

## MEMORANDUM

## **EUGENE WATER & ELECTRIC BOARD**



TO: Commissioners Barofsky, Schlossberg, Brown, Carlson, and Morris

FROM: Kelly Hoell, Strategy & Climate Advisor

DATE: November 4, 2025

SUBJECT: EWEB GHG Inventory 2024 Results using updated protocols and implications on

Board Policies SD2 Environmental Policy / SD15 Climate Change Policy

OBJECTIVE: Information

#### Issue

EWEB GHG inventory Results for 2024 using updated protocols and implications on Board Policies SD2 Environmental Policy and SD15 Climate Change Policy.

#### **Background**

In 1997, EWEB's Board of Commissioners first passed its Environmental Policy, SD2, with updates in 2005 and 2016. SD2 outlines a set of environmental focus areas but does not articulate specific targets or reporting mechanisms.

In 2007, EWEB's Board of Commissioners first passed its Climate Change Policy, SD15, with updates in 2018 and 2022. SD15 outlines five areas of focus. The policy also outlines specific performance targets in two of these areas: Power Generation and EWEB Operations. EWEB has made significant progress towards both sets of targets and currently reports achievements and performance in all five areas annually through the <u>Climate Guidebook</u>. The Guidebook also reports EWEB's progress towards its voluntary commitments towards the City of Eugene's Climate Action Plan 2.0.

To meet the operational emissions targets in SD15, EWEB has calculated and reported its greenhouse gas (GHG) emissions from internal operations following The Climate Registry's General Reporting Protocol since 2009. This protocol provides guidance applicable to any business in any industry on how to report operational emissions according to best practices. Since this time, EWEB's internal GHG reporting practices have not included emissions associated with our power supply. Emissions associated with drinking water production and delivery have been included as operational emissions.

Since enacted, EWEB has met all reporting requirements to Oregon Department of Environmental Quality's (DEQ) GHG Reporting Program. This consists of reporting electricity generation by source to DEQ, who then applies their own methodology to generate a utility-specific emissions factor for EWEB that is published on their website and used by EWEB customers wishing to calculate their own emissions from electricity purchased from EWEB.

The Climate Registry does provide additional guidance for electric utilities on how to report industry-specific emissions for the electric power sector. Beginning in 2024, EWEB voluntarily decided to use this additional protocol in conjunction with the General Reporting Protocol to report a more complete set of emissions.

#### Discussion

In support of two of EWEB's 2025 Organizational Goals relating to power supply and consumer behavior, EWEB staff have implemented a process breakthrough in how we track and report GHG emissions internally. For the first time, EWEB is maintaining a more complete GHG inventory that includes Scope 1, 2, and 3 emissions from power delivery emissions sources, water delivery emissions sources, and operational emissions sources.

EWEB has formally adopted industry standards from *The Climate Registry* for electric sector reporting and is developing a comprehensive program to track all emissions. This program includes staff training and development, as well as improvements to our tools and processes, to support more consistent and complete annual reporting.

By expanding the scope and rigor of our inventory, EWEB gains better control over emission reductions, enhances our ability to advocate for improved practices with partners, and can holistically track progress toward organizational climate goals.

In lieu of a written report, please see the attached slide deck showing the 2024 emissions results. Most of these slides are provided as background reading material for this packet and will not be included in the brief presentation at the board meeting.

The board presentation will focus on the connections between the 2024 GHG inventory results and potential future updates to EWEB Board Policies SD2 Environmental Policy and SD15 Climate Change Policy.

#### **Recommendation and Requested Action**

Information and discussion only.

Staff is seeking initial guidance on how to proceed in 2026 with potential updates to EWEB Board Policies SD2 Environmental Policy and SD15 Climate Change Policy.

### **Attachments**

PowerPoint presentation of 2024 GHG Inventory Results using new methods SD2 Environmental Policy SD15 Climate Change Policy

# EWEB 2024 GHG Inventory following new protocols & Implications for SD2 Environmental Policy and SD15 Climate Change Policy

Nov 4, 2025

Regular Board Meeting





# Agenda

- Big Picture Summary: What we did and why it matters
- Project milestone status update
- 2024 GHG Inventory Results
  - by Scope 1, 2, 3
  - by Operational Category: Power Delivery, Water Delivery, Operations
  - Differences in emissions intensities: region, state, EWEB
  - Water year impacts on GHG emissions intensities
- Lessons learned
- Policy Implications for SD2 / SD15



# Big Picture: What we did, why it matters

- Prior: reported only operational emissions.
- Current: use industry-specific protocols for wider set of boundaries.
- This work supports EWEB's Strategic Compass:
  - 2025 Goal 6: Implement 2023 Energy Resource Action Plan. Complete and begin implementing 2025 Energy Resource Plan.
  - 2025 Goal 10: Evaluate and prepare for opportunities to influence consumption behavior.
- This work allows us to answer the following:
  - Where can EWEB take direct action to reduce emissions?
  - Where can EWEB enhance our partnerships?
  - How can EWEB track our progress towards our Board Policies/targets?



# **Project Milestones**

- Combined separate operational and regulatory reporting into one comprehensive program.
- **\**

• Trained staff for annual disclosure: Energy Division.



Built tools & processes: calculated 2023 emissions.



• Tested tools & processes: calculated 2024 emissions.



Shared results with internal interest holders.



Nov 2025: Board presentation of 2024 GHG inventory results



Refine/combine goals in SD2 / SD15

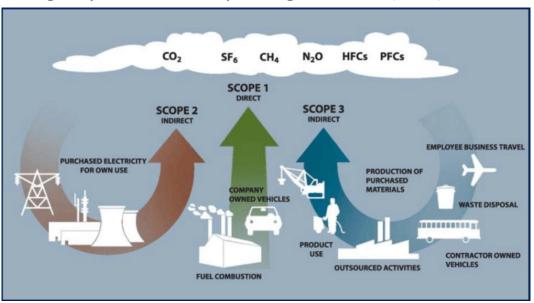
2026?

