upfront cost often reduce operational costs, resulting in overall savings. When prioritizing goals and targets for implementation, the overall cost of each activity should be taken into account.

Those targets to be implemented as part of a first phase should be initially selected based on: potential environmental impact, payback period and ease of implementation.

**Emerging Small Business Development (ESBD):** There are no ESBD considerations with this report.

Respectfully Submitted by:

  
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Facilities Manager

Approved by:

  
Reina J. Schwartz  
Director, Department of General Services

Recommendation Approved:

  
Ray Kerridge  
City Manager

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**Attachment 1**

**BACKGROUND INFORMATION:**

Sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. When a process is sustainable, it can be carried out over and over without negative environmental effects or high costs.

In June 2005, City Council directed staff to develop a Sustainability Agenda with goals and objectives that contribute in moving the City toward using natural resources efficiently to prevent pollution and improve the economic, environmental, and social well-being of current and future generations.

On April 4, 2006, City Council held a workshop to review elements of the Agenda including draft focus areas and goals. The nine focus areas are as follows:

- Energy Independence
- Climate Protection
- Air Quality
- Material Resources
- Public Health and Nutrition
- Urban Design, Land Use, Green Building and Transportation
- Parks, Open Space and Habitat Conservation
- Water Resources and Flood Protection, and
- Public Involvement and Personal Responsibility

In addition on April 4, 2006, the City Council took action in support of the United Nations (UN) Urban Environmental Accords. The UN Urban Environmental Accords are a set of 21 actions that the United Nations has asked city governments to adopt and implement over a seven year period. The UN Urban Environmental Accords provide a basis for the City's Sustainability Agenda. However, to achieve long-term sustainability, the City will have to progressively improve performance in all thematic areas.

On May 16, 2006, as part of the FY2006/07 Strategic Planning – Strategic Budget process the City Council identified sustainability and livability as one of the five focus areas for the City's "Vision for 2007." As part of the budget process City Council appropriated \$150,000 towards the development of a Sustainability Plan meant to further the development of a policy agenda for the City, establish City operating principles, and establish coordination among City departments.

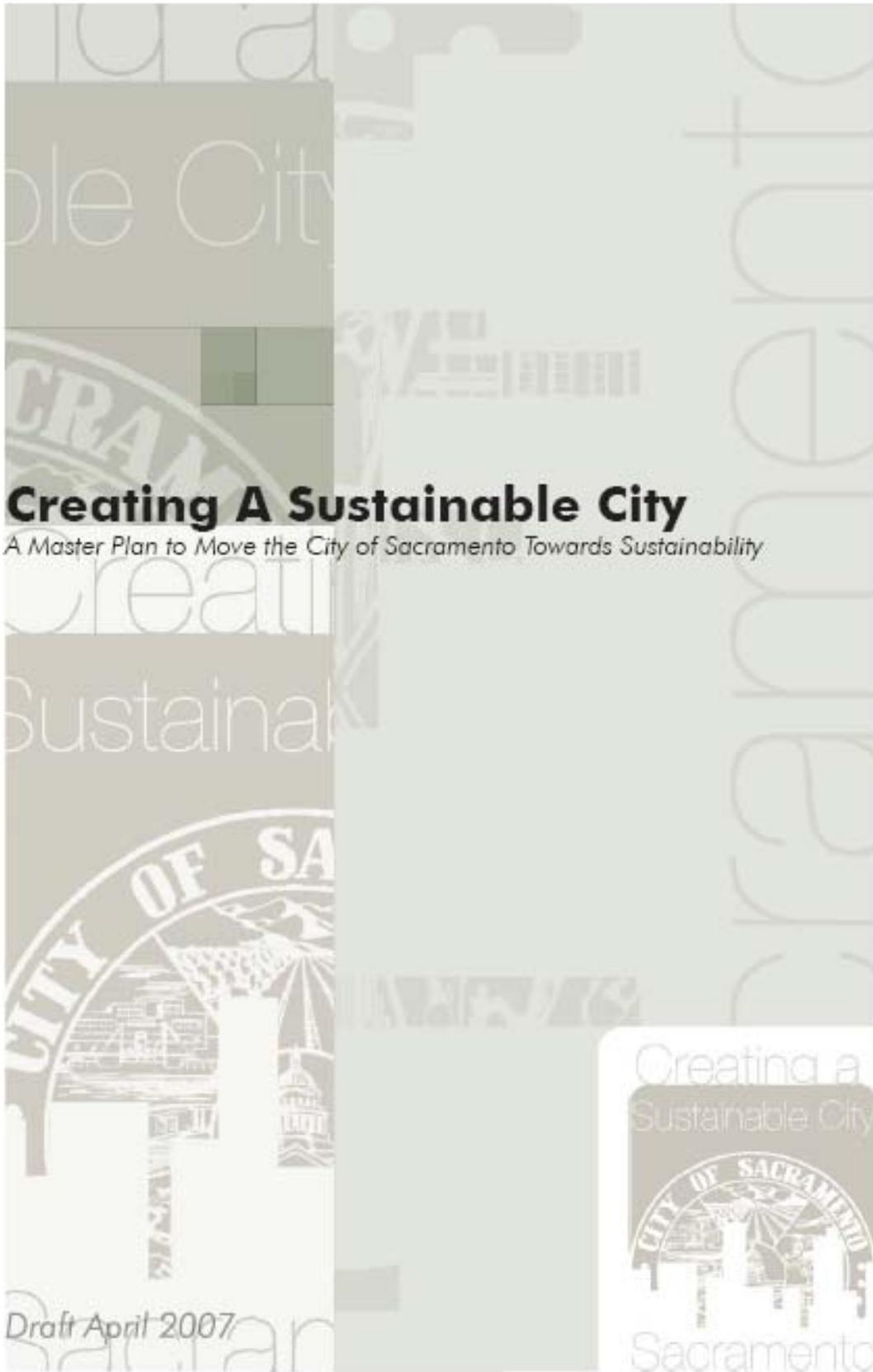
In Fall 2006, the Sustainability Technical Advisory Committee (STAC) was created including representatives from City Departments and the Mayor/City Council Office. STAC has worked over the past months to refine and develop the City's draft Sustainability Master Plan – *Creating a Sustainable City*, to ensure that sustainability concerns are incorporated into the City's decision making processes.

