

BUILDING A BRIGHT FUTURE

San Francisco's Environmental Plan 2008

CLIMATE ACTION

RENEWABLE &
EFFICIENT ENERGY

CLEAN TRANSPORTATION

GREEN BUILDING

URBAN FOREST

ZERO WASTE

ENVIRONMENTAL JUSTICE

Sforward



SForward

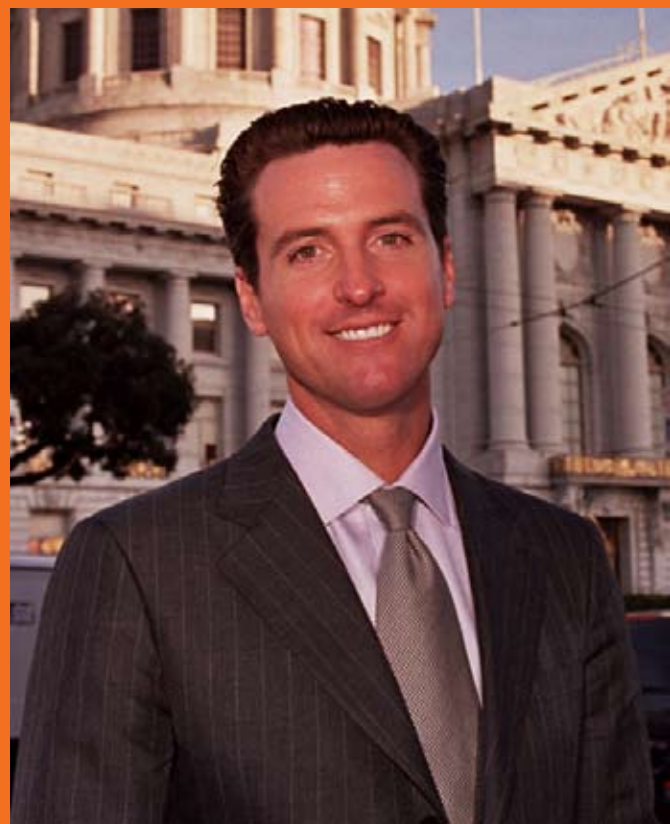
SAN FRANCISCO'S ENVIRONMENTAL FUTURE is already unfolding. When fully realized, the San Francisco of the future will be a place where words like "green" and "sustainable" are meaningless, because it will simply be understood that any action includes best practices for the environment. There will be no "green building," because all buildings will be green. There will be no "clean air transportation" because all transportation will be low or zero emission.

Cities are the primary human environment of the future. With the reality of climate change upon us, cities are integrally part of the problem, as well as the solution. San Francisco leads by example, and the climate protection programs we offer will have a direct and lasting impact from the energy we generate, to the transportation we use, to our management of recycling and waste.

My administration remains committed to maintaining San Francisco's place at the environmental vanguard. This means moving beyond mere goals into meaningful action. We have achieved 69 percent recycling. We have converted all of our municipal diesel fleet to biodiesel. We introduced stringent green building guidelines that require optimum environmental performance in commercial and residential buildings. We are starting a local carbon offset program that will promote investments in San Francisco-based green projects and, if voters approve, will offer solar loans to residents. We attracted new clean tech businesses to the City through innovative incentive programs. We are also the first city in the nation to consider replacing our business payroll tax with a new carbon tax that charges businesses based on greenhouse gas emissions.

We've accomplished great progress together during my first four years as your mayor. But as they say, "you ain't seen nothing yet." In my second term, I will advance an unparalleled legacy of commitment to our environment and to the future of our City.

Mayor Gavin Newsom

A handwritten signature in black ink, appearing to be 'M. Newsom', with a stylized, elongated horizontal stroke at the end.

**We are the City of
San Francisco.**

Moving SForward

reducing 400,000
tons of CO₂
annually

2008



sfgreasecycle:
grease to biodiesel



75 percent
landfill diversion

“slow food” policy
equal access to
healthy food



A Vision of the SFuture

Every resident is actively and consciously reducing greenhouse gas emissions and waste production by making their homes more energy efficient, using alternatives to driving, ensuring that their home and business construction projects use green building materials, planting and caring for trees, recycling and composting as much as possible, and safely disposing of batteries and other toxic products.

It's the City's job to help its residents take action—by modeling the right behavior and supporting their efforts through incentives and education.

San Francisco's Environmental Mission

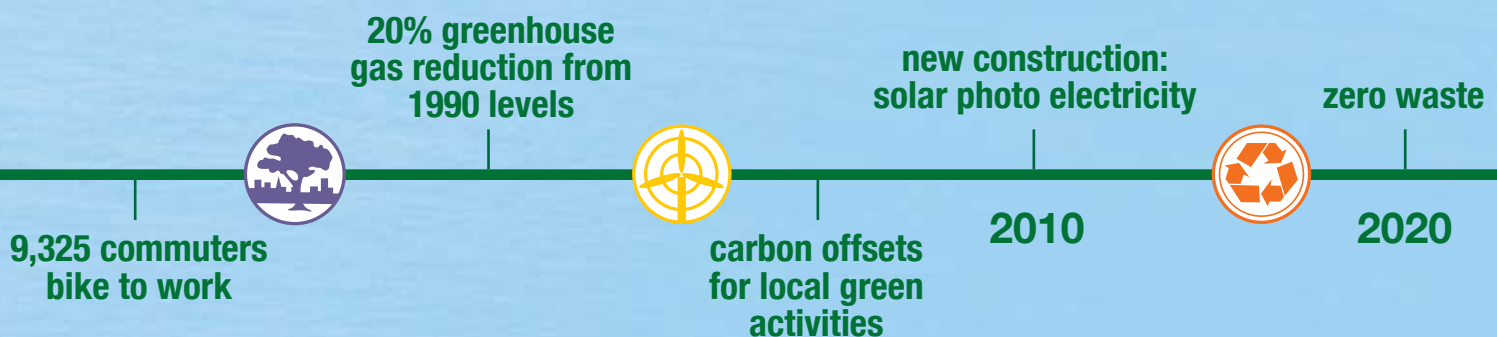
To improve, enhance, and preserve the environment, and to promote San Francisco's long-term wellbeing.

