BOARD OF DIRECTORS  
CLIMATE PROTECTION COMMITTEE MEETING

COMMITTEE MEMBERS

TERESA BARRETT – CHAIR  
JOHN GIOIA – VICE CHAIR
SCOTT HAGGERTY  
DAVID HUDSON
DAVINA HURT  
LIZ KNISS
GORDON MAR  
KATIE RICE
MARK ROSS  
BRAD WAGENKNECHT
SHIRLEE ZANE

THURSDAY  
FEBRUARY 20, 2020  
9:30 A.M.

1ST FLOOR BOARD ROOM  
375 BEALE STREET  
SAN FRANCISCO, CA 94105

AGENDA

1. CALL TO ORDER - ROLL CALL

PLEDGE OF ALLEGIANCE

PUBLIC MEETING PROCEDURE

The Committee Chair shall call the meeting to order and the Clerk of the Boards shall take roll of the Committee members. The Committee Chair shall lead the Pledge of Allegiance.

This meeting will be webcast. To see the webcast, please visit www.baaqmd.gov/bodagendas at the time of the meeting. Closed captioning may contain errors and omissions, and are not certified for their content or form.

Public Comment on Agenda Items The public may comment on each item on the agenda as the item is taken up. Public Comment Cards for items on the agenda must be submitted in person to the Clerk of the Boards at the location of the meeting and prior to the Board taking up the particular item. Where an item was moved from the Consent Calendar to an Action item, no speaker who has already spoken on that item will be entitled to speak to that item again.
2. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

Public Comment on Non-Agenda Items, Pursuant to Government Code Section 54954.3 For the first round of public comment on non-agenda matters at the beginning of the agenda, ten persons selected by a drawing by the Clerk of the Boards from among the Public Comment Cards indicating they wish to speak on matters not on the agenda for the meeting will have two minutes each to address the Board on matters not on the agenda. For this first round of public comments on non-agenda matters, all Public Comment Cards must be submitted in person to the Clerk of the Board at the location of the meeting and prior to commencement of the meeting.

Staff/Phone (415) 749-

3. **APPROVAL OF THE MINUTES OF DECEMBER 2, 2019**

Clerk of the Boards/5073

The Committee will consider approving the attached draft minutes of the Climate Protection Committee meeting of December 2, 2019.

4. **CLIMATE CHANGE AND FOOD – AN OVERVIEW**

J. Broadbent/5052

jbroadbent@baaqmd.gov

Staff will present on the connection between food and climate change, including the impact of climate change on food resources and the impact of diet and food waste practices on greenhouse gas emissions.

5. **FOOD WASTE REDUCTION IN ALAMEDA COUNTY**

J. Broadbent/5052

jbroadbent@baaqmd.gov

Staff from the Alameda County Waste Management Authority, StopWaste, will present on the agency’s current comprehensive program to reduce food waste in Alameda County.

6. **REGIONAL FOOD AND CLIMATE EVENT**

J. Broadbent/5052

jbroadbent@baaqmd.gov

Staff will provide an update on the Air District’s current partnership with Acterra to convene a region-wide event on food and climate in Fall 2020.

7. **PUBLIC COMMENT ON NON-AGENDA MATTERS**

Speakers who did not have the opportunity to address the Board in the first round of comments on non-agenda matters will be allowed two minutes each to address the Board on non-agenda matters.
8. COMMITTEE MEMBER COMMENTS

Any member of the Board, or its staff, on his or her own initiative or in response to questions posed by the public, may: ask a question for clarification, make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter or take action to direct staff to place a matter of business on a future agenda. (Gov’t Code § 54954.2)

9. TIME AND PLACE OF NEXT MEETING

Thursday, April 16, 2020, at 375 Beale Street, San Francisco, CA 94105 at 9:30 a.m.

10. ADJOURNMENT

The Committee meeting shall be adjourned by the Committee Chair.
• To submit written comments on an agenda item in advance of the meeting. Please note that all correspondence must be addressed to the “Members of the Climate Protection Committee” and received at least 24 hours prior, excluding weekends and holidays, in order to be presented at that Committee meeting. Any correspondence received after that time will be presented to the Committee at the following meeting.

• To request, in advance of the meeting, to be placed on the list to testify on an agenda item.