**Attachment 2**

**COMMUNITY OUTREACH RECOMMENDATION:**

Staff is recommending that the Sustainability Master Plan – *Creating a Sustainable City* be presented to a wide range of community groups for review and comment including but not limited to:

1. Development Oversight Commission
2. Planning Commission
3. Sacramento Housing and Redevelopment (SHRA) Commission
4. Capitol Area Development Authority (CADA) Board
5. Parks and Recreation Commission
6. General Plan Advisory Committee
7. Environmental Council of Sacramento (ECOS)
8. Neighborhood Services Area 1 Leadership Meeting
9. Neighborhood Services Area 2 Leadership Meeting
10. Neighborhood Services Area 3 Leadership Meeting
11. Neighborhood Services Area 4 Leadership Meeting
12. Sacramento Downtown Partnership
13. North State Building Improvement Association (BIA)
14. Sacramento Municipal Utility District (SMUD) Board of Directors
15. Sacramento Environmental Commission
16. Sacramento Metropolitan Chamber of Commerce
17. Central Valley Chapter of the American Institute of Architects
18. Associated General Contractors of California (Delta-Sierra District)
19. Sacramento Urban Design Alliance





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### FOCUS AREAS

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## SECTION 1:

### **Introduction - The Issue.**

From concerns over climate change, to drought-related water shortages, to air quality, society faces serious environmental issues locally, regionally, nationally and even globally. These issues will affect the quality of life today and into the future.

There is a growing body of evidence that a major shift in human behavior is necessary to overcome destructive tides of over-consumption and environmental degradation; and work for a better future for ourselves, our children and the numerous species that share our planet. Our existing economic systems, built environments and cultures are inherently unsustainable.

#### DEPENDENCE ON NON-RENEWABLE RESOURCES

Our economy and lifestyle is dependent on vast supplies of non-renewable resources, primarily derived from fossil fuels. As these resources are consumed, they will become increasingly scarce and more expensive. We must prepare for this eventuality to prevent a crisis of supply vs. demand. In addition, reducing our dependence on non-renewable fossil fuels reduces climate changing greenhouse gases and gives us greater energy independence.

#### OVER & EXCESSIVE USE OF NATURAL RESOURCES

We are using some renewable resources faster than nature can replenish them. Examples of this are consumption of water, lumber, wood and paper products, over-fishing and soil depletion. Over-consumption of some renewable resources can cause damage or collapse of ecosystems.

#### POLLUTION

Un-intended by-products of manufacturing, consumption and combustion of resources end up in our air, water, soil, and food. Many of these by-products are toxic. Material from consumption is left over as "waste" and buried in landfills; thus we are taking valuable resources out of nature's' renewing cycles in addition to consuming valuable land resources.

Our existing economic systems, built environments and cultures are inherently unsustainable. Achieving sustainability in contemporary times represents a major paradigm shift, essentially reversing long-standing trends of consumption and development, and changing our philosophy and behavior.

## SECTION 2:

**What is Sustainability?**

Sustainability is a broad term that generally means that a person or society should live within the means of what the Earth can provide over the long term. When a process is sustainable, it can be carried out over and over without negative environmental effects or high costs. The definition of Sustainability for the purposes of this Master Plan is:

*"Sustainability meets the needs of the present without compromising the ability of future generations to meet their own needs."*

- United Nations World Commission on Environment and Development

A sustainable society does not rely extensively on non-renewable resources as a basis for its economy. A sustainable society reduces consumption of renewable resources to levels that can be replenished by nature.

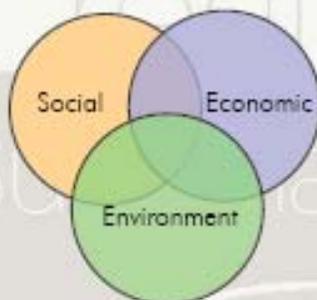
The "Triple Bottom Line" is a common theme for decision-making in a sustainable society. The Triple Bottom Line refers to the consideration of financial implications, environmental sustainability and social equity aspects of a particular decision.

A sustainable society uses non-toxic and/or biodegradable materials and products, and develops "cradle-to-cradle" processes to replace the "cradle-to-grave" conventional processes of post-industrial society.

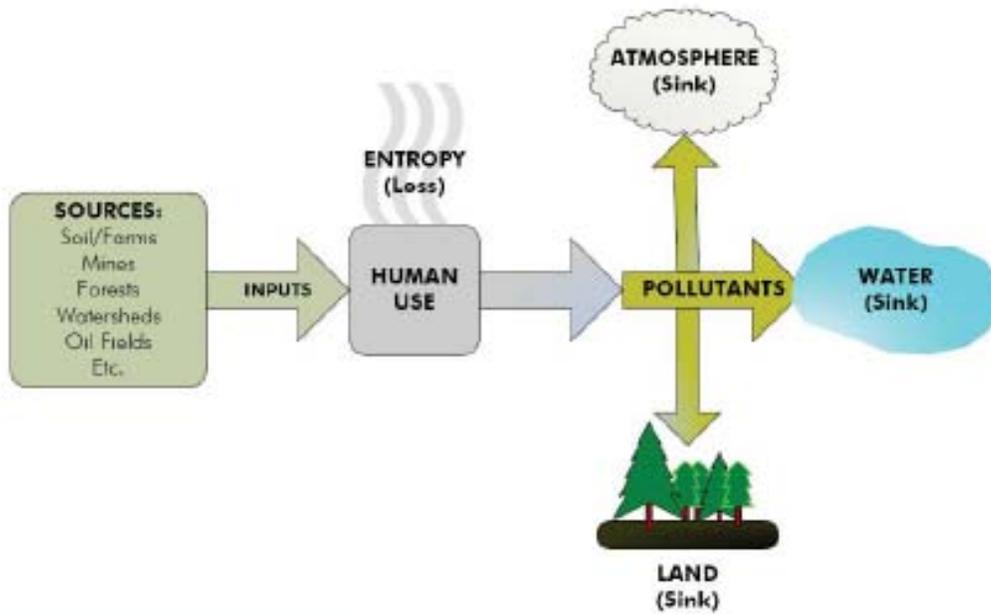
In a "cradle-to-grave" process materials are moved in a linear fashion rather than nature's endless cycling and recycling of materials. The linear process moves materials that support life from their sources through human consumption that ultimately pollute the sinks (atmosphere, rivers, lakes, ocean, and landscape). Eventually, this one-way process also depletes and destroys the natural landscape on which it depends.

