



[Commission Name]

CONSENT CALENDAR
December 19, 2017

To: Honorable Mayor and Members of the City Council
 From: Berkeley Energy Commission
 Submitted by: Ryan Bell, Chairperson, Energy Commission
 Subject: Response to Referral to Community Environmental Advisory Committee (CEAC) and the Berkeley Energy Commission to Evaluate Phasing-out Natural Gas

RECOMMENDATION

Send a letter to California state energy agencies requesting policy support for phasing out fossil fuels by electrifying natural gas applications in response to referral directing CEAC and the Energy Commission to develop and evaluate a proposal to phase-out natural gas for heating and cooking.

FISCAL IMPACTS OF RECOMMENDATION

No direct fiscal impact.

CURRENT SITUATION AND ITS EFFECTS

On Nov 1, 2016, the Honorable Mayor and Members of the City Council adopted a referral to the Energy Commission and Community Environmental Advisory Commission to investigate phasing out the use of natural gas, which accounts for 30% of the city's greenhouse gas emissions.

The Energy Commission has determined that transitioning end-uses from natural gas to renewable electricity is vital for meeting Berkeley's climate action goals. However, current state policies inhibit the ability to enact local policies to promote this transition. A recommendation that the City petition state agencies to update these policies to enable high-efficiency all-electric buildings that use renewable power was discussed and a motion in support of sending the attached letters to the California Energy Commission and California Public Utilities Commission was passed on October 25, 2017.

Motion/second (Leger, Luce). The motion carried 5-0-0-4 (Ayes: Bell, Leger, Stromberg, Johnston, Luce. Noes: None. Abstain: None. Absent: Bernhardt, Jiang, Schlacter, Weems).

On November 9, 2017 the Community Environmental Advisory Commission voted on the same recommendation and approved the motion unanimously as follows:
Motion/second (Ticconi, Hetzel) Ayes: Ticconi, Hetzel, Delfin-Polk, Goldhaber. Absent: Gould, Lim. Excused Absence: Varnhagen, Miller.

ENVIRONMENTAL SUSTAINABILITY

Transitioning from natural gas to renewable electricity and high-efficiency appliances will decrease greenhouse gas emissions and local criteria pollutants, enabling the city to meet climate action goals and improving public health.

RATIONALE FOR RECOMMENDATION

More direct courses of action are impeded by state policies. By formulating a policy position and requesting action at the state level, these barriers might be removed, and city staff could be authorized to look for additional ways of promoting these policies.

ALTERNATIVE ACTIONS CONSIDERED

Continuing use of natural gas, which would prevent the city from reaching climate action goals.

Recommending adoption of a REACH building ordinance mandating use of electric heat-pump water heaters in new construction, but current state policies prohibit this path.

CITY MANAGER

The City Manager concurs with the content and recommendations of the Commission's Report.

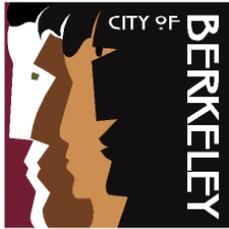
CONTACT PERSON

Billi Romain, Commission Secretary, Office of Energy and Sustainable Development, 510-981-7432

Nabil Al-Hadithy, CEAC Secretary, Toxics Management Division, 510-981-7460

Attachments:

1. *Letter to the California Energy Commission*
2. *Letter to the California Public Utilities Commission*



Energy Commission

Date

To: Mr. Andrew McAllister, Commissioner
California Energy Commission
1516 Ninth Street, MS-12
Sacramento, CA 95814

Re: Policy support for phasing out fossil fuels by electrifying natural gas applications

Dear Commissioner McAllister:

Global warming causes more extreme and erratic weather, and this year's hurricane and fire seasons have highlighted the urgency to reduce greenhouse gas emissions. The City of Berkeley has committed to doing its share by reducing local emissions by 33% below 2000 levels by 2020 and 80% by 2050. State policies promoting renewable and low-emission electricity have been vital towards this effort. As of 2012, electricity only accounts for 15% of our emissions. While low-emission electricity is helpful, we are increasingly turning our attention to the emissions from natural gas, which account for 30% of our greenhouse gas. The only way to reach our climate protection goals is to significantly reduce the consumption of fossil fuels in the form of natural gas and petroleum.

A growing consensus in climate mitigation research indicates a need to transition from natural gas appliances to high-efficiency all electric buildings powered by low-carbon electricity. Electric heat pumps for space and water heating are up to 4 times as efficient as natural gas combustion technologies, and significantly reduce greenhouse gas emissions. Additionally, heat pump water heaters can store energy as thermal heat, thereby helping harmonize the grid with intermittent renewable electricity. Despite the climate benefits of electrifying heating in residential and commercial buildings, the CPUC and CEC's energy policies impede electrification and lock the state into continued use of fossil fuels.

Berkeley is interested in considering a local building reach code ordinance to promote adoption of high-efficiency and low-greenhouse-gas technologies such as heat-pump water heaters or all-electric homes that enable the transition to renewable energy. Currently, policies as the state level are impeding our ability to encourage or require electric technology when natural gas is available.

We respectfully request consideration of the following recommendations that would alleviate some of the barriers to building electrification:

1. Revise Title 24 Building Energy Efficiency Standards to include an all-electric reference design to streamline the transition to 100% renewable energy.
2. Provide rebates and other incentives under Energy Upgrade California to replace gas appliances with qualifying electric alternatives.
3. Create an electricity rate structures for a new category of high-efficiency all-electric buildings that allows residents to maintain low energy bills while transitioning away from fossil fuels.

We request that the state update these policies to enable us to phase out fossil fuel use and reach our global warming mitigation goals.

Regards,

CC: Title 24 Update Committee



Energy Commission

Date

To: Mr. Michael Picker, President
California Public Utility Commission
505 Van Ness Avenue
San Francisco CA 94102

Re: Policy support for phasing out fossil fuels by electrifying natural gas applications

Dear President Picker:

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