

Introduction

Economic opportunity, a vibrant community, or miles of beautiful open space, there are many reasons why San Rafael inspires those who live, work, and play in this unique city. Over many decades, the City's collection of neighborhoods has grown, filled in with families and businesses, matured, and become reinvigorated again with each new cycle of arrivals. Today, San Rafael is a living tapestry. It is exemplified by an enduring mix of community goodwill, respect for our diverse cultural roots, appreciation of our natural resources, and innovative thinking. Our community preserves those qualities that make this city a great place and seizes opportunities to enhance it. Because San Rafael has so much to offer, there are compelling reasons to plan judiciously for its future.

The Sustainability Element is San Rafael's guiding strategy to actively adapt to ongoing changes within the community and in the environment. In concert with other elements within the General Plan and with the City's Climate Change Action Plan, it defines the City's goal of becoming a sustainable community by providing stewardship of our shared natural resources, creating economic resilience, and contributing to the social well-being of its citizens. The Sustainability Element is a bridge spanning what San Rafael is today, and how it takes shape in the future. To meet the community's present needs without compromising its ability to do the same for future generations, the City government is committed to achieving sustainability in all aspects of community planning and governance. While San Rafael is making progress towards this ideal, there is much more that can be and must be accomplished.

Incorporating sustainability at the city government level supports a decision making process that examines constraints and opportunities, as well as short term gains and long term impacts. It clarifies the goals and vision of San Rafael and forms a comprehensive strategy recognizing that one solution can solve multiple problems.

The Sustainability Element and other General Plan elements illustrate San Rafael's hallmark of community based planning; where engaged residents and businesses work with City staff and elected officials to identify and resolve General Plan themes such as managing traffic, providing affordable housing and supporting economic diversity. While no General Plan element takes precedence over others, the Sustainability Element provides an additional focus on the City of San Rafael's decision making process to ensure that our community's valued foundations and resources are preserved, enhanced and restored.

Sustainability: Balancing the Environment, Economy and Social Equity

Planning and development for the evolving needs of San Rafael brings many challenges. Well into its second century, the City and its residents value the distinct collection of neighborhoods and the surrounding open space. To preserve the character of San Rafael, land use and development are carefully evaluated to determine optimum use and impact on surrounding neighborhoods. The City meticulously manages its established network of streets to run efficiently. To accommodate anyone wishing to live here, the City encourages housing for a variety of income levels. Working with other elements of the General Plan, the Sustainability Element provides an additional thread tying all elements together, forging a community that exists in harmony with the environment and local economy, while promoting a healthy, engaged and culturally diverse community.

Meeting present and future community needs requires San Rafael to balance three inter-related foundations of the community: the environment, the economy, and social equity. Each foundation is vital to a thriving community and must be valued equally in relation to the remaining two. For example, a healthy economy may provide many jobs, but jobs filled by employees who commute to work alone from outlying areas create negative consequences for the environment and society in the form of increased fuel consumption and traffic congestion, less local employment, and degradation of air quality.

The Sustainability Element and other General Plan Elements take a broad view of the City's planning issues, but hone in on the fundamental problems requiring solutions. San Rafael pledges to confront environmental, economic and societal imbalances so that our community becomes resilient and adaptable at its core.

Foundations of Sustainability

Environment: A sustainable environment is one in which people, plants, animals and other organisms live harmoniously together within the same ecosystem, without doing harm to it or each other. Protection, restoration, management, and conservation of our shared natural resources such as land, water and air, is crucial to achieving a sustainable environment.

Economy: A sustainable economy is diverse in its offerings of goods and services to a range of consumers within our community. A sound economy includes jobs that employ varying skill levels that match those found locally. Businesses in a sustainable economy are environmentally responsible, provide positive benefits to their employees and the community and have the strength to weather national and global market swings. Locally based businesses are especially important to a resilient local economy.

Social Equity: Social equity in a sustainable community promotes inclusiveness in the City's current and future planning and development. Access to community services, transportation, education, jobs, government and recreation are provided to all residents. A sustainable community also protects its residents from potential hazards through recognition and awareness of our changing environment, promoting adaptive behavior through programs and decision making strategies that include partnerships with the community.

