



# 2019 ENVIRONMENTAL SUSTAINABILITY REPORT

Reporting Period: April 2019 - March 2020

## Epson Portland Operations

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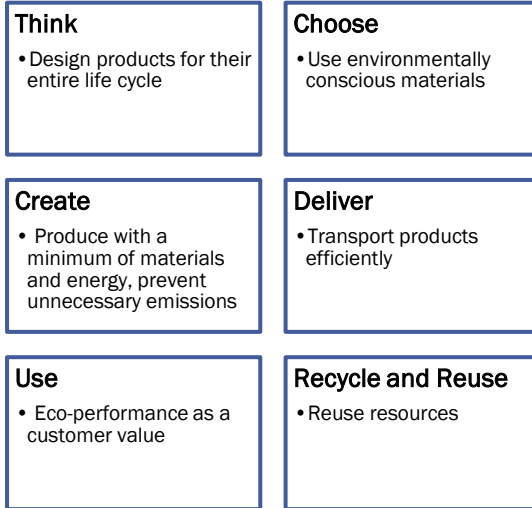
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# EPSON AND THE ENVIRONMENT

## Life Cycle Thinking

Through Epson’s creation of eco-considerate products, we are cooperating with customers and business partners to expand our environmental impact mitigation efforts beyond our doors.



## ENVIRONMENTAL VALUES

As Epson’s United States manufacturing affiliate, we are proud to have a progressive environmental program that includes a zero waste to landfill operation, renewable energy purchase program, effective use of energy and resources, responsible supply chain management, and employee engagement programs.



To support our goals and to ensuring compliance, we have company policies and a Corporate Social Responsibility (CSR) Action Plan that serve as a benchmark to gauge current activities, future activities, and help score our progress on a quarterly basis. Our environmental values are used as a framework to measure and monitor environmental activities and determine company environmental objectives in conjunction with our Environmental Management System (EMS).

# SUSTAINABLE PROCESSES

We integrate our Environmental Management System (EMS) into business processes to produce environmentally sustainable products.

## ENVIRONMENTAL INDICATORS

### Accomplishments and Deficiencies Exceeding Regulatory Compliance

Green Purchasing	<b>Target:</b> 80% of consumable supplies purchased are environmentally preferred products	<b>Result:</b> Achieved 85% green purchasing for consumables
Solid Waste	<b>Target:</b> (Hillsboro) Maintain Zero Waste-to-Landfill	<b>Result:</b> 100% solid waste goes to a waste-to-energy facility
	<b>Target:</b> (Hillsboro) Maintain FY18 Baseline Solid Waste Level	<b>Result:</b> 6% decrease
	<b>Target:</b> (QCU) Maintain FY18 Baseline Solid Waste Levels	<b>Result:</b> 39% decrease
Total CO <sub>2</sub>	<b>Target:</b> (Hillsboro) Maintain FY18 CO <sub>2</sub> Emissions (per unit produced & gas vs. baseline FY18)	<b>Results:</b> Achieved 10% CO <sub>2</sub> reduction
	<b>Target:</b> (QCU) Maintain FY18 CO <sub>2</sub> Emissions (Based on Production Demand)	

## STRATEGIC APPROACH

### Determining Performance Indicators

The EMS is intended to be a guide for establishing, maintaining, and improving our environmental activities. The Environmental, Health, and Safety (EHS) department drafts recommendations based on the requirements and categories listed below which are approved by senior management. Once approved, the EHS department drafts plans for each objective, detailing who is responsible and critical milestones or deadlines to achieve each target. The EHS committee then completes an annual analysis of those environmental aspects and impacts.

## Environmental Planning Procedures Integrated Process



### 8 Categories of Impacts

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Air pollution

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Water pollution (sanitary)

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Water pollution (outside)

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Soil pollution (outside)

