

**CITY OF ALBANY  
MEMORANDUM**

DATE: Aril 18, 2018

TO: Sustainability Committee

FROM: Claire Griffing, Sustainability & Resilience Manager

SUBJECT: Energy Efficiency Policy Analysis

---

**STAFF RECOMMENDATION**

That the Sustainability Committee:

1. Recommend development of a voluntary Home Energy Score Program and work with the community and consultants to develop energy policy priorities as part of the Climate Mitigation & Adaptation planning process.
2. Establish an energy efficiency subcommittee to promote new and existing energy efficiency programs to Albany residents and business owners.

**BACKGROUND**

Albany’s Climate Action Plan (CAP) identifies a RECO/CECO ordinance that requires property owners to make building efficiency upgrades as a potential measure for reducing greenhouse gas emissions. RECO/CECO ordinances have been repealed by other cities, however, because of concerns with cost effectiveness, low building turnover rates, and challenges keeping up with state building codes. Berkeley has replaced their RECO with a Building Energy Savings Ordinance (BESO), which requires property owners to conduct energy assessments at time of sale. The Sustainability Committee has been considering a similar Building Energy Assessment and Disclosure Ordinance (BEADO), which staff brought to Council for feedback in December 2015 and April 2016. Council expressed concerns about privacy, cost to homeowners, staff time, enforcement, inclusiveness of rental properties, and overall effectiveness. At a meeting in April 2017, the Oakland Berkeley Association of Realtors urged staff to consider a voluntary program due to concerns about the usefulness and cost effectiveness of assessments, and high deferral rates. Staff participated in Stopwaste’s residential energy assessment and disclosure working group in 2016, which consisted of cities and counties throughout the Bay Area. The group was disbanded in 2017 due to lack of interest and political support in energy assessment and disclosure requirements.

The CAP Implementation Subcommittee proposed a voluntary assessment pilot program, which was approved by the Sustainability Committee in the summer of 2017. Staff administered a pre-survey in September 2017, selected 20 homes to receive free assessments, and contracted with Home Comfort & Energy Solutions to conduct the assessments. Please see the memo titled Analysis of Home Energy Score Pilot Program for details and program results.

## Existing State and Federal Policies

In 2014, AB 1103, established a mandatory policy requiring nonresidential property owners within California to disclose their EPA Energy STAR Manager benchmarking information at the time entire properties are sold, leased, or financed. Senate Bill 758 and 350 have both specifically targeted energy efficiency increases in existing buildings, with the goal of doubling efficiency statewide by 2030. AB 802 requires utility companies to provide energy use data to multi-family and commercial properties greater than 50,000 square feet, and the CEC will make the information public.

## **DISCUSSION**

### Energy Program Priorities

Albany's Climate Action Plan highlights a variety of renewable energy and energy efficiency measures to reduce greenhouse gas emissions. Staff and the Sustainability Committee have been brainstorming ways to upgrade existing buildings to reduce energy usage. With potentially all Albany electricity accounts defaulted into East Bay Community Energy's carbon-free product, energy efficiency programs should focus more narrowly on reducing natural gas usage. Albany's carbon neutral target by 2050 will require fuel switching (switching natural gas appliances such as space and water heating to electric alternatives). Thus, Albany's CAP 2.0 must reexamine energy priorities and focus more narrowly on deep decarbonization principles.

Potential energy efficiency policies and programs that fit multiple City Council strategic priorities are likely to be more successful. Along with advancing climate action, the City Council strategic plan prioritizes promoting housing availability and affordability, seismic safety, active transportation and safety, health and wellness, business vitality and economic development, engaging the community and promoting inclusiveness. Programs should be sensitive to housing affordability issues. Programs that focus on energy efficiency have the potential to also provide co-benefits to health and safety if coupled with seismic upgrade or lead testing programs. Programs could also provide benefits to businesses. The City Council has expressed a priority to upgrade rental properties and support low income households, and expressed concern about programs that require additional staff time or enforcement.

### Current Energy Efficiency Program Offerings

Numerous energy efficiency programs are offered to East Bay residents and businesses, including \$250 rebates for Home Energy Score assessments provided by the Bay Area Regional Energy Network (BayREN); free Home Energy Advisor program providing individualized assistance to homeowners about energy efficiency programs and benefits; free energy audits, project management, and significant rebates to small businesses; and no-cost weatherization, energy-efficient appliances, and energy education for low-income residents. Please see Attachment 1 for a complete list of energy efficiency programs available in the East Bay. Additional new programming will be available shortly through the East Bay Community Energy (EBCE) program.