A sustainable or "cradle-to-cradle" process is one that is continually self-renewing. Linear one-way processes must be replaced by cyclic flows, continually regenerating materials that support life.

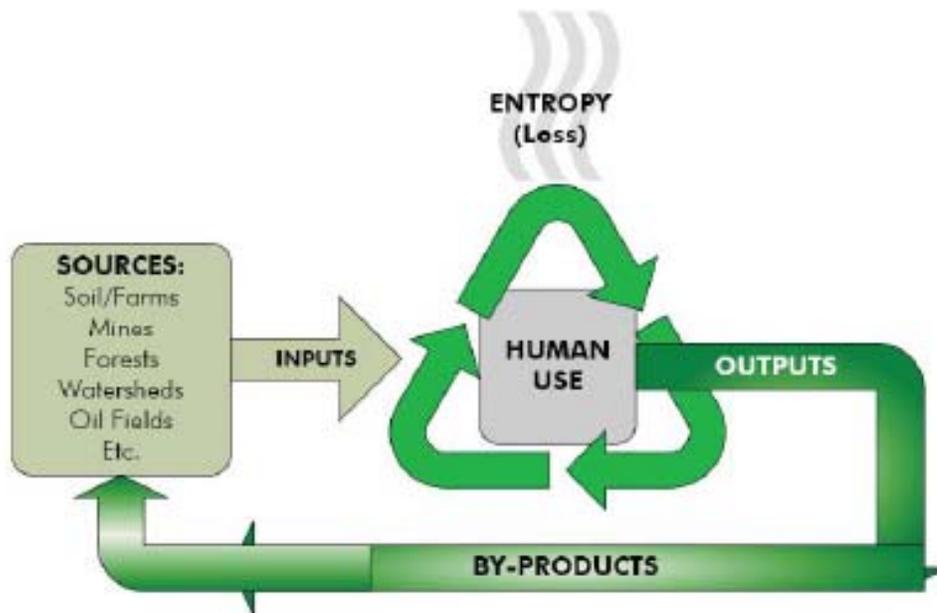
The two diagrams on the next page graphically represent the "cradle-to-grave" and the "cradle-to-cradle" concepts.

**A Sustainable Balance**

**"CRADLE-TO-GRAVE"**



**"CRADLE-TO-CRADLE"**



### SECTION 3:

## **Creating a Sustainable City Why a Sustainability Master Plan?**

As a major landowner, employer, building manager, fleet operator, utility owner and operator, consumer of goods and services, and service provider, the City of Sacramento has both the opportunity and the capacity to bring about significant improvements in environmental quality in and around the region.

By integrating environmentally sustainable practices into City policies, procedures, operations, and fostering collaboration across City government, the City's Sustainability Master Plan – *Creating a Sustainable City*, will work to protect and enhance the quality of life for present and future generations in the City of Sacramento. Leading by example, the Sustainability Master Plan promotes responsible management and effective stewardship of the City's built and natural environments; transforming the City of Sacramento into a model government agency that is clean, healthy, resource-efficient, and environmentally conscientious.

What are some things the City can do?

- Practice "Restorative Redevelopment"
- Increase the resource efficiency of City facilities
- Reduce pollution from City vehicles
- Build and Buy Green
- Work towards reducing Greenhouse Emissions
- Reduce the City's use of pesticides
- Protect and restore the City's Urban Creeks
- Promote Environmental Stewardship
- Encourage City employees to drive less
- Improve and optimize Transportation Infrastructure
- Improve and expand the City's Green Infrastructure

Moving towards sustainability will require a new consciousness and commitment to do things differently than we have been. It will require the City to: (1) develop new programs and/or change existing programs, (2) establish new priorities, (3) commit resources to sustainable causes, and (4) collaborate with other jurisdictions within the region to achieve sustainability.

The strategy for moving the City of Sacramento toward sustainability focuses first on changes the City has control over. The City has the most control over its internal operations. In addition, the City has jurisdiction over changes to

the built environment (land use, infrastructure, and building permits) within its boundaries.

The Sustainability Master Plan is intended to be a means for *Creating a Sustainable City*, not an end. The plan is a tool to guide future operational and policy decisions. To proceed in a sensible way to change long-standing environmental practices, it is necessary to develop focus areas, goals and targets to be achieved.

This Master Plan (Plan) provides the policy framework for how the City will be operated sustainably over the next generation. Although it is anticipated that some of the Targets identified will require additional resources, this Plan also has the potential to:

- Increase local and regional job production, thus keeping money in the Sacramento regional economy;
- Reduce long term energy costs for local residents and businesses, and
- Create public/private partnerships. The City's Goals and Targets are common to many within the State, thus having a clearly stated intent the City will be able to create these partnerships to implement this plan.

The foundation for the Sustainability Master Plan is the United Nations Environmental Accords. The Urban Environmental Accords are a set of 21 actions that the United Nations has asked City Governments to adopt and implement over a seven-year period. The Urban Environmental Accords, signed by the Mayor in April 2006, are incorporated into this plan.

Concurrent with this process, the City is updating the General Plan. The pertinent Goals and Targets identified in this Plan will be incorporated into the City's General Plan.

## SECTION 4:

### How to Read this Document

The proposed Sustainability Master Plan is meant to serve as a policy framework for the City of Sacramento to ensure that sustainability concerns are incorporated into the City's decision making processes.

