

4 Building Energy Measures

Measure BE-1 (Municipal) Decarbonize 50% of Municipal Buildings and Facilities by 2030 and All Remaining Municipal Facilities by 2035

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-1.1	Feasibility Study	Develop a plan to electrify 50% of City-owned municipal buildings by 2030 and decarbonize 100% of municipal facilities by 2035. The plan will include an inventory of fossil fuel-powered municipal building equipment, low/zero-carbon technologies available for replacing the equipment (where available), and a short- and long-term schedule for completion. Address diesel generators and recent natural gas investments. Address feasibility concerns around community swimming pool decarbonization. Any buildings that are unable to be electrified due to technological infeasibility should be decarbonized with other technology.	Supportive
BE-1.2	Structural Change	By 2031, develop an ordinance to require the installation of solar and/or energy storage backup power instead of diesel generators, where feasible.	Supportive
BE-1.3	Structural Change	Implement the municipal building decarbonization plan developed under BE-1.1 to decarbonize 100% of municipal buildings by 2035 (any buildings that are unable to be electrified due to technological infeasibility shall be decarbonized with other technology).	Supportive
BE-1.4	Structural Change	Develop and implement a plan for retrofitting all remaining streetlights, facility lighting, and traffic signals to LEDs by 2035.	Supportive
BE-1.5	Foundational, Funding	Leverage the grant writer position(s) in strategy A-2.2 to expand funding efforts for municipal decarbonization.	Supportive
BE-1.6	Structural Change	Include, at the time of lease renewal, requirements for City-owned leased buildings and facilities to be all-electric.	Supportive

Measure BE-2 (Municipal) Procure Carbon Free or 100% Renewable Electricity for Municipal Operations by 2030

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-2.1	Foundational	Require all municipal electrical accounts to remain in SBCE's 100% Green option and purchase carbon-free electricity.	Supportive

Measure BE-3 (Municipal) Increase Municipally Owned Distributed Renewable Energy Generation throughout the City

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-3.1	Foundational, Feasibility Study	Implement all feasible microgrid projects at municipal facilities as identified by the 2017 Zero Net Energy study and re-evaluate viability of additional facilities.	Supportive
BE-3.2	Feasibility Studies	Conduct a feasibility study to understand the barriers of installing additional distributed energy resources such as solar and battery	Supportive

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storage, or other renewable energy generation infrastructure, at municipal facilities. The City may need to re-evaluate plans for funding, energy storage capacity, and distributed energy resources to implement these projects. Focus municipal efforts around finding adequate space for energy storage and microgrid projects.

Measure BE-4 Expand Existing Natural Gas Prohibition Ordinance for New Construction

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-4.1	Structural Change	In 2025 and every 3-years thereafter, revisit building ordinances to update the scope and exemptions to align with industry technology and maximize GHG reduction. Examples include requiring all major remodels (over 50% of building effected or an addition of over 50% of gross floor space) and removing exemptions in the all-electric building requirements. The building code cycle updates are processed in 2025, effective in 2026, and updated every 3-years.	2030: 7,918 2035: 12,975

Measure BE-5 Reduce Existing Residential Natural Gas Consumption by 10% Below 2019 Levels by 2030 and 17% Below 2019 Levels by 2035

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-5.1	Structural Change	Adopt a time of renovation energy efficiency and electrification requirement by 2025, effective 2026. This ordinance could require replacement of HVAC systems, hot water heaters, and other appliances to be all electric and low hydrofluorocarbons (HFC) gas emitters or provide a checklist of cost-effective efficiency and electrification options for renovations to complete based on the scope of the project. Adopt an electrification ordinance for existing residential buildings by 2028, effective 2029, to be implemented through the building permit process, which bans expansion or reconnection of natural gas infrastructure.	2030: 426 2035: 859
BE-5.2	Feasibility Studies, Education, Equity	Complete an existing building electrification feasibility analysis in collaboration with UCSB or another research institution by 2025 to determine the upfront and on-bill costs associated with building electrification strategies. This information will be used to inform and support future ordinances addressing existing building electrification as well as the building electrification accelerator (BE-5.3). The study will include extensive community input and an equity analysis to ensure all people have affordable access to the health, comfort, economic, and resilience benefits of building electrification.	2030: 7,880 2035: 13,551
BE-5.3	Structural Change, Education, Equity	Create a residential building electrification accelerator program to increase community access to building electrification resources. This program should include the provision and expansion of resources needed to support residents in electrifying their homes. For example, by providing rebates, enhanced funding for income-qualified homeowners, technical expertise, and contractor support.	
BE-5.4	Feasibility Study, Structural Change	Identify opportunities for the strategic reduction of gas infrastructure within the City and develop a gas infrastructure pruning pilot program.	
BE-5.5	Structural Change,	Complete a low income and affordable housing electrification pilot project in collaboration with affordable housing owners, utilities, and	

