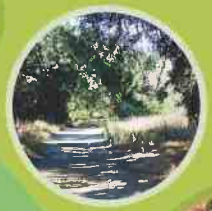
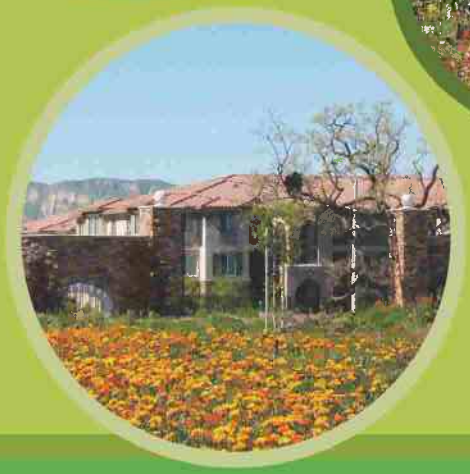
CITY OF SIMI VALLEY





Voluntary Green Building
POLICY

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ACKNOWLEDGEMENTS

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This policy supports the California Long Term Energy Efficiency Strategic Plan Goal 1: "Local governments lead adoption and implementation of "reach" codes stronger than Title 24 on both mandatory and voluntary bases." The policy specifically implements Strategic Plan Task 1.1.2: "Adopt a Green Building Policy for commercial development and residential development." The policy meets the Task 2.A.4 requirements as described in the "Strategic Plan Strategy Program" Statement of Work as approved by the Simi Valley City Council.

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Executive Summary

The City of Simi Valley has long been a champion of energy efficiency. By demonstrating a continuing commitment to reduce energy use in its own facilities, the City is leading by example in the community. In 2009, the City adopted Ventura County's first Green Building Ordinance (GBO) for new construction and substantial remodels. The focus of the GBO was on energy efficiency, water conservation, and recycling of construction and demolition waste. The energy efficiency portion of the GBO is called a "Reach Code" because it requires that new construction achieve energy efficiencies above the Title 24, Part 6 (California Energy Code) minimum requirements.

The City has had good success with implementation of the GBO and the Reach Code for new construction, especially as building materials and appliance efficiencies have improved. However, the majority of buildings in the City were built before these requirements were put into place. Improvements and smaller remodels of these existing buildings (built between 1950 and 1990) do not trigger the GBO requirements, and any mandatory requirements to retrofit these buildings to meet current and future Title 24, Part 6 standards is likely to discourage the public from obtaining building permits for any improvements.

This Voluntary Green Building Policy will address this gap by providing resources and technology support to encourage the owners of existing buildings to incorporate energy efficiency into their homes and businesses when they are remodeling their property. This policy is designed to encourage obtaining building permits for simple retrofits of heating, ventilation, and air conditioning (HVAC) systems, appliance replacements, window and roofing replacements, and to suggest options for materials and simple additional steps that could be taken to dramatically improve the savings and comfort levels for building owners and occupants. Available incentives and rebates for energy efficiency measures will be offered during the design or permitting process. This will contribute to reductions in the overall energy use of the community.

To achieve this goal, the Simi Valley Voluntary Green Building Policy expresses the City of Simi Valley's commitment to the following five objectives:

1. To establish City-sponsored technical assistance and resources, which property owners can use to save money and energy through energy efficiency retrofits.
2. To establish a City-sponsored plan of outreach to property owners.
3. To establish a plan to educate and assist the success of the local contractor community by partnering with local contractors and contractors' associations to provide training and credentials in green building and energy efficiency.
4. To establish a plan for the continuing education of City staff members so that they, by means of their expertise in energy efficiency and code compliance, may serve, assist, and empower the Simi Valley community to save money and resources through energy efficiency retrofits.

5. To establish a process whereby knowledge gained through Simi Valley's energy efficiency programs for public-sector buildings is brought to the private sector.

The City of Simi Valley will encourage the widespread implementation of energy efficiency retrofits in existing buildings and homes, and influence the behavior of private citizens by helping them understand the benefits of making green retrofits to their existing buildings. The Voluntary Green Building Policy describes the specific steps that the City will take to accomplish these goals. To inform and empower the community and implement the policy, the City will:

1. Establish a Voluntary Green Building Program intended to aid businesses and homeowners in evaluating, selecting, and implementing energy efficiency retrofits in existing homes and commercial buildings.
2. Support local contractors to ensure that they have the tools they need to help promote Simi Valley's goals.
3. Enhance its existing website, participate in community events to educate the public, and provide technical support and service to the community in evaluating cost-effective energy efficiency improvements.

