



**The City of Fresno's Strategy  
for Achieving Sustainability**



PHOTO BY KEITH SEAMAN | CAMERAD

**green:**  
being a good steward of the earth's natural resources.

A **GREEN** CITY IS ONE THAT:

- **Protects urban forests**
- **Promotes smart growth**
- **Buys locally**
- **Harnesses solar energy**
- **Provides bike and pedestrian trails**
- **Leads by example**
- **Rethink, Reduce, Reuse, Recycle!**

## Why 'FRESNO GREEN'?

It is hardly a secret that the San Joaquin Valley's air is some of the dirtiest in the United States, and that our children experience a high rate of asthma. On a more global scale, we are quickly depleting our source of fossil fuels, our landfills are overflowing, fresh water is becoming increasingly scarce, and other natural resources are pushed to the brink.

Being "green" – that is being environmentally responsible – is no longer just a fad and technologically cool, it is imperative.

To quote a Lakota Sioux proverb:  
**"We do not inherit the earth from our ancestors; we borrow it from our children."**

Imagine being able to see the Sierras from the valley every day, bicycling or walking to work, preserving more open space as well as our Valley's agricultural heritage. Imagine living in a city that mixes the best of the old with the new.

These are some of the visions of Fresno Green. Green/sustainable programs combine cutting edge technology with the best common sense practices of the past.

Fresno Green embraces the heritage of the "City Beautiful Movement" of the early 20th century—progressive urban design, expansive parks and open space, public health and public art programs... Fresno Green moves us toward a New City Beautiful.

The objective of **FRESNO GREEN** is clear and unchanging:

## **FRESNO WILL BE A SUSTAINABLE CITY BY 2025.**

The strategies and tactics for achieving this objective are intended to be periodically reviewed and updated as we move toward the objective.

## Preface

Through the leadership of Mayor Autry and the City Council, the City adopted the 2025 Fresno General Plan in November, 2002. This Plan dramatically changed the patterns of growth in Fresno, focusing development “in-and-up” rather than continuing an outward expansion beyond the city’s planned urban boundary.

The General Plan substantially enhances the established community’s physical and social environment through revitalization of Fresno’s existing urban core. The Plan promotes conservation of significant natural, physical, historical and cultural resources. The General Plan is working as evidenced by growth patterns over the past five years.

The next step is the progression of Fresno into a sustainable city, a community that meets the needs of the present without compromising the ability of future generations to meet their own needs. The foundation of sustainability is good stewardship of the earth’s natural resources. Clear views of the Sierra Nevada, extensive

open space and pathways, encouragement of local agricultural producers, innovative solar technology, a healthy urban forest and zero landfill waste are all indicators of a sustainable community.

Sustainable development balances economic development and environmental stewardship with innovative business enterprises that focus on the “triple bottom line” of providing economic, environmental and social benefits. In early 2007, Mayor Autry, together with then Council President Henry T. Perea, asked the City Manager and the One Fresno Key Results Area (KRA) Cabinet to develop a Green Element to support the 2025 Fresno General Plan.

Fresno Green: the City of Fresno’s Strategy for Achieving Sustainability is an action-oriented plan that will transform Fresno into a sustainable city. Fresno Green consists of 25 strategies with accompanying implementation tactics.

## Progress has already been made.

- The City’s vehicle and bus fleets are converting to clean fuels.
- Land use policies encourage walkable mixed use neighborhoods.
- Solar panels are sprouting off the tops of residential and commercial buildings as well as at the Municipal Service Center and Fresno Yosemite International Airport.
- The City’s Team Clean Air initiative is a progressive program designed to reduce air polluting emissions through City operations.
- Operation Clean Air, initiated by Mayor Autry, is a regional collaborative focused on improving air quality.
- The Public Utilities Department has been honored nationally for energy conservation.
- The Public Works Department is completing a significant portion of a city-wide traffic synchronization project that will reduce vehicle emissions.
- The Parks, recreation and Community Services Department continues to partner with the San Joaquin River and Conservation Trust to develop a 23-mile, 6000 acre green belt with recreational trails.
- Interest in a sustainable future was furthered by City Council action in February 2004 through the efforts of current Council President, Henry T. Perea. His proposal to explore sustainable building development resulted in the Planning and Development Department convening a task force of City employees and private sector members to develop an incentive-based Fresno Green building program.
- The Mayor’s Creative Economy Council Report of 2006 targeted sustainability and energy efficiency as major community goals.

## FRESNO GREEN Team Partners with Fresno State



SOLAR ARRAY PARKING STRUCTURE AT FRESNO STATE.

