



**BOARD OF DIRECTORS
EAST BAY MUNICIPAL UTILITY DISTRICT**

375 - 11th Street, Oakland, CA 94607

Office of the Secretary: (510) 287-0404

**AGENDA
Sustainability Committee
Tuesday, October 22, 2024
10:30 a.m.
Boardroom
375 11th Street
Oakland, CA 94607**

***** Please see appendix for public participation instructions*****

Committee Members: Doug A. Linney {Chair}, Andy Katz, and Marguerite Young

ROLL CALL:

PUBLIC COMMENT: The Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.

DETERMINATION AND DISCUSSION:

- 1. Calendar Year 2023 Greenhouse Gas Inventory (Briggs)

ADJOURNMENT:

Disability Notice

If you require a disability-related modification or accommodation to participate in an EBMUD public meeting please call the Office of the Secretary (510) 287-0404. We will make reasonable arrangements to ensure accessibility. Some special equipment arrangements may require 48 hours advance notice.

Document Availability

Materials related to an item on this agenda that have been submitted to the EBMUD Board of Directors within 72 hours prior to this meeting are available for public inspection in EBMUD's Office of the Secretary at 375 11th Street, Oakland, California, during normal business hours, and can be viewed on our website at www.ebmud.com.



APPENDIX

Sustainability Committee

10:30 a.m.

EBMUD public meetings of the Board will be conducted in person and via Zoom. These meetings are recorded, live-streamed, and posted on the District's website.

Online*

<https://ebmud.zoom.us/j/94804788254?pwd=Z2duWU9RZzVqb3RMd1RlNXVISjNsUT09>

Webinar ID: 948 0478 8254

Passcode: 467920

By Phone

Telephone: 1 669 900 6833

Webinar ID: 948 0478 8254

Passcode: 467920

International numbers available: <https://ebmud.zoom.us/j/94804788254?pwd=Z2duWU9RZzVqb3RMd1RlNXVISjNsUT09>

*To familiarize yourself with Zoom, please visit <https://support.zoom.us/hc/en-us/articles/201362193-Joining-a-Meeting>

Providing public comment - *The EBMUD Board of Directors is limited by State law to providing a brief response, asking questions for clarification, or referring a matter to staff when responding to items that are not listed on the agenda.*

- Each speaker is allotted 3 minutes to speak; the Board President has the discretion to amend this time based on the number of speakers
- The Secretary will track time and inform each speaker when the allotted time has concluded
- Comments on **non-agenda items** will be heard at the beginning of the meeting
- Comments on **agenda items** will be heard when the item is up for consideration
- The Secretary will call each speaker in the order received

In person

- Fill out and submit a blue speaker card which is available in the meeting room

Via Zoom

- Use the raise hand feature in Zoom to indicate you wish to make a public comment
<https://support.zoom.us/hc/en-us/articles/205566129-Raising-your-hand-in-a-webinar>
 - If you participate by phone, press *9 to raise your hand
- When prompted by the Secretary, please state your name, affiliation if applicable, and topic

Submitting written comments or materials

- Email written comments or other materials for the Board of Directors to SecOffice@ebmud.com
- Please indicate the meeting date and agenda item number or non-agenda item in the subject of the email. Contact information is optional.
- **Please email by 4 p.m. the day prior to the scheduled regular meeting;** written comments and other materials submitted to the Board of Directors will be filed in the record.
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To view the livestream of meetings of the Board, please visit:


<https://www.ebmud.com/about-us/board-directors/board-meetings/>

EAST BAY MUNICIPAL UTILITY DISTRICT

DATE: October 17, 2024

MEMO TO: Board of Directors

THROUGH: Clifford C. Chan, General Manager 

FROM: David A. Briggs, Director of Operations and Maintenance 

SUBJECT: Calendar Year 2023 Greenhouse Gas Inventory

SUMMARY

The District's Policy 7.07 – Energy was updated on September 26, 2023 and set a goal for the District to achieve carbon neutrality for water and wastewater operations by 2030. Since 2005, the District has tracked and reported its greenhouse gas (GHG) emissions to measure progress towards the goal. The District's goal in 2023 was 21,535 metric tons of carbon dioxide equivalent (MT CO₂^e) with actual GHG emissions totaling 17,322 MT CO₂^e. This item will be presented at the October 22, 2024 Sustainability Committee meeting.