The City of San Francisco is taking on a formidable challenge: to meet the threat of the climate crisis head-on by radically reducing the impact we have on our environment.

We are working on many fronts to meet this challenge. We've developed innovative, practical and wide-ranging environmental programs. We've fostered groundbreaking legislation. We've connected the public to comprehensive and easy-to-use information on a wide range of sustainable practices. And we help San Francisco residents and businesses learn how to recycle, reduce toxics, improve energy efficiency, and empower their community.

We make it easy for everyone in San Francisco to take care of their environment and—ultimately—the planet.

Our seemingly ambitious—but deliverable—environmental goals include attaining 75 percent recycling by 2010 and curbing San Francisco's greenhouse gas emissions to 20 percent below 1990 levels by 2012.



Opportunities of **THE CLIMATE CHALLENGE** (The two ton challenge)

Global warming is an impending crisis, the first signs of which are already evident. For San Francisco, the results could be devastating. As a coastal city surrounded on three sides by water, projected rises in sea level could threaten our infrastructure and property. **A three-foot rise in sea level would put the SFO, Treasure Island and Giants' stadium totally or partially under water and would compromise major regional transportation arteries such as Highway 101.**

It is imperative for governments to do everything within their jurisdiction to reduce the greenhouse gas emissions that cause global warming. Achieving these reductions will require changes in the areas of transportation, recycling, urban forestry, as well as energy efficiency and renewable energy.

San Francisco's Climate Action Plan has ambitious greenhouse gas reduction goals: a 20 percent reduction below 1990 levels by 2012. To meet these, each person who lives or works in San Francisco will need to cut almost 2 tons of carbon dioxide annually. We have set a mid-term goal of 10% by 2010.

San Francisco was the first city in the nation to certify its carbon emissions through a third party—in our case, the California Climate Registry. This provides real, measurable data by which we can gauge the performance of our greenhouse gas reduction efforts.

Several programs—Climate Action, Renewable Energy & Energy Efficiency, Clean Transportation, Urban Forest, Green Building, and Zero Waste—will help attain these goals. These programs are described in detail on the following pages.

CLIMATE ACTION

Goal: Reduce San Francisco's contribution to global climate change to 10 percent below 1990 levels by 2012.



CLEAN TRANSPORTATION

Goal: Reduce CO2 emissions from transportation by 963,000 tons annually.



RENEWABLE ENERGY & ENERGY EFFICIENCY

Goals: Reduce 400,000 tons of CO2 annually through energy efficiency and to displace 3,000 tons of CO2 annually through development of renewable energy resources by 2009.



ZERO WASTE

Goal: Achieve 75 percent landfill diversion by 2010 and zero waste by 2020.



URBAN FOREST

Goal: Plant and maintain 25,000 new trees in San Francisco by 2012, offsetting 2,500,000 pounds of CO2 annually.



GREEN BUILDING

Goal: Ensure that all new commercial and residential buildings in San Francisco eventually meet LEED Gold Standard.



CLIMATE ACTION



CLIMATE ACTION GOAL

Reduce San Francisco's contribution to global climate change to 20 percent below 1990 levels by 2012.



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“Carbon Neutrality” is the state of producing no net carbon dioxide or greenhouse gases. For San Francisco to achieve carbon neutrality, residents and businesses alike must produce as few greenhouse gases as possible, as well as offset the remaining emissions through direct carbon sequestration projects or by purchasing credits.

The City will achieve this through aggressive and comprehensive programs for energy efficiency in buildings, transit alternatives, transportation demand management, alternative vehicle fuels, and generating electricity with renewable energy. The programs vary by market sector and utilize different strategies: public awareness campaigns, direct technical assistance, financing, incentive payments, and new local law.

The City has delivered \$32 million worth of energy efficiency programs, saving tens of thousands of tons of carbon dioxide. In spite of these unprecedented efforts, the last four years have generated only a small fraction of the reductions needed to meet our goal. Between now and 2012, we must expedite the rate of reductions. This will require a larger commitment of city resources and private sector leadership.

The City's strategies to develop new local policy to address climate change and associated issues include:

- Creating a San Francisco Carbon Fund for local green activities designed to mitigate or “offset” greenhouse gas emissions.
- Developing framework for a Carbon Tax, which may serve as an alternative to payroll taxes for San Francisco businesses.
- Incorporating climate protection criteria into the City's General Plan.
- Incorporating climate action into departmental plans, activities and performance measures.
- Working with Peak Oil Task Force to maximize synergies between climate action and the development of the City's approach to Peak Oil.
- Advocating for strict laws and regulations on climate change in Sacramento and Washington D.C.
- Continuing to improve infrastructure to track and report San Francisco's progress towards meeting the 2012 greenhouse gas reduction target.



The San Francisco Carbon Fund is the first effort of its kind, where carbon offsets can be bought for projects that take place in San Francisco, directly benefiting the City. It will begin as a pilot program to offset emissions from municipal air travel, and will be expanded to San Francisco residents, businesses and visitors.

RENEWABLE ENERGY & ENERGY EFFICIENCY



ENERGY GOALS

Reduce 400,000 tons of CO₂ annually through energy efficiency and to displace 3,000 tons of CO₂ annually through development of renewable energy and co-generation resources by 2009.

The City has made strides in attaining its energy efficiency and emissions reductions goals. Direct incentive programs, including the innovative **Power Savers Program that targeted hard-to-reach small businesses and the subsequent Peak Energy Program, have reduced electricity use in San Francisco by 18 megawatts—enough to power over 20,000 residences.** Even better, the Power Savers Program saved small businesses \$3.5 million. The new EnergyWatch Program will focus on reducing overall electricity and natural gas use.