• Any writing relating to an open session item on this Agenda that is distributed to all, or a majority of all, members of the body to which this Agenda relates shall be made available at the District’s offices at 375 Beale Street, Suite 600, San Francisco, CA 94105, at the time such writing is made available to all, or a majority of all, members of that body.

Accessibility and Non-Discrimination Policy

The Bay Area Air Quality Management District (Air District) does not discriminate on the basis of race, national origin, ethnic group identification, ancestry, religion, age, sex, sexual orientation, gender identity, gender expression, color, genetic information, medical condition, or mental or physical disability, or any other attribute or belief protected by law.

It is the Air District’s policy to provide fair and equal access to the benefits of a program or activity administered by Air District. The Air District will not tolerate discrimination against any person(s) seeking to participate in, or receive the benefits of, any program or activity offered or conducted by the Air District. Members of the public who believe they or others were unlawfully denied full and equal access to an Air District program or activity may file a discrimination complaint under this policy. This non-discrimination policy also applies to other people or entities affiliated with Air District, including contractors or grantees that the Air District utilizes to provide benefits and services to members of the public.

Auxiliary aids and services including, for example, qualified interpreters and/or listening devices, to individuals who are deaf or hard of hearing, and to other individuals as necessary to ensure effective communication or an equal opportunity to participate fully in the benefits, activities, programs and services will be provided by the Air District in a timely manner and in such a way as to protect the privacy and independence of the individual. Please contact the Non-Discrimination Coordinator identified below at least three days in advance of a meeting so that arrangements can be made accordingly.

If you believe discrimination has occurred with respect to an Air District program or activity, you may contact the Non-Discrimination Coordinator identified below or visit our website at www.baaqmd.gov/accessibility to learn how and where to file a complaint of discrimination.

Questions regarding this Policy should be directed to the Air District’s Non-Discrimination Coordinator, Rex Sanders, at (415) 749-4951 or by email at rsanders@baaqmd.gov
# Monthly Calendar of Air District Meetings

## February 2020

<table>
<thead>
<tr>
<th>Type of Meeting</th>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors Stationary Source Committee - CANCELLED</td>
<td>Monday</td>
<td>17</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
<tr>
<td>Board of Directors Regular Meeting</td>
<td>Wednesday</td>
<td>19</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
<tr>
<td>Board of Directors Climate Protection Committee</td>
<td>Thursday</td>
<td>20</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
<tr>
<td>Board of Directors Budget &amp; Finance Committee</td>
<td>Wednesday</td>
<td>26</td>
<td>9:30 a.m.</td>
<td>1st Floor Yerba Buena Room</td>
</tr>
<tr>
<td>Board of Directors Legislative Committee - CANCELLED</td>
<td>Wednesday</td>
<td>26</td>
<td>10:30 a.m.</td>
<td>1st Floor Yerba Buena Room</td>
</tr>
<tr>
<td>Board of Directors Stationary Source Committee</td>
<td>Wednesday</td>
<td>26</td>
<td>10:45 a.m.</td>
<td>1st Floor Yerba Buena Room</td>
</tr>
<tr>
<td>Board of Directors Mobile Source Committee</td>
<td>Thursday</td>
<td>27</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
</tbody>
</table>

## March 2020

<table>
<thead>
<tr>
<th>Type of Meeting</th>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors Regular Meeting</td>
<td>Wednesday</td>
<td>4</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
<tr>
<td>Board of Directors Community and Public Health Committee</td>
<td>Thursday</td>
<td>5</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
<tr>
<td>Advisory Council Special Meeting - PM Symposium</td>
<td>Tuesday</td>
<td>24</td>
<td>9:00 a.m.</td>
<td>Oakland Marriott City Center</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1001 Broadway, Oakland CA</td>
</tr>
<tr>
<td>Board of Directors Budget &amp; Finance Committee</td>
<td>Wednesday</td>
<td>25</td>
<td>9:30 a.m.</td>
<td>1st Floor Yerba Buena Room</td>
</tr>
<tr>
<td>Board of Directors Legislative Committee</td>
<td>Wednesday</td>
<td>25</td>
<td>10:30 a.m.</td>
<td>1st Floor Yerba Buena Room</td>
</tr>
<tr>
<td>Board of Directors Mobile Source Committee</td>
<td>Thursday</td>
<td>26</td>
<td>9:30 a.m.</td>
<td>1st Floor Board Room</td>
</tr>
</tbody>
</table>
BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson Teresa Barrett and Members
   of the Climate Protection Committee

From: Jack P. Broadbent
       Executive Officer/APCO

Date: February 11, 2020

Re: Approval of the Minutes of December 2, 2019

RECOMMENDED ACTION

Approve the attached draft minutes of the Climate Protection Committee (Committee) meeting of December 2, 2019.

