

ANALYSIS OF OPTIONS TO FUND IMPLEMENTATION OF THE ALBANY CLIMATE ACTION PLAN

Summary

Albany City Council requested the Albany Sustainability Committee to provide an overview of possible funding mechanisms for implementing the measures identified in the Albany Climate Action Plan (CAP). The committee has explored four options for funding: (1) grants, (2) voluntary donations, (3) a new parcel tax, and (4) an increase in the Utility Users' Tax (UUT). The advantages and disadvantages of each approach are summarized here.

The City has successfully obtained several grants and in-kind contributions to commence implementation of the CAP. However, grant funding is limited, and preparation of grant applications requires significant staff time.

A voluntary, donation-based approach to raising funds to implement CAP measures has an important advantage: it could be structured to engage the community. The main disadvantages of a donation-based approach are: (1) the volunteer effort required is extensive and ongoing, (2) the amount that could be raised to support CAP implementation cannot be expected to match the amounts that have been raised by established Albany organizations, and (3) many Albany residents already donate to established organizations.

The main benefits of funding the CAP using a parcel assessment are (1) the method provides a steady revenue stream, since it is not tied to property values or the consumption of energy, (2) a parcel tax could be incorporated by the Alameda County Assessor into property tax bills, as currently done with many other assessments, (3) exemptions could be provided for seniors, and (4) the method would be favorable to small business, since it equalizes the payment by each tax payer. The principal disadvantages of funding CAP implementation with a parcel tax are: (1) successful passage of a parcel tax measure is a substantial effort, (2) the tax burden is placed on

residential property owners, and (3) the tax is not linked to greenhouse gas emissions, and therefore creates no incentive to reduce GHG emissions.

The advantages of using an increase in the UUT to finance CAP implementation are: (1) funding is tied directly to a climate action goal (reduced energy consumption), (2) PG&E has indicated that it could collect a UUT increase as part of the current UUT collection on utility bills, (3) a UUT increase to 9.0% would add an average of \$21.27 per year to the typical residential customer (less than \$2.00 per month), (4) businesses would incur an average cost increase of \$225.03 per year (less than \$20.00 per month) from a UUT increase to 9.0%, (5) a UUT increase from 7% to 9.0% would generate approximately \$205,000 per year, and (6) a UUT for Climate Action could be structured with a sunset, perhaps coinciding with the adopted 2020 reduction time frame. The principal disadvantage of a UUT increase is that a successful campaign for approval by voters would be a substantial effort.

Background – The Albany Climate Action Plan

Albany has set a goal of reducing its 2020 total greenhouse gas emissions by 25 percent compared to 2004. To achieve this goal, Albany City Council adopted the Climate Action Plan (CAP) in April, 2010. City Council requested the Albany Sustainability Committee, the City’s advisory body to help implement the CAP, to provide an assessment of possible funding mechanisms for implementing the measures identified in the CAP.

Since 2010, the Sustainability Committee has prepared an update of the original 2004 base inventory of greenhouse gas (GHG) emissions in Albany, which documents progress through 2012 and projects 2020 GHG emissions (Figure 1). Key findings are:

- Between 2004 and 2012, Albany GHG emissions declined by 15 percent. The decline resulted in part from reductions in the use of electricity (by 2 percent), natural gas (by 8 percent), and vehicle miles (by 4 percent). Local efforts, such as installation of LED lighting and more bicycling, contributed to these reductions in demand. State regulations required increasing use of renewable energy sources for generating electricity, which reduced the emissions per unit electricity by 31 percent. Waste Management of Alameda County reduced its GHG emissions by 42 percent.
- The projected decline by 2020 is 26 percent, a hypothetical projection to illustrate the emissions that would occur due to state and federal regulations, without any further changes in the amounts of electricity, natural gas, or vehicle miles. Emissions from electricity use would decline to half the 2004 level as utilities implement a state requirement of 30 percent renewables. Vehicle emissions would decline by 23 percent compared with 2004 due to state and federal programs. Emissions from natural gas use would be unchanged, unless new programs were put into place to improve the energy efficiency of existing buildings.
- Growth in population or commercial activity in Albany would increase emissions above the target reduction of 25 percent. Local programs specified in the CAP provide an opportunity to accommodate new growth.