Community Partnerships for a Sustainable San Rafael

Effective city governance starts with a strong partnership with the people it serves. San Rafael has a long history of providing options for residents, neighborhood associations, businesses, and other community groups to bring their ideas, issues and concerns directly to local government. The General Plan 2020, including the Sustainability Element, are prime examples of our community stepping up and working with City staff to communicate their needs and vision for a sustainable city. Through public workshops, community meetings, and the City's website, these forums facilitate an ongoing dialogue, a key to keeping San Rafael responsive to its citizens. Feedback assists the City in prioritizing local issues, while allowing opportunities to educate and inform. The City recognizes that active community participation is vital to implementing effective governance.

Public discussion sessions consistently mention improving and preserving San Rafael's quality of life and vitality, while maintaining its essential character. The City's General Plan elements, including the Sustainability Element specifically address these concerns.

Climate Change Action Plan

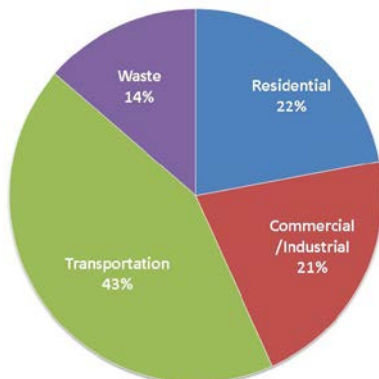
There is undeniable evidence that climate change is happening now. Excessive consumption of our earth's natural resources for energy, transportation and lifestyle choices contribute to rising greenhouse gas (GHG) emissions largely in the form of carbon dioxide (CO₂), which causes the global climate to warm. Higher temperatures triggered by climate change can bring intensive weather-related events; massive droughts and forest fires in some areas, severe rainstorms and flooding in others. In San Rafael, a primary concern regarding climate change is rising sea level due to the melting of polar ice caps. A 3' rise in sea level would flood nearly all of southeastern San Rafael and parts of downtown, devastating our community by destroying or disrupting our neighborhoods, local businesses and community infrastructure.



Satellite image of San Rafael based on a 3 foot rise in sea level.

Bay Conservation and Development Commission, 2009

At the State level, law makers have also taken notice of climate change issues. In 2006, California legislators signed into law AB32 and SB375, complementary plans to reduce GHG emissions to 1990 levels from 'business-as-usual' levels by 2020, a roughly 30% overall reduction. Using current GHG levels, this translates into a 15% reduction by 2020.



San Rafael's GHG emissions in 2005

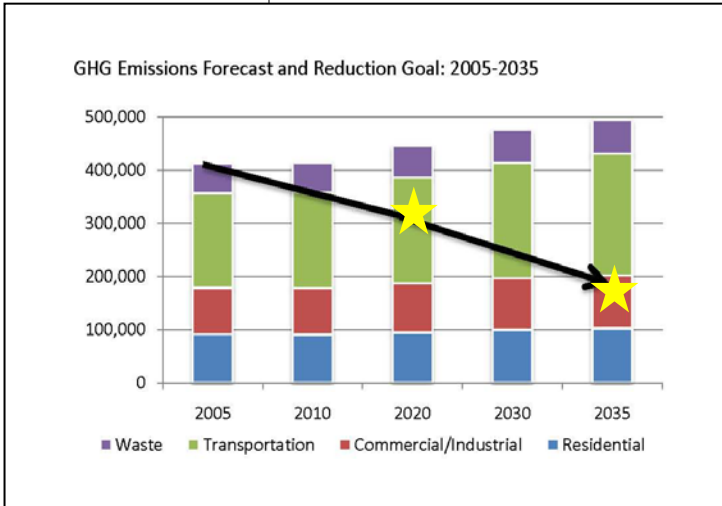
Recognizing the magnitude of the reduction goal and the importance of complying, San Rafael began proactively studying the sources of GHG emissions in the community. In 2008, the City brought together residents, community groups, county and regional agencies, and environmental consultants for a series of workshops and outreach sessions to develop a comprehensive plan to curb GHG emissions and combat the effects of climate change. During its investigation, the City identified three major GHG contributors (transportation, buildings, waste)

and quantified community-wide emissions and those from the City's municipal operations.

The community vision and recommendations culminated as San Rafael's Climate Change Action Plan 2009 (CCAP) which targets an ambitious 25% GHG reduction goal from 2005 levels by 2020 and an 80% reduction by 2050. The 25% GHG reduction goal by 2020 exceeds the 15% expectation of AB 32 and will require reductions beyond the specific programs in the CCAP to lower GHG emissions. The remaining 10% reduction is anticipated to come from addition community reduction

efforts and effects of federal programs. The CCAP is intended to be updated frequently based on experience in implementing programs, monitoring of GHG emissions, changes in state and federal statutes and best practices of other local governments.

