



Kate Harrison
Councilmember District 4

REVISED AGENDA MATERIAL

Meeting Date: April 26, 2021

Item Description: Budget Referral and Resolution Establishing A Pilot Climate Equity Action Fund to Assist Low-Income Residents with Transition to Zero-Carbon Transportation and Buildings

Submitted by: Councilmember Harrison

Amended item to clarify the title.



Kate Harrison
Councilmember District 4

CONSENT CALENDAR
May 11, 2021

To: Honorable Mayor and Members of the City Council
From: Councilmember Harrison and Mayor Arreguín
Subject: Budget Referral and Resolution Establishing A Pilot Climate Equity Action Fund to Assist Low-Income Residents with Transition to Zero-Carbon Transportation and Buildings

RECOMMENDATION

1. Adopt a Resolution establishing:
 - a. a Climate Equity Action Fund as a repository of grant and municipal funds for equitable climate-related pilot programs for low-income households at or below 50% of Area Median Income or as otherwise designated by Council; and
 - b. an annual process for the Energy Commission (or successor) and Facilities, Infrastructure, Transportation, Environment & Sustainability Policy Committee (FITES), in consultation with community groups, to provide input to staff and Council about eligible categories of fund expenditures (e.g., transportation modal shift or building electrification) to maximize equitable emissions reductions and impacts for eligible households.
2. Refer to the June, 2021 budget process:
 - a. \$500,000 of general fund monies from excess equity as seed funding for the Climate Equity Action Fund pilot program; and
 - b. \$100,000 for staff costs associated with the Finance Department and OESD in administering applications and disbursement of monies.

CURRENT SITUATION, EFFECTS, AND RATIONALE FOR RECOMMENDATION

The City of Berkeley and broader world is facing a grave climate emergency, requiring municipalities to rapidly transition towards zero carbon economy by 2030. Transitioning Berkeley's economy will require significant investment on the part of both government and residents. Lower-income communities are most impacted by global climate change and have the least financial ability to address it. It is in the public interest to establish a Climate Equity Action Fund to assist low-income residents with the cost of transitioning from a carbon-based city. This item establishes a Climate Equity Action Fund as a depository of funds related to climate equity, allocates an initial funding amount of

\$500,000, contingent on the availability of excess equity, from the General Fund, and asks the Energy Commission (or successor) and FITES Committee, in consultation with community groups, to provide input to staff and Council on at least an annual basis about categories of fund expenditures that have the most benefit for low-income households and to maximize equitable emissions reduction impacts. It also provides \$100,000, contingent on the availability of excess equity, for staff costs associated with the Finance Department and Office of Energy and Sustainable Development (OESD) in administering applications and disbursement of monies

BACKGROUND

According to the best available science, a 50% reduction in emissions is needed worldwide by 2030 or earlier in order to delay extremely catastrophic warming. Implicit in the U.N.'s global 2050 net-zero targets to keep emissions as close as possible to 1.5 degrees Celsius is the assumption that wealthy nations and cities will near zero by 2030.¹

The people of Berkeley, especially low-income people, are already disproportionately impacted by the effects of climate change and fossil fuel pollution. Low-carbon technology can often be out of reach of many low-income households, and without direct assistance, many will be left behind.

The City's Electric Mobility Roadmap notes that key to ensuring equity in access to electric mobility is to improve its affordability, including through subsidized e-bike and EV charging incentive pilots and public transit passes.

In addition, Berkeley's Existing Building Electrification strategy includes recommendations for potential pilot projects prioritizing low-income communities with rebates and incentives. According to recent research conducted by the California Energy Commission, low-income residents will face the brunt of natural gas price increases as a result of communitywide electrification trends, highlighting the necessity of increasing access and affordability of all-electric technologies for low-income communities.

¹ IPCC, 2018: Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. *World Meteorological Organization, Geneva, Switzerland, 32 pp.*
<https://www.ipcc.ch/sr15/chapter/spm/>.

While incentives are currently available to Berkeley residents for all-electric water heating and cooking appliances from BayRen and East Bay Community Energy (EBCE), lower-income households face structural barriers in accessing those incentives. As an example, rebates often provide only for high-end purchases rather than leases of items such as solar arrays and for premium appliances rated as Energy Star, which many lower-income households cannot afford.² Lower-income households are often denied the opportunity both to save money in energy costs and create cleaner, more efficient homes.