The Focus Areas, Goals and Targets are based on the following Operating Principles:

1. The City will include fiscal responsibility, social equity, and environmental sustainability in its decision-making processes.
2. The City of Sacramento intends to conduct its business in a way that increases the sustainability of this and future generations.
3. The City may will use its jurisdiction over the built environment (land use, infrastructure, and building permits) to improve the sustainability of the City.
4. The City will adopt a General Plan that contains key sustainability policies and practices, and recognizes direction provided by this Plan.
5. The City will be a leader and advocate for sustainability efforts at the regional, state and federal level.

Sustainability for the City of Sacramento has been separated into nine Focus Areas. The final nine pages of this Plan are comprised of one-page summaries of each Focus Area. Each summary page includes:

**Background:** Why the City should be concerned about the Focus Category.

**Goals:** A concise description of the City's objectives that reflects the City's values regarding sustainability.

**Targets:** Measurable and achievable Targets will ultimately be developed to correspond to each Goal. Clear intent and measurable quantities of how the City will address each Focus Category.

**Accomplishments:** Past actions that the City has done that relate to the Focus Category.

# 1. Energy Independence

**Background:** The United States is dependent on foreign oil; the country imports 60% of its supply and that percentage increases each year. World demand for oil continues to increase each year. Oil supplies are finite and at some point will decline. These facts could eventually translate into a world wide shortage of gasoline and diesel fuels, negatively affecting the federal trade deficit, harming local job creation, and increasing national security concerns. In addition, the use of carbon based fossil fuels creates greenhouse gas emissions.

It is estimated that it will take many years to transition from a fossil fuel economy to a renewable fuels economy. This time lag between the demands and supply of fuel technology and availability could create challenging market conditions. A gradual transition towards renewable energy is prudent.

The City must continue to support more sustainable land use patterns such as transit-oriented development (TOD), green building design, energy efficiency, alternative transportation options and the use of renewable energy sources for both public and private developments and support local and regional job creation through development of renewable energy production facilities.

## Goals:

- Reduce the use of fossil fuels, improve energy efficiency and increase the availability and use of locally and regionally produced renewable energy.
- Identify, replace and/or renovate high energy consumption facilities and systems to reduce energy use.

## Targets:

- Adopt and implement a policy to reduce City Operations peak electric load by 10% through energy efficiency, shifting the timing of energy demands, and conservation measures.
- Adopt and implement a policy to increase the use of renewable energy to meet 10% of the City's Operations peak electric load, above and beyond SMUD's Renewable Portfolio Standard (RPS) goal.
- Achieve climate neutral energy use within City Operations (electricity, natural gas, fleet fuel).
- Work to achieve climate neutral fossil fuel energy use within City limits (electricity, natural gas, motor fuels).
- Work to maximize local and regional renewable energy production.
- Identify and catalog inefficient and high energy use facilities to develop a program of renovation and replacement.

## Accomplishments:

1. The City purchases 3% of its electricity requirements from renewable resources; this is above and beyond the SMUD RPS goal.
2. Due to efficient design, construction and operation, the New City Hall complex is among the top 5% of energy performers for large office buildings within the nation.
3. Over 110 energy efficiency projects have been installed in City facilities since 1992. Due to these measures, energy consumption is 9% lower

## 2. Climate Protection

**Background:** Human activities are altering Earth's climate by emitting greenhouse gases such as carbon dioxide into the earth's atmosphere. It is estimated over the next 95 years that the earth's average temperature will increase between 2° F and 10° F. Predicted local impacts include, but are not limited to the following:

- Heat waves will be more intense, will occur more frequently, and will be sustained for longer periods.
- Sierra snow pack will be reduced by up to 90%.
- Since more precipitation will fall as rain rather than snow, the risk of winter flooding may increase.
- Since much of our water storage in California depends on snow pack, water shortages in the summer will increase.
- Rising sea levels will cause increased salt water intrusion into the Sacramento-San Joaquin Delta, potentially putting two-thirds of California's water supply in jeopardy.
- In Sacramento, the number of days per year over 95° F will increase from an average of 18 days/year to as much as 110 days/year.

We are already committed to addressing climate change, however, the sooner we act, and the more we do, the better the outcome.

The City has greatest control over its own operations, however, there is potential for the greatest emissions reductions through the City's jurisdiction over the built environment. Furthermore, by providing a positive example of what can be accomplished, the City may influence other jurisdictions to achieve their own climate protection goals.

### Goals:

- Implement a Citywide and regional climate action plan.

### Targets:

- By 2030 reduce Greenhouse gas emissions from City operations by 25% to 60,000 metric tons and develop a system for accounting and auditing greenhouse gas emissions.
- Meet Global Warming Solutions Act of 2006 (AB32) greenhouse gas reduction goals for 2012 and 2020 and any subsequent targets.
- Work with community partners to develop and implement a region-wide Climate Action Plan that includes inventories, targets, time lines and climate adaptation techniques.

### Accomplishments:

1. The City's existing internal operations are estimated to reflect 20% of the reductions necessary to meet our 2030 climate reduction target.
2. The City became one of 12 charter members of the California Climate Action Registry (CCAR) in 2002, the CCAR is now 200+ members strong.
3. The City has a 2-year history of developing emissions inventories; has identified a reduction target and has developed a draft internal operations climate action plan.
4. The City is participating in a multi-jurisdictional group that has the creation of a regional climate action plan as a goal.

### 3. Air Quality

**Background:** Air quality is a major environmental health issue for Sacramento, particularly in the summer when an inversion layer traps pollutants close to the ground. Vehicles and other mobile sources powered by combustion (such as lawnmowers) cause 70% of our air pollution. The Sacramento region has been designated as a severe ozone non-attainment area by the U.S. Environmental Protection Agency (US EPA). In the summer, the Sacramento area fails to meet both state and federal standards for ozone. Although ozone in the upper atmosphere protects us from harmful ultraviolet rays, at the ground level it is an irritant that causes the eyes to burn, and it can damage lung tissue. Other problematic air pollutants include carbon monoxide, hydrocarbons, sulfur dioxide, and oxides of nitrogen (NOx).