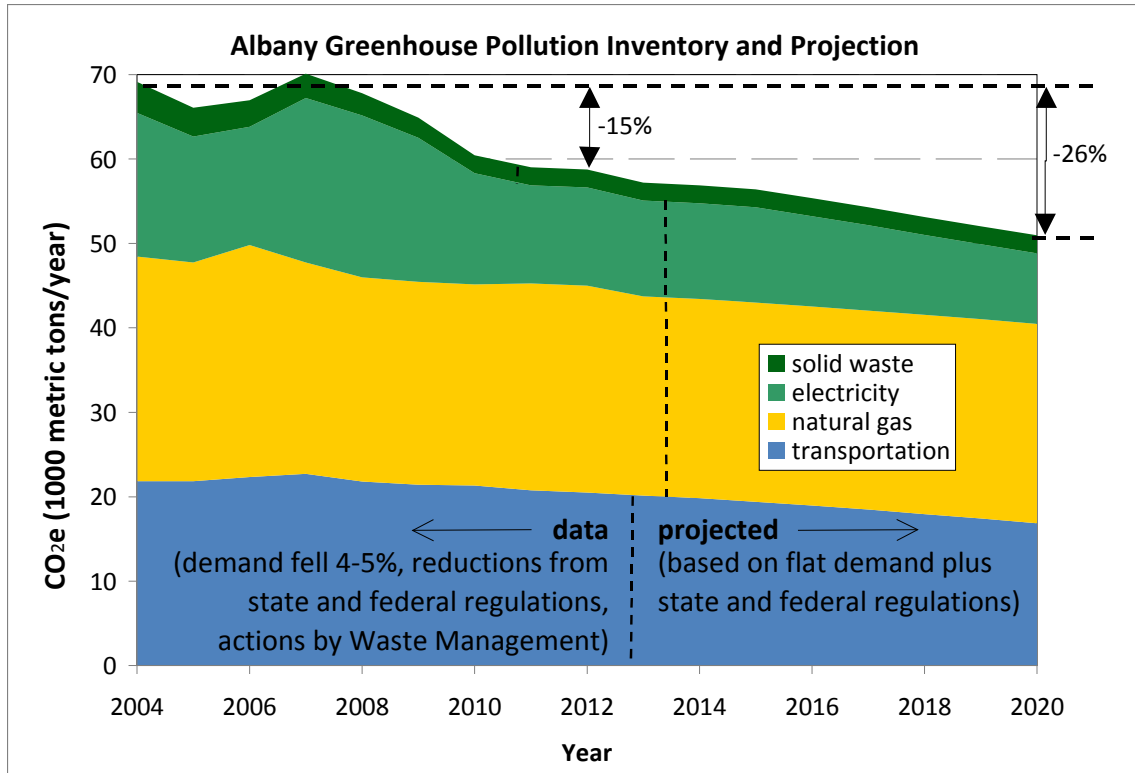


Figure 1. Albany GHG inventory prepared by the Sustainability Committee, showing progress through 2012 and projections to 2020.

The CAP and its Implementation Plan contain a wide range of local programs and initiatives that require varying public capital investment and/or operating costs (e.g., personnel and materials) to implement. These include, for example, creating a continuous community outreach and education program, establishing a set of energy-efficiency standards applied to residential units upon resale, improvement of major streets as pedestrian-friendly “complete streets,” and low-cost audits of residential and commercial buildings’ energy use and retrofit measures. Although the City has successfully obtained several grants and in-kind contributions to commence implementation of the CAP (Appendix A), achieving its measures and effecting additional emission reductions will require a continuous, reliable source of funding for personnel, vendors, equipment, and capital improvements. Several CAP measures and policies are in place, but other CAP measures need funding to implement.