The CCAP was updated in 2011 to include a quantified GHG Reduction Strategy and monitoring program, also a key component of the Sustainability Element. To truly become a sustainable community, San Rafael will need to accept that program implementation is a dynamic process, involving objective review, community input and collaboration with sustainable thinking in both plan and action.



San Rafael's GHG emissions forecast and reduction goals

Measuring Progress

While the Sustainability Element proposes many programs designed to fulfill our goal of significantly reducing our GHG emissions while simultaneously becoming a sustainable community, the true test of progress will be achieving measurable results based on quantifiable data. By using a defined set of indicators, the City can compare results year by year and make adjustments as necessary to improve program effectiveness. The Goals, Policies, and Programs section of this element includes a set of indicators that the City will use in its annual reporting. For example, collecting annual data on public bus ridership within San Rafael provides an indicator of whether programs geared toward reducing auto transportation and CO₂ emissions in the City are successful. Because San Rafael is committed to cutting GHG emissions 25% by 2020, monitoring progress on sustainability initiatives is extremely important and it is imperative that San Rafael use indicators that are easily understood, attainable, and quantifiable.

Relationship to Other Elements

Sustainability is an “umbrella” objective that affects many aspects of community planning and municipal operations. Most elements of the General Plan contribute policies and programs that further the City’s sustainability goals.

- The **Land Use and Housing Elements** guide much of San Rafael’s growth along transit lines and in concentrated mixed-use areas such as the Downtown and Northgate/Civic Center. They seek to accommodate a very diverse community, including housing for all income levels.
- The **Neighborhoods and Design Elements** foster distinct neighborhoods with a unique sense of place, preservation of historic structures and natural hillsides and convenient mobility without dependence on automobiles.
- The **Economic Vitality Element** promotes a vibrant local economy, environmentally-friendly businesses and green jobs.
- The **Circulation Element** looks forward to a balanced transportation network with convenient transit, extensive bicycle facilities, pleasant pedestrian ways and private vehicles powered by renewable energy.
- The **Governance Element** fosters a local government that is inclusive, transparent and celebrates the diversity of the community.
- The **Culture and Arts and Parks and Recreation Elements** promote cultural and recreational activities which bring residents together in healthy ways.
- The **Safety Element** anticipates the need to adapt to the impacts of climate change such as sea level rise and disaster planning.
- The **Open Space and Conservation Elements** address preservation and restoration of natural areas and species habitat, energy and water conservation, waste reduction and green building.
- The **Air and Water Quality Element** fosters reduction in air and water pollution and soil preservation.

GOAL 25:

It is the goal of San Rafael to have a sustainable community; one that balances the needs of the environment, the economy and a diverse society. *A sustainable community is one that improves its economy, built environment and lifestyles within the limits and opportunities provided by the natural environment. Living within the carrying capacity of natural systems will improve the resilience of our community to withstand market shifts and the effects of climate change.*

The Built Environment

The way that we develop our city determines how efficiently we are able to use natural resources, including energy and building materials. The vast majority of San Rafael’s greenhouse gas emissions come from energy use in buildings and transportation. A denser living environment with services close by can reduce vehicular trips by 40 percent. Green building techniques can reduce energy use in buildings by 20-50 percent.

SU-1. Land Use.

Implement General Plan land use policies to increase residential and commercial densities within walking distance of high frequency transit centers and corridors.

SU-1a. Transportation Alternatives. Consider land use and transportation alternatives (better bicycle and pedestrian access and increased transit feeder service) to best use the future Civic Center SMART Station.

Responsibility: Community Development, Public Works
Timeframe: Short Term
Resources: Grants, Transportation Agencies

SU-1b. Walkable Neighborhoods. Determine areas in need of sidewalk improvements, land use changes, or modified transit stops to create walkable neighborhoods.

Responsibility: Community Development, Public Works
Timeframe: Long Term
Resources: Staff Time

SU-2. Promote Alternative Transportation.
Decrease miles traveled in single-occupant vehicles.

SU-2a. Bike Share Program. Facilitate the creation of a bike share program, particularly in the Downtown area. Conduct a feasibility study to determine feasibility, scale, and costs.

Responsibility: Public Works, Economic Development
Timeframe: Long Term
Resources: Private Vendors, Grants, Parking District, Measure A

SU-2b. Car Share Program. Facilitate the creation of a car share program, particularly in the Downtown area. Conduct a feasibility study to determine feasibility, scale, and costs.