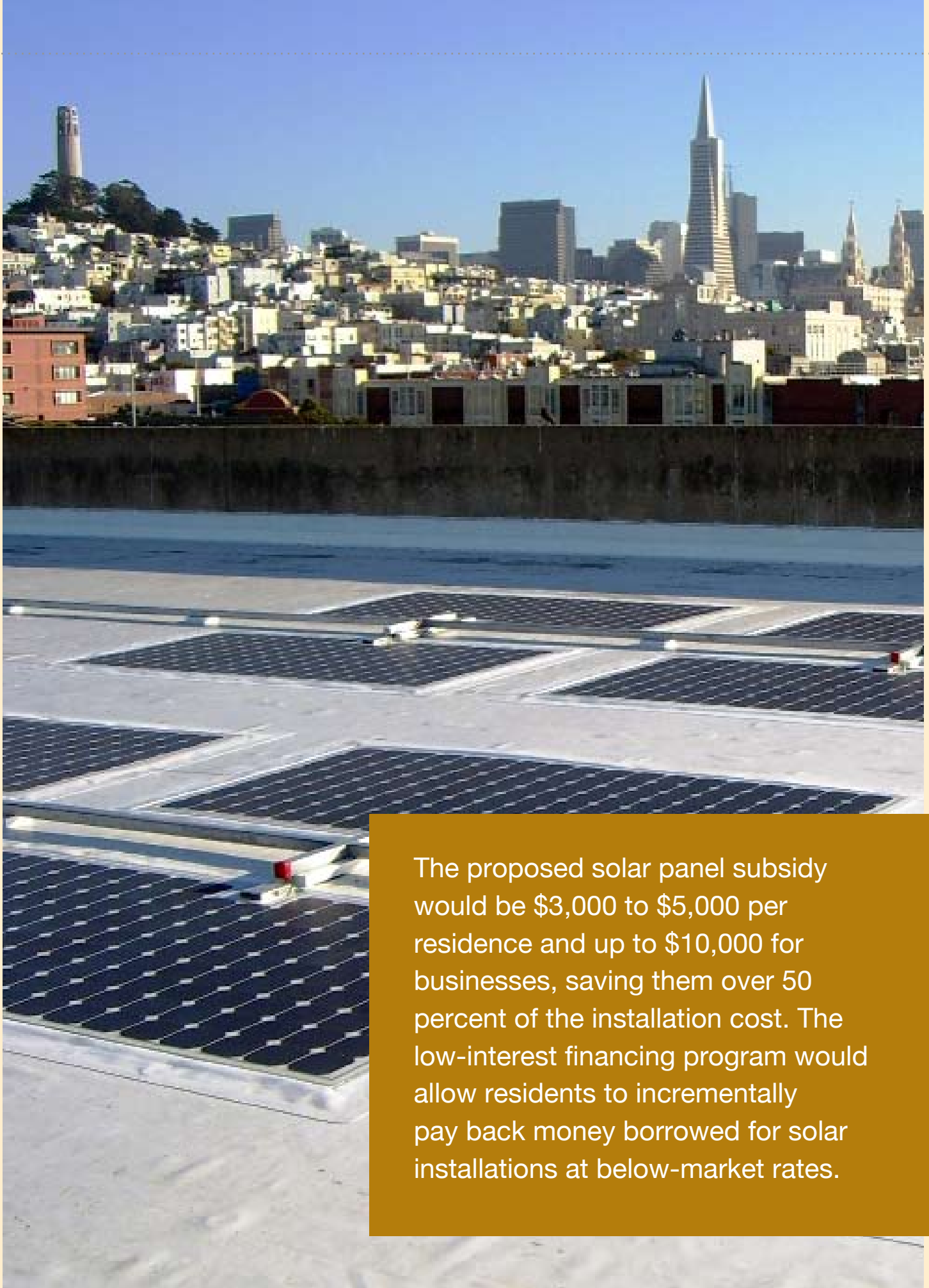
Our city has installed three megawatts of solar power on city-owned property, and is advancing the development of wind, ocean, and geothermal power.

Strategies to reach our goals include:

- Provide subsidies and loans to homeowners and businesses that install solar panels.
- Identify rooftop solar potential and assist with installation on commercial rooftops.
- Expansion of a solar mapping Web portal for citizens to assess costs and benefits of installing solar panels on residential and commercial properties.
- Update the Residential Energy Conservation Ordinance and the Commercial Energy Conservation Ordinance and develop legislation requiring the residential Multiple Listing Service to include a green rating for properties for sale.
- Deliver energy-saving retrofit services for small businesses and multi-family building owners.
- Encourage more energy efficiency through a citywide public education program on climate and energy efficiency for business, neighborhood, and tenant organizations.
- Build the clean tech industry and green collar jobs in San Francisco through economic incentives.
- Streamline permit process for solar water heating and facilitate easier interconnection requirements for distributed generation.

These efforts will require ongoing participation in local, regional, state and federal regulatory processes.





The proposed solar panel subsidy would be \$3,000 to \$5,000 per residence and up to \$10,000 for businesses, saving them over 50 percent of the installation cost. The low-interest financing program would allow residents to incrementally pay back money borrowed for solar installations at below-market rates.



CLEAN TRANSPORTATION

CLEAN TRANSPORTATION GOAL

Reduce CO2 emissions from transportation by 963,000 tons annually.

Transportation affects the environmental quality of our lives in San Francisco more acutely than almost any other single factor. The choices we make regarding transportation—whether as individuals, government agencies, companies or nonprofit organizations—have a direct impact on congestion and noise, pollution, and climate change. The gasoline and diesel burned to power vehicles on San Francisco roads is our largest source of greenhouse gases, accounting for 51 percent of the City’s carbon dioxide emissions. Emissions and congestion on the City’s streets grow each year as the number of vehicles and the miles they travel increases.

All of the City’s 1,500 diesel vehicles are powered by B20, a mix of 20 percent soy-based biofuel and 80 percent petroleum diesel fuel. And the City’s car fleet, including taxis, is one of the greenest in the United States. But more must be done.

In order to meet the City’s climate protection target, we must achieve drastic reductions in vehicle emissions. The Clean Air Transportation Program will reach this goal through a combination of reducing vehicle trips and by promoting the use of clean fuels.

Our specific trip-reduction objectives are to get:

- 9,325 solo drivers to walk to work,
- 9,325 to bicycle to work,
- 16,800 to carpool or vanpool, and
- 105,350 to switch to transit.