## Program Gaps

While many energy efficiency programs are currently available to Albany property owners, program uptake is low and there is still significant potential energy savings in existing Albany buildings. The following list highlights a few key barriers to program success:

<b>Barrier</b>	<b>Description</b>	<b>Potential Policy/Program Solution</b>
Information Deficiency: Albany property owners lack the knowledge necessary to adequately upgrade their buildings	Lack of understanding regarding climate change	Community outreach regarding climate change
	Lack of understanding of existing programs and incentives for energy upgrades	Community outreach programs to increase knowledge of existing programs
	Lack of understanding of what needs to be upgraded	Development of a building energy assessment program
	Lack of understanding of how to upgrade or how to pay for upgrades	Promotion of Home Energy Advisor Program
	Home buyers do not know the energy efficiency of the home they buy	Requirements for disclosure of energy use at time of sale
Lack of Monetary Incentive to Upgrade	Homeowners are not paying the true environmental cost of their energy use.	Tax electricity use, especially natural gas use.
	ROI on energy upgrades is not attractive enough	Provide subsidies/rebates or other incentives for energy upgrades.
	While many Albany homes are inefficient, low income tenants and homeowners have less resources to upgrade, and experience increased financial burden resulting from more expensive electricity bills.	Provide programs specifically to low income groups.
Split Incentive Problem	Landlords are not incentivized to upgrade properties where they do not reside	Require tenant disclosures and/or upgrades to rental properties.
Inertia Issue	Property owners with adequate financing and information still do not upgrade properties.	Require upgrades at time of sale or date certain.

## Potential Energy Programs & Policies

The energy programs and policies listed below attempt to address the barriers in the above table.

### *Community Outreach*

Increase community outreach programs regarding climate change education and existing energy efficiency programs.

### *Assessment & Disclosure Ordinance*

Require property owners to complete energy assessments at the time of sale or a certain date to identify inefficiencies, suggested upgrades, and available financing. Assessment results would be disclosed to tenants, buyers, and City staff to help prioritize assistance. This policy could be tailored specifically for landlords, but the City does not have a mechanism to determine when rental properties turn over. The City of Berkeley's Building Energy Savings Ordinance (BESO) requires property owners of commercial and multi-family buildings to complete energy assessments of their property on a specified schedule. Single-family homeowners and smaller multi-family projects (1-4 units) are required to conduct assessments at the time of sale. Berkeley has hired additional staff for compliance and enforcement, customer service, manual data entry and data analysis. Please see Attachment 2 for a matrix of cities with similar policies. Please refer to Attachment 3 for a white paper on residential energy policies.

### *Assessment & Upgrade Ordinance*

Require energy assessments and upgrades at point of sale or date certain for properties found to have inefficiencies above a certain threshold through mandated assessments. RECO/CECO ordinances have been repealed by other cities, however, because of concerns with cost effectiveness, low building turnover rates, and challenges keeping up with state building codes.

This policy could be tailored specifically for landlords, similar to Boulder's [SmartRegs program](#), which requires all licensed rental housing to obtain an inspection (similar to the Home Energy Score assessments in Berkeley), create an energy action plan with a free advisor, and upgrade their property to a certain efficiency standard by a certain date. It is important to note that Boulder's sustainability team has more than 13 FTE and has an operating budget of \$3.36 million. Mandating abatement addresses the split incentive issue, but imposes a financial burden on property owners that could be passed on to renters.

### *Voluntary Assessment Program*

Provide free or reduced cost energy assessments to building owners and promote their availability. The City of Cupertino is partnering with Stopwaste and BayREN to match BayREN incentives and administer the program. Berkeley's voluntary ME2 program, coupled with incentives for upgrades, was very successful.

### *Energy Efficiency Subsidies*

The City could subsidize retrofits, particularly for rental and low income properties. Funding could be obtained through a modest increase in the transfer tax or an increase in the utility users tax. This program would not address inertia issues, but could address affordability and equity, and incentivize upgrades. An increase in the utility users' tax could provide a modest income for

sustainability programs (~\$200,000 annually), and taxing based on carbon intensity could promote fuel switching, but is currently not allowed by PG&E. Tax increases may not be politically feasible and the program could cause an administrative burden on Albany's lean staff. Existing rebates from State and regional programs are currently underutilized.

## **ANALYSIS**

### Policy Evaluation Criteria

The following criteria were used to evaluate policies and programs listed above.

#### *Effectiveness*

This criterion measures how effective the policy is at producing the intended outcome. Does it solve the problem? Ultimately, will it increase energy efficiency in Albany buildings?

#### *Feasibility*

Is the measure politically feasible? Is there political support? Opposition? Will there be legal hurdles? Does the City have the capacity to administer and enforce it?