DISCUSSION

The District's GHG inventory is comprised of direct and indirect emissions. Direct emissions result from the combustion of fuels including gasoline, natural gas, propane, and diesel, as well as losses from refrigerant usage. Indirect emissions are from the use of electricity. The 2023 inventory is based on the Water Energy Nexus (WEN) 2.0 protocol developed by The Climate Registry. Pursuant to WEN 2.0, the District estimates process emissions of methane and nitrous oxide related to the treatment and discharge of wastewater. According to Policy 7.07, these process emissions will be estimated and tracked but not included as part of the District's GHG goal.

The 2023 inventory is summarized below along with values from the baseline year (2000) and last year (2022). Note that prior-reported values including the baseline, have been updated using WEN 2.0 protocols which is a common practice when protocols are updated. This allows direct comparison of values.

Year	Water Emissions (MT)	Wastewater Emissions (MT)	Total Emissions (MT)	District Goal (MT)	Wastewater Process Emissions (MT)
2000	35,871	10,648	46,519	--	35,520
2022	19,231	4,737	23,968	24,611	49,871
2023	11,828	5,494	17,322	21,535	53,625

The District’s GHG emissions inventory can be grouped into the sectors representing major areas of operation. The table below summarizes the 2023 GHG emissions for each sector.

Sector / System	Total GHG Emissions (MT)	Percent of Total	Change from 2022
Buildings	1,388	8%	-25%
Fleet Emissions	4,026	23%	+5%
Raw Water	166	1%	-97%
Treated Water	6,248	36%	-25%
Water Total	11,828	68%	-39%
Wastewater Total	5,494	32%	+16%
District Total	17,322	100%	-28%

The 2023 GHG emissions are 28 percent lower than the prior year. The following items are noted for the 2023 inventory:

- **Buildings:** Emissions in this sector include operation of diesel generators for a variety of purposes, including support of water operations. In 2022, diesel generators were used to support water distribution pumping to accommodate construction and drought operations. Use of generators was lower in 2023.
- **Fleet Emissions:** Gasoline consumption increased compared to 2022, likely due to the return of in-person activities after the pandemic ended. The District has maximized the use of renewable diesel and further emission reduction from switching to renewable diesel are not expected.
- **Raw Water:** No pumping of supplemental water supplies from the Sacramento River or other sources occurred in 2023, greatly reducing the electricity-related emissions. Additionally, Briones Reservoir did not require re-filling via pumping due to local precipitation in 2023.
- **Treated Water:** Treated water emissions were lower in 2023 because the conventional water treatment plants (Upper San Leandro and Sobrante), which consume more energy, were utilized less compared to 2022. Additionally, purchased power had lower emission factors.

- **Wastewater Energy:** Wastewater emissions were higher in 2023 since the cogeneration engines, which provide green in-house power, were offline for extended periods for maintenance. Additional power was purchased to meet plant electrical demands.

The District continues to purchase Zero Emission Vehicles (ZEVs) to replace conventional light duty vehicles that reach the end of their useful life. Staff utilize grant opportunities, when possible, to lower purchase costs for zero-emission construction equipment. Staff are also piloting medium- and heavy-duty vehicles and expanding the District's electric vehicle charging infrastructure.

NEXT STEPS

The District began acquiring Renewable Energy Certificates (RECs) from the Western Area Power Administration (WAPA) in 2024 for supplied hydropower and will apply them to future inventories as GHG credits toward Scope 2 (electricity) emissions. The RECs will reduce a portion of the emissions related to WAPA power.

Once operational, RECs from the Orinda photovoltaic project will be owned by the District. These RECs may be sold to others or applied to District accounts and credited to future inventories. The District will continue to collaborate with others to study emerging GHG issues such as reservoir emissions and wastewater process emissions.

CCC:DAB:sd

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