

From Policy to Progress: How California Is Using EPEAT® to Build a Net-Zero Future



GLOBAL
ELECTRONICS
COUNCIL®

Advancing Responsible Technology



Executive Summary

This joint case study between the Global Electronics Council® (GEC) and the State of California highlights how California's sustainable procurement practices, particularly the adoption of EPEAT registered electronics, are directly supporting the State's world-leading Climate Action Plan to Achieve Carbon Neutrality by 2045.

California has long been a global leader in climate innovation, and its latest Scoping Plan sets one of the most ambitious roadmaps to carbon neutrality of any jurisdiction in the world. The plan will cut greenhouse gas emissions by 85%, reduce oil usage by 94%, and create 4 million new jobs by 2045. It builds on the California Climate Commitment, a comprehensive strategy to eliminate fossil fuel dependence, achieve a 100% clean energy grid, ramp up carbon removal, and invest \$54 billion in building sustainable, resilient communities across the state.

In support of these transformative goals, the State of California's procurement leadership has embedded sustainability and lifecycle-based environmental considerations into purchasing decisions, ensuring that taxpayer dollars advance both operational efficiency and measurable climate action. Through its long-standing commitment to EPEAT, the premier global ecolabel for sustainable electronics managed by GEC, California is demonstrating how public procurement can serve as a powerful agent for carbon reduction, circularity, and responsible supply chains.

GEC's analysis of California's EPEAT Purchaser Awards data (2022–2024) quantifies the real-world environmental benefits of these purchasing decisions. Using life-cycle assessment (LCA) methodologies, GEC measured reductions in greenhouse gas emissions, energy consumption, water use, and air pollution resulting from the state's procurement of EPEAT registered products. These purchases resulted in cost savings of almost \$7.5 million and carbon emissions reductions of over 40,000 MT of CO_{2e}, demonstrating the tangible environmental returns of California's sustainable purchasing programs, showing that integrating EPEAT criteria directly contributes to the state's emissions-reduction targets under the Net-Zero Plan.

These LCA insights helped connect procurement decisions to specific policy goals and milestones outlined in the Climate Action Scoping Plan, such as achieving an 85% reduction in GHG emissions and achieving 100 million metric tons of CO₂ removal capacity by 2045.

This collaboration illustrates how evidence-based procurement, guided by internationally recognized ecolabels like EPEAT, can accelerate systemic progress toward net-zero. California's use of EPEAT not only ensures lower-emission, resource-efficient products across agencies, but also sets a global precedent for leveraging public purchasing to drive climate transformation.

As California works toward its vision of a pollution-free, net-zero economy, the State's adoption of EPEAT provides a compelling model for other governments worldwide, demonstrating how sustainable procurement can be both a climate action strategy and a catalyst for economic innovation.

Through data-driven collaboration and forward-looking procurement, California continues to lead by example, showing how aligning purchasing power with climate policy can bring the world closer to a sustainable, net-zero future.

Background

California has long been a global leader in climate action, aiming to achieve carbon neutrality by 2045 through its Climate Action Plan to Achieve Net-Zero. Central to this effort is the state's Environmentally Preferable Purchasing (EPP) Program, which supports emissions reduction, clean energy adoption, and sustainable economic growth.

To translate its climate commitments into measurable results, California turned to EPEAT, the leading ecolabel for sustainable electronics. By integrating EPEAT criteria into state purchasing requirements, the Department of General Services (DGS) ensures that electronic products meet strict standards for energy efficiency, greenhouse gas reduction, material health, and responsible supply chains.

The state tracks all EPEAT purchases and quantifies their impact using the EPEAT Benefits Calculator, which converts procurement data into tangible metrics like avoided carbon emissions, energy savings, and waste reduction. These results are published annually, reinforcing transparency and demonstrating how procurement decisions contribute to improvements in air quality and public health statewide. This data-driven approach provides transparency and accountability in the state's efforts to reduce air pollution by 71% and supports its broader environmental health objectives.

Through EPEAT, California has built a replicable model for sustainable procurement, one that links everyday purchasing to long-term climate, health, and economic resilience goals.



The Solution

To operationalize California's ambitious climate commitments and ensure that purchasing activities contribute directly to the state's Net-Zero by 2045 target, the Department of General Services (DGS) implemented a comprehensive procurement framework built on policy, ecolabel integration, and data-driven oversight. The state's approach aligns procurement with its Climate Action Plan and Executive Order N-19-19, which mandates that state agencies reduce greenhouse gas (GHG) emissions through sustainable purchasing.

Strategy

California's sustainable procurement strategy is anchored in its EPP Program. This program empowers the DGS to guide all state agencies in purchasing environmentally preferable goods and services, including electronics that meet EPEAT criteria.

EPEAT serves as the cornerstone of this strategy. By formalizing EPEAT as the preferred ecolabel for electronics, California ensures that state purchases align with environmental and social responsibility goals. EPEAT's lifecycle-based criteria allows DGS to measure tangible benefits such as reduced greenhouse gas emissions, energy savings, lower waste, and responsible supply chain practices.