Implementation of this policy will support energy savings goals in the Green Community Action Plan and Climate Action Plan. These goals include a lower per capita residential and business energy use than the regional average through providing programs to assist residents and businesses with energy efficiency retrofits, and a 15% reduction in community greenhouse gas emissions by 2020.

Background

The City of Simi Valley is leading by example by increasing energy efficiency in government-owned existing buildings and saving taxpayers money. The City is implementing a variety of green building and energy efficiency measures and policies focused on its own operations, including energy benchmarking of City facilities, development of an Energy Action Plan, and conducting retro-commissioning for existing buildings to improve operational performance. These proactive public-sector measures can serve as a resource for the community. In addition to establishing new voluntary programs and resources for City facilities, the Voluntary Green Building Policy will leverage the work that is being done by the City to conduct outreach and training activities to educate the private sector to adopt similar strategies for energy efficiency. By means of these efforts, the City of Simi Valley will promote the environmental and economic health of the community and its citizens.

The City's public commitment to energy use reduction marks Simi Valley as a local government leader within a state renowned as a national leader in green building and energy efficiency practices. In 2009 the City adopted Ventura County's first Green Building Ordinance (GBO) for new construction and substantial remodels. The focus of the GBO was on energy efficiency, water conservation, and recycling of construction and demolition waste. The energy efficiency portion of the GBO is called a "Reach Code" because it requires that new construction achieve energy efficiencies above the Title 24, Part 6 (California Energy Code) minimum requirements. The City has had good success with implementation of the GBO and the Reach Code for new construction as building materials and appliance efficiencies have improved. However, the majority of buildings in the City were built before these requirements were put into place. Improvements and smaller remodels of these existing buildings (built between 1950 and 1990) do not trigger the GBO requirements. In 2014, Title 24, Part 6 will be updated, dramatically increasing the energy efficiency requirements for new construction. The City recognizes that owners of the existing building stock will not be able to meet these standards in a cost effective manner, and establishing mandatory standards for improvements and smaller remodels for these buildings will result in building permit avoidance.

The City's main challenge to reducing private-sector energy use through retrofits to existing buildings is its citizens' unfamiliarity with the savings potential of those retrofits. Many consumers do not have the tools or information to effectively evaluate energy-efficient options or understand the savings and payback time associated with them. The wealth of information available online is currently not organized in a way that is readily accessible to the Simi Valley community. Consumers may not be able to distinguish what level of savings is realistic, and which claims are simply sales pitches by manufacturers or contractors. Without a trustworthy resource for evaluating these claims and understanding tradeoffs, it is reasonable to expect consumers to opt for lower up-front costs. This is particularly true when upgrades are occurring as part of other projects, such as kitchen remodels or home expansions.

Therefore, the focus of this policy will be to describe a multifaceted program to bridge the gap in understanding and connect building owners to resources, including experienced contractors, which they need to successfully implement green and energy efficiency measures.

Goals and Purposes

The goal of the Simi Valley Voluntary Green Building Policy is to increase the voluntary adoption of energy efficiency measures in existing single and multi-family residences and small businesses. Increasing energy efficiency measures will help save property owners money through reduced energy use, and improve interior comfort levels in existing buildings throughout the community.

To achieve this goal, the Simi Valley Voluntary Green Building Policy expresses the City of Simi Valley's commitment to the following five purposes:

1. To establish City-sponsored technical assistance and resources, which property owners can use to save money and energy through energy efficiency retrofits.
2. To establish a City-sponsored plan of outreach to property owners that includes benefits of installing energy efficient improvements, assistance in identifying incentives and rebates offered by the State of California, local utilities, and any future programs develop by the City.
3. To establish a plan to educate and assist the local contractor community by partnering with local contractors and contractors' associations to provide training and credentials in green building and energy efficiency.
4. To establish a plan for the continuing education of City staff members so that they, by means of their expertise in energy efficiency and code compliance, may serve, assist, and empower the Simi Valley community to save money and resources through energy efficiency retrofits.
5. To leverage the City of Simi Valley's energy efficiency programs for public-sector buildings, and conduct outreach and training activities to educate the private sector.