The Albany Sustainability Committee has explored four options for funding: (1) additional grants, (2) voluntary donations, (3) a new parcel tax, and (4) an increase in the Utility Users' Tax (UUT). The advantages and disadvantages of each approach are summarized in the following sections.

Grants

Grants have provided total revenue of [TBD] to date. Their principal advantage is that they provide funding without additional taxes. Their disadvantages are that funding is limited, and that preparation of grant applications requires significant staff time.

Voluntary Donations

Various organizations actively seek donations to support community and educational activities in Albany, including the Albany Community Foundation, Albany Education Foundation, SchoolCARE, and Albany Music Fund. These organizations successfully raise amounts individually ranging from thousands to hundreds of thousand dollars each year.

A voluntary approach to raising funds and implementing CAP measures has an important advantage: it could be structured to engage the community. This advantage aligns with the Council goal to "Engage Our Diverse Community." In keeping with this goal, the Sustainability Committee intends to bring Council a proposal to form an Albany Green Coalition to conduct citywide outreach and education campaigns to implement the following CAP measures: (1) reduce auto trips, (2) increase energy conservation at home and work, particularly natural gas-based heating, and (3) increase energy efficiency at home and work, particularly natural gas-based heating. The proposed Albany Green Coalition is not intended as a fundraising effort, but could include elements of fundraising for specific projects.

The main disadvantages of a donation-based approach to raising funds are: (1) the volunteer effort required is extensive and ongoing, (2) the amount that could be raised to

support CAP implementation cannot be expected to match the amounts that have been raised by established Albany organizations, and (3) many Albany residents already donate to the established organizations. These disadvantages pose a significant barrier to successful voluntary fundraising for CAP implementation.

The City could also set up a voluntary fund that would be a checkbox on each utility bill, with payments passed along to the City. The advantage of this voluntary approach is that little ongoing effort is required. The disadvantages are (1) it does not actively engage the community, and (2) it cannot be expected to generate significant revenues.

Parcel Tax

This method of financing the CAP would assess each property owner on a per-parcel basis, similar to some other existing assessments already paid by Albany's property owners. Recent court decisions indicate that residential and commercial property cannot be treated differently at present. A viable parcel tax would therefore tax each parcel the same amount, regardless of parcel size.

The main benefits of funding the CAP using a parcel assessment are:

- **Steady Revenue Stream.** This method provides a steady revenue stream, since it is not tied to property values or the consumption of energy, and the number of parcels in Albany is relatively unchanged over time. Inflation factors can also be incorporated easily.
- **Cost to Collect.** Could likely be easily incorporated by Alameda County Assessor into property tax bills, as currently done with many other assessments.
- **Exemptions for Seniors.** This method can follow similar other assessment methods to exempt seniors (recent court rulings preclude low income exemption).
- **Less Impact on Small and Medium-Sized Businesses.** This method, depending on how it is structured, would be favorable to small business, since it equalizes the payment by each taxpayer.

The disadvantages of parcel tax funding are:

- Successful passage of a parcel tax measure represents substantial effort.
- The tax burden is placed on residential property owners.
- The tax is not linked to greenhouse gas emissions, and therefore creates no incentive to reduce GHG emissions.

An example assessment is shown in Appendix B, with calculations based on an inventory of parcels there. The table below summarizes this example.

Example Estimated Revenue from Simple Parcel Assessment

(based on parcel list, see Appendix B)

Category	Number of Parcels	Annual Assessment (\$45 per parcel)
Residential Parcels	5,253	\$ 236,385
Parcels	301	\$ 13,545
Exempt Parcels	184	-
Total Revenue Per Year	-	\$ 249,930

Utility Users Tax (UUT)

The City of Albany, similar to many cities in California, charges its residential and commercial utility customers a Utility Users Tax (UUT), which is collected by PG&E in customers’ monthly utility bills, and forwarded to the City. At present, the Albany UUT is 7.0 percent of gas and electricity charges. Many cities in the East Bay charge similar or higher UUT’s for municipal programs, with rates ranging from 5.5 percent (Emeryville) to 10.0 percent (Richmond). Berkeley, Oakland, and Piedmont charge 7.5 percent, and El Cerrito’s rate is 8.0 percent.