We are working to achieve these through a variety of strategies.

- Building key transportation projects including the Transbay Terminal and the Central Subway.
- Expanding “SF Go,” a transportation management system to improve Muni.
- Complete required planning on the San Francisco Bike Plan, and greatly expand the City’s bicycle network.
- Include bicycle-sharing options in new bus shelter programs.
- Designate 500 parking spaces for car-share vehicles.
- Introduce variable pricing, possibly via legislation, for parking, city garages, and transit.
- Establish a regional purchasing pool for plug-in hybrid vehicles.
- Develop legislation requiring all service stations in San Francisco to offer a biofuel alternative, in addition to conventional fossil fuels.



The Transbay Terminal will create a regional hub for four major transit systems, and include 3,400 transit oriented housing units.

The 100% conversion of City fleet to B20 biofuel means that vehicles, such as MUNI buses and fire trucks, now use environmentally friendlier fuel, intended to sharply reduce toxic exhaust. It also helps build the market for alternative fuels.



- Participate in Car Free Day, Spare the Air, RideShare Week, and events sponsored by local and regional transportation agencies.
- Facilitate more City employees and residents taking advantage of tax-free commuter benefits.
- Offer Emergency Ride Home services for employees who walk, bicycle, carpool or ride transit.
- Partner with transit agencies to provide subsidized transit for San Francisco college and university students.
- Purchase clean, energy-efficient and alternative fuel vehicles for the City's fleet and public access.
- Continue developing the City's alternative fueling infrastructure for advanced transportation technology vehicles in the City's fleet and for public access.
- Help implement City policies for use of low-emission equipment at construction sites.
- Assist with the greening of San Francisco's taxi fleet by boosting the number of CNG and hybrid vehicles.

In addition to reducing the number of vehicle trips in the City, we actively work to use clean fuel technology and higher fuel efficiency standards to reduce carbon dioxide production from our own fleet vehicles. Under the Healthy Air and Smog Prevention Ordinance, we are developing and expanding the City's alternative fuel infrastructure and creating "green index" policies for purchasing the cleanest, most energy-efficient vehicles for the City's fleet.

We are working to achieve these goals through a variety of strategies:

- Update the Healthy Air and Smog Prevention Ordinance to better incorporate green index provisions in the City's fleet purchasing procedures.





GREEN BUILDING

GREEN BUILDING GOAL

Ensure that all new commercial and residential buildings in San Francisco eventually meet LEED Gold Standard.

In the face of climate change, peak oil, water shortages, and rising waste production, San Francisco cannot afford to move slowly towards the greening of its building and construction industry. **Mandatory measures to ensure the highest level of energy and water conservation, the least toxic building materials, and the highest use of recycled materials are now a necessity.**

Traditional forms of building construction and operation consume 48 percent of the US's energy, 76 percent of electricity generated by power plants, and up to half of all raw material use. Each year in California, building-related activities are responsible for approximately 27 percent of the State's carbon dioxide emissions, and in San Francisco construction and demolition debris accounts for about 40 percent of the waste stream.

San Francisco led the way in 1999 when we adopted mandatory green building standards for municipal construction in the Resource Efficient Building Ordinance. The ordinance was amended in 2004 to require all new municipal construction to meet the standard of LEED* Silver. Recent signature projects in San Francisco include Laguna Honda Hospital, which will save the City over \$7 million in energy costs in the first 10 years of operation, as well as the major renovation of the California Academy of Sciences campus in Golden Gate Park, which is on track to receive a LEED Platinum certification.

***LEED stands for Leadership in Energy and Environmental Design. It is a national standard adopted by the United States Green Building Council. LEED ratings range from Certified to Silver, Gold, and Platinum.**

In 2007, the Mayor's Green Building Task Force released recommendations that all new construction and major renovations of residential and commercial buildings strive to achieve LEED Certified, increasing to LEED Gold by 2012. For smaller commercial buildings, where the payback for green design is less substantial, the Task Force recommends voluntary compliance to the extent practicable.

Smaller residential and commercial buildings are recommended to achieve a GreenPoint Rating of 75 points by 2012. (GreenPoint Rated is a rating system more suited for smaller residential rather than commercial construction, developed by Build It Green.)

The Task Force recommended phased incentives – including development bonuses, property assessment equalization, and fee reductions – to help building owners achieve these objectives.

In December 2007, the Mayor introduced a new ordinance for stricter building codes, requiring all new residential and commercial buildings to meet internationally recognized standards for energy and water efficiency, recycling, pollution control and other environmental measures.

Other strategies to help the City meet its Green Building objectives include:

- Incorporate green building principles into citywide planning and development processes.
- Ensure municipal buildings meet LEED Silver standards.
- Streamline the permitting processes and provide other assistance to encourage private sector construction and remodeling projects to meet LEED standards.



When San Francisco's California Academy of Sciences is completed, it will be the most visited LEED Platinum building in the world. We are currently expanding stringent building requirements from city government to private developments for maximum impact on San Francisco's carbon emissions and energy use. The plan calls for all buildings over 75-feet tall and major commercial renovations of over 25,000 square feet to be in compliance with the highest benchmarks for green certification set by the U.S. Green Building Council.

- Provide project design teams with green construction specifications, materials and systems research, and specialist referrals (i.e. architectural and engineering consultants, indoor air quality specialists, etc.).
- Monitor and track local green building activity in municipal, commercial and residential sectors; promote projects; and share lessons learned through Web site, awards, tours, publications, announcements, and press releases.
- Support, coordinate and host green building education opportunities in partnership with US Green Building Council, Bay Area Leadership in Energy and Environmental Design Users Group, Build It Green, Pacific Energy Center, and other green building organizations. Educational opportunities will be widely available for public and private building industry stakeholders including: residents, architects, engineers, contractors, permit applicants, developers, real estate professionals, and financial institutions.



URBAN FOREST

URBAN FOREST GOAL

Plant and maintain 25,000 new trees in San Francisco by 2012, offsetting 2,500,000 pounds of CO₂ annually.