Responsibility: Public Works, Economic Development
Timeframe: Long Term
Resources: Private Vendors, Grants, Parking District, Measure A

SU-2c. Bus Service. Support Marin Transit and the Transportation Authority of Marin in the planning, funding and implementation of additional transit services that are cost-effective and responsive to existing and future transit demand.

Responsibility: Public Works
Timeframe: Long Term
Resources: Measure A, State Transportation Funds

SU-2d. SMART. Encourage continued funding, development and use of SMART, which will provide residents and employees of San Rafael an additional transportation alternative to single-occupant vehicles.

Responsibility: Public Works
Timeframe: Short Term
Resources: SMART

SU-2e. Sidewalk and Street Improvements. Continue to implement sidewalk and bicycle improvements in accordance with the adopted Bicycle and Pedestrian Master Plan and the Safe Routes to School program.

Responsibility: Public Works
Timeframe: Ongoing
Resources: State Transportation funds, Measure A

SU-2f. Transit to Schools. Encourage the school districts, Marin Transit and the Transportation Authority of Marin to increase funding for school busing programs, promote carpooling and limit vehicle idling.

Responsibility: Public Works
Timeframe: Ongoing
Resources: General Fund, grants

SU-3. Alternative Fuel and Fuel Efficient Vehicles.

Promote the use of alternative fuel and fuel efficient vehicles.

SU-3a. Public Charging Stations. Install charging stations for plug-in electric vehicles in City garages and parking lots.

Responsibility: Public Works, Parking Services, Community Development

Timeframe: Ongoing

Resources: Grants, Parking District

SU-3b. Charging Stations for Private Facilities (Deleted per Amendment on 12/5/16)

SU-3c. Regional Charging Stations. Support regional efforts to encourage use of plug-in electric vehicles and widespread availability of charging stations for electric vehicles.

Responsibility: Public Works, Community Development

Timeframe: Ongoing

Resources: Staff Time

SU-4. Renewable Energy.

Increase the supply of renewable energy sources. Promote and encourage residences to be resource, energy and water efficient by creating incentives and removing obstacles to promote their use.

SU-4a. Marin Energy Authority. Support efforts of the Marin Energy Authority to increase the proportion of renewable power offered to residents and businesses and to provide financial and technical assistance for energy efficiency upgrades.

Responsibility: City Manager

Timeframe: Ongoing

Resources: Marin Energy Authority

SU-4b. PACE Financing. Participate in an assessment district financing (PACE) program to fund installation of renewable energy systems and other efficiency upgrades to existing buildings.

Responsibility: City Manager

Timeframe: Short Term

Resources: Staff Time, Outside financing

SU-4c. Energy Efficiency Outreach. Continue to inform businesses and residents of programs and rebates to conserve energy.

Responsibility: Community Development

Timeframe: Ongoing

Resources: Staff Time

SU-4d. Wind and Solar. Consider methods to reduce barriers in the wind and solar system permit process, such as the expedited permit process for small residential rooftop solar systems.

Responsibility: Community Development

Timeframe: Short Term

Resources: Staff Time

SU-4e. Regional Energy Office. Consider participation in the County's Regional Energy Office.

Responsibility: City Manager

Timeframe: Long Term

Resources: Staff Time

Previously CON-17a (Regional Energy Office)

Title 24 Standards

The California Building Code establishes building energy efficiency standards for new construction (including requirements for entire new buildings, additions, alterations, and in nonresidential buildings, repairs). Since first established in 1977, the Building Energy Efficiency Standards (along with standards for energy efficiency in appliances) have helped Californians save more than \$11.3 billion in electricity and natural gas costs. The Standards are updated periodically to allow incorporation of new energy efficiency technologies and methods.

SU-4f. Zoning and Building Code Review. Identify barriers to resource efficiency in the Zoning and Building Codes and evaluate the suitability of removing those obstacles.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time

Previously CON-18b (Energy-efficient Homes)

SU-4g. Clean Energy Production. Encourage options, such as photovoltaic cells, for energy production. Seek ways to provide incentives for solar and clean energy systems.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Grants

Previously CON-18d (Incentives for Solar and Clean Energy) and CON-19a (Energy Production)

SU-5. Reduce Use of Non-Renewable Resources.
Reduce dependency on non-renewable resources.