As shown in Appendix C, an increase from the existing UUT of 7.0% to a possible 9.0% would raise the average residential utility bill by \$1.77 per month, or \$21.27 per year. The cost to business (commercial) is higher than residential, due to higher underlying average utility bills in Albany. The impacts of various levels of UUT increase are summarized in the table below.

Estimated Average Utility Bill with Varying Levels of UUT

Total (Electric + Gas)	No UUT	7.0% UUT	7.5% UUT	8.0% UUT	8.5% UUT	9.0% UUT
Avg. Residential Bill	\$88.64					
Amount of UUT		\$6.20	\$6.65	\$7.09	\$7.53	\$7.98
Bill with UUT		\$94.84	\$95.29	\$95.73	\$96.17	\$96.62
Monthly Increase			\$0.44	\$0.89	\$1.33	\$1.77
Annual Increase			\$5.32	\$10.64	\$15.95	\$21.27
Avg. Commercial Bill	\$937.63					
Amount of UUT		\$65.63	\$70.32	\$75.01	\$79.70	\$84.39
Bill with UUT		\$1003.27	\$1007.95	\$1012.64	\$1017.33	\$1022.02
Monthly Increase			\$4.69	\$9.38	\$14.06	\$18.75
Annual Increase			\$56.26	\$112.52	\$168.77	\$225.03

A UUT increase to 9.0% to finance the CAP’s implementation measures would raise approximately \$205,000 per year, as summarized in the table below.

New Revenue From UUT Increase to 9.0%

Percent	UUT Rate x PG&E Rev	Est Exempt from UUT (existing exemptions)	Est UUT Rev for City	Est UUT Rev for City if CARE exempt
7%	\$905,443	\$189,152	\$716,291*	\$676,557
9%	\$1,164,141	\$243,196	\$920,945	\$869,858
Difference	\$258,698	\$54,044	\$204,654	\$193,301

* Estimated UUT revenue for city at current 7% rate (2010 data)
 2% CARE discount - difference in UUT Rev for City = \$193,301
 100% CARE exempt - difference in UUT Rev for City = \$153,567
 Source: PG&E

The advantages of using an increase in the UUT to finance CAP implementation are:

- **Financing Tied Directly to Climate Action Goal (Reduced Energy Consumption).**
 A UUT increase has the benefit of discouraging energy consumption while raising revenues to further reinforce consumption reductions. The direct relationship to energy consumption also enables the consumer to manage the expenditure,

including the UUT. If the CAP implementation is successful, however, the funding stream will decline over future years.

- **No Cost Collection and Administration.** PG&E has indicated that it could collect the UUT increase as part of their current UUT collection on utility bills.
- **Small Cost per Household.** As shown, the UUT increase to 9.0% would add an average of \$21.27 per year to the typical residential customer.
- **Moderate Cost per Business.** As shown above, due to higher average energy consumption by business compared to households in Albany, businesses would incur an average increase from the a UUT increase to 9.0% of \$225.03 per year.
- **Sunset Option.** The UUT for Climate Action could be structured with a sunset, perhaps coinciding with the adopted 2020 reduction time frame

The principal disadvantage of a UUT increase is that a successful campaign for approval by the voters represents a substantial effort.

Additional consideration is needed regarding exemptions for low-income households within the PG&E CARE program. CARE customers are not exempt from the current UUT, and PG&E has indicated that exempting CARE would require additional administrative work subject to a fee. The estimated revenue would also decrease to approximately \$193,000 if CARE customers were exempt.