Additionally, with regard to building decarbonization, rebates are typically aimed at property owners that have sufficient capital available to replace natural gas building systems as part of a larger renovation or on an ad hoc basis when systems fail. These programs are not necessarily geared towards those with limited upfront capital and those less acquainted with the often confusing and complex all-electric building systems available to property owners. Rebates are also not necessarily geared towards the benefit of renters, such as those living in affordable housing complexes.

Existing BayRen incentives are in most cases not enough to cover the bulk of the all-electric retrofit. Further, BayRen's \$1,000 electric-heat pump space heater incentive will be out of reach for most Berkeleyans, regardless of income, as it requires the property owner to replace an existing gas heating system *combined* with an existing air conditioning unit. Air conditioning units have historically been a rarity in Bay Area homes in the more temperate climate zones such as Berkeley, and therefore this incentive will have little impact on Berkeleyans, and leaves a large gap across Berkeley's decarbonization strategy. Therefore, larger and more flexible incentives for low-income households and/or opportunities to lease, rent (and still receive rebates) or purchase low-carbon systems are needed.

Berkeley Climate Equity Action Fund Pilot – Initial Proposal for FY 2022

In March 2021, Congress passed a \$1.9 trillion economic stimulus and recovery bill in response to the COVID-19 crisis. The law provides the City of Berkeley with approximately \$68 million dollars of one-time flexible funding that can be used to offset revenue reductions and costs associated with the City's COVID-19 response in addition to certain infrastructure projects. Congress provided local jurisdictions with flexibility about how to allocate these funds, and any excess equity resulting from using federal funds to supplant existing or planned appropriations. In other words, the Mayor and Council could appropriate a certain proportion of any equity resulting from the Act

² Marti Frank, "Expanding Access to Energy Efficient Appliances," <https://ilsr.org/local-energy-rules-podcast-homepage/>.

towards municipal services, including services or programs that assist residents with transitioning towards a zero-carbon city.

The initial purpose of the Climate Equity Action Fund is to provide direct subsidies to low-income residents to help them transition away from fossil fuel building and transportation infrastructure.

Low-income households that qualify would be defined as those at or below 50% of Area Median Income (about \$59,000 per year for a family of 3), with a certain percentage of funds reserved for very-low-income families earning below 138% of the Federal Poverty Level (about \$30,000 per year for a family of 3). However, in recognition that equity requires consideration of more than just income alone, the Resolution provides for Council to approve other equitable investments and uses as recommended by staff in consultation with the community.

This item refers to the Energy (or successor) Commission and the FITES Committee on an annual basis to recommend how to best appropriate funds to maximize equitable emissions reduction impacts of funds to include, but not limited to:

- ***Transportation Modal Shift***

Income qualified subsidies for:

1. Renting or purchasing bicycles, electric bicycles, scooters, and other forms of micro mobility. The City of Berkeley is working with nearby jurisdictions to create a municipal micro-mobility rental program;
2. EV charging infrastructure, including membership in ChargePoint and other charging systems;
3. Public transit passes, including the AC Transit EasyPass.

- ***Building Decarbonization***

Income qualified subsidies for:

1. purchasing and installing induction stoves and electric ovens, heat pump water heaters, heat pump space heaters, energy-efficient refrigerators and heat pump washers and dryers;
2. electric panel upgrades associated with electrification of appliances;
3. leasing or purchasing solar arrays;

4. weatherization;
5. purchasing and installing smart thermostats and smart plugs/energy monitoring devices;
6. permit fees in connection with electrification retrofits and solar installation.

On November 3, 2020, Berkeley voters narrowly defeated Measure HH, which would have established a Climate Equity Action Fund and provided \$2.4 million annually through an increase in the electricity and gas portion of the Utility Users Tax. In contrast to Measure HH, this budget referral will not result in any tax increases as it relies on a one-time appropriation of General Fund monies associated with the American Rescue Act. However, by establishing a Climate Equity Action Fund, the Council would create a locus for grant funds and for future appropriate appropriations, whether through the General Fund or otherwise.

Berkeley Climate Equity – Moving into the Future

The FITES Committee is currently considering a separate ordinance expanding eligibility for the Seismic Transfer Tax Rebate Program for electrification. Since only individuals who can afford to buy and sell property in Berkeley qualify for the proposed transfer tax rebate program, the Climate Equity Action Fund in subsequent years would be an equitable companion program aimed at lower-income populations, but could draw upon the same source of revenue.