The air quality in the Sacramento region has actually improved in the last decade due to cleaner cars, smog check requirements, reformulated gasoline, vapor recovery systems on gasoline dispensers, and state and federal regulations for solvents in paints and other consumer products. However, in the future the combined impact of more people, more cars, and more hot days due to global warming will make meeting air quality standards a greater challenge.

SACOG has estimated that there will be 1.7 million more people in the Sacramento Region in 2050 than there were in 2000, which will bring the number of residents to over 3.6 million. If present trends are continued, residents will drive many more miles annually and spend more time in their cars, which will have a negative effect on air quality. In addition, the increase in energy demand accompanying projected population increases will create the demand for additional power plants; this will further threaten our air quality.

#### Goals:

- Meet and maintain air quality standards.
- Encourage City Employees to drive less.

#### Targets:

- Work with community partners to reduce the number of “unhealthy”, or “hazardous”, air quality days by 10% based on an established baseline year.
- Work with community partners to reduce sulfur levels in diesel and gasoline fuels, concurrent with using advanced emission controls on all buses, taxis, and fleets to reduce particulate matter and smog-forming emissions from those fleets by 50% based on an established baseline year.
- Reduce travel times by optimizing traffic signals throughout the City.
- Work to implement a regional policy to reduce the percentage of commute trips by single occupancy vehicles by 10%, relative to an established baseline year.
- Work with community partners to reduce per household vehicle miles traveled by 25%, relative to an established baseline year.

#### Accomplishments:

1. The City has a large fleet of natural gas fueled solid waste trucks. These are much cleaner than traditional diesel trucks.
2. The Sacramento Emergency Clean Air and Transportation (SECAT) program was created as a way to help truck owners and fleet operators reduce their vehicles' emissions in a business-friendly manner.

## 4. Material Resources

**Background:** Landfills have historically been the lowest cost alternative for eliminating waste, however many factors are causing this traditional method to become less attractive:

1. Global warming: decomposing organic waste emits carbon dioxide and methane from landfills, both negatively affect global warming
2. Diminishing resources; many useable, valuable resources are now buried in existing landfills
3. Overuse of non-renewable resources: improved recycling can reduce stress on renewable resources and increase the life of existing landfills
4. Land values: Landfills consume valuable land and diminish surrounding land values
5. Transportation costs: Increased regulation and land values combine to cause many City's to ship their waste to landfills hundreds of miles away
6. Energy production: The energy content from a typical residential waste stream can provide 25 to 50% of a home's energy needs
7. Water quality: Rain and landfills combine to create leachates, which can cause local groundwater contamination concerns

In addition, the use of toxic materials to meet the needs of citizens and businesses frequently causes unintended consequences; e.g. mercury in fish and DDT causing a decline in bird birth rates.

Recycling and composting are more sustainable alternatives to landfills. Both reuse materials that would otherwise be wasted. Recycling is economical, saves energy, metals and forests.

### Goals:

- Reduce consumption.
- Encourage the reuse and local recycling of materials.
- Reduce the use of pesticides and other toxic materials.

### Targets:

- Implement an Environmentally Preferred Purchasing (EPP) policy which may include bid preferences to suppliers that meet minimum sustainability criteria as defined by the City.
- Reduce the use of pesticides in City parks and facilities by 30%.
- Work to reduce the use of a disposable, toxic, or non-renewable product category within the City limits by at least 50%.
- Implement and continuously improve a construction and demolition waste ordinance.
- Reduce per capita solid waste disposal to landfill by 20% relative to an established baseline year.
- Work with community partners to maximize landfill diversion given reasonable cost effectiveness constraints.

### Accomplishments:

1. The City offers many recycling opportunities including weekly residential curbside pick up, commercial recycling collection and specialty programs such as recycling in parks, e-waste recycling and hazardous waste recycling.
2. The City requires the use of recycled paper and environmentally preferred janitorial cleaners for many of its buildings.

## 5. Public Health and Nutrition

**Background:** The City currently has wellness programs, school food programs, community gardens, trails and exercise facilities. By improving public health, health care costs can be reduced, thus assisting to improve City livability.

Recent research has connected public health and smart growth. A report for the US Green Building Council concludes that such smart development factors such as density, mix of uses, access to recreation facilities and even population and income diversity can be directly related to improved health and fitness of the population.

### Goals:

- Improve the health of residents through access to a diverse mix of wellness activities and locally produced food.
- Promote “greening” and “gardening” within the City.
- Create “Healthy Urban Environments” through Restorative Redevelopment.

### Targets:

- Annually, identify one product, chemical or compound that is used within the City that represents the greatest risk to human health and adopt a policy and provide incentives to reduce or eliminate its use by City Operations.
- Adopt City policies and work to preserve local prime agricultural land and support the viability of local farms
- Work to maximize the quantity of roads in the City that are “Complete Streets,” efficient and safe for all modes of travel.
- Employ new products or approaches to soften the edges between the natural and built environments.
- Redevelop or rehabilitate areas within the City or aged city facilities based on old, wasteful and/or dysfunctional designs to achieve better results for people and the environment.
- Work with community partners to define a list of many products that should be produced locally or regionally and encourage business development for those products.
- Work with community partners to ensure each neighborhood in the City has safe and efficient access to quality food sources and vendors.
- Work with community partners to identify the most basic food products and promote business growth to ensure that products are grown locally or regionally.
- Work to maximize the number of amenities (e.g. Park, Restaurant, Grocery, Shops, Theatre) that are located within 1/5 mile of all residents. Ultimately all Citizens should have walkable access to six or more amenities.
- Promote and support community gardening.

### Accomplishments:

1. Farmer’s Markets are operable on a daily basis throughout Sacramento for approximately seven months per year.
2. The City (through a County program) provides daily lunches to school children; some of the food provided is organic.