DISCUSSION

Attached for your review and approval are the draft minutes of the Committee meeting of December 2, 2019.

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Marcy Hiratzka
Reviewed by: Vanessa Johnson

Attachment 3A: Draft Minutes of the Committee Meeting of December 2, 2019
1. CALL TO ORDER – ROLL CALL

Climate Protection Committee (Committee) Chairperson, Teresa Barrett, called the meeting to order at 9:30 a.m.

Present: Chairperson Teresa Barrett; and Directors Scott Haggerty, Liz Kniss, Katie Rice, Mark Ross, and Brad Wagenknecht.

Absent: Vice Chair John Gioia; and Directors David Hudson, Lori Wilson, and Shirlee Zane.

Also Present: None.

2. PUBLIC COMMENT ON NON-AGENDA ITEMS, PURSUANT TO GOVERNMENT CODE SECTION 54954.3

No requests received.

3. APPROVAL OF THE MINUTES OF JUNE 10, 2019

NOTED PRESENT: Director Ross was noted present at 9:32 a.m.

Public Comments

No requests received.

Committee Comments

None.
Committee Action

Director Kniss made a motion, seconded by Director Wagenknecht, to approve the Minutes of June 10, 2019; and the motion carried by the following vote of the Committee:

NOES: None.
ABSTAIN: None.
ABSENT: Gioia, Hudson, Ross, Wilson, Zane.

4. APPROVAL OF THE MINUTES OF SEPTEMBER 19, 2019

Public Comments

No requests received.

Committee Comments

None.

Committee Action

Director Kniss made a motion, seconded by Director Wagenknecht, to approve the Minutes of June 10, 2019; and the motion carried by the following vote of the Committee:

AYES: Barrett, Haggerty, Kniss, Rice.
NOES: None.
ABSTAIN: Wagenknecht.
ABSENT: Gioia, Hudson, Ross, Wilson, Zane.

5. UPDATE ON AIR DISTRICT’S BUILDING DECARBONIZATION PROGRAM (OUT OF ORDER, ITEM 7)

Greg Nudd, Deputy Air Pollution Control Officer of Policy, introduced Axum Teferra, Planner, who gave the staff presentation Air District Building Decarbonization Program, including: from a Clean Air Plan to a building decarbonization strategy; identifying Air District actions; building sector strategies; local government building decarbonization clearinghouse; incentive programs; regional collaboration; and building decarbonization program next steps.

Public Comments

No requests received.
Committee Comments

The Committee and staff discussed the suggestion for a heat pump education and rebate program; the anticipated launch of the Local Government Building Decarbonization Clearinghouse; methods of outreach to jurisdictions and resulting attendance of energy storage forums that the Air District co-hosted with the Bay Area Regional Energy Network; concerns about the use of electric appliances and vehicles during power outages and the need for gas alternatives; the reliability of the electric grid and the need for improvements; the need to identify the total contribution of the built environments to climate change; and the need for continual education and interaction with jurisdictions.

Committee Action

None; receive and file.

6. MARIN COUNTY LOW-CARBON CONCRETE ORDINANCE (ITEM 5)

Abby Young, Planning and Climate Protection Manager, introduced Alice Zanmiller, Planner from County of Marin, who gave the presentation *Marin County Low-Carbon Concrete Ordinance*, including: local climate action context – what’s missing; embodied versus operational carbon emissions in buildings; Bay Area low-carbon concrete code; next steps; and barriers, opportunities, and questions.

Public Comments

Public comments were given by Miya Kitahara, StopWaste.

