



# General Plan: Policies & Programs Related to Building Energy Use and Renewable Energy

Adopted on July 2014 as part of the 2040 General Plan Policy Document

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## Energy Related Policies

### LU-1.8 Green Building and Landscaping Requirements

The City shall maintain and implement green building and landscaping requirements for private- and public-sector development to:

- Reduce the use of energy, water, and natural resources.
- Minimize the long-term maintenance and utility expenses of infrastructure, buildings, and properties.
- Create healthy indoor environments to promote the health and productivity of residents, workers, and visitors.
- Encourage the use of durable, sustainably-sourced, and/or recycled building materials.
- Reduce landfill waste by promoting practices that reduce, reuse, and recycle solid waste.

*[Source: New Policy; City Staff] (RDR)*

### CS-5.7 Energy Assurance Plan

The City shall develop, maintain, and implement a citywide Energy Assurance Plan that documents the energy needs of critical City and community facilities and functions, establishes goals and actions to increase energy resiliency during disasters, and prioritizes the use of renewable energy or other sustainable technologies to reduce dependency on the grid during power outages. *[Source: New Policy; City Staff] (CSO/MPSP)*

### NR-2.4 Community Greenhouse Gas Reduction

The City shall work with the community to reduce community-based GHG emissions by 20 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively. *[Source: New Policy, City staff] (RDR)*

### NR-2.5 Municipal Greenhouse Gas Reduction

The City shall reduce municipal greenhouse gas emissions by 20 percent below 2005 baseline level by 2020, and strive to reduce municipal emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively. *[Source: New Policy, City staff] (RDR)*

**NR-2.6 Greenhouse Gas Reduction in New Development**

The City shall reduce potential greenhouse gas emissions by discouraging new development that is primarily dependent on the private automobile; promoting infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; and improving the regional jobs/housing balance ratio.. *[Source: New Policy, City staff] (RDR)*

**NR-4.1 Energy Efficiency Measures**

The City shall promote the efficient use of energy in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment. *[Source: New Policy, City staff] (RDR)*

**NR-4.2 Energy Efficiency Collaboration**

The City shall collaborate with partner agencies, utility providers, and the business community to support a range of energy efficiency, conservation, and waste reduction measures, including the development of green buildings and infrastructure, weatherization programs, installation of energy-efficient appliances and equipment in homes and offices, promotion of energy efficiency retrofit programs, use of green power options, and heightened awareness of the benefits of energy efficiency and conservation issues. *[Source: New Policy, City staff] (RDR/PI/MPSP/JP)*

**NR-4.3 Efficient Construction and Development Practices**

The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the life-cycle of a structure. *[Source: New Policy, City staff] (RDR)*

**NR-4.4 Energy Resource Conservation in Public Buildings**

The City shall continue to require all public facilities and services to incorporate energy and resource conservation standards and practices. *[Source: New Policy, City staff] (RDR)*

**NR-4.5 Energy Efficient Contractors**

When soliciting and awarding public contracts, professional service agreements, or grants to businesses or non-profit agencies, the City shall require, as appropriate, proposals or applications to include information about the sustainability practices of the organization. *[New Policy: Climate Action Plan] (RDR)*

**NR-4.6 Renewable Energy**

The City shall encourage and support the generation, transmission, use, and storage of locally-distributed renewable energy in order to promote energy independence, efficiency, and sustainability. The City shall consider various incentives to encourage the installation of renewable energy projects (i.e. reduced permit fees and permit streamlining). *[Source: New Policy, City staff] (RDR/JP)*

**NR-4.7 Renewable Portfolio Standards**

The City shall strive to increase the renewable portion of utility electricity generation by advocating for increased state-wide renewable portfolio standards. *[New Policy: Climate Action Plan] (IGC)*

**NR-4.8 Community Choice Aggregation**

The City shall assess and, if appropriate, pursue participation in community choice aggregation, or other similar programs. The City shall seek partnerships with other jurisdictions to minimize start up and administration costs. (CSO) *[New Policy: Climate Action Plan]* (CSO)

**NR-4.9 Renewable Energy Financing Programs**

The City shall collaborate with regional agencies and organizations to promote financing programs for renewable energy systems. *[New Policy: Climate Action Plan]* (IGC)

**NR-4.10 Public Renewable Energy Generation**

The City shall ensure that all new City-owned facilities are built with renewable energy, as appropriate to their functions, and shall install renewable energy systems at existing City facilities where feasible. *[New Policy: Climate Action Plan]* (RDR/MPSP)

**NR-4.11 Green Building Standards**

The City shall require newly constructed or renovated public and private buildings and structures to meet energy efficiency design and operations standards with the intent of meeting or exceeding the State's zero net energy goals by 2020. *[Source: New Policy, City staff]* (RDR/MPSP)

