



KAISER PERMANENTE EPEAT CASE STUDY

Purchasing Environmentally Responsible Electronics with EPEAT

Environmental and Human Health Impact: Vast reduction in use of toxic materials (lead, cadmium, and mercury) and energy; increased use of recycled resins, recycled content packaging, and reusable packaging.

Business Impact: Up-front purchase of computer systems is cost neutral with estimated energy cost savings of \$1.36 million per year.

Challenge

Electronics and information technology enable Kaiser Permanente to provide members, patients, and physicians with real-time access to electronic medical information, which has expedited and simplified delivery of care. But the manufacture, use, and disposal of computers, printers, monitors and their electronic accessories have a significant adverse impact on human and environmental health globally. Recognizing this, Kaiser Permanente began work in the early 2000s to identify more environmentally responsible electronic products that would enable them to maximize the benefits of their IT operations while minimizing their environmental impacts. In early 2006, Kaiser Permanente became one of the first private companies in the world to specify EPEAT -- an environmental rating system for electronic devices supported by the U.S. EPA -- in a contract with a new computer system supplier. The contract language specified a strong and definite preference for energy efficient and environmentally responsible electronic equipment, using EPEAT as a benchmark to credibly and effectively identify such product options. Over ten years of working with EPEAT, Kaiser Permanente's specifications have required higher levels of performance and expanded to newly covered product categories. The organization's procurement team wanted to assess the overall benefit to the Kaiser Permanente system of this ten year purchasing commitment.

Aim/Goal

- To procure electronic products that are manufactured with least toxic materials, designed for prolonged useful life and easy recycling, use minimal energy for operation, and are packaged with minimal material.
- To reduce Kaiser Permanente's energy consumption and costs.

Team

IT Procurement Sourcing Team

Pradeep Saxena
Remi Murphy
Kevin Williams
Earl London
Linda Morgan
Lois Johannsen
Ken Mudge
Jeff Bruno

Environmentally Preferable Purchasing Program

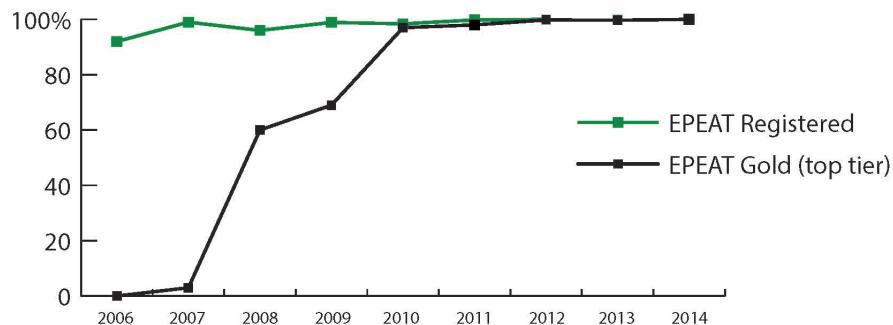
Vanessa Lochner

Actions Taken

- In 2006, the EPEAT criteria and registry system, enabling an easy comparison of the environmental performance of computer systems was launched.
- Prior to EPEAT, Kaiser Permanente had utilized the EnergyStar® rating system as a minimum requirement for new computer systems. However, Procurement & Supply's IT sourcing team quickly adopted EPEAT due to its comprehensive focus on environmental issues, including energy performance.
- Expectations were set with the incumbent supplier that as new products meeting higher registry tiers became available, Kaiser Permanente would move to adopt those models into their purchasing standards.
- Since 2006, EPEAT has been the baseline requirement for all computer and display products purchased by Kaiser Permanente.
- In 2013, EPEAT ratings were launched for imaging equipment (copiers, printers, multifunction devices, scanners, and fax and mailing machines).
- In 2014, Kaiser Permanente began to require EPEAT registration for imaging equipment.
- Over the 10-year period, Kaiser Permanente has encouraged vendors to provide ever-higher rated products, resulting in the purchase of 100% EPEAT Gold-rated desktops, notebooks/laptops and monitors since 2012. Ninety-three percent of printers purchased in 2014 following this commitment were rated EPEAT Silver, as were 94 percent of all multi-function devices purchased.

