AGENDA

Oregon Sustainability Board

DATE: September 11, 2026

TIME: 10 a.m. to 3:00 p.m.

LOCATION: DAS Executive Building, Training Room, 155 Cottage Street NE, Salem, OR 97301.

JOIN VIRTUALLY: [Join the meeting now]

Meeting ID: 269 816 731 116 20
Passcode: rc6R9Sh3
Dial in by phone
+1 503-446-4951
Phone conference ID: 140 575 32#

Agenda Items

1. Welcome and Administrative Actions – *10 minutes*
2. Agency Presentations: Oregon State Lottery & Department of State Lands – *110 minutes*
3. Lunch – *30 minutes*
4. Work Plan Check-in – *30 minutes*
5. Forum Debrief & Takeaways – *30 minutes*
6. Legislative Report Development – *60 minutes*
7. Public Comment – *15 minutes*
8. Closing Remarks – *15 minutes*

*Times are best estimates and subject to change

Board Members

Secretary Tobias Read, Chair Secretary of State

Elin Shepard, Vice Chair CLEAResult

Mayor Taneea Browning, City of Central Point

Joshua Proudfoot, Parametrix

Rex Burkholder, The Oxalis Group

Tom Kelly, Neil Kelly Company (Retired)

Cassidy Cianciolo, Environmental and Whole-Person Health Coach

Webly Bowles, WAP Sustainability

Cory Ann Wind, Clean Fuels Alliance America

Dan Orzech, Oregon Clean Power Cooperative

Chris Enlow, Futurescapes

Next Meeting

DATE: December 11, 2026

TIME: TBD

LOCATION: DAS Executive Building, Fremont Conference Room, 155 Cottage Street NE, Salem, OR 97301

Oregon
Tina Kotek, Governor

Department of Administrative Services
155 Cottage Street NE
Salem, OR 97301

MEMORANDUM

To: Oregon Sustainability Board

From: Zechariah Heck, Statewide Sustainability Officer

Date: September 4, 2026

Subject: September 11, 2026, OSB Meeting

September 11 Meeting Overview

Welcome and Administrative Actions
This agenda item includes introductions of the Oregon Sustainability Board (OSB) members and guests. Cory Ann Wind and Dan Orzech, newly appointed Board members, will be formally welcomed and given an opportunity to introduce themselves. The Board will also be asked to review and approve the minutes from the June 5, 2026, meeting.

Agency Presentations: Oregon State Lottery and Department of State Lands
The Oregon State Lottery will be represented by director Michael Wells and supporting staff. The last time Lottery presented to the Board was in 2020. An updated Sustainability Report and presentation materials are attached.

Ali Ryan Hansen, chief of staff at the Department of State Lands (DSL), will present the agency's sustainability plan update. DSL last presented to the OSB in 2024. The agency's 2026 sustainability plan and presentation materials are attached.

Work Plan Review
As a standing agenda item for the quarterly business meeting, the Board will review its work plan to ensure progress on agreed-upon actions. Staff will share the work plan spreadsheet on screen and provide updates on each item. Three items will be discussed in greater depth:

1. Fleet Electrification Letter of Support
2. Agency Sustainability Plan Guidelines
3. Sustainable Design Guidelines

The Board will also be asked to confirm priorities for the upcoming quarter.

Sustainability Forum Debrief & Takeaways
The Board will debrief the inaugural Sustainability Forum held on September 10. Hosting this event was the top priority for the previous quarter's work plan, and Board members and staff invested significant time in its preparation. This agenda item is intended to provide space for the Board to reflect on the forum, discuss takeaways and lessons learned, and consider options for similar future events.

Legislative Report Development
ORS 184.429(1)(c) requires the Board to submit a biennial report to the Legislative Assembly by March 31 of each odd-numbered year "on the Board's activities and recommendations." In previous discussions, the Board and staff agreed that submitting the report before the long-session begins would be ideal, as it allows legislators more time to review the report and consider its recommendations. If the Board supports this timeline, staff will have a final draft prepared by the December 11 Board meeting. The 2027 Legislative Session begins on February 1.

Under this agenda item, staff will ask Board members for direction on the report outline, themes to convey, recommended policies and budget priorities. Board members interested in being more involved in the report's development are welcome to collaborate with staff. Previous legislative reports are attached for reference.

Attachments:

June 5, 2026, Meeting Minutes – Draft
State Lottery Meeting Materials
DSL Meeting Materials
OSB Work Plan – last updated September 2026
Agency Sustainability Plan Guidelines – Draft Update Version 2
OSB Legislative Reports

2026 Sustainability Committee Report

2020 - 2025 REPORTING PERIOD

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Oregon Lottery continues to advance sustainability initiatives that support environmental stewardship, operational efficiency, and responsible management of public resources. Building on organizational changes and a renewed focus on operational excellence, the Lottery remains committed to reducing environmental impacts while delivering value to Oregonians.

During the reporting period, the Lottery made significant progress in energy conservation, fleet efficiency, waste reduction, and employee engagement. Key accomplishments included reducing the fleet by 10 vehicles, exceeding fleet efficiency targets, increasing electric vehicle utilization, upgrading warehouse heating and ventilation systems, and continuing participation in Portland General Electric's Green Source renewable energy program.

The Lottery also strengthened its recycling and materials management efforts by reducing VLT packaging waste by more than 60%, achieving over 90% recyclability of packaging materials, extending equipment life through component-level repairs, and further reducing paper consumption through digital business processes.

Water conservation efforts continued through minimized landscape irrigation, ongoing use of bioswales to protect local waterways, and planned installation of additional high-efficiency fixtures. Employee involvement remained strong through sustainability education, statewide sustainability partnerships, and volunteer programs supporting Oregon communities.

Together, these efforts demonstrate the Oregon Lottery's commitment to environmental responsibility, operational efficiency, and continuous improvement while supporting a sustainable future for the people of Oregon.

INTRODUCTION

In alignment with its mission to *"operate a lottery with the highest standards of security and integrity to earn maximum profits for the people of Oregon commensurate with the public good,"* the Oregon Lottery remains committed to advancing sustainable business practices across all areas of its operations. This commitment reflects our responsibility to steward public resources wisely, minimize environmental impacts, and foster a culture of accountability among employees and business partners.

This report builds upon the 2020 Sustainability Committee Annual Report and reflects a period of meaningful organizational transformation. Since the last reporting cycle, the Lottery has undergone significant changes, including new executive leadership and a renewed strategic focus on return on investment (ROI). Efforts to streamline the executive structure and modernize operational processes are ongoing, with the goal of improving efficiency, strengthening accountability, and positioning the organization for long-term success.

In accordance with Executive Order 20-04, the Oregon Lottery has taken, and continues to advance, actions to address climate change and reduce greenhouse gas emissions:

- **Reducing building energy consumption:** Recent upgrades completed in 2025, including the installation of higher efficient heaters in the warehouse and integration of the warehouse venting system into the electronic building management system, have improved energy efficiency and will continue to reduce emissions.
- **Expanding renewable energy use:** The Lottery participates in Portland General Electric's Green Source renewable energy program, supporting cleaner energy generation.
- **Improving fleet efficiency and reducing fuel consumption:**
    - Optimization of delivery, shuttle, and field service routes to reduce travel demands.
    - Transition toward hybrid and fuel-efficient vehicles, with the introduction of select electric vehicles.
    - Reduction in staff-assigned and shared fleet vehicles.
    - Overall decreases in vehicle usage and fuel consumption

These efforts demonstrate the Oregon Lottery's continued commitment to environmental stewardship, operational excellence, and responsible governance. We remain dedicated to strengthening these initiatives and contributing to a sustainable future for the people of Oregon.

ENERGY CONSERVATION AND GREENHOUSE GAS EMISSIONS

The Sustainability Committee has collaborated closely with personnel from the Facilities and Fleet departments to measure and reduce greenhouse gas emissions from the Lottery's most significant operational sources. These efforts focus primarily on the energy required to heat, cool, and provide electricity to the Salem headquarters building, as well as overall facility operations. Through targeted improvements, including energy-efficient system upgrades, enhanced building management practices, and participation in renewable energy programs, the Lottery has reduced its environmental impact while improving operational efficiency. These coordinated efforts reflect a strategic and data-driven approach to sustainability, ensuring that emissions reductions are both measurable and aligned with statewide environmental goals.

Fleet performance data reflects strong and sustained progress toward the Oregon Lottery's operational efficiency and emissions reduction goals. Key efficiency metrics for miles driven consistently exceeded expectations, performing between **123% and 133% of target**, indicating significant gains in vehicle utilization, routing optimization, and fuel efficiency.

The target key efficiency metric for miles per gallon showed strong improvement, with areas that were previously close to meeting targets (91%-95%) increasing to 101% of target, demonstrating the effectiveness of corrective actions and operational adjustments. These improvements align with strategic initiatives such as reducing fleet size and incorporating hybrid and electric vehicles into operations.

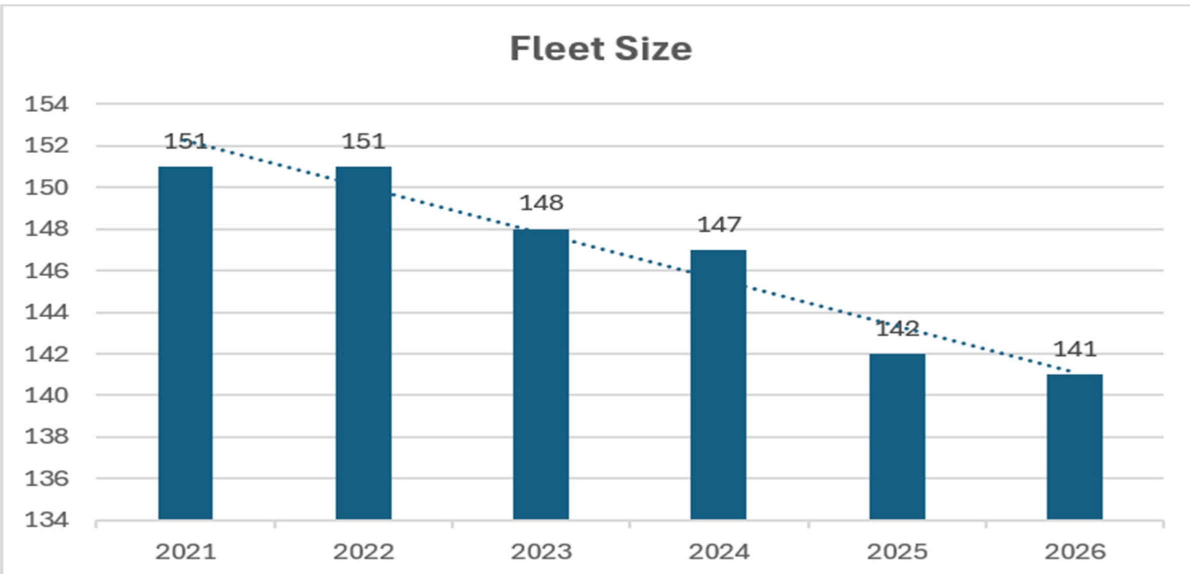
Cost efficiency has also improved steadily. Operating cost per mile trends (**$0.43 to $0.50**) demonstrates enhanced cost control while maintaining service delivery standards. These results directly support the Lottery's objective of reducing overall fleet operating costs by **17%**.

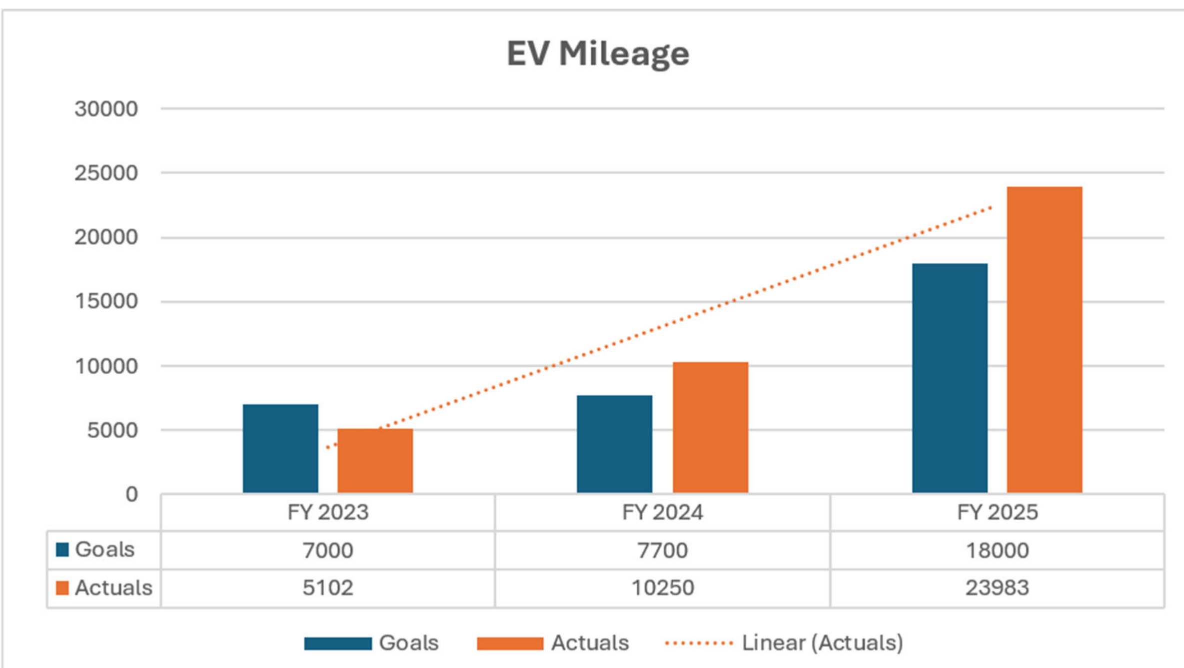
Increased electric vehicle (EV) productivity is reflected in activity levels, which rose significantly from **5,102 to 23,983 miles driven**, indicating improved utilization and more effective deployment of fleet resources.

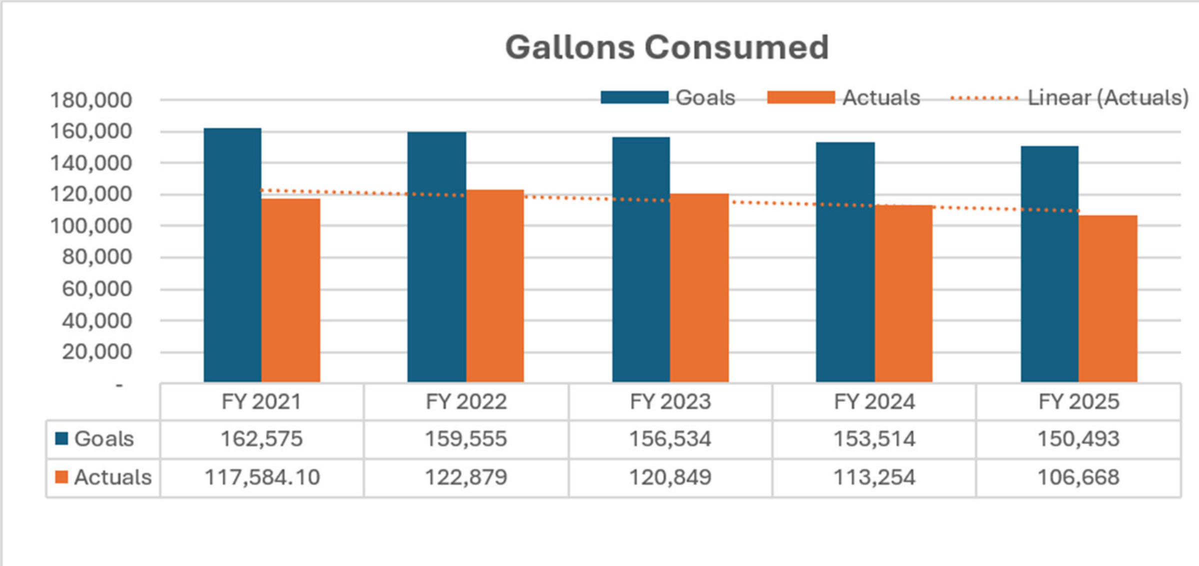
Overall, the data confirms that targeted investments in fleet modernization, route optimization, and data-driven management tools are producing measurable results. These efforts not only reduce greenhouse gas emissions but also strengthen financial performance and operational resilience. Continued expansion of electric and hybrid vehicle adoption, supported by advanced GPS-enabled analytics, positions the Lottery to meet its 2035 fleet modernization and sustainability objectives.

Key Highlights

- 10-vehicle fleet reduction (151 → 141)
- 123–133% performance in key efficiency metrics
- Cost per mile stabilized and controlled
- 23,983 peak utilization (EV Productivity)
- EV + Hybrid adoption accelerating







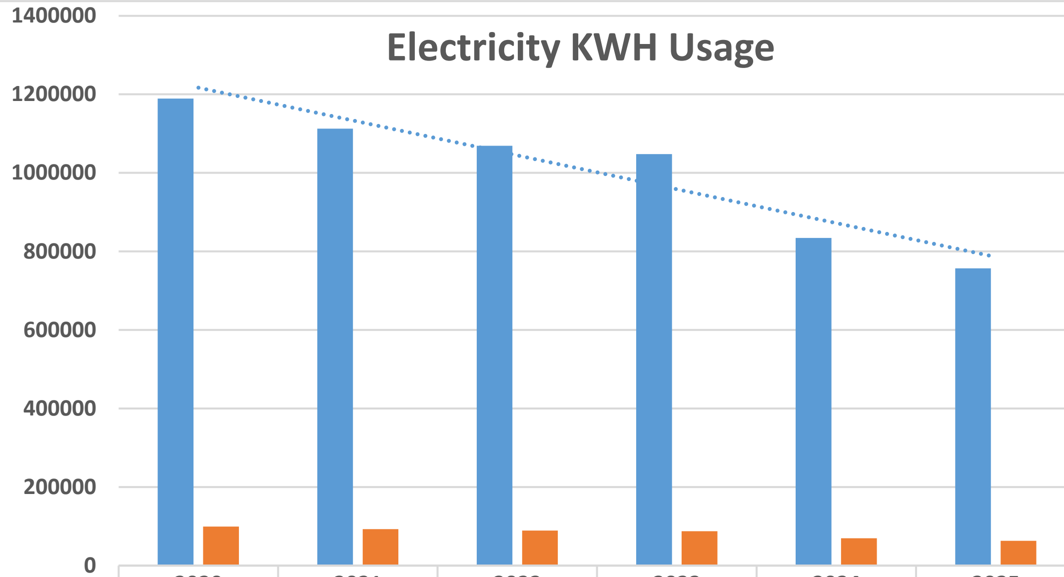
Keys to Continuous Improvement

Sustained progress is supported by continued operational improvements, technology adoption, and strategic resource management:

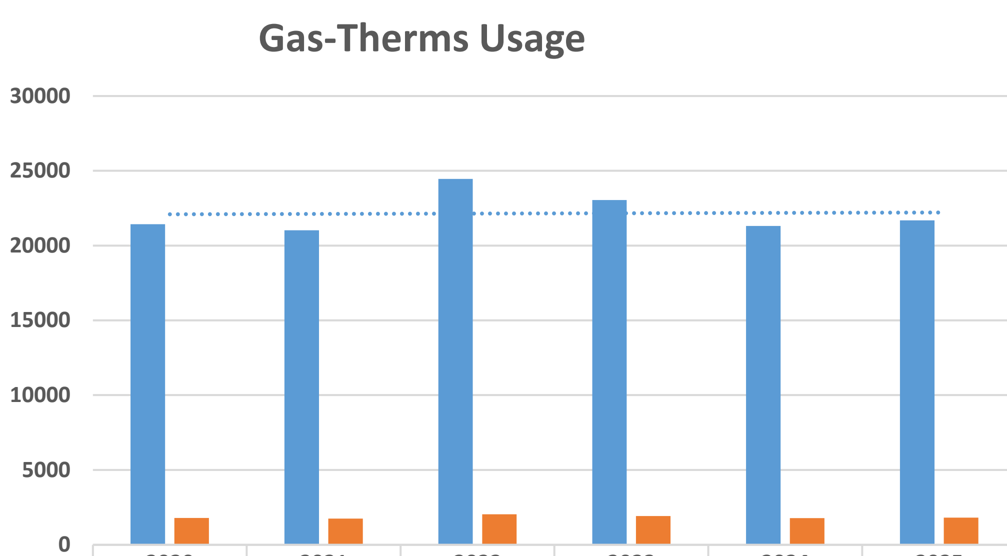
- **Facility modernization:** Upgraded warehouse heating systems and the installation of high-efficiency gas heater and ventilation systems—supported in part by the Energy Trust of Oregon—have improved both energy efficiency and workplace conditions.
- **Space optimization:** Relocating departments from warehouse space into existing office areas has reduced energy demand while improving working environments for employees.
- **Operational footprint reduction:** Enhanced space utilization has enabled plans to eliminate the need for an external warehouse by February 2027, further reducing carbon emissions and long-term operating costs.
- **Renewable energy commitment:** Continued participation in Portland General Electric's Green Source renewable energy program supports the agency's transition to cleaner energy sources.

Metrics Summary

Metric	Dec 2013 (Energy Baseline)	May 2026 (Energy Current)	Change
ENERGY STAR Score (1-100)	37	91	54.00 (145.90%)
Source EUI (kBtu/ft²)	221.7	87.7	-134.00 (-60.40%)
Site EUI (kBtu/ft²)	97.7	43.2	-54.50 (-55.80%)
Energy Cost ($)	181,048.26	132,211.69	-48,836.57 (-27.00%)
Total (Location-Based) GHG Emissions Intensity (kgCO2e/ft²)	7.63	3.05	-4.58 (-60.00%)
Water Use (All Water Sources) (kgal)	2,093.6	734.0	-1,359.60 (-64.90%)
Total Waste (Disposed and Diverted) (Tons)	7.59	88.90	81.31 (1,071.30%)



	2020	2021	2022	2023	2024	2025
Consumption annually	1188800	1112600	1069000	1047600	834200	756899
Average per month	99067	92717	89083	87300	69517	63074



	2020	2021	2022	2023	2024	2025
Consumption Anually	21425.5	21019	24453.9	23045.6	21307.2	21689.7
Average per Month	1785.5	1751.6	2037.8	1920.5	1775.6	1807.5

Consumption Anually Average per Month Linear (Consumption Anually)

RECYCLING AND MATERIALS

As part of its commitment to responsible resource management, the Oregon Lottery actively works to reduce waste and divert materials from landfills through comprehensive recycling and reuse practices. Like many organizations, Lottery operations generate a range of materials, including electronics, metals, plastics, office paper, packaging, and components from more than 11,000 Video Lottery Terminals (VLTs), as well as sales and marketing materials.

To minimize environmental impact, recyclable materials from decommissioned VLTs, electronic equipment, and other operational items are carefully separated and processed for recycling whenever feasible. In addition, the Lottery prioritizes reuse by repairing and redeploying electronic components, extending asset life cycles and reducing the need for new materials.

2026 Summary

Materials designated for recycling are segregated and tracked by Distribution staff prior to final disposition. The accompanying charts illustrate trends in office paper consumption, VLT retirement and repair activity, electronics reuse, and signage upgrades.

- **Security**: The Security Department is advancing the Oregon Lottery's sustainability goals by modernizing its case management process. Beginning in September 2026, Lottery will partner with a vendor to develop and implement a fully digital case management system. The project is expected to require approximately 7–8 months of development and testing, with full deployment targeted within the following year. Once implemented, the system will significantly reduce paper consumption, streamline records management, improve operational efficiency, and support the agency's long-term commitment to sustainable business practices.
- **Paper**: Increased reliance on digital tools—including electronic presentations and telework technologies—has significantly reduced paper consumption. As a result, less paper is purchased, used, and recycled. This downward trend has stabilized and reflects a positive outcome and reduced demand for forest resources.
- **Cardboard, metals, plastics, and electronics**: A substantial portion of these materials originate from decommissioned VLTs, and equipment returned from retailers. Reported recycling volumes have generally declined since reporting began, reflecting improved lifecycle management activities and ongoing operational recycling practices.

