Sustainability Update

2022












Recology™
WASTE ZERO

ABOUT THIS REPORT

At Recology, sustainability means supporting our employee-owners, engaging our local communities, and protecting our natural environment.

This 2022 Sustainability Update offers a glimpse into our operations and activities, including progress we made in 2021 and the vision we hold for our future.

For a comprehensive review of our sustainability activities, including previous reports, visit Sustainability.Recology.com.

NAVIGATING INTERACTIVE COMPONENTS

This report contains links to supporting resources that offer unique insights into Recology partnerships, programs, and resource recovery operations. Keep an eye out for this button to see Recology in action!

LEARN MORE

CEO Statement

2021 was a year of transformation and revitalization for Recology.

As our communities began to recover from the impacts of 2020, Recology embraced the opportunity to strengthen the foundations of our culture and our operations. We welcomed new executive and board leaders who bring fresh perspectives, a renewed focus on company direction, and reinforced commitments to employee ownership and operational excellence. We bolstered our governance and enterprise risk management protocols, and continued to prioritize health, wellness, and safety throughout our operations.

We also made strides to foster a vibrant, equitable, and inclusive workplace. We enhanced our Diversity, Equity & Inclusion initiatives, and expanded employee development and networking opportunities. We also built new channels for feedback to hear and learn from our diverse employee-owner community.

In 2021, we commemorated 25 years of composting in San Francisco, where we implemented the nation's first curbside organics collection program. We continue to push the boundaries of resource recovery, investing millions in our composting facilities in Oregon and California, positioning ourselves to help jurisdictions meet the requirements of progressive organics recovery legislation.

We are also strengthening our commitment to address climate change. In 2021, the recycling and composting activities of Recology and our partners avoided 9 times more greenhouse gases than were generated by our operations.

We continue to transition away from conventional fossil fuels, powering nearly 83% of our fleet with renewable or alternative fuels in 2021.

Finally, as part of a broader commitment to sustainability and transparency, this year we will establish an emission-reduction target and work to align with Sustainability Accounting Standards Board (SASB) reporting standards for our next report publication in 2023.

When I look at 2022 and beyond, I see opportunity.

Opportunity to reinvigorate employee-owners' sense of belonging. Opportunity to further invest in resource recovery, to keep materials out of landfills, and to support the circular economy. Opportunity to mitigate the effects of climate change through composting, recycling, and renewable energy. Most of all, I see the opportunity to continue providing value to our communities as we pursue a world without waste.

Salvatore M. Coniglio
Chief Executive Officer

Who We Are

Recology sees a world without waste, a vision carried out by a dynamic workforce **of over 3,700 employee-owners who make Recology the largest 100% employee-owned company** in the resource recovery industry.

Our operations provide comprehensive environmental services to over one million households and businesses in **137 communities in California, Oregon, and Washington**. Together with our valued customers, our materials management infrastructure played an essential role in the **recovery of nearly 2.7 billion pounds of materials in 2021**.

3,753
EMPLOYEE-OWNERS

137
COMMUNITIES SERVED

26
COLLECTION COMPANIES

24
TRANSFER STATIONS

14
MATERIAL RECOVERY FACILITIES

8
ORGANICS PROCESSING FACILITIES

Resource Recovery

By leveraging innovative technology and integrated materials management infrastructure, Recology is able to recover more, landfill less, and bolster our leadership in the industry.

In partnership with industry peers, our collection fleets and network of recycling, composting, and transfer operations empowered us to collect, process, and recover more than 1.3 million tons of recyclable and compostable materials in 2021.

GHG EMISSION AVOIDANCE

Recovering materials through recycling and composting creates numerous environmental and economic benefits. In addition to conserving natural resources and supporting global supply chains and food systems, recycling and composting help mitigate the production of greenhouse gases (GHGs) by minimizing methane production in landfills and reducing the energy needed to extract and refine virgin resources.

In 2021, the recycling and composting activities of Recology and our partners avoided 1.6 million $MTCO_2e$ of greenhouse gases[1]

OR

9x **more GHG emissions than were generated by our operations[2]**

Organics
735,490 TONS

Cardboard
145,339 TONS

Paper
112,664 TONS

Glass
71,918 TONS

Crushed Rock
70,117 TONS

Wood
59,411 TONS

Metals
50,351 TONS

Plastics
14,652 TONS

Tires
1,029 TONS

Electronics
890 TONS

Mattresses
516 TONS

Carpet
109 TONS

Recology Compost: 25 Years of Climate Leadership

As we continue to expand resource recovery solutions in our communities, Recology remains committed to diverting organics from landfills, supporting healthy soil ecosystems, and addressing our changing climate. Since opening our first organics processing facility nearly three decades ago, Recology has been an industry pioneer in commercial composting. In 2021, our eight composting facilities transformed 1.5 billion pounds of yard trimmings, food scraps, and agricultural wastes into nutrient-rich compost for local farms, vineyards, and nurseries.

ADVANCING THE LIMITS OF ORGANICS PROCESSING

This past year, Recology completed the next phase of a $12 million upgrade at our Blossom Valley Organics compost facility in Vernalis, CA. Already processing more than 320,000 tons per year—including curbside organics from San Francisco—the new aerated static pile (ASP) installation and screening equipment improvements allow the facility to increase throughput, reduce odors, and produce a cleaner finished product.

These upgrades are in addition to other major investments in compost infrastructure Recology completed in 2020, including opening a new facility (Ostrom Organics) and installing ASP at two Oregon facilities.

COMPOST'S NEXT FRONTIER: THE CLIMATE CRISIS

Our efforts to bring composting to more communities come at a critical time. **California's Senate Bill 1383**, which sets ambitious targets for organic waste diversion from landfills, went into effect in early 2022 and is the latest legislative action to combat climate change through organic waste recovery.

Together with SB 1383, Recology is helping advance a growing awareness that widespread composting can help combat drought and the climate crisis. **Recology is proud to be a premier service provider for commercial organic waste recovery**, and we are poised to provide even greater solutions to satisfy our communities' progressive waste diversion and climate targets.

LEARN MORE

RECOLOGY IN THE NEWS

The Economist · Los Angeles Times · BUSINESS INSIDER · San Francisco Chronicle · Office of the Mayor · BioCycle · Examiner

As we celebrate 25 years of composting in San Francisco, learn how Recology compost is helping communities divert organics from landfills, save water, and address climate change.

READ MORE

Sustainable Operations

As Recology works toward a world without waste, we are determined to mitigate the negative effects our business activities have on the natural environment.

From how we fuel our collection fleet and power our facilities, to how we manage methane from our landfills, Recology is guided by a strong sustainability ethos. Our efforts to address climate change include prioritizing resource efficiency, revalorizing landfill gas, and migrating to renewable and low-carbon energy sources.

83%

of the Recology fleet is powered by renewable or alternative fuels

43%

reduction in use of conventional diesel since 2019

FUELING OUR FUTURE

In 2019, Recology announced an ambitious goal to power 90% of our fleet with renewable or alternative energy sources by 2022. As of 2021, nearly 83% of our fleet has met that mark, an improvement from 80% in 2020.

Our adoption of Renewable Diesel (R99) and Renewable Natural Gas (RNG) has led our transition away from conventional fossil fuels. Since 2019, we have reduced our use of conventional diesel by nearly 43%.

Meanwhile, R99 now accounts for over half of our fuel purchases, and RNG now accounts for over 80% of the fuel for our natural gas-based fleet.

RENEWABLE RECOVERY

Beyond our fleets, Recology remains committed to harnessing renewable and carbon-free energy to power our materials processing infrastructure. Through ongoing partnerships with Community Choice Energy (CCE) Programs, the Recology network of recycling, compost, and transfer station facilities draws more than 82% of its electricity—over 23,000 MWh—from renewable or carbon-free energy sources like solar, wind, and hydroelectric.

82%

of electricity used at Recology facilities is generated from renewable or carbon-free sources

Our reduced reliance on conventional fossil fuels resulted in a

↓ 20%

reduction in fleet emissions since 2019, equaling 7,800 $MTCO_2e$ of greenhouse gases avoided[3]

OR

Emission reductions achieved by removing over

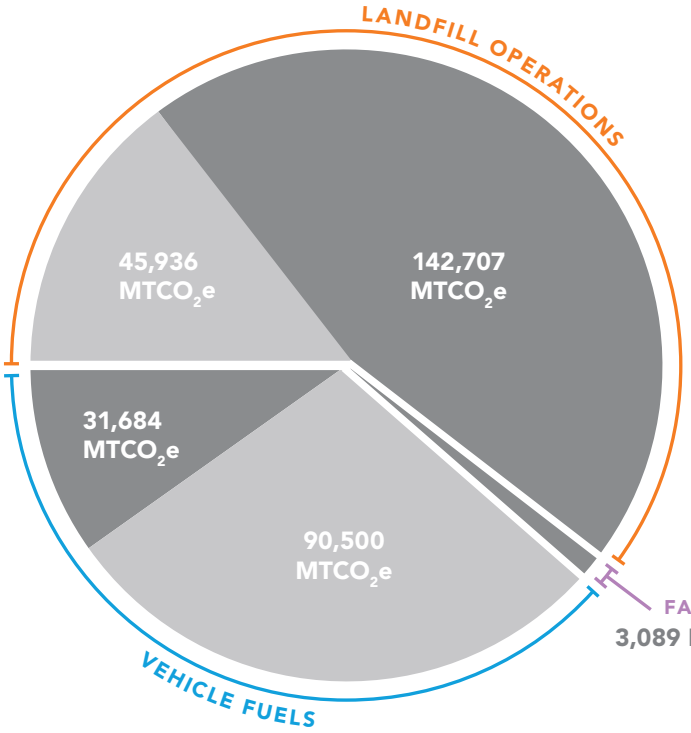
1,700

passenger vehicles from US roadways for one year.[4]

GREENHOUSE GAS EMISSION INVENTORY[3]

Recology generates GHG emissions from three primary areas: landfill operations, vehicle fuels, and facility energy.

We closely monitor our emission sources and actively pursue sustainability initiatives—such as our adoption of renewable and low-carbon vehicle fuels—that improve our overall emission performance.



Anthropogenic Emissions
Associated with human activity.

Biogenic Emissions
Associated with earth's natural carbon cycle.

A comprehensive emission inventory and definitions of key terms can be found in the Appendix.

BRINGING R99 TO THE PNW

Recology is driving demand for R99 in the Pacific Northwest. Our operations in Seattle, WA and Ashland, McMinnville, and Portland, OR will migrate approximately half a million gallons of diesel fuel to R99 in 2022 and help broaden availability of renewable transport fuels in the region.

LANDFILL GAS MANAGEMENT

As a landfill operator, Recology is responsible for managing and revalorizing landfill methane, a natural byproduct of waste degradation in landfills and a potent greenhouse gas. When harnessed properly, this gas can be converted to usable electricity and vehicle fuel.

In partnership with renewable energy providers, Recology actively converts landfill gas to electricity at both of our owned landfills. Excess gas is channeled into flaring systems that combust the methane, thereby helping mitigate the landfills' adverse impacts on air quality.

In 2021, landfill gas engines at Recology-owned landfills produced

41,500+

Megawatt-hours of electricity[5]

ENOUGH TO POWER

3,800

U.S. households for a year[4]

People and Community

EMPLOYEE OWNERSHIP

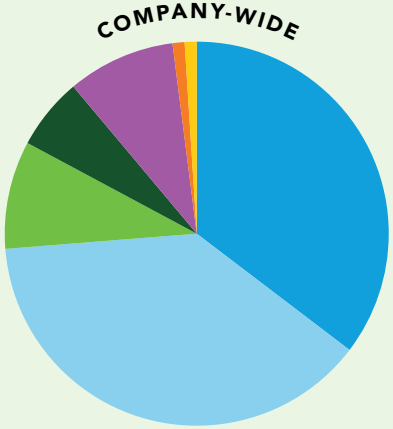
Recology employee-owners are at the core of our mission and vision. Our unique ownership model fosters a workplace culture that empowers a growth mindset and a collaborative spirit to thrive with pride.

The Recology Employee Stock Ownership Plan (ESOP) maintains ownership in the hands of our employees, not external shareholders. Through the ESOP, employees receive a supplemental retirement plan and share in the company's success during tenure and beyond.

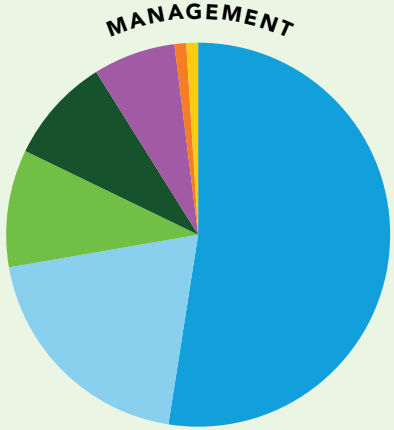
Recology is committed to advancing a workforce that reflects the diversity of the communities we serve. **In 2021, 75% of company-wide promotions went to employee-owners who identify as women and/or members of an ethnic minority group.**

In 2021, 65% of Recology employees identified with an ethnic minority, along with 43% of Recology board members

Ethnic Diversity



- White
- Hispanic/Latino
- Black
- Asian
- Two or More Races
- Hawaiian or Pacific Islander
- American Indian/Alaska Native



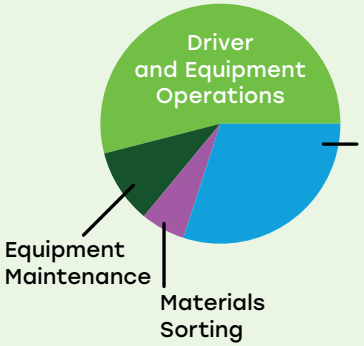
Women at Recology

18% COMPANY-WIDE

30% MANAGEMENT

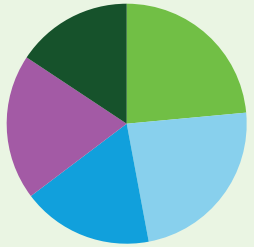
29% BOARD OF DIRECTORS

Workforce Expertise



- Community and Government Relations
- Customer Service
- Education and Outreach
- Engineering
- Environmental Compliance and Permitting
- Finance and Accounting
- People and Culture
- Information Technology
- Legal Administration
- Safety and Health Services
- Sustainability and Business Development

Years of Service



- 0-2 Years
- 11-20 Years
- 3-5 Years
- 21+ Years
- 6-10 Years

WORKPLACE CULTURE

Recology creates opportunities for employee-owners and fosters an environment of inclusivity, collaboration, and accountability.

In 2021, Recology hired our first Diversity, Equity, & Inclusion (DEI) Manager, and through our Learning and Development department we continue to cultivate unique opportunities that bolster employee collaboration and professional development.

11
EMPLOYEE NETWORK GROUPS

107
PROFESSIONAL DEVELOPMENT TRAININGS

50+
LISTENING SESSIONS AND TOWN HALLS

51
MENTORSHIP PROGRAM PARTICIPANTS

SAFETY PERFORMANCE

Workplace safety is a key part of our culture. We continue to advance our safety culture campaign, including expanding our safety scorecard and leveraging in-field software that allows Recology supervisors to quickly address and respond to safety and wellness issues.

Since 2015, Recology has seen a **49% reduction in Lost Time Incident Rate (LTIR) and a 14% reduction in Total Recordable Incident Rate (TRIR)**—both key industry metrics of safety performance.

Awards and Recognition

Recology was named "2021 Company of the Year" by the National ESOP Association, following similar recognition from the California/Western States Chapter of the ESOP Association in 2020.

In addition, two Recology drivers received prestigious awards from the National Waste and Recycling Association (NWRA). These awards recognize drivers across the country whose contributions and exceptional safety performance records help elevate the industry.

LAWRENCE JACKSON III
2021 Regional Industrial Driver of the Year

AARON MEIER
2021 Regional Residential Driver of the Year

Community Outreach and Stewardship

Recology continues to support our communities and educate our customers on sustainable practices as we collectively adapt to—and ultimately emerge from—the COVID-19 pandemic.

1,025
IN-PERSON PRESENTATIONS AND TRAININGS

418
VIRTUAL PRESENTATIONS AND TRAININGS

3,643
CUSTOMER CONSULTATIONS

158
IN-PERSON AND VIRTUAL FACILITY TOURS

2,879
ADULT AND YOUTH TOUR ATTENDEES

REDUCING RECYCLING CONTAMINATION IN SEATAC

Recology and the City of Seatac implemented the Slotted Lid Program to prevent recycling contamination. Combined with door-to-door outreach, the program has been overwhelmingly successful and plans for expansion are underway.

BRINGING ART TO LIFE IN SONOMA COUNTY

Recology partnered with ArtStart Santa Rosa, a youth art education program, to create a 25-foot-tall mural of native flowers, each hand-painted by volunteers and Recology employee-owners.

10 YEAR ANNIVERSARY: PORTLAND GLEAN

The GLEAN Program saw a record number of artist applicants in 2021, and those selected created over 50 works of art for two esteemed exhibitions.

REPURPOSING CHRISTMAS TREES IN BUTTE COUNTY

Partnering with Chico Boy Scout Troop 2 and the California Department of Water Resources, Recology collected over 1,100 Christmas trees for use as fish habitat structures in Lake Oroville.

SAN FRANCISCO AIR PROGRAM ENGAGES ALUMNI

In its 31st year, the SF Artist In Residence (AIR) program engaged former artists with virtual programming, held its first in-person exhibition in two years, and collaborated on an exhibition at the Bedford Gallery that hosted work from nearly 50 AIR alumni.

RECYCLING WATER IN AMERICAN CANYON

Supporting the City of American Canyon's new water recycling initiative, Recology repurposed nearly 200 plastic food grade drums, playing a key role in the city's delivery of over 1 million gallons of non-potable water to residents.

BAY AREA BLOOD DRIVE

Recology hosted a blood drive in partnership with Vitalant, bringing in over 75 donors whose critical donations will save up to 243 lives.

COMMUNITY GARDENING IN SAN BENITO

Recology partnered with Growing Hearts, a local non-profit organization aimed at integrating adults with special needs into the local community through hands-on experience with gardening and landscape maintenance.

Appendix

RESOURCES AND METHODOLOGIES

1. Emission avoidance values for organics and recycling activity were calculated using a combination of the California Air Resources Board (CARB) Recycling Emission Reduction Factor (RERF, 2011) and Composting Emission Reduction Factor (CERF, 2017) tools, as well as the US EPA's Waste Reduction Model (WARM, 2020).

2. The '9x' figure was calculated by comparing the sum of emissions avoided through Recology resource recovery activity (per the tools referenced above) to the sum of company-wide Scope 1 and Scope 2 emissions.

3. Emission figures were calculated using a combination of The Climate Registry (TCR) database tools, utility-specific emission factors, Local Government Operations Protocol (LGOP) equations 9.1, 6.2, 8.7, 8.8, and California Air Resource Board's (CARB) implementation of IPCC's First Order Decay Model.

4. Emission equivalencies were calculated using the US EPA's online Greenhouse Gas Equivalencies Calculator.

5. Landfill gas volume, flaring activity, and electricity generation data were provided by vendors Golder Associates, G2, Aptim, SCS Field Services, and American Solar Corporation.

DEFINITIONS

Greenhouse Gases (GHGs): Any gases that absorb and trap infrared radiation (e.g. energy from the sun) in the atmosphere, leading to increased global temperatures and disruptions to natural climate systems. Many GHGs are caused by human activity and include carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). *Source: Overview of Greenhouse Gases—US EPA*

Metric Tons of Carbon Dioxide Equivalent ($MTCO_2e$): A unit of measure that standardizes the climatic impacts of various greenhouse gases by accounting for each gas' heat-trapping potential and persistence in the atmosphere compared to carbon dioxide (CO_2). *Source: Overview of Greenhouse Gases—US EPA*

Anthropogenic Emissions: Those associated with human activity, commonly generated through the burning of fossil fuels or other human activities (e.g. methane produced in landfills). Anthropogenic emissions result in a net increase in atmospheric greenhouse gases and thus have an adverse effect on climate change. *Source: Report on the Environment: Greenhouse Gases—US EPA*

Biogenic Emissions: Those associated with the earth's natural carbon cycle, commonly generated from the decomposition of organic materials and combustion of biomass-derived fuels (e.g. biodiesel, renewable diesel, and ethanol). As biogenic sources do not introduce fossil-derived carbon into the atmosphere, they do not result in a net increase in atmospheric carbon and therefore have fewer adverse climatic impacts than anthropogenic emissions. *Source: Science and Climate Definitions—UC Davis*

2021 EMISSION INVENTORY

Our voluntary emission inventory includes the three internationally recognized GHGs generated from company business activity: CO_2, CH_4, and N_2O.
Recology does not participate in activities that generate SF_6s, HFCs and PFCs above de minimis levels, so these gases are not quantified.

Scope	Description	Anthropogenic ($MTCO_2e$)	Biogenic ($MTCO_2e$)
1	Direct Emissions from Stationary Combustion *Source: Fossil portion of fuels used in stationary assets, natural gas usage at facilities, landfill flaring*	1,654.19	—
1	Direct Emissions from Mobile Combustion *Source: Fossil portion of vehicle fuels*	30,722.03	—
Biogenic	Biogenic CO_2 Emissions from Mobile Combustion *Source: Biomass portion of vehicle fuels*	—	89,959.89
1	Direct Fugitive Emissions *Source: Fugitive landfill methane*	142,563.00	—
Biogenic	Biogenic CO_2 Emissions from Stationary Combustion *Source: Landfill flaring, biomass portion of fuels used in stationary assets*	—	46,475.88
2	Indirect Emissions from Electricity Use *Source: Purchased electricity*	2,523.84	—
Biogenic	Biogenic CO_2 Emissions from Electricity Use *Source: Biomass portion of purchased electricity*	—	16.98
	TOTAL	177,463.06	136,452.76

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