The urban forest is a vital component of San Francisco's ecosystem. **Trees provide environmental and economic benefits through improving air and water quality, increasing property values, lowering building energy use and producing 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. Currently, San Francisco is home to approximately 668,000 trees with an overall canopy that covers 12 percent of the City's surface area. This includes 32,000 City-maintained street trees and 60,000 privately-maintained street trees. It is estimated that one tree can sequester 100 pounds of CO₂—a benefit that is needed throughout the city particularly in neighborhoods like Bayview Hunters Point, the Mission and Chinatown. Statistics

indicate that on a percentage basis, **half as many trees per capita have been planted in these environmentally distressed neighborhoods than in more affluent areas.** The City has also pursued an unprecedented greening program on City streets and medians, including Van Ness Avenue, Lombard Street and Alemany Boulevard.

Each year, the City offers residents the Green Christmas program. For \$99, residents can buy a living Christmas tree for their homes. After the holidays, the City picks up and re-plants the tree in an area of the City that needed greening. San Franciscans loved the program, purchasing 200 trees in 2006, which were later replanted. This alone will offset an estimated 4,000 pounds of CO₂ yearly.





The City's Urban Forest Council has developed an Urban Forest Plan—a set of long-term guidelines for improving tree management. In collaboration with the United States Forest Service, the Forestry Council has conducted two scientific studies that yield a clear description of trees in San Francisco—helping the City and its residents better plan for planting and maintaining the right kinds of tree species that will thrive in San Francisco.

To meet its goal of promoting a healthy and sustainable urban forest, the City will pursue numerous initiatives, including:

- Expand the greening program to new medians throughout the City.
- Partner with local businesses to fund “Gateways Project” to green entrances to the City.
- Coordinating with city departments to incorporate urban forestry into climate change initiatives, including quantifying benefits of tree planting and growth.
- Researching long-term funding sources such as a landscape assessment district, public ballot measure, etc., and provide information on urban forest funding mechanisms to city departments and community groups.
- Organizing an annual workshop for City staff and contractors on best management practices and standards.
- Implementing the Urban Forest Council Ordinance, including helping the Urban Forest Council submit annual State of the Urban Forest Reports and turning elements of the Urban Forest Plan into long-term planning initiatives.

Trees provide environmental and economic benefits through improving air and water quality, increasing property values, lowering building energy use and producing an experience of nature amidst urban life.

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ZERO WASTE

ZERO WASTE GOAL

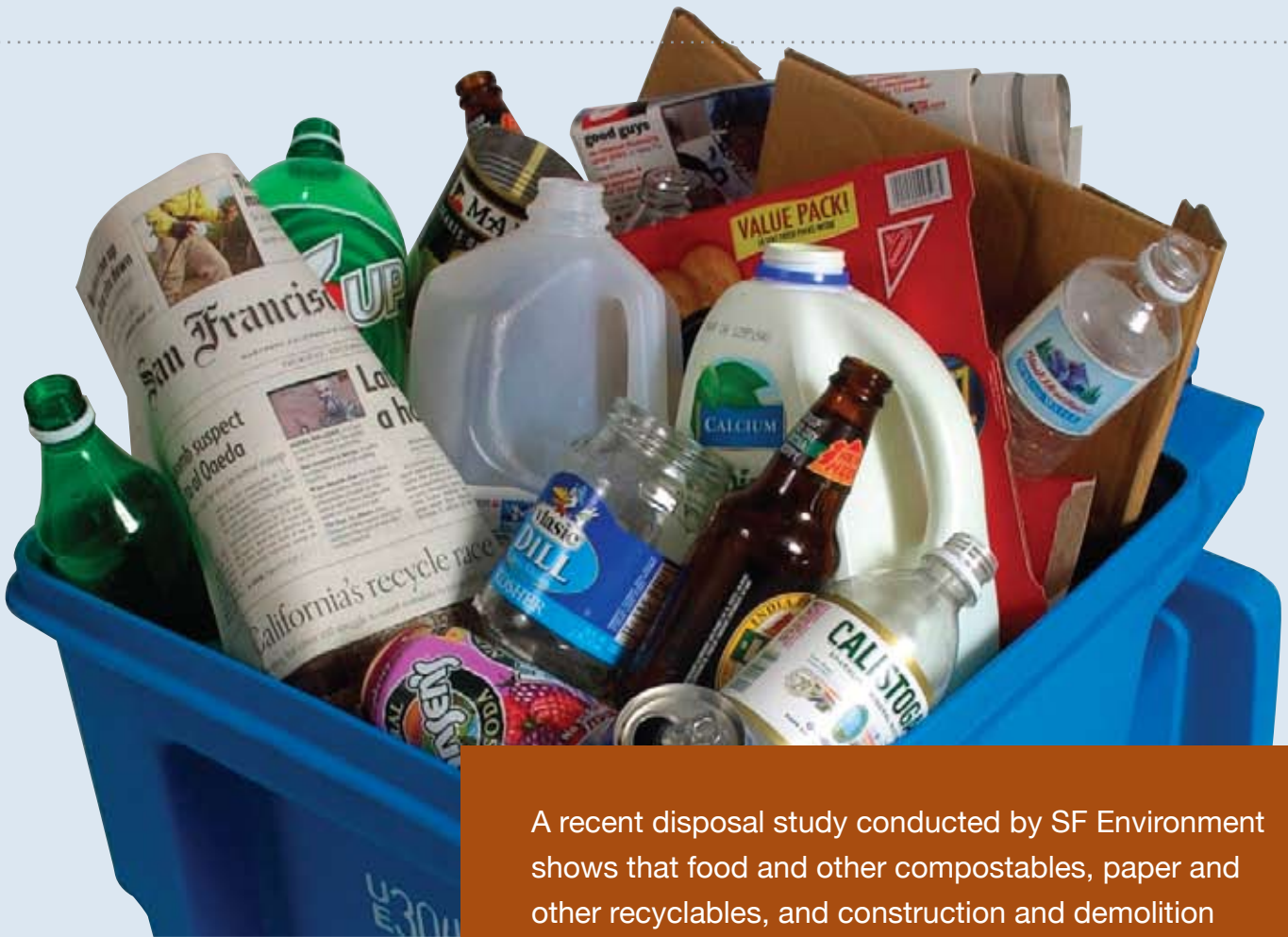
Achieve 75 percent landfill diversion by 2010 and zero waste by 2020.