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Utilities consumption

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Reused/recycled materials

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Solid waste

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Regulatory compliance

### Basis of Objectives and Targets

United States regulatory requirements

Epson's significant environmental impacts

Seiko Epson Corporation requirements

Requirements from senior management

Views of interested parties

## POLLUTION PREVENTION

### Energy Conservation & Renewable Energy

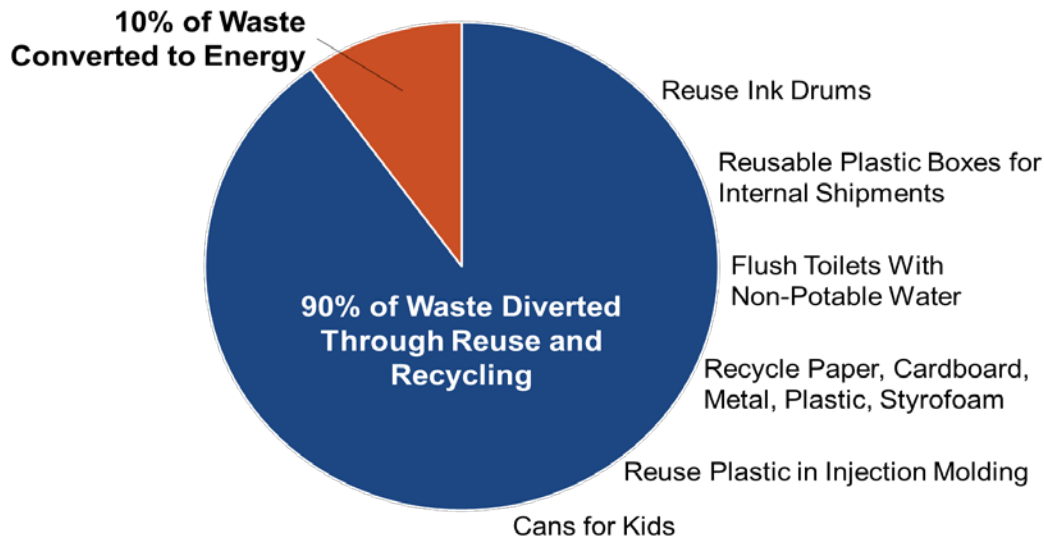
At Epson's Portland Operations, we take a multifaceted approach to energy conservation which included upgrading the Hillsboro site's HVAC System with approximately 48% energy reduction and control electric power maximum demand reduction of operation lead-time for Quartz products at the Longview site. The company uses energy-efficient lighting which includes the use of LED lightbulbs in most of our facility and motion-sensing light switches as part of our ongoing efforts to conserve energy.

### Twenty Years Zero Waste to Landfill

Twenty years ago, EPI began working with Covanta, a world leader in providing sustainable waste and energy solutions, to process all waste that EPI could not reuse or recycle. Covanta's waste-to-energy facility in Brooks, Oregon, collects EPI's solid waste for combustion. As the waste is burned, water is superheated and the steam turns a turbine generator to produce electricity, which is exported to local utilities. After combustion, the volume of waste is reduced by 90% and metals are extracted for recycling.

The waste stream at EPI's Hillsboro Operations employs comprehensive reuse and recycling programs, which collectively divert an average of 90% of solid waste from incineration. By sending the remaining 10% of waste to the waste-to-energy facility, we continue to limit EPI's overall environmental impact

Through this program, we have recycled or otherwise diverted 60 tons of materials from the landfill in FY19.



## Renewable Energy

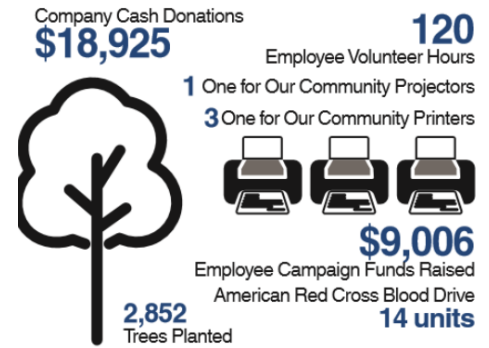
The Hillsboro site has been purchasing renewable energy through Portland General Electric's (PGE) Clean Wind<sup>SM</sup> Program since 2003. In FY19, we purchased 4,752,804 kWh of renewable power and avoided 7,592,604 lbs of CO<sub>2</sub> emissions. The company's decision to use electricity from wind-generation facilities benefits everyone by increasing the demand for power from renewable sources.

## Environmental Conservation

To reduce and offset CO<sub>2</sub> pollution, Epson's Portland Operations are VOC-free (and have been since 2002). The company provides TriMet annual passes for public transportation to all Portland metro area employees as part of our comprehensive benefits package through the Department of Environmental Quality's (DEQ's) Employee Commute Options (ECO) program. This pass encourages ridership on environmentally friendly forms of transportation to reduce air pollution from motor vehicles and reduce local traffic congestion. Additionally, employees are encouraged to carpool or ride their bikes to work.