Examples of Equitable Climate Programs Provided by Other Jurisdictions

Neighboring jurisdictions already offer their residents various equitable income-based subsidies related to the climate transition. For example, Marin County maintains the Natural Gas Appliance Replacement Rebate Program known as Electrify Marin. This program is funded through a one-time grant from the Bay Area Air Quality Management District and provides generous subsidies for all-electric appliances and electric service panel upgrades. While funding is universal, it also provides qualified supplemental assistance such that low-income residents can equitably receive substantially more funding:

Appliance Type	Standard Rebate	Income Qualified Rebate
Heat Pump Water Heater	\$1,000	\$2,000
Heat Pump Space Heater		
Central Heat Pump	\$1,000	\$4,500
Mini-Split Heat Pump	\$800	\$3,000
Induction Cooking		
Range (Cooktop & Oven)	\$500	\$500
Cooktop only	\$250	\$250
Service Panel Upgrade	\$500	\$1,200

In addition, the City and County of San Francisco Public Utilities Commission provides residents with solar installation rebates through its GoSolarSF program; these rebates are in addition to those from PG&E. The program offers generous additional subsidies to low-income residents, nonprofit/municipal and nonprofit affordable housing applicants:

Incentive Levels for Calendar Year 2021	
CleanPowerSF & Hetch Hetchy Residential Basic*	\$0/kW
Add on if eligible: Environmental Justice or CalHome Loan	\$100/kW. Cap: 4.0 kW per meter.
Add on if eligible: City Installer	\$250/kW. Cap: 4.0 kW per meter.
Add on if eligible: Low-Income	\$2,000/kW. Cap: 4.0 kW per meter.
Business*	\$0/kW
Nonprofit/Municipal	\$1,000/kW. Cap: \$50,000 per service site.
Nonprofit Residential	\$1,000/kW. Cap: \$50,000 per service site.
Multi-Unit Residential Virtual Net Metering*	\$0/kW
Net Energy Metering Aggregation (NEM-A)*	\$0/kW

Several cities and countries offer financial incentives to purchase electric bikes as part of their GHG emissions reduction strategy.³ Sonoma’s Community Choice Aggregator, Sonoma Clean Power, recently offered up to \$1,000 for qualified customers to purchase electric bikes. Eligible customers included those who participate in CARE/FERA rates or income-qualified programs such as SNAP (aka food stamps), Medicaid/Medical, Cash Assistance Program for Immigrants (CAPI), Women Infants and Children (WIC), Head

³ “Electric Bike Subsidies and Grants Around the World. US, UK, Canada, and more,” eBikeHQ, <https://ebikeshq.com/electric-bike-subsidies-grants-around-world/>

Start, and many others. In addition, long term electric bike leasing and lease to own programs help to remove the cost barrier to electric bike use and ownership. Swapfiets has been offering leasing for \$20/month in several European cities, with roughly 35,000 leases in Amsterdam and 200,000 elsewhere in Europe.⁴

Currently, all Berkeley residential property owners are eligible for electrification incentives through BayRen, which does not provide a differential subsidy based on income. These rebates could be leveraged in combination with supplemental Berkeley Climate Equity Action fund subsidies for maximum impact:

Eligible Program Measures & Rebate Amounts

Measure	Rebate Amount
Operations and Maintenance Measures	
Smart Thermostat (must be listed on the ENERGY STAR qualified product list for Smart Communicating Thermostat)	\$150
Duct sealing ≤ 10% total leakage (Ducts or Furnace/Air Handler/FAU located in garage disqualify this measure)	\$200
Duct Replacement ≤ 5% total leakage	\$800
Building Shell Measures	
Attic insulation ≥ R-44 (includes attic air sealing)	\$0.75 / ft ² (not to exceed \$1,000 per home)
Wall insulation ≥ R-13 (2x4 framing) or ≥ R-19 (2x6 framing)	\$0.70 / ft ² (not to exceed \$1,000 per home)

⁴ Feargus O'Sullivan, "How Paris Hopes to Build an E-Bike Boom," September 24, 2019, <https://www.citylab.com/transportation/2019/09/electric-bikes-paris-bicycle-rental-france-e-bike-subsidy/598192>. See also, Alex Ledson, "This Is The New Transport Trend Sweeping Europe" Oct 10, 2020, <https://www.forbes.com/sites/alexledson/2020/10/10/this-is-the-new-transport-trend-sweeping-europe/?sh=3667577c100b>