## 6. Urban Design, Land Use, Green Building and Transportation

**Background:** In shaping the places in which we live, we shape the patterns of our own behavior. We have built sprawling cities that require long commutes, streets that discourage pedestrians and bicycles, and building methods that waste resources and contribute to pollution and climate change. From the human scale to the regional scale, we need to take a different approach to designing the built environment.

The SACOG Blueprint demonstrated how future population growth can be accommodated in a way that will reduce the consumption of open space, reduce auto dependency, improve air quality and provide a greater variety of choices for people to live and work, when compared to build-out according to existing development trends. The City is now translating the SACOG Blueprint into the City's General Plan, which will guide the City's future growth and development. The City can implement more sustainable development types mostly through jurisdiction over land use, issuance of building permits, and provision of transportation infrastructure.

### Goals:

- Establish and continuously improve "green" building standards for both residential and commercial development--new and remodeled.
- Provide efficient and accessible public transit and transit supportive land uses.
- Provide a wide array of transportation and housing choices for a balanced, healthy City.

### Targets:

- Implement a policy requiring LEED (Leadership in Energy and Environmental Design) Silver certification for all new City owned buildings.
- Work with community partners and adopt a LEED/BIG (Build It Green) type rating program for, new and retrofit, commercial and residential single family, multi-family and neighborhood development.
- Work with community partners and aggressively implement the SACOG Blueprint through the City General Plan and associated documents.
- Work with community partners to develop and implement a policy that expands affordable public transportation coverage to within one-quarter mile of all city residents.
- Work with community partners to achieve 80% LEED-type certification of new construction within the City.

### Accomplishments:

1. Sacramento leads the country in LEED certified buildings, based on square footage. The City of Sacramento owns the Cal EPA building, the first LEED Platinum high rise building in the world.
2. On December 29, 2001 the City Council adopted smart growth principles.
3. Over 84% of all houses in the City are within 1/2 kilometer of a transit station or bus stop.
4. On November 22, 2005, City Council Adopted Vision & Guiding Principles for General Plan, which includes a vision for sustainability.
5. In November, 2005, City Council accepted the SACOG Blueprint growth allocations, and directed staff to plan for this growth in the General Plan.

## 7. Parks, Open Space and Habitat Conservation

**Background:** From small urban parks, to regional parks, to rural and agricultural landscapes, the preservation of open space and our rivers and creeks is essential to the health of our community. Accessible parks will be vital amenities as our City and region grows. Natural areas, such as the American River Parkway, provide unique opportunities for recreation, rejuvenate our spirits, and provide wildlife habitat. Much of the agricultural open space adjacent to our City also provides critical habitat to protected species such as Swainsons hawk and Giant garter snake.

The condition of the urban forest is a key indicator of sustainability for a place that is named the City of Trees. Trees provide environmental and economic benefits through improving air and water quality, increasing property values, lowering building energy use and providing an experience of nature amidst expanses of concrete. Trees improve public health and well-being by reducing UV radiation exposure, providing restorative healing for people with illness, and creating safe public spaces. It includes “ecosystem services” such as absorbing air and noise pollution, reducing flooding and water pollution by providing natural filtration of rain water, and storing carbon dioxide that would otherwise contribute to global warming.

### Goals:

- Provide accessible parks and open spaces.
- Maintain and expand the urban forest.
- Preserve prime farmland and critical habitat resources.
- Protect and restore the City’s urban creek system.

### Targets:

- Work to adopt regional guidelines that protect and preserve open space, prime farmland and key habitat, such as wildlife corridors and water bodies.
- Implement the Parks and Recreation Master Plan, Urban Forest Best Management Plan and Urban Forest Enhancement Plan.
- Purchase land for additional park space in identified, historically underserved neighborhoods.
- Develop a policy and implementation plan for developing “Small Public Places” in the City’s urban core and in areas with significant park acreage deficiencies.
- Develop an inventory, restoration and management plan for the City’s natural open spaces.
- Work with regional partners to restore and maintain the region’s watershed resources.
- Work with community partners to plant five to six million trees in the SACOG region and achieve urban tree canopy goal of 35% per the Greenprint Plan.

### Accomplishments:

1. The Sacramento Greenprint provides guidance on how to manage and upgrade the City’s urban forest.
2. The City’s Parks and Recreation Master Plan provides guidance on how to manage and upgrade the City’s human-to-nature connectivity.
3. The Natomas Basin Habitat Conservation Plan establishes a multi-species conservation program to mitigate the expected loss of habitat.

## 8. Water Resources and Flood Protection

**Background:** Although the City currently has no shortage of water, California as a whole is an arid region. Furthermore, climate models indicate that California may experience an increased risk of water shortages in the future.

On the other end of the spectrum, significant portions of the City are at risk from catastrophic flooding. Flood protection in California is an intergovernmental challenge involving federal, state, local, special district governments and private property owners. The Sacramento Area Flood Control Agency (SAFCA) has proposed a comprehensive Legislative Framework for flood Control and Flood Risk Management in the Sacramento Valley (framework). The framework seeks action by the Legislature that would establish criteria for developing and maintaining urban and non-urban levees. It would also mandate a comprehensive evaluation of the urban levees, establish permanent noticing and insurance requirements, and provide for adequate funding and liability controls.

Existing city policy is to achieve 200 year flood protection. Concerns about ongoing climate change call that standard into question because FEMA maps are based on historical data, but climatic models suggest that historical data may not be relevant in the future. Climate change scenarios developed by the state project significant changes in climate and precipitation in Sacramento by the end of the century.

### Goals:

- Conserve the use and protect the sources of water.
- Work to provide exceptional flood protection.

### Targets:

- Continuously protect the ecological integrity of the City's primary drinking water source.
- Work with SAFCA and other community partners to develop a flood control system plan with urban levees protecting the City of Sacramento.
- Adopt municipal waste water management guidelines and reduce the volume of untreated wastewater discharges by 10% relative to baseline year, which is to be determined; through the expanded use of recycled water.
- Adopt and implement policies to reduce per capita water consumption by 10% from an established baseline year.
- Achieve 200 year flood protection using median of projected and approved climate models.
- Work with community partners to reduce per capita water consumption to 200 gallons per person per day from an average of 300 gallons.