Savings and Benefits

An energy-efficient retrofit is a change in a building's systems and/or structure in order to improve its energy efficiency. What savings and benefits might a homeowner expect to see as the result of energy efficient retrofits?

The United States Environmental Protection Agency (EPA) notes that the average household that implements a suite of simple, cost-effective energy efficiency measures might see a savings of $750 per year in 2008 dollars.[i] For example, a total investment of $3,000 on measures such as improved insulation, upgraded windows, duct sealing, and HVAC controls designed to maximize performance results in a four-year payback period—after which the savings become money in the bank, especially as utility rates increase.

Simple, low-cost measures such as adding insulation, caulking, and sealing a home can produce utility bill savings of 10 to 25 percent.[ii] Further, energy-efficient homes and businesses typically experience reduced medium- and long-term operating costs. Systems operating at peak efficiency last longer while expending less energy.

Energy efficiency in existing homes is a selling point, and a distinguishing factor in the real estate market that can increase the resale value of a home. Recent studies[iii] indicate that existing homes with an energy efficiency certification sell for 23% more than non-certified homes, and spend 18 fewer days on the market.

Finally, upgraded ventilation systems and controls can improve indoor air quality, occupant health, and comfort. Studies[iv] also indicate that home energy upgrades can be an opportunity for better control over asthma and allergy triggers.

Eligibility and Scope

This Voluntary Green Building Policy focuses on the improvement of existing buildings. Implementation of this policy will support energy savings goals in the Green Community Action Plan and Climate Action Plan. Achieving these goals will contribute to a 15% reduction in community greenhouse gas emissions, and will result in a lower per capita energy use in homes and businesses than the regional average. The City's Voluntary Green Building Policy is designed to help improve the energy efficiency of building systems in:

- Existing single-family dwellings;
- Existing multi-family dwellings and dwelling units; and
- Existing commercial buildings.

The City will assist the owners of these buildings by identifying available rebate and incentive programs, such as Energy Upgrade California, and providing resources such as qualified contractors to install energy efficient improvements.

Because the greatest period of growth within Simi Valley occurred between 1960 and 1980, there are now a large number of buildings within the City that are between 30-50 years old and likely in need of retrofits and upgrades. As building equipment and systems reach the end of their functional lives and need to be replaced, building owners are often faced with a choice between less-expensive equipment that may also be less efficient, and higher-performing equipment that may cost more up front but may result in savings on energy bills.

For example, upgrading insulation from R-13 to R-19 in walls, installing energy-efficient lighting, and upgrading heating, ventilation, and air conditioning (HVAC) systems are measures with relatively brief payback times: without eligible rebates, between 3 to 10 years; and with eligible rebates, between 1 and 8 years. The Simi Valley Voluntary Green Building Program will inform and improve the capacity of homeowners and businesses to recognize the savings potential of energy efficiency measures, including both behavioral changes and equipment upgrades.

City-Sponsored Technical Assistance and Resources

By developing and implementing a technical assistance program, the City of Simi Valley will provide clear, useful, and up-to-date information to both homeowners and small business owners about the benefits of green building measures and energy efficiency retrofits, including potential strategies, rebates and incentives, and methods for conducting cost analyses. The City will educate and use existing staff members involved in the building permitting and inspection processes to provide technical support to community members. In addition, the City's new on-line permitting program will also help permit applicants identify energy saving opportunities.

The City will begin by designating a "green building champion" from among the existing City staff. This staff person(s) will be charged with:

1. Coordinating the green building program, with components of public outreach to the residential, small business, and contractor sectors.
2. Identifying and working with contractors and contractor associations to establish a training program, workshops, and credentialing opportunities.
3. Assessing Simi Valley's customer service engagements, including an evaluation of the permitting process, to determine and implement opportunities where information about green building and energy efficiency can be effectively disseminated. The City's Environmental Services Department will establish and promote public walk-in hours to answer questions and give advice regarding energy efficiency retrofit planning and projects.
4. Identifying and implementing opportunities for staff training, particularly for staff members involved with plan checking and building inspection. Training of plan-checking, building inspection, and other key Simi Valley staff members on green building, energy efficiency, and demand response programs will occur no less than twice per year; it will include the information described in point 5 below, as well as instruction on building relationships and effective customer service to property owners and contractors.
5. Maintaining an up-to-date library of available resources, green building standards, utility incentive and rebate programs (eligibility, scope, and timelines), and energy code compliance; and disseminating this information to city staff members, contractors and contractor associations, and the public.
6. Identifying resources and knowledge available as a result of the City of Simi Valley's energy efficiency efforts in public buildings, and leveraging these on behalf of the Voluntary Green Building Program for the private sector.
7. Serving as a resource for community members with questions.
8. Serving as an energy efficiency and green building ambassador to the Simi Valley community, engaging on the neighborhood level by appearing in

person once each year before each of Simi Valley's four Neighborhood Associations (at four total meetings, and at others as necessary).

9. Tracking metrics (as designated in the final section of this Green Building Policy) to evaluate the success of the actions related to this Policy and opportunities for improvement.
10. Developing case studies, with cost analyses, for the proposed "Save Green" website (see below), highlighting Simi Valley success stories.
11. Encouraging homeowners and investigating a mechanism to provide home energy assessment surveys so that consumers can learn what energy efficiency improvements they can make.

The designated Simi Valley green building champion will prepare an annual report to the City Council on the status and operations of the steps and performance metrics discussed above.

Simi Valley's Community Outreach Plan

Under this Policy, the Voluntary Green Building Outreach Plan for Simi Valley will include the following core components:

1. **The addition of a "Save Green" section to the City's "Live Green" website.** The City will dedicate a section of its "Live Green" website to providing resources and information related to green building and energy efficiency. The new "Save Green" site will be updated on a regular basis, and will include the following information:
    a. Information on the benefits of green building retrofits for existing buildings.
    b. Simple tips for saving energy in homes and commercial spaces.
    c. Information on the types of retrofit strategies for both commercial and residential buildings, and what these strategies entail.
    d. Information on current incentives and rebates, and how to take advantage of these.
2. **Online energy assessment tools (and other calculator tools) to help visitors:** determine energy use; conduct simple financial analysis of projects to determine return on investment, payback, and similar metrics; and motivate property owners to seek a contractor depending on their findings.
    a. Information and resources for finding or becoming a green contractor.
    b. List of credentialed contractors.
    c. Case studies and success stories.
3. **Technical support**, as described under "City Sponsored Technical Assistance" above.
4. **Community events and person-to-person education.** The City will participate in and host community events to actively promote green building and energy efficiency.
    a. The City will host a booth at the annual Living Green Expo that will include educational information and resources about the Voluntary Green Building Program. This booth may be used at other community events as well.
    b. Presentations and seminars for community members on aspects of green building and energy efficiency. Example organizations to target include:
        i. *Business/Professional/Trade Groups*—Chamber of Commerce, Small Business development support organizations (e.g., SCORE, Economic Development Collaborative—Ventura County), Contractor and Builders Associations.

ii. *Civic Groups*—Rotary, Kiwanis, Lions, Masons, Elks, Knights of Columbus, Democrat and Republican Clubs, etc.

iii. *Housing/Home Improvement-Related Organizations and Companies*—Homeowners and Neighborhood Associations, Realtors, local hardware stores, remodeling companies.

iv. *Community Organizations*—School Board, Simi Valley Education Foundation, Rancho Simi Recreation and Park District, Habitat for Humanity.

5. **Outreach for energy-efficiency programs** via low-cost outreach mechanisms that rely on existing communications channels, such as:
   a. Press releases to local media.
   b. Interviews with local city officials about the goals and activities for the Green Building program.
   c. City of Simi Valley "City Focus" newsletters.
   d. Utility bill inserts.
   e. Transit signage—inside or outside.
6. (Optional) **Recognition for small business engagement.** The City will award "Save Green" signage or decals to local businesses that implement green building or energy efficiency measures. Such recognition will be designed to give a boost to local businesses and bring attention to the program overall.
7. (Optional) **Neighbor-to-Neighbor Activities.** These may include:
   a. Demonstration open houses, where completed upgrades could be identified with signage and/or explained by the homeowner or contractor.
   b. Neighborhood energy-efficiency workshops promoted and sponsored by Simi Valley's Neighborhood Associations and conducted by contractors or by local residents that complete a train-the-trainer training session.