Committee Comments

The Committee and staff discussed the metric by which cumulative carbon emissions are measured; tradeoffs of locally-sourced cement; cement mixture qualities and carbon impacts; utilizing fly ash; what initiated this effort in Marin County, and how easily other jurisdictions might adopt this ordinance; integrity, cost, and feasibility of the alternative cement options; the probability that statewide legislation will be needed beyond jurisdictional adoption; how Marin County plans to track adoption success; the source of cement emissions and how carbon impacts during the cement-making process can be minimized; the comparison of emissions from cement production and air travel; and appreciation to the Air District for helping to fund this work.

Committee Actions

None; receive and file.
7. BUILDING ELECTRIFICATION TRENDS AND OPPORTUNITIES (ITEM 6)

Ms. Young introduced Panama Bartholomy, Director of the Building Decarbonization Coalition, who gave the presentation *Building Electrification Trends and Opportunities*, including: Berkeley bans natural gas in new buildings; 50+ California and local governments actively exploring zero-emissions reach codes; California’s greenhouse gas (GHG) emissions today (buildings 24%); electricity is getting cleaner, moving toward 100% carbon-free by 2045; transitioning to cleaner power sources; electric heat offers pathway to zero emissions; California is top state for new gas connections from 2013 to 2017; gas infrastructure costs and economic challenges for some residents; gas prices are increasing faster than electricity prices; rising gas costs lead to downward spiral of gas system; Nitrogen Oxide (NOx) in California and in Bay Area; stock turnover; electric buildings can be; California Public Utilities Commission (CPUC) decarbonization plans; Title 24 2022 – time dependent source energy; California Restaurant Association sues Berkeley over natural gas ban; food services is energy intensive; the Energy Use Intensity Challenge; the challenge for food service; how much energy does the food service industry buy; resiliency from wildfires and power shutoffs; about 20,000 Pacific Gas & Electric (PG&E) customers in Sonoma County still have no natural gas service; decarbonization targets within the building sector; and suggestions.

Public Comments

Public comments were given by Miya Kitahara, StopWaste.

Committee Comments

The Committee and staff discussed the adoption rate of local governments who are “exploring” zero-emissions reach codes; whether reach codes should allow the use of propane; the existing housing stock’s current energy efficiency and offset strategies; the concern about the lack of electrical storage capacity mentioned in the presentation; and the need to reach out to the food service industry and mitigate challenges regarding permit avoidance.

Committee Actions

None; receive and file.

8. PUBLIC COMMENT ON NON-AGENDA ITEMS, PURSUANT TO GOVERNMENT CODE SECTION 54954.3

No requests received.

9. COMMITTEE MEMBER COMMENTS / OTHER BUSINESS

None.
10. TIME AND PLACE OF NEXT MEETING

Thursday, February 20, 2020, at 375 Beale Street, San Francisco, CA 94105 at 9:30 a.m.

11. ADJOURNMENT

The meeting adjourned at 11:10 a.m.

Marcy Hiratzka  
Clerk of the Boards
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
   of the Climate Protection Committee

From: Jack P. Broadbent
       Executive Officer/APCO

Date: February 11, 2020

Re: Climate Change and Food – An Overview

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

In 2017, the Board of Directors (Board) adopted the 2017 Clean Air Plan, *Spare the Air – Cool the Climate* (2017 Plan), which sets a blueprint for reducing Bay Area greenhouse gas (GHG) emissions 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050.

Included in the 2017 Plan is a call for Bay Area residents to play a critical role in achieving these GHG-reduction targets. In particular, the 2017 Plan outlines the need for Bay Area residents to develop a low-carbon lifestyle, one where residents make informed and appropriate consumption decisions. Through deliberate decisions as consumers – in terms of the goods and services purchased, how and where to travel, and what foods to eat – residents can greatly reduce their carbon footprint. The nexus between GHG emissions and food is shown when resident centers shift diets, creating less GHG-intensive food consumption.

The connection between food and GHG emissions also extends to how food waste is handled. Food waste occurs at all steps of the production, distribution, and consumption cycle. When this waste ends up in a landfill, the zero-oxygen environment results in production of methane, a potent GHG. Reducing food waste will require a multi-pronged approach: reducing waste in food production, at supermarkets, in restaurants and institutions (schools, hospitals, prisons), and in the home, as well as diverting excess edible food to food banks and shelters. Food that cannot be put to edible use will need to be composted or otherwise put to productive use.