### Accomplishments:

1. The Sacramento Area Flood Control Agency (SAFCA) was formed in 1989 to address the Sacramento area's vulnerability to catastrophic flooding. SAFCA's mission is to provide the region with at least a 100-year level of flood protection as quickly as possible while seeking a 200-year or greater level of protection over time.
2. Sacramento is part of a natural floodplain and uses levees and sophisticated drainage systems to protect the City from the waters of American and Sacramento Rivers and local creeks and streams.

## 9. Public Involvement & Personal Responsibility

**Background:** Ultimately, sustainability affects every level and scale of organization, from the entire planet to local neighborhoods and individuals. In addressing the global and regional issues facing Sacramento, public involvement and personal responsibility is vital to effectively planning actions and implementing solutions. Neither the governments nor individuals alone will make the problems go away, so a collaborative effort is necessary. The City should take the opportunity to work with citizens, businesses and community groups to implement personal and business oriented (e.g. County's BEREC (Business Environmental Resource Center) Sustainable Business Program) sustainability initiatives.

Through a wide variety of programs — in schools, in parks, in community centers, and in neighborhoods — the City can promote an ethic of conservation and stewardship, and encourage and empower people to take actions that improve environmental quality and quality of life in and around their neighborhoods.

### Goals:

- Adopt a policy or implement a program that creates environmentally beneficial jobs in low-income neighborhoods.
- Promote an ethic of conservation and stewardship.

### Targets:

- Develop a City sustainability website.
- Include a class on sustainability in the City Management Academy
- Provide permanent and on-going educational opportunities for staff and citizens.
- Work with BEREC and other community partners to maximize the number of businesses within the City which incorporate sustainability into their daily operations.
- Work with SMUD and other community partners to develop a LEED type, or carbon foot-printing type, of rating system for residents and their dwellings.
- Develop an environmental education program to promote positive behavior change that increases recycling, protects local waterways, inspires stewardship and prevents litter.
- Work with local schools to provide students opportunities to experience nature and stewardship directly.

### Accomplishments:

1. The City Planning Academy has a class on sustainability.
2. The Department of Parks and Recreation provides assistance to the Community Gifts to Share Program.
3. As a pilot project, the City has provided bid preferences to companies that show they operate their business in a sustainable fashion.



**CREATING A SUSTAINABLE CITY**

**Staff Recommendation:**

- Review Draft Sustainability Master Plan – *Creating a Sustainable City*
- Approve proposed Community Outreach
- Direct staff to return in Summer 2007 with final Sustainability Master Plan
- Direct staff to return in Summer 2007 with a recommended first phase implementation

**CREATING A SUSTAINABLE CITY**

**What are the ISSUES?**

The proposed FOCUS AREAS, GOALS and TARGETS are designed to address three issues.

1. Dependence on Non-Renewable Resources
2. Over & Excessive Use of Natural Resources
3. Pollution

**CREATING A SUSTAINABLE CITY**

**What is Sustainability?:**

*“Sustainability meets the needs of the present without compromising the ability of future generations to meet their own needs.”*

-United Nations World Commission on Environment and Development

When a process is sustainable, it can be carried out over and over without negative environmental effects or high costs.

**CREATING A SUSTAINABLE CITY**

**Why a Sustainability Master Plan?**

*What can the City do?*

- City Operations – setting the example.
- Land Use Decisions – what we look like.
- Promoter & Educator – being the leader.

**Some Examples:**

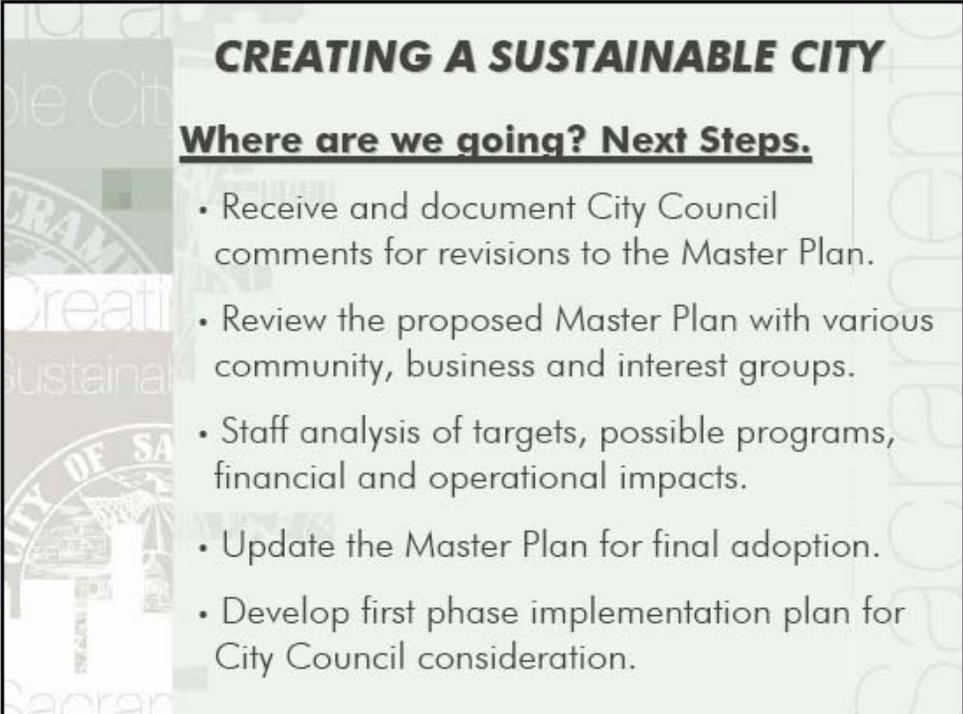
- Practicing “Restorative Redevelopment”
- Build and Buy Green
- Improve Transportation & Green Infrastructure
- Promote Environmental Stewardship



## **CREATING A SUSTAINABLE CITY**

### **FOCUS AREAS:**

- Energy Independence
- Climate Protection
- Air Quality
- Material Resources
- Public Health and Nutrition
- Urban Design, Land Use, Green Building and Transportation
- Parks, Open Space and Habitat Conservation
- Water Resources and Flood Protection
- Public Involvement and Personal Responsibility



## **CREATING A SUSTAINABLE CITY**

### **Where are we going? Next Steps.**

- Receive and document City Council comments for revisions to the Master Plan.
- Review the proposed Master Plan with various community, business and interest groups.
- Staff analysis of targets, possible programs, financial and operational impacts.
- Update the Master Plan for final adoption.
- Develop first phase implementation plan for City Council consideration.