Brian Booth, Chief Energy Resource Officer – Executive Sponsor; Kelly Hoell, Strategy Advisor – PM Jon Hart, Jay Hiner, Marciana Rosales, Emily Tozier, Andrew Janos



# Industry Standard Approach to GHG Reporting

GHG Inventory Boundaries per The Climate Registry's General Reporting Protocol (GRP)



## **Key Learning Take-Aways:**

- 1. Previously, EWEB reported voluntarily under The General Reporting Protocol (GRP) only.
- Now we report voluntarily under GRP & EPSP.
- 3. EWEB has and will continue to report under Oregon DEQ's GHG Reporting Program.

GHG Inventory Boundaries per The Climate Registry's Electric Power Sector Protocol (EPSP). Red Circles are sources that apply to EWEB.

TABLE 5.1 Expected Emissions Categories for Various EPS Organizations

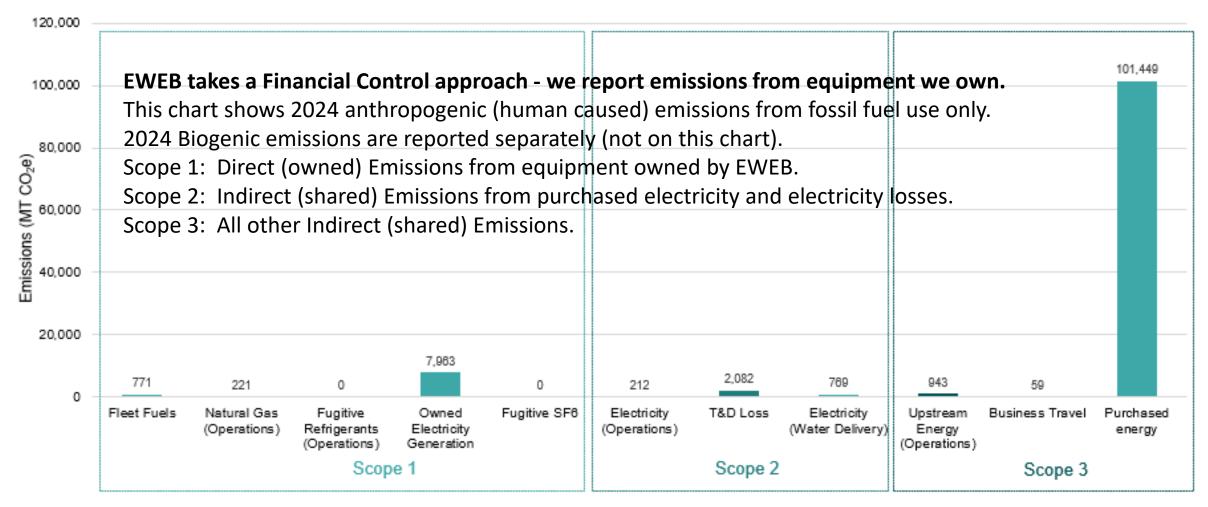
	Fossil Generator <sup>1</sup>	Other Generator <sup>2</sup>	Transmission Company, Balancing Authority, ISO <sup>3</sup>	Local Distribution Company⁴	Marketer/ Intermediary/ Retail Provider <sup>5</sup>
irect Emissions (Scope 1)					
Stationary Combustion		<b>√</b>			
Process Emissions	V	V			
Fugitive Emissions	V	√			
irect Emissions (Biogenic)					
Stationary Combustion					
Process		V			
direct Emissions (Scope 2)					
Bulk Power Transmission Losses					
Wheeled Power			√		
Local T&D Losses				√	V
Purchased and Consumed Electricity	√	√	V	√	V
ther Indirect Emmisions (Scope 3) <sup>6</sup>					
Specified Purchases			V	V	1
Other Purchases			V	√	V
Direct Access			V	٧	
Power Exchanges			√	√	

#### Notes:

EPS = Electric Power Sector T&D = Transmission & Distribution



# 2024 GHG Emissions Results By Scope





# GHG Emission Category Descriptions

## Scope 1:

- **Fleet Fuels**: Represents the emissions from fossil diesel and gasoline use in EWEB-owned fleet vehicles. Biogenic emissions from renewable diesel, ethanol and biodiesel are not shown here.
- Natural Gas (operations): Represents the fossil natural gas usage at EWEBowned facilities (in 2024, just ROC) for space/water heating.
- Fugitive Refrigerants (operations): Represents recharges of high global-warming potential gases from EWEB HVAC systems and vehicle air conditioning systems in the inventory year due to leaks. EWEB uses R-407C, R-410A and HFC-134A. Note: often these gases leak slowly over time and emissions reporting can lag actual atmospheric releases until leak is discovered.
- Owned Electricity Generation: Represents fossil natural gas consumption at owned biomass facility. Biogenic emissions from black liquor are not shown here.
- Fugitive SF6: Sulphur Hexafluoride is a high global warming potential gas used in substations to prevent arcing. Like refrigerants, this gas can leak slowly over time and emissions reporting can lag actual releases until leak is discovered.



# **Emission Category Descriptions**

## Scope 2:

- **Electricity (operations)**: Represents electricity, purchased from EWEB's electric utility, used in EWEB owned buildings for operations.
- Electricity (water delivery): Represents electricity, purchased from EWEB's electric utility, used in EWEB owned buildings (specifically Hayden Bridge water treatment plant and water pump stations) on behalf of drinking water customers to treat and deliver drinking water.
- **T&D Loss**: Represents electricity losses along EWEB's transmission and distribution system.