#### *Efficiency*

What is the cost-benefit of this measure? Can costs to the City be recovered by fees?

#### *Redundancy*

Does the measure already exist? Will the measure provide a unique service?

#### *Imposition*

Does the measure unnecessarily impose on the public or industry? Does it impose on the freedom, rights, and privacy of individuals? Does it cost property owners time or money?

#### *Equity*

Will the measure affect everyone equally, or reduce existing inequalities?

## Policy Analysis

The table below outlines expected outcomes of each policy and calculates desirability based on the criteria listed above.

Policy	Outcome	Criteria						Score	
		Effective-ness	Feasibility	Efficiency	Equity	Imposition	Redundancy	Total	Weighted Total
		Weights							
		30	30	25	5	5	5		
Community Outreach	Increased knowledge of energy efficiency programs	1	5	4	5	5	2	22	57%
Assessment & Disclosure Ordinance	Increased knowledge of potential energy upgrade projects	2	2	2	2	1	3	12	33%
Assessment & Upgrade Ordinance	Building upgrades	5	1	1	0	0	5	12	38%
Voluntary Assessment Program	Increased knowledge of potential energy upgrade projects	2	5	4	5	5	5	26	64%
Energy Efficiency Subsidies	Financing for building upgrades	2	1	1	5	3	1	13	27%
<p>Note: Each policy was rated on a scale of 1-5, multiplied by criterion weights, and then divided by the number of criteria (6). Weighted totals reflect a percentage out of 100 possible points. Criteria weights are based on determined importance.</p>									

Based on these criteria, a voluntary assessment program similar to the one in Cupertino is the best option because it is feasible and has a similar potential effectiveness to a required program given that it could have a similar reach.

Ultimately, the ideal program would be a suite of cascading policies that first incentivize assessments, then require them and upgrades if the voluntary approach is not effective. A successful program could also offer financial assistance for priority homes. Additional energy policy options should be further analyzed through the CAP 2.0 public planning process.

Program Benefits & Challenges

An analysis of challenges and benefits of a voluntary program are outlined below.

<b>Benefits</b>	<b>Analysis</b>
Benefits of voluntary program	A voluntary program that is incentivized could potentially increase the reach of the program beyond just homes that turn over. It will provide data to homeowners that are interested in obtaining and utilizing the data, which could increase uptake. It is free to homeowners, more inclusive of rental properties, and ultimately more politically feasible.
Economic	Assessments will provide property owners with building-specific recommendations on how to reduce energy costs. The program provides owners access to financing and rebate/incentive opportunities.
Property Owner/Occupant	Assessments increase property owner awareness of energy savings potential and provide information on how to reduce GHGs by making use of new efficiency technologies and incentives. Recommendations can lead to improved comfort, increases in indoor air quality, and increased fire/combustion safety.
Environmental	Environmental benefits include overall air pollutant and GHG emission reduction, water conservation, and reduced reliance on fossil fuels.
Data Access	HES data will be collected primarily for the use of City Staff and administration to inform current and future City programs focused on encouraging building energy efficiency. Data could be useful for future grant applications and policy development.
Energy Efficiency Policy Development	

<b>Challenges</b>	<b>Analysis</b>
Inertia	A voluntary program may have inertia issues as many energy programs do.
Allotment of Staff Time for Program Administration	An incentivized voluntary program will require staff time for outreach, administration of rebates, coordination with Stopwaste and BayREN, and data analysis.
Limited Incentives for Landlords to Upgrade Properties	Half of Albany housing units are rentals. A voluntary program will be available to landlords, but it does not require upgrades.
Program Effectiveness	There is limited data on project uptake for energy assessments.
Cost – City Administration	Subsidizing a voluntary program will likely cost the City \$50 per assessment in addition to staff time for program administration.

**FINANCIAL IMPACT**

The City could provide up to a \$50 match to partner with BayREN’s \$250 rebate to subsidize the entire cost of a Home Energy Score assessment. Funding could be obtained through the City’s regular budget process.

**NEXT STEPS**

For staff:

1. Budget for Home Energy Score subsidy for FY18-19
2. Work with BayREN and Stopwaste to establish a cost sharing agreement to fully subsidize voluntary assessments

For the Sustainability Committee:

1. Promote new and existing energy efficiency programs to Albany residents and business owners.
2. Work with the community and consultants to develop energy policy priorities as part of the Climate Mitigation & Adaptation planning process.

**Attachments**

1. East Bay Energy Efficiency Programs
2. Energy Policy Matrix – attach and/or insert?
3. IMT Website
4. Residential Energy Policy White Paper