Packaging Innovation Reduces Waste and Improves Efficiency

In FY26, Technical Services partnered with IGT, our Video Lottery Terminal (VLT) vendor, to redesign the packaging used for new Sierra VLT cabinet shipments. The updated packaging incorporates reusable shipping blankets and significantly reduces packing material requirements.

As a result, waste generated from each shipment of 72 VLTs was reduced from approximately **8 cubic yards to just 3 cubic yards**, which was a reduction of more than **60%**. Additionally, over **90% of the remaining packaging material is recyclable**, further minimizing landfill impact.

Beyond the environmental benefits, the new packaging solution has also improved operational efficiency by reducing the time required to pack and unpack equipment and lowering packaging material costs for our vendor.

Extending Equipment Life Through Component-Level Repairs

The Bench Repair team continues to focus on reducing electronic waste by repairing equipment at the lowest practical component level rather than replacing entire assemblies.

A significant FY26 achievement involved the Aristocrat Helix VLT platform. Historically, the most frequently failed component, the processor carrier board—was only available from the manufacturer as part of a complete logic assembly replacement. By identifying a supplier capable of providing refurbished processor carrier boards, the team can now replace only the failed component rather than discarding the entire assembly.

This initiative is expected to reduce electronic waste by approximately **64 kilograms annually**, equivalent to **1.6 kilograms of material diverted from disposal per repair** across an average of 40 repairs each year. In addition to keeping functional components in service longer, the program generates substantial cost savings while supporting a circular economic approach to equipment maintenance.

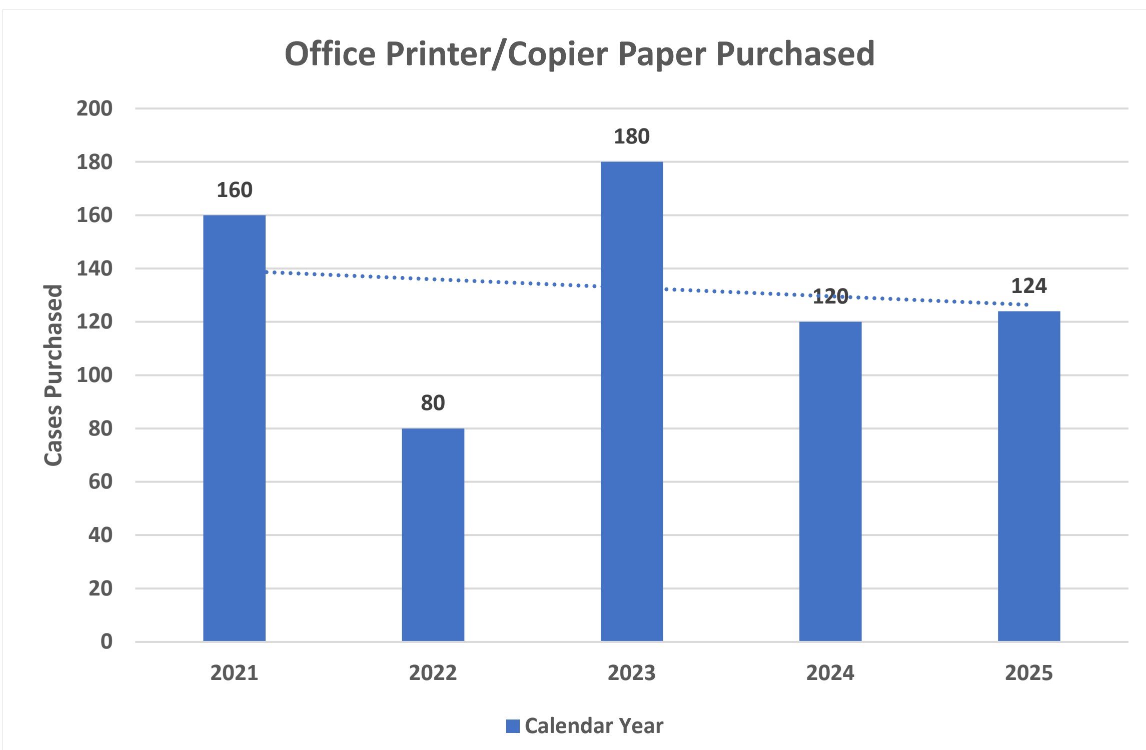
Key FY26 Highlights

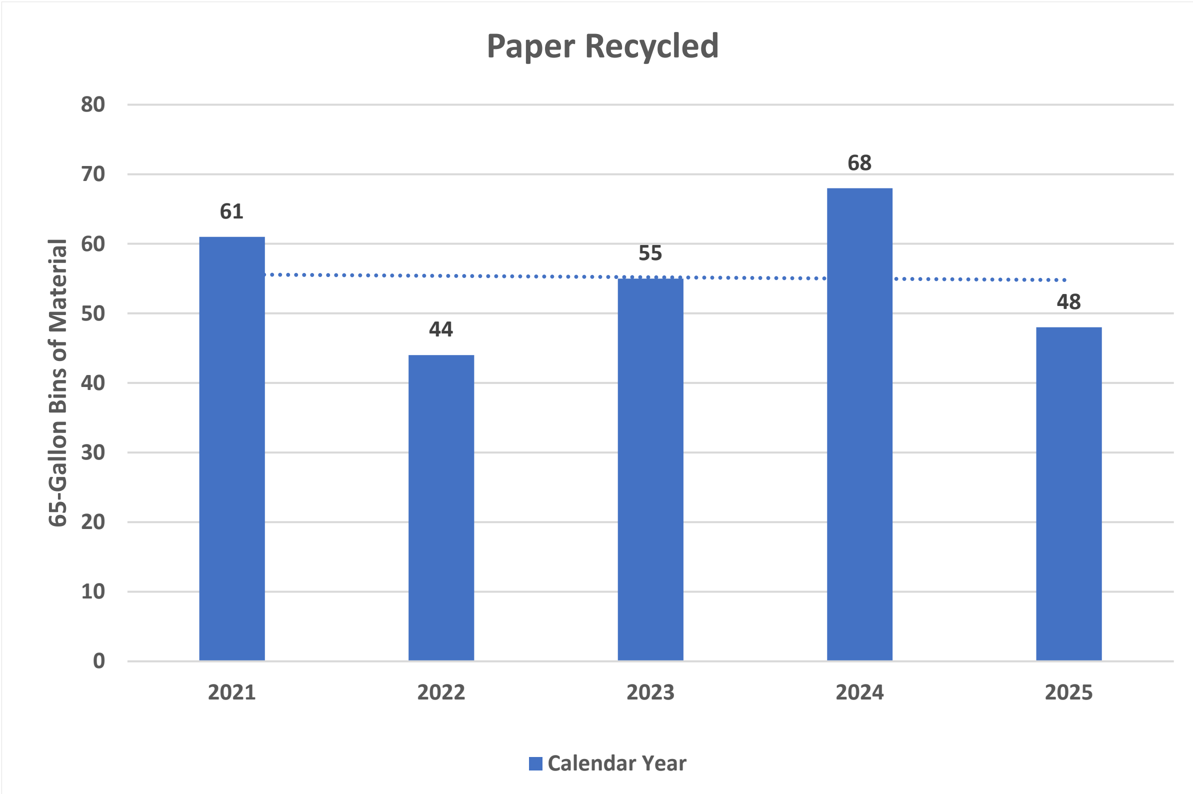
- Reduced VLT packaging waste by more than **60%** per shipment.
- Achieved **90%+ recyclability** of packaging materials.
- Improved operational efficiency through streamlined packaging and handling processes.
- Diverted approximately **64 kg of electronic waste annually** through component-level repairs.
- Extended the useful life of electronic equipment through refurbishment and reuse.
- Reduced material consumption and repair costs while advancing a sustained reduction in shipping materials.

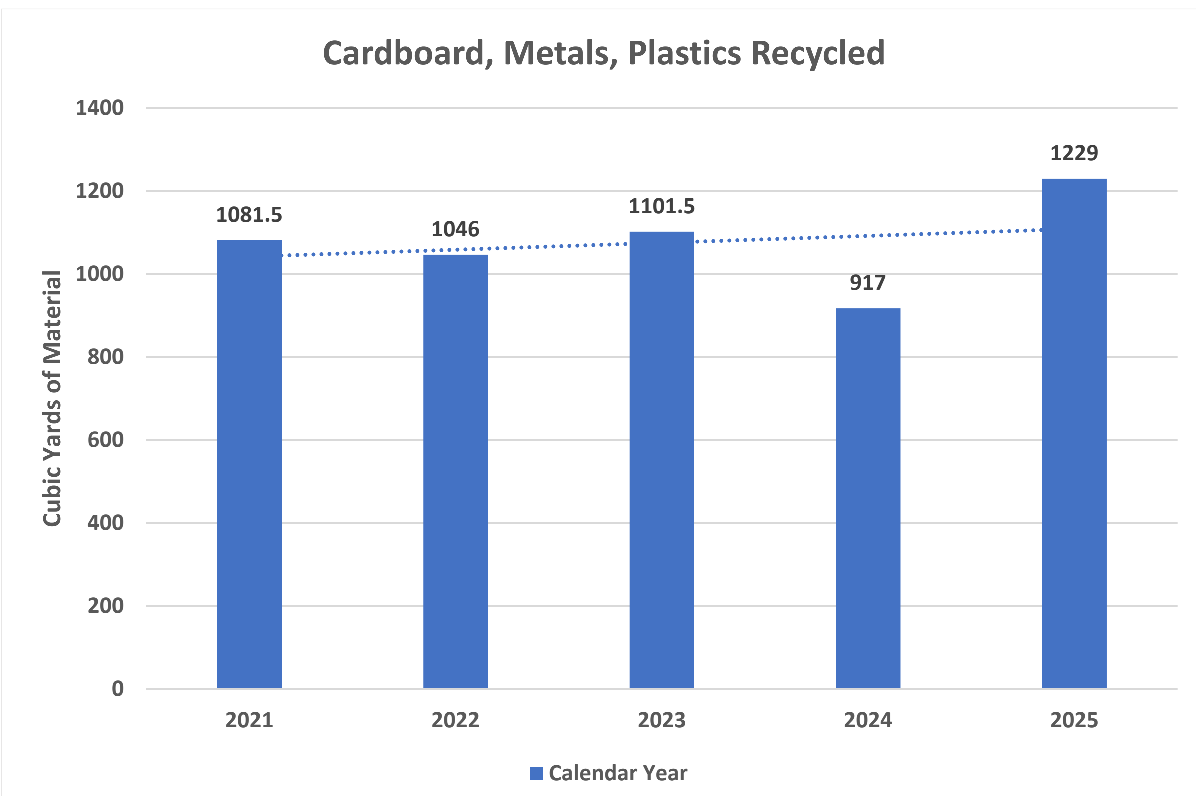
Keys to Continuous Improvement

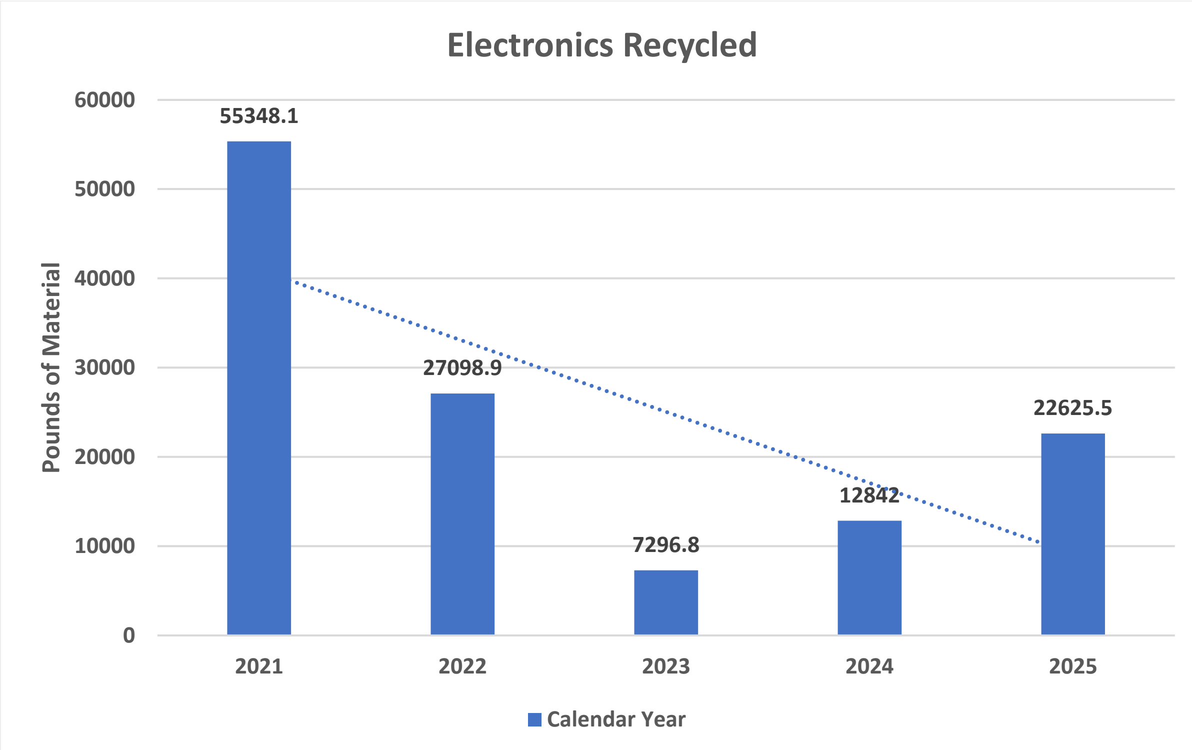
The Lottery continues to strengthen its recycling and materials management efforts through the following initiatives:

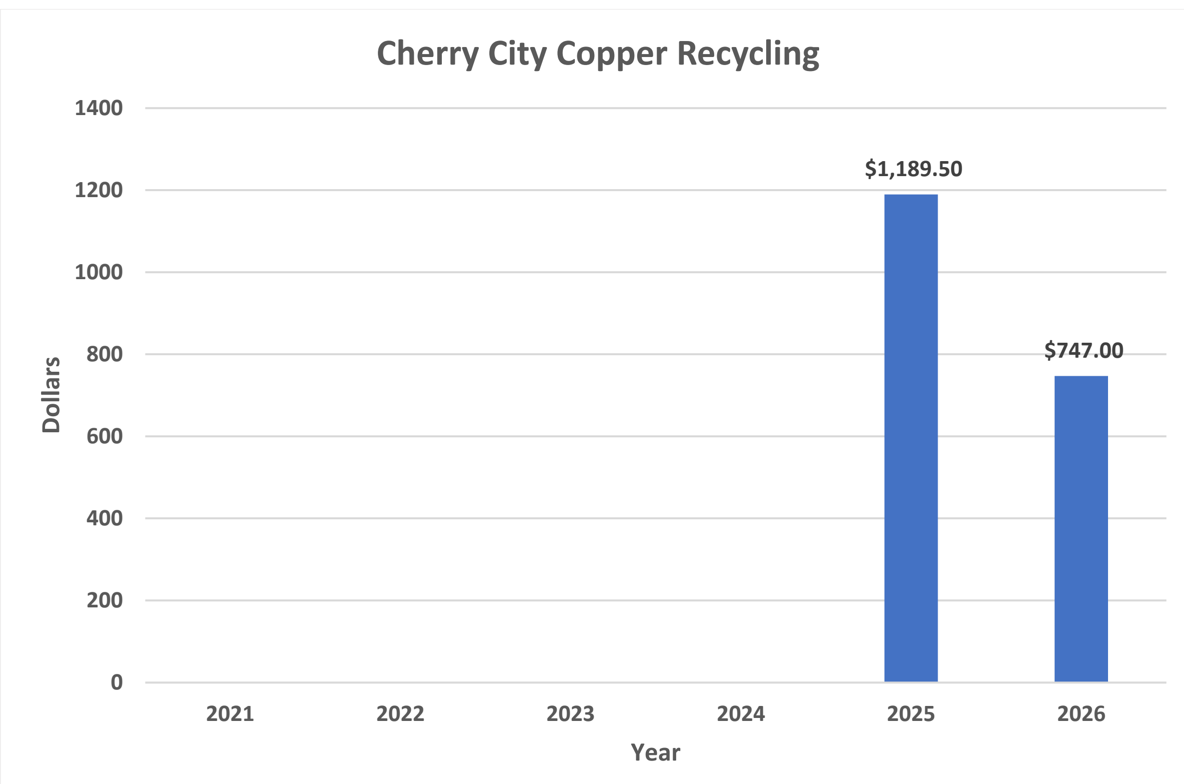
- Distribution staff and Field Representatives ensure that surplus and end-of-life materials, including point-of-purchase items returned from retailers, are properly recycled or repurposed.
- Clear, visually accessible recycling guidelines are displayed throughout office spaces to promote proper waste sorting and employee participation. The warehouse has dedicated recycling zones for all materials being recycled and are gaining funds from metal recycling and copper recycling.
- Ongoing evaluation of waste streams is expanding recycling opportunities for materials not previously captured.
- Investment in large digital displays in conference rooms supports paperless presentations, and use of Microsoft Team and Zoom meetings reduces printing needs.
- Printer settings are configured for default double-sided printing to further reduce paper consumption.
- Office paper purchases, containing a minimum of 30% recycled content, have steadily declined since 2016 due to the adoption of DocuSign, digital workflows, teleconferencing tools, and telework practices.




Paper Recycled
65-Gallon Bins of Material
80
70
60
50
40
30
20
10
0
61
44
55
68
48
2021
2022
2023
2024
2025
Calendar Year


Cardboard, Metals, Plastics Recycled
Cubic Yards of Material
1400
1200
1000
800
600
400
200
0
1081.5
1046
1101.5
917
1229
2021
2022
2023
2024
2025
Calendar Year


Electronics Recycled
60000
50000
40000
30000
20000
10000
0
Pounds of Material
55348.1
27098.9
7296.8
12842
22625.5
2021
2022
2023
2024
2025
Calendar Year

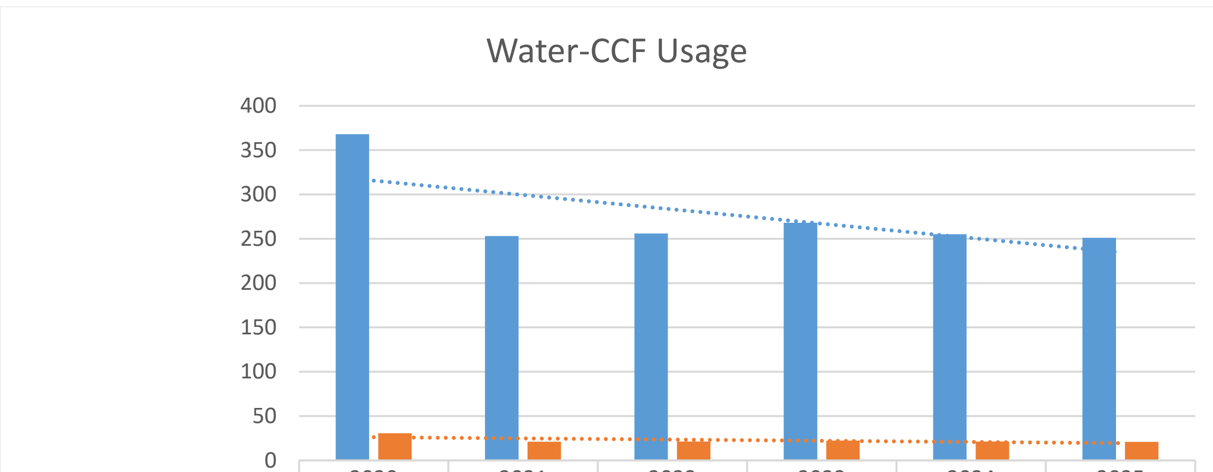

Cherry City Copper Recycling
1400
1200
1000
800
600
400
200
0
Dollars
$1,189.50
$747.00
2021
2022
2023
2024
2025
2026
Year

WATER RESOURCES

Water is a critical natural resource that is often taken for granted until conditions such as drought and reduced mountain snowpack create potential shortages for agricultural, business, and residential use. In 2015, Oregon experienced these conditions, prompting the declaration of a statewide drought emergency. Executive Order 15-09 directed state agencies to eliminate non-essential landscape irrigation and reduce overall water consumption by 15% by December 31, 2020.

The Oregon Lottery recognizes its responsibility to conserve water resources and has incorporated water efficiency into its operational practices. Water is utilized at the Salem headquarters for both indoor functions and the maintenance of outdoor landscaping areas. To mitigate environmental impact and improve stormwater management, runoff from the facility's roof and parking areas is directed into bioswales. These systems naturally filter pollutants and help regulate water flow into nearby Mill Creek, reducing the potential for contamination and erosion.

Through these measures, the Lottery continues to support responsible water stewardship while aligning with statewide conservation goals.



	2020	2021	2022	2023	2024	2025
Consumption annually	368	253	256	268	255	251
Average per month	30.67	21.08	21.33	22.33	21.25	20.92

Water Use Intensity (All Water Sources) (gal/ft²)	
Current WUI:	7.5
Baseline WUI:	21.3

Key Highlights

- Restroom remodels with high-efficiency low-flow water fixtures will continue as projects are budgeted.
- Landscape irrigation continues to be minimized.
- Bio-swales continue to be used to filter and cleanse the runoff from the Lottery HQ building and parking lot to prevent any possible contaminants from entering nearby Mill Creek.

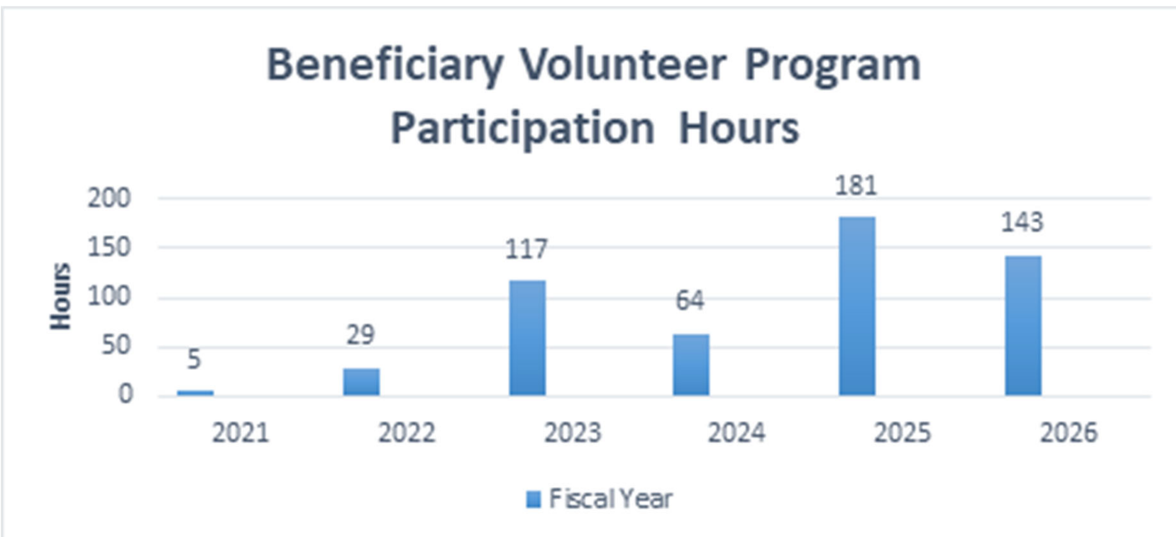
EMPLOYEE INVOLVEMENT

Oregon Lottery employees actively support sustainability and community engagement through a variety of programs and initiatives that promote environmental stewardship and public service.

- **Sustainability Committee:** Lottery's Sustainability Committee brings together employees who are passionate about helping create a more sustainable workplace and community. Through collaboration, innovation, and employee engagement, the committee supports environmental stewardship while identifying opportunities to make a positive impact across the organization. Participation is voluntary, reflecting the commitment and enthusiasm of employees who want to contribute to the Lottery's sustainability focus areas:
    - Support and advance the Oregon Lottery's sustainability priorities and initiatives
    - Encourage employee awareness, engagement, and participation in sustainable practices
    - Identify opportunities to reduce environmental impact and improve resource efficiency
    - Promote continuous improvement through new ideas, partnerships, and projects
    - Champion sustainability efforts that support both the workplace and the broader community

  The committee champions sustainability efforts, helping turn ideas into action and fostering a culture of environmental responsibility.

- **Oregon State Interagency Sustainability Coordinators Network (ISCN):** The Sustainability Committee represents the Oregon Lottery within the Oregon State Interagency Sustainability Coordinators Network (ISCN). Participation in ISCN strengthens the Lottery's ability to align with state goals while continuously enhancing its internal sustainability efforts.
- **Employee Sustainability Education:** The Lottery wellness program provides an opportunity for staff to learn about resources on recycling, energy conservation, renewable energy, and health and wellness topics.
- **Beneficiary Volunteer Program:** Employees are provided up to eight hours of paid leave per fiscal year to participate in volunteer activities that support Lottery-funded programs and organizations. Volunteer opportunities include partnerships with:
    - SOLVE (e.g., beach and community clean-up efforts)
    - Oregon State Parks
    - Veteran support programs
    - Governor-sponsored events: Charitable Fund Drive, Food Drive, and Toys for Tots.



CONCLUSION

These efforts demonstrate the Oregon Lottery's continued commitment to environmental stewardship, operational excellence, and responsible governance. We remain dedicated to strengthening these initiatives and contributing to a sustainable future for the people of Oregon.

2026 Sustainability Committee Report

Lottery Overview

01 Who We Are

02 What We Do

03 Mission

04 Values

Lottery Funding

01 Beneficiaries

02 Oregon Administrative Rules (OARs)

03 FY26 Insights

Sustainability and Public Value

01 Core Sustainability Commitment

Ensure sustainability remains a fundamental part of the Lottery's governance and long-term resilience strategy.

02 Data-Driven Transformation

Leadership changes emphasize
data-driven decisions to enhance environmental and operational efficiency.

03 Statewide Climate Directives

Compliance with state orders drives adoption of renewable energy and high-efficiency technologies.

04 Sustainability in Daily Operations

Routine practices like double-sided printing and digital workflows
embed sustainability
into everyday work.

Sustainability Performance

Oregon Lottery continues to balance environmental stewardship with operational excellence by reducing emissions, improving efficiency, minimizing waste, and engaging employees in sustainability initiatives.

FY26 Highlights

- Facility energy upgrades completed in 2025
- Fleet modernization and vehicle reduction
- 60% reduction in packaging waste
- 90%+ recyclable packaging materials
- Growing employee volunteer and sustainability participation
- Ongoing renewable energy commitment

Fleet Optimization Efforts

Fleet Modernization

- Reduced fleet size by 10 vehicles (151 → 141)
- Increased adoption of hybrid and electric vehicles
- Optimized delivery, shuttle, and field service routes

Performance Improvements

- Fleet efficiency metrics reached 123–133% of target
- Previously underperforming MPG measures improved from 91-95% to 101%
- EV productivity increased from 5,102 to 23,983 miles

Financial Impact

- Operating cost per mile stabilized and controlled
- Supports goal of reducing total fleet operating costs by 17%

Distribution Operations & Resource Management

Key Contributions

- Distribution staff track and manage recyclable materials
- End-of-life equipment properly recycled or repurposed
- Returned retailer materials evaluated for reuse
- Dedicated warehouse recycling zones established
- Revenue generated through metal and copper recycling

Continuous Improvement

- Expanded recycling opportunities across operations
- Improved material segregation processes
- Increased focus on reuse before disposal

Facilities Energy

Facility Upgrades Completed

- High-efficiency warehouse heating system
- High-efficiency gas boilers
- Upgraded Salem office and warehouse lighting
- Integrated warehouse ventilation system controls

Renewable Energy

- Continued participation in PGE's Green Source Program
- Support for cleaner energy generation

Results

- Reduced building energy consumption
- Lower greenhouse gas emissions
- Improved workplace conditions
- Reduced long-term operating costs

OREGON LOTTERY.

Facilities Optimization & Future Planning

Space Optimization

- Relocated departments into existing office space
- Reduced overall energy demands
- Improved employee working environments

Operational Footprint Reduction

- Eliminating need for external warehouse by February 2027
- Reduction in future carbon emissions
- Long-term operating cost savings

Water Conservation

- Continued reduction in water consumption
- Low-flow fixture upgrades completed
- Bioswales protect nearby Mill Creek

Recycling & Materials

Materials Recycled

- Electronics, Metals, Plastics, Pape, and cardboard
- Lamps and lighting materials
- VLT components

Process Improvements

- Segregation and tracking of recyclable materials
- Expanded digital workflows reducing paper usage
- Continued equipment refurbishment and redeployment

Results

- Reduced landfill waste
- Extended asset life cycles
- Lower material consumption

FY26 Success Story:
Sierra VLT Packaging Redesign

<u>Before:</u>

Approximately 8 cubic yards of waste per shipment

<u>After</u>

Approximately 3 cubic yards of waste per shipment

<u>Results</u>

- More than 60% reduction in waste
- More than 90% recyclable materials
- Reduced packaging costs
- Faster packing and unpacking process
- Lower landfill impact

Extending Equipment Life: Circular Economy & Equipment Repair

01

Component Level Repair Program

- Focus on repair rather than replace
- Refurbished processor boards now utilized
- Reduced need to replace entire assemblies

02

FY26 Impact

- Approximately 64 kg of e-waste diverted annually
- Average of 40 repairs annually
- Extended useful life of VLT equipment
- Significant cost avoidance

03

Benefits

- Lower environmental impact
- Reduced material consumption
- Reduced purchasing costs
- Supports circular economy principles

Employee Involvement

Sustainability Committee

- Voluntary employee participation
- Cross-functional collaboration
- Continuous improvement initiatives
- Employee-driven sustainability ideas

Sustainability Education

- Recycling awareness
- Energy conservation education
- Renewable energy education
- Health and wellness resources

Focus Areas

- Employee awareness
- Environmental stewardship
- Resource efficiency
- Continuous improvement

Community Impact & Volunteerism

Employee Benefit

- Up to 8 hours of paid volunteer leave per year

Community Partnerships

- SOLVE community cleanups
- Oregon State Parks
- Veteran support programs
- Marion Polk Food Share
- Governor-sponsored charitable initiatives

Key Takeaways and Looking Ahead

FY26 Achievement

- Fleet reduced by 10 vehicles
- Efficiency metrics exceeded targets
- Packaging waste reduced by 60%
- 90%+ recyclable packaging
- 64 kg of e-waste diverted annually
- Continued energy and water reductions
- Strong employee participation

Future Priorities

- Expand EV and hybrid vehicle fleet
- Continue facility modernization
- Eliminate external warehouse by 2027
- Advance paperless operations
- Expand circular economy practices
- Deepen employee engagement

OREGON LOTTERY

Thank You

OREGON LOTTERY®

Together, we do good things.

Oregon
Tina Kotek, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 986-5200
FAX (503) 378-4844
www.oregon.gov/dsl

Date: September 11, 2026

To: Oregon Sustainability Board

From: Kaitlin Lovell, Director, Oregon Department of State Lands

Re: DSL Sustainability Plan Update – 2026

The Oregon Department of State Lands (DSL) is pleased to provide this update on our sustainability efforts over the past year. DSL's mission naturally aligns with the duty of the Sustainability Board to encourage activities that best sustain, protect and enhance the quality of the environment, economy and community for the present and future benefit of Oregonians. Adopted in 2024, DSL's Sustainability Plan is aligned with our 2022-2027 Strategic Plan to capture programmatic impacts on sustainability through projects that focus on achieving outcomes relevant to sustainability within overarching strategic goals of Exceptional Service, Thriving Oregon, and Supporting Schools. Our Sustainability Plan also emphasizes sustainability through fleet and building management, identifying projects that contribute to specific outcomes, as well as the importance of centering diversity, equity, and inclusion in our pursuit of sustainability.

The update below provides an overview of Sustainability Plan progress and highlights initiatives advancing sustainability outcomes, with 11 of the 15 identified progress targets meeting or exceeding expectations. We also preview continuing or upcoming efforts, including our work to update DSL's strategic plan that is anticipated to identify opportunities related to sustainability.

PROGRESS TARGETS AND PROJECT HIGHLIGHTS:

Exceptional Service
Sustainability efforts in the Exceptional Service goal focus on outcomes of improving service and increasing access to information and services. These support Oregon's sustainability goals in ORS 184.423 to support sustainable communities including independent and productive citizenry while making investments and expenditures that help promote improvements in the efficient use of energy, water and resources.

Progress Target 1: Increase number of people reached from year to year through the DSL website, social media, and email lists.
DSL has seen year-to-year growth in digital community outreach across all online channels, including email subscribers, website visitors, and followers across all three social media accounts. This growth indicates continued progress in expanding public outreach and provides an increasingly sustainable way to share information with a broad audience.

As DSL continues to broaden its online reach, digital communications offer an efficient and sustainable means of connecting with customers while reducing reliance on print materials for routine outreach. At the same time, DSL recognizes that not all customers have consistent or easy access to online information. When critical information needs to reach customers broadly and equitably, DSL continues to prioritize targeted mailings to ensure that all customers have access to essential information. For example, when announcing major program and fees changes to existing waterway customers or to raise awareness of the upcoming transition to our new online customer service platform DSLConnect. We work to send this information in the form of postcards, reducing use of paper and waste.

Thriving Oregon

Sustainability efforts in the Thriving Oregon goal focus on enhancing lands and waters owned, managed, or regulated by DSL, aligning with the Sustainability goal to "help reduce adverse impacts on native habitats and species and help restore ecological processes

Progress Target 1: No net loss of wetlands year to year.

DSL recorded a net loss of 43.62 acres of wetlands through permitted impacts, enforcement actions, compensatory mitigation, and voluntary restoration. Results can vary significantly from year to year based on the timing of mitigation bank projects and voluntary restoration efforts.

Progress Target 2: Continuously invest in research, projects, and practices that promote climate change and wildfire resilience on agency-managed lands, waterways, and wetlands.

In FY 2025, DSL continued investing in climate and wildfire resilience through 22 research projects, restoration efforts, and practices. Key milestones included the Wasson Creek Restoration Project, increased South Slough management planning, furthering implementation of the Abandoned and Derelict Vessel (ADV) program, and prioritization of land and water restoration projects. At South Slough, 2.9% of acres received resilience-focused restoration, while 9,527 rangeland acres were treated for juniper and noxious weeds and 2% of DSL-managed forestlands received treatment.

We also completed three projects supporting this goal within its 2025 Strategic Plan: the updated Oregon Wetland Program Plan, Wetland and Land Use Change Report, and updated Habitat Restoration General Authorization. Six additional projects remain underway, including wildfire risk reduction on school rangelands, professional development, student learning opportunities, volunteer and career development opportunities, and research to inform coastal resource policy and DSL practices. Overall, we are making continued progress toward building climate and wildfire resilience while expanding stewardship, education, and restoration opportunities.

Supporting Schools

Sustainability efforts in the Supporting Schools goal focus on increasing net revenue for Oregon's Common School Fund. This goal supports Oregon's sustainability goal that "State Operations should reflect partnerships with communities and business" (ORS 184.423(1)(g) by increasing our annual unrestricted payments from the Common School Fund to local schools in every community.

Progress Target 1: Increase annual cash generated by Department activities and deposited into the Common School Fund by 10%.

Deposits to the Common School Fund increased 47.0% from FY 2024. The increase was primarily driven by continued growth in receipts from the Unclaimed Property Program, which generated $231 million in FY 2025, an increase of $84 million (57.3%) from FY 2024.

Progress Target 2: Increase revenues generated by land management activities, excluding ODF timber harvest receipts, by 3%.
Revenue decreased approximately $2.2 million from FY 2024, which was an unusually high-producing year. Waterway easement revenue decreased approximately $1.6 million, while revenue from industrial, commercial, and residential lands declined approximately $400,000, largely due to vacancies at the Salem DSL building. Increased mineral royalties partially offset these declines, while rangeland, agricultural, and special stewardship revenues remained relatively stable.

Progress Target 3: Increase the percentage of South Slough Reserve operations funded through sources other than the Common School Fund (Target: 50%).
External grants, fees, and other non-Common School Fund sources accounted for 67.96% of South Slough Reserve funding, the highest percentage to date. Several successful grant awards supported restoration and construction projects and allowed the Reserve to leverage state funds as matching funds. Staff continue to pursue external grants and other funding opportunities to support Reserve operations and projects.

Progress Targets 4 and 5: Administrative and Operational Costs - Percent of program revenue streams used to cover administrative and operational costs of programs for forest and non-forest lands exclusive of the Elliott State Research Forest (ESRF).
DSL's FY25 KPM report combines the Supporting Schools Progress Targets 4 and 5 into a single measure (KPM 2a). Administrative and operational costs accounted for 84.9% of program revenue, compared with the 45% target. Forestland revenues decreased by approximately $1 million from FY24, while forestland expenses decreased by approximately $1.5 million. Non-forestland management revenues decreased by 28% and expenses increased by 21%.

Building and Fleet Management
Sustainability efforts in areas of building and fleet management focus on reducing and maintaining energy and resource use and waste. DSL's effort directly supports the goal for "Investments in facilities, equipment and durable goods should reflect the highest feasible efficiency and lowest life cycle costs" and that "investments and expenditures should help promote improvements in the efficient use of energy, water and resources." OAR 183.423(1)(b) and (c).

Progress Target 1: Maintain Department energy use in accordance with Department of Energy (ODOE) standards, currently set at 50 EUI (Energy Use Intensity).
As of 2025, the Salem office has an EUI of 42.7, below ODOE's 50 EUI target, indicating that DSL is using less energy than the established standard.

Progress Target 2: Maintain regular vehicle maintenance and inspections.
Vehicle maintenance is conducted as needed based on mileage, and DSL vehicles are inspected every two months by the DSL Safety Committee. Fleet usage remains on target.

Progress Target 3: Engage with DAS during the 23-25 biennium to discuss options for transitioning fleet vehicles to hybrid or electric models.
DSL has added its first fully electric vehicle (EV), a Subaru Solterra, to the Salem fleet. The EV supports the Department's goal of reducing fleet-related energy use and emissions.

Progress Target 4: Establish necessary charging infrastructure by 2027 if the Department acquires electric or plug-in hybrid vehicles.

DSL has added EV charging infrastructure at the State Lands building parking structure and at South Slough as part of its entrance and parking lot upgrade. The Salem fleet's dedicated charger also provides a cost and energy-use benefit, with charging costs of approximately $0.20/kWh, compared with the current DAS charging rate of approximately $0.42/kWh.

Progress Target 5. Staff complete as much work as possible electronically.
All new files are saved electronically to DSL's database. Public-facing applications and payments are also available electronically. Staff utilize several electronic systems to support these efforts. Our commitment to increasing electronic processes will be further strengthened once DSLConnect is fully implemented and operational, which is expected to provide a significant benefit to the agency and further reduce reliance on paper-based processes.

Progress Target 6: Reduce or maintain monthly paper use from the 2023 average of 4,600 sheets per month.
Since January 2026, the Bend and Salem offices have averaged 7,521 printed pages per month. DSL will continue to monitor paper use and identify opportunities to reduce printing and support more sustainable electronic processes.

Progress Target 7: Transition to 100% recycled paper purchases.
DSL has transitioned to purchasing 100% recycled paper.

DIVERSITY, EQUITY, INCLUSION AND MEANINGFUL ENGAGEMENT:

DSL continues to advance diversity, equity, and inclusion across its programs, policies, and practices to support equitable customer service, public participation, environmental justice, and meaningful engagement with communities and Tribal Governments. DSL has developed a DEI Committee that continues to support staff education and training and is developing a DEI Action Plan aligned with the agency's Strategic Plan and Affirmative Action Plan. DSL also supports environmental justice through its Environmental Justice Liaison, strengthens public participation through its Community Engagement Officer, and maintains ongoing communication and consultation with Oregon's nine federally recognized Tribal Governments through its Tribal Liaison and related interagency efforts.

LOOKING FORWARD:

Modernizing DSL operations and customer service
DSLConnect, our new administrative system for authorizations, customer information, and payment processing, is in development and scheduled to launch in November 2026.

Expanding wetland, waterway, and habitat resilience
DSL will pursue additional resources and partnerships to expand compensatory mitigation options and improve the resiliency of Oregon's wetlands, waterways, and territorial sea. DSL will also continue to seek sustainable funding for the state's Abandoned and Derelict Vessel Program to address the serious threat these vessels pose to waterways while also continuing to maximize dollars sent to schools.

Advancing renewable energy on state lands
We are analyzing state lands for renewable energy potential and exploring opportunities to lease lands for renewable energy uses where feasible. Current efforts include three active solar

authorizations and an anticipated geothermal license to explore energy production development at Crump Lake. DSL is also working with the Department of Fish and Wildlife to explore conservation easements associated with renewable energy habitat mitigation.

Restoring and improving rangeland habitat
We are continuing habitat uplift projects across approximately 16,000 rangeland acres, including three juniper removal projects and four noxious weed management projects.

Exploring geologic carbon sequestration
We are working with the Department of Geology and Mineral Industries (DOGAMI) to explore the potential for geologic carbon sequestration. DOGAMI will drill an "information hole" on state land to evaluate whether the geology is conducive to future carbon sequestration.

Updating DSL's strategic plan
As of August 2026, we have launched an update to our strategic plan, which will ensure sustainability efforts are aligned with broader strategic goals. As part of the planning process, we anticipate identifying and exploring opportunities related to sustainability and developing sustainability-focused initiatives.

CONCLUSION

We are proud of the work we have accomplished to advance Oregon's sustainability goals in the last biennium. We remain committed and dedicated to improving Oregon's environmental, economic, and societal outcomes in our work ahead.

OREGON DEPARTMENT OF STATE LANDS

2026 DSL Sustainability Plan Update

Ali Ryan Hansen, DSL

September 11, 2026

OUR MISSION

To ensure Oregon's school land legacy and protect waterways and wetlands of the State through superior stewardship and service

Sustainability Intersections

Environmental and Economic
Contributing to communities in multiple ways

Efficient and Effective
Strategic and operational alignment

Serving Oregon
Increasing access, enhancing experience

Present and Future
Benefits for current and future communities

Our Sustainability Plan

Aligned to Strategic Goals

Exceptional Service, Thriving Oregon, Supporting Schools

Managing Infrastructure

Emphasis on efficiency in building and fleet management

Centering DEI Work

Advancing diversity, equity, inclusion through pursuit of sustainability

2026 Highlights

Progress Targets and Projects

Exceptional Service

Thriving Oregon

Supporting Schools

Building and Fleet Management

Diversity, Equity, Inclusion and Meaningful Engagement

Looking Forward

Progress: Exceptional Service

Exceptional Service

Target: Increase number of people reached from year to year through the DSL website, social media, and email lists

Status: Met

- Year-to-year **growth** in email subscribers, website visitor, social media followers.
  - Digital communications provide an efficient, sustainable way to reach customers
  - Targeted mailings continue to ensure equitable access to critical information.
  - DSLConnect set to launch in November 2026

Progress: Thriving Oregon

Climate & Wildfire Resilience

Target: Continuously invest in research, projects, and practices that promote climate change and wildfire resilience on agency-managed lands and waterways, and wetlands.

Status: Met

- **22** research, restoration, and resilience projects in FY25
- **9,527 rangeland acres** treated for juniper and noxious weeds
- **2% of DSL-managed forestlands** received treatment
- **2.9% of South Slough acres** received resilience-focused restoration

Wetland Protection

Target: Continuously invest in research, projects, and practices that promote climate change and wildfire resilience on agency-managed lands and waterways, and wetlands.

Status: Not Met

- **FY25 recorded a net loss of 43.62 wetland acres**
  - Results reflect permitted impacts, enforcement actions, mitigation, and voluntary restoration
  - Timing of loss/gain affects reported number

Progress: Supporting Schools

Target: Increase Deposits Common School Fund

47% increase in annual deposits to the Common School Fund

Target: 10% increase | Exceeded Target

Increase primarily driven by Unclaimed Property Program receipts Unclaimed Property generated **$231 million in FY 2025**, up **57.3% ($84 million)** from FY 2024

Target: Land Management Revenue

Revenue decreased approximately $2.2 million from FY 24

Target: 3% increase | Not Met

- FY 24 was an **unusually high-producing year**
- Waterway easement and ICR revenue decreased
- **Increased mineral royalties** partially offset these declines
- Rangeland, agricultural, and special stewardship revenues remained relatively stable

Target: South Slough Reserve Funding Mix

67.96% of operations funded through grants, fees, and other non Common School Fund sources

Target: 50% | Exceeded Target

Highest to-date!

Grant funding supports restoration and construction projects

Target: Administrative & Operational Costs

84.9% of program revenue used for admin/ops costs

Target: 45% | Not Met

- Forestland revenue
- decreased approximately **$1 million**, while expenses decreased approximately **$1.5 million**
- Non-forestland management revenue decreased **28%**, while expenses increased **21%**

Progress: Building and Fleet Management

Target: Energy Efficiency

Salem office EUI: **42.7;** Below ODOE target of **50 EUI**

Target: Fleet Management

Fleet management remains on target, with vehicles receiving regular mileage-based maintenance and inspections every two months by the DSL Safety Committee.

Targets: Electric Vehicles

Added DSL's **first fully electric vehicle: Subaru Solterra**

EV charging infrastructure added:

- State Lands building parking structure
- South Slough entrance/parking lot project

Dedicated Salem charger costs approximately **$0.20/kWh**

DAS charging rate: approximately **$0.42/kWh**

Target: Electronic Operations

- New files stored electronically in DSL systems
- Electronic public applications and payments
- File folders reused or recycled when appropriate
- DSLConnect expected to further reduce paper-based processes

Targets: Paper Reduction

Bend and Salem offices average 7,521 pages per month, compared with the 2023 baseline of 4,600 pages per month.

DSL now purchases 100% recycled paper.

Diversity, Equity, Inclusion & Meaningful Engagement

DSL advances DEI across programs, policies, and practices to support:

- **Equitable customer service and public participation**
- **Environmental justice and meaningful community engagement**
- **Tribal consultation and collaboration**

Key efforts:

- DEI Committee supporting staff education and training and developing a DEI Action Plan
- Environmental Justice Liaison
- Community Engagement Officer strengthening public participation
- Tribal Liaison supporting ongoing communication and consultation with Oregon's nine federally recognized Tribal Governments

Looking Forward

Modernizing operations and customer service

Expanding wetland, waterway, and habitat resilience

Advancing renewable energy on state lands

Restoring and improving rangeland habitat

Exploring geologic carbon sequestration

Updating DSL's strategic plan


STATE OF OREGON
OREGON DEPARTMENT OF
STATE LANDS
Thank You!
Ali Ryan Hansen
Chief of Staff
Oregon Department
of State Lands

Oregon Sustainability Board
OSB Work Plan, Updated September 2026

Focus Area	Project/Initiative	Board Role	Lead Board member	Timeline	Status and Other Comments
Fleet Decarbonization	EV acquisition + charging infrastructure expansion	Letter of support for funding request on topic	Josh Proudfoot	Draft letter to be approved at September meeting.	9/2 - Discussion item for September meeting. ---------------------- 6/5/26 - Staff will prepare a draft letter for OSB review. If approved, staff will include in budget proposal for consideration by DAS director and Governor Office.
Sustainable Buildings	Sustainable design guidelines for state buildings, parking lots, and landscapes	Advise DAS on sustainable design principles and concepts; advocate for policy, incorporation in capital project funding review process, and/or legislation.	Webly & Elin	DAS to initiate engagement ASAP (work plan in development). Draft policy to decision makers by end of year?	9/2 - Zechariah met with Elin+Webly twice to date; Z proposing statewide policy approach to EAM leadership; DAS internal sustainable design criteria shared with DEQ for initial feedback. ---------------------------------- 6/5/26 - HB 3409 (2023) calls on DAS to develop sustainable design guidelines for the enterprise. OSB has expressed interest in assisting in development of the SDGs and promoting their use by state agencies.
Statewide Sustainability	Sustainability Plan Guidelines	Update existing plan guidelines to be of value for all state agencies. Include a presentation template to assist agencies in preparing presentations to the OSB.	Webly & Elin	Elin, Webly, Z currently working on update - proposed update to be shared in advance of June meeting (ideally approved during June meeting).	9/2 - Updates incorporated from June meeting. Staff has shared draft version with agencies seeking advice on upcoming OSB presentations.
Statewide Sustainability	Legislative Report	Statutory required report	Secretary Read	Goal to complete by December so that report can be shared in advance of session. Statutory deadline - March 30 of 2027.	9/2 - Dedicated agenda item for Sustainability Forum and during Sept. OSB business meeting. Staff will have final draft for review of OSB during December 11 meeting.

Ongoing initiatives / 'parking lot items'

Fleet Decarbonization	Increase renewable diesel fuel use as bridge fuel.	Letter of support as appropriate		TBD - depends on opportunities	
Procurement	Green Chemistry				
Procurement	Advance renewable energy use by DAS / state agencies. Explore Direct Access as a potential path (i.e., contracting directly with renewable energy service provider instead of utility).	Advocate for best path forward once options are identified.		Stretch goal to be done by EOY - likely a 2027 task	Day to day work on this task doesn't seem to be appropriate for OSB engagement. Staff proposes to pursue internally and update OSB / ask for guidance at key intervals.
Statewide Sustainability	Agency presentations on sustainability plan progress / updates.	Receive presentations from agency leadership on a regular internal.		Staff to identify which agencies are due to present to OSB at beginning of year.	
Statewide Sustainability	DAS statewide sustainability policies	Review policies and make suggestions for improvement and impact.		Ongoing - as policies are up for renewal	Examples include: - Energy management and conservation policy - Sustainable procurement policy
Statewide Sustainability	Sustainability awards program	Board would lead up statewide awards program.		Initiate if capacity available come June	Board historically supported an awards program, but efforts were phased out.
Sustainable Buildings	Building Portfolio Standards (HB3409)	Receive updates on implementation. Advocate for improvements / funding as deemed appropriate.		Ongoing - fit into OSB agendas as needed / time allows.	

Completed initiatives

Statewide Sustainability	Sustainability Forum / 25th Anniversary Celebration	OSB as "host organization" - board members as active participants, hosting sessions / facilitating discussions, etc.	Rex, Chris, Cassidy	**Target date is September 10	Completed

DRAFT

2026 Oregon Sustainability Board

Agency Guidelines

Introduction

This document provides guidelines for state agencies that are developing sustainability strategies or plans for the first time or revising existing plans or strategies. The Oregon Sustainability Board has designed these guidelines to help agencies put the concepts of sustainability into plans and, ultimately, into practice, contributing to sound stewardship of Oregon's natural, social, and economic systems for today and tomorrow.

For additional guidance or assistance, contact the Office of Sustainability within the Department of Administrative Services (DAS):

Zechariah Heck, Statewide Sustainability Officer
(971) 493 - 8531
Zechariah.Heck@das.oregon.gov

Steven Markham, Statewide Sustainability Analyst
(503) 932-6319
Steve.markham@das.oregon.gov

Why develop a sustainability plan?

State agencies in Oregon are expected to develop sustainability plans not only as a best practice, but to comply with state laws, executive orders, and statewide policies that integrate sustainability into government operations and decision-making.[1] That said, sustainability plans do not need to be standalone documents. Agencies are encouraged to integrate sustainability strategies into existing planning or reporting processes wherever appropriate to reduce duplication of effort and avoid unnecessary reporting.

The Oregon Sustainability Act defines sustainability as balancing environmental, economic, and community needs for current and future generations, while subsequent executive orders and policies require agencies to improve energy and resource efficiency, reduce greenhouse gas emissions, support equitable and resilient communities, and incorporate sustainable procurement, fleet, and facility practices. A comprehensive sustainability plan helps agencies meet these obligations, improve operational efficiency, reduce long-term costs and risks, strengthen public trust, and support Oregon's long-term environmental, economic, and social well-being.

Approaches to Sustainability Planning

Oregon's state agencies vary widely in their missions, facility and fleet characteristics, and program responsibilities. To ensure that each agency contributes meaningfully while avoiding unnecessary burden, the OSB suggests two criteria to guide expectations for sustainability planning:

[1] See Appendix for list of applicable statutes, executive orders and statewide policies.

Criterion 1: Mission Relevance

Some agencies have missions that directly influence Oregon's overarching environmental quality, climate resilience, natural resources, transportation systems, social equity, economic wellbeing, or community health. Here, an agency's mission relevance applies to sustainability regardless of agency size or operational footprint. For these agencies, program design and service delivery are major drivers of sustainability outcomes.

Agencies with sustainability-related missions should at least have a 'sustainability strategy' that:

- Focuses on how agency programs, policies, and investments advance long-term sustainability outcomes for Oregon and its inhabitants.
- Describes how the agency's programs relate to climate adaptation and/or GHG emissions reduction, equity, and community impact.
- Includes operational sustainability as suggested below in Criterion 2.

Criterion 2: Operational Footprint

Agencies differ in their level of control over operations (i.e., facilities, fleet, and infrastructure). The Board identifies three categories that agencies can self-identify with:

1. **Little-to-no operational control:** Leased facilities, small or no fleet, no bulk fuel or owned assets, and largest procurement items being office supplies.
2. **Medium operational control:** Leased facilities but pay utility bills and/or have ability to track energy use; moderate fleet size with some influence on vehicle type; and/or field programs where sustainable strategies could be employed through purchasing decisions or education.
3. **High operational control:** Owned facilities, land, or bulk-fuel systems; large fleets with diverse occupational needs; significant procurement of supplies that impact sustainability; various programs where sustainable strategies can be employed.

When combined, these two criteria guide agencies toward an appropriate approach to developing a sustainability strategy or plan, depending on mission relevance and operational control. The next section provides specific guidance for agencies as they develop their plan.

Sustainability Plan Template

Use the table below to determine which elements to include in your sustainability strategy or plan. Start at the top and work downward – your responses will point you to the questions and metrics that apply to your agency.

Criterion 1: Mission Relevance
Agency does not have an overarching mission related to sustainability: ➔ No expectations **see Criterion 2** Agency has an overarching mission that relates to sustainability: ➔ Develop statement speaking to how the agency advances Oregon's sustainability objectives (reference Sustainability Act and relevant Executive Orders). ➔ Encouraged to include narrative in sustainability plan by answering the following questions: - How does your agency's mission align with Oregon's definition of 'sustainability'?

- How do your agency's programs or services influence the environmental, social, or economic well-being of Oregon communities?
- How does your agency assess the downstream or upstream effects of its work on natural resources, community health, climate adaptation, and overall resilience of Oregon?
- How do equity considerations influence the way your agency evaluates the external impacts of its programs or regulations?
- How does your agency engage communities to understand the external impacts of your programs?
- Are there policies, mandates, or operational constraints that limit your ability to maximize positive external sustainability outcomes? If so, what would help?
- What innovations or cross-agency collaborations could expand the positive external impacts of your agency's work?
- How does your agency consider intergenerational impacts when designing programs or setting priorities?
- What external sustainability successes or challenges from your recent work could the OSB learn from or help amplify?

Criterion 2: Operational Footprint

****Little-to-no operational control**

➔ Agencies in this category are not expected to develop a strategy or plan. However, such agencies should regularly check-in with the DAS Sustainability Office to confirm awareness of the latest statewide policies related to sustainability.

**** Medium operational control**

➔ Agencies in this category should prepare an operational plan with the following metrics, including trends for each to highlight progress or where additional resources are needed.

Metric	Unit	Measure	Data Source
Building Performance Standards (BPS) // Status of facilities enrolled in the State Energy Efficient Design (SEED) Program	Energy Use Intensity (EUI)	1. Identify facilities that are subject to BPS / SEED and report on compliance. *Occupancy rate of each building is encouraged to be included.*	Facility manager Oregon Dept. of Energy DAS
Percent of Zero-Emission Vehicles in Fleet	Vehicle count	1. % - Total ZEVs / Total fleet vehicles 2. # of miles traveled in ZEV compared to total miles traveled *Include description of typical use case of vehicle categories.*	Agency fleet manager
Fleet carbon emissions per total vehicle miles travelled	Metric tons of carbon dioxide equivalent (MT CO_2e).	1. Calculated from vehicle fuel mix and total vehicle miles traveled.	DAS Fleet report (annual)
Water consumption	Gallons per meter	1. Use quantities reported on utility bills (may need to convert to gallons).	Invoices from utilities May need to ask landlord if in leased building and do not directly pay utilities

**** High Operational Control**

➔ Agencies in this category should develop a comprehensive operational sustainability plan, inclusive of the metrics listed above in addition to the following metrics.

➔ Consider reporting on other relevant metrics, like amount of electric landscaping equipment used or number of staff engaged in sustainability education, events, or trainings.

Metric	Unit	Measure	Data Source
GHG emissions	MT CO2e	Scope 1 – 3 GHG emissions, calculated using the G3C carbon calculator tool (or similar).	Varies – most readily available data comes from financial audit software Contact DAS for access to tool
Installed solar capacity	Annual energy generation in MWh/year	Total amount of electricity solar system(s) produce over a 12-month period.	Facility manager
Percent of renewable fuel used	Gallons	% - total gallons of renewable fuel / total gallons used over a 12-month period.	Fleet fuels manager

Setting Goals and Targets

Agencies should establish clear goals and targets tied directly to applicable metrics in the template above to ensure measurable and meaningful progress. These goals must be quantitative, such as percentage reductions or absolute thresholds, and time-bound, with specific interim and long-term milestones. When drafting a sustainability plan, agencies should articulate why each target matters to their mission, outline how it will be achieved, and define who is responsible for monitoring and reporting performance.

For agencies with 'high operational control' – it is strongly recommended they align their GHG targets with the directives in EO 20-04 (i.e., 45% below 1990 levels by 2035 and 80% below 1990 levels by 2050). These requirements should serve as the minimum standard for agency GHG goals. In your plan, include interim milestones, such as reductions by 2028, to guide progress and enable early adjustments. Be explicit about how GHG reductions will be achieved (e.g., strategies like energy efficiency upgrades, ZEV fleet procurement, and sustainable procurement practices).

Review of Agency Plans

As noted previously, the OSB is charged with assisting state agencies in advancing sustainability throughout both their operational practices and their programmatic work. In fulfilling this role, the OSB seeks to support agencies in identifying their most significant sustainability impacts, strengthening strategic approaches, and aligning statewide efforts to achieve meaningful environmental, economic, and social outcomes. The Board's engagement is intended to foster collaboration, elevate opportunities, and help agencies integrate sustainability in ways that reflect their core missions and service to Oregonians.

A key step in the Board's engagement with agencies is meeting with agency staff to discuss their sustainability plan. The OSB aims to meet proactively with agencies whose missions have strong relevance to sustainability (Criterion 1) and those that fall within medium or high operational control categories of Criterion 2. These agencies may have particularly significant opportunities to influence statewide sustainability outcomes through their programs, operations, or regulatory authority.

Plans and updates will be reviewed and either approved or returned with comments and requested improvements. Criteria used in evaluating plans include the following:

- Alignment with the template provided above.
- The clarity and credibility of the agency goals and targets.
- The presence of meaningful actions and timelines.
- The agency's communication strategy for sharing progress with Oregonians.

To support smooth and high-quality reviews, agencies should share a draft updated plan with the DAS Office of Sustainability no less than two months prior to their scheduled appearance before the OSB. Sustainability Office staff will review drafts and provide feedback as appropriate. Final updated plans should then be shared with OSB members at least one month before the agency's presentation so that Board members have adequate time to review materials and offer meaningful input. Once endorsed by the OSB, final plans will be posted on the agency sustainability plan website.

Appendix: State Agency Sustainability Requirements

Statutory Authority

Pursuant to the Oregon Sustainability Act, codified at ORS 184.421–184.435, state agencies are expected to engage in sustainability planning and to conduct agency operations in a manner consistent with the statutory definition of sustainability. Under ORS 184.421, "sustainability" is defined as the use, development, and protection of resources in a manner that meets present needs while ensuring that future generations are able to meet their own needs, viewed from the combined environmental, economic, and community perspectives.

In accordance with ORS 184.423(1)—(3), state agencies, in consultation with the Department of Administrative Services, must integrate sustainability considerations into operational, administrative, and procurement practices designed to:

- Support long-term environmental, economic, and social well-being
- Prioritize facilities, equipment, and goods with demonstrably low life-cycle costs
- Improve efficient use of energy, water, and other resources
- Support rural, distressed, and downtown communities
- Expand opportunities for historically underemployed populations
- Foster partnerships with local communities and businesses
- Protect native habitats, reduce ecological impacts, and restore natural systems
- Reduce contaminants and promote resource reuse and recycling

The Act further establishes the Oregon Sustainability Board, charged with advising the governor, legislators, state agencies and private entities, recommending actions, and advancing policies promoting sustainable statewide environmental, economic, and community objectives. All agencies are directed to assist the Board in the performance of its functions. (ORS 184.427)

Executive Direction

Executive Orders issued by governors of Oregon provide further directions to state agencies regarding the implementation of statutory sustainability mandates:

- **Executive Order 03-03** requires certain state agencies to prepare sustainability plans, adopt performance measures, and operate within a statewide sustainability framework consistent with the statutory responsibilities of the Sustainability Board.
- **Executive Order 06-02** reaffirms the agency planning expectations established under EO 03-03, directs agencies to maintain current sustainability plans, evaluate performance outcomes, and participate in interagency sustainability initiatives.
- **Executive Order 17-20** mandates energy and water conservation measures in state-owned facilities and requires that new construction achieve carbon-neutral performance.
- **Executive Order 17-21** directs agencies to accelerate the conversion of state fleets to zero-emission vehicles as part of statewide efforts to reduce transportation-related greenhouse gas emissions.
- **Executive Order 20-04** establishes statewide greenhouse gas reduction targets (i.e., 45 percent below 1990 levels by 2035; 80 percent by 2050), requires integration of climate considerations into budgeting and decision-making processes, and directs agencies to center equity considerations in their operations and programmatic activities.
- **Executive Order 25-26** expects state agencies to integrate climate resilience into existing programs and planning processes, with a target of conserving ten percent more climate resilient areas by 2035.
- **Executive Order 25-29** orders certain agencies to implement greenhouse gas reduction strategies and align decisions with the Oregon Energy Strategy, streamline clean energy projects, and build a resilient clean energy economy.

Statewide Policies

Agency responsibilities under statute and executive order are operationalized through statewide administrative policies, including but not limited to:

- **Sustainable Procurement Policy (107-009-0040)**, requiring the use of life-cycle cost analysis and prioritization of environmentally preferable products.
- **Green Chemistry Policy (107-009-0080)**, guiding procurement toward safer chemical alternatives and reduced toxic exposures.
- **Energy and Resource Conservation Policy (107-011-010)**, directing implementation of energy efficiency and resource conservation measures in support of statewide emissions-reduction goals.
- **Fleet Management Policy (107-011-040)**, establishing fleet efficiency standards and requiring the adoption of electric vehicles in state fleets.

Oregon Sustainability Board 2023-2024 Biennial Report Executive Summary

March 31, 2025

Oregon Sustainability Board
900 Court St. NE, Ste. 160
Salem, OR 97301

Oregon
Tina Kotek, Governor

Oregon Sustainability Board
900 Court St, NE, Ste. 160
Salem, OR 97301

March 31, 2025

Oregon State Legislature
900 Court St NE
Salem, OR 97301

Re: Oregon Sustainability Board Biennial Report on Activities and Recommendations

Honorable members of the Legislature,

In accordance with ORS 184.429 and ORS192.245, the Oregon Sustainability Board (OSB) is pleased to submit the 2023-2024 Biennial Report Executive Summary.

You will find in the attached executive summary the work this group has been undertaking the last two years. The volunteer members of the OSB are supported by staff in the Department of Administrative Services (DAS) Office of Sustainability. The OSB and DAS staff work with agencies as well as local partners and DAS itself to develop strategies and actions that support Oregon's environment, economy and community. Oregon has emerged as a leader in sustainable procurement, offering to Oregon's other government agencies, as well as nonprofits, trusted information and access to vendors of products and services that advance sustainability goals.

Through agency sustainability plans, the OSB and the DAS Office of Sustainability provide thoughtful and actionable support for improving the sustainability of state operations and programs. The OSB also meets with local agencies and organizations to learn and share information, traveling to a different community every year.

I am proud of the talented and thoughtful members of the board that offer their extensive knowledge and engagement, as well as the leadership of the DAS Office of Sustainability and all our partners, within and outside of Oregon state government.

I hope that you will find the executive summary enlightening and hopeful. The full OSB 2023-2024 Biennial Report may be requested by contacting the DAS Office of Sustainability at jeni.hall@das.oregon.gov.

We would be happy to meet with you or answer any questions you may have about our work.

Yours respectfully,

Rex Burkholder, Chair
Oregon Sustainability Board

Executive Summary

The Oregon Sustainability Board (OSB) was established in 2001 to carry out the goals of the Oregon Sustainability Act and encourage activities that best sustain, protect and enhance the environment, economy and community for the present and future benefit of Oregonians (ORS 184.421-435). Appointed by the Governor, this 11-member board represents a variety of partners from across Oregon. Statute directs the OSB to provide the Legislature with a biennial report on its activities and recommendations.

According to ORS 184.421, "sustainability" means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environmental, economic and community objectives.

The OSB is directed by statute to develop and promote policies and programs that will assist in the meeting of sustainability goals specified in ORS 184.423. Executive orders and guidance from prior governors (EO 06-02) further inform the board's work, which primarily consists of helping agencies integrate sustainability into operations and programs consistent with sustainability goals. The OSB is also directed by statute to evaluate and recommend legislation, regulatory changes or policies to support sustainability.

Helping Agencies Thrive

The OSB regularly reviews agency sustainability plans and provides feedback and support. Approximately 20 agencies prepare plans using the OSB's Agency Sustainability Plan Guidelines, last published in 2023. In 2023-2024, the OSB met with 15 agencies to review and provide feedback on their sustainability plans and activities. Some highlights of feedback include:

- Reviewing and providing feedback on Oregon Department of Transportation's Sustainability Plan, including activities related to its operations and its Climate Office.
- Meeting with Oregon Department of Agriculture and advising on integrating resilience into programs that assist Oregon farmers with adapting to a changing climate.
- Providing feedback to Business Oregon on how agency programs can support traditional Oregon industries (e.g., wood products) in responding to a changing climate.
- Complementing other efforts across Oregon state government to help agencies apply an equity lens to their operations and programs.

Supporting Enterprise-wide Programs

In 2023-2024 the OSB provided valuable guidance and support to the DAS Office of Sustainability and the Sustainable Procurement Program. The Office of Sustainability works with agencies across the enterprise to integrate sustainability into operations, programs and practices through statewide policy, data sharing, guidance and technical assistance. The Sustainable Procurement Program helps integrate sustainability into statewide solicitations, contracts, policy, and training. Guidance provided by OSB included:

- Supporting DAS in establishing a full-time sustainable procurement program manager position and new statewide Sustainable Procurement Policy.
- Creating a climate action planning tool to assist agencies in identifying and reducing greenhouse gas emissions in their operations.
- Supporting agency efforts to plan for and invest in energy efficiency in state-owned buildings.
- Establishing a data dashboard showing trends in energy use and greenhouse gas emissions across state agency fleets and buildings.

Fostering Sustainable Communities

Board members visit Wallowa County in September 2024.

ORS 184.423 directs agencies to enable and encourage sustainable communities to achieve resilient local economies thriving work forces, efficient infrastructure investments, affordable housing, healthy watersheds and clean water – including communities that are economically distressed. The OSB supports these efforts by regularly meeting in, and engaging with, communities across Oregon.

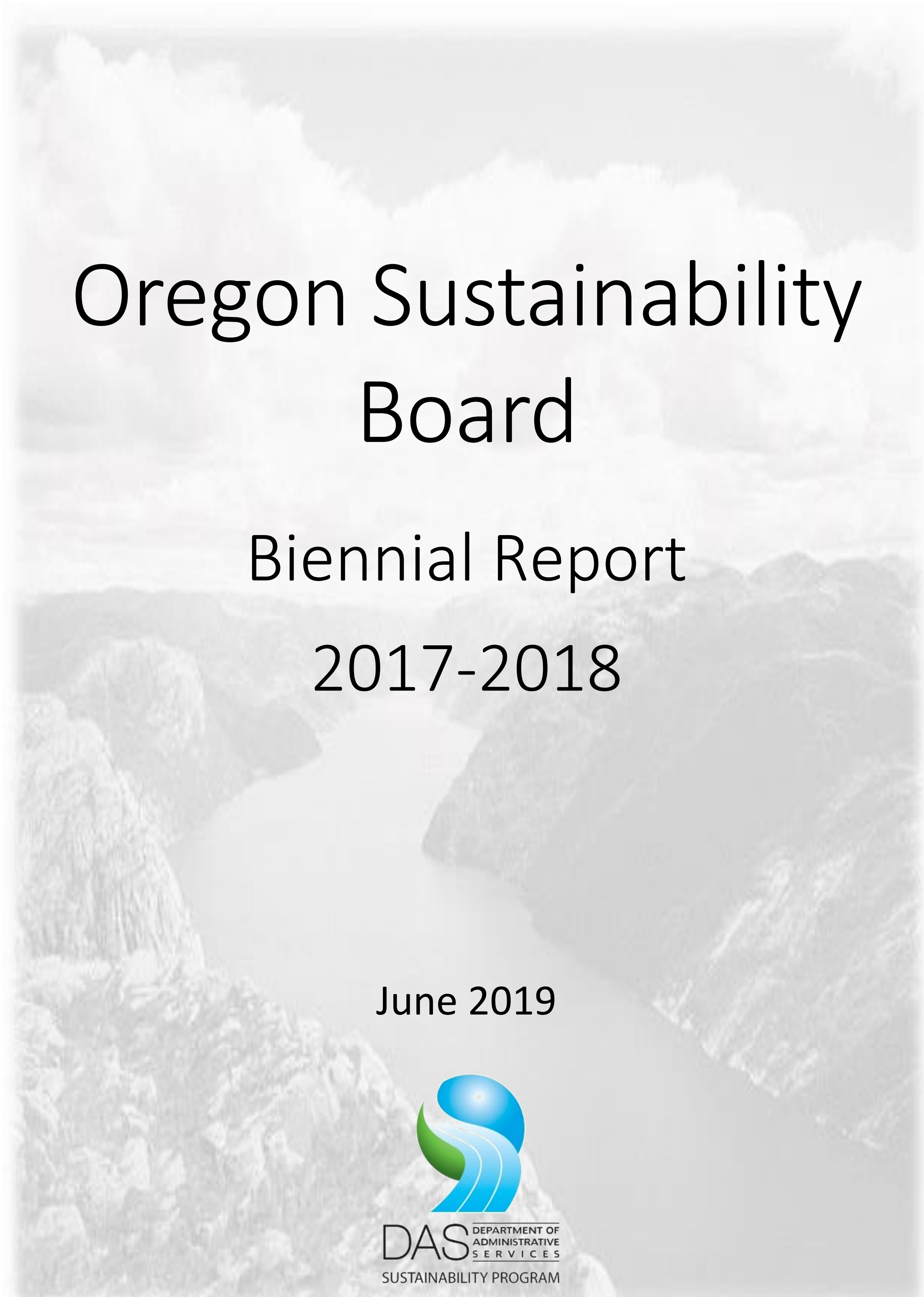
In 2023-2024, two highlights encapsulate the OSB's work fostering sustainable communities. In 2023, the OSB hosted discussions with the City of Corvallis, Benton County and Oregon State University to discuss local sustainability efforts and how the OSB could foster collaboration with state agencies. In 2024, the OSB held a two-day meeting in Wallowa County, hearing from and providing support to local government officials, the local organization Wallowa Resources and other organizations about issues related to housing, energy, farming and forestry and wildfire – many of which profoundly impact rural Oregon. The OSB also conducted field tours of residential renewable energy and community reforestation projects to learn how such projects could be supported and replicated elsewhere.

Moving Forward

The board is well positioned for 2025-2026 and beyond with an active membership and a roadmap for supporting agencies as they face challenges such as a changing climate, water resource management, evolving energy technologies and supporting underserved communities. The OSB is committed to addressing the root causes of Oregon's sustainability challenges, rather than the symptoms. Over the next two years, the OSB intends to focus on the following topics:

- Supporting Governor Kotek's priorities by helping apply a sustainability lens to addressing Oregon's housing needs.
- Further refining its guidelines for how agencies integrate sustainability into their programs and operations.
- Helping DAS create, in accordance with 2023's House Bill 3409, a set of sustainable design guidelines for new construction and major renovations of state-owned buildings.
- Supporting resilience efforts across agencies on issues such as wildfire, agriculture, renewable energy and water – particularly for low income and rural Oregon communities.
- Identifying ways agencies can lower and eventually eliminate greenhouse gas emissions from their buildings.
- Recommending holistic changes to Oregon's transportation system to support the transition away from fossil fuel vehicles.
- Supporting an Oregon work force that can thrive in the face of a changing climate and build new industries around clean energy.
- Cross-collaborating with other boards and commissions – such as the Climate Action Commission and Environmental Justice Council – to support each other's efforts.

The full OSB 2023-2024 Biennial Report may be requested by contacting the DAS Office of Sustainability at jeni.hall@das.oregon.gov.



Oregon Sustainability Board

Biennial Report

2017-2018

June 2019

DAS DEPARTMENT OF ADMINISTRATIVE SERVICES
SUSTAINABILITY PROGRAM

Table of Contents

2017-2018 Board Members

John Miller, Chair
Wildwood/Mahonia

Serena Dietrich
Sustainability Business Consultant

Roje Gootee
Rush Creek Ranch

Lisa Gaines, Ph.D.
Institute for Natural Resources
Oregon State University

David Gremmels
Rogue Creamery

Lori Hollingsworth
Lincoln City, Oregon

Mark Nystrom
City of Eugene

Rory Schmick
Stillwater Energy

A. About the Board

The Oregon Sustainability Board (OSB) was created in 2001 and encourages activities that best sustain, protect and enhance the environment, economy and community for the present and future benefit of Oregonians. Appointed by the Governor, members represent a variety of stakeholders across the State of Oregon.

The Legislature adopted the Oregon Sustainability Act (ORS 184.421-435), which established the state's overall sustainability policy. This legislation created the OSB and established legislative goals for the Board, and more generally for state government around sustainability. Subsequent executive orders and communications from the Governor have directed the Board to oversee, review and approve sustainability plans developed by state agencies.

The OSB, which meets quarterly, remains actively involved in the oversight of agency sustainability plans and initiatives, as well as statewide projects working to enhance the environment, economy and community.

B. Recap of 2017-18 activities

In 2017-18, the OSB met 8 times, collaborating with multiple state agencies on their sustainability plans and metrics. The OSB also engaged communities in eastern, central and rural Oregon, deepening OSB's understanding and capacity to address social sustainability issues such as equity, and supported two significant special projects with impacts across state government – a material footprinting effort and statewide sustainability survey. Future schedules will include revisiting southern and coastal areas. Taken together, these efforts and projects have led to significant benefits, from elevating the visibility and effectiveness of sustainability across Oregon to tactical actions, resource efficiencies and cost savings across agencies.

The OSB remained short of full capacity in 2017-18, with three position vacancies. In June 2017, however, the OSB gained critical support with the hiring of a full-time Statewide Sustainability Officer at DAS. Additional staff support from DAS has increased the Board's capacity to engage communities, work effectively with agencies to improve their sustainability performance and take on special projects. Conversely, the Board's guidance and expertise, along with a commitment to operating in a way that minimizes the need for outside resources, is an investment in Oregon's future. The Board's guidance helps make agency operations more resource and cost efficient, while working to protect and enhance Oregon's environment and communities.

C. Reviewing agency sustainability plans

A core activity of the OSB is reviewing, commenting on and ultimately approving agency sustainability plans. A total of 13 agencies presented their new or updated sustainability plans – or implementation progress reports on existing plans – to the OSB in 2017-18. These plans and the goals, actions and metrics they include are showing impact to not only agency operations, but also to the programs and services these agencies deliver to the people of Oregon. Some highlights from these plans:

- Business Oregon is working to incorporate sustainability into the agency strategic plan and division work plans;
- Department of Corrections met all of its goals from a prior iteration of its Sustainability Plan and created a new five-year Plan;
- State Parks is developing a sustainability chapter for all park master plans;
- Travel Oregon committed in their 2017 Sustainability Plan to infuse sustainability into all of its programs where possible;
- Department of Administrative Services created over 40 new priority strategies to integrate sustainability into planning and construction management, real estate, procurement, fleet and more.

Sustainability plan presentations

2017

Department of Water Resources
Watershed Enhancement Board
Department of State Lands
Department of Housing and Community Services
State Parks
Travel Oregon

2018

Public Utilities Commission
Department of Environmental Quality
Business Oregon
Department of Corrections
Department of Administrative Services
Department of Transportation
Department of Forestry

D. Addressing diversity, equity and inclusion

Historically, as the OSB has supported and reviewed agency sustainability plans, agencies have placed a significant emphasis on the environmental pillar of sustainability, with less attention paid to the community/social pillar. Since passage of the Sustainability Act, sustainability as a professional practice has progressed and now integrates an emphasis on social/community issues such as equity and inclusion, in addition to the traditional focus upon environmental aspects.

In 2017-2018, the OSB dedicated a number of meetings to exploring and discovering how to more formally address the social pillar of sustainability in agency sustainability plan guidance. With the Governor's support, the OSB engaged several agencies, Boards and organizations in this process including the Environmental Justice Task Force (EJTF) in initial collaboration led by Board member David Gremmels.

The OSB also engaged the Governor's Office of Diversity, Equity and Inclusion/Affirmative Action (DEI/AA); Oregon Health Authority's Office of Equity and Inclusion; Multnomah County; and outside organizations such as Beyond Toxics.

This two year learning effort has prepared the OSB for the next phase: the development of processes and tools to support agencies in incorporating social sustainability considerations, such as diversity, equity and inclusion, into their sustainability plans. With its agency sustainability plan guidance on track for updates in 2019, the time is right for the OSB to continue our collaborative efforts with the complete application of sustainably principles. In November 2018, the OSB drafted and passed a resolution on integrating DEI into sustainability plans (Appendix A).

E. Collaborating on product footprinting

Every product has an environmental "footprint" - the resources used and waste or pollutants released over the life of the product. This includes a product's production, use, and management at end-of-life. The "carbon footprint" is the most common type of footprint, but businesses are exploring other types of footprints as well, addressing issues such as the water used to make products, or the toxic chemicals released over their life.

The OSB collaborated with the Oregon Department of Environmental Quality (DEQ), the State of Washington and an advisory group of stakeholders from across Oregon and Washington to evaluate the potential benefits and challenges inherent in product-level environmental footprinting.

The OSB worked with DEQ to develop four case studies, and conducted more in-depth footprinting analyses of food and concrete. Case studies included:

- Excel Dryer: a comparative product life cycle assessment of high-speed and energy-efficient hand dryers.
- Impossible Foods: evaluating the impact and resource use along the supply chain to help understand the life cycle impacts of plant-based alternatives to meat and dairy products, and document trends in the US food system.
- Hewlett-Packard: an assessment of the environmental benefits and tradeoffs of small-batch digital printing.
- Steelcase: evaluating the life cycle impacts of commercial furniture.

Case study profiles are included in Appendix B.

Food

These studies summarized existing product footprinting literature regarding the environmental impacts of a variety of foods - some of which are produced in Oregon, and others not produced here but consumed in significant quantities in Oregon. This information may be helpful to producers and purchasers working to reduce environmental impacts of foods. The DEQ produced several food study reports for tomatoes, wine, port, land-based aquaculture, beer, coffee and citrus fruits and juices.

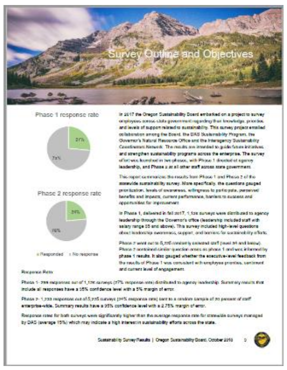
Concrete

In partnership with the Oregon Concrete and Aggregate Producers Association, DEQ has made available to all concrete producers in Oregon a tool that allows them to calculate the carbon footprint of each of their different concrete mixes. The State of Oregon is also providing support for verifying these calculations so that they can be shared with customers in a format called an "environmental product declaration." Developing such declarations gives Oregon producers more opportunity to compete in the green building marketplace, particularly for buildings being certified under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program.

F. Completing a successful sustainability survey

In 2017 the Oregon Sustainability Board embarked on a project to survey employees across state government regarding their knowledge, priorities and levels of supportrelated to sustainability. The OSB collaborated with the DAS Sustainability Program, the Governor's Natural Resource Office and the Interagency Sustainability Coordinators Network. DAS worked with OSB to develop survey questions, administer the survey, collect and analyze results and prepare the draft report.

In October 2018, after a year-long effort, the OSB and DAS Sustainability Program published the survey results (Appendix C). Two separate surveys were used.
One survey went out to agency leaders. A follow up survey, incorporating findings from leadership responses, went to a random sample of staff across the enterprise. Over 1,500 people across state agencies responded, giving OSB a robust data set on which to make recommendations.



Survey findings

Overall, the survey showed strong support for sustainability among both agency leadership and staff, prompting the OSB to develop several recommendations. These included supporting staff involvement in their agency's sustainability activities, increasing knowledge on climate change mitigation and adaptation. DAS Sustainability is now coordinating with various agencies and individuals to implement the Board's recommendations, which include enhanced communications and information sharing, focused efforts on climate literacy and resiliency, and revised guidelines and decision support tools for agency sustainability efforts.

The OSB will continue to support these actions and monitor outcomes through its regular engagement with the Governor's Office, DAS Sustainability staff and agency sustainability plans and actions.

G. Revising agency sustainability plan guidelines

In In collaboration with the Interagency Sustainability Coordinators Network (ISCN) – a network of sustainability practitioners across state agencies – in 2018 the OSB began the process of revising its Sustainability Plan Guidelines for agency sustainability plans. The ISCN, which represents several agencies that have or are developing new sustainability plans, provided feedback to the Board on how to improve guidelines to make sustainability plans resourceful, actionable and effective (Appendix D). The Guidelines, last revised in 2013, will be updated to include increased knowledge about sustainability data and metrics, new executive orders and policy guidance from Governor Brown, and guidance for social sustainability topics such as equity. The OSB anticipates working with DAS to issue revised guidelines in 2019.

H. Engaging Oregon's communities

Every calendar year, the OSB commits one of their quarterly meetings to a two-day meeting in an Oregon community to learn about statewide current trends and issues, as well as opportunities for the Board to support sustainability-related efforts.

2017: Boardman and Condon

In In October 2017 the OSB traveled to Boardman and Condon to meet with local representatives and discuss current issues facing these areas. The OSB also toured the Portland General Electric (PGE) Boardman coal-fired plant, the adjacent natural gas plant and the Pacific Power Condon Wind Farm to understand current and future energy challenges and opportunities.

In **Boardman**, the OSB heard from City of Boardman and Morrow County officials about renewable energy, sustainable agriculture and forestry, economic development, transit and housing challenges. The OSB also toured the Port of Morrow facilities and learned about developmental activities such as education and training in the energy industry, agricultural processing, data center growth.

In **Condon**, OSB members and local representatives discussed infrastructure and broadband availability, agricultural and grazing, land stewardship, water issues and housing and energy assistance for low-income residents in the four-county region (Gilliam, Umatilla, Morrow and Wheeler).

Local participants included:

- Jim Doherty, Morrow County Commissioner
- Karen Pettigrew, City Manager, City of Boardman
- Lisa Mittelsdorf, Port of Morrow/Morrow Development Corporation
- Kathryn Greiner, Administrator, City of Condon
- Christine Kirwan, Gilliam County, County Soil and Water Conservation District
- Jordan Maley, OSU Extension, Gilliam County
- Denise Jerome, Community Action Program of East-Central Oregon (CAPECO)

OSB members touring the Boardman coal plant in October 2017.

2018: Bend and Deschutes County

In 2018 Board members traveled to Bend to learn about sustainability-related efforts in Bend and Deschutes County. Members heard from City staff about city operations, community climate action plan efforts, and equity challenges in housing. Staff from OSU Cascades shared efforts to integrate sustainable design into expansion of its campus, including remediation and reclamation of an onsite landfill and pit mine, net zero energy and water goals, and creation of an innovation district on campus for local businesses. The OSB also heard about the efforts of "Move Bend" and "Bend 2030" to address the area's rapid growth and transportation challenges, while the Environmental Center shared their work to engage residents through an energy challenge and other energy efficiency efforts.

Local participants included:

- Gillian Ochner, Cassie Lubenow, City of Bend
- Joshua Romero, City of Bend
- Lindsey Hardy, Climate Action Steering Committee
- Jillian Taylor, Interim Executive Director, Move Bend and Bend 2030
- Mike Riley, Executive Director, The Environmental Center
- Blair Garland, Kelly Sparks, OSU Cascades

I. Looking ahead to 2019 and beyond: Board priorities

The Sustainability Board is well positioned for 2019 and beyond, with the reappointment of three current members and the addition of new member Rex Burkholder. It continues to enhance its relationship with state agencies to support their sustainability efforts and has the opportunity to help the Governor's office advance diversity, equity and inclusion in agency sustainability plans. The Board will be exploring opportunities and setting priorities in 2019 to guide its work over the next biennium. Future meetings in 2019 also include locations in coastal and southern Oregon to engage communities about how the Board can best support them.

Appendix A: Board Diversity, Equity and Inclusion Resolution

Oregon Sustainability Board

Context, history and planned approach: Diversity, equity and inclusion

Context

According to the Oregon Sustainability Act (ORS 184.423), "sustainability" means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of *environmental, economic* and *community* objectives.

Central to the Act are several goals that state agencies shall seek to achieve in support of sustainability. The Act directs the Oregon Sustainability Board (Board) to identify, evaluate, make recommendations and propose legislation, regulatory changes or policy modifications to agencies, the Governor, the Legislative Assembly, private entities or other bodies for the purpose of encouraging activities that best sustain, protect and enhance the quality of the *environment, economy* and *community* for the present and future benefit of Oregonians. The Board shall also develop and promote proposals that *jointly and mutually* enhance *local economies*, the *environment* and *community health* for the present and future benefit of Oregonians.

To carry out the Act, multiple executive orders have directed the Board to support and guide agencies in the creation of sustainability plans. Since 2003, the Board has worked with over 20 agencies to develop and implement such plans.

History

Historically, as the Board has supported and reviewed agency sustainability plans, agencies have placed a significant emphasis on the environmental pillar of sustainability, with less attention paid to the community/social pillars.

Since passage of the Sustainability Act, sustainability as a professional practice has progressed and now integrates an emphasis on social/community issues such as equity and inclusion in addition to the traditional focus upon environmental aspects. This is reflected in several sustainability frameworks such as AASHE STARS (higher education), STAR Communities (local governments), the Global Reporting Initiative (largely corporate emphasis), the Living Future Institute's JUST label, and the EcoDistricts Protocol (neighborhood planning), among others. Individual sustainability and climate action plans, including recent plans by Business Oregon, the Department of Corrections and Department of Administrative Services now address equity and inclusion.

In 2017-2018, the Board dedicated a number of meetings to exploring and discovering how to more formally address the social pillar of sustainability in agency sustainability plan guidance. With the Governor's support, the Board engaged several agencies, Boards and organizations in this process including the Environmental Justice Task Force (EJTF) in initial collaboration led by Board member David Gremmels. The Board also engaged the Governor's Office of Diversity, Equity and Inclusion/Affirmative Action (DEI/AA); Oregon Health Authority's Office of Equity and Inclusion; Multnomah County; and outside organizations such as Beyond Toxics.

Planned Approach

This two year learning effort has prepared the Board for the next phase; the development of processes and tools to support agencies in incorporating social sustainability considerations, such as diversity, equity and inclusion, into their sustainability plans. With its agency sustainability plan guidance due for an update, the time is right for the Board to begin a collaborative effort with the Governor's Office, agencies, the EJTF and other relevant resources to implement a more complete application of sustainably principles.

In the recently completed statewide Sustainability Survey by the Board with support from the Governor's Office, agencies expressed incorporating sustainability into their external programs as a high priority.

Internally, DEI/AA is working with agencies to create work environments that allow every individual the opportunity to reach their full potential as a state employee. The Governor's Office has created the following statements regarding diversity, equity and inclusion (DEI):

> *The Governor's Office recognizes diversity as the collective mixtures of our differences and similarities. The differences are viewed as a strength that maximizes the state's competitive advantage through innovation, effectiveness, and adaptability.*
>
> *Equity is a value and goal, not a process. It allows all individuals to thrive and reach their full potential.*
>
> *Inclusion is leveraging diversity which builds and sustains a culture in which people are engaged and motivated. Ultimately, inclusion is the environment that people create to allow these differences to thrive.*

Agencies are diverse in their missions, programs and organizational cultures. Each will encounter its own set of DEI issues. As a result, rather than creating a one-size-fits-all approach, the Board will provide decision support tools and guidance within a framework that agencies can adapt to their circumstances.

Adopted Resolution

The Board will collaborate with the Governor's office, EJTF, participating agencies and non-governmental organizations, to begin in Q1 2019, the development of DEI guidelines and tools that agencies can use to develop sustainability plans and to evaluate and enhance proposed policies and programs. This will include the development of a lens and toolbox with guiding language and definitions, decision support tools and sample case studies to help pursue the Governor's definitions, set goals and evaluate proposed policies and programs with questions such as, but not limited to:

- How will agencies incorporate DEI into their sustainability plans?
- Who is positively and negatively impacted, and how?
- What are the opportunities and barriers that promote or prevent more equitable outcomes?
- How are public resources and investments distributed geographically?
- Who is meaningfully being included or excluded in decisions?
- How are environmental justice impacts considered?
- How does the policy or program integrate voices and priorities for communities more affected by inequities?
- Would a pilot program help demonstrate the value of addressing DEI in sustainability plans?

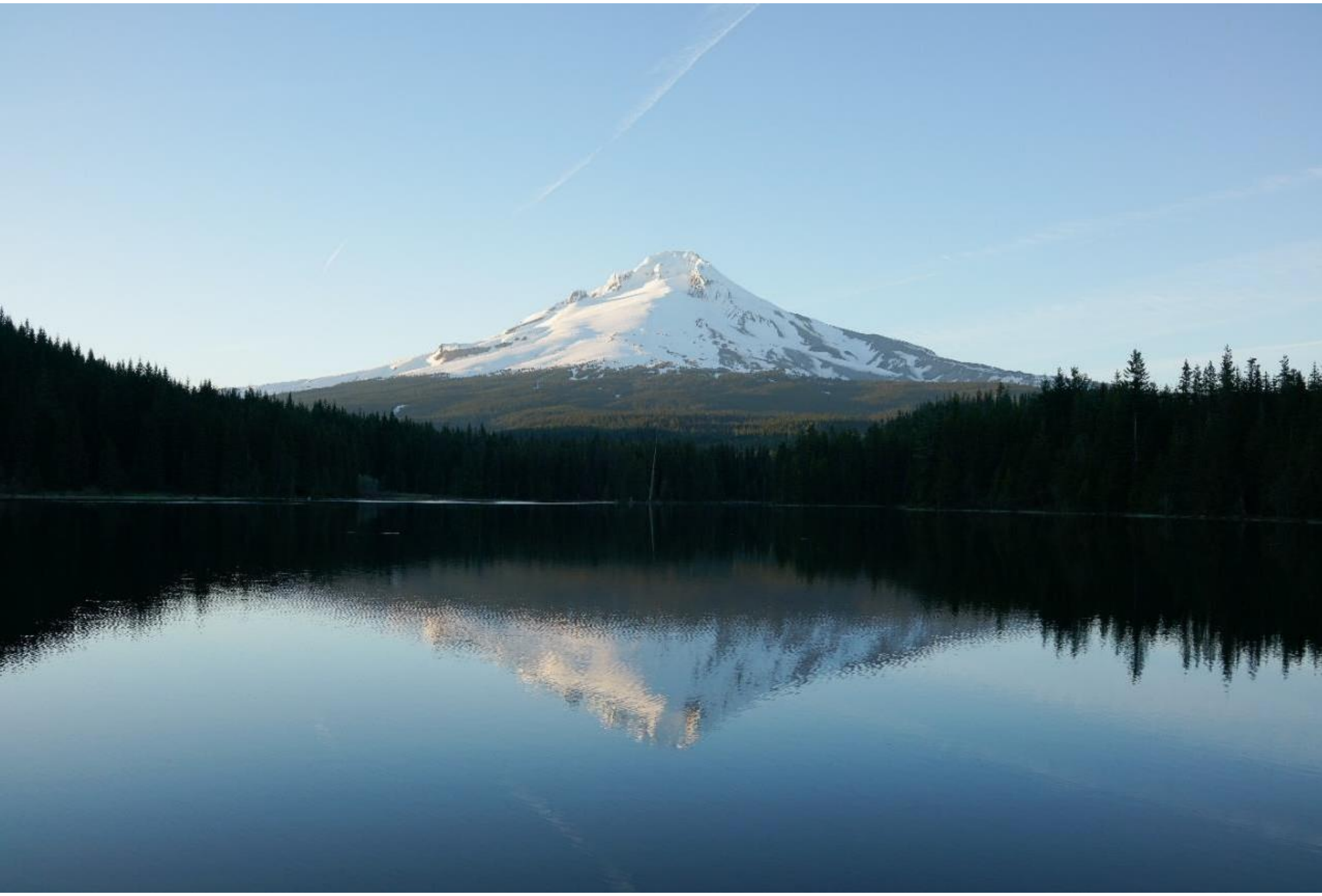
The Board will continue to work with the Governor’s office and relevant agencies, partners and organizations. The Board will collaborate with the Governor’s Natural Resource Office and the Governor’s Office of Diversity, Equity, and Inclusion to expand its knowledge and further evaluate opportunities to address diversity, equity (including environmental equity) and inclusion for agency sustainability plans - including scope, standards and potential metrics. The Board will also partner with the EJTF and establish a timeline and specific steps for integrating EJ into agency plans in a manner that complements the work of the EJTF.

APPENDIX B: Statewide Sustainability Survey

Oregon Sustainability Board Sustainability Survey

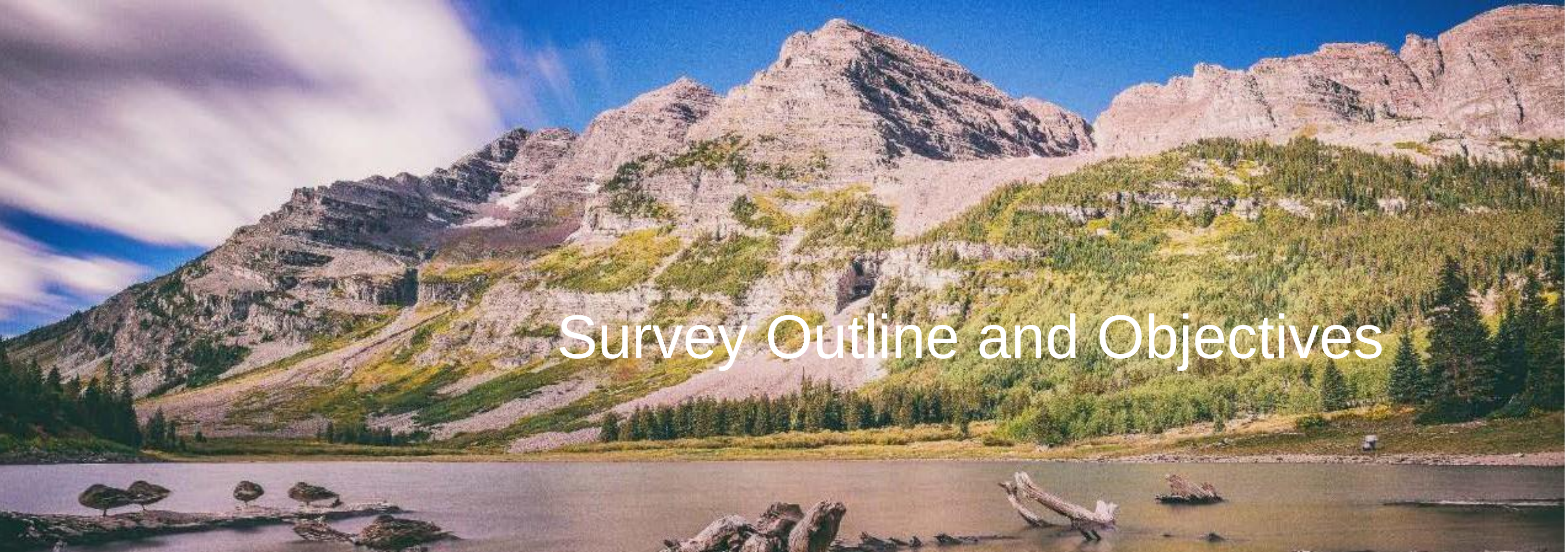
Phase 1 and 2 Results

October 2018

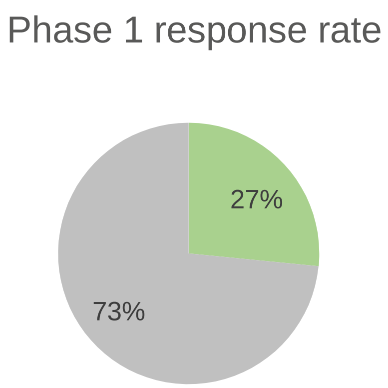


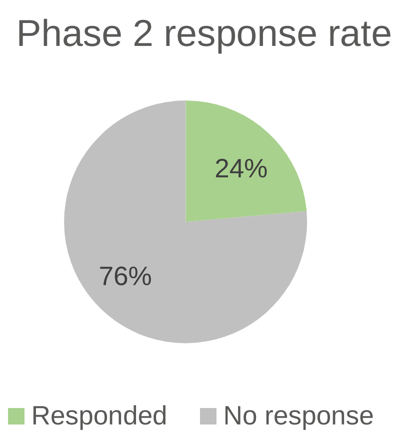
SUSTAINABILITY PROGRAM

Contents



Survey Outline and Objectives





In 2017 the Oregon Sustainability Board embarked on a project to survey employees across state government regarding their knowledge, priorities and levels of support related to sustainability. This survey project entailed collaboration among the Board, the DAS Sustainability Program, the Governor's Natural Resource Office and the Interagency Sustainability Coordinators Network. The results are intended to guide future initiatives and strengthen sustainability programs across the enterprise. The survey effort was launched in two phases, with Phase 1 directed at agency leadership, and Phase 2 at all other staff across state government.

This report summarizes the results from Phase 1 and Phase 2 of the statewide sustainability survey. More specifically, the questions gauged prioritization, levels of awareness, willingness to participate, perceived benefits and impacts, current performance, barriers to success and opportunities for improvement.

In Phase 1, delivered in fall 2017, 1,126 surveys were distributed to agency leadership through the Governor's office (leadership included staff with salary range 35 and above). This survey included high-level questions about leadership awareness, support, and barriers for sustainability efforts.

Phase 2 went out to 5,225 randomly selected staff (level 34 and below). Phase 2 contained similar question areas as phase 1 and was informed by phase 1 results. It also gauged whether the executive-level feedback from the results of Phase 1 was consistent with employee priorities, sentiment and current level of engagement.

Response Rate:

Phase 1- 299 responses out of 1,126 surveys (27% response rate) distributed to agency leadership. Summary results that include all responses have a 95% confidence level with a 5% margin of error.

Phase 2- 1,233 responses out of 5,225 surveys (24% response rate) sent to a random sample of 20 percent of staff enterprise-wide. Summary results have a 95% confidence level with a 2.75% margin of error.

Response rates for both surveys were significantly higher than the average response rate for statewide surveys managed by DAS (average 15%) which may indicate a high interest in sustainability efforts across the state.

Strategic Prioritization

Across the enterprise staff and leadership believe sustainability should be a strategic priority. Currently, however, staff do not perceive it to be one.

Desired vs. perceived prioritization:

Agency leaders and staff agree sustainability should be a strategic priority for their agencies. About 91% of agency leadership and 93% of employees indicated sustainability should be a high or moderate strategic priority.

There is a gap among staff between desired and perceived prioritization. While 93% of staff believe sustainability should be a moderate or high priority, only 69% of staff think sustainability currently is a moderate or high priority. Breaking out their scores shows further disparity; 36% rated that they think it is a moderate priority and only 33% believe it is a high agency priority.

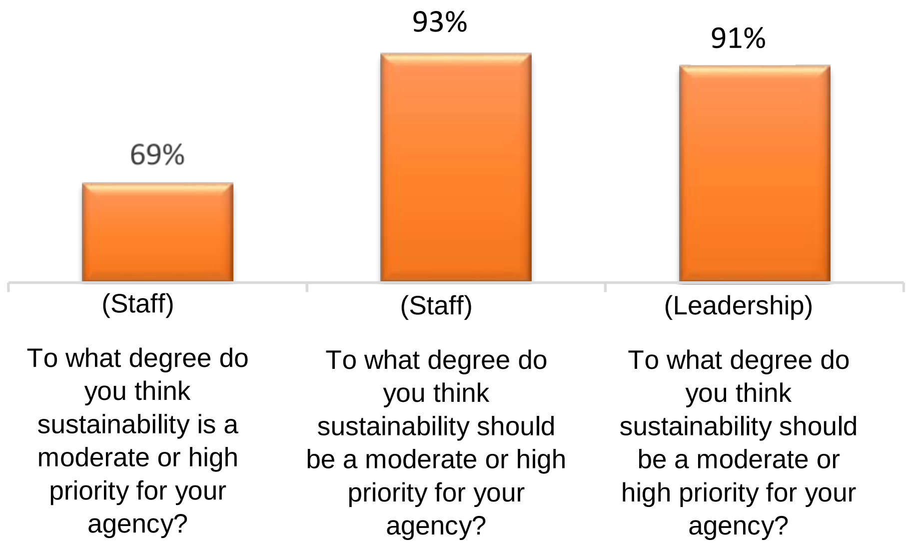
Awareness:

Less than half of staff indicated they were somewhat or very aware of their agencies sustainability efforts. Some comments from staff indicated that awareness at the program level nearest to them was high but awareness at the division or agency level was low.

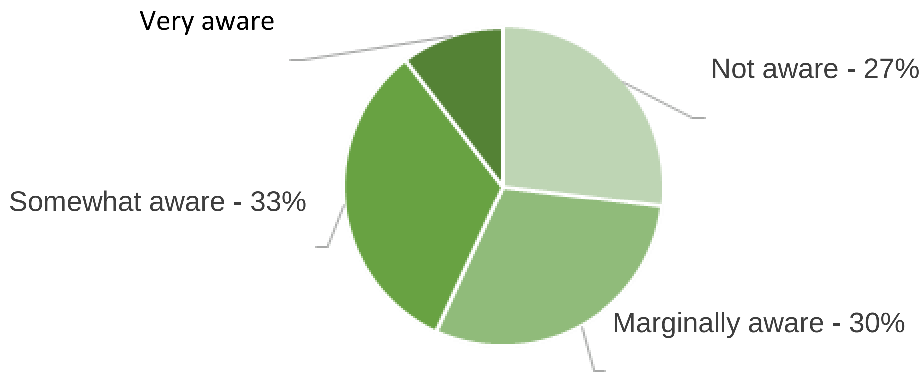
Interest:

Despite the relatively low awareness, 61% of staff said they were moderately or highly interested in participating in their agency’s sustainability efforts.

Staff and Leadership Prioritization



Staff awareness of sustainability efforts



Prioritizing Sustainability Topics and Activities

	Leadership Priorities	Staff Priorities
1	Energy	Energy
2	Waste reduction / recycling	Protecting public health
3	Water	Waste reduction / recycling
4	Transportation	Water
5	Natural resources (land, plants, wildlife)	Procurement (goods and services)
6	Procurement (goods and services)	Toxics reduction
7	Climate change	Natural resources (land, plants, wildlife)
8	Equity / diversity	Transportation
9	Toxics reduction	Climate change

Staff and leadership prioritization:

The summary results of both Phase 1 and Phase 2 surveys shows that leadership and staff shared similar sustainability priorities. Energy, water, and waste reduction were all ranked highest by both staff and leadership. Notable, however, is that staff also rated public health as a high priority. Climate change fell as a low priority for both leadership and staff.

Benefits:[1]

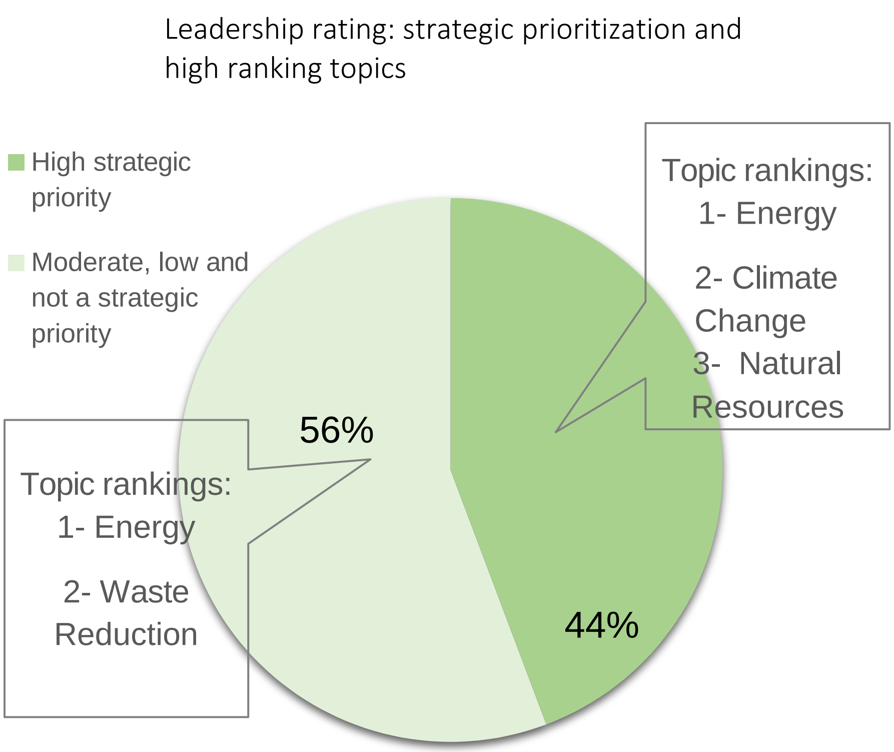
Staff and leadership also agreed on how the agency would benefit from sustainability efforts.

While ordered differently for staff and leadership, the top four ranked benefits/impacts of more focused efforts on sustainability include:

- Preparing and adapting for the future
- Increasing efficiency in the use of resources
- Fulfilling a sense of obligation (the right thing to do)
- Saving money

[1] Only the leadership survey included equity/diversity as an option. This was omitted from the staff survey.

Prioritizing Sustainability Topics and Activities



Prioritization (continued): There is a difference in topic prioritization between the leaders who rate sustainability as a whole a high priority vs. those rating it as a less important strategic priority.

About 45% of leaders rated sustainability as a high agency priority. This group indicated that energy, climate change, and natural resources are the three most important topics on which to focus.

The 56% of leaders who rated sustainability as a moderate, low, or not a priority ranked energy, waste reduction and procurement as the top three areas on which to focus; in this group, climate change was ranked much lower (8th out of the 9 topic areas).

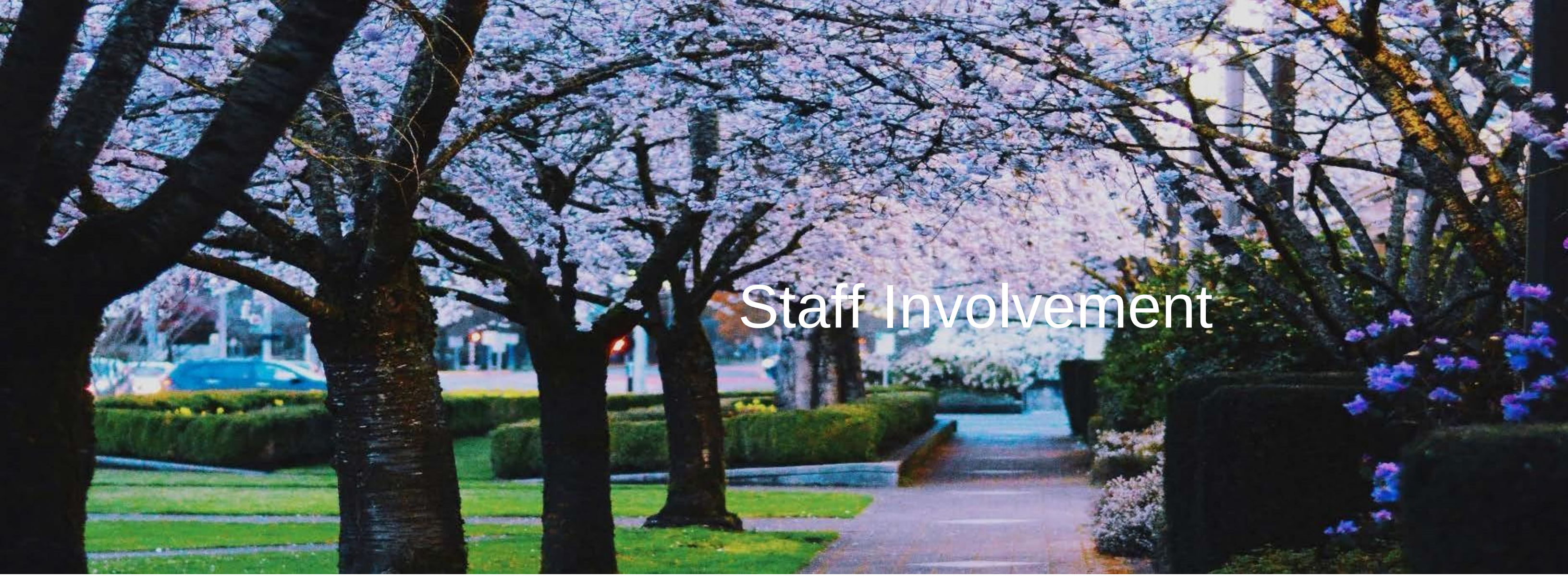
Activities:

Regarding more discrete actions, leadership prioritized the following activities:

1. Managing building resource use (energy, water and waste)
2. Integrating sustainability into agency programs / decisions
3. Providing employee education and training

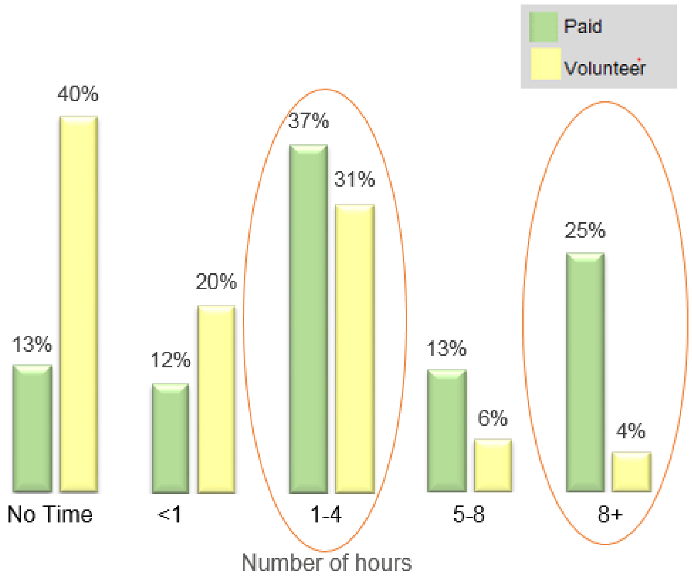
Updating agency sustainability plans and focusing more on procuring sustainable goods and services also received high rankings compared to other activities.

Comments from staff showed high interest in telework and alternative work schedules. Suggested benefits include: reducing traffic, reducing greenhouse emissions and saving energy in buildings.



Staff Involvement

Staff rating: paid vs. volunteer hours they are willing to commit to sustainability activities



Participation:

The survey asked leadership and staff about their willingness to participate in agency sustainability activities. The questions asked leadership which topic areas would benefit most from staff time and where they are most willing to support volunteer or paid staff time.

Leadership indicated staffing constraints limit the total time possible to designate for these efforts. Comments indicated that having a budget for staff to work explicitly on sustainability initiatives would affect significantly more change.

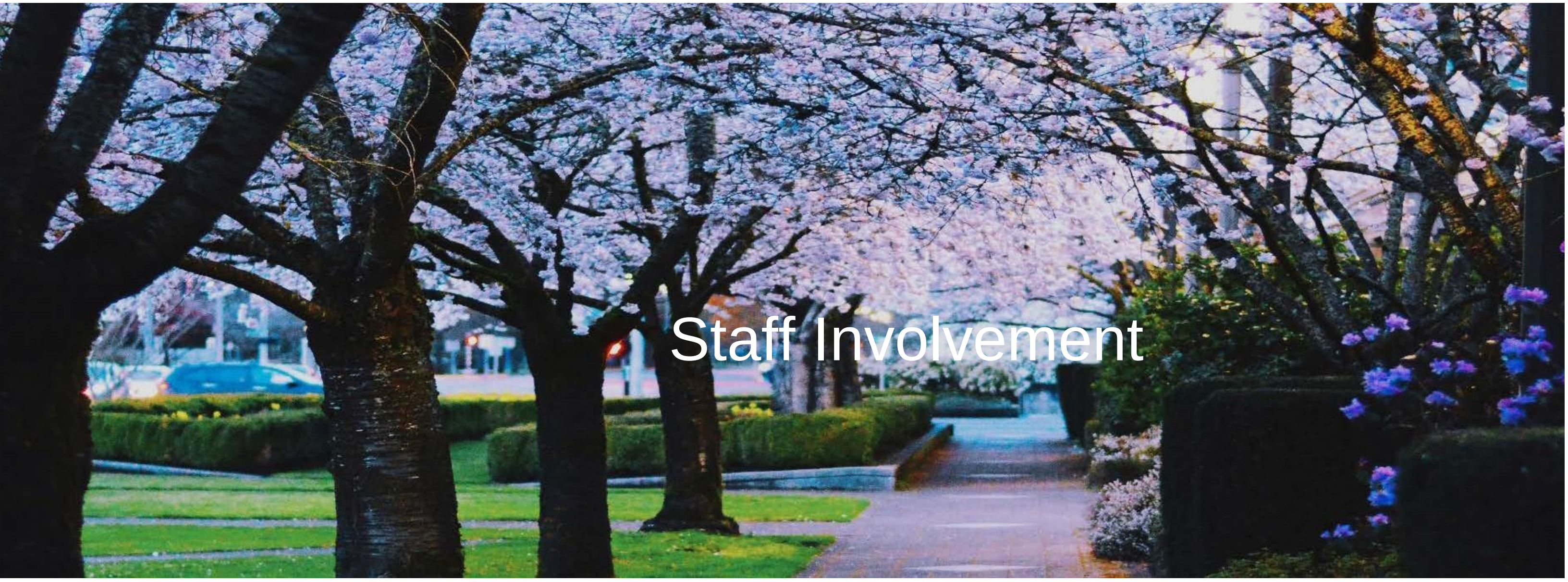
Employee willingness to use paid vs. volunteer time shows that there would be significantly more support if able to use paid time. In the middle range of 1-4 hours, employees are near equally willing to offer volunteer or paid time. Anything above 4 hours and paid time appears a necessity. This is contrasted with leadership prioritization.

There was marginal support for allotting 5+ hours a month to sustainability activities (paid or volunteer). The comments from both staff and leadership indicated a strain on existing workloads. The following section describes the areas leadership indicated would benefit most from staff involvement.

Motivators:

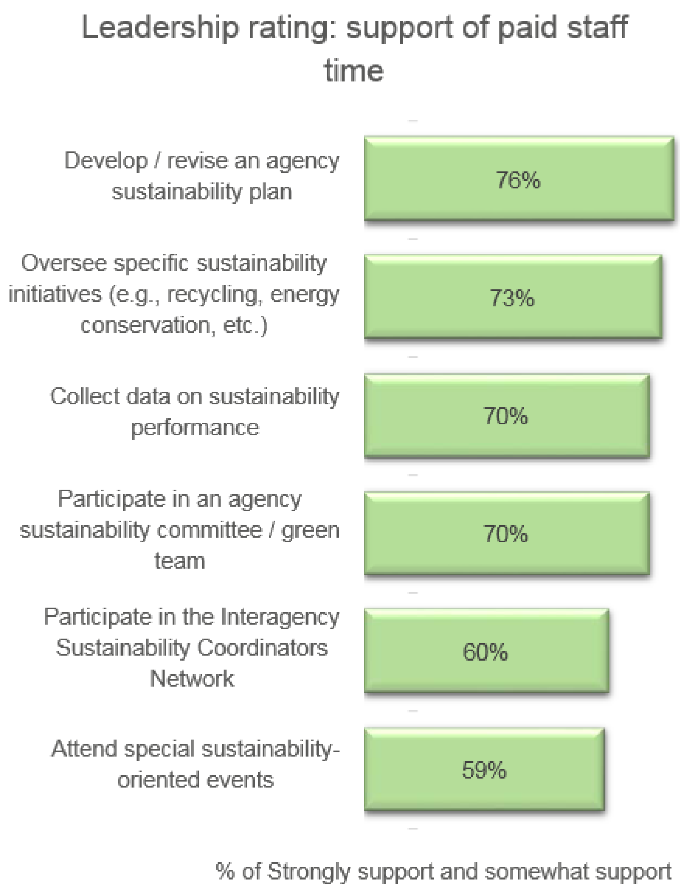
When asked what would motivate staff to participate more in agency sustainability efforts they indicated the following as the top three motivators:

1. Ability to use paid staff time to participate
2. Direction from agency leadership
3. More knowledge and training on sustainability opportunities



Staff Involvement

Leadership rating: support of paid staff time



Activities:

Ratings from staff and leadership were taken into account regarding interest, benefit, total amount of time staff are willing to volunteer, and total amount of time leadership can commit.

As a result the following areas would likely benefit most from staff involvement:

- Developing / revising an agency sustainability plan
- Overseeing specific sustainability initiatives (e.g. recycling, energy conservation)
- Participating in agency sustainability committees / green teams

With respect to revamping or developing agency sustainability plans, leadership indicated they would approve 8+ hours of staff time a month.

Once the plan is developed/updated, a mix of volunteer / paid time at approximately four hours a month would be supported to sustain continued activities.

Agency Performance

Current Performance:

Leadership was asked to rate their agency’s current performance across a range of categories. Equity/diversity and recycling were rated as the top categories for performance among all agencies, but responses varied when looking at agencies by size. There were 11 categories that leadership rated. The following are those that received the highest ratings, broken out by agency size.

1 = Highest **11** = Lowest

Top two performing categories: All agencies

1 - Promoting equity/diversity
2 - Increasing recycling

Medium agencies (100-700 employees)

1 - Increasing recycling
2 - Reducing toxics

Large agencies (>700 employees)

1 - Promoting equity/diversity
2 - Increasing recycling

Small agencies (<100 employees)

1 - Promoting equity/diversity
2 - Managing natural resources

Leadership indicated efforts in promoting equity/diversity are currently performing well. The narrative comments from staff expressed both questions and insights concerning this topic.

For example, there were questions about sufficiently defining this topic area. It is currently either unclear or too broad a definition to identify strategies and measurable goals around equity and diversity efforts. Some comments identified a need to either develop or sustain a community/culture of sustainability at the agency level.

Agency Performance

Current Performance (continued):

Of the 11 categories that leadership rated, the following are those that receive the lowest ratings broken out by agency size.

1 = Highest **11** = Lowest

Lowest performing categories:

All agencies

8 - Reducing fossil fuel use from the agency fleet
9 - Reducing greenhouse gas emissions
10 - Increasing resiliency to climate change
11 - Conserving water

Large agencies (>700 employees)

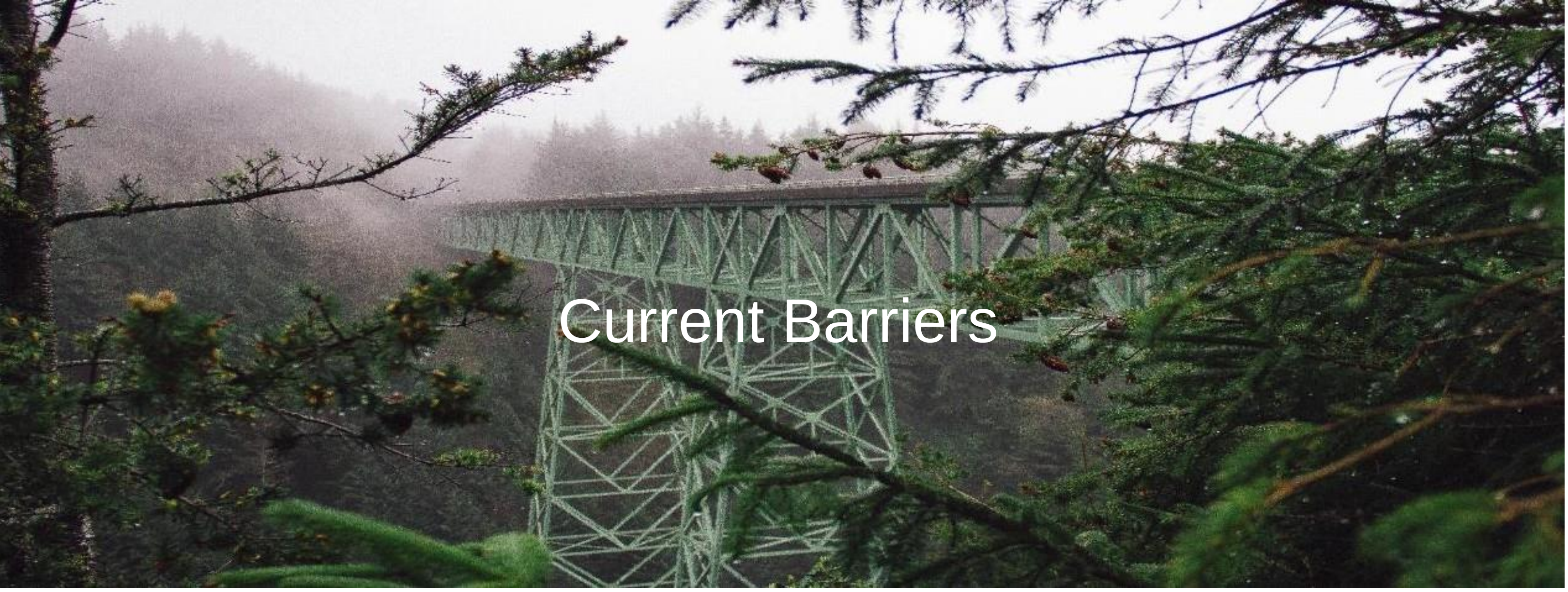
8 - Increasing resiliency to climate change
9 - Reducing greenhouse gas emissions
10 - Reducing fossil fuel use form agency fleet
11 - Conserving water

Medium agencies (100-700 employees)

8 - Increasing resiliency to climate change
9 - Reducing fossil fuel use form agency fleet
10 - Procuring of goods and services
11 - Conserving water

Small agencies (<100 employees)

8 - Conserving water
9 - Reducing fossil fuel use from agency fleet
10 - Procuring of goods and services
11 - Increasing resiliency to climate change



Current Barriers

Staff rating: significant barriers to practicing sustainability

Current barriers:

Staff identified current barriers to sustainability performance: high short- term costs (budget) and lack of perceived guidance or support from leadership.

Barriers remain mostly the same across agencies of all sizes. One exception is that large agencies also ranked knowledge and training as a significant barrier.

Comments:

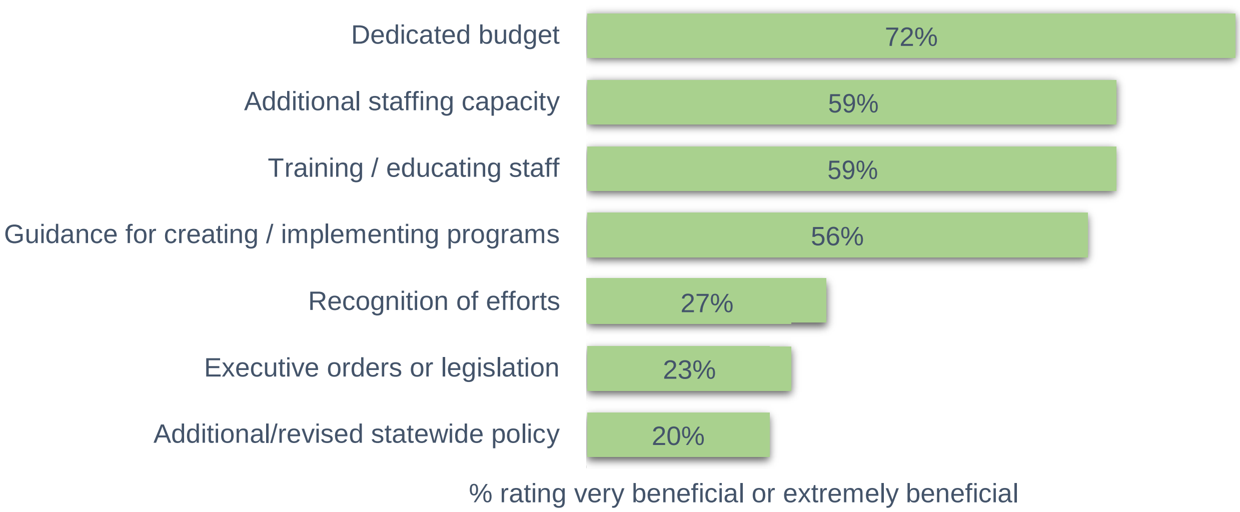
Staff comments echoed the quantitative results and shed light on how these areas affect sustainability activities within the agencies. Lack of guidance and support from leadership leave staff feeling a disconnect between staff actions and the agency vision. For some larger agencies, staff expressed a willingness to participate and integrate sustainable practices but noted that the culture of sustainability is not established. Staff commented that a vision, consistent communication, and clear and attainable goals would help address this.

Opportunities for Support

Opportunities for support:

When asked what areas would benefit most from additional support, leaderships' ratings mirrored the barriers identified by staff.

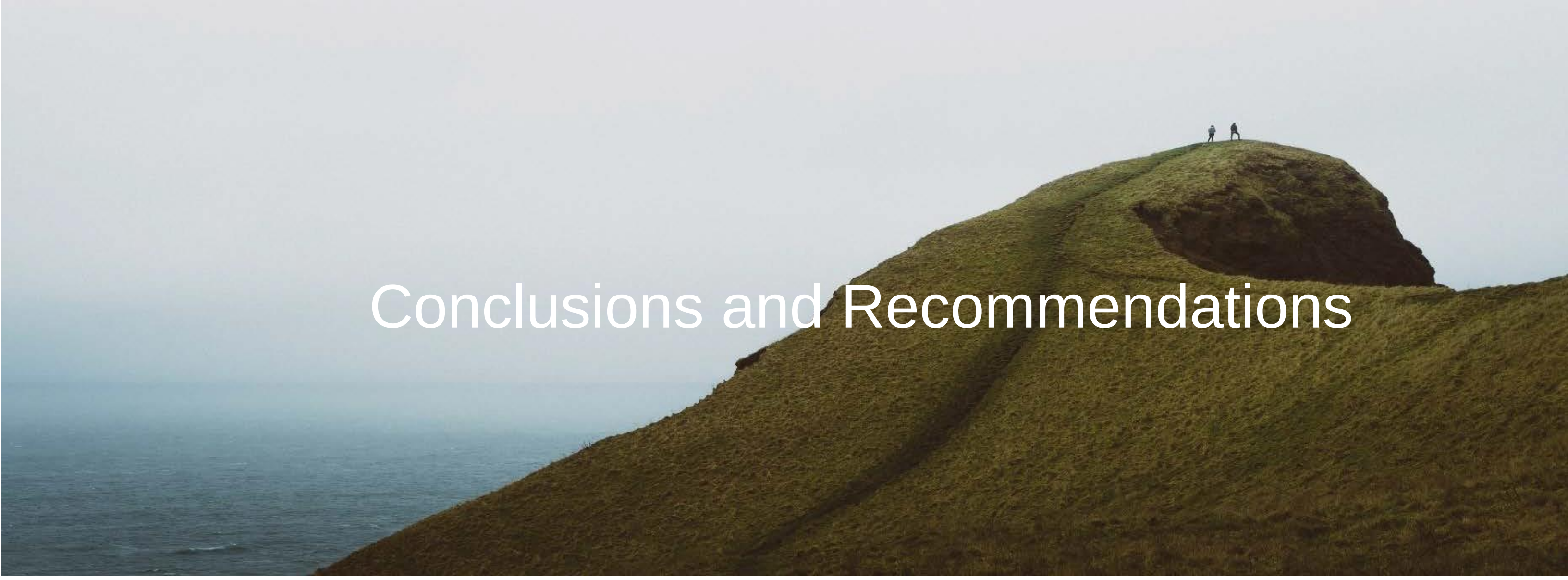
Leadership rating: areas for additional support



Communication:

Staff indicated that the most effective ways to learn about sustainability efforts are through the following outlets:

- State government sustainability-specific newsletter
- Staff meetings
- Trainings
- Agency green teams



Conclusions and Recommendations

Survey results indicate both positive trends in the form of strong support for sustainability among leadership and staff – but also some significant opportunities to further agency sustainability efforts. Some specific conclusions and recommendations:

- Staff are interested in more knowledge about what their agencies are doing with respect to sustainability. Agency sustainability coordinators are encouraged to partner with their communications staff to increase messaging and disseminate sustainability news and progress. The DAS Sustainability Program can help provide content for agencies to push to staff, as well as communication tips and ideas.

- With the convening of a Governor's Climate Cabinet and state Carbon Policy Office, the timing is right to close current climate literacy gaps among leadership and staff across the enterprise. Leaders from natural resources agencies, who already perceive climate change and sustainability as high priorities, can help in this effort. Given climate change is a priority of the Governor, the Board recommends additional messaging, training and knowledge development on the impacts of climate change to agency operations, and the importance of both mitigation and resilience.

- Leaders and staff were well aligned in perceived benefits of sustainability. Preparing and adapting for the future – a key tenet in climate change adaptation – was seen as the greatest benefit. The Board recommends that this theme be integrated into agency climate change knowledge development and training efforts, as well as overall adaptive resiliency of agencies.

- Leaders indicate that their agencies are addressing equity/inclusion. While this topic represents a social dimension of sustainability, respondents acknowledged that it is broad and not as commonly affiliated with sustainability compared to environmental sustainability topics. The Board suggests further effort would be beneficial to both define and measure these aspects of sustainability.

- Leadership responses point to an opportunity to further support agency work in the areas of climate change and fleet. Agencies are starting to integrate climate change into their sustainability plans, and to track metrics such as greenhouse gas (GHG) emissions. It is recommended that the Sustainability Board and the Global Warming Commission work collaboratively to assist agencies in these efforts. DAS Fleet and Parking Services already calculates GHG emissions associated with state fleet vehicles – this data provides a good foundation for such efforts.

- Staff are willing to participate in agency sustainability efforts – small amounts as volunteers, substantially more time if paid. Leaders support allowing staff paid time to participate in sustainability efforts – up to four hours per month, but up to 8 hours for developing initial sustainability plans. This suggests the chance for agencies to provide more specific guidance to staff on when or how they can participate on paid time. The Board recommends that agencies support staff paid time during normal work hours, and that this is communicated through human resources policies or other similar mechanisms.

- The Board recommends that agency leadership/executive teams explicitly support sustainability efforts. This could include integrating sustainability into agency strategic plans, messaging from leadership to staff in agency communications (e.g. internal newsletters), developing an agency sustainability policy and having leadership actively engaged in sustainability plans (development and presentations to the Board).

- While staffing and budgeting are perceived as limitations, sustainability efforts often lead to cost savings and efficiencies. The Board recommends agencies apply life-cycle analysis to evaluate both up-front and long-term costs and savings, and explore capturing and re-investing savings from sustainability into new sustainability efforts. Specific support for agency sustainability efforts can be integrated into existing position descriptions, noting that sustainability doesn't need to be an "add on" effort, but rather can be reflected as helping existing staff integrate sustainability principles into their work.

- Beyond managing buildings efficiently, leaders expressed integrating sustainability into agency program/decisions as a high priority, along with staff education and training. The Board can support development of decision support tools and guidance to help agencies withprogrammatic sustainability efforts

APPENDIX C: Board and ISCN Correspondence, Sustainability Plan Guidelines

Memorandum

July 27, 2018

To: John Miller, Chair, Oregon Sustainability Board

From: Interagency Sustainability Coordinators Network Dave Wortman, Statewide Sustainability Officer, DAS

Re: Board Guidelines for Agency Sustainability Plans

In 2013 the Oregon Sustainability Board (OSB) developed the document entitled, "State Agency Sustainability Plan Updates," providing guidance for agencies to create or update their sustainability plans. This document was developed based on 2013 direction in a letter from the Governor's Office that called on the OSB to "measure and support progress at state agencies", and to "review(ing) agency sustainability plans by meeting with agency staff to discuss plans and execution". Among other elements, the Guidelines include sections on plan requirements, and plan elements (mission, goals, internal and external practices and policies). A separate but related one-page document provides agencies a template for reporting on statewide metrics.

In the six years since these guidelines were developed, changes in state government provide an opportunity to review and revise them. Governor Kate Brown has different priorities with respect to sustainability than her predecessor. The Governor has signed executive orders on energy and climate change, as well as water conservation and equity. Agency staff and leadership has changed in many cases, leading to different agency approaches to sustainability. Finally, agencies have additional experience and insights to offer, having prepared and/or revised sustainability plans under the 2013 Guidelines.

In early 2018, the ISCN dedicated a work session to reviewing and discussing the Guidelines. This included breakout sessions to discuss what in the current Guidelines was working, what could be improved upon and what the Board may wish to add or remove. The ISCN provides the following suggestions for the next generation of sustainability plan guidelines.

What to Keep from Current Guidance

- Core sustainability plan documents should be concise and make use of bulleted lists.
- Agencies should continue to describe what sustainability means to them and how it fits with their mission and/or strategic plan.
- Maintain general guidance directing agencies to include short-term goals and longer-term stretch goals, along with strategies to meet goals.
- Continue to document both internal and external practices and goals.
- Identify specific metrics to measure success.
- Maintain the general idea of collaboration among agencies, and with Board members.

Opportunities to Revise Guidance

- The five-page limit is short for agencies that have extensive and specific actionable items; ISCN suggests agencies emphasize brevity, but that they be provided some flexibility on length. Extra material can also be placed in appendices.
- Update specific content guidance on short and longer-term goals to align with the latest executive orders and related statewide policy (e.g., align goals with Governor's goals on energy, water, climate, etc.).
- Consider helping agencies in conducting a "materiality analysis" to determine their areas of greatest impact, control and opportunity – e.g. internal operations, external programs or specific functional areas.
- Consider providing flexibility in reporting requirements based on agency size/complexity and capacity of staff (e.g. does the agency have a sustainability coordinator?). Larger and more complex agencies have more resources to track metrics and pursue complex strategies compared to smaller agencies and boards.

Opportunities to Add to Guidance

- Include a section that discusses the scope of an agency's authority; for example, the Military Department has both federal and state requirements related to sustainability. Agencies that receive federal funds have specific federal goals that must be addressed in addition to Oregon goals.
- Frequency of reporting to OSB might be more meaningful if plans are updated every five years, but then agencies could update the Board on implementation progress in interim years. This would encourage agencies to be accountable for actually making progress toward goals, monitoring metrics and completing specific actions.
- For presentations to the Board, it would be helpful if agencies knew ahead of time if there were specific questions or areas of interest. That way, presentations could be tailored to answer Board questions.
- Foster cross-agency collaboration on sustainability – this would help agencies working on similar issues, such as executive order compliance, to collaborate and avoid redundant efforts.
- Provide a section on when/how to update plans, and how to proceed with implementation. What are some best practices agencies can employ to sustain the sustainability?
- Specify who from the agency should approve the plan internally, and who should present to the Board. Emphasize the importance of senior-level management.
- Include education and communication efforts, and how agencies can engage employees in plan development and implementation.

Delete from Guidance

- Pull out the discussion of budget narrative from plan guidance; two years ago, agencies were told they no longer have to report out on those guidelines in their plans once it was part of an agency budget.

Other Ideas

- Explore building stronger relationships between OSB members, agencies and plan partners. Pair Board members with agencies so agencies have a Board mentor advocate who can assist in responding to questions that come up during the meeting because they know how an agency operates. This would give agencies an on-going connection and intersections with new areas.
- Provide specific but simple guidance on how to collect data on key metrics. Revise the statewide metrics template to include revised guidance on water, waste, fleets, climate, procurement and other data points.

Suggested Outline for Revised Agency Guidance Document

1. Why sustainability?
2. History of sustainability in Oregon state government
3. Why develop a strategy or plan? (requirements and benefits)
4. Overview of the process: plan-do-check-act (create a living document)
5. Conduct a materiality analysis
    a. What does sustainability mean for your agency
    b. Identify areas of greatest impact to scope your plan
    c. Characterizing operational impacts
    d. Characterizing programmatic impacts
6. Summarize current impacts and practices
7. Engage your staff
    a. Newsletters
    b. Idea boxes
    c. Focus groups
    d. Steering committee
    e. Pop up events/open house over lunch
    f. Surveys
8. Cross check against executive orders and statewide policy, and use plan as a vehicle to address them
9. Develop a sustainability vision, mission and/or guiding principles as appropriate to your agency's culture
10. Create short-term and long-term goals
    a. Reference current goals in EOs, other legislation or key drivers
11. Create strategies/action to support goals
12. Map goals and strategies to metrics
    a. ODOE building energy scorecard
    b. OWRD water resources reporting
    c. DAS fleet fuel and GHG emissions records
    d. Waste- estimating diversion rate
    e. GHG emissions – The Climate Registry CRIS
    f. Programmatic impacts
    g. Equity, Diversity and Inclusion
13. Lay out an implementation plan along with tracking progress, sharing results and updating the plan (who, what and when)
14. Appendices:
    a. Staff survey template
    b. Links to EOs and statewide policies
    c. Link to agency plans web page

Oregon Sustainability Board

Governor's Sustainability Office 900 Court St, NE, Ste. 160
Salem, OR 97301
503-378-6460

September 10, 2018

To: Interagency Sustainability Coordinators Network (ISCN) From: Oregon Sustainability Board

Re: Agency Sustainability Plan Guidelines Members of the ISCN:

Thank you for your excellent July 27, 2018 memorandum providing suggestions for updating the "State Agency Sustainability Plan Updates" document. This document has informed agency sustainability plan development since it was written in 2013. As you acknowledge - and the Board agrees - changes in state government leadership and priorities provide an opportunity to revisit and revise this document. The Board discussed your suggestions at its August 2018 meeting and provides below some more detailed response. We greatly appreciate your thoughtful suggestions and agree with most of them as received.

What to keep from current guidance: The Board agrees with the ISCN feedback on what to keep from the current guidance. Specifically, plans should remain concise, but they should continue to link sustainability to the agency's mission and strategic plan. Agencies should pursue both short- and long- term goals, evaluating both internal operations as well as external-facing programs, and strive to measure success with specific metrics.

Opportunities to revise guidance: The Board largely concurs with the ISCN on opportunities to revise guidance and appreciates the flexibility agencies seek in structuring their plans based on size, levels of complexity and other factors. At its last meeting the Board discussed the idea of a "smart sheet" to help agencies scope out areas of greatest impact, control and opportunity.

Opportunities to add to guidance: The ISCN provides several suggestions, many of which the Board supports. These include articulating an agency's authority (e.g., other federal considerations), focusing on plan implementation in updates to the Board and including education and communication.

To foster dialogue between agencies and the Board, we suggest that agencies scheduled to present to the Board submit materials two weeks in advance. This will allow more Board member time to review documents and prepare specific questions, providing agencies a better sense of Board questions and areas of interest. Providing concise summaries of, " what' s changed" - such as a summary matrix of updates or implementation progress - would also expedite the Board' s review effort.

We also agree that senior agency leadership should be involved, from signing off on plans to participating in Board presentations. The Board also strongly encourages ISCN members to work with their leadership to address sustainability in the agency's strategic plans.

Other ideas: The Board is committed to supporting agencies as they develop their plans. We hope the next iteration of plan guidance will provide renewed direction and tools. While we appreciate the idea of pairing Board members with agencies as mentors, we must also balance our Board duties with other commitments. Alternatively, we suggest Board members serve as an on-call resource for agencies, particular ly in each Board member ' s area of expertise, should agencies have specific questions .

As a next step, we propose to work with the DAS Sustainability Officer and the Governor's Office to develop revised plan guidelines. In addition to the points raised by the ISCN, we are also examining how best to integrate equity and inclusion as well as climate into future guidelines. We understand that the guidelines must be relevant and workable for agencies, and we will keep you updated and engaged as we make progress.

Respectfully,

John Miller

John Miller, Chair
Oregon Sustainability Board

Attachment: Suggested guidance document outline

APPENDIX D: Material Footprinting Case studies

This case study is one in a series co-sponsored by Washington Department of Ecology, the Oregon Sustainability Board, and the Oregon Department of Environmental Quality to help companies in the Pacific Northwest understand the challenges and benefits of product environmental footprinting.

EXCEL DRYER

gaining competitive advantage through product life cycle assessment

Excel Dryer, the first hand dryer manufacturer to commission a comparative product life cycle assessment of high-speed energy-efficient hand dryers, now evaluates the performance of its XLERATOR® Hand Dryer following the new Product Category Rules published by UL Environment.

THE ISSUE

For over 50 years, Excel Dryer, Inc. has been manufacturing American made hand dryers and invented the original, patented XLERATOR® Hand Dryer. XLERATOR created the high-speed, energy-efficient hand dryer category, redefining the public perception of hand dryers and setting a new standard for performance, reliability and sustainability.

The hand dryer market, like so many others, has seen the environmental performance of products become a key point of market competition, and as a result has seen a variety of “green” claims being made over the past decade. While the XLERATOR Hand Dryer was determined to be a leader in energy-efficiency among electric hand dryers, based on the results of a peer reviewed life cycle assessment (LCA), neither the environmental benefits nor its scale over the full life cycle of the product were apparent. Additionally, it was not clear how the XLERATOR compared to hand drying alternatives such as virgin or 100 percent recycled paper towels.

THE SOLUTION

To quantify benefits of the XLERATOR, Excel Dryer became the first hand dryer company to commission an independent LCA of high speed hand dryers, which was peer reviewed to ISO 14040 standards. The end goal was to share credible, third-party testing results with consumers and the specifying community to substantiate environmental claims of their XLERATOR Hand Dryer.

The LCA compared the high-speed, energy-efficient XLERATOR Hand Dryer to a conventional electric hand dryer and paper towels containing between zero and 100 percent recycled content. The LCA examined a broad range of environmental impacts at all stages of the product life cycle including all material, energy inputs and pollutant outputs.

Each system was evaluated to determine the environmental impact of providing 10 years of service (drying 260,000 pairs of hands). This was understandably a lengthy process and significant commitment of time, money and staff resources.

The LCA confirmed the XLERATOR Hand Dryer reduces the carbon footprint of hand drying substantially versus even 100 percent recycled paper towels.

“People generally believe that recycled anything is the greenest solution, which often isn’t true,” said Penny Bonda, LEED fellow with the U.S. Green Building Council, a partner with Ecoimpact Consulting and past president of the American Society of Interior Designers. “Product and material specification becomes easier, almost intuitive, once the design professional understands the LCA process and the vital role it plays in green design.”

THE CHALLENGES

AVOIDING 'GREENWASHING'

With so much information being disseminated, it became increasingly important for buyers and specifiers to understand and gain access to reporting tools and benchmarks to authenticate claims relative to environmental impacts and product performance. A champion for innovation and change, Excel Dryer recognized that in order to provide clarity and prevent 'greenwashing' in the sustainable product sector, the method to test for environmental impact of hand dryers needed to be standardized.

NEED FOR STANDARDIZATION

To that end, Excel Dryer again reached out to a credible internationally recognized third party, UL Environment (a business division of Underwriters' Laboratories), to create Product Category Rules (PCR) for the hand dryer industry globally. Excel Dryer was selected to chair the PCR committee and work with other industry leaders to create industry consensus per ISO standards.

TRANSPARENCY

The newly published PCR was the first global PCR published by any industry. It included industry consensus guidelines that specify how a hand dryer's performance is to be tested for energy use and dry times, both key components to properly reporting their environmental impacts. Third-party testing to these guidelines levels the playing field and creates an apples-to-apples comparison of hand dryers allowing consumers and specifiers to make more informed decisions. This new PCR ushers the hand dryer industry into a new 'age of transparency.'

"I'm proud to be an American manufacturer of quality products people enjoy using and can depend on," said Excel Dryer President, Denis Gagnon. "If we make a claim about environmental sustainability, we back it up with credible, third-party testing results."

What's a PCR?

Product Category Rules (PCR), is a set of specific rules that are peer-reviewed, and offer scientifically supported guidance specifying the way a product LCA ought to be carried out given the nuances of that product category. A PCR is a prerequisite for a product Environmental Product Declaration (EPD), which is a concise, highly readable format for easily communicating the environmental performance of a product. EPDs are increasingly used in purchasing decisions.

RESULTS

Just as they did in 2009, Excel Dryer again called upon the help of a third-party consultancy to refresh the LCA of their XLERATOR Hand Dryer, as well as new models that have been released since 2009 — this time to apply the product-specific guidance put forth in the hand dryer PCR. This effort is expected to be completed in 2017.

Excel Dryer understands that a coordinated approach to green restroom design is one that uses the most up-to-date high-efficiency products to reduce energy usage, conserve water, save money and contribute to a better environment overall.

BENEFITS

With this holistic and environmentally focused approach, Excel Dryer will continue to be an innovator and champion for change, leading the industry by example.

Materials Management Grant Focus Area

State of Oregon
Department of Environmental Quality

Land Quality
700 NE Multnomah St.
Suite 600
Portland, OR 97232
Phone: 503-229-5446
Contact: Marie Diodati
Email:
Diodati.Marie-Helene@deq.state.or.us

www.oregon.gov/DEQ

DEQ is a leader in restoring, maintaining and enhancing the quality of Oregon's air, land and water.

Introduction

The Department of Environmental Quality's (DEQ) Materials Management Program funds projects that support Oregon's 2050 Vision for sustainable materials management. Since 1991, DEQ has awarded over $9 million in materials management grants. Project grants are for any project that reduces waste generation, promotes reuse, or recovers solid waste through recycling, composting or anaerobic digestion.

Focus Area: Partnerships involving Community-Based Organizations (CBOs)

This year, the Grant Program aims to foster new partnerships between CBOs and environmental organizations in Oregon.

- Focus points will be given to projects involving two or more organizations where materials management outcomes would assist a local community in Oregon. The implementation must also include extensive involvement from a CBO that is representative of or has successfully served the target community. Applicant must demonstrate that the project would foster or establish a new partnership with a CBO (e.g., a partnership formed January 1, 2016 or later).
- Projects that fall within this focus area can earn additional focus points if the applicant or CBO has never received an award from the Materials Management Grant Program.

Definitions

Community-Based Organizations (CBOs)

For the purposes of the focus area, a CBO is defined as an incorporated non-profit organization (including, but not limited to, environmental justice networks, faith based organizations, grassroots level regional advocacy groups and representatives of the business community); and tribal governments and tribal organizations of the federally recognized nine tribes in Oregon. Other groups may be considered depending on the focus of the project.

CBO Involvement

Extensive involvement of a CBO means that the CBO is involved in several actions or stages of the development and implementation of the project. Merely having the CBO submit a general letter of support stating that the project is a good idea will not be sufficient to be considered for focus points.

New Partnership

To be considered for focus points, applicants partnering with a CBO can demonstrate that the partnership was formed within the last three years by submitting a letter signed by both parties affirming that the parties have not previously worked together on a contract before January 1, 2016, or other documentation affirming this statement.

This case study is one in a series co-sponsored by Washington Department of Ecology, the Oregon Sustainability Board, and the Oregon Department of Environmental Quality to help companies in the Pacific Northwest understand the challenges and benefits of product environmental footprinting.

HP
finds life cycle assessment lends credibility to the environmental benefits of small batch digital printing

Small batch digital printing enables consumer packaged goods brands to respond to rapid market changes and stand out on the retail shelf. HP's use of life cycle assessment demonstrates that small batch digital printing offers environmental benefits as well.

THE ISSUE

In the world of consumer flexible packaging for everything from dried peanuts to moist tofu, the text, images and logos had always been printed with analog technologies, which require either engraved cylinders or plates for each color separation of print images. Such technologies make good sense for large print jobs that don't require frequent changes—ones in which economies of scale really pay off.

But what about smaller print batches, or ones where many customized designs are needed? Consumer packaged goods (CPG) brands and retailers are under the pressure of dynamic change in consumer trends and are redesigning their processes to allow more flexibility and customization to meet the demands of shoppers. The CPG industry demands more agile, flexible printing technologies to bring down printing costs for small print batches and also seeks new ways to interact with consumers through their packaging.

HP seized this opportunity and in 2014 introduced a new technology to the flexible packaging market—the Indigo 20000 Digital Press. This press proved financially beneficial for not only smaller print jobs with quick turnaround but also enabled variable data printing for creating new flexible packaging applications that had not existed before, complementing analog technologies, which remain preferable for large print jobs.

HP's marketing team could easily substantiate the financial benefits to its customers for using this small-batch technology. But what about the environmental performance benefits? The marketing team had a strong inclination that there were environmental benefits to be communicated, but it wanted a sound, credible, thorough message—a powerful, positive marketing message to deliver to that audience.

Examples of printed flexible packaging (aka pouches)

GOALS

In deciding to conduct a life cycle assessment (LCA), HP had its sights set on the following goals:

1. To understand the environmental hotspots within the life cycle of the printed product using Indigo technology, from materials extraction to product end of life with a particular focus on the printing impacts, and what actions have the most leverage to reduce those impacts.

2. To evaluate those impacts in terms of a wide range of environmental impact indicators –not limited to carbon—including water, ecotoxicity, carcinogens, and ionizing radiation—to be made aware of burdens shifted from one indicator to another, using quantitative, scientifically-supported methods.

3. To compare its Indigo technology's environmental performance relative to the latest analog technologies.

4. To communicate the findings publicly in a fair, transparent and credible way—in alignment with HP's values.

THE SOLUTION

The vision amounted to a comparative assertion LCA, which was carried out in alignment with ISO-14040/14044 standards. The criteria include review by a third-party panel and stringent guidelines to help ensure fairness in the comparison. Carrying out this type of project allows the findings to be communicated to the public in a credible way.

THE CHALLENGES

COST

Carrying out a comparative assertion LCA can be expensive in terms of money and time—a lot of data needs to be collected, familiarity with life cycle inventories and methods is needed, and a peer review must be supported—so HP decided to start small to gain more certainty about their technology's environmental performance.

HP did some in-house calculations using information from its manufacturing team and some publicly available information for the competing technologies and came up with some positive preliminary results.

HP recognized that working with detailed environmental data and analysis was outside their core competency and hence engaged a qualified consultant early to guide the process.

With specialized help engaged, HP was able to validate the likely outcomes and then implement a complete LCA that would conform to the ISO 14040/14044 standards.

DATA

One of the biggest challenges of the study lay in finding reliable data, particularly for energy use, for the alternative technologies. HP overcame that challenge by seeking the advice of an expert specialized in those technologies to provide the most current information available. By including such an expert in analog printing technology in the review panel, they were able to further ensure that all systems were fairly represented in the assessment.

ANALYSIS

HP found it challenging to summarize all of the interesting findings from the LCA—from ozone depletion to water consumption, which results do you communicate without obfuscating any information? HP addressed this by focusing on the key drivers of impact and putting the results into the context of its customers—which environmental indicators are important and relevant to them? HP polled its customers and reviewed general industry information to determine the subset of the information which had the most meaning to its key audience.

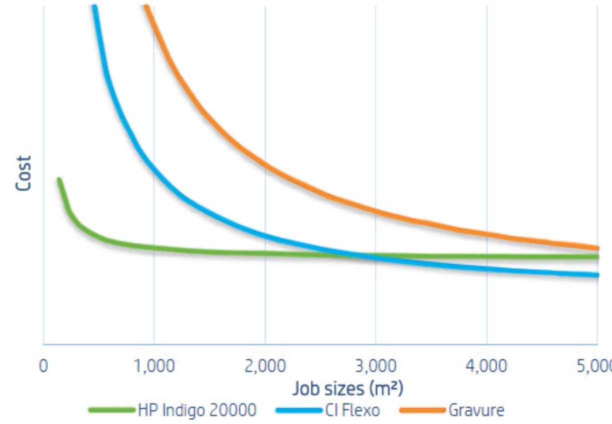
INTERPRETATION

HP recognized the importance of doing the LCA right. HP wanted a fair comparison that accurately reflected the technologies and the best available science. Careful interpretation and communication of the results was key to aligning the messaging with HP's leadership in transparent sustainability disclosure. To this end, HP found it very important to develop and provide long-term knowledge and support to respond to ongoing customer and public inquiries about the work.

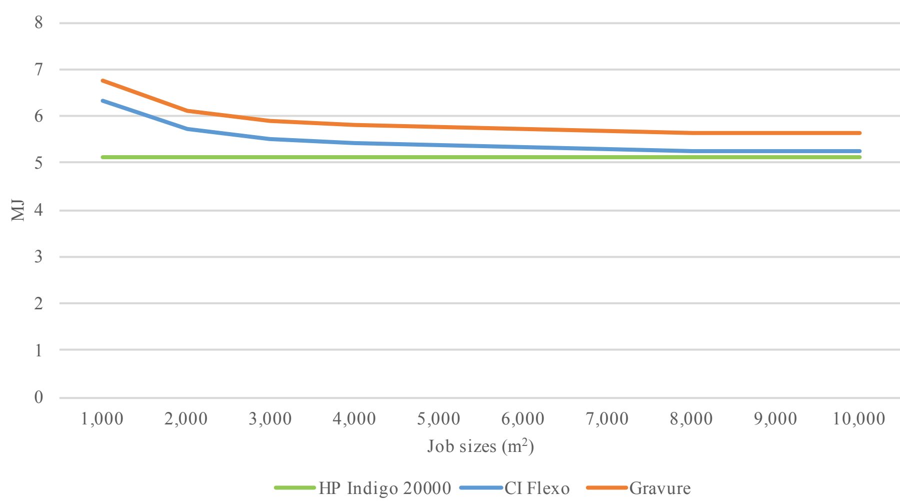
RESULTS

The LCA results confirmed what HP had speculated: as print job sizes increase, the setup impacts per print job decrease, and at job sizes smaller than 10,000 m^2, digital technology provides lower potential impacts for many of the indicators evaluated including global warming potential, water depletion and energy demand.

For very large print jobs, analog prints make sense both financially and environmentally. Therefore, the right solution depends on the printing goals. HP was able to quantify this "cross-over point" at which analog becomes preferable to digital. HP was happy to conclude that there was enough room in the market for both analog and digital printing technologies.



Cumulative Energy Demand per pouch varying print job size (Europe)



Coffee pouch's cost (top) and cumulative energy demand (left) performance using HP Indigo 20000 Digital Press and analog printing (Reproduced from HP's Press White Paper 2016). As print size grows, analog print costs and environmental performance together make it competitive with digital prints.

THE BENEFITS

Although financial benefits cannot yet be tracked to this project directly, the learnings from the LCA have helped inform the way HP designs the printing press, which help its customers reduce environmental impacts during the printer's use stage. These actions have given HP a competitive advantage. HP is able to market this superior environmental performance as part of its branding as a sustainability leader.

HP was also able to leverage the work to engage in direct conversations with customers, strengthening those relationships for the long term. This work is just one more brick in the foundation of HP's sustainability reporting, environmental transparency and brand image.

This case study is one in a series co-sponsored by Washington Department of Ecology, the Oregon Sustainability Board, and the Oregon Department of Environmental Quality to help companies in the Pacific Northwest understand the challenges and benefits of product environmental footprinting.

IMPOSSIBLE FOODS
explores possibilities of better burgers through life cycle assessment

Impossible Foods' use of an internally developed and externally reviewed life cycle assessment (LCA) helps them understand the impact and resource use along the supply chain of its flagship product, credibly communicate with customers, and help drive select business decisions. In addition to their own product LCA, Impossible Foods uses LCA results from the academic literature to quantify sustainability and resource use trends within the existing US food system.

THE ISSUE

Impossible Foods, a producer of plant-based alternatives to meat and dairy products, has a mission to help transform the global food system by providing a way to reduce the environmental impacts of animal product consumption. They pursue this mission through food technology innovations in taste, texture and more.

Their flagship product is a plant-based burger made from ingredients such as coconut oil, textured vegetable protein and potato protein. Since beef is one of the most resource intensive components of global diets, Impossible Foods needed a robust internal understanding of the environmental impacts of food ingredients and processes on water, land and the climate, for both their product and that of beef.

They and their customers are interested in understanding how their products perform relative to animal-based products, and the key drivers of environmental impacts. For its flagship plant-based burger product, clear and credible environmental messages are expected to further motivate consumers beyond the taste experience to seek out its product as an environmentally preferable option.

THE SOLUTION

Because providing environmentally-friendly food choices is core to its mission, Impossible Foods knew from the start they'd commit to maintaining an up-to-date and rigorous LCA of its products.

They began by internally performing a farm-to-factory LCA of its Impossible Burger product to understand its impacts and hotspots, as well as its comparison to ground beef. They had this LCA externally reviewed to ensure the quality of the information before communicating the findings publicly. A farm-to-factory boundary was selected as it is expected to be equivalent for the beef comparison for the outbound distribution stage.

After first constructing an assessment in spreadsheets using data from multiple open-source LCA tools, they moved their modeling to a professional LCA software to ensure the quality and consistency of data used, and to more thoroughly explore the findings.

They saw investing in a professional software and learning to use it as a step that would help them fully integrate the insights from LCA into both their product development and also their marketing and communications, as well as present new opportunities for use of product environmental footprinting, or LCA, in business decisions. Separate from their product LCA, Impossible Foods made use of existing published LCAs in the academic literature to understand the resource use and environmental impacts of animal agriculture production systems (for instance, resource use variability among region, product, and by conventional, grass fed, and organic systems).

In some cases, both the LCA software and the academic literature for product LCA have been useful in providing context for business decisions. For example, in assessing environmental burdens associated with different sources of plant-based fats, they used the default data in their software to develop an initial assessment, which was then refined through a broader literature review of the available information on the production systems associated with the different ingredients in their product.

They found that the impact information available for many of these ingredients tell part of the environmental story, but require additional context from other data sources such as scientific literature and statistics from the Food and Agriculture Organization of the United Nations (FAOSTAT). That understanding informs not only the 'why' behind the product but also the means to improve their environmental performance by identifying hotspots in production and supply chains.

THE CHALLENGES

Due to the mission (and branding) of Impossible Foods and its flagship product, environmental footprinting was a necessity, and their leaders provided full support. As a fairly young start-up offering plant-based alternatives to meat, footprinting established performance benchmarks and demonstrated credibility.

COST

The initial inventory and assessment was developed internally, by employees who specialize in LCA. However, in terms of staff time, costs of software license and consulting support, that process could be perceived as labor and resource-intensive. The inventory stage of data collection required bandwidth not just from the company's sustainability practitioners but from all operations-owners across the company, including manufacturing, R&D, and facilities, as their expertise was required in model development.

For example, Impossible Foods uses a novel fermentation method to develop 'heme,' a key ingredient that functions as an analog to the myoglobin found in meat. Commercial-scale fermentation has general parameters for energy requirements, but each system is very different, and those collecting the life cycle inventory data worked closely with engineers to model the process based on launch-scale energy requirements of yeast culture.

As such, the time required by multiple parties was significant, but this may not be a concern for companies wishing to footprint a product with a more ubiquitous and well-documented set of ingredients/ inputs.

RESOLUTION

Impossible Foods chose to hire consultants to perform a review of its internally developed LCA to identify inconsistencies or gaps, and to transition the model from Excel to professional software.

This review helps lay the groundwork for a future ISO-compliant audit: ISO compliant LCAs go through multiple rounds of peer review, and entail significantly more time and resources. Impossible Foods plans on pursuing ISO compliance for the LCA in the future, when the bill of materials, processes, and commercial production partners are less subject to change. The future peer-reviewed LCA is not expected to deviate significantly from the current reviewed results, but is expected to refine understanding of impacts and hotspots within the supply chain.

Impossible Foods first engaged an independent consultant for support and eventually opted to engage a well known LCA consulting group at a higher price point. Based on their experience, Impossible Foods found that expertise, location, cost, and time constraints are the main criteria for choosing between an independent consultant and a larger firm when undertaking an LCA study.

THE ADVICE

Impossible Foods has provided the following advice for companies considering taking on product environmental footprinting:

"For companies tackling LCA independently/internally: read lots of industry reports and journal articles. For those engaging in footprinting through partnering with sustainability consultants: read lots of journal articles, and ask lots of questions!

The consultants are a valuable source of expertise—methodologies and theory behind the various footprinting protocols are dynamic and specific, and company staff should understand those frameworks prior to trying to communicate results or make product comparisons."

"We would recommend that all companies attempt to understand their respective environmental impacts and improve them accordingly. However, fully reviewed and vetted environmental footprinting spanning multiple metrics (not just carbon) can be a big-ticket-expense for small and medium size companies.

Development of a LCA should be undertaken with clear sense for how the results will be leveraged in marketing, vendor relations, and establishment of benchmarks and future environmental performance goals. Start small, and give your staff lots of time.

Begin building a life cycle inventory long before any marketing or branding needs necessitate the process, and build the inventory with the intent of understanding baseline performance as a starting point for future improvement."

"We chose to begin our sustainability consulting vendor relationship with an additive approach, beginning with our internal LCA and pursuing rigorous independent review, while building core competency in LCA in-house. Once our bill of materials and supply chains become less fluid, we are likely to embark on a full ISO compliance process for our LCA with our sustainability consulting partners."

"In initiating our review process, vendor selection was a top consideration. The sustainability consulting industry hosts a multitude of excellent groups, and selecting the right vendor is tough. After meeting with a number of potential sustainability partners, we selected a vendor based on body of work (focus on food footprinting), engagement with and initiatives in the quantified sustainability community, and their ability to meet our ambitious pre-product launch review deadline.

For those operating under tight communications deadlines, geographic location of consultants might be a consideration, as real-time responses across large time zone gaps may have proved challenging in our particular case."

"Finally, for companies interested in making use of footprinting results in marketing: engagement between marketing/communications and footprint developers is key. No model is perfect, and footprinting procedures should be communicated with the understanding that variation in results is inevitable and the footprint is simply an estimate of real physical and energy flows—contingent on modeling assumptions, assessment methods selected, and real-time changes in bills of materials and supply chains."

> “As we scale, we can leverage our in-depth understanding of our resource use (and established baseline) to address hotspots and streamline operations, potentially by partnering with vendors. Anecdotally, the impact of dietary patterns on global ecosystem health is not well-known among consumers, and our footprinting activities facilitate some consumer education along those lines.”
>
> *– Rebekah Moses, Impossible Foods*

THE BENEFITS

The flagship product was only very recently launched, so direct economic benefits thus far aren’t possible to assess. But Impossible Foods has already found value in the ability to communicate the relative sustainability of the product to customers and investors, and knowledge of impact-areas within their production practices.

They are looking for opportunities to integrate this knowledge more closely in further developments of the Impossible Burger as well as in new product development. Knowledge of impact-areas/hotspots has also been critical for future growth strategy and in determining optimal facility design for future scale-up (for example, planning for reduced electricity demand by conceptualizing co-generation facilities, grid alternatives, and various forms of energy reclamation techniques, particularly for fermentation processes).

Expected economic benefits resulting from this footprinting work and outreach are reduced expenses within their direct operational control and supply chain, enhanced brand recognition, increased communication with customers resulting in sales growth, vetting performance of future products, and the ability to answer customer requests for data.

The environmental benefits include reducing the impact of their own production and suppliers’ practices based on learnings from the study and helping consumers select and use environmentally preferable products.