San Francisco has the most ambitious waste diversion goals in the nation. More than just lofty ambition, we are now well on our way to achieving zero waste—currently diverting more than 69 percent of our waste! Materials are diverted from landfills according to the hierarchy of source reduction, reuse, and recycling and composting. While waste prevention, composting and recycling programs are generally proceeding well, each additional one percent of diversion is more difficult to achieve than the previous one percent.

Some of the City's groundbreaking actions will be to:

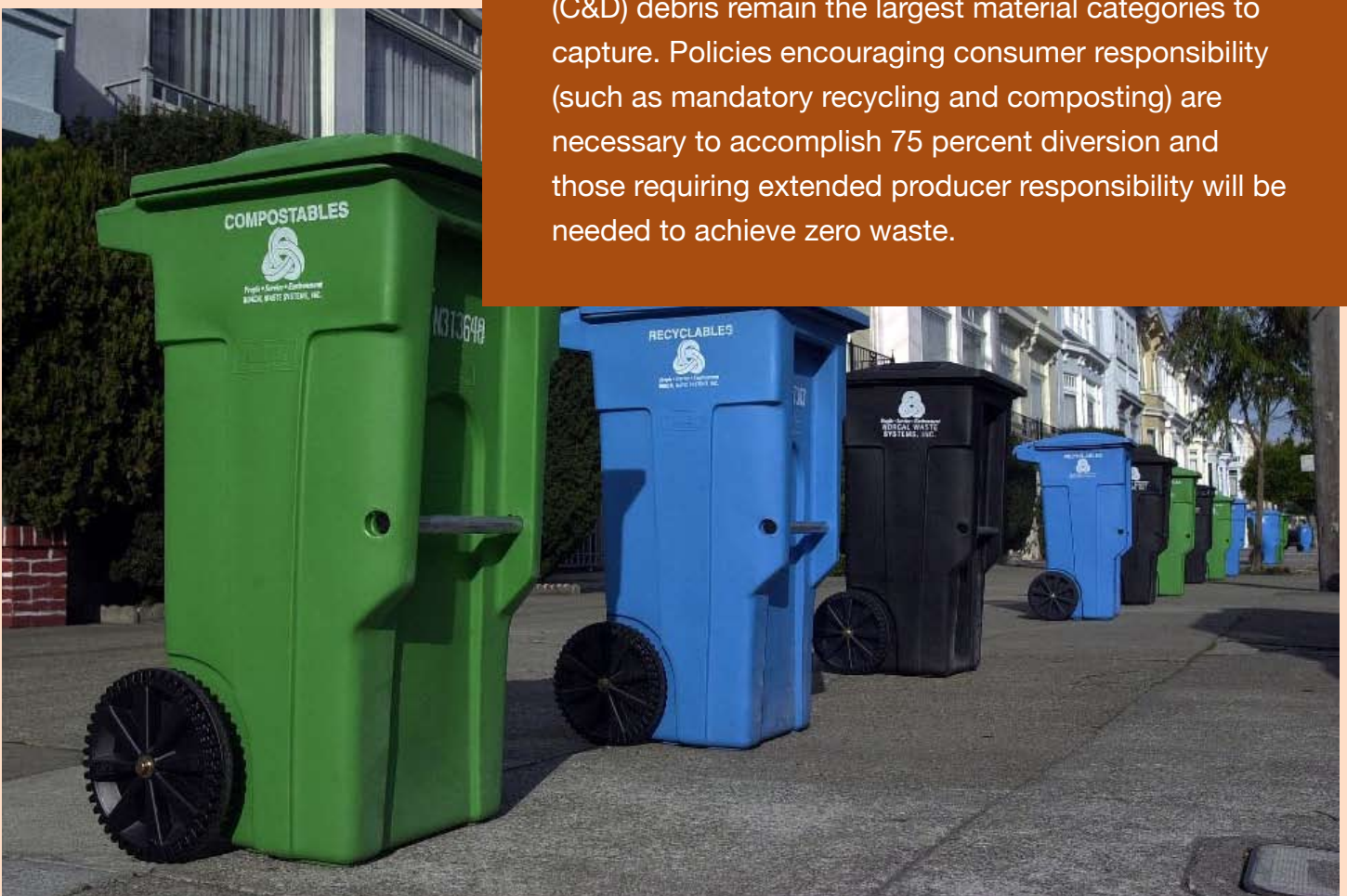
- Mandate participation in diversion programs for all sectors, including banning materials, such as yard trimmings, from disposal.
- Require adequate and convenient space for recycling and composting in all buildings.
- Foster stewardship by managing major event disposal practices—including recycling and food scraps/composting—at large, citywide public events that attract hundreds of thousands of people.
- Increase business diversion to 80 percent through rate incentives, recognition programs, technical assistance, and targeted outreach. This includes reaching out to fast food restaurants, which are responsible for the bulk of litter on the City's streets.
- Increase City government diversion beyond 80 percent by expanding reduction, recycling and composting programs; practicing reuse through the Virtual Warehouse; conducting waste audits; and promoting purchase of more environmentally friendly office products.





A recent disposal study conducted by SF Environment shows that food and other compostables, paper and other recyclables, and construction and demolition (C&D) debris remain the largest material categories to capture. Policies encouraging consumer responsibility (such as mandatory recycling and composting) are necessary to accomplish 75 percent diversion and those requiring extended producer responsibility will be needed to achieve zero waste.

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ENVIRONMENTAL JUSTICE

ENVIRONMENTAL JUSTICE GOAL

Development of urban farms, community gardens, and schoolyard gardens to teach adults and children about the nutritional benefits of growing and eating fresh produce.

The City of San Francisco believes that every human being has the right to a healthy and safe environment. In order to achieve this goal locally, our government, citizens, and businesses must work together to ensure that our air, water, soil, and food are of the highest possible standard in every community.