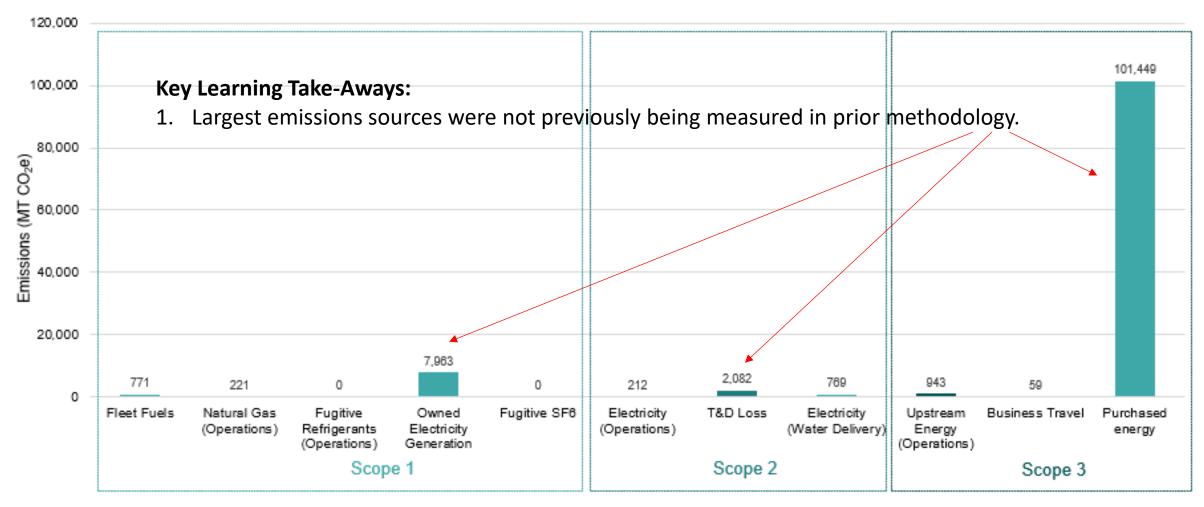
# **Emission Category Descriptions**

## Scope 3:

- **Upstream Energy (operations)**: Represents the upstream emissions throughout the supply chain associated with mining, refining, and transporting fossil fuels to EWEB for consumption in EWEB owned vehicles and buildings.
- **Business Travel**: Represents personal vehicle and air business travel by EWEB staff.
- **Purchased Energy**: Represents emissions associated with all contracted energy purchases. This includes EWEB's and BPA's unspecified energy purchases (market purchases where the generation source is unknown) that are assumed to be at an emissions rate similar to a natural gas plant.