Results

Kaiser Permanente Purchasing Trend of EPEAT- Registered Desktops, Monitors & Laptops Since Inception of Registry (% of New Purchases)



In 2014, the latest date for which data is available, Kaiser Permanente purchased nearly 162,000 EPEAT Gold-registered PCs (desktops, laptops, tablets) and monitors, and more than 7000 printers and multi-function devices (MFDs) registered in the EPEAT Imaging Equipment category. As with the initial PC registrations, those imaging equipment products are registered at lower tiers. Kaiser Permanente structured the procurement with a preference instead of a requirement for higher tiers, since in the EPEAT system, manufacturers must work hard over time to qualify for additional criteria and achieve higher ratings in newer product categories. Kaiser Permanente will continue to push vendors to provide higher rated products over time, indicating progress toward additional environmental performance criteria.

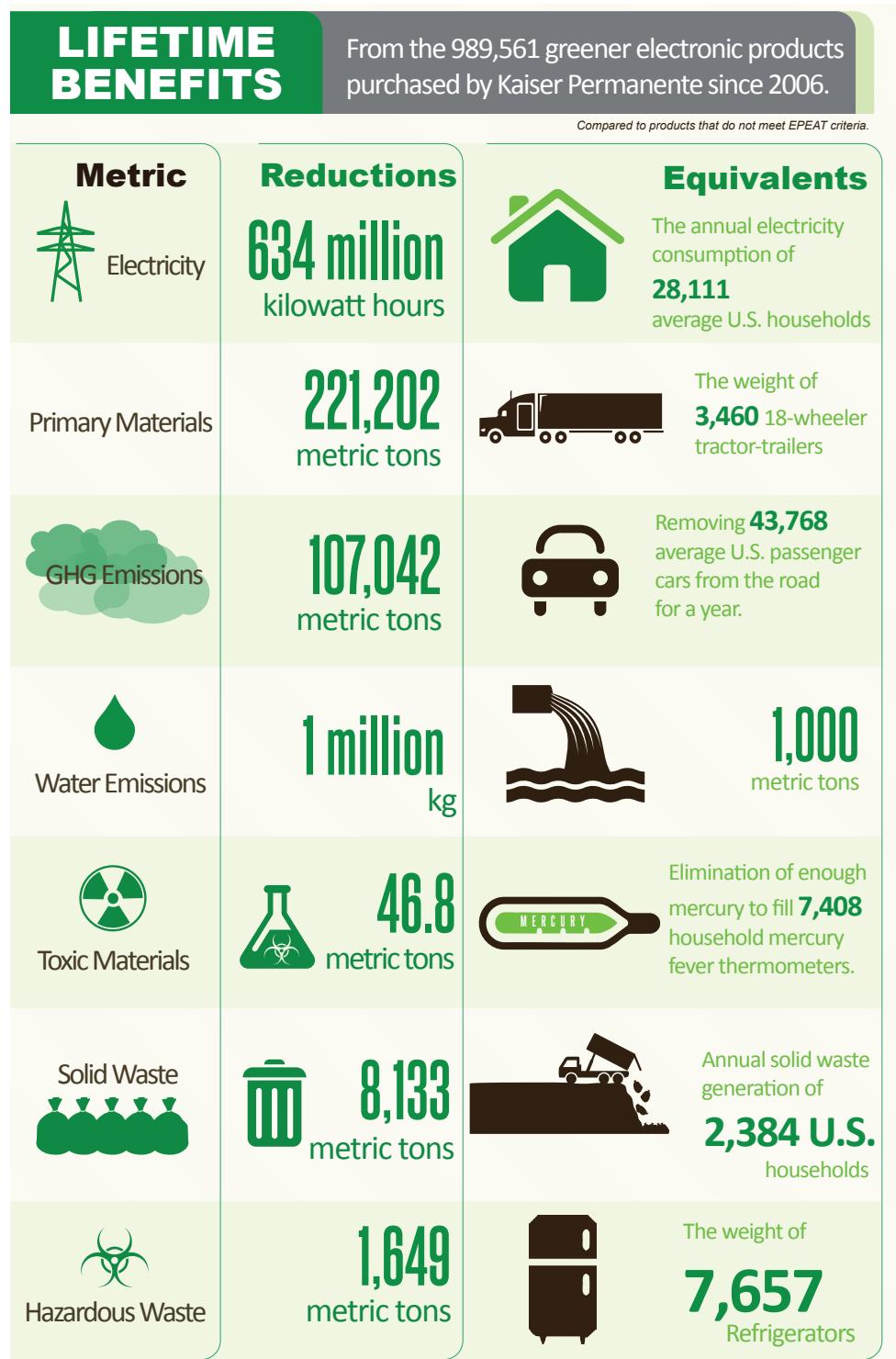
The environmental benefits and cost savings from Kaiser Permanente's 2014 purchasing of EPEAT registered products are significant, as illustrated by the table below:

Environmental Benefits of 2014 EPEAT Purchasing Over Products' Lifetime**

Metric	Amount	Equivalent
Electricity Saved	51.3 million KwH	Enough to power 4022 U.S. households for one year
Hazardous Waste Avoided	139,778 kg	Equivalent weight to 1136 refrigerators
Greenhouse Gas Reductions	8.5 million kg	Removing 6126 passenger cars from the road for a year
Water Emissions Prevented	85,705 kg	85.7 metric tons
Solid Waste Reduced	745,992 kg	399 U.S. households' annual solid waste
Cost Savings from Energy Use Reductions	\$7.9 million	

Cumulative Benefit

As of 2015, Kaiser Permanente will have completed 10 years of EPEAT procurement. The benefits calculated on an annual basis have been remarkable, but they wanted to assess the cumulative impact of directing their procurement dollars to products that meet EPEAT's challenging criteria. Taking Kaiser Permanente's cumulative annual purchase records for PCs, monitors, printers and MFDs from 2006 to 2014, they calculated the benefits again, with stunning results:



Lessons Learned

- The use of a reputable and verifiable third-party certification tool can simplify the purchasing of environmentally preferable products.
- A certification system, like EPEAT, that compares supplier performance in a transparent and balanced fashion can help prevent price mark-ups and “green washing” (disingenuous promotion or advertising of product environment attributes).
- A commitment to highest levels of performance can help motivate vendors to design and deliver increasingly sustainable products – and make them available to other purchasers who might not have Kaiser Permanente’s purchasing power.

Next Steps

- Continue standardization on purchasing solely EPEAT Gold products when product refresh is required, for mature product categories where sufficient Gold registrations exist. (EPEAT Gold-rated products meet all required and 75 percent of optional criteria.)
- Consider implementing an EPEAT specification for televisions – and encourage other healthcare providers to do the same, since healthcare facilities are one of the most significant institutional buyers of TVs.
- Participate in working groups and continue to support the expansion of EPEAT to new product areas.
- As new product category standards come on line, specify EPEAT-registered products with preference for higher levels to encourage registration and drive higher performance.

For more information, contact

AndreaDesimone@globalelectronicscouncil.org or Environmental-Supply-Chain@kp.org

* Cost savings reflect energy cost savings only, and are based on the 2010 commercial rate of \$0.102/kWh, as noted in version 3.1 of the US-EPA's Electronics Environmental Benefits Calculator.

** Benefits are calculated using version 3.1 of the US-EPA's Electronics Environmental Benefits Calculator. Benefits derived from compliance with the EU's Reduction of Hazardous Substances (RoHS) directive are removed from the calculations, since devices sold now by global manufacturers are nearly uniformly compliant.