Heating and Cooling Measures	
High efficiency central gas furnace ≥ 95% AFUE w/ Variable Speed Motor (must replace existing central gas furnace)	\$300
High efficiency split central air conditioner ≥ 17 SEER High efficiency packaged central air conditioner ≥ 16 SEER (must replace entire load associated with existing central AC)	\$800
High efficiency heat pump ≥ 17 SEER / 9.4 HSPF (must replace entire load associated with electric heating system or heat pump or for electrification must replace existing central natural gas furnace and air conditioner with ducted direct exchange (non mini-split) heat pump or replace wall furnace and window air conditioner with a ductless mini-split heat pump.) ⚡	\$1,000
Water Heating Measures	
High efficiency storage gas water heater medium usage ≥ 0.64 UEF, high usage ≥ 0.68 UEF Instantaneous water heater ≥ 0.87 UEF (must replace existing gas storage water heater)	\$400
Heat pump water heater ≥ 3.1 UEF (must replace existing gas or electric water heater) ⚡	\$1,000
Bonus Rebates	
Combine one or more Building Shell measures with a Heating or Cooling measure (measures must be completed simultaneously)	\$500
Combine attic with exterior wall insulation (measures must be completed simultaneously)	\$500
Downsize heating and/or cooling system compared to existing system (requires a minimum 12 kBtu or 1 ton <i>input</i> reduction)	\$100
Building air sealing ≥ 30% total leakage reduction (must be combined with another measure, otherwise requires blower door test-in and test-out to qualify as a standalone building shell measure)	\$150
Combustion Appliance Safety (CAS) test-out (CAS test-out required for all measures. Not available as a standalone rebate. Only one per service address)	\$150
Electrification Appliance Measures	
*Induction electric range (no hybrid) or cooktop (must replace existing natural gas range or cooktop) ⚡	\$300
*Heat pump clothes dryer ≥ 4.50 Combined Energy Factor (CEF) (must replace existing natural gas clothes dryer and listed as ENERGY STAR Efficient heat pump clothes dryer. ⚡	\$300

⚡ Electrification measures can replace gas equipment

In addition, EBCE and Stopwaste currently offer Berkeley customers through the Home+ Energy Efficiency Program an additional \$1,000 incentive to help cover the installation cost of heat pump water heaters for a total of \$2,000 when combined with BayRen incentives. Again, these rebates do not provide for supplemental funding for lower-income households.

Finally, the city of Portland recently allocated \$8.6 million through the newly voter-approved Portland Clean Energy Community Benefits Fund grants to fund organizations conducting low-income energy retrofits.

FINANCIAL IMPLICATIONS

This item would result in a one-time investment of \$500,000 from excess equity to seed a Climate Equity Action Fund, and an additional \$100,000 for Finance Department and OESD staff costs associated with administering applications and disbursement of Fund monies.

ENVIRONMENTAL SUSTAINABILITY

Supporting low-income incentives for building decarbonization and transportation modal shift will complement and accelerate Berkeley's ongoing efforts to reduce carbon emissions at an emergency and equitable pace in line with the Climate Action Plan, Climate Emergency Declaration, Mobility Roadmap and Existing Building Electrification Strategy.

CONTACT PERSON

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RESOLUTION NO. ##,###-N.S.

RESOLUTION ESTABLISHING A CLIMATE EQUITY ACTION FUND

WHEREAS, the City of Berkeley and broader world is facing a grave climate emergency, requiring municipalities to rapidly transition towards a zero-carbon economy by 2030; and

WHEREAS, transitioning Berkeley's economy will require significant investment on the part of both government and residents; and

WHEREAS, lower-income communities are most impacted by global climate change and have the least financial ability to address it; and

WHEREAS, low-carbon technology and infrastructure can often be out of reach for many low-income households and, without direct assistance, many will be left behind; and

WHEREAS, City's Electric Mobility Roadmap and Existing Building Electrification strategy both cite the importance of ensuring equity in access to carbon-free technology and infrastructure; and

WHEREAS, it is in the public interest to establish a Climate Equity Action Fund to assist low-income residents with the cost of transitioning from a carbon-based city; and

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Berkeley that the City Manager establish a Climate Equity Action Fund as a repository of city, regional, state, and federal funds related to climate equity for low-income households at or below 50% of Area Median Income, or as designated by Council.

BE IT FURTHER RESOLVED that the Berkeley Energy Commission, or successor, and the Facilities, Infrastructure, Transportation, Environment & Sustainability Policy Committee, in consultation with community groups, provide input to staff and Council on at least an annual basis about eligible categories of fund expenditures to maximize equitable emissions reductions and impacts for eligible households.

BE IT FURTHER AND FINALLY RESOLVED that any unexpended funds shall carry over from year to year.