**NR-4.12 Urban Forestry**

The City shall encourage the planting of native and diverse tree species to reduce heat island effect, reduce energy consumption, and contribute to carbon mitigation. *[Source: New Policy, City staff]* (RDR)

**NR-4.13 Energy Use Data**

The City shall consider requiring disclosure of energy use and/or an energy rating for single family homes, multifamily properties, and commercial buildings at certain points or thresholds. The City shall encourage residents to voluntarily share their energy use data and/or ratings with the City as part of collaborative efficiency efforts. *[New Policy: Climate Action Plan]* (RDR)

**NR-4.14 Energy Efficiency Retrofits**

The City shall collaborate with regional entities and others to promote incentive programs for energy efficiency retrofits such as the Energy Upgrade California program for residential properties. *[New Policy: Climate Action Plan]* (IGC/JP)

**NR-4.15 Energy Efficiency Programs**

The City shall promote the use of the Energy Star Portfolio Manager program and energy benchmarking training programs for nonresidential building owners. *[New Policy: Climate Action Plan]* (PI)

**EDL-3.3 Sustainable Design**

The City shall encourage school districts to incorporate sustainable design practices in the construction and renovation of school facilities to reduce energy and water consumption and related utility expenses. *[Source: New Policy; City Staff]* (PI/IGC/RDR)

**EDL-6.6 Design Principles**

The City shall consider the following principles when designing new library facilities and library renovation projects:

- Libraries should be flexible and provide spaces that can support a variety of uses, such as personal study, group interaction, creative and innovative collaboration, art exhibits, computer research, presentations and lectures, and community events.
- Facility systems should support a technology-rich environment and wireless networking.
- Interior spaces should be zoned by acoustical and activity levels to allow simultaneous use by all types of people.
- The exterior and the interior of the building should be easy to navigate and designed with a sense of openness.
- Libraries should incorporate sustainable design practices to reduce energy and water consumption and related utility expenses.
- Libraries should have high-quality interior spaces and furniture that attract people and encourage them to stay for long periods of time (similar to coffee shops or book stores).

*[Source: New Policy; City Staff] (RDR)*

**HQL-9.6 Energy Resiliency**

The City shall continue to encourage residents and businesses to use less gasoline for transportation, and improve energy efficiency in and renewable energy generation from buildings and industry processes to reduce impacts from rising oil and energy prices. *[Source: New Policy, City staff] (RDR/MPSP)*

**PFS-2.3 Sustainable Practices**

The City shall serve as a role model to businesses and institutions regarding purchasing decisions that minimize the generation of waste, recycling programs that reduce waste, energy efficiency and conservation practices that reduce water, electricity and natural gas use, and fleet operations that reduce gasoline consumption. *[Source: New Policy; Climate Action Plan] (CSO)*

**PFS-2.7 Energy Efficient Buildings and Infrastructure**

The City shall continue to improve energy efficiency of City buildings and infrastructure through implementation of the Municipal Green Building Ordinance, efficiency improvements, equipment upgrades, and installation of clean, renewable energy systems. *[Source: New Policy; Climate Action Plan] (CSO)*

**PFS-4.12 Renewable Energy**

The City shall support efforts to develop, enhance, and maintain clean, green and renewable energy systems at the Water Pollution Control Facility, including:

- Solar photovoltaic and solar hot water; and
- Methane recovery systems and digester gas combustion systems.

*[Source: New Policy, City Staff] (IGC)*

**PFS-7.17 Waste-to-Energy Generation Systems**

The City shall advocate for waste management strategies that aim to maximize the value of solid waste by using waste-to-energy generation systems. *[Source: New Policy; Climate Action Plan] (IGC/JP)*

**PFS-8.8 Renewable Energy Integration**

The City shall encourage energy providers (e.g., PG&E) to offer their support and assistance in integrating individual renewable energy systems (e.g., solar systems) into the electricity grid. *[Source: New Policy, City Staff] (RDR/PI)*

**Implementation Programs**

See page 7 for Implementation Timeline

**ED 3. Energy and Sustainability Businesses Program.** The City shall coordinate with the Chamber of Commerce and the East Bay Economic Development Alliance to develop a program that supports and attracts businesses in the renewable and energy-efficiency sector to Hayward. *[Source: Climate Action Plan] (MPSP/JP/IGC)*

**CS 13. Energy Assurance Plan.** The City shall develop and implement an Energy Assurance Plan to ensure that critical facilities have access to power during emergencies and power outages. *[Source: New Program; City Staff] (MPSP)*

**NR 5. Residential Energy Performance Assessment and Disclosure Ordinance.** Not sooner than 2017, the City shall consider adopting a Residential Energy Performance Assessment and Disclosure (EPAD-R) Ordinance for detached single-family homes and multi-family homes. The EPAD-R Ordinance may include the following:

- energy performance disclosures at certain points or thresholds
- use of a free online tool such as the Environmental Protection Agency's *Home Energy Yardstick* for self-assessment, which takes into account the size of the home and number of occupants
- alternatively, use of a low-cost assessment tool such as the Department of Energy's *Home Energy Score*
- flexible exemption provisions including:
  - the age of the building,
  - foreclosures or short sales,
  - recent energy efficiency upgrades,
  - an owner providing 12 consecutive monthly utility bills from the previous two years

*[Source: New Program; Climate Action Plan] (RDR)*

**NR 6. Commercial Energy Performance Assessment and Disclosure Ordinance.** The City shall consider adopting a Commercial Energy Performance Assessment and Disclosure (EPAD-C) Ordinance for commercial buildings. The EPAD-C Ordinance may include the following:

- Energy use disclosure requirements consistent with State law (AB 1103), which requires use of the ENERGY STAR *Portfolio Manager* benchmarking tool.
- Exemption provisions consistent with AB 1103, which include:
  - the size of the building
  - the occupancy type of the building

*[Source: New Program; Climate Action Plan] (RDR)*

**NR 7. Energy Reduction Initiative and Annual Report.** The City shall develop and implement a public information and education campaign to encourage every household and every business to reduce their energy consumption by 10 percent by 2020. The City shall evaluate and report to the City Council annually on the community's progress in achieving the ten percent goal, and recommend additional efforts as necessary to ensure the goal is met. *[Source: New Program, Climate Action Plan]* (MPSP/PSR/PI)

**NR 8. Home Energy Monitors and Annual Report.** The City shall develop a program to encourage the installation of Home Energy Monitors in existing homes. The City shall evaluate and report to the City Council annually on the community's participation in the program, and any additional reductions in energy use that result from implementation of the program. *[Source: New Program, Climate Action Plan]* (MPSP/PSR)

**NR 9. Financing Program for Residential Energy Efficiency Retrofits.** The City shall work with regional agencies and organizations to develop a residential energy efficiency retrofit financing program for single-family and multi-family homes. *[Source: New Program, Climate Action Plan]* (MPSP/FB)

**NR 10. Financing Program for Commercial Energy Efficiency Retrofits.** The City shall work with regional agencies and organizations to develop a commercial energy efficiency retrofit financing program for commercial and industrial properties. *[Source: New Program, Climate Action Plan]* (MPSP/FB)

**NR 11. City Building Audits and Reports.** The City shall conduct an energy efficiency audit of City-owned buildings every five years to identify opportunities for efficiency improvements from both operations and equipment upgrades. The City shall prepare and submit a report to the City Council that summarizes the results of the audit and makes recommendations for improvements that will improve energy efficiency. *[Source: New Program, Climate Action Plan]* (PSR)

**NR 12. Financing Program for the Installation of Residential Renewable Energy Systems.** The City shall work with regional agencies and organizations to develop a financing program for the installation of renewable energy systems on single-family and multi-family residential buildings and mobile homes. *[Source: New Program, Climate Action Plan]* (FB/IGC/MPSP)

**NR 13. Financing Program for the Installation of Commercial Renewable Energy Systems.** The City shall work with regional agencies and organizations to develop a financing program for the installation of renewable energy systems on commercial and industrial properties. *[Source: New Program, Climate Action Plan]* (FB/IGC/MPSP)

**NR 14. Renewable Energy Generation Potential.** The City shall conduct a city-wide study to estimate the total potential for renewable energy generation on City facilities and the estimated costs and benefits of developing that potential. Based on findings from the study, the City shall develop a plan to develop cost effective renewable energy projects. *[Source: New Program, Climate Action Plan]* (PSR)

<b>Implementation Timeline</b>		<b>2014-2016</b>	<b>2017-2019</b>	<b>2020-2040</b>	<b>Annual</b>	<b>Ongoing</b>
NR 7	Energy Reduction Initiative and Annual Report	X			X	
NR 5	Residential Energy Performance Assessment and Disclosure Ordinance		X	X		
NR 6	Commercial Energy Performance Assessment and Disclosure Ordinance		X	X		
ED 3	Energy and Sustainability Businesses Program		X			
NR 8	Home Energy Monitors and Annual Report		X		X	
NR 9	Financing Program for Residential Energy Efficiency Retrofits		X			X
NR 10	Financing Program for Commercial Energy Efficiency Retrofits		X			X
NR 12	Financing Program for the Installation of Residential Renewable Energy Systems		X			X
NR 13	Financing Program for the Installation of Commercial Renewable Energy Systems		X			X
NR 14	Renewable Energy Generation Potential		X			
CS 13	Energy Assurance Plan			X		
NR 11	City Building Audits and Reports			X		