DISCUSSION

Staff will present on the nexus between food and GHG emissions. Topics to be addressed include: the impact of climate change on food production and supply, the impacts of the carbon intensity of food (i.e., GHG emission from production, processing, and distribution) on climate change, as well as the role of food waste on climate change given its potential as a potent source of methane.
BUDGET CONSIDERATION / FINANCIAL IMPACT

None

Respectfully submitted,

Jack P. Broadbent
Executive Officer/APCO

Prepared by: Geraldina Grünbaum
Reviewed by: Henry Hilken
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
Memorandum

To: Chairperson Teresa Barrett and Members of the Climate Protection Committee

From: Jack P. Broadbent  
Executive Officer/APCO

Date: February 11, 2020

Re: Food Waste Reduction in Alameda County

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

Methane is responsible for about 20 percent of current net global climate forcing. In September 2016, Governor Brown signed into law Senate Bill (SB) 1383, establishing a target of reducing methane emissions 40 percent by 2030. In the Bay Area, methane emissions are responsible for approximately 10 percent of total greenhouse gas emissions (based on a 20-year time horizon). Landfills are the largest contributor to methane emissions in the Bay Area. Recent top-down studies by staff indicate that methane emissions from landfills contribute more than was previously estimated, accounting for 50 to 70 percent of the region’s total human-made methane inventory.

Addressing methane emissions from landfills can be done at the facility level, such as through current Air District rulemaking, and by limiting the amount of organic material being sent to landfills. This latter approach is the focus of a county-wide effort by the Alameda County Waste Management Authority (StopWaste). StopWaste is a regional joint powers authority that helps Alameda County’s businesses, residents, schools, and local governments waste less, recycle more, and use water, energy, and other resources efficiently. StopWaste’s county-wide effort to reduce food waste includes a Climate Protection Grant from the Air District for a pilot project using a technological approach to identify and reduce contamination in the commercial organics recycling stream.

DISCUSSION

According to StopWaste, food scraps and food-soiled paper are the largest single item in Alameda County’s waste stream, accounting for approximately 35 percent of the County’s solid waste. Wasted food that ends up in landfills is a growing problem with both financial and environmental impacts. StopWaste is implementing a multi-pronged food waste reduction program that connects the reduction of food waste with important co-benefits, such as financial savings and improved health for families, and reducing methane emissions for climate protection.
Cassie Bartholomew, Program Manager at StopWaste, will present on the program’s components, including digital campaigns and on-the-ground outreach. She will also report on metrics that have been tracked and development of the program for 2020.

**BUDGET CONSIDERATION / FINANCIAL IMPACT**

None.

Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Abby Young  
Reviewed by: Henry Hilken
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
Memorandum

To: Chairperson Teresa Barrett and Members
   of the Climate Protection Committee

From: Jack P. Broadbent
       Executive Officer/APCO

Date: February 11, 2020

Re: Regional Food and Climate Event

RECOMMENDED ACTION

None; receive and file.

BACKGROUND

In 2019, the Air District sponsored its first climate-friendly cuisine event, as part of the Governor’s Global Climate Action Summit. The event was attended by restaurateurs and others with a focus on promoting sustainable food choices. Over 125 people attended the event.

DISCUSSION

A second Climate Friendly Cuisine Conference is being planned for Fall 2020, to build on the success of our 2019 event. The focus is to inform and empower individuals from the Bay Area food service industry, and public, about sustainability and climate-friendly business practices, regarding food, sustainable food choices, and diets. Participants will include food service staff from restaurants, caterers, hospitals, educational institutions, corporate campuses, entertainment venues, and the general public. The conference will promote the reduction of food and packaging waste, sourcing of food products from more sustainable options, and adoption of a climate-friendly diet, which will ultimately lead to significantly lower greenhouse gas emissions from Bay Area sources.

The 2020 event will be enhanced by video-taping the sessions and making the information available on the Acterra Climate Friendly Cuisine webpages.

BUDGET CONSIDERATION / FINANCIAL IMPACT

None; resources for this event are included in the Fiscal Year Ending (FYE) 2020 and proposed FYE 2021 budgets.
Respectfully submitted,

Jack P. Broadbent  
Executive Officer/APCO

Prepared by: Lisa Fasano