## Community Support

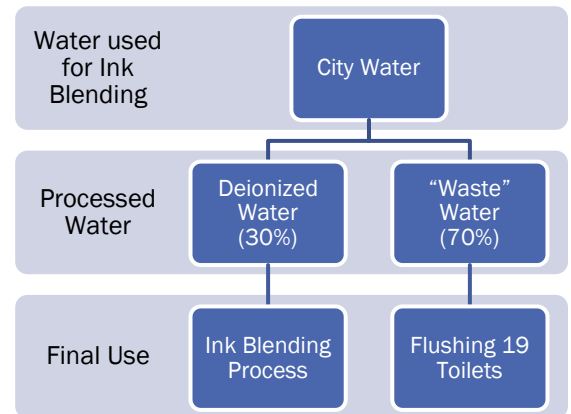
Each year, EPI makes donations to a variety of local, nonprofit organizations with focuses on the environment, STEM education (science, technology, engineering, and math), social welfare, culture, and the arts. In addition to the company’s monetary donations, we also create opportunities for everyone to get involved through giving campaigns and volunteer opportunities.



Collectively, these activities make up EPI’s Corporate Social Responsibility (CSR) initiatives. We put an emphasis on these activities during October’s Community Support Month, which includes our annual United Way campaign, blood drive, tree planting volunteer day, and more.

## Water Efficiency

At the Hillsboro site, we capture non-potable water from our ink blending process and use it as flush water for the 19 toilets in one building. Through this process, we roughly reuse 900 gallons of water per day. The company also has low-flow toilets and maintains an extremely conservative summer landscape irrigation program made possible by a switch to native vegetation instead of high-water-needs-plants and flowers.



## EMPLOYEE PARTICIPATION

We believe in environmental conservation at the individual level, so we provide a variety of opportunities to employees and community members. Additionally, Epson’s Portland Operations also make monetary donations to local non-profit organizations with an environmental focus. The local organizations we support include Columbia Land Trust, Lower Columbia Estuary Partnership, Jackson Bottom Wetlands, and Friends of Trees.

## Environmentally Friendly Efforts Enhance Summer Picnic

In an effort to create a more sustainable event, we eliminated single use products wherever we could. The greater purpose behind all of these changes is that the plates, utensils, and linens are all reusable!

Instead of tossing everything in the garbage, each plate, fork, knife, spoon, and napkin was sent back to the rental company for cleaning.

We added a waste station to collect food scraps, recycling, and

dishes. Everyone who cleaned up after themselves supported the mission to have a sustainable event, and your involvement made the difference.



Although there is not an accurate measurement of how much waste was produced during the summer picnic last year, we estimate that we eliminated 7 garbage bags worth of non-recyclable waste by leveraging reusable plates and utensils. We will continue to plan company events as sustainably as possible.

## Tree Planting



Plant trees at Jackson Bottom Wetlands for Friends of Trees' Green Space planting events sponsored by Epson Portland Inc. We maintain a long-term partnership with local non-profit Friends of Trees and sponsored 2 local tree planting events in FY19. Employees and community members came together with Friends of Trees at these events to help plant more than 2852 native trees, shrubs, sedges, and rushes during the 2019 planting season.

## Road Warriors Highway Clean-Up

Employee volunteers clean up trash through ODOT's Adopt-a-Highway program along our adopted section of Highway 26 at least twice each year. Each employee participant volunteered 2 hours per event.



## Environmental E-Kaizens

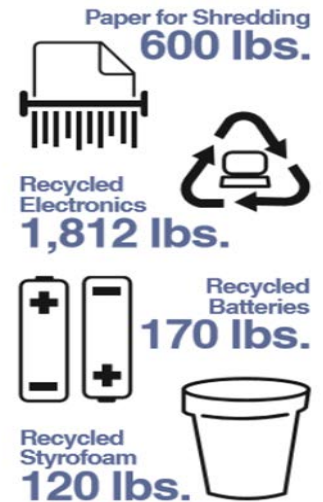
We encourage employee involvement and promote continual improvement through the E-Kaizen Continual Improvement Program ("E-Kaizen"). Once an environmental improvement is implemented, an E-Kaizen may be submitted through the online E-Kaizen system. There was a total of 62 environmental e-kaizens that were implemented.