## SMUD's Goals Complement Sacramento's Sustainability Master Plan

Genevieve Shiroma, Member  
Board of Directors  
Sacramento Municipal Utility District  
April 3, 2007



## SMUD's Goals

- ◆ Prevent pollution and continuously improve the environment
- ◆ 20% renewable resources by 2011
- ◆ Lead in development of solar power
- ◆ Comprehensive energy efficiency programs

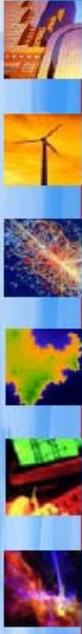
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## Program Opportunities

- ◆ Free Shade Trees
- ◆ Greenergy® – investment in solar, wind, biofuels
- ◆ Rebates & Incentives – Energy Star® appliances, compact fluorescent light bulbs, etc.
- ◆ Advantage Homes – residential building incentives
- ◆ Savings By Design - commercial building incentives
- ◆ More information: [www.smud.org](http://www.smud.org)
  - ❖ “Serving your home”, “Serving your business”
  - ❖ 742-SMUD

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## Carbon Offset Program

Under development this year:

- ◆ Educational campaign – what *you* can do
- ◆ Voluntary program to offset carbon footprint
- ◆ Carbon-calculator, based on SMUD’s specific resource mix
- ◆ Customer contributes “green bucks”
- ◆ Funds to be invested in local projects
  - ❖ e.g., solar, dairy digesters, trees, energy efficiency upgrades, truck stop electrification

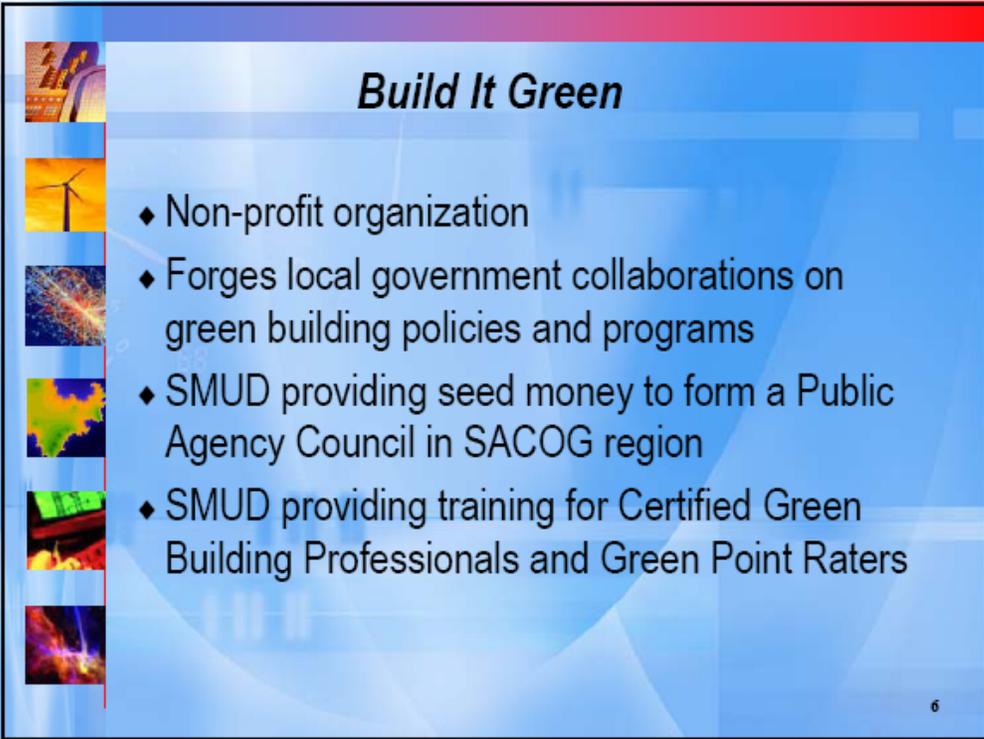
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**LEED™**

- ◆ Leadership in Energy & Environmental Design
- ◆ SMUD working with City to provide LEED™ orientation for city staff
  - ❖ Better understanding of sustainable design
  - ❖ Encouraging green building expertise
- ◆ SMUD complementing City and LEED™ objectives:
  - ❖ LEED™ registration & commissioning incentives for design teams
  - ❖ LEED™ for Homes
  - ❖ Savings by Design, Photovoltaics, Greenergy®

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***Build It Green***

- ◆ Non-profit organization
- ◆ Forges local government collaborations on green building policies and programs
- ◆ SMUD providing seed money to form a Public Agency Council in SACOG region
- ◆ SMUD providing training for Certified Green Building Professionals and Green Point Raters

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## SolarSmart Homes

- ◆ SMUD provides incentives for built-in solar (PV) systems and rebates for energy efficiency upgrades in new construction
- ◆ SMUD agreement with Lennar Homes
  - ❖ Integrated solar system a standard feature in every home
  - ❖ ***Largest solar new home partnership in U.S.!!***
  - ❖ 1,254 new homes in 11 communities, e.g., Village Greens in Natomas

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## Solar for Existing Homes

- ◆ SMUD rebates ~ 25% of initial cost of a residential retrofit system
- ◆ Encouraging cities to be “solar partners” with SMUD to demonstrate commitment to clean, solar energy
  - ❖ One-day permit review process
  - ❖ Standardized application packet
  - ❖ Post-installation inspection in <24 hours
  - ❖ Waive permit fee for solar (PV) installation for a 3-year pilot period

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