Environmental Justice (EJ) is the fair treatment and meaningful involvement of all people—regardless of race, ethnicity, income, or education level—in environmental decision-making. Today, there remain significant differences between the low level of environmental quality experienced by our poorest and most politically marginalized communities when compared to other residents.

The City is concerned with the potential impacts of a changing climate on San Francisco's most vulnerable neighborhoods. Low-income residents already face multiple barriers to transportation access, food security, affordable housing, health care and employment opportunities. Climate change is expected to impact our daily lives not only by causing natural disasters such as flooding, but also by making basic human necessities—such as food, shelter, energy and health care—more expensive and difficult to obtain. Climate change will disproportionately burden those who have the least amount of financial resources.

The City is working to understand and reduce the potential impacts of climate change on our low-income neighborhoods and help residents and businesses in these areas adapt to and address the health and economic burdens created by the uncertainties and stress of climate change.

San Francisco's EJ Program administers a special grant program to help community-based organizations and nonprofit groups dedicated to providing energy and environmental services in the Bayview Hunters Point and Potrero neighborhoods. The EJ Program

also works with other City programs and community groups to promote environmental justice in San Francisco, focusing primarily on food security, energy and air quality concerns. Examples of the specific strategies the City will support are:

- Developing a healthy “slow food” policy, stressing nutrition and equal access to healthy food, including establishing a local farmers market in the Bayview Hunters Point community.
- Development of urban farms, community gardens, and schoolyard gardens to teach adults and children about the nutritional and health benefits of growing and eating fresh produce.
- Increasing local access to fresh produce through the “Good Neighbor Program,” home produce deliveries, community gardens and produce stands.
- Promoting Green Collar job development in the City's southeast, including job training and establishing an Eco-Industrial Park and a Southeast Tech Park.

Understanding the levels of pollution in underserved areas and its effects is critical for residents to help reduce pollution. We will gain a better understanding of neighborhood pollution levels from the Bayview Hunters Point Community Air Monitoring Program and other City and regional sources. From this, we will:

- Expand economic opportunity in the clean tech industry to disadvantaged residents, including the creation of green collar jobs.
- Develop a long-term plan to reduce diesel air pollutants from mobile and stationary sources in the Bayview Hunters Point community.
- Craft City policies to reduce pollution that contributes to asthma in existing and new construction housing, particularly for low-income residents.
- Help low-income residents identify measures that can reduce indoor air pollution, including purchasing environmentally preferred products and reducing the use of toxic consumer goods.



A critical component of the environmental justice program is improving access to healthy food. It recognizes the importance of what most take for granted: the availability, accessibility and affordability of nutritious and safe foods in a community. The City sustains efforts to distribute not just food to residents—including support of new farmers' markets – but also knowledge and information about nutrition and food preparation.

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TOXICS REDUCTION

In 2003, San Francisco became the first city in the country to adopt the precautionary principle as a guideline for environmental and public health policy. San Francisco's Precautionary Principle Ordinance requires city government—and urges businesses and community members—to seek out the safest alternatives when making choices ranging from purchasing products to building design and urban planning.

The Toxics Reduction Program is anchored in the process of alternatives assessment and education and outreach. The program seeks to evaluate options to identify the safest, most environmentally sensitive choices in order to improve the quality of human health and the environment in San Francisco. However, even in the best of circumstances, there will be leftover or unwanted products which, if disposed of improperly, would contaminate municipal landfills, storm and sewer systems, as well as our land, water, and air. **The Toxics Reduction Program supplies information on safer alternatives and also coordinates a wide-range of hazardous waste recycling services for spent or leftover household products including batteries, paint, pesticides, motor oil and electronics.**

Some program highlights include:

- In 2006, the Toxics Reduction Program collected more than 1 million pounds of hazardous waste from San Francisco residents and small businesses, of which approximately 88 percent was recycled, recovered, or reused.
- San Francisco has eliminated the use of the most toxic pesticides in City parks and buildings and has decreased its overall pesticide use by over 50 percent.

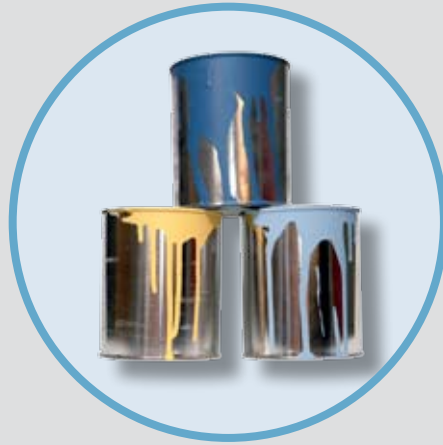
TOXICS REDUCTION GOAL

The Precautionary Principle: Instead of asking, “How much harm will be allowed?” we will ask, “How little harm is possible?”

- City purchasers now make decisions based on environmental and human health criteria determined by a public stakeholder process.
- City janitors and mechanics also protect their health and the environment by choosing less toxic products to clean offices, clean and repair engine parts, and maintain buildings.
- Seventy-five local businesses have been designated as “San Francisco Green Businesses.”

Going forward, the City will increase public awareness about safe disposal of unwanted toxic products, pest management options, and environmentally preferable purchasing.

- Recruit local businesses for certification in San Francisco's Green Business Program.
- Track and reduce the use of pesticides on City-managed properties through the development and implementation of a Web-based pesticide use reporting system, and ensure City agencies continue to maintain targeted pesticide reduction levels.
- Coordinate a network of San Francisco hospitals to share opportunities for the purchase of environmentally preferable healthcare products and experiences over the implementation of pilot projects.
- Work with community partners to identify San Francisco businesses that provide environmentally preferable products and services and promote their availability to businesses and residents.



Efforts to reduce the use and proper disposal of toxic products are taking place all over the country. San Francisco can lead the statewide, regional, and national levels to help increase availability and use of safer alternatives and to promote product stewardship among manufacturers and retailers. This will involve expanding product stewardship on the part of

manufacturers and retailers, coordinating development of product purchasing specifications and standards, and participating in efforts to develop pest prevention guidelines for building construction and integrating these guidelines into Green Building standards.