Simi Valley's Contractor Outreach Plan

A credentialed, trained, informed, and motivated contractor force is one of the most important components of effective and successful implementation of green building policies and programs. The City will work with local contractors or contractors' associations, such as the Ventura County Contractors Association, to develop:

1. A credentialing program or similar program that will allow the City to link to a list of credentialed contractors as resources on the City website.
2. Co-sponsored educational programs, for building owners on the benefits of green retrofits and for contractors on best practices.

For Simi Valley's contractor community, participation in this program will have these benefits:

3. Listing as a credentialed contractor on the Simi Valley website.
4. Leads for residential and small business energy-efficiency assessments (also called audits) and upgrades (leads from events and general inquiries).
5. Information about incentives currently available for their customers—for example, Energy Upgrade California (EUC) incentives.
6. Opportunities for professional development.
7. Public recognition and enhanced reputation due to program participation.

Contractors who demonstrate an interest and are confirmed as eligible for the program will be provided with the support, leads, and recognition they need to successfully service their energy-efficiency customers and grow their businesses.

To qualify, contractors will demonstrate that they have energy-efficiency upgrade training by completing the Southern California Edison Energy Upgrade California training; contractors will also attend an informational session offered by the Simi Valley Building & Safety Division providing background on Simi Valley and its program and goals. Once identified as eligible, participating contractors will receive, at a minimum:

1. Addition of their name and contact information to the "Find a Contractor" link on the Save Green website linking to the EUC-Ventura County contractor directory page.
2. Residential and business-focused fliers or content about the program for their own marketing materials.
3. Regular updates about available rebates and other Simi Valley program incentives.
4. Leads acquired through Simi Valley's outreach efforts.
5. Recognition for program participation, such as certificates and window clings.

6. Participating contractors will be required to report the following simple metrics on a quarterly basis to the City, in order to help evaluate the program and identify opportunities to promote it further:
7. Number of energy assessments completed.
8. Number of upgraded homes or businesses, identifying significant or interesting upgrade projects for use in case studies and other marketing materials.
9. Issues and questions that arise from the general public, homeowners and business owners, so Simi Valley can address them in its program planning and outreach efforts.

Program Evaluation

The City of Simi Valley will evaluate the success of this policy and its associated program and identify opportunities for improvement using a variety of goals and metrics included in the table below. Starred (*) entries signify metrics required by SCE funding and the California Long-Term Energy Efficiency Strategic Plan. Metrics in some cases are expressed as milestones.

All metrics will be recorded daily by City staff members, reported weekly to the City's Building Official or Energy Efficiency staff, reported monthly to SCE, and reported annually to the City Council.

Category	Metric	Goal(s) or Milestone(s)
Direct Inquiries and Correspondence	Number of inquiries received from the City of Simi Valley and credentialed contractors regarding green building or energy efficiency measures	50 inquiries received (year 1) 200 inquiries (year 3) 500 inquiries (year 5)
Promotion of Green Building Policy and Internal Training	Number of organizations promoting the program through their communication channels	5 organizations (year 1) 30 organizations (year 3)
	Number of local television or print news mentions of Green Building Policy	3 mentions (year 1) 10 mentions (year 3)
	Number of recommended energy efficiency measure lists/facts sheets distributed via the program (from all sources)*	Number
	Number of City staff members participating in workshops or educational programs*	Number
	Number of workshops and educational programs provided to City staff members*	Number
Activity on "Save Green" Web pages	Number of visitors	3,000 visitors by 2013 7,000 visitors by 2014
	Number of stories posted	50 stories by 2013 100 stories by 2014
Events and Presentations	Number of presentations or seminars delivered	Number
	Number of presentation attendees	Number; goal is 5% year over year increase
	Number of leads collected at events	Number; goal is 5% year over year increase
	Number of booths representing Green Building Program	Number
	Number of booth visitors	Number; goal is 5% year over year increase