The current UUT is based on energy cost, since PG&E cannot tax electric and gas use at different rates. The use of electricity from PG&E creates less GHG emissions per unit of energy than does natural gas. Should PG&E change its billing capabilities, a modification to reflect an emissions-based tax could be considered.

Uses of Climate Action Fund

The proposed uses of new revenues are important to consider because it is not expected that any revenue measure would generate sufficient funds to implement the entire CAP, and therefore the City will have to make strategic decisions to implement certain measures while continuing to seek additional grants and other funding sources.

Additionally, the Committee expects that identifying revenue uses will be an essential component of appealing to voters in favor of enacting a tax increase, if tax options are considered. Although these considerations apply also to donation-based fundraising, annual fund-raising drives have the flexibility to change their targeted uses from year to year in a way that a tax measure does not. The Committee examined three options for identifying how increased tax revenues would be used:

Option 1: Specific Allocations of Fund. This option would identify specific, discrete measures that would be funded with tax revenue, and ensure that the revenue is earmarked for these purposes. Specific allocation would give clear direction to City staff, and may have the benefit of providing voters with concrete reasons to vote in favor of a tax increase. However, this option limits flexibility over time, including limiting the City's ability to respond opportunistically to outside funding sources and low-cost implementation options.

Option 2: Unrestricted Fund Allocation. Unrestricted allocation places no restrictions on the use of revenue, except for CAP implementation. It provides the City with maximum flexibility to efficiently implement CAP measures. At the same time, it may be difficult to communicate to voters how their taxes would be spent, which could be a barrier to generating voter support. In order to help explain the proposed tax increase to voters, the City could provide illustrative examples of how revenues would be spent to implement the CAP, without committing itself to funding specific CAP measures.

Option 3: Allocate Fund By Benefiting Category. This approach would dedicate a specific percentage of revenue to each of several defined sectors (i.e. residential, commercial, municipal, and possibly non-profit). It could provide sufficient information to voters, while also offering flexibility over time to the City. Funds allocated to non-profit organizations could be distributed back to community organizations via "mini-grants," using a process similar to the Albany Education Foundation. Encouraging community groups to undertake community projects could, in turn, engage larger segments of Albany, enhancing outreach and participation.

Appendix A – CAP Projects Implemented with Grant Funding

Project	Detail	Funding Source	Outcome
LED street light replacement	Replacement of all high pressure sodium vapor cobra head street lights to LED	ARRA energy efficiency grant and loan	Project complete
Residential “Green House Calls”	Contract with Rising Sun Energy Center to implement minor energy efficiency improvements	Climate showcase grant funds	Project complete; 113 homes visited
Residential Energy Efficiency Rebate Program	Rebate for energy efficiency audits and upgrades to residential homes (up to \$590)	Climate showcase grant funds and regional grant funds	Project ongoing
Commercial Energy Efficiency Rebate Program	Rebate for energy efficiency upgrades to commercial buildings (up to \$2000)	Climate showcase grant funds	Project ongoing
Municipal Building Upgrades	Heating upgrade – Childcare Center	Climate showcase grant funds	Project design phase
Municipal Building Alternative Energy	Solar Panels on City facilities	Climate showcase grant funds	RFQ/RFP packet under preparation
Zero Waste Planning	Identification of materials and sectors to target	Alameda County Measure D	Project ongoing
Residential/Commercial Energy Efficiency Ordinances	Development of requirements for energy upgrades	PG&E Pilot Innovator/Stopwaste.Org	Preliminary planning to determine regional opportunities
Energy Management Planning	Collaborative program with local small cities to analyze energy usage within City facilities and identify energy management opportunities/improvement	PG&E Pilot Innovator	3 interns retained to serve the collaborative