**On March 25th 2008, Fresno City Council presented a joint proclamation with California State University President John D. Welty, declaring a partnership to be know as Univer/City Sustainable Initiative.**

**The Fresno Green Team is in full partnership with Fresno State’s Sustainability Team to assist in the greening of the entire City. Both the University and the City will benefit from the shared resources and technical expertise, as we proceed toward the implementation of the Fresno Green Strategies.**

# Ready to plant the seeds

The field is plowed and the City is ready to plant the seeds of a more thorough, multifaceted and unified approach to growing a green city. The purpose of Fresno Green is to provide the framework of this approach.

The strategies and tactics of Fresno Green will aim to reduce consumption of non-renewable resources, improve air quality, position Fresno as a leader in solar energy and other green enterprises, reduce waste generation, and honor our agricultural heritage as we build the future.

Progress toward Fresno Green occurs in two arenas:

- 1) the community at large (the private sector)
- 2) the public sector.

We believe that in order to encourage a community-wide transformation the City of Fresno needs to “walk-the-talk” and take bold action.

## FRESNO GREEN IS ORGANIZED INTO FIVE VISIONS:



The strategies listed in the first four areas are generally private-sector oriented, supported by City of Fresno programs in Section 5, “City as Good Steward.” However, some public sector City policies appear in other sections; the topics of air quality and energy conservation inevitably overlap, which means a variety of strategies can be accomplished with a few well-chosen and concerted actions.

Finally, Fresno Green is intended to be a bridge. Working together, we can forge the public-private partnerships needed to accomplish the objective. Continuing this metaphor, we can then cross the bridge to a more sustainable future by refining our strategies and tactics into an innovative element of the City’s General Plan. Finally, through partnerships we will elevate and deepen our commitment to the triple bottom line of economic, environmental and social sustainability.

**WE INVITE ALL TO JOIN US IN CROSSING THE BRIDGE INTO A MORE SUSTAINABLE FUTURE.**

## FRESNO GREEN VISIONS:



### NEW CITY BEAUTIFUL

Fresno will be nationally recognized for the innovative integration of buildings within their neighborhood context, good urban design, and for giving priority to public health, open spaces, public art, historic preservation, urban forests and the protection of natural habitats.



### SIERRA VIEW 2025

The Sierra Nevada mountain range will be clearly visible to all Valley residents by 2025. Public health will be improved by having cleaner air, enhanced public transportation and additional opportunities for walking and cycling.



### SOLAR VALLEY

Fresno will become a leader in renewable energy use by maximizing new renewable sources as well as increasing the efficiency of our existing uses. Fresno will lead the state in the creation of related innovative technology and new business enterprises. With its abundant sunshine and population growth, the opportunity exists to improve air quality, reduce dependence on foreign energy, and provide attractive new jobs by harnessing solar and other types of renewable energy.



### GREEN ENTERPRISES AND ECONOMIC DEVELOPMENT

The City of Fresno will become a center for innovative business enterprises that focus on the “triple bottom line” of providing environmental, economic and social benefits.



### CITY AS GOOD STEWARD

The City of Fresno will lead by example by greening up its facilities and practices, embracing a zero waste initiative, providing appropriate staff resources, and collaborating with other municipalities and agencies to develop regionally-based Green programs.

## SUSTAINABILITY IS:

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

World Commission on the Environment and Development

# NEW CITY BEAUTIFUL

Green Buildings and Sustainable Development, Public Health, Open Spaces

## STRATEGY 1

Develop and implement new urbanist principles that advance higher density, mixed use, and accessible neighborhoods which coordinate land use and transportation with open space systems for recreation and ecological restoration by 2011. Develop and implement Green building standards for private residential, multi-family and commercial projects 2011.



HENRY MADDEN LIBRARY CONSTRUCTION | 85% RECYCLING OF CONSTRUCTION WASTES

Finalize Planning Department's incentive-based green building program which links sustainable building and communities, historic preservation, public art and historic landscapes into a holistic approach by 2009.

**Build at least 20% of all future City-sponsored affordable housing units to meet an adopted Green building standard, beginning in 2011.**

Update general plan and zoning code to promote increased densities around activity centers and transportation corridors, and to encourage trip reduction through mixed use development by 2011.

Update subdivision design standards to promote vehicular and pedestrian Connectivity by 2011.

**Update street design standards to provide increased quality of life for residential neighborhoods, a more attractive bike and pedestrian environment, and conservation of natural resources by 2012.**

Adopt revised zoning ordinances and building codes that are consistent with the Fresno Green incentive program by 2010.