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	Education, Equity	the community. The pilot project will ensure that there is not an increase to energy bills for occupants of pilot buildings.	
BE-5.6	Structural Change, Funding	Provide a rebate at time of sale for qualifying building electrification upgrades including panels, wiring, and heat pump appliances. Implement the rebate program by 2025.	
BE-5.7	Education, Structural Change	Improve the City's building electrification permit process through a comprehensive permitting compliance program that streamlines processes, reduces fees, provides permit and inspection checklists, shortens review times, and educates affected trades and staff, thus reducing barriers to electrification and unlocking available incentives.	
BE-5.8	Feasibility Studies	Conduct a feasibility study of a smart building market demand program, such as Recurve's <i>flexgrid</i> program. The study should include a pilot project that allows building owners to track the power generation and consumption of their retrofitted structures and work on making this a widely available and affordable option.	
BE-5.9	Structural Change	Develop the program studied in BE-5.8 that allows building owners to track the power generation and consumption of their retrofitted structures to optimize energy management.	
BE-5.10	Funding	Partner with ReCurve or similar entity to design and implement a market demand program that would pay energy users to save energy during times of peak demand, use energy more efficiently, and help balance the grid.	
BE-5.11	Education	Expand education programs directed at homeowners and renters on energy resource programs (examples include energy efficiency programs, demand response, and market demand programs).	
BE-5.12	Structural Change	Promote residential energy disclosure legislation, requiring home energy score at time of all residential property sale or rental listings.	
BE-5.13	Structural Change, Funding	Establish a program that provides targeted direct install services and cost share for specific electrification measures with multi-unit residential development owners. City to cover incremental cost in addition to an incremental electricity rate from SBCE.	
BE-5.14	Structural Change, Equity	Develop and implement a multi-family residential property regulation by 2028 to promote phased building energy efficiency and decarbonization. The regulation would require periodic energy inspections and prescriptive energy efficiency and decarbonization points requirements from a standardized checklist, with required performance increasing over time.	
BE-5.15	Structural Change	Develop an emergency hot water appliance program where the City provides residents with emergency natural gas hot water heaters within 24 hours of a request, with an agreement that the resident's gas powered hot water heater will be replaced within 6 months with a heat pump water heater.	
BE-5.16	Education	Increase community awareness and understanding of tax benefits for residential building energy efficiency upgrades (Example: the Residential Energy Efficiency Property Tax Credit).	
BE-5.17	Funding	Develop incentives for California Alternate Rates for Energy (CARE)/ Family Electric Rate Assistance (FERA) subsidized rate programs for low-income resident customers to increase energy assurance.	
BE-5.18	Structural Change, Funding	Implement direct installation and/or incentive programs that facilitate the installation of combined solar and battery energy storage system	

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Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
		installations on local area single family residential buildings. Target 120 installations by 2035.	
BE-5.19	Moonshot	Adopt a natural gas end of flow date by 2040. ¹ Create public engagement and education campaigns around this action to give the community advanced notice as well as signify all progress being made to make this possible.	

¹ Action not included in GHG emission reductions quantification to avoid double counting with rest of measure.

Measure BE-6 Reduce Commercial Natural Gas Consumption 10% Below 2019 Levels by 2030 and 18% Below 2019 Levels by 2035

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO ₂ e)
BE-6.1	Structural Change	Based on the results of measure BE-5.2, the existing building electrification feasibility analysis, develop and adopt an ordinance for existing commercial buildings by 2025, effective 2026, that requires the replacement of fossil fuel building systems such as HVAC and Domestic Hot Water systems with heat pumps at time of renovation. Any buildings that are unable to be electrified due to technological infeasibility shall be decarbonized with other technology. Adopt an electrification ordinance for existing commercial buildings by 2028, effective 2029, to be implemented through the building permit process, which bans expansion or reconnection of natural gas infrastructure.	2030: 1,174 2035: 3,158
BE-6.2	Structural Change	Develop and implement a commercial and mixed-use building benchmarking program for commercial and multifamily buildings over 20,000 square feet by 2025, effective 2026. The program would include reporting electricity and natural gas usage (and any other energy source) data through energy star portfolio manager. It would establish monetary penalties for non-compliance. Residential portions of buildings that are part of a mixed-use development would be exempt. Create incentives for buildings not covered to encourage voluntary compliance.	2030: 4,113 2035: 6,149
BE-6.3	Structural Change	Develop and implement a building performance standard by 2028. The standard should identify a GHG emissions per square footage threshold for each commercial building type using the data collected under action BE-6.2. The program will start with larger commercial/multifamily residential buildings and decrease in size over time.	
BE-6.4	Structural Change, Feasibility Studies	Re-evaluate building performance program every 3 years to gauge implementation progress and possible expansion to smaller sized buildings.	
BE-6.5	Funding, Education	Work collaboratively (via SBCE) with SCE to incentivize all-electric retrofits by combining rebate programs and financing mechanisms to create cost effective electrification packages. Prioritize small, and under-resourced population-owned businesses.	
BE-6.6	Funding, Feasibility Studies, Partnerships, Education	Expand education, outreach and engagement efforts relating to building electrification and energy resources, including these actions: <ul style="list-style-type: none"> ▪ Partner with the Santa Barbara South Coast Chamber of Commerce to inform and facilitate electrification for commercial business owners. 	