To operationalize this framework, DGS integrates EPEAT requirements into all relevant procurement policies and tools. The EPP Best Practices Manual provides purchasing officials with information to select products that meet the state's sustainability objectives. It identifies recognized ecolabels such as EPEAT and ENERGY STAR, establishes recycled-content standards, and outlines requirements for product take-back and recycling services.

Complementing these measures, Executive Order N-19-19 directs all state entities to reduce their carbon footprint through sustainable purchasing. Under this directive, DGS established minimum requirements in statewide commodity contracts that desktops, laptops, monitors, and tablets must be EPEAT registered (Silver or higher) and ENERGY STAR certified.

California further demonstrates leadership by prioritizing opportunities to incorporate EPEAT Climate+™ as criteria in its solicitations, which meet stringent criteria for climate performance. This commitment has earned the state recognition as an EPEAT Climate+ Purchasing Leader, underscoring its role as a national model in leveraging procurement to advance climate and sustainability goals.

Implementation Process

California's integration of EPEAT into procurement practices follows a centralized yet scalable implementation model, designed to ensure compliance across all agencies while maintaining flexibility for evolving product categories.

1. Policy Integration and Contract Design

DGS's Procurement Division embeds EPEAT requirements into relevant statewide leveraged procurement agreements, ensuring that any electronic product available through these contracts meets EPEAT registration requirements. Once a contract is awarded, agencies are mandated to purchase EPEAT registered products where applicable.

Statewide commodity solicitations for computing and electronic devices must include:

- ENERGY STAR certification.
- EPEAT registration at Silver tier or higher as a minimum standard.

2. Supplier Engagement and Accountability

Bidders are informed that the relevant products must be listed in the EPEAT registry by the bid due date, verifying that their products meet the specified environmental standards. Senate Bill 253 requires U.S. entities doing business in California with >\$1B annual revenue to publicly disclose annual Scope 1 & 2 (starting 2026) and Scope 3 (starting 2027) greenhouse gas emissions. It reinforces California's leadership in climate accountability and supply chain transparency.

3. Cross-Agency Collaboration

DGS collaborates with state agencies and departments to ensure compliance with EPEAT requirements through training, technical assistance, and procurement resources. The EPP Unit within DGS maintains an open platform for sharing best practices and monitoring performance across departments.

4. Performance Measurement and Reporting

Each year, DGS tracks and measures the environmental impact of all EPEAT purchases using the EPEAT Benefits Calculator. These annual results are published online, allowing California to transparently report how sustainable procurement contributes to GHG reduction, pollution prevention, and energy savings across state operations.

5. Continuous Improvement and Innovation

As an EPEAT Climate+™ Purchasing Leader, DGS continues to expand its criteria to align with emerging sustainability standards and technologies. The EPEAT Climate+ designation emphasizes performance in five key areas: public- and third-party-verified product GHG disclosures, energy-efficient upstream manufacturing processes, science-based GHG reduction targets, sourcing electricity from renewable energy sources, and product energy efficiency standards, helping the state continually improve the sustainability of its purchasing portfolio.

By combining strong policy mandates, supplier accountability, and verified ecolabel standards, the State of California has created a procurement ecosystem that not only supports but also accelerates its Net-Zero Climate Plan. By mandating EPEAT and ENERGY STAR standards across all eligible product categories, the state ensures that every purchase contributes directly to its GHG reduction targets, air pollution goals, and public health objectives, reinforcing California's position as a global leader in sustainable public procurement.

The Results

The State of California’s integration of EPEAT registered products across its procurement operations has delivered measurable and substantial environmental, financial, and public health benefits. Through data collected between 2022 and 2024, the state has demonstrated that sustainable purchasing not only advances its Net-Zero Climate Plan but also produces quantifiable results that strengthen its economic and environmental resilience.

Procurement Overview (2022–2024)

Between 2022 and 2024, the State of California purchased 311,218 electronic products that met EPEAT criteria. These purchases span multiple technology categories across all major state agencies, underscoring California’s commitment to integrating sustainability into its day-to-day operations.

| Category | Total Purchased (2022–2024) | Highlights |
|--|-----------------------------|--|
| Computers & Monitors | 275,453 | Purchases of EPEAT registered computers and monitors grew 104% in three years, from 55,194 in 2022 to 112,489 in 2024. |
| Printers, Scanners & Multifunction Devices | 12,455 | Grew 47%, from 2,661 in 2022 to 3,918 in 2024, reflecting greater adoption of EPEAT registered office equipment. |
| Servers | 536 | Support for more energy-efficient data infrastructure. |
| Mobile Phones | 22,722 | Reflects the expansion of sustainable purchasing practices to mobile technologies. |
| Televisions | 52 | Commitment to purchasing energy-efficient and environmentally responsible televisions |

| Year | Products Purchased |
|------|--------------------|
| 2022 | 67,143 |
| 2023 | 120,701 |
| 2024 | 123,374 |

These results highlight California’s strong year-over-year growth in sustainable procurement, particularly for high-impact electronics such as computers, servers, and imaging equipment. These categories contribute most significantly to reductions in greenhouse gas emissions and energy use.