## STRATEGY 2

Build all new municipal buildings according to a green building rating system. Adopt green technology for the retrofit of existing City buildings by 2011.

Make public buildings didactic through the development of permanent interpretive panels at each site that "teach" about the building's use of green technology by 2011.

**Require all construction wastes generated from new construction and demolition to be recycled, beginning in 2008.**

## STRATEGY 3

Plan new residential areas and retrofit existing neighborhoods to be within one half mile of public parks, school playgrounds and/or recreational open space by 2011.

Refine the City's 2007 draft Open Space Policy in order to meet this strategy by 2010.

**Revise the City's Parks' Master Plan to meet this strategy by 2010.**

## STRATEGY 4

Plant and maintain trees in order to achieve shading of at least 50% of all hardscaped parking and pedestrian surfaces by 2015.

Work with community groups such as Tree Fresno to conduct an inventory of existing canopy coverage in the city and to prepare adequate maintenance plans of City-owned trees and landscaped medians by 2010.

**Develop Alternate Public Improvement Standards (API) that protect Fresno's historic landscapes, such as Kearney Boulevard by 2010.**

## STRATEGY 5

Through implementation of the Regional Cooperation Element of the 2025 Plan, protect critical habitat corridors and other key habitat characteristics (e.g. water features, food bearing plants, shelter for wildlife, use of native species, etc.) from unsuitable development by 2015.

Work with regional partners to develop an agricultural land conservancy program. Apply new agricultural land preservation and conservancy programs both within and outside of the City's Sphere of Influence (SOI) by 2015.

**Provide incentives for habitat restoration and protection through the City's Fresno Green building incentive program by 2011.**

Partner with the San Joaquin River Parkway and Conservation Trust to maintain and operate accessible areas along the SJR Parkway by 2009.

**STRATEGY 6**

Reduce the use of disposable toxic or non-renewable products through environmentally preferred purchasing policies, by 2009.

Support a residential hazardous waste facility in cooperation with Fresno County.

**Support Producer Responsibility, where product manufacturers are responsible for the final disposal of any toxic products produced, through continued support of the California Product Stewardship Council.**

Reduce use and sale of non-rechargeable batteries within the City by 2010.

**Reduce use and sale of incandescent bulbs within the City by 2010.**

Reduce use of plastic shopping bags by local retailers within the City by 2010.



“...millions of poor people will suffer from hunger, thirst, floods and disease unless drastic action is taken...”

[and] nearly a third of the Earth’s species will vanish if global temperatures rise just 3.6 degrees above the average temperature in the 1980’s-90’s...”

Intergovernmental Panel on Climate Change  
Fresno Bee, page 1, 7 April 2007



**SIERRA VIEW 2025** .....

**STRATEGY 7**

Implement enhanced public transit and traffic light synchronization programs that reduce commute time by 20% from 2000 baseline by 2015.

Implement bus rapid transit (BRT) along identified corridors pursuant to the Fresno Transit Master Plan Project by 2025.

**Implement Transit Priority traffic signal system by 2010.**

Develop BRT corridor specific land use overlays by 2015.

**Focus new growth around transit corridors in densities high enough to support public transit pursuant to the 2025 Fresno General Plan, and forthcoming Highway 41 Corridor and Activity Center Study recommendations.**

**STRATEGY 8**

Reduce particulate matter and smog-forming emissions from city fleets by 90% below 2000 baseline and reduce GHG emissions to 1990 levels by 2020, and reduce GHG emissions to 80% below 1990 levels by 2050.

Continue successful emissions reduction efforts of the City’s Team Clean Air program. Reduce City of Fresno operations and fleet through conversion of fleet vehicles to hybrid or electric technology, clean fuels, implementation of e-government, alternative work schedules and teleworking, and traffic signal synchronization.

**Replace all City-owned light equipment vehicles with hybrid vehicles, and if not practical for hybrid application, require a minimum of 30 miles per gallon fuel efficiency by 2017.**

Develop “Green Fleet Preference” policy for all City contracts by 2010.



CLEAN AIR ALTERNATIVE FUEL VEHICLE FLEET

## STRATEGY 9

Reduce by 20% the number of commute trips by single occupancy vehicles from 2000 baseline by 2015.

Offer incentives to employers who implement a Transportation Demand Management Program and commit to the goal of 20% reduction in single occupancy vehicles in seven years. Such programs may include provision of free bus passes, a parking pricing program, preferential parking for vanpools and carpools, bicycle racks and lockers, and employee showers.



