

# Sustainability Update <sup>20</sup><sub>24</sub>



## ABOUT THIS REPORT

Our 2024 Sustainability Update showcases our company-wide commitments to decreasing greenhouse gas emissions, supporting our diverse employee-owners, and partnering with local communities to advance resource recovery and achieve our shared goals.

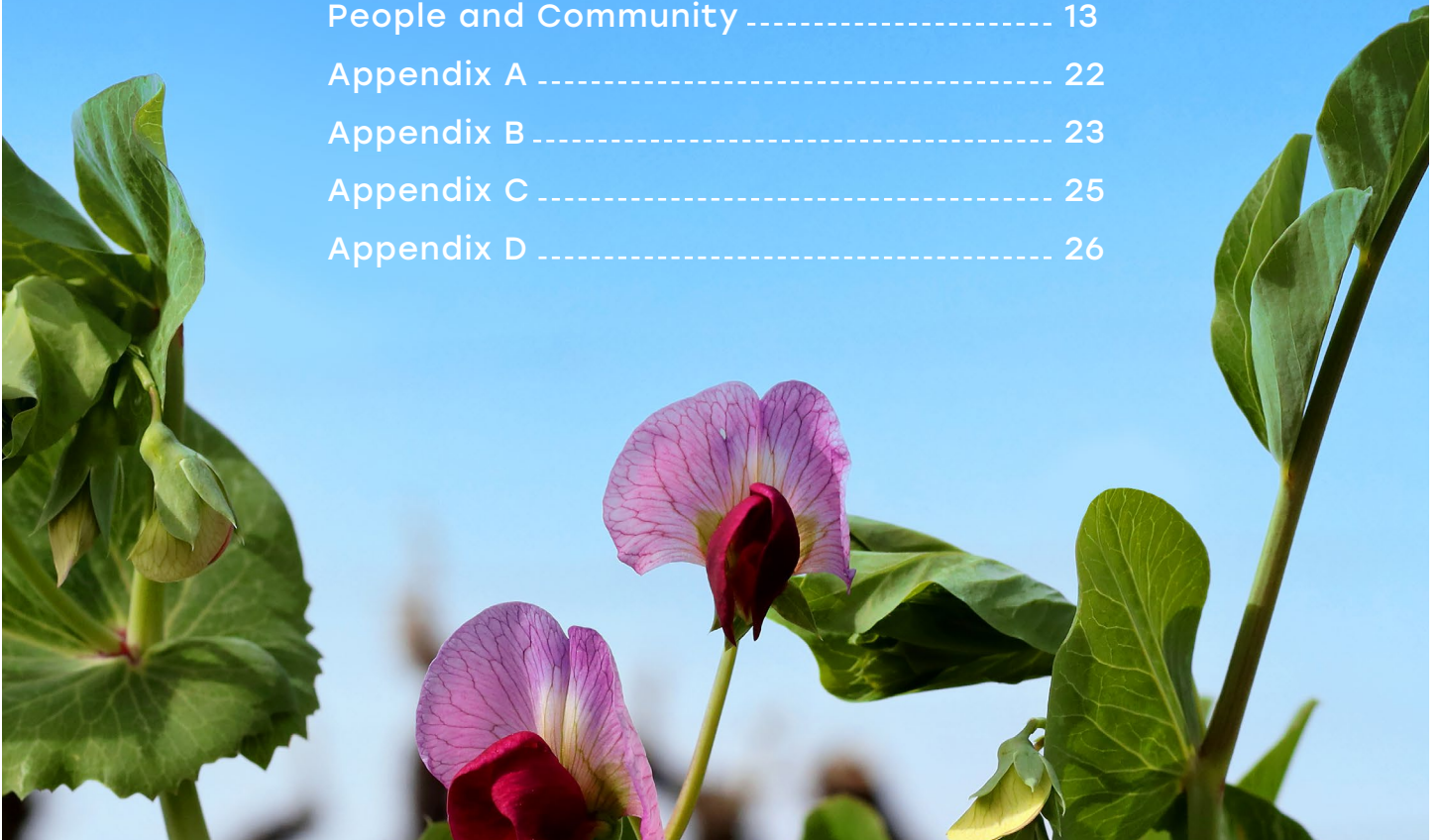
All data in this report is for the 2023 fiscal year, which ended on September 30, 2023, except where otherwise noted.

Recology's scope 1 and 2 greenhouse gas emissions inventory is verified to a limited assurance level by Cameron-Cole, LLC, an independent third-party. See Appendix A for more detail.

For a comprehensive review of our sustainability activities, including previous reports, visit [recology.com/sustainability](https://recology.com/sustainability).

## TABLE OF CONTENTS

Introduction .....	i
Resource Recovery .....	1
Sustainable Operations .....	7
People and Community .....	13
Appendix A .....	22
Appendix B .....	23
Appendix C .....	25
Appendix D .....	26





**At Recology, sustainability is fundamental to how we do business. As the largest 100% employee-owned company in our industry, we consider our diverse workforce essential to our success.**

Our employee-owners are true sustainability leaders, committed to reducing waste and lowering our carbon footprint while providing best-in-class service to our communities, upholding our commitment to ethical business practices, and maintaining a safe work environment.

Supporting our employee-owners means ensuring they have the tools and training they need to be accountable and excel in their roles. In 2023, we launched numerous trainings for our employee-owners that reinforce our dedication to a culture of ethics, integrity, and compliance. We also continue to invest in programs that foster a safe work environment, enhance our employee-owners' skills and competencies, and provide additional professional development opportunities to take their Recology careers to the next level. Prioritizing our employee-owners will sharpen our competitive edge so we can continue to conduct business responsibly and set new benchmarks for service and sustainability.

We remain focused on resource recovery, which uniquely positions Recology to play a key role in building a circular future while also reducing our climate impact. Recology's participation in the United Nations Climate Change Conference (COP28) Leadership Interviews showcased our recovery-focused business model as a more sustainable path for our industry. I was honored to represent Recology and highlight our innovative solutions to divert materials from landfills while reinforcing our leadership in resource recovery.

Our sustainability leadership extended to the policy arena in 2023, where we were proud to publicly support California Senate Bill (SB) 253, The Climate Corporate Data Accountability Act. Transparent emissions reporting will hold companies like ours publicly accountable and is a necessary step towards driving greenhouse gas emissions reductions.

Looking forward, we also continue to work towards our climate targets of powering our facilities with 100% renewable or carbon-free electricity and beneficially using 75% of the landfill gas we collect to generate renewable energy by 2028. These targets will continue to push our company to further decarbonize our operations and strengthen our role as a climate partner to our communities.

Thank you to everyone who has contributed to our sustainability efforts. Our employee-owners are the heart and soul of Recology, and our communities are critical partners. Their dedication and commitment to sustainability drive our progress.

**Salvatore M. Coniglio**  
Chief Executive Officer (CEO)

# Recology in 2023

100%

Employee-Owned

63%

of Recology Stock Beneficially Owned by Women and Minority Groups

23%

Reduction in Scope 1 and 2 Emissions Since 2018

OVER

1M

Customers Served Throughout CA, OR, and WA

1.4M

Tons Diverted from Landfill

100%

of Recovered Metals and Glass Sent to Domestic Markets

90%

of Facility Electricity from Renewable or Carbon-Free Sources

OVER

9X

More Greenhouse Gases Avoided Through Recycling and Composting Than Generated by Operations

Since our founding over 100 years ago, Recology has evolved into a 100% employee-owned, resource recovery company with over 3,800 employees. We proudly serve over one million customers in 137 jurisdictions across California, Oregon, and Washington. As we continue to expand our operations, we move closer to our vision of a world without waste.

**KING COUNTY, WASHINGTON**

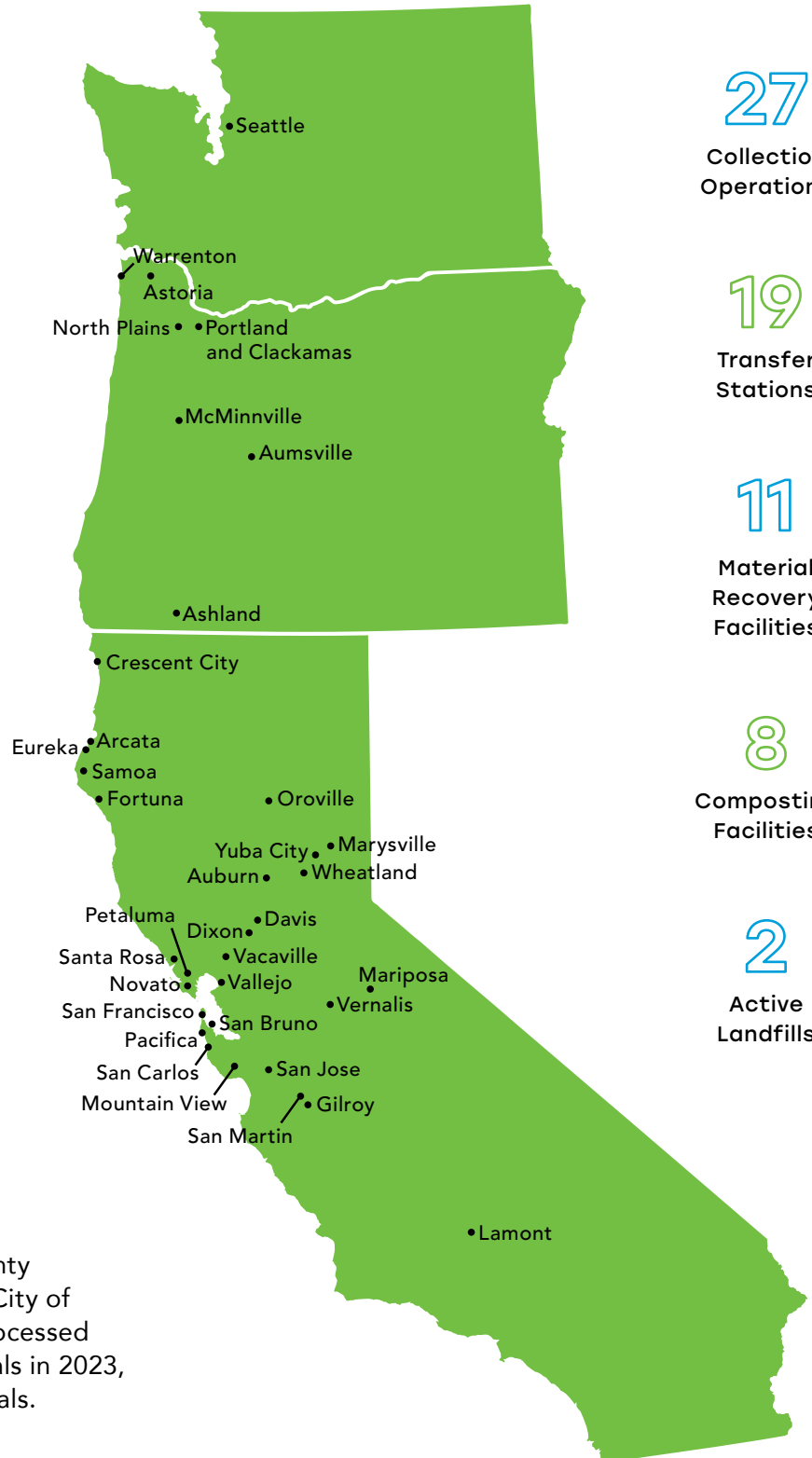
Our operations in King County, Washington have been rapidly expanding. We will be serving 21,300 additional customers due to new contracts awarded to us in the cities of Tukwila, North Bend, and Redmond. We are also pleased to continue to serve 36,300 existing customers due to the renewal of our previously awarded contracts for Burien, Bothell, and the City of SeaTac.

**CLACKAMAS COUNTY, OREGON**

In 2023, we began serving 5,500 new customers in Clackamas County, Happy Valley, and Portland due to our acquisition of Sunset Garbage Collection.

**LOS ANGELES, CALIFORNIA**

Our composting facility in Kern County began accepting organics from the City of Los Angeles in January 2023. We processed over 100,000 tons of organic materials in 2023, helping the city meet its SB 1383 goals.



27

Collection Operations

19

Transfer Stations

11

Material Recovery Facilities

8

Composting Facilities

2

Active Landfills

# Resource Recovery

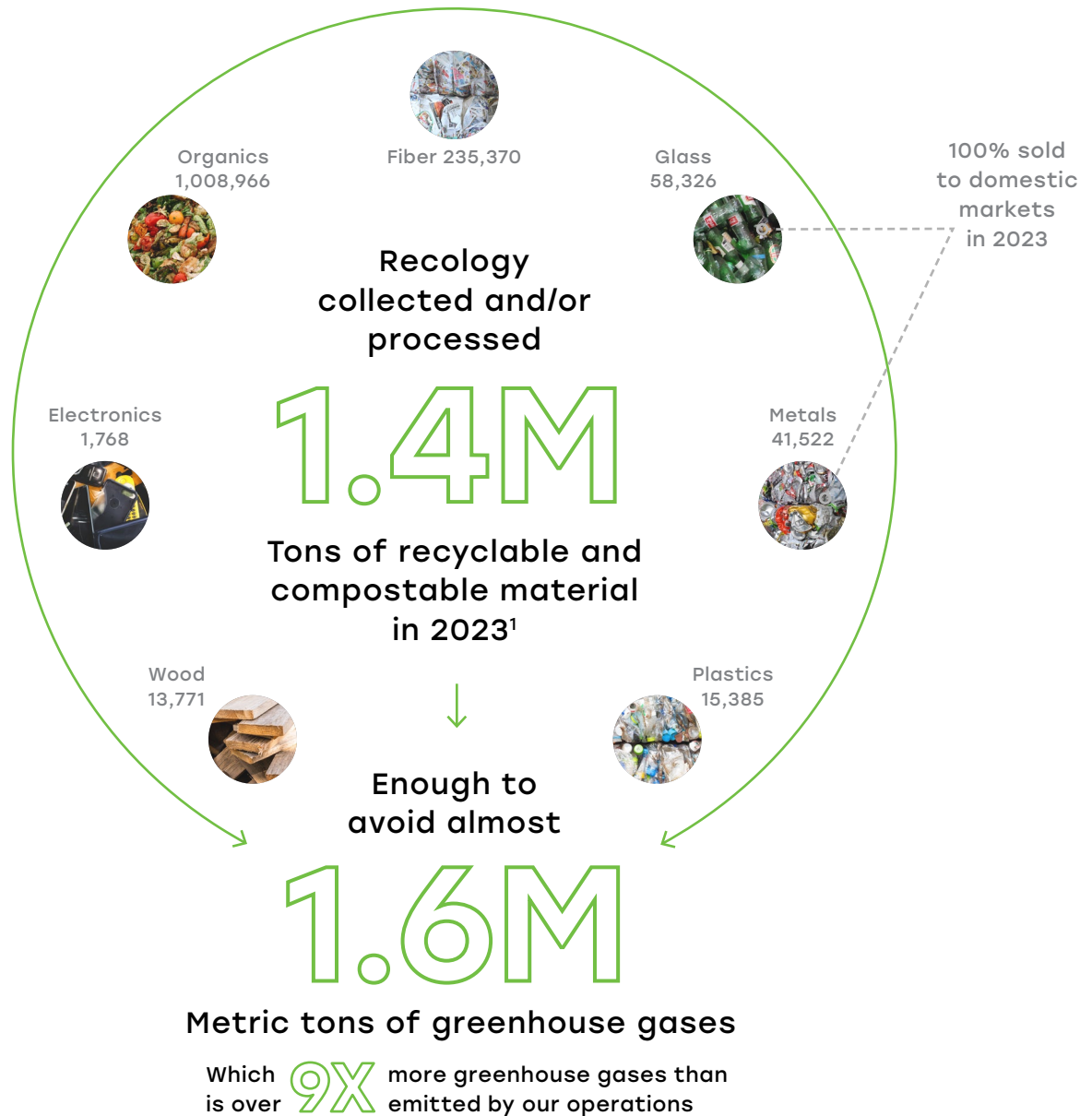


# Achieving Climate Benefits

Recology is committed to resource recovery, one of the primary tools our communities rely on to reduce their climate impact and contribute to the circular economy.

By diverting both recyclable and compostable material from the landfill, we can reduce greenhouse gas emissions, ensure the re-use of materials into new products, and deliver nutrients back to the earth. Along with our communities, Recology proudly plays a vital role in that effort.

Recology recognizes the climate benefits of reducing the transport of goods abroad. We prioritize the sale of recovered materials to markets here in the United States.



# Advancing Circularity

Recycling plays a critical role in advancing a circular economy. Recology is strengthening recycling systems where we operate by broadening access to recycling services, prioritizing outreach, and investing in our materials recovery facilities (MRFs) to optimize sorting.

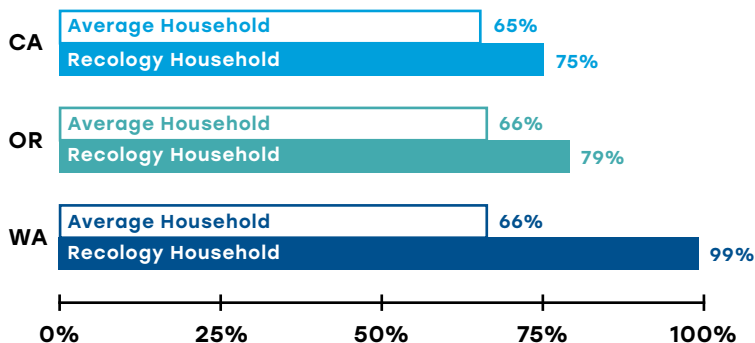
**Recycling works but greater access to and participation in recycling are needed nationally.**

According to The Recycling Partnership’s 2024 State of Recycling Report, 76% of the nation’s residential recyclable materials don’t make it into the recycling system, highlighting a pressing need to broaden access to recycling services and drive greater adoption of recycling practices. The report also noted that only 3% of residential recyclables are lost at MRFs during sorting, demonstrating that properly sorted recyclables are being recycled at high rates.

**More communication and outreach can help increase participation.**

Recology’s Waste Zero teams have long emphasized the importance of outreach and education in improving recycling participation and recovery. On the West Coast, where Recology operates and where recycling is mandated in many cities and counties, approximately 2/3 of residents participate in available recycling programs, compared to only 59% participation nationally. In Recology service areas, these participation rates are even higher.<sup>2,3</sup>

**Recycling Participation in States Where Recology Operates<sup>2,3,4</sup>**



## SB 54: New Recyclability and Compostability Standards in California

SB 54, once implemented, will establish an EPR program requiring producers to ensure that packaging and plastic foodware sold in California meet strict recyclability and compostability standards. Recology supported SB 54 and advocated for its passage during the legislative process.

By 2032, producers selling goods in California must:



**Reduce**

the amount of single-use plastic packaging by weight and number of plastic components by 25% from 2023 levels.



**Recycle**

a minimum of 65% of plastic materials covered under the regulations.



**Ensure**

all single-use packaging and plastic foodware are recyclable or compostable.

**More products and packaging need to be designed for recyclability.**

With less than half of plastic packaging in the United States currently recyclable, it’s essential for producers to design recyclable products and packaging to maximize recycling rates and reduce waste – a key component of source reduction policies. Extended Producer Responsibility (EPR) policies, which hold producers materially and financially responsible for the entire lifecycle of their products and packaging, including end-of-life recycling and disposal, are also key policy levers that can aid our effort to increase resource recovery.

With new EPR policies going into effect, Recology is optimistic that recycling rates in the states where we operate will continue to increase in the coming years.

## SONOMA COUNTY MATERIALS RECOVERY FACILITY GRAND OPENING

Recology is continuously investing in our facilities to modernize our systems and increase recovery rates so less material ends up in the landfill. In November 2023, we completed a \$35 million modernization of our MRF in Santa Rosa, CA, which Recology unveiled to the public in January 2024.

The 85,000 square foot facility features cutting-edge equipment, including seven optical sorters and a powerful eddy-current separator, that work alongside our team of recycling sorters to maximize our sorting efficiency and material recovery rate.

The Santa Rosa MRF can process approximately 400 tons of material each day and recover 85% of the materials the surrounding communities place in their blue bins.

**“This plant gives customers peace of mind that the recyclables they put in their blue bin will be properly recycled...Investments like these show that recycling can work, and Recology is here to make sure that it does...”**

– Logan Harvey, Sr. General Manager  
Recology Sonoma Marin



# Feeding the Soil and Benefiting the Planet

According to the United States Environmental Protection Agency (USEPA), an estimated 58% of fugitive methane emissions from landfills are from food waste. Recology is proud to have pioneered curbside food scrap collection for composting in San Francisco in 1996, which has helped keep millions of tons of food waste out of the landfill. Composting plays a key role in combatting climate change by avoiding methane emissions from decomposing organic matter in landfills and sequestering carbon.

Composting is a natural process that involves the aerobic decomposition of organic materials like food scraps, yard trimmings, and agricultural residues into a nutrient-rich soil amendment called compost. Recology is widely recognized as a leader in commercial composting, with eight composting facilities that span over 550 acres throughout California and Oregon.

## SB 1383: Compost Expansion in California



Beginning January 1, 2022, California implemented a statewide organic waste recycling requirement with the ambitious goal of decreasing organic waste disposal in landfills by 75% by 2025. This groundbreaking legislation, referred to as SB 1383, is part of a broader initiative to reduce emissions of short-lived climate pollutants (SLCP). SLCPs, such as methane, have a greater warming effect than carbon dioxide, so further reductions are crucial to slow down atmospheric warming.

In 2023, Recology:

**Integrated 847 New CA Organics Customers**  
which helped increase the amount of organic materials recovered at our facilities

**Recovered Over 1M Tons of Organic Material for Composting<sup>1</sup>**  
a 27% increase from 2022



## Leading the Way in Composting: Recology's 2023 Achievements

### RECOLOGY OSTROM ORGANICS NAMED A 2023 ORGANICS MANAGEMENT FACILITY OF THE YEAR

The National Waste & Recycling Association (NWRA) recognized Recology's leadership in organics recovery by naming Recology Ostrom Organics (ROO) as a winner of the 2023 Organics Management Facility of the Year award.

ROO, located in Wheatland, California, is a modern, sustainable composting facility equipped with innovative organics processing technology and powered with renewable energy from landfill gas collected at the neighboring Ostrom Road Landfill.

ROO also employs water recycling throughout the composting process and prioritizes renewable diesel for mobile equipment.



### RECOLOGY FEATURED IN COP28 LEADERSHIP INTERVIEWS

Recology CEO, Sal Coniglio, was invited to represent Recology as part of the COP28 Leadership Interviews, which featured companies at the forefront of driving a sustainable future.<sup>5</sup>

Sal highlighted Recology's sustainability-focused business model, including our pioneering efforts in composting, and called for global advancements in recycling and composting to address the climate crisis.

Recology remains committed to implementing new, innovative strategies that advance resource recovery and help mitigate rising greenhouse gas emissions.



[Watch Sal's Interview  
to Learn More](#)



Recology  
Ostrom  
Organics



OVER  
**200k**  
Tons of organic  
material since  
2020



OVER  
**120k**  
Cubic yards of high-quality  
organic compost for local and  
regenerative agriculture

# Sustainable Operations

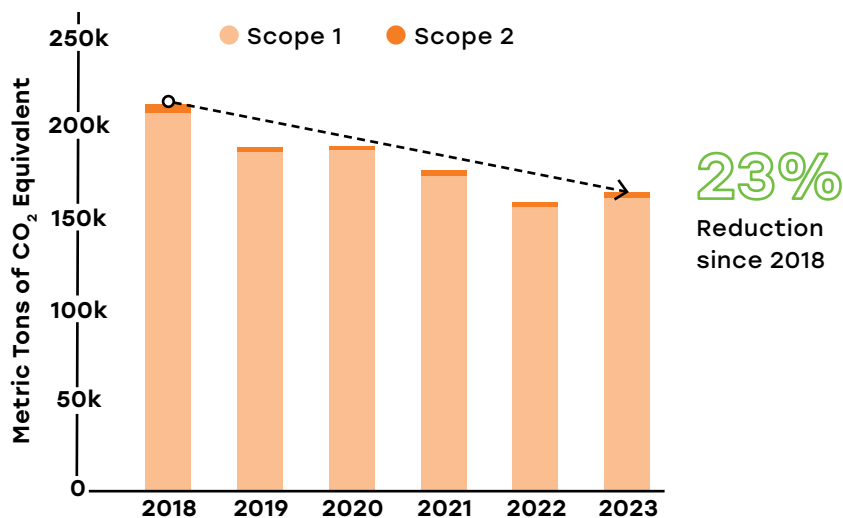


# Reducing Our Climate Impact

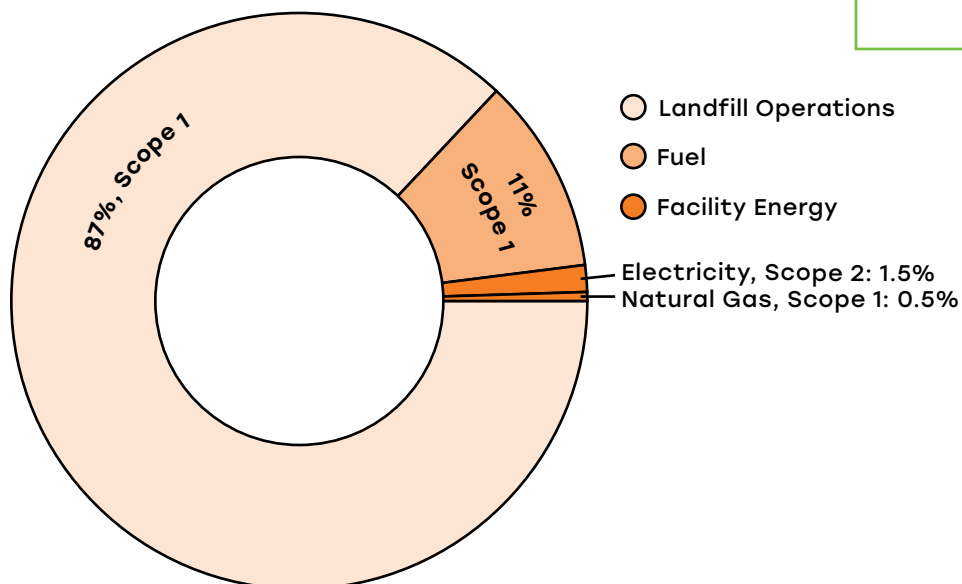
Recology generates greenhouse gas emissions from three primary sources: landfill operations, fuel, and facility energy.

Since 2018, we have reduced scope 1 and scope 2 emissions by 23%. Recology achieved this emissions reduction by increasing our fleet's use of renewable and alternative fuels and by adopting cleaner electricity options at our facilities.

Historical Greenhouse Gas Emissions



2023 Greenhouse Gas Emissions



## SB 253: California's Greenhouse Gas Disclosure Mandate

In October 2023, California enacted The Climate Corporate Data Accountability Act, known as SB 253. SB 253 requires large private and public corporations to publicly disclose all three scopes of their greenhouse gas emissions beginning in 2026.

Recology supported SB 253 and advocated for its passage during the legislative process because transparent emissions reporting will help ensure accountability and drive meaningful reductions in greenhouse gas emissions.



**Scope 1**  
Direct emissions from operations

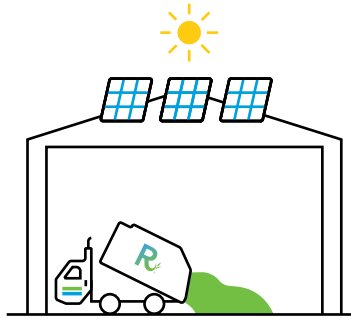


**Scope 2**  
Indirect emissions from purchased electricity



**Scope 3**  
Indirect emissions from supply chains and product use

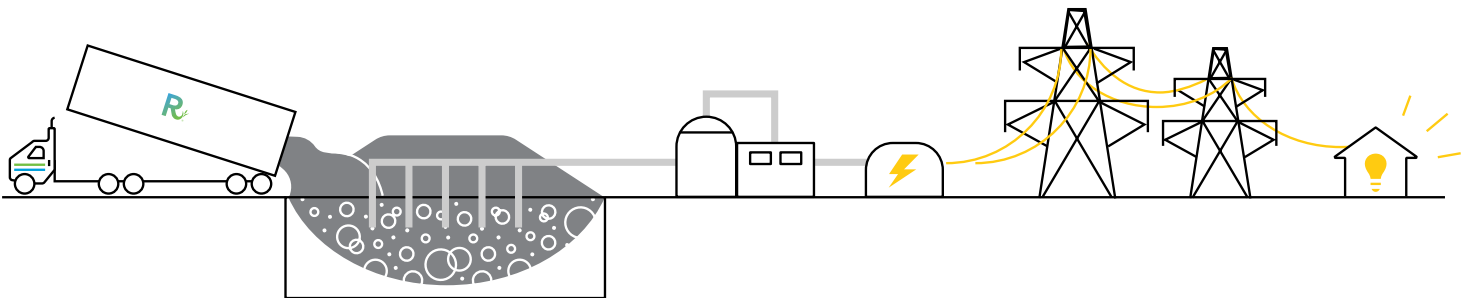
# By 2028, Recology is committed to



Powering  
our facilities with

# 100%

renewable or carbon-free  
electricity



And using

# 75%

of the landfill gas we  
collect to generate  
renewable energy

# Revalorizing Valuable Energy

When organic materials decompose in landfills, they generate landfill gas which contains methane—a potent greenhouse gas with a global warming potential at least 28 times greater than carbon dioxide. While both of Recology’s active landfills and most of our closed landfills are equipped with gas collection and control systems that capture landfill gas and redirect it to gas-to-energy or flaring systems, some gas is still emitted directly through the landfill surface—referred to as fugitive emissions.

**Emissions from landfills accounted for 87% of Recology’s total greenhouse gas emissions, totaling 144,313 MTCO<sub>2</sub>e in 2023.**

Reducing emissions from our landfills is a top priority for Recology. In addition to our continued efforts to divert organic materials from landfills, we are investing in new projects to improve the efficiency of our gas collection systems and beneficially reuse more of our gas to generate renewable energy so we can achieve additional climate benefits.

## RECOLOGY IS EXPANDING OUR RENEWABLE ENERGY GENERATION CAPACITY

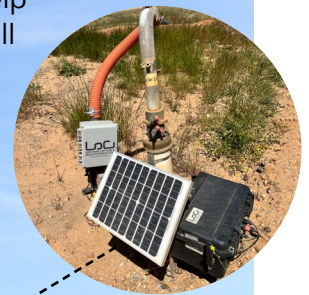
In 2023, we set a target to beneficially reuse 75% of the landfill gas we collect to generate renewable energy. Since setting our target, we've made improvements to our systems that allow us to capture more methane. However, the percentage of landfill gas converted to renewable energy will continue to decrease until we complete our planned expansion projects.

\*Due to regular maintenance and increasing gas volumes, Recology’s percentage of landfill gas converted to electricity decreased slightly between 2021 and 2022. In 2023, we saw a larger decrease because our existing landfill-gas-to-energy systems underwent significant maintenance.

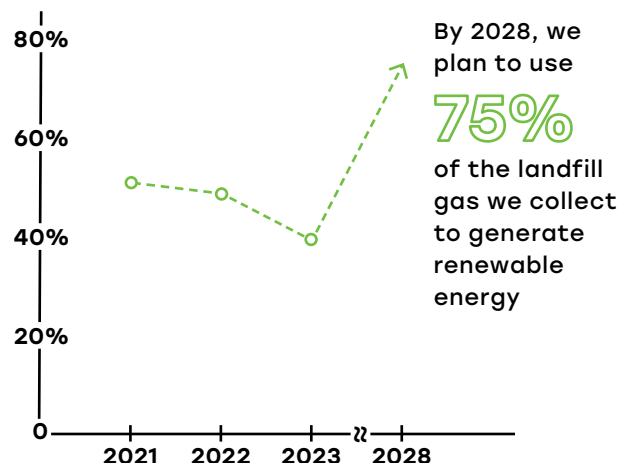
## RECOLOGY IS IMPROVING METHANE CAPTURE

In 2023, Recology worked with LoCI, a company specializing in optimizing collection of landfill gas, to improve the efficiency of our gas collection systems.

LoCI’s real-time data and automated control systems have allowed us to capture more methane that would otherwise be emitted through the landfill surface. These improvements also help optimize the collected landfill gas to generate renewable energy, such as electricity and natural gas.



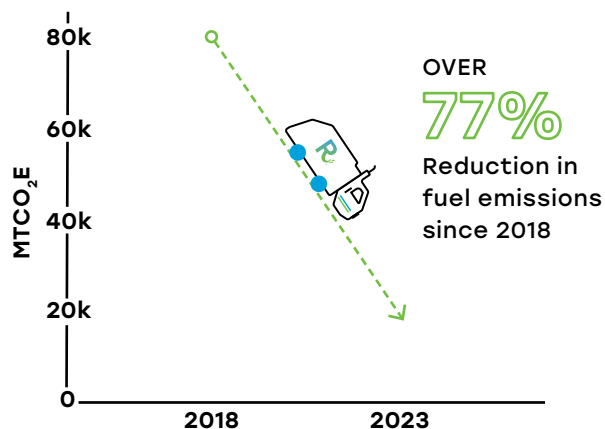
Percentage of Collected Gas Beneficially Reused\*



# Fueling Our Sustainable Future

In 2023, fuel made up 11% of Recology's total greenhouse gas emissions, totaling 17,697 MTCO<sub>2</sub>e.

By transitioning to renewable and alternative fuels, Recology has reduced our fuel emissions by over 77% since 2018—equivalent to 157,326,209 fewer miles driven by an average gasoline-powered passenger vehicle.



## RECOLOGY PILOTING NORTH AMERICA'S FIRST HYDROGEN FUEL CELL-POWERED REFUSE TRUCK IN SAN FRANCISCO

Recology, working with Hyzon and New Way, unveiled North America's first hydrogen fuel cell-powered electric refuse truck at Waste Expo in May 2024. This initiative demonstrates our continued



### California's Advanced Clean Fleets

California's ACF regulation, which was approved by the California Air Resources Board (CARB) in April 2023, is designed to accelerate the transition of medium and heavy-duty vehicle fleets to ZEVs with the goal of reducing tailpipe emissions and improving air quality. ACF will require operators of large fleets like Recology to fully transform their fleet from gas-powered vehicles to ZEVs by 2042.

Recology looks forward to collaborating with our communities and equipment partners to achieve CARB's goal of aggressively reducing greenhouse gas emissions by transitioning our fleet to ZEVs.

leadership to decarbonize the waste management industry as we prepare to transition our fleet to zero emission vehicles (ZEVs), as required by California's Advanced Clean Fleets (ACF) regulation.

With employee-owners at the helm, Recology will be the first to demo the vehicle during the summer of 2024 in San Francisco.

# Powering Our Facilities with Clean Energy



Recology's facilities include a network of transfer stations, MRFs, composting facilities, retail recycling stores, public buyback centers, customer service centers, maintenance shops, offices, and more.

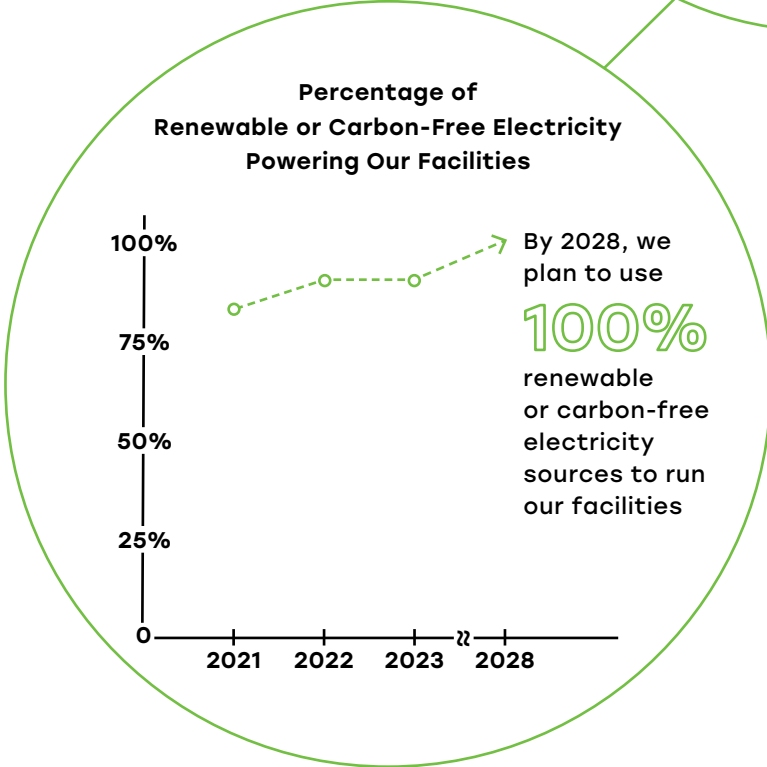


As a result of our commitment to reducing our carbon footprint, our facilities ran on

**90%**

renewable or carbon-free electricity sources in 2023.

In 2023, facility energy made up less than 2% of Recology's total greenhouse gas emissions from our operations, totaling 3,093 MTCO<sub>2</sub>e.



# People and Community



## Anchoring Our Culture

Recology is the largest 100% employee-owned company in the resource recovery industry. This ownership structure is the cornerstone of our success—driving a culture of company pride, collaboration, and innovation.

Through our Employee Stock Ownership Plan (ESOP), Recology stock is beneficially owned by current and former employee-owners rather than outside investors. This ensures that employee-owners' hard work and dedication are rewarded not only during their tenure at Recology but also into their retirement years. Through the ESOP, employee-owners are directly invested in the success and growth of Recology, aligning their interests with the long-term interests of the company.

Recology is proud to be employee-owned and aims to increase awareness of the benefits of employee ownership across the country. We were honored to advocate for employee ownership in Washington, D.C. with both the ESOP Association and Employee-Owned S Corporations of America (ESCA) in 2023. We also raised \$29,000 for the Employee Ownership Foundation (EOF) to bolster these efforts.



# 63%

of Recology stock was beneficially owned by employee-owners who identify as women or members of an ethnic minority group, or both, in 2023



# Investing in Our Employee-Owners

In our 2023 culture survey, employee-owners provided feedback on Recology's culture, work environment, initiatives, and policies.<sup>6</sup> With over 75% participation in the survey, the results have informed meaningful changes that will further enhance our employee-owners' workplace satisfaction.

## OUR EMPLOYEE-OWNER PULSE

79%

of employee-owners would recommend a friend to work at Recology

71%

of employee-owners feel that Recology is a workplace where they can develop and be their best self

71%

of employee-owners are satisfied with their career growth development opportunities at Recology

## OUR MANAGER ESSENTIALS TRAINING SERIES

Recology is committed to ensuring our supervisors and managers are well-prepared to lead their teams effectively. We've designed our Manager Essentials training series to equip them with the necessary tools to excel in their roles by enhancing their understanding of our business and honing essential leadership skills.

This leadership training is grounded in our "Guiding Principles" of Awareness, Approachability, Agility, Accountability, and All-Inclusivity. By providing supervisors and managers with the knowledge and skills they need, we ensure they can drive success and foster a positive, productive work environment.

**285** participants in 2023 Manager Essentials training series

## OUR EMPLOYEE-OWNER MENTORSHIP PROGRAM

Recology's mentorship program provides employee-owners with individualized professional development opportunities in a collaborative environment. During regular one-on-one meetings, mentors share their knowledge and expertise to help mentees identify and achieve their career goals, fostering meaningful connections at Recology outside of participants' daily work activities.

Participants also attend monthly educational events, which provide helpful information on our business, company-wide initiatives, and any additional opportunities to gain skills, build confidence, and reach their potential.

**44%** growth in mentorship program participation since its 2019 launch

### FOSTERING A CULTURE OF ACCOUNTABILITY AND TEAMWORK

Recology’s employee ownership structure fosters a culture of ethics, integrity, and compliance—reinforcing our dedication to the communities we serve. We pride ourselves on doing business fairly and honestly. Recology’s Code of Conduct formalizes our longstanding commitment to ethical conduct, guiding employee-owners on ethical behavior and decision-making.

In 2023, we reinforced our Code of Conduct by updating our Employee Reference Guide and launching mandatory compliance-related training for relevant employee-owners. We also began training employee-owners in leadership roles and those who interact regularly with government officials on a one-on-one basis. These trainings ensure that Recology leaders at all levels of the company uphold the Code and provide accurate messaging to the teams they manage.

Recology is committed to ethical conduct in all aspects of our business, reflecting the values of our employee-owners.

[Learn More About Our Code of Conduct](#)

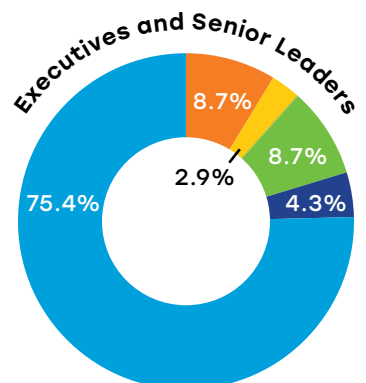
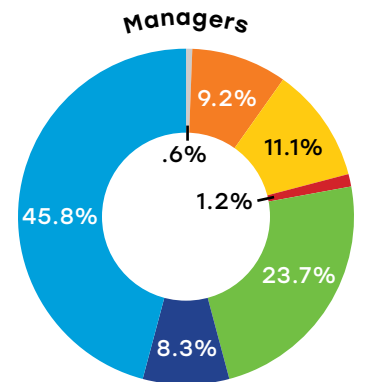
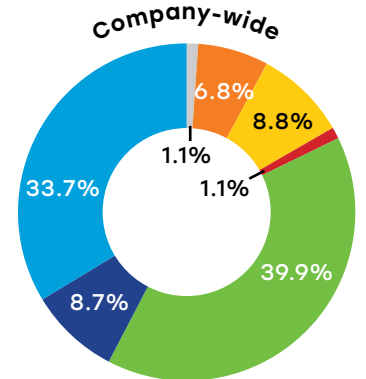
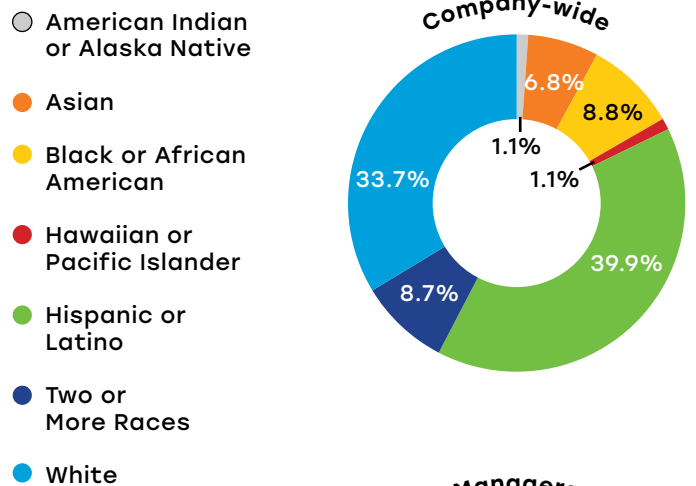
### PRIORITIZING OUR CUSTOMER EXPERIENCE



Customer experience remains a top priority for Recology. We know that customers want to engage with customer service representatives with local knowledge and expertise, which is why we prioritize locating our call centers in the communities we serve. By providing a locally integrated customer experience, we can better support and continue to provide best-in-class service to our communities.

### CELEBRATING OUR DIVERSE WORKFORCE

Recology is proud of our diverse workforce and celebrates the differences between us that make for a vibrant work culture. Our employee-owners’ varied experiences and perspectives generate a broad range of ideas, resulting in a more innovative workplace. This inclusive mindset contributes to our unique employee ownership culture.





**RECOLOGY VOLUNTEER PROGRAM:  
BURIEN, WASHINGTON**

Since 2008, the Recology Volunteer Program has supported local organizations that work to improve our communities. Our employee-owners collaborate with community volunteers to rejuvenate and beautify public spaces where we operate using environmentally conscious materials, such as drought-resistant plants, compost, mulch, and recycled paint.

In August 2023, Recology held a volunteer event in Burien, Washington where approximately 70 Recology volunteers gathered at Seahurst Park and the adjacent beach to complete a restoration and beach clean-up project for the Burien community.

Our employee-owners removed 3,200 square feet of invasive blackberry, morning glory, buttercup, and horsetail from the park, spread 15 cubic yards of mulch, and removed trash from the beach.



**RECOLOGY SAFETY ROAD-EO:  
DIXON, CALIFORNIA**

The Recology Safety Road-eo returned to Dixon, California in September 2023. Employee-owners enjoyed a fun-filled day with delicious barbecue, activities for all ages, music, a classic car show, and of course, an exciting Safety Road-eo.

All who attended had the pleasure of watching Recology's best-of-the-best drivers from our California operations show off their driving and safety skills in a spirited competition.



# Educating Our Communities

Community education and outreach is a key component of Recology’s efforts to improve participation in recycling programs and maximize resource recovery. Our Waste Zero teams champion these efforts by conducting trainings, site audits, tours, and more—instilling our “Waste Zero” philosophy throughout our communities.



## Waste Zero Activities in 2023

8,440

Site Visits  
and Consultations

226

In-Person  
and Virtual Tours

1,622

Trainings  
and Presentations

282

Tabling and  
Attended Events

## ENGAGING OUR COMMUNITIES DURING EARTH MONTH

While Recology prioritizes education and outreach year-round, Earth Month is the busiest time of year for our Waste Zero teams who spend the month engaging with our communities to promote resource recovery in service to our planet.

In April 2023, our San Mateo County Waste Zero team provided relatable and accessible outreach and education to nearly 2,000 community members

at private sector events, school assemblies, and local government Earth Month celebrations, including the City of Belmont and City of San Carlos’ Earth Day celebrations, the Love Our Earth Festival in Menlo Park, and RethinkWaste’s Earth Day Celebration. Our team also participated in local clean-up efforts to support the preservation and beautification of our communities.



# Ensuring the Health and Well-Being of Our Employee-Owners

Recology prioritizes the health and safety of our employee-owners and communities. As part of our ongoing efforts to reduce the number of accidents and resulting injuries, we utilize a safety scorecard. The safety scorecard grades each operation on various categories to incentivize managers' proactive engagement with employee-owners and identify areas where additional training could be helpful.

## 2023 Recology Safety Scorecard

PROTOCOL	MEAN SCORE
<p><b>Vehicle Condition Inspections</b></p> <p>Recology operations managers inspect company vehicles monthly to ensure that employee-owners are conducting the necessary vehicle maintenance and reporting any issues of concern incurred during work hours.</p>	A+
<p><b>Safety Observations</b></p> <p>Recology operations managers observe employee-owners on-the-job regularly to make sure that everyone is following proper safety protocols, including the use of proper tools and appropriate personal protective equipment (PPE) for their individual tasks.</p>	A+
<p><b>Injury and Accident Reviews</b></p> <p>Recology operations managers conduct timely reviews of workplace accidents or injuries to assess the cause and determine if additional training is warranted.</p>	A+
<p><b>NOTES</b></p> <p>Recology employee-owners have embraced the safety scorecard and are excelling in all categories, resulting in a safer work environment for all.</p>	

# Taking Pride in Our Employee-Owners



The NWRA awards drivers who exemplify safety and outstanding customer service. Only a handful of drivers are chosen out of hundreds across the entire waste and recycling industry. We are extremely proud to recognize our 2023 winners.



## Residential Driver of the Year

Gustavo Arriaga, Recology Sunset Scavenger

Known for his enthusiasm for the job and commitment to the community, Gustavo has more than 35 years of experience in the industry.



## Regional Commercial Driver of the Year: Honorable Mention

Salvador Plascencia, Recology South Valley

With 23 years in the industry, Salvador is known for his friendliness and willingness to go above and beyond expectations.



For over 10 years, Recology's ROCStar program has been a key part of our tradition and culture. It provides a platform for employee-owners to recognize peers who exemplify our core values and positively impact our communities—whether through outstanding customer service, innovative problem solving, or exemplary teamwork.



## 2023 ROCStar of the Year

Isaac Hanley, Recology Auburn Placer

Isaac's exceptional customer relations, friendly demeanor, and efficient work ethic set a shining example and act as a source of inspiration for all who have the pleasure to work with him.

# Appendices



# Emissions Data

## RECOLOGY 2023 EMISSIONS (MTCO<sub>2</sub>e)

Scope	Description	Anthropogenic	Biogenic
1	Direct Emissions from Stationary Combustion <i>Source: Fossil portion of fuels used in stationary assets, natural gas usage at facilities, landfill flaring</i>	1,291	—
Biogenic	Biogenic CO <sub>2</sub> Emissions from Stationary Combustion <i>Source: Landfill flaring, biomass portion of fuels used in stationary assets</i>	—	27,842
1	Direct Emissions from Mobile Combustion <i>Source: Fossil portion of vehicle fuels</i>	17,160	—
Biogenic	Biogenic CO <sub>2</sub> Emissions from Mobile Combustion <i>Source: Biomass portion of vehicle fuels</i>	—	103,267
1	Direct Fugitive Emissions <i>Source: Fugitive landfill methane</i>	144,228	—
2	Indirect Emissions from Electricity Use <i>Source: Purchased electricity</i>	2,424	—
<b>TOTAL</b>		<b>165,103</b>	<b>131,109</b>

## RECOLOGY HISTORICAL EMISSIONS (MTCO<sub>2</sub>e)

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
SCOPE 1	209,553	187,414	188,571	174,939	157,752	162,679
SCOPE 2	4,743	2,001	1,339	2,524	1,630	2,424
TOTAL SCOPE 1 & 2	214,296	189,415	189,910	177,463	159,382	165,103
TOTAL BIOGENIC	85,970	133,210	135,198	136,453	120,159	131,109

## RECOLOGY 2023 AVOIDED EMISSIONS (MTCO<sub>2</sub>e)<sup>1</sup>

AVOIDED EMISSIONS FROM RECYCLABLES	1,047,238
AVOIDED EMISSIONS FROM COMPOSTABLES	539,560
TOTAL AVOIDED EMISSIONS	1,586,798
EMISSIONS AVOIDANCE FACTOR (Avoided Emissions) ÷ (Scope 1 & 2 Emissions)	9.6

# Emissions Reductions Disclosure Statement

The following disclosures are made pursuant to California Assembly Bill (AB) 1305. References to “we” or “our” refer to Recology Inc.

## GREENHOUSE GAS EMISSIONS REPORTING

Recology generates greenhouse gas emissions from three primary sources: landfill gas, fuel emissions, and facility energy usage.

We have voluntarily measured and reported our companywide greenhouse gas emissions for each fiscal year since 2018. We have not undergone any significant changes in our business or emissions calculation methodology that would warrant recalculating the company’s historical emissions.

Our emissions inventory includes the three internationally recognized greenhouse gases generated from company business activity: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Recology does not participate in activities that generate sulfur hexafluorides (SF<sub>6</sub>s), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) above de minimis levels, so these gases are not quantified. Our inventory is based on Recology’s fiscal year, October 1<sup>st</sup> through September 30<sup>th</sup>, and includes emissions from landfills, fleet, and buildings where Recology has operational control.

We calculate scope 1 and 2 emissions using a combination of The Climate Registry (TCR) database tools, utility-specific market-based emission factors, Local Government Operations Protocol (LGOP) equations 9.1, 6.2, 8.7, and 8.8, and CARB’s implementation of Intergovernmental Panel on Climate Change’s (IPCC) First Order Decay Model.

Recology does not currently report scope 3 emissions.

## INDEPENDENT THIRD-PARTY VERIFICATION

Cameron-Cole, LLC, an independent third party, verified our 2022 and 2023 scope 1 and 2 greenhouse gas emissions inventory to a limited assurance level in conformance with ISO 14064-3, The Greenhouse Gas Protocol, and The Climate Registry’s General Verification Protocol. Full reports can be found [here](#).

## GREENHOUSE GAS EMISSIONS REDUCTION EQUIVALENCY CLAIMS

We use the US EPA’s online Greenhouse Gas Equivalencies Calculator to calculate GHG emissions reduction equivalency claims (e.g., claims that a greenhouse gas emission reduction is equivalent to removing a certain number of cars from the road for a year).

## GREENHOUSE GAS EMISSIONS AVOIDANCE CLAIM

Recology’s recycling and composting activities result in avoided emissions, in comparison to a baseline scenario of landfilling.

We calculate emissions avoidances for composting activity using CARB’s Composting Emission Reduction Factor (2017) quantification methodology. We calculate emissions avoidances for recycling activity using the US EPA’s Waste Reduction Model (2023). This differs slightly from our emissions avoidance calculation methodology for recycling activity from 2022 and prior years, where we used both the US EPA’s Waste Reduction Model (2020) and CARB’s Recycling Emission Reduction Factor (2011) quantification methodology.

We calculate a companywide emissions avoidance factor by comparing the sum of emissions avoidances to the sum of company-wide scope 1 and scope 2 emissions.

## CLIMATE TARGETS

TARGET	HOW PROGRESS IS BEING MEASURED
<p>By 2028, we seek to use 100% renewable or carbon-free electricity to power our facilities.</p>	<p>Recology aligns definitions of renewable and carbon-free electricity with the US EPA. This includes biomass, biowaste, geothermal, hydroelectric, solar, wind, and nuclear energy sources. We calculate performance by dividing total electricity used and generated from renewable or carbon-free sources by total electricity used, companywide. We report progress based on the fiscal year, ending September 30 each year. We make progress by opting into cleaner electricity portfolios, installing on-site renewable electricity generation, and purchasing renewable energy certificates.</p>
<p>By 2028, we seek to use 75% of the landfill gas we collect to generate renewable energy.</p>	<p>Recology partners with G2 Energy to create renewable electricity from the gas we collect from our active owned landfills' gas collection systems. We calculate performance by dividing total landfill gas volumes directed to renewable energy generation by total landfill gas volumes collected by our collection systems at all our owned landfills. We report progress based on the fiscal year, ending September 30 each year. We make progress by partnering with energy generators to expand existing or install new generation systems and improve gas collection systems on-site.</p>

# References and Methodologies

1. Total recyclable and compostable materials includes all materials Recology manages at its facilities for recycling or organics (compost, mulch, or wood chipping) markets. Graphic includes only a subset of total recovered materials. Total recyclable material includes all recyclable materials Recology processed at our MRFs or transfer stations and sent to third-party recyclers or MRFs. Total compostable material includes all organic materials Recology processed at our composting or mulching facilities, or our transfer stations before being composted at third-party facilities. Both values exclude residual materials sent to landfills. The same conditions apply to all recovery values in this report, unless otherwise stated.
2. According to The Recycling Partnership's 2024 State of Recycling Report, participation is defined as households with access that use their available recycling service.
3. Participation in recycling is not mandatory at the state level in California, Washington, and Oregon but is mandatory in some jurisdictions where Recology operates, including San Francisco, California, Portland, Oregon, and King County, Washington.
4. Households are defined as Recology residential and apartment customers.
5. COP28 gathered representatives of national delegations, business leaders, youth and activist groups, non-governmental organizations (NGOs), and more to discuss climate change and the necessary actions to combat its advancement, including reducing global reliance on fossil fuels.
6. In 2023, Recology worked with a third party to administer an anonymous survey of all employee-owners. The survey received over 75% participation.

# 2023 SASB Disclosure

Our disclosures follow the Sustainability Accounting Standards Board (SASB) Waste Management Standard (version 2023-06). All data is based on the Recology fiscal year, ended September 30, 2023, except where otherwise noted.

SASB Code	Metric	Unit of Measurement	2023 Recology Response
<b>Greenhouse Gas Emissions</b>			
IF-WM-110a.1	(1) Gross global scope 1 emissions, percentage covered under (2) emissions-limiting regulations, and (3) emissions-reporting regulations	(1) Metric tons carbon dioxide-equivalent (MTCO <sub>2</sub> e) (2) Percent (3) Percent	(1) 162,679 (2) 89% (3) 89%  <i>(1) Recology's FY23 scope 1 and 2 greenhouse gas emissions inventory includes emissions from landfills, fleet, and buildings where Recology has operational control. Our inventory has received third-party verification in conformance with ISO 14064-3 and The Climate Registry's General Verification Protocol to a limited assurance level. (2-3) Reflects landfills covered by California and Oregon emissions-limiting and emissions-reporting regulations.</i>
IF-WM-110a.2	(1) Total landfill gas generated, (2) percentage flared, and (3) percentage used for energy	(1) Million British Thermal Units (MMBtu) (2) Percent (3) Percent	(1) 877,469 (2) 61% (3) 39%  <i>(1) Reflects total landfill gas collected from active and closed landfills. Data is collected monthly. Landfill gas is converted to MMBtu using the higher heating value of methane and monthly landfill gas composition data.</i>

SASB Code	Metric	Unit of Measurement	2023 Recology Response
<b>Greenhouse Gas Emissions (Continued)</b>			
IF-WM-110a.3	Discussion of long- and short-term strategy or plan to manage scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	N/A	<p>Recology is committed to reducing greenhouse gas emissions from our landfills, fleet, and facilities.</p> <p><b>Landfills</b></p> <ul style="list-style-type: none"> <li>• Short-term strategy: Recology owns only two active landfills, both of which have gas collection systems and landfill gas-to-energy facilities that beneficially reuse the gas. In 2023, Recology converted 39% of the total gas collected at our landfills into 37,158 Megawatt-hours of renewable electricity. Flaring systems at our landfills combusted approximately 9,670 metric tons of methane, displacing approximately 141,932 MTCO<sub>2</sub>e of greenhouse gases in 2023.</li> <li>• Long-term strategy: We continue to prioritize resource recovery across our operations to minimize the amount of material going to landfills. We are actively pursuing projects to improve gas collection and beneficially reuse additional gas, and we seek to beneficially reuse 75% of the landfill gas we collect to generate renewable energy by 2028.</li> </ul> <p><b>Fleet</b></p> <ul style="list-style-type: none"> <li>• Short-term strategy: By shifting towards renewable and alternative fuels, we have reduced our anthropogenic fleet emissions by 77% since 2018.</li> <li>• Long-term strategy: We continue to prioritize renewable and alternative energy sources for our fleet and are preparing to transition our fleet to zero-emission vehicles to comply with the California Air Resources Board (CARB) Advanced Clean Fleets (ACF) regulation.</li> </ul> <p><b>Facilities</b></p> <ul style="list-style-type: none"> <li>• Short-term strategy: Recology facilities ran on 90% renewable or carbon-free electricity sources in 2023.</li> <li>• Long-term strategy: Recology seeks to power our facilities with 100% renewable or carbon-free electricity by 2028.</li> </ul> <p><b>Avoided Emissions</b></p> <p>Recology's recycling and composting activities result in avoided emissions, in comparison to a baseline scenario of landfilling. Recology collected and/or processed over 1.4 million tons of recyclable and compostable materials in 2023 – enough to avoid emitting almost 1.6 million metric tons of carbon dioxide-equivalent, or over 9 times the amount emitted by our operations.</p> <p><b>Emissions Reduction Targets</b></p> <p>Since 2018, we have reduced scope 1 and 2 emissions by 23%. Recology is committed to continuing to reduce greenhouse gas emissions from our landfills, fleet, and facilities. See Appendix B for more information about our climate targets.</p>

SASB Code	Metric	Unit of Measurement	2023 Recology Response
<b>Fleet Fuel Management</b>			
IF-WM-110b.1	(1) Fleet fuel consumed, (2) percentage natural gas, and (3) percentage renewable	(1) Gigajoules (GJ) (2) Percent (3) Percent	(1) 1,583,064 (2) 23% (3) 89%  (1) Calculated for mobile vehicle fleet using heat content from The Climate Registry, based on higher heating values from the IPCC. (3) Calculated for mobile vehicle fleet, consistent with the U.S. Renewable Fuel Standard (U.S. 40 CFR 80.1401).
IF-WM-110b.2	Percentage of alternative fuel vehicles in fleet	Percent	84%
<b>Air Quality</b>			
IF-WM-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N <sub>2</sub> O), (2) SOx, (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Metric tons (MT)	(1) 9.90 (2) 19.40 (3) 0.65 (4) Not reporting  Reporting is based exclusively on Recology-owned active landfills. We use measured landfill gas flow to flares, flare source tests, and actual runtimes for calendar year 2023.
IF-WM-120a.2	Number of facilities in or near areas of dense population	Number	0  None of Recology's active or closed landfills are located near areas of dense population.
IF-WM-120a.3	Number of incidents of non-compliance associated with air emissions	Number	*3
<b>Management of Leachate &amp; Hazardous Waste</b>			
IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases, and (2) percentage released to water	N/A	Recology is not required to report under the US EPA TRI program.
IF-WM-150a.2	Number of corrective actions implemented for landfill releases	N/A	Not reporting. SASB guidance on this metric is unclear.
IF-WM-150a.3	Number of incidents of non-compliance associated with environmental impacts	Number	0

\*Amended 04/28/2025

SASB Code	Metric	Unit of Measurement	2023 Recology Response
<b>Labor Practices</b>			
IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	N/A	Not reporting.
IF-WM-310a.2	(1) Number of work stoppages and (2) total days idle	N/A	Not reporting.
<b>Workforce Health &amp; Safety</b>			
IF-WM-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	N/A	(1) Not reporting (2) Recology had zero fatalities (3) Recology does not currently track NMFR
IF-WM-320a.2	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance, and (6) Hazardous Materials Compliance	N/A	Not reporting. BASIC percentile scores for Recology's Department of Transportation (DOT) numbers are available to the public at <a href="https://Ai.fmcsa.dot.gov/SMS">Ai.fmcsa.dot.gov/SMS</a> .
IF-WM-320a.3	Number of road accidents and incidents	N/A	Not reporting.
<b>Recycling &amp; Resource Recovery</b>			
IF-WM-420a.1	(1) Amount of waste incinerated, (2) percentage hazardous, and (3) percentage used for energy recovery	(1) Metric tons (MT) (2) N/A (3) N/A	(1) 0 (2) Not applicable (3) Not applicable  <i>Recology does not own or operate any waste incinerators.</i>
IF-WM-420a.2	Percentage of customers receiving (1) recycling and (2) composting services, by customer type	Percent	(1) Percentage of customers receiving recycling services: Residential*: 78% Commercial*: 75%  (2) Percentage of customers receiving composting services: Residential*: 72% Commercial*: 49%  <i>*The majority of Recology's commercial and residential customers are serviced through contracts with a municipality.</i>

SASB Code	Metric	Unit of Measurement	2023 Recology Response
<b>Recycling &amp; Resource Recovery (Continued)</b>			
IF-WM-420a.3	Amount of material (1) recycled, (2) composted, and (3) processed as waste-to-energy	Metric tons (MT)	(1) 649,849 (2) 1,223,807 (3) 947,858  <i>(1) Reporting includes recyclable materials collected by Recology. Much of this material is also processed at Recology facilities. (2) Reporting includes organic materials collected by Recology plus organic materials received from third parties at Recology composting facilities. (3) Reporting includes material landfilled at Recology-owned landfills with landfill gas-to-energy systems.</i>
IF-WM-420a.4	Amount of electronic waste collected, percentage recovered through recycling	Metric tons (MT)	1,604 MT provided to electronic waste recyclers
<b>Activity Metrics</b>			
IF-WM-000.A	Number of customers by category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other	Number	Commercial*: 101,000 Residential*: 933,000 Industrial: 6,000  <i>*The majority of Recology's commercial and residential customers are serviced through contracts with a municipality.</i>
IF-WM-000.B	Vehicle fleet size	Number	Recology operates over 2,600 vehicles.
IF-WM-000.C	Number of: (1) landfills, (2) transfer stations, (3) recycling centers, (4) composting centers, (5) incinerators, and (6) all other facilities	Number	(1) 2 active, 3 closed landfills (2) 19 transfer stations (3) 11 material recovery facilities (4) 8 composting facilities (5) 0 incinerators (6) 2 landfill gas-to-energy facilities, 18 customer service centers, 4 retail stores  <i>Reporting includes Recology-owned and/or operated facilities where Recology has operational control, consistent with our scope 1 and 2 greenhouse gas emissions boundaries.</i>
IF-WM-000.D	Total amount of materials managed, by customer category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other	Million Metric Tons (MMT)	6.1  <i>Reporting includes all material collected by Recology and/or managed at Recology facilities. Recology does not categorize this value by customer category.</i>

[recology.com/sustainability](https://recology.com/sustainability)  
[sustainability@recology.com](mailto:sustainability@recology.com)



RECOLOGY; the R design; RECOLOGY: A WORLD WITHOUT WASTE; RECOLOGY BUILDS EXCEPTIONAL RESOURCE ECOSYSTEMS; RECYCLE CENTRAL; and BEYOND WASTE are registered trademarks of Recology Inc. Other trademarks used in this report are the property of their respective owners. ©2024 Recology Inc. All rights reserved. Reproduction of material in this report only with the permission of Recology Inc.