Category	Metric	Goal(s) or Milestone(s)
Contractor Activity	Number of contractors and building professionals who participated in a co-sponsored workshop or educational program*	Number
	Number of workshops and educational programs provided to contractors and building professionals*	Number
	Number of relevant projects reported by participating contractors	Number; goal is 5% year over year increase
	Number of energy assessments completed by local contractors	Number; goal is 5% year over year increase
Incentives and Upgrades	Number of utility incentive applications submitted to contractors, other building professionals, and property owners*	Number; goal is 5% year over year increase
	Number of energy efficiency equipment installations for utility incentive applications that were confirmed by inspections*	Number; goal is 5% year over year increase
	Number of residential upgrades recorded by Simi Valley permit officials	Number; goal is 5% year over year increase
	Number of business upgrades recorded by Simi Valley permit officials	Number; goal is 5% year over year increase
	Number of permit applications including energy efficiency or green building recorded by Simi Valley permit officials	Number; goal is 5-to-10% year over year increase

Other City, State, and Federal Policies and Resources Promoting Energy Efficiency

The City of Simi Valley has a long-standing commitment to reducing energy usage and promoting green measures. The City's Green Community Action Plan (GCAP) has established the goal of reducing energy use by 20% in City facilities by 2020, as compared to 2006. Other policies that are related to the Voluntary Green Building Policy and which can be leveraged for Simi Valley's Voluntary Green Building Policy include:

The City of Simi Valley Green Building Ordinance outlines requirements for construction of new buildings in Simi Valley.

The City of Simi Valley Energy Action Plan (EAP), the City of Simi Valley Benchmarking Policy, the City of Simi Valley Retro-commissioning (RCx) Policy, and the City of Simi Valley Greenhouse Gas (GHG) inventory policy all aim at improving municipal operations and performance of municipal buildings. These policies help demonstrate the City's commitment to leading by example and have specific information and resources that may be useful to Simi Valley private-sector building owners. For example, benchmarking and tracking energy use is a powerful step on the path to energy efficiency; for its public buildings, Simi Valley uses a simple, no-cost tool from EPA's ENERGY STAR program—Portfolio Manager—, which private-sector commercial properties might also consider.

The State of California has enacted an interconnected set of executive orders, legislation, policies, codes, and programs that are intended to work together to achieve the overall goal of reducing energy use and GHG emissions. Ambitious statewide GHG reduction goals have been established by the California Global Warming Solutions Act of 2006 (AB 32), which directs the California Air Resources Board (CARB) to set reporting requirements for GHG emissions and develop rules and regulations needed to reduce state-wide emissions to 1990 levels by 2020. This translates to a reduction of 15% below 2006 GHG emission levels. Executive Order S-3-05 provides an additional long-term target of 80% below 1990 levels by 2050. To educate and assist citizens and local governments, the California Energy Commission homepage has a wealth of resources on energy efficiency at http://www.energy.ca.gov/efficiency/.

As a response to State mandates and goals, California utilities have developed their own programs and resources listing energy efficiency incentives and rebates available to property owners. *Energy Upgrade California* has information by Zip code; information for Ventura County is available at:

https://www.energyupgradeca.org/

No-cost, co-brandable federal government programs and outreach resources include ENERGY STAR for Homes (https://www.energystar.gov/newhomes?s=mega).

and ENERGY STAR for Small Business (https://www.energystar.gov/buildings/facility-owners-and-managers/small-biz).

EPA's ENERGY STAR Building Upgrade Manual—a no-cost resource made publicly available at http://www.energystar.gov/BldgManual—details case studies of savings associated with specific retrofit strategies.

Endnotes

[i] Environmental Protection Agency (EPA) Residential Energy Efficiency Website. https://www.epa.gov/statelocalenergy/local—residential—energy—efficiency

[ii] McKinsey & Company. *Unlocking Energy Efficiency in the U.S. Economy.* July 2009. https://www.mckinsey.com/~/media/mckinsey/dotcom/client_service/epng/pdfs/unlocking%20energy%20efficiency/us_energy_efficiency_exc_summary.ashx

[iii] Earth Advantage Website. https://www.earthadvantage.org/ and report https://www.earthadvantage.org/assets/documents/EarthAdvantage—2014%20Annual%20Report.pdf

[iv] EPA's Office of Indoor Air Quality website. http://www.epa.gov/iaq/