FRESNO COHOUSING GROUNDBREAKING CEREMONY

## STRATEGY 10

By 2024 meet the federal clean air standards through coordination with the California Air Resources Board, the San Joaquin Valley Air Pollution Control District and Operation Clean Air.

Consider policies for alternatives to the use of leaf blowers for residential and commercial uses.

**Consider policies for alternatives to the use of gasoline powered lawn mowers.**

Develop an education program to increase awareness of air quality improvement options by 2010.

**Develop Department level action plans for Healthy Air Living in conjunction with the San Joaquin Valley Air Pollution Control District by 2010.**

Focus on larger air quality contributors to reduce emissions, Areas of focus will include getting people to drive less, reducing fuel consumption, and use of alternative fuel vehicles.

**Develop plug-in hybrid and electric vehicle charging station infrastructure by 2009. These charging stations should be in conjunction with solar power installations and facilities whenever possible.**

Conduct further research and establish programs to limit or eliminate landscape irrigation a week prior to "Spare the Air" days to reduce ground level ozone impacts by 2010.



## SOLAR VALLEY

## STRATEGY 11

Increase the use of renewable energy to meet 50% of the annual electrical consumption of KWH for City of Fresno operations.

Continue support for the City of Fresno Solar Energy System Rebate and Loan Program. This program is jointly administered through the Housing Division of the Planning and Development Department to ensure installation compliance for loan administration and rebate payment.

**Provide up to 100 solar water heaters to qualified low income owner occupied households through loans over a five year period starting in 2008. This loan is part of the Housing Improvement Program and an integrated portion of a potential larger loan of \$30,000.**

Investigate the use of a bulk solar module procurement policy by partnering with buying power of the California Construction Authority, similar to the Fairgrounds model, as an alternative to design build, or Power Purchase Agreements for any future City owned facility solar installations by 2009.

**Investigate the development of a Master Cooler Incentive Program that encourages residents to reduce electrical demand for air conditioning by converting to a house master cooler by 2009.**

Develop plan for implementation of potentially viability of alternative energy sources including solar, thermal, cogeneration. As well as hydrogen fuel cell by 2009.

**Require all future City constructed buildings at usable sf of 7500sf or more must have a solar system design considered during the planning phase, unless an exemption is identified and approved by Council.**



SOLAR ARRAY | MUNICIPAL SERVICE CENTER

## STRATEGY 12

Reduce the city's peak electrical load by 10% through energy efficiency, shifting the timing of energy demands, and conservation measures by 2012.

Work with PG&E to improve and increase city-wide energy conservation programs, including city-owned facilities.

**Add a weatherization/energy conservation component to all City renovation and repair programs.**

**Develop and implement homeowner weatherization program to include low-income residents, including seniors, in insulating their homes.**

## STRATEGY 13

Reduce citywide total greenhouse emissions to match requirements of State Assembly Bill 32 by 2012.

Develop a system for accounting and auditing greenhouse gas emissions.

Register the City of Fresno in the California Climate Action Registry, a volunteer program to record and monitor greenhouse gas emissions.



## GREEN ENTERPRISES AND ECONOMIC DEVELOPMENT .....

### STRATEGY 14

Position Fresno as a regional center for Green Enterprises by 2015.

Support and encourage existing green enterprises in the City of Fresno through a Green Business Recognition program by 2009.

Incorporate into the City's Economic Development Strategic Plan policies and incentives for attracting new green businesses by 2010.

Encourage new businesses to locate in the city that meet green pairing needs by 2011.

Encourage development of a green business park for new businesses where waste streams are treated as resources by 2012.

Implement industrial ecology principles in business development by 2015.

Consider the Hanover Principles as a model for future development by 2011.

### STRATEGY 15

Create environmentally beneficial jobs in low-income neighborhoods by 2015.

Designate and establish Air Quality Empowerment Zones which produce quantifiable emissions reductions and preserve or create jobs in economically disadvantaged areas 2011.

Track economic growth with the Index for Sustainable Economic Welfare or the Genuine Progress Indicator (GPI) in addition to gross product starting in 2009.



### STRATEGY 16

Promote the public health and environmental benefits of supporting locally grown and organic foods.

Encourage all city facilities (including schools) to serve at least 20% locally grown and organic foods beginning in 2009.

Work with large manufacturers and food service operators to remove obstacles and identify opportunities for piloting decentralized food purchasing by 2012.

Work with local and regional stakeholders to develop regional buying incentives by 2012.