SU-5a. Green Building Regulations (Deleted per Amendment on 12/5/16)

SU-5b. Use of Alternative Building Materials. Evaluate the benefits and impacts of amending the City's building codes and zoning ordinances to allow the use of acceptable resource-efficient alternative building materials and methods.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time

Previously CON-18c (Use of Alternative Building Materials)

SU-5c. Energy Efficiency Programs. Develop and implement energy efficiency and conservation programs to achieve a 20% reduction in energy use by 2020, including PACE financing, stretch building codes, energy audits, upgrades upon resale, education and outreach.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time, Marin Energy Authority, grants

SU-5d. Water Efficiency Programs. Develop and implement water efficiency and conservation programs to achieve a 30% reduction in water use by 2020, including water efficient landscape regulations, PACE financing, water audits, upgrades upon resale, education and outreach. Make available to property managers, designers and homeowners information about water-conserving landscaping and water-recycling methods and resources.

Responsibility: Community Development, Marin Municipal Water District
Timeframe: Ongoing
Resources: Marin Municipal Water District, Staff Time

Merged with previous CON-20a (Water Conserving Landscaping)

SU-5e. Water Recycling. Support the extension of recycled water distribution infrastructure. Require the use of recycled water where available.
Responsibility: Community Development
Timeframe: Ongoing
Resources: Fees

Previously CON-20b (Water Recycling)

SU-5f. Reflective Surfaces. Encourage the use of high albedo (reflectivity) materials for future outdoor surfaces such as parking lots, roadways, roofs and sidewalks.
Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time

SU-6. Resource Efficiency in Site Development.

Encourage site planning and development practices that reduce energy demand, support transportation alternatives and incorporate resource- and energy-efficient infrastructure.

SU-6a. Site Design. Evaluate as part of development review, proposed site design for energy-efficiency, such as shading of parking lots and summertime shading of south-facing windows.
Responsibility: Community Development
Timeframe: Ongoing
Resources: Fees

Previously CON-22 (Resource Efficiency in Site Development) and CON-22a (Site Design)

The Natural Environment

Sustainability demands a respect for nature and our reliance on natural resources. By protecting and enhancing our environment we can reap rewards for generations to come.

SU-7. New and Existing Trees.

Plant new and retain existing trees to maximize energy conservation and carbon sequestration benefits.

SU-7a. Tree Inventory. Inventory tree and vegetative cover to determine existing resources and carbon sequestration, and establish citywide goals and strategies to increase carbon sequestration.
Responsibility: Public Works
Timeframe: Long Term
Resources: Staff Time, grants

SU-7b. Tree Preservation. Adopt ordinances to regulate the removal and replacement of significant trees.
Responsibility: Public Works
Timeframe: Long Term
Resources: Staff Time, fees

SU-7c. Parking Lot Landscaping. Maintain zoning regulations for parking lot landscaping to increase shading and reduce thermal gain.
Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time

SU-7c. Carbon Offset Program. Consider the feasibility of a local carbon offset program to support tree planting and maintenance.
Responsibility: Public Works, Finance
Timeframe: Short Term

Resources: Staff Time, contributions

SU-8. Local Food Production. Increase local food production.

SU-8a. Farmers Markets. Continue to promote local farmers markets.

Responsibility: Economic Development

Timeframe: Ongoing

Resources: Economic Development

SU-8b. Home and Community Gardens. Encourage the creation of home and community gardens, including possible use of surplus City properties for community gardens.

Responsibility: Community Services

Timeframe: Long Term

Resources: Staff Time, grants, partnerships

SU-8c. Community Garden Standards. Examine practices and standards that could be established to permit community gardens by right based on performance standards

Responsibility: Community Services

Timeframe: Ongoing

Resources: Staff Time, Grants

Previously PR-16a (Community Gardens)

Lifestyles

The success of the community in becoming more sustainable is largely dependent upon the willingness of residents to adopt lifestyles which are less demanding on natural resources. The City can encourage and enable residents and businesses to adopt sustainable lifestyles and operations.

A sustainable community celebrates and is strengthened by its diversity. All residents have decent jobs, housing and an opportunity to participate in the governance of their community.

SU-9. Social Diversity and Equity.

Enhance social equity among all segments of the community.

SU-9a. Affordable Housing. Continue to expand the supply of affordable housing, which reduces commute times and congestion.

Responsibility: Economic Development, Community Development

Timeframe: Ongoing

Resources: Developer Contributions

See also H-4 (Governmental and Community Collaboration), H-6 (Funding for Affordable Housing), H-16 (Second Units), H-17 (Regulatory Incentives for Affordable Housing), H-18 (Inclusionary Housing Requirements), EV-12 (Workforce Housing), G-1 (Jobs and Diversity), G-2 (Variety of Housing), G-6 (Broad-Based Involvement), and G-7 (Community Participation).