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO2e)
		<ul style="list-style-type: none"> Conduct a survey of small businesses detailing obstacles and needed resources to inform equity considerations of the ordinance. Conduct engagement efforts to the commercial sector to identify ways the City can support commercial energy storage installations and neighborhood scale microgrid opportunities. Leverage the grant writer position(s) in strategy A-2.2 to facilitate funding opportunities for commercial business electrification by identifying and supporting grant opportunities available to the community, prioritizing small and under-resourced population community owned. Implement feedback provided during the community outreach process to small businesses and under-resourced population-owned businesses to address potential equity impacts of the building performance program. 	
BE-6.7	Structural Change	Track and require rental energy use disclosures at all commercial property over 10,000 SF. Require an ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers) level-1 audit for properties over 10,000 SF, and property over 20,000 SF requires an ASHRAE level-2 audit to be conducted and disclosed to the City, tenants, and potential buyers prior to sale and/or listing.	
BE-6.8	Structural Change, Funding	Establish a decarbonization incentive rate pilot program that would charge SBCE customers a reduced marginal cost rate for installation of specific electrification measures. Target commercial kitchens/restaurants, Hotel/Motels, etc.	
BE-6.9	Education	Publicize tax breaks for commercial building energy efficiency upgrades. For example, Section 179D Deduction is a federal tax deduction that allows commercial building owners to deduct up to \$1.80 per square foot of the cost of qualifying energy-efficient upgrades made to their buildings, including HVAC systems, lighting, and building envelope improvements.	
BE-6.10	Structural Change, Funding	Implement direct installation and/or incentive programs that facilitate the installation of combined solar and battery energy storage system installations on local area commercial buildings. Target 36 installations by 2035.	
BE-6.11	Structural Change	Develop an emergency hot water appliance program where the City provides commercial residents with emergency natural gas hot water heaters within 24 hours of a request, with an agreement that the hot water heater will be replaced within 6 months with a heat pump.	
BE-6.12	Structural Change, Education, Equity	Create a commercial and mixed-use building electrification accelerator program to increase community access to building electrification resources. This program should include the provision and expansion of resources needed to support building electrification. For example, providing rebates, enhanced funding for income-qualified homeowners, technical expertise, and contractor support.	

Measure BE-7 Increase the Impact of Santa Barbara Clean Energy (SBCE)

Action Number	Strategic Theme	Action	Anticipated Reduction (MT CO2e)
BE-7.1	Foundational	Adopt a reach code requiring all non-residential new construction and major remodels to include solar PV.	Supportive

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BE-7.2	Structural Change, Education	Convert SCE direct access customers to SBCE through targeted programs, incentives, and engagement. Direct access customers purchase electricity from a competitive provider called an Electric Service Provider (ESP), instead of from a regulated electric utility like Southern California Edison (SCE).	Supportive
BE-7.3	Structural Change	Develop targeted rate structures and other incentives for large commercial customers including demand response.	Supportive
BE-7.4	Education, Equity	Develop a local education program detailing incentives for electrification and promoting the benefits of opting in to SBCE's service, particularly for under-resourced populations.	Supportive
BE-7.5	Education, Foundational	Maintain SBCE opt-out rates below 10%.	Supportive
BE-7.6	Structural Change, Foundational	Create innovative pilots for SBCE through local partnerships addressing technical, low-income, market, and policy barriers to progress the City's sustainability and resilience goals. Consider working with departments at UCSB like Technology and Management Program for innovative solutions that leverage technology, Engineering for data-driven solutions, and Environmental Science for cutting edge environmental research.	Supportive
BE-7.7	Structural Change	Develop a Feed-In Tariff to increase and incentive distributed energy resources. Feed-In Tariffs allow eligible small-scale renewable energy generating sources to sell their energy back to the utility or major energy grid.	Supportive

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