Changing Behavior, Spreading the Word



Today's students are tomorrow's SFuture.

The City's Environmental Education Program is an award-winning initiative that serves more than 225 public and private schools in San Francisco, annually reaching 20,000 students and 1,000 teachers who, in turn, become catalysts for change in the community. We are noted for our groundbreaking, creative approach to educating young people about environmental issues.

Covering everything from recycling and toxics to waste reduction means that students grow up into the City and the world with a far greater understanding of their individual and collective role in their ecosystem. Rather than one-off programs that expose children to important educational messages intermittently, **San Francisco school children have an opportunity for sustained environmental learning.** Here are some examples of the successful components of the City's program:

- The Food to Flowers! lunchroom composting and recycling program conserves natural resources, reduces the amount of garbage sent to landfills, and gives students an opportunity to act as stewards for the environment.
- Participation in the San Francisco Green Schoolyard Alliance helps support the greening and gardening movement in city schools, so eventually every school will have a garden.
- Field trips to the Transfer Station, Pier 96 Recycle Central, and the Scroungers Center for Reusable Art Parts teach students about where garbage and recycling go, and how "garbage" can be re-used.
- School presentations about water pollution in the San Francisco Bay.
- Newsletters, e-mails and the department web site are all used to communicate with teachers. Curriculum packets help them teach standards-based environmental lessons, and teacher workshops prepare them to catalyze change with students and within the school system.
- Students can learn about natural processes through a hands-on approach while on field trips to the Garden for the Environment, the Conservatory of Flowers, and McLaren Park.
- The Stop Litter Program—including assemblies, curriculum and poster contests—creates positive behavior change and cuts down litter on City streets, schools, parks, and benches.
- Students learn about Wind Power through interpretive panels and a self-guiding field trip for elementary school students in conjunction with restoration of Murphy Windmill in Golden Gate Park.
- Students learn about the science of energy and energy efficiency through the Energy Activity Program.
- **An International Pen Pal program teaches hundreds of San Francisco and international students about how their local actions can have a global impact on the environment.**
- The Safe Cosmetics Program educates teens about the personal and environmental dangers of makeup and other body care product ingredients and how to be smart, eco-savvy consumers.





2004-2008 ENVIRONMENTAL ACCOMPLISHMENTS

BROAD CLIMATE PROTECTION EFFORT

- First City in the nation to complete certification of municipal greenhouse gas emissions.
- Issued San Francisco Climate Action Plan, committing the City to reduce greenhouse gas emissions to 20% below 1990 levels by 2012.

IMPROVING ENERGY EFFICIENCY/ GREEN BUILDING

- Implemented successful commercial and multi-family residential energy efficiency programs, saving sufficient energy to power 25,000 residences.
- Established Green Building Task Force to improve environmental performance of new construction projects in the City. Introduced ordinance codifying Task Force recommendations—the strongest in the nation.

GREENING THE ECONOMY

- Established a Clean Technology Advisory Council to attract clean technology businesses to San Francisco, and provided payroll tax exemption for businesses engaging in clean energy technology.
- Sponsored creation of Business Council on Climate Change, a public-private partnership for sharing best practices around greenhouse gas reduction.

CLEAN AIR & TRANSPORTATION

- Established the unprecedented goal of zero emission public transit by 2020. All of the City's diesel buses run on biodiesel, and the remainder of the fleet is zero emission electric.
- Upgraded pedestrian traffic signals and improved bicycle safety.
- Passed legislation that gives incentives for taxi fleets to purchase clean fuel vehicles.
- 100% of the City's non-emergency diesel fleet runs on B20 biodiesel.

HEALTHY FOOD

- Expanded number of local farmers markets from 3 to 9, and funded youth gardening groups such as Quesada Gardens and Alemany Farm.
- Launched 'Shape Up SF' to increase physical activity and improve nutrition.

GREEN STREETS

- Planted 16,034 new trees towards the aggressive goal of 25,000 trees by 2010.
- Set goal of reducing street litter by 50%, working with fast food restaurants and other businesses that produce frequently littered items.

ALTERNATIVE ENERGY

- Closed outdated, polluting Hunters Point Power Plant, a milestone in redressing the historical legacy of environmental racism. Put framework in place to shut down Potrero Power Plant, the City's next largest source of point-based pollution.
- Increased use of solar on City-owned buildings, and implemented the first solar mapping Web portal for use by San Francisco residents (www.sf.solarmap.org).
- Launched tidal power feasibility studies, with the goal of building a one megawatt demonstration project.
- Launched program to collect waste cooking oil from restaurants to make into biofuel for the City fleet.

RECYCLING & TOXICS REDUCTION

- Banned conventional plastic bags at supermarkets and large drugstores.
- Banned the use of Styrofoam and required compostable or recyclable food service ware at city restaurants.
- Required reuse and recycling of all construction and demolition materials, and use of recycled content materials in public works construction.
- Adopted green purchasing guidelines, including the nation's strictest requirements for environmentally friendly cleaning products, and trained hundreds of City custodians in green cleaning techniques.
- Banned the purchase of bottled water for use by City departments.
- Eliminated 100% of the most toxic chemicals used in parks and open spaces, and reduced overall pesticide use by over 70 percent.

WATER

- Begun recycled water projects to irrigate parks and golf courses, and replenishing our groundwater sources.
- Achieved lowest per capita water use in California.

To see a complete list of San Francisco's environmental achievements, visit SFGov.org, and click on "Office of the Mayor."



Living by Example

This brochure was printed with soy-based inks on acid-free, 100% post-consumer recycled paper, processed chlorine-free. By using environmentally friendly paper, we saved:

- 8.56 trees preserved for the future
- 402 lbs solid waste not generated
- 792 lbs net greenhouse gases prevented

Savings from the use of emission-free wind-generated electricity:

- 412 lbs air emissions not generated
- 980 cubic feet natural gas unused
- planting 28 trees



SF Environment

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A Department of the City and County of San Francisco

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