SU-10. Zero Waste.

Reduce material consumption and waste generation, increase resource re-use and composting of organic waste, and recycle to significantly reduce and ultimately eliminate landfill disposal.

SU-10a. Zero Waste. Implement and monitor the progress of actions contained in the Zero Waste Goal and Zero Waste Strategic Plan.

Responsibility: City Manager

Timeframe: Short Term

Resources: Marin Hazardous and Solid Waste JPA

SU-10b. Home Composting. Develop a program to assist and educate residents in home-composting.

Responsibility: City Manager

Timeframe: Ongoing

Resources: Marin Hazardous and Solid Waste JPA

SU-10c. Community Composting. Create a community-scale composting program for food and green waste.

Responsibility: City Manager

Timeframe: Ongoing

Resources: Marin Hazardous and Solid Waste JPA

SU-10d. Organic Waste-to-Energy. Encourage the creation of an organic waste-to-energy program.

Responsibility: City Manager

Timeframe: Short Term

Resources: Staff Time

SU-10e. Recycling. Encourage efforts to promote recycling, such as encouraging businesses to recycle building and other materials, promoting composting by restaurants, institutions and residences, and supporting Marin Conservation Corps' work to promote recycling.

Responsibility: City Manager, Community Development

Timeframe: Ongoing

Resources: Staff Time

Previously CON-21a (Recycling)

SU-10f. Recyclable Waste Receptacles. Support efforts by Marin Sanitary to install recyclable waste receptacles in heavy pedestrian areas to encourage recycling of plastics, glass, etc.

Responsibility: City Manager, Community Development

Timeframe: Short Term

Resources: Staff Time

Previously CON-21b (Recyclable Waste Receptacles)

SU-10g. Recycling for Apartments and Nonresidential Buildings. Encourage recycling facilities and programs for apartment and nonresidential buildings. Consider the cost and benefits of expanding recycling facilities and programs for apartment and nonresidential buildings.

Responsibility: City Manager

Timeframe: Ongoing

Resources: Staff Time

Previously CON-21c (Recycling for Apartments and Nonresidential Buildings)

SU-10h. Demolition Waste. Study ways to actively encourage greater recycling and reuse of demolition waste.

Responsibility: Community Development

Timeframe: Long Term

Resources: Staff Time

Previously CON-21d (Demolition Waste)

SU-10i. Recycling Education. Encourage Marin Sanitary to continue its recycling education programs, and to reach out to those not aware of the "reduce, reuse and recycle" techniques.

Responsibility: City Manager

Timeframe: Ongoing

Resources: Staff Time

Previously CON-21e (Recycling)

SU-10j. Incentives for Waste Reduction and Recycling. Work with the City's waste franchisee to create additional incentives in the rate structure for waste reduction and recycling and expand the range of recycled products if resale markets exist.

Responsibility: City Manager, Marin Sanitary
Timeframe: Ongoing
Resources: Fees

SU-9f. Construction Debris (Deleted per Amendment on 12/5/16)

SU-10k. Reuse Facilities. Assist in the development of additional reuse facilities (resale shops, refilling stations, repair shops and resource recovery yards).

Responsibility: Community Development, Economic Development
Timeframe: Long Term
Resources: Staff Time

SU-9h. Non-Recyclable Single Use Items. (Deleted per Amendment on 12/5/16)

SU-9i. Commercial and Multi-Family Recycling. (Deleted per Amendment on 12/5/16)

SU-11. Community Education and Engagement.
Increase community education and engagement in sustainability efforts.

SU-11a. Conservation Programs. Continue to connect businesses and residents with programs and rebates to conserve energy and water.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Grants

SU-11b. Resilient Neighborhoods and Businesses. Implement the Resilient Neighborhoods and Businesses program to encourage behavioral changes to reduce carbon emissions through effective education and peer group support.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Grants

SU-11c. Promote Sustainability Efforts. Use the City's website and City publications and work with community organizations to promote sustainability efforts to both residents and businesses.

Responsibility: City Manager
Timeframe: Ongoing
Resources: Staff Time

SU-11d. Green Festival. Partner with other agencies and organizations to hold an annual "green festival" to promote sustainability efforts.

Responsibility: Community Development
Timeframe: Ongoing
Resources: Staff Time

SU-11e. Vehicle Idling. Educate and encourage businesses and residents to limit vehicle idling.