July is E-Kaizen month, Ink Cartridge Manufacturing implemented a major process improvement: the department has eliminated three paper forms from each of nine HAV3P lines used for daily data entry. Now data is captured using PC tablets and entered into CALI.

This improvement saves time by making data entry faster and the system is even designed to flag inconsistent or irregular entries immediately, which prevents errors from going unnoticed.

## Recycling Program

Every April, EPI creates opportunities for employees to recycle those hard-to-dispose of items like electronics and secure documents. This year, we collected more than 2,500 pounds (1,130 kilograms) of recyclable goods. In an effort to support a sustain-able lifecycle for Epson products, EPI is now collecting personal use Epson products from employees for proper recycling.





# FULFIL COMPLIANCE OBLIGATIONS

## Regulatory Status Category

- Conditionally Exempt Small Quantity Generator

## Regulatory Reports

- DEQ NPDES Cooling Tower Report
- DEQ Recovered Materials Report
- State Fire Marshal Report
- SWIS Metro Report
- EPA TRI Report
- EPA TSCA Report
- Waste Water Report

## Site Permits and Licenses

- Department of Emissions Quality NPDES Waste Discharge (Permit #100-J)
- Conditional No Exposure Exemption (Longview CNE #CNE303287)
- State Waste Discharge (Longview Permit #ST6185)
- Clean Water Services Industrial Wastewater Discharge (Permit #133072)
- Metro Solid Waste Non-System (License #N-028-17)
- Department of Emissions Quality NPDES Storm Water Discharge (Permit #1200-Z)

## Sustainable Purchasing

Epson Portland Operations maintains a strong green purchasing program, maintained through vendor surveys and audits to verify that products and methods of production are environmentally friendly.

## About ISO 14001

The ISO 14001 standard sets criteria and provides a framework for an Environmental Management System (EMS) that can be adopted by any organization. By using ISO 14001, Epson's Portland Operations demonstrates a commitment to measuring and improving our environmental impact.

This site established its EMS in 1998 in accordance with the requirements of ISO 14001, and was the fifth company in Oregon at the time to achieve such status.

The company participates in regular internal audits and annual external audits and has maintained its certification without interruption since 1998.

# COMMUNICATIONS

We are proud of our sustainable business practices and make every effort to communicate them, as appropriate, through: Internal Communications, Public Outreach, Community Engagement, and this Annual Environmental Sustainability Report.

## Green Business Leader

Epson's Portland Operations maintains the Washington County Green Business Leaders Gold Award, an award designed to recognize an organization's efforts in sustainable materials management, toxins reduction, employee and community engagement, and supporting actions like conserving water and energy.



## Independent Auditor's Report

Epson Portland Operation's Environmental Management System (EMS) audit was conducted in November 2019 by Bureau Veritas Certification to upgrade the ISO 14001:2008 to 14001:2015. There were no major Non-Conformances found during the audit. Based on the evidence verified and the findings of the audit, the EMS is maintained and is in conformance with the requirements of the ISO 14001:2015.

The Management System Review consists of an annual executive management strategic review by senior management, an annual review by the EHS committee as well as a monthly overview by leadership at and above the Assistant Manager level. All reviews were completed in FY2019. In addition, Epson conducts monthly focus audits to ensure the adequacy of policies, procedures, and actions that support cleanliness, safety, and the environmental considerations at the plant. These audits are done by members of the EHS committee as well as management representatives. Twice a year, the subject matter of the audits is environmental, and each time, any concerns noted are communicated to the appropriate person and action is taken to make corrections.

## ABOUT EPSON'S PORTLAND OPERATIONS

Based in Hillsboro, Ore., with a satellite office in Longview, Wash., Epson's Portland Operations are the United States manufacturing subsidiary and logistics center for the Epson brand. We move ink cartridges from concept to completion using Epson robotics, including precision injection molding of proprietary plastic parts and manufacture of Genuine Epson Ink. Our finished cartridges are packed into retail boxes onsite and prepared for distribution.

At our Longview, Wash., location, we manufacture synthetic quartz crystals for Epson's Micro-Device Division. The quartz is used in electronic products manufactured by Epson affiliates around the world.

Led by the Japan-based Seiko Epson Corporation, the worldwide Epson Group generates annual sales of more than JPY 1 trillion. Learn more at [global.epson.com](https://global.epson.com), [epson.com](https://epson.com), and [epson.com/Portland](https://epson.com/Portland).