# CITY AS GOOD STEWARD .....

## STRATEGY 17

Achieve 75% Diversion to Landfills by 2012 and Zero Waste to landfills by 2025.

Adopt and implement a Zero Waste Action Plan beginning in 2008.

**Educate those who live, work, and interact in our community to emulate sustainable natural cycles, where all discarded materials are resources for others to use beginning in 2008.**

Promote policies that foster the reduction and gradual elimination of problem waste. (i.e. household toxics, Styrofoam, plastic grocery bags) beginning in 2009.

**Implement a Food Waste Diversion program for residences, restaurants and the business community by 2011.**

## STRATEGY 18

Develop and Implement an Integrated Pest Management (IPM) program by 2010.

Reduce the unnecessary use of chemical pesticides in City departments by 2010.

**Train city staff on best management practices to increase IPM awareness by 2010.**

## STRATEGY 19

Protect the ecological integrity of the city's primary drinking water sources (i.e. aquifers, rivers, lakes, wetlands and associated eco-systems) through an update of the general plan by 2011.

Install water meters and develop a usage-based fee system on all single family residential locations by 2015.

**Use best horticultural practices and conservation irrigation technology as well as a drought tolerant and water efficiency plant palette for all City-owned properties. Eliminate water run-off from landscapes on all City-owned properties by 2011.**

Eliminate water run-off from landscapes on all City-owned properties by 2011.

**Identify the carrying capacity of the water resources currently available to the City of Fresno and then reduce the City's impact to the groundwater basin by 2025 to a level that is sustainable with the current resources taking into account anticipated climate change impact scenarios.**

Develop city planning policies that minimize urban runoff and maximize water reuse by 2011.

**Promote Xeriscaping, which does not require supplemental irrigation, beginning in 2009.**

## STRATEGY 20

Develop and implement Environmentally Responsible Policies and Practices by 2009.

Hire a Sustainability Program Manager who will promote, coordinate, and facilitate the Fresno Green Strategies as well as all the City of Fresno's sustainability projects by 2009.

**Support and maintain an inter-departmental Fresno Green Team, encouraging partnerships with other agencies toward implementing the Fresno Green Strategies.**

Develop staff training materials and regularly conduct staff "Green" training by 2009.

**Develop and implement Green Purchasing and Practices Policies by 2009.**

## STRATEGY 21

Market the Fresno Green program throughout the community by 2010.

Develop a media plan for involving all citizens and businesses in the Fresno Green Strategies by 2009.

**Take the lead in working with the media, educational groups and other public agencies to develop regionally-based green/sustainable programs of benefit to the broader community by 2010.**

## STRATEGY 22

Incorporate sustainable policies as developed through this strategy into a Green Element of the City of Fresno's 2025 General Plan by 2011.

## STRATEGY 23

Measure the successes of the Fresno Green Strategies and present an annual report to Council, beginning in 2008.

Perform a Green House Gas Assessment pursuant to AB32 of all city activities, functions, and facilities by 2009, and pursue appropriate reductions in emissions.

**Create a Fresno Green Scorecard in order to measure progress toward sustainable goals and measures of the Fresno Green Strategies by 2009.**



MAYOR'S BUSINESS RECYCLING AWARDS



## FRESNO GREEN TEAM

The Greening of the City began as early as 2001, with the start-up of Operation Clean Air. Since then the City has erected a vast solar array at the Municipal Service Center and began replacing its fleet of vehicles with alternative fueling features.

In 2004, the Planning and Development Department began to develop green policies, birthing the Fresno Green Building program.

At the leadership of then Assistant Manager Jon Ruiz, the Fresno Green Team was formed in early 2007 with the mission to develop and implement strategies designed to green our city. Mayor Autry and then Council President Perea presented the first draft of Fresno Green: The City of Fresno's Strategy for Achieving Sustainability on April 23, 2007.

Throughout the summer and fall of 2007 the Fresno Green Team met to plan implementation actions designed to be integrated with the 2025 General Plan.

In December 2007, the Fresno Green Team presented to City Council numerous achievements gained to green the city, including:

**Fresno Green Building Incentive Program**

**Solar Energy System Rebate and Loan Program**

**Weatherization and Energy Efficiency Program**

**Traffic ITS synchronization along Herndon**

**Purchase of CNG/LNG/Hybrid vehicles**

**665 KW Solar power system at Fresno Municipal Service Center**

**2 MW Solar power system at Fresno Yosemite International Airport**

**Mayor's Business Recycling Awards**

## FRESNO GREEN TEAM

**Robert Gedert**  
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**Joseph Oldham**  
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**Claudia Cazares**  
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