Responsibility: Police
Timeframe: Long Term
Resources: Staff Time

The Economy

A diverse and local economy which provides opportunities and services for all segments of the community is more resilient to potential market shifts, including those which may result from the effects of climate change and changing sources of energy.

SU-12. Environmentally Beneficial Economy.

Support environmentally beneficial businesses and job creation.

SU-12a. Local Green Businesses. Continue to promote new green businesses opportunities.

Responsibility: Economic Development

Timeframe: Ongoing

Resources: Economic Development

SU-12b. Marin County Green Business Program. Support and encourage green businesses in conjunction with Marin County's Green Business Program.

Responsibility: Economic Development; Marin County

Timeframe: Ongoing

Resources: Economic Development

Incorporated CON-17b (Green Business Program)

SU-12c. Environmentally Beneficial Jobs. Support the creation of environmentally beneficial jobs, particularly for low income residents.

Responsibility: Economic Development

Timeframe: Long Term

Resources: Economic Development

Monitoring Sustainability Indicators and Objectives

Achieving a more sustainable community and responding to climate change will take concerted efforts. It will be necessary to monitor our progress and effectiveness, and to change course as warranted.

SU-13. Monitor Sustainability Objectives and Indicators.

Monitor success in achieving sustainability objectives and greenhouse gas reductions.

SU-13a. Monitor Sustainability Indicators and Greenhouse Gas Inventory.

Periodically update the community and municipal greenhouse gas inventories, monitor changes in the identified sustainability indicators and periodically update the Climate Change Action Plan to achieve greenhouse gas reduction goals.

Responsibility: Community Development

Timeframe: Ongoing

Resources: Staff Time, grants

SU-13b. Future Development and Capital Improvements.

Evaluate future development applications and the City's Capital Improvement Program against compliance with the Sustainability Element and the GHG Emissions Reduction Strategy.

Responsibility: Community

Development Timeframe: Ongoing

Resources: Staff Time, grants

Sustainability Indicators

Indicators are quantifiable objectives that allow us to monitor and gauge our effectiveness at achieving sustainability goals.

1. Decrease miles travelled in single-occupant vehicles on local streets.

Between 2005 and 2020 achieve:

- A 10% reduction community-wide.
- 20% of City employees using alternate modes of commuting.
- 500 new housing units within ½ mile of high frequency transit.

2. Promote energy savings from transportation.

Between 2005 and 2020 achieve:

- A 20% reduction in annual per vehicle gallons of fuel purchased.
- 100 electric vehicle charging stations in public locations.

3. Reduce material consumption and achieve resource re-use.

Between 2005 and 2025 achieve:

- A 94% diversion of waste from landfills.

4. Reduce dependency on non-renewable resources.

Between 2005 and 2020 achieve:

- A 20% reduction community electricity and natural gas use.
- A 30% reduction in household water use.

5. Enhance social equity among all segments of the community.

Between 2005 and 2020 achieve:

- 560 new units of deed-restricted affordable housing.

SU-13c. Annual Reports. Prepare an annual report to the Planning Commission and City Council assessing the implementation of sustainability programs and the GHG Emissions Reduction Strategy.

Responsibility: Community

Development

Timeframe: Ongoing

Resources: Staff Time

SU-12d. Sustainability Coordinator. (Deleted per Amendment on 12/5/16)

SU-13d. Sustainability Commission.

Maintain a Sustainability Commission to advance sustainability efforts.

Continue to hold the Climate Change Action Plan (CCAP) Quarterly Forum, which provides oversight on the implementation progress of sustainability programs.

Responsibility: Community

Development

Timeframe: Short Term

Resources: General Fund

GOAL 26:

It is the goal of San Rafael to have municipal operations that are highly resource efficient and anticipate the effects of climate change. *Municipal operations constitute only one percent of the community's greenhouse gas emissions, but can be a leader in sustainable practices. The City should anticipate and mitigate the effects of sea level rise and natural disasters which will be exacerbated by climate change.*

SU-14. Municipal Programs.

Implement municipal programs to demonstrate the City's commitment to sustainability efforts and reducing greenhouse gases.

SU-14a. Alternative Transportation Options. Provide transit and carpool incentives to City employees, including alternative work schedules and telecommuting opportunities.

Responsibility: Public Works

Timeframe: Long Term

Resources: General Fund, grants

Incorporated CON-23a (City Carpool)

SU-14b. Alternative Fuel for City Fleet. Continue to implement existing City policy to purchase alternative fuel vehicles and increase the efficiency of the vehicle fleet.