Environmental Impact Highlights (2022–2024)

The environmental benefits achieved through EPEAT registered purchases are both impressive in scale and aligned with the state’s broader climate and air quality objectives, including its target to reduce GHG emissions by 85% and cut air pollution by 71%.

These outcomes, verified using the EPEAT Benefits Calculator, demonstrate the effectiveness of California’s policy-driven procurement in achieving measurable environmental and fiscal benefits.

State of California

Total sustainability impact and cost savings for **311,218** products purchased in 2022-2024

COST SAVINGS IN THE AMOUNT OF \$ 7,483,624

ENVIRONMENTAL IMPACT REDUCTION

GHG Reduction

40,742,982

kilograms of CO₂ equivalents



EQUIVALENT TO

Taking **8,724** average US passenger car off the road for a year



Smog Formation Potential 1,691,753
kg O₃ equivalent

Energy Savings

167,901,930

Kwh



The annual electricity consumption of **13,821** average US households



Water Emissions 18,375
kilograms

Hazardous Waste

17,565

kilograms



The weight of **145** refrigerators



Eutrophication Potential 3,918
kg N equivalent

Solid Waste

3,379,818

kilograms



Annual waste generation of **1,817** average US households



Air Emissions 7,430,326
kilograms

Primary Materials

3,782,195

kilograms



The weight of **727** elephants



Water Consumption

364,142,620

liters of H₂O



Fluid volume of **146** olympic sized swimming pools



Acidification Potential 182,537
kg of SO₂ equivalent

Toxics

20,207

kilograms



The weight of **8,910** bricks



Material Conservation

230,468

kilograms



The weight of **6** 18-wheelers



Advancing Public Health and Economic Co-Benefits

California partners with EPEAT to achieve climate mitigation, pollution reduction, and energy savings among other benefits. By quantifying the environmental and human health impacts of electronic purchases, the state can evaluate and refine procurement policies that directly improve air quality, reduce toxic exposure, and promote cleaner workplaces and communities.

This data-driven transparency enables California to evaluate the real-world return on investment of sustainable procurement, not only in emissions avoided but also in public health benefits and economic gains that support every resident of the state.

Testimonial

“Being able to quantify the state’s purchases of electronic goods into greenhouse gas emissions and reductions helps us add transparency and continuity to California’s efforts to reduce air pollution attributed to its purchase of electronic products. EPEAT helps ensure that every purchase supports both environmental protection and public health.”

— California Department of General Services, Environmentally Preferable Purchasing Unit

Summary and Conclusion

California has built one of the world’s most advanced sustainable procurement systems by embedding environmental standards, supplier accountability, and transparent impact reporting into every stage of purchasing. At the heart of this system is EPEAT, the state’s trusted ecolabel for evaluating the environmental and social performance of electronics.

Through policy alignment, strong leadership, and collaboration across agencies, California has transformed procurement into a climate action tool, linking purchasing decisions to measurable reductions in greenhouse gas emissions, waste, and energy use. The credibility of EPEAT, backed by scientific rigor and multi-stakeholder governance, has been essential in driving supplier participation and ensuring consistency across product categories.

As an EPEAT Climate+™ Purchasing Leader, California continues to demonstrate how strategic procurement can advance its Net-Zero Climate Plan and 2045 carbon neutrality goals. By integrating lifecycle-based standards and continuously adapting to evolving criteria, the state strengthens both its climate impact and market influence.

California’s experience offers a clear model for other governments: unify purchasing power, embed credible ecolabels like EPEAT, and use data-driven procurement to achieve sustainability and equity goals. In doing so, the state has proven that every purchase can be a powerful step toward a cleaner, more resilient, and low-carbon future.

Contact

Emmanuel Nwodo, enwodo@gec.org

Senior Manager, Market Development, Global Electronics Council

Direct Line: +1 (503) 279-9383 • Mobile Phone: +1 (971) 380-4081 • U.S Eastern Time Zone

100% SUSTAINABLE ELECTRONICS BY 2050

FOR EVERYONE, EVERYWHERE

About the Global Electronics Council®

The Global Electronics Council (GEC) envisions a world with only sustainable electronic technology that enhances the well-being of people and planet. Our mission is to accelerate the transformation of markets toward prioritizing the most sustainable electronic products and services.



As stewards of the EPEAT ecolabel, we set global standards for electronics that empower brands, their value chains and their buyers to achieve ambitious sustainability goals. Through our thought leadership, advocacy, and EPEAT ecolabel, GEC is helping to reshape the electