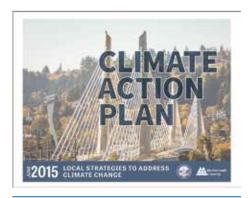


n 2008, Portland City Council unanimously approved the Portland Recycles! Plan, setting goals to recycle more, waste less, and manage Portland's discards more sustainably. The City of Portland Bureau of Planning and Sustainability (BPS) is pleased to report significant progress toward the goals of the Portland Recycles! Plan. This update illustrates the achievements during the Portland Recycles! Plan implementation period, 2008 – 2015. It also highlights new efforts to manage materials in Portland as directed by the Climate Action Plan (CAP) and the Sustainable City Government Principles.

- Promote sustainability of the solid waste and recycling system that includes maximum efficiency, equity and economic vitality, improved worker safety and reduced environmental and human health impacts over the entire lifecycle of the materials.
- Minimize the impact of harmful wastes by targeting toxicity and reducing greenhouse gas emissions.
- Reduce per capita waste generation below 2005 levels by the year 2015.
- Increase recovery of all waste with a target of 75 percent by the year 2015, and promote highest value
 use of the recovered materials.





www.portlandoregon.gov/bps/ article/531984



Climate Action Plan and Sustainable City Government Principles now replace original Portland Recycles! Plan

Since the plan's adoption, the City established additional overarching citywide policies with the Climate Action Plan and Sustainable City Government Principles. Together, these new plans and policies set new sustainable materials management objectives and goals aimed toward a 2030 horizon (see 2030 goals below). The policies also reflect priorities set by the Oregon Department of Environmental Quality in the 2050 Materials Management Vision and Framework for Action, adopted in 2012. Bureau and program work plans provide the detailed implementation guidance to complete action items and reach objectives.

2030 Goals

- Reduce consumption related emissions by encouraging sustainable consumption and supporting Portland businesses in minimizing the carbon intensity of their supply chains.
- Reduce food scraps sent to landfills by 90 percent.
- Reduce per-capita solid waste by 33 percent.
- Recover 90 percent of all waste generated.
- Recover 90 percent of waste generated from City operations.
- Reduce total waste from City operations 25 percent below fiscal year 2009-10 levels.

The complementary roles of the City of Portland, Metro and the State of Oregon

BPS regulates permitted private garbage and recycling companies that collect recyclables, compostable materials and garbage from businesses and residents in Portland. All garbage and recycling companies must follow City of Portland administrative rules to ensure safe and equitable service, promote sustainable waste recovery, and reduce the environmental impacts of the waste collection system.

Metro sets direction and the regional service standard that all jurisdictions must follow through its Regional Waste Plan. Metro also owns two transfer stations and determines which facilities the garbage, recycling and composting collected in the region may go to for transfer or processing. Metro tracks the recovery rate (amount recycled or composted) for the region. All jurisdictions within the Metro region follow the direction provided in the Regional Waste Plan.

The Oregon Department of Environmental Quality regulates solid waste facilities and ensures that processing, transferring or disposal of materials is done in an environmentally protective manner. Statewide materials management (including disposal, recycling or composting) is addressed in the Oregon DEQ Materials Management 2050 Vision.

2015 Portland Recycles! Status Summary

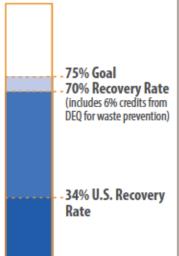
2015 Goal and Recovery Rate

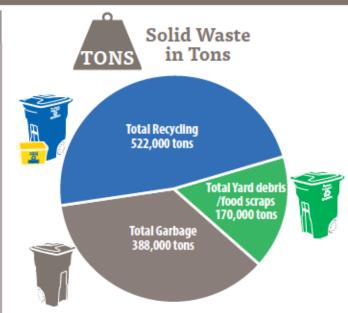
With a recovery rate that's almost twice the national rate, Portland remains a recycling leader. From 2008 through 2015, the Portland Recycles! Plan policy goals and actions increased recycling and composting and decreased waste headed to landfills.

Recycling

Composting and
Anaerobic Digesting

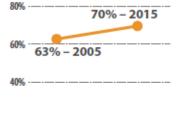
Recovery





Total Solid Waste = 1,080,000 tons

Recovery Rate Over Time



About 80% of Portland's waste comes from business and multifamily, with 20% from residential.

Waste Generation per Capita

Portland between 2005 and 2015:

Reduced per capita waste generation by

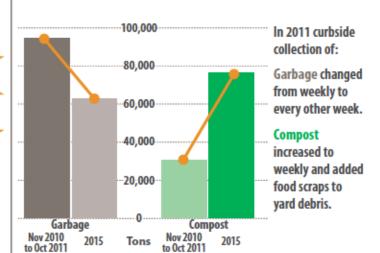
While the population grew by

And total waste generated dropped by

2005 4,200 lbs. per person per year

2015 3,500 lbs. per person per year

2011 Program Changes = Less Garbage, More Compost



1992

2008 a bins 1 recycling blue roll cart / 1 d

2 yellow recycling bins 1 yard debris container 1 garbage can



New curbside service: Yard debris and recycling collection 1 recycling blue roll cart / 1 glass only bin 1 yard debris green roll cart 1 garbage container



New curbside service: Roll carts for yard debris and recycling 2011

1 recycling blue roll cart / 1 glass only bin 1 food scrap/yard debris green roll cart 1 garbage container



New curbside service: Food scrap collection







Top facts about three different service audiences

Residential

- 158,600 households (single-family, duplex, triplex and fourplex) are signed up for curbside garbage, recycling, and yard debris/food scraps collection.
- Fourteen private garbage and recycling companies provide curbside collection in a franchised system; the City of Portland sets the collection rates and service options.
- Sign-up for collection service is voluntary, except for rental dwellings.
- Yard debris/food scraps and recycling are collected weekly, both on the same day; garbage is collected every other week for most (every-fourth-week garbage collection is also an option).
- More than 90 percent participation in recycling.
- Each household receives a blue 65-gallon roll cart for recycling and a green 65-gallon roll cart for composting from their garbage and recycling company.

Commercial

- 25,000 businesses.
- Thirty-five private, commercial permitted haulers collect garbage and recycling in a competitive system; businesses may choose their garbage hauler and recycler and negotiate prices for these services.
- Businesses are required to recycle paper and containers. Commercial food scrap collection was first offered to business customers in 2005. As of 2015, about 1,200 Portland businesses have signed up for this service.

Multifamily

- Approximately 4,000 multifamily complexes (five or more units), totaling more than 110,000 households.
- About 20 private, commercial permitted haulers collect garbage and recycling in a competitive system; property managers may choose their garbage hauler and recycler and negotiate prices for these services.
- City of Portland administrative rules require a two-sort recycling system.
 Property managers are required to provide one container for commingled paper, metal and plastic and a separate container for glass.
- Recycling containers must be as conveniently located as garbage containers, with clear signage.
- The landlord or property manager must provide written recycling information to all residents at least once per year and to all new residents within 30 days of their move-in. Currently about 80 multi-family properties voluntarily participate in food scrap collection.

GREATER PARTICIPATION FROM PORTLAND'S COMMERCIAL SECTOR

n 2009 BPS notified all Portland businesses of the requirement to recycle paper, metal, plastic and glass containers. In addition to a media campaign, all businesses and organizations received a notice in the mail and the 700 largest were contacted by phone. They were offered free assistance, staff training, posters, stickers and collection containers.

The amount of food scraps collected by businesses and organizations has doubled since 2006, with over 1,200 currently collecting food scraps for recovery. Next steps: To reach Portland's recycling and climate action goals, large food-generating businesses and organizations will soon be required to collect food scraps for recovery and composting.

Sustainability at Work

Sustainability at Work program serves 800 businesses annually with free technical assistance to encourage businesses to reduce, reuse and recycle.

In 2011 BPS launched Sustainability at Work, a program providing assistance, certification, and resources around recycling, energy, water and transportation — all at no cost to the business. This initiative has increased the number of businesses served by BPS sustainability programs by 60 percent.



Resourceful PDX

The Resourceful PDX campaign, launched in 2010, gives residents tools and ideas for reducing waste while getting the things they need day-to-day or during times of life transitions.

Since 2010, Resourceful PDX has reached over 200,000 contacts through community events and provided tools and resources through mailings to all residents. Key action areas include: 1) Buy smart; 2) Reuse; 3) Borrow and share; 4) Fix and maintain.



- Buy Smart
- 2 Reuse
- 3 Borrow and Share
- A Fix and Maintain

RESOURCEFUL PDX SAVE MORE. LIVE MORE. www.resourcefulpdx.com

Plastic Bag Ban



Plastic bag ban reduced contamination in the blue recycling roll cart.

Portland City Council banned plastic retail bags in 2011, significantly reducing the number of plastic bags that cause problems for our recycling facilities. A recent Metro study showed that Portland's recycling contains 70 percent fewer plastic shopping bags than surrounding areas without bag bans.

Deconstruction Program



New deconstruction ordinance saves valuable materials for reuse.

In 2016, Portland City Council approved a new ordinance to require deconstruction for Portland's oldest and most historic houses. The ordinance became effective on Oct. 31, 2016. Portland is the first city in the country to ensure that valuable materials from our houses and duplexes are salvaged for reuse instead of crushed and landfilled — protecting health and creating pathways to construction careers.

Air Pollution Reduction Requirements for Collection Vehicles



Requiring cleaner collection vehicles reduces smog and soot.

Since 2008, Portland has required garbage and recycling companies to purchase 20 percent biodiesel for their diesel collection vehicles. The City has also required garbage and recycling companies to buy new trucks. Older, polluting garbage and recycling trucks are being replaced with cleaner vehicles that emit significantly less air pollution. In addition, some garbage and recycling companies have switched their fleet to compressed natural gas. Together these changes have led to a 40 percent reduction in carbon dioxide emissions from 2006 levels.

Public Space Recycling



Public space recycling established.

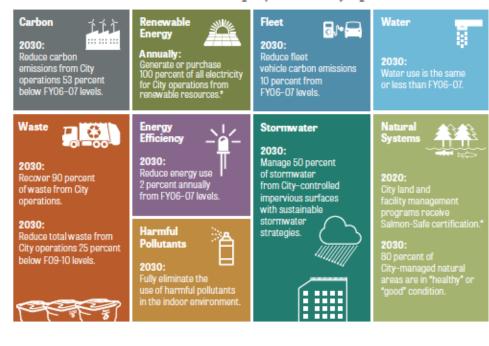
The City installed 165 public recycling containers alongside downtown public garbage cans on the transit mall in 2009.

City Bureaus Recycle

Since 2008, a cross-bureau committee has worked on waste-related projects in City operations.

The City of Portland is a leader in encouraging sustainable procurement, lowering the production, use and disposal impacts of materials on an array of purchases from park turf to underground pipes to street lights. The City developed Sustainable City Government Principles to guide lower consumption, increase materials recovery and reduce the carbon footprint of City operations. Other waste-related accomplishments include:

- City waste-hauling contracts were consolidated to track recycling data more efficiently and to create a recycling rebate fund.
- City bureaus use money from sale of recyclables to fund additional waste reduction and recycling initiatives.
- City facilities established food scrap collection systems.



Master Recycler Program

Volunteers support our efforts to reach businesses and residents.

Master Recyclers are a volunteer corps trained to conduct outreach on thoughtful consumption, recycling, greener cleaners, food waste, climate change and compost/worm bins. To become a Certified Master Recycler, they must volunteer 30 education and outreach hours. Volunteers staff information booths and offer presentations at community gatherings and take leadership roles in community projects like Repair Cafés, event recycling, Green School Certifications and green teams at work. There are 1,500 Master Recyclers who have provided over 47,000 volunteer hours.



COMING SOON: NEXT STEPS ON PRIORITY PROJECTS

Food-generating businesses and organizations: Food scrap collection



Since 2008, Portland businesses that process, prepare, cook or sell food have been required to separate their food scraps for collection. With adequate facility capacity for food scraps composting and anaerobic digestion now available, Portland will expand education efforts to help businesses meet the requirement by signing up for food scrap collection service before compliance begins.

Metro is developing a region-wide (Clackamas, Multnomah and Washington counties) business food scrap collection requirement similar to Portland's. The policy will be phased in over several years, starting in 2019 with businesses that generate the most food scraps. The City will coordinate outreach and enforcement efforts to align with Metro's regional timeline.

Multifamily properties: Equitable service provision, improved recycling

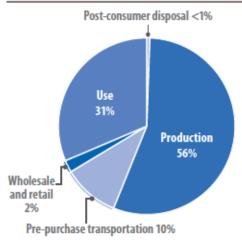


Metro's Urban Growth Report projects that, within the Urban Growth Boundary, 60 percent of the next 200,000 households added will be multifamily. This diverse, growing group of the region's residents requires equitable garbage and recycling collection service that meets their needs and expectation, as well as meeting performance goals.

Metro and BPS collaborated on research looking at the performance of existing multifamily recycling infrastructure and systems. Compared to single family households, multifamily households are provided less recycling service with more non-recyclable materials in the recycling. Stakeholder engagement included a focus on people who have had limited influence over the system such as apartment communities with higher percentages of people of color, limited English proficiency, or lower incomes.

Over the next several years, BPS will implement program changes focused on improving multifamily resident access to recycling services and increasing the amount of high-quality recyclable materials. Potential program changes will be incorporated into Metro's Regional Waste Plan and will be phased in over a multi-year period.

All Portland residents and businesses: Sustainable Consumption and Production Strategy



Multnomah County carbon emissions from consumption by lifecycle phase (Consumption-based inventory, 2011) To meet Climate Action Plan goals, Portland residents and businesses will need to do more than just recycle and compost. We also need to make more sustainable purchasing and production decisions. Close to 70 percent of the carbon emissions from the food and goods that we buy are generated before we purchase them. BPS is working to develop a sustainable production and consumption strategy in alignment with the Oregon Department of Environmental Quality's Materials Management in Oregon: 2050 Vision and Framework for Action. The process will identify the City's role in developing a materials management policy. Then, City bureaus can explore and refine policies to support a shift to lower-carbon production and consumption choices.

Commercial



- Develop equity-focused Sustainability at Work technical assistance strategies.
- Develop equitably applied compliance and enforcement strategies that:
 - Include a comprehensive monitoring system.
 - Do not rely solely on complaints.

Residential



- Continue efforts in equitable service provision, special focus on renters.
- Evaluate the residential franchise in terms of system performance, customer satisfaction and equity (mid-term franchise renewal review).

City of Portland Operations



- Explore procurement policies to promote office supply reuse across all bureaus.
- Continue to track and evaluate waste generation and waste prevention efforts.
- Support contracting, purchasing policies to enhance sustainable procurement.
- Include City facilities in mandatory food scrap collection.

Across Portland



- Promote deconstruction over demolition when buildings need to be taken down.
 - Launch web-based Deconstruction Calculator.
 - Provide training for deconstruction contractors.
 - Continue to expand participation in Community Collection Events.
- Expand public garbage can collection to all regional, town, and neighborhood centers identified in the 2035 Comprehensive Plan over a five-year period.
- Prevent food waste through Climate Action Now Campaign and work with targeted commercial food generators.

APPENDIX

Below are status updates indicating progress made on the original actions in Portland Recycles! Plan.

Waste Prevention	•
Plan Actions 2008-2015	Notes
Emphasize waste prevention in education and outreach.	Continuing.
Work with DEQ to implement Waste Prevention Strategy.	Completed and ongoing.
a. City as stakeholder in planning process.	
b. Integrate results in City programs.	
Pursue product stewardship policies and projects.	Supported statewide e-waste legislation.
Work with green building program to develop and promote best management practices for waste prevention.	Ongoing.
Explore retailers' role with waste prevention through new partnerships, pilot projects and promotion.	Plastic bag ban adopted in 2011. In 2013 all retailers prohibited from distributing single use plastic checkout bags.
Commercial	
Plan Actions 2008-2015	Notes
Establish a new overall 75 percent mandatory recycling requirement for	2015 rate is 64 percent
businesses by 2015.	(70 percent with 6 percent credits).
Establish a new mandatory paper and containers recycling requirement for all businesses in the city.	Completed.
Establish new mandatory food scrap diversion.	Mandate established.
 Start with the businesses that generate the most food scraps. 	Implementation initially delayed due
b. Expand to include all food scrap generators above a level or size.	to insufficient composting facility capacity, but now underway.
Give small commercial customers the option for service and rates under the residential franchise.	Completed.
Develop new hauler requirements and strengthen regulatory approval process.	Completed.
 Equipment and services to allow their customers to reach 75 percent recycling goal. 	
b. Require that all trucks use B20 and meet new emission standards.	
Regulate as needed to meet City goals for the waste collection system.	Progress towards goals deemed sufficient.
Provide additional education and technical assistance for food and paper waste prevention and recycling.	Progress made, ongoing work.
Build partnerships with business organizations to assist with and promote compliance with new recycling requirements.	Progress made, ongoing work.
Emphasize waste prevention in education and outreach.	Progress made, ongoing work.
	+

Residential	
Plan Actions 2008-2015	Notes
Add recycling and yard debris roll carts.	Completed in 2008.
Add new materials (plastic tubs, buckets, plant pots) for recycling.	Completed in 2008.
Expand neighborhood collection events to include additional materials and promote reuse.	Completed.
Require hauler feedback to customers in the form of leave behind tags to communicate issues with contamination, account problems and overweight containers.	Completed.
Develop new emissions requirement for garbage and recycling trucks.	Completed. Clean Fleet requirement in effect January 2016.
Work with Metro and DEQ to develop standards for Material Recovery Facilities (MRF).	In progress. Participated in MRF strategy committee.
Include food scraps with yard debris and make yard debris collection weekly.	Completed in 2011.
Add garbage roll cart and begin every-other-week garbage collection.	Every other week garbage collection added in 2011. Standardized color garbage cart strategy in place, rollout will be completed by 2024.
Develop customer and hauler incentives. a. Differentiated can rates. b. Waste reduction targets.	Continued customer incentives but not hauler incentives.
Implement ban on recyclables in the garbage.	Not pursued. Recovery rate continue to be high, ban deemed unnecessar
Multifamily	
Plan Actions 2008-2015	Notes
Establish the 75 percent commercial recycling requirement as a long-term goal for multifamily recycling.	Goal established, rate not met.
Gain compliance on current administrative rule requirements for multifamily properties.	In process / ongoing.
 Monitor multifamily properties to verify that adequate recycling systems have been provided and are as convenient as garbage disposal. 	Coordinated region-wide site attribute study.
 Continue to convert multifamily properties to the two-sort recycling collection system to reach 100 percent compliance. 	Completed.
c. Work with property managers to ensure tenant education requirements are met (provide recycling information within 30 days of move-in as well as on an annual basis).	Continued annual outreach mailing offering free materials to property managers. New method tested in 2014.
Work with Metro and other local government partners on new multifamily research and program initiatives.	Ongoing.

City Operations, Sustainable City Government	
Plan Actions 2008-2015	Notes
Establish a new recycling rate goal: 85 percent for all City facilities by 2015.	In progress—currently 70 percent; Sustainable City Government goal is 90 percent by 2030.
Establish a waste prevention goal: zero increase in the waste stream.	Difficult to measure due to poor historic data collection. CAP goal is to reduce waste generation by 2030 and increase material salvage for City-owned demolitions. The Sustainable City Government goal is to reduce total waste from City operations 25 percent below 2009-10 levels. In 2015 we are 0.05 percent below 2009-10 levels.
Consolidate and improve the City contract for garbage and recycling services.	Completed.
Provide dedicated staff at Office of Management and Finance.	Completed.
Create a cross-bureau waste prevention and recycling team.	Completed.
Promote waste prevention through sustainable purchasing practices.	Completed.
Initiate food scrap service.	Completed in many bureaus.
Explore options for animal waste in parks.	Completed.
Provide comprehensive employee education on waste prevention and recycling practices.	In progress.
Provide public recycling with City trash cans.	Completed. 165 recycling containers on transit mall.