Responsibility: Public Works

Timeframe: Ongoing

Resources: General Fund, grants

Incorporated CON-24c (City Vehicle Fleet)

SU-14c. Limit Idling of City Vehicles. Adopt a policy to limit City vehicle idling where practical. Evaluate equipping trucks with an auxiliary electrical system for illumination and warning signs.

Responsibility: Public Works, Police Fire

Timeframe: Short Term

Resources: Staff Time

SU-13d. Green Purchasing (Deleted per Amendment on 12/5/16)

SU-13e. Energy Audits Municipal Buildings (Deleted per Amendment on 12/5/16)

SU-14d. City Electricity. Participate in the Marin Energy Authority by switching all City accounts over to the Light Green option in 2010 and the Deep Green option (100% renewable power) by 2020. Consider the use of renewable energy technology such as solar, cogeneration and fuel cells in the construction or retrofitting of City facilities.

Responsibility: City Manager

Timeframe: Short Term

Resources: Staff Time

Incorporated CON-24d (Renewable Energy Sources in City Facilities)

SU-14e. Streetlights and Traffic Signals. Pursue funding to complete the retrofit of City traffic signals and retrofit streetlights with LED fixtures.

Responsibility: Public Works

Timeframe: Short Term

Resources: Staff Time

SU-14f. Employee Awareness. Increase City employees' awareness of climate protection issues, and develop an internal committee to implement plans.

Responsibility: City Manager
Timeframe: Short Term
Resources: Staff Time

SU-14g. Local Government Agency Involvement. Continue to provide a leadership role with other local governmental agencies to share best practices and successes.

Responsibility: Community Development, Marin Climate and Energy Partnership
Timeframe: Ongoing
Resources: Staff Time

SU-14h. Advancing GHG and Sustainability Efforts. Advocate for state and federal legislation that advance greenhouse gas reductions and other sustainability efforts.

Responsibility: City Manager
Timeframe: Ongoing
Resources: Staff Time

SU-14i. Civic Buildings. Require that new, expanded or renovated City buildings that exceed 5,000 square feet achieve CalGreen standards. This requirement shall not apply to City facilities which are leased.

Responsibility: Public Works Department
Timeframe: Ongoing
Resources: General Fund, Capital Improvement Program, bonds or grants

Previously CON-18f (Civic Buildings)

SU-14j. Green Business Certification. Participate in Marin County's Green Business program to become certified as a Marin Green Business. As part of the programs, review ways for the City to improve recycling and resource-efficient purchases and designate a staff person in each department to establish and maintain recycling in City facilities.

Responsibility: Community Development, City Manager
Timeframe: Ongoing
Resources: Staff Time

Previously CON-24a (Green Business Certification)

SU-14k. Regional Collaboration. Participate in regional collaborations between public agencies to enact and support new programs or shared improvements which promote or utilize renewable energy sources or reduce energy demand.

Responsibility: City Manager
Timeframe: Ongoing
Resources: Staff Time

Previously CON-24b (Regional Collaboration)

SU-14l. Backup Energy Provision. Evaluate backup energy provisions for critical city facilities and upgrade as needed. Encourage the use of alternatives, such as fuel cell and solar generator backups, to the sustained use of gasoline-powered generators.

Responsibility: Public Works
Timeframe: Short Term
Resources: Staff Time

See S-34a (Disaster Preparedness Plan) and S-34c (Neighborhood Disaster Preparedness).

Previously CON-25a (Backup Energy Provision)

SU-15. Adapting to Climate Change.

Increase understanding and preparation to adapt to the effects of climate change, including sea level rise.

SU-15a. Vulnerability Assessment. Participate in Marin County's regional vulnerability assessment, and prepare a local vulnerability assessment for San Rafael.

Responsibility: Public Works

Timeframe: Long Term

Resources: Staff Time, grants

SU-15b. Emergency Planning. Continue to provide emergency planning and community awareness.

Responsibility: Emergency Services

Timeframe: Ongoing

Resources: Staff Time, grants

SU-15c. Levee Analysis. Develop a program of levee analysis, including inventorying heights, testing and maintaining public and private levees.

Responsibility: Public Works

Timeframe: Long Term

Resources: Staff Time, grants, private property owners

SU-15d. Sea Level Monitoring and Planning. Work with the Bay Conservation and Development Commission (BCDC), and other regional agencies, to monitor sea level rise and plan for shoreline defense.

Responsibility: Public Works

Timeframe: Short Term

Resources: General Fund, grants

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