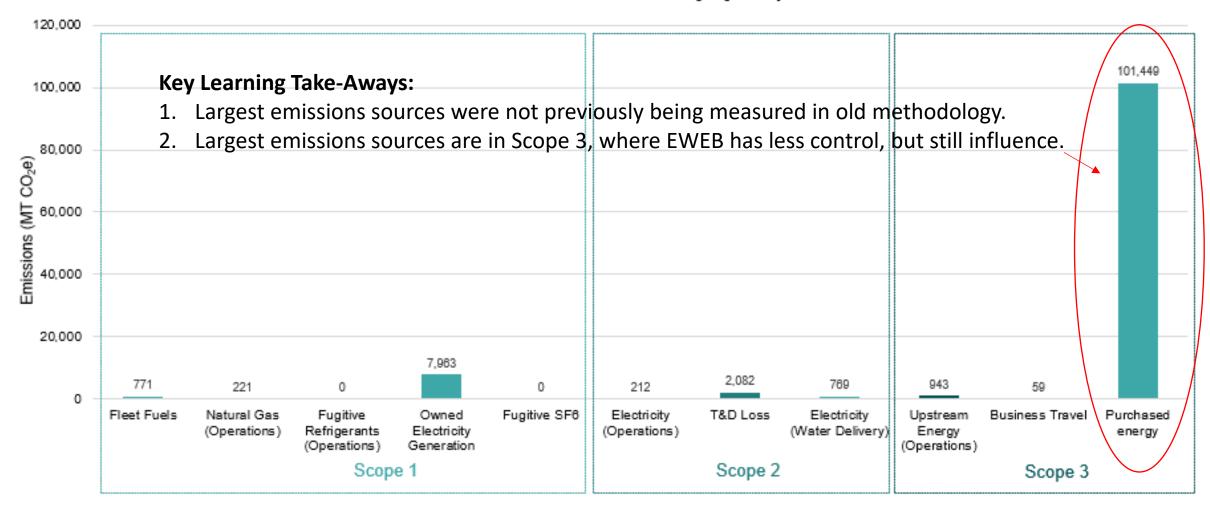


# 2024 GHG Emissions Results By Scope



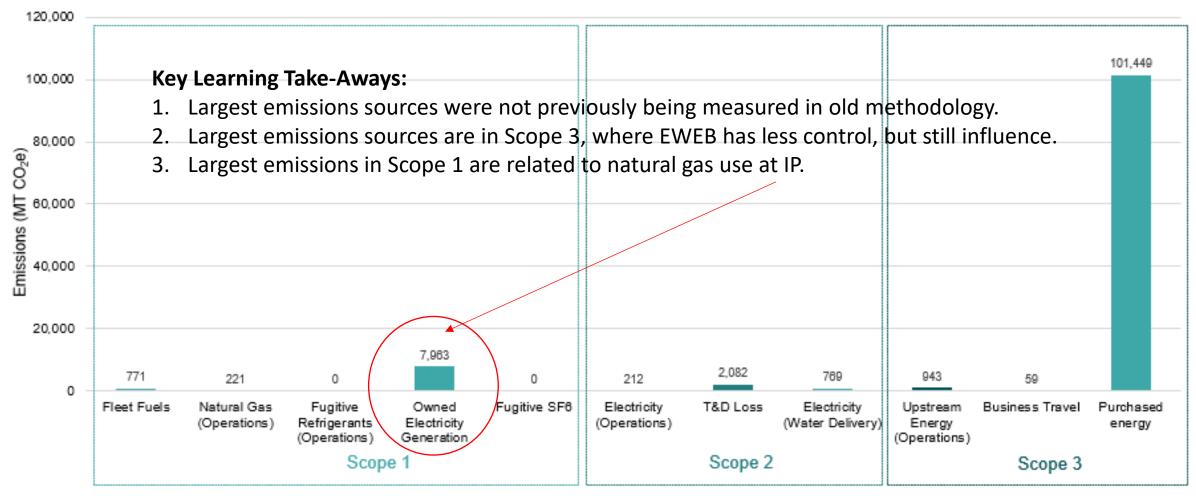


# 2024 GHG Emissions Results By Scope



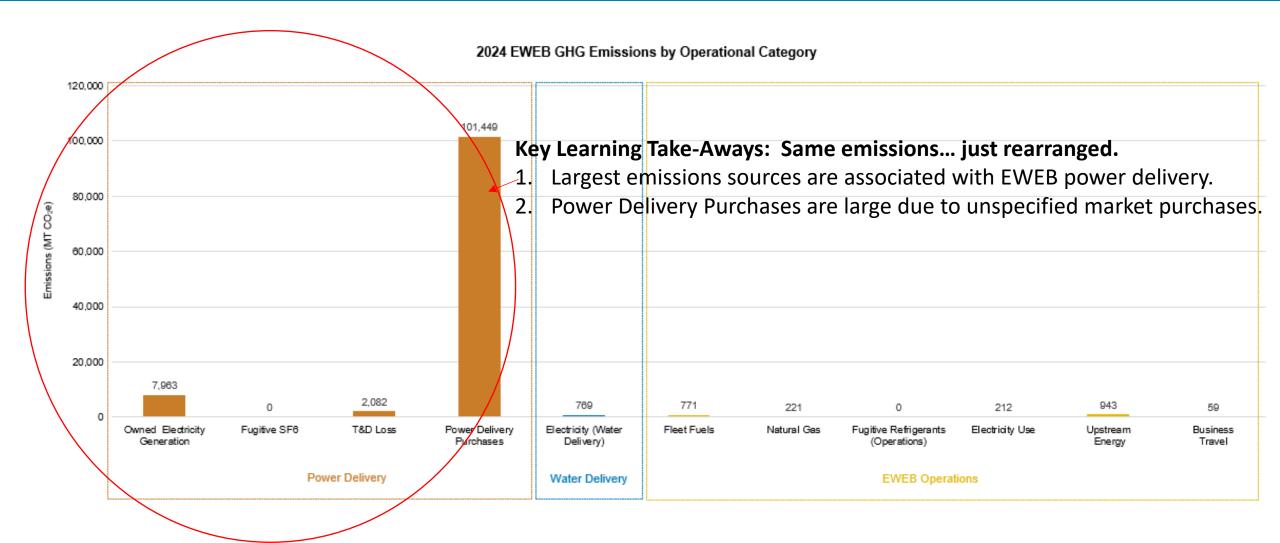


# 2024 Emissions Results By Scope



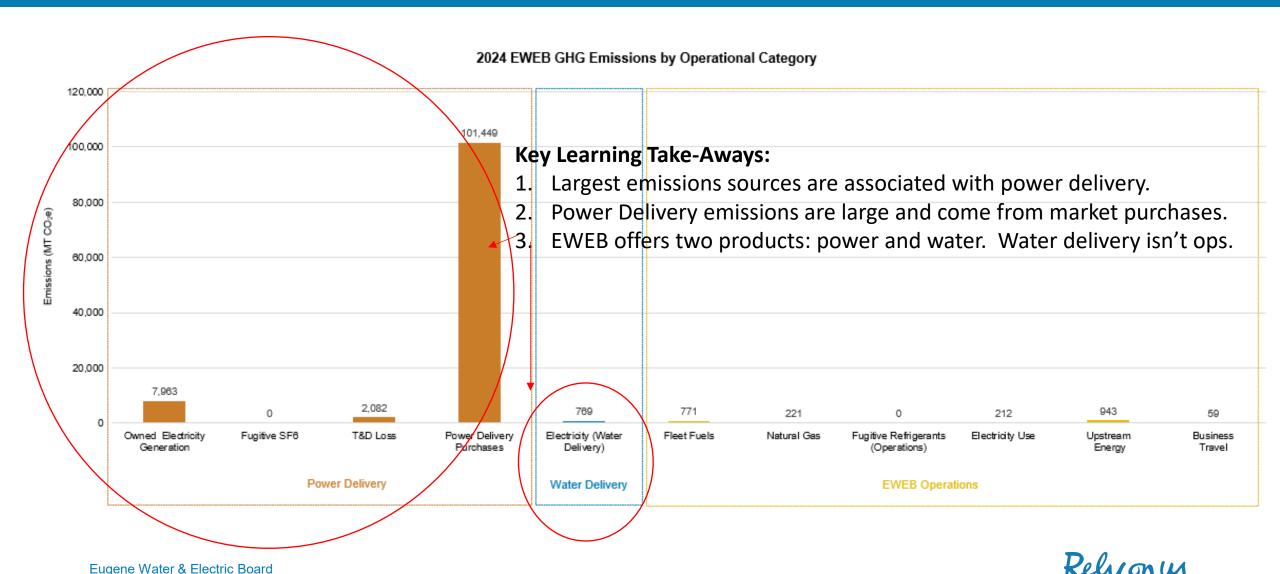


# 2024 Emissions Results by Operational Category





# 2024 Emissions Results by Operational Category



# EWEB's Resource Portfolio, 2024

Sources List	Generation Type	Source Type	Facility? (Yes/No)	Fuel 1	Fuel 2	Resource? (Yes/No)	Qualified? (Yes/No)	Capacity (MW)	State	Location
Carmen Smith	Reservoir hydro	Owned	No			Yes	No	104.0	OR	OR - McKenzie River
Trail Bridge	Reservoir hydro	Owned	No			Yes	No	10.0	OR	OR - McKenzie River
Leaburg	Run of River hydro	Owned	No		1.0	Yes	No	15.9	OR	OR - McKenzie River
Walterville	Run of River hydro	Owned	No	50	ope 1 Own	ea <sub>Yes</sub>	No	9.0	OR	OR - McKenzie River
Stone Creek	Run of River hydro	Owned	No			Yes	No	12.0	OR	OR - Clackamas River
International	Combined fossil-			Biomass:						
Paper GU #4	biomass	Owned	Yes	Black Liquor	Natural Gas	Yes	Yes	25.4	OR	OR - Springfield
Harvest Wind	Wind	Jointly owned	No			No	Yes	98.9	WA	WA - Klickitat County