Appendix B: Detailed Parcel List**Estimate of Parcel Assessment Per Year**

Parcel Type	Number of Parcels	Annual Assessment (\$45.00 per parcel)
Exempt Properties (Estimate)		
Exempt public agencies	166	
Restricted income properties	1	
Property owned by a public utility	17	
Subtotal Exempt	184	\$ -
Residential Parcels		
Vacant residential land zoned for < four units	24	
Single family residential home used as such	3663	
Single family residential home w/ 2nd living unit	28	
Single family residential home w/slight common use	1	
Planned development (townhouse type)	7	
Planned development common area (townhouse type)	1	
Planned development (tract type) with common area	10	
Planned development common area (tract type)	6	
Two three or four single family homes	55	
Double or duplex	129	
Triplex; double or duplex w single Fam Res home	39	
Four living units; e.g. fourplex; triplex w/S F Res	61	
Residential property of 2 living units value code 22	23	
Residential property of 3 living units value code 23	6	
Residential property converted to 5 or more units	4	
Condominiums	1077	
Common area of condominium or planned development	31	
Multiple residential properties > 5 units	88	
Subtotal Residential	5253	\$236,385
Commercial Parcels		
Vacant commercial land (may include misc. imps)	10	
One -story store 7 8		
Store on 1st fl w/office or apts on 2nd or 3rd fls	34	
Miscellaneous commercial (improved)	15	
Discount House	8	
Restaurant	15	
Supermarket	1	
Commercial or industrial condominium to sale of 1 unit	6	
Vacant industrial land (may include misc imps)	2	
Warehouse	1	
light Industrial	5	

Heavy industrial(factories batching plants etc)	3	
Nurseries	1	
Schools	3	
Churches	6	
Lodgehalls and clubhouses	2	
Car washes	1	
Commercial garages (repair)	19	
Automobile dealerships	2	
Parking Lots	16	
Service stations	5	
Nursing or boarding homes	1	
Banks	5	
Medical-Dental	29	
1 to 5 story offices	25	
Bowling alleys	1	
Theaters (walk-in)	3	
Other recreational: rinks; stadiums; race tracks	4	
Subtotal Commercial	301	\$13,545
Total Revenue Per Year		\$249,930

Appendix C: UUT Detail**Average UUT Increase Per Customer Per Month**

	Existing UUT (7.0%)	Possible UUT (9.0%)	Change Per Month	Change Per Year
Electric				
Residential Per Month				
Avg. Bill without UUT	\$49.57	\$49.57	\$0.00	
Amount of UUT	\$3.47	\$4.46	\$0.99	
Avg. Total Bill	\$53.04	\$54.03	\$0.99	\$ 11.90
Commercial Per Month				
Avg. Bill without UUT	\$687.79	\$687.79	\$0.00	
Amount of UUT	\$48.15	\$61.90	\$13.76	
Avg. Total Bill	\$735.93	\$749.69	\$13.76	\$165.07
Gas				
Residential Per Month				
Avg. Bill without UUT	\$39.07	\$39.07	\$0.00	
Amount of UUT	\$2.74	\$3.52	\$0.78	
Avg. Total Bill	\$41.81	\$42.59	\$0.78	\$ 9.38
Commercial Per Month				
Avg. Bill without UUT	\$249.84	\$249.84	\$0.00	
Amount of UUT	\$17.49	\$22.49	\$5.00	
Avg. Total Bill	\$267.33	\$272.33	\$5.00	\$ 59.96
Total (Electric + Gas)				
Residential Per Month				
Avg. Bill without UUT	\$88.64	\$88.64	\$0.00	
Amount of UUT	\$6.20	\$7.98	\$1.77	
Avg. Total Bill	\$94.84	\$96.62	\$1.77	\$ 21.27
Commercial Per Month				
Avg. Bill without UUT	\$937.63	\$937.63	\$0.00	
Amount of UUT	\$65.63	\$84.39	\$18.75	
Avg. Total Bill	\$1003.27	\$1022.02	\$18.75	\$ 225.03

Source: PG & E data provided to City of Albany