BPA Block	Bonneville Mix	Contract resource	No			Yes	Yes	20,000	OR/WA	Columbia River System
BPA Slice	Bonneville Mix	Contract resource	No			Yes	Yes	0.0	OR/WA	Columbia River System
Priest Rapids	Reservoir hydro	Contract resource	No			Yes	No	788.5	OR/WA	Columbia River System
Wanapum	Run of River hydro	Contract resource	No			Yes	No	831.3	OR/WA	Columbia River System
Klondike III	Wind	Contract resource	No			No	Yes	223.6	OR	OR - Wasco in Sherman County
Sierra Pacific Industries	Wood and Wood Residuals	Contract resource	Yes	Biomass: wood residuals		No	Yes	19.8	OR	OR - Eugene
Stateline	Wind	Contract resource	No			No	Yes	299.6	WA	WA - Walla Walla
Direct Gen Solar	Solar	Contract resource	No	Scope 3	Shared	Yes	Yes		OR	OR - Eugene
Net Meter Solar	Solar	Contract resource	No			Yes	Yes		OR	OR - Eugene
Univ. of Oregon	Natural Gas	Contract resource	Yes	Natural Gas	Diesel	No	No	7.0	OR	OR - Eugene
Market Purchases	Grid mix	Market purchase	No	Assumes natural gas		No	No		N/A	Regional

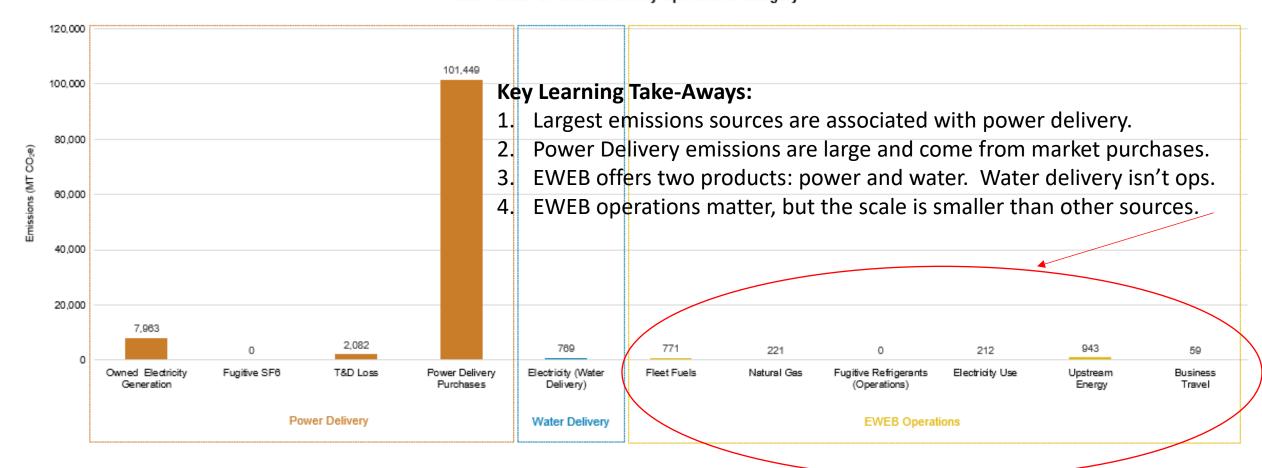
REC

**Dedicated** 

Nameplate

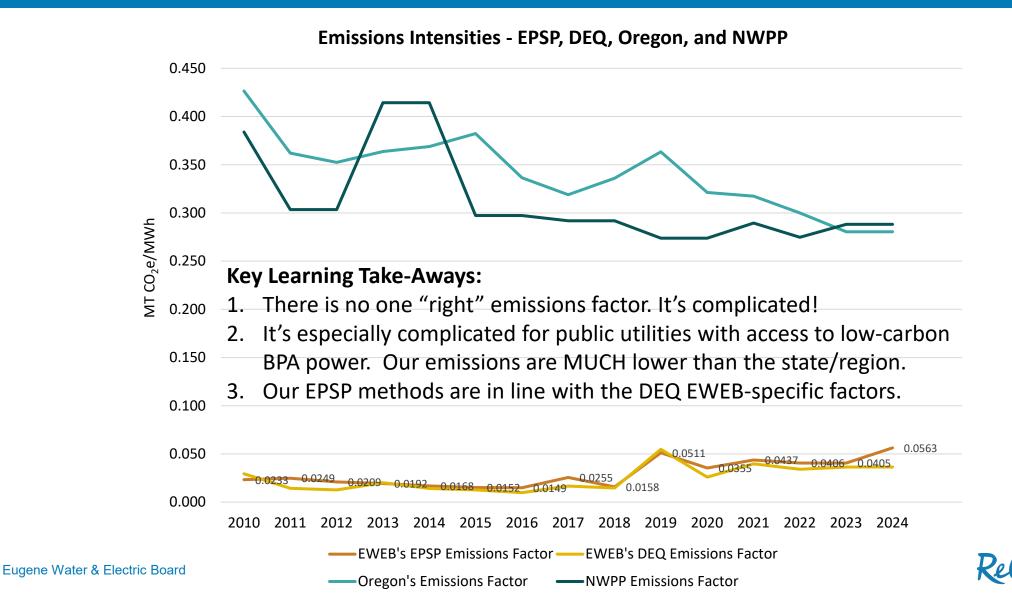
# 2024 Emissions Results by Operational Category

## 2024 EWEB GHG Emissions by Operational Category

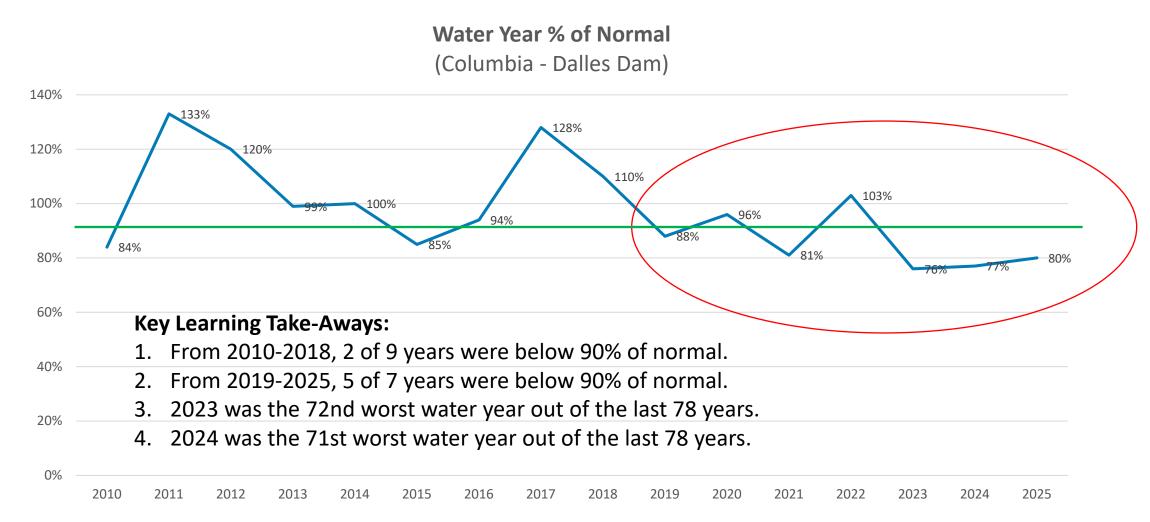




## Differences in Emissions Intensities



# In the PNW, Water Year Impacts Emissions





## Lessons Learned

- Where can EWEB take direct action to reduce emissions?
  - Power Delivery:
    - Explore biofuel opportunities to reduce fossil fuel use.
    - Reduce unspecified market purchases when possible.
  - Water Delivery: Energy efficiency in water facilities and leak detection.
  - Operations: Electrified light-duty fleet.
- Where can EWEB enhance our partnerships?
  - Enhanced understanding & data clarity with DEQ, EIA, BPA, IP, etc.
- How can EWEB track our progress towards our goals?
  - Revise SD2 & SD15 in 2026 to conform to our new methods.
  - Explore what it would take to achieve 'neutrality'.



The following *primary directives* are adopted:

- Power Generation: Target 95% carbon-free resources by 2030.
- **EWEB Operations:** reduce Operational Scope 1+2 GHG emissions relative to 2010 baseline by:
  - 25% reduction by 2020
  - 50% reduction by 2030
  - Carbon neutral by 2050
- Climate Policy
- Customer Decarbonization
- Impacts on EWEB

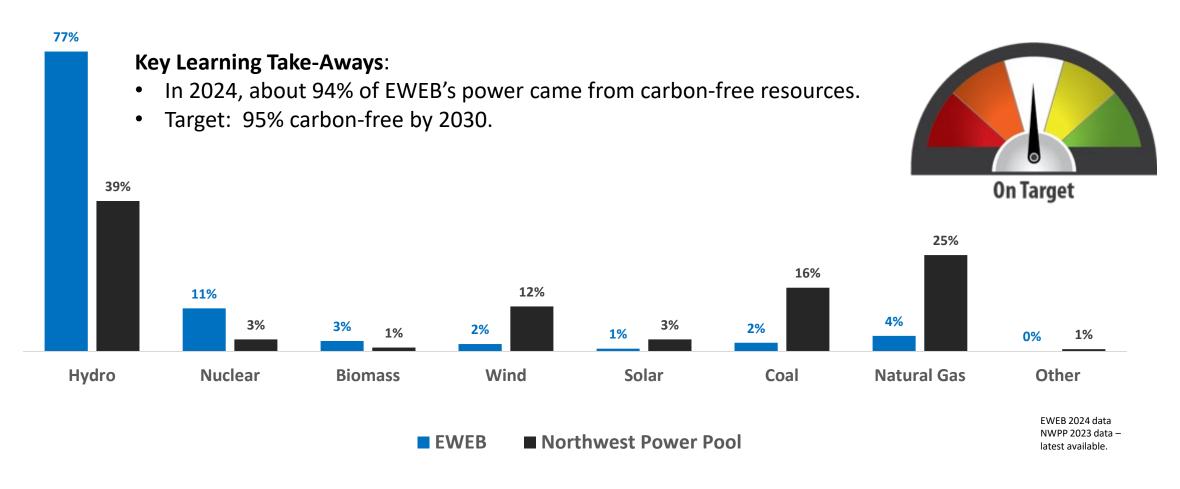
No Target set by SD15.

Climate Guidebook reports activity.



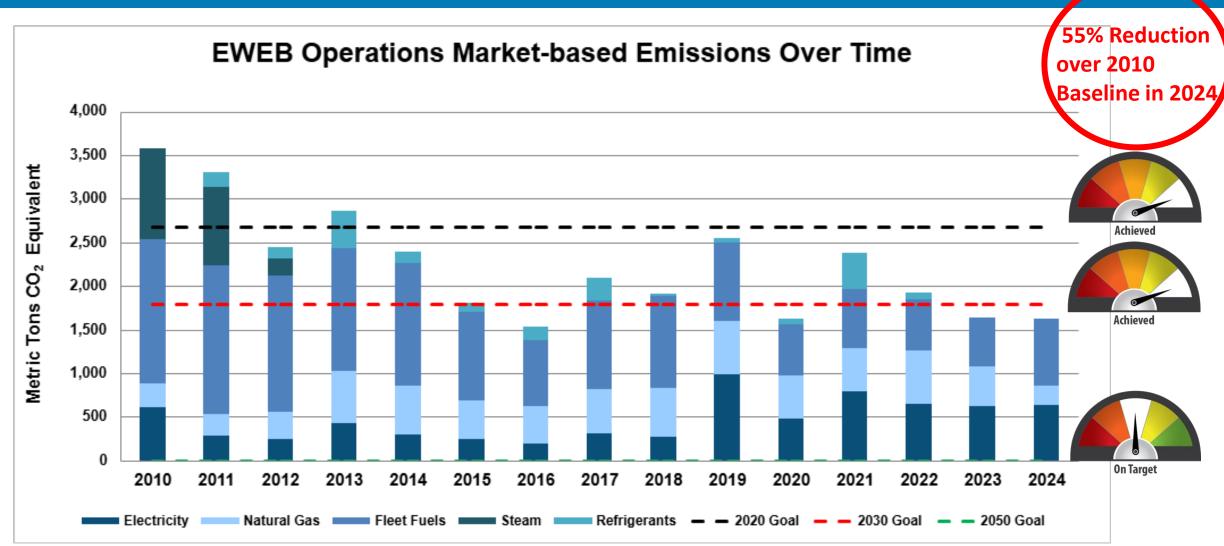
## SD15 Adherence: Power Generation

## Where does your power come from?





# SD15 Adherence: EWEB 2024 Operations Emissions





SD15 Category	Target?	Target Description	Comments/Questions for Future Policy Discussions
EWEB Operations	Yes	The Board directs the GM to continue efforts to minimize and/or mitigate GHG emissions from EWEB's operations. As initially established in 2010, EWEB adopted a goal to reduce the Scope 1 and 2 (direct GHG emissions and energy) GHG emissions	<ul> <li>Given updated methods/protocols – are operational emissions still the right boundary for this target?</li> <li>Is the Board supportive of purchasing</li> </ul>
		associated with its operations and facility management activities. Accordingly, and as formally established by this directive, EWEB plans to reduce our net Scope 1 and 2 GHG emissions from operations relative to 2010 levels by 25% by 2020, 50% by 2030, and achieve carbon neutrality from our operations by 2050.	<ul> <li>EWEB has met the 2030 milestone and there is a 20-year gap between the 2030 and 2050 milestones per SD15. Does the Board want to wait until 2050 to take the next step?</li> </ul>



SD15 Category	Target?	Target Description	Comments/Questions for Future Policy Discussions
Power Generation	Yes	The Board is committed to supporting a <i>low-carbon electric power portfolio</i> that maintains, on a planning basis, over 90% of annual energy from carbon-free resources and targets over 95% of annual energy from carbon-free resources by 2030 to the extent possible and practical without distinct adverse impacts to customers.	<ul> <li>"Percent carbon-free resources" is a target that does not conform with GHG protocols/methods.</li> <li>How should we measure "distinct adverse impact to customers"?</li> <li>If the target were missed in a year with significant market purchases, would the Board support EWEB taking other actions? (e.g. purchase of offsets, etc.)</li> </ul>



SD15 Category	Target?	Target Description	Comments/Questions for Future Policy Discussions
Customer Decarbonization	No	N/A	<ul> <li>Does the Board wish to set a target for this action area?</li> </ul>
Climate Policy	No	N/A	<ul> <li>Does the Board wish to set a target for this action area?</li> </ul>
Climate Impacts on EWEB	No	N/A	<ul> <li>Does the Board wish to set a target for this action area?</li> </ul>



# SD2 Environmental Policy

## Environmental Focus Areas: (No specific targets set by policy)

- Compliance
- Environmental Planning
- GHG Reduction
- Waste Minimization
- Water & Energy Conservation
- Watershed Protection
- Natural & Cultural Resource Protection
- Transportation
- Employee Education
- Inspire Action

# Comments/Questions for Future Policy Discussions:

- There is some redundancy with SD15.
- Not all of these areas are reported on in EWEB's Climate Guidebook.
- Is it a Board priority to have policies that are more directive than SD2?



# Questions for Today's Discussion

Is it a Board priority to combine SD2 and SD15 into one policy?

 Is gaining clarity related to SD15 language, methods, metrics, and performance tracking a priority in 2026?

## OR

 Is the Board comfortable with executive leadership and staff using discretion within the guideposts of the policy on implementation?



# Thank you!

Kelly Hoell, Strategy & Climate Advisor - kelly.hoell@eweb.org







### Strategic Direction Policies (SD Policies)

SD2 Environmental Policy

Effective Date March 1, 2016

EWEB strives to establish a positive environmental legacy for the community we serve and for future generations. In doing so, we are committed to minimizing overall impact on the environment while encouraging environmentally responsible behavior within our own operations.

We will identify, measure and understand the direct and indirect impact of our operations and develop innovative and realistic solutions for mitigating those impacts. We will comply with, and in some cases exceed environmental laws and regulations. Finally, EWEB is committed to communicating regularly its progress in implementing the policies and achieving the targets that it has established as well as continually improving our environmental programs.

#### **ENVIRONMENTAL FOCUS AREAS:**

<u>Compliance</u>: We comply with all applicable environmental laws, regulations, and company procedures. We perform internal audits to confirm compliance with environmental laws governing our operations.

**Environmental Planning:** We employ a triple bottom line decision-making approach that considers environmental, social and economic impacts.

<u>Greenhouse Gas Emissions Reduction</u>: We will reduce harmful GHG emissions by identifying the sources and implementing solutions, including source elimination, efficiency improvement, minimizing transportation and other fuels, and increasing the use of clean and renewable fuels.

<u>Waste Minimization</u>: We will minimize waste in our operations and business activities and will incorporate waste reduction into all activities; reducing waste through innovative supply chain management, and end-of-life recycling.

<u>Water and Energy Conservation</u>: We will improve water and energy efficiencies in existing operations, invest in new technologies and systems that enhance water and energy conservation, and support customers' efforts to conserve water and energy in homes and businesses. We will include water and energy management as an integral part of planning for future projects to reduce the consumption of water and energy.

<u>Watershed Protection</u>: We protect EWEBs drinking water supply with programs to measure the balance between watershed health and human use over time, and to implement actions, which maintain a healthy balance for production of exceptional water quality.

**Natural & Cultural Resource Protection:** We protect the lands, waters and ecosystems entrusted to our care which provide habitat for native fish and wildlife, clean water, healthy soils and recreational opportunities.

<u>Transportation</u>: We implement reasonable, environmentally friendly transportation solutions to limit emissions from utility-owned and personal vehicles used for utilities business.



## **Eugene Water & Electric Board**

**Board Policy Manual** 

<u>Employee Education</u>: We continue to shape environmental awareness and behaviors by helping our employees understand their role in meeting our environmental objectives.

<u>Inspire Action</u>: We seek opportunities to provide leadership and expertise to our employees, customers and partner agencies to promote wise stewardship of our energy and water resources and support community education programs that bring environmental awareness to future generations.

**Source:** Board Approved 11/04/97; Ratified 04/19/05; Revised 03/01/16, Resolution No. 1530-Amended, Approved on 04/05/16.





### Strategic Direction Policies (SD Policies)

SD15 Climate Change Policy

Effective Date January 4, 2022

The Board recognizes that climate change presents ongoing environmental, economic, and social risk to EWEB, our customers, community, and the world. Greenhouse gas (GHG) emissions from human activity are known to be the primary cause of climate change, with the energy, industrial, construction, agricultural and transportation sectors generally identified as the primary sources of greenhouse gas emissions in the United States.

The primary direct impacts to EWEB operations from climate change include changes in streamflow –quantity and timing– affecting hydroelectric generation, impacts to water quality and watershed health, increased risk of wildfires, changes in consumption patterns, and increasing threats from extreme weather events. The Board also recognizes that EWEB, as a water and electric utility, impacts our climate through electric generation resource choices, business practices, and the operation and maintenance of our assets, lands, buildings, and transportation fleet.

Consistent with EWEB's Vision, Mission, and Values (SD1), the Board supports EWEB taking an active role in combating and mitigating the impacts of climate change, within the context of and while executing our strategy and ongoing operations.

Accordingly, the following primary directives are adopted,

- POWER GENERATION: The Board is committed to supporting a low-carbon electric power portfolio that maintains, on a planning basis, over 90% of annual energy from carbon-free resources and targets over 95% of annual energy from carbon-free resources by 2030 to the extent possible and practical without distinct adverse impacts to customer-owners. Using the Integrated Resource Plan (IRP) process including final adoption by resolution (GP7), the Board will work with the General Manager to establish the long-term (20-year) principles, priorities, approaches, definitions (including carbon-free, carbon intensity), measurements, and goals for the electric generation portfolio, demand response, conservation and energy efficiency, and customer impact limitations (including but not limited to reliability, cost, and equity) supporting this directive.
- <u>CLIMATE POLICY</u>: The Board authorizes, delegates, and directs the General Manager to participate in local, state, and regional efforts to encourage, develop and *enact measures to minimize and/or mitigate GHG emissions* that contribute to climate change. Consistent with Board Policy (GP13), prior to legislative sessions the Board develops and guides EWEB's positions relative to legislation, including those related to climate and environmental policy supporting this directive.
- **EWEB OPERATIONS:** The Board further authorizes, delegates, and directs the General Manager to continue efforts to *minimize and/or mitigate GHG emissions from EWEB's operations* that contribute to climate change. As initially established in 2010, EWEB adopted a goal to reduce the Scope 1 and 2 (direct GHG emissions and energy) greenhouse gas emissions associated with its operations and facility management activities. Accordingly, and as formally established by this directive, EWEB plans to reduce our net Scope 1 and 2 GHG emissions from operations relative to 2009 levels by 25% by 2020, 50% by 2030, and achieve carbon neutrality from our operations by 2050.



- CUSTOMER DECARBONIZATION: The Board further authorizes, delegates, and directs the General Manager to assist customers with achieving their GHG emission reduction goals through partnerships, technical assistance, resources, and programs that support, but are not limited to, energy efficiency, alternative fuels, electric and water conservation, electrification, and carbon offsets and sequestration. Long-term conservation, energy efficiency, and demand-response goals are established as part of the IRP process. Additional program objectives, incentives and budgets will be established annually, as applicable, and/or through revisions to the strategic plan.
- <u>IMPACTS ON EWEB</u>: Consistent with resiliency initiatives included in EWEB's approved strategic plan, the Board directs the General Manager to evaluate and enact measures, as necessary and appropriate, to prepare for and *minimize the effects of climate change that could impact EWEB's* water and electric supply and infrastructure, damaging EWEB's resiliency and reliability.

#### **IMPLEMENTATION:**

In support of the *primary directives* identified above, major decisions and actions, including those related to this policy, will be evaluated based on a triple-bottom-line methodology, including assessments of consistency with the organization's values, including safety, reliability, affordability, environmental stewardship, transparency, and equity.

The Board and General Manager will work together to develop annual goals, consistent with Board Policy BL4 and BL5, related to the *primary directives*, as applicable, including milestones and measurements, and reporting frequency.

So that EWEB's actions are visible to our community, at least annually EWEB will compile and report GHG emission reduction and/or mitigation activity, including a greenhouse gas inventory (Scope 1 and 2, along with Scope 3 where impactful, applicable, and practical), and will calculate and publish the carbon intensity of our energy portfolio. Definitions, GHG emission reduction and/or mitigation details (e.g., fuel mix, use of offsets, etc.) and carbon accounting methods will be published, consistent with industry standards and/or official reporting requirements where applicable.

**Source:** Steve Newcomb, Environmental Manager, Approved 09/18/07; Revised 07/10/18, Resolution No. 1820; Revised 01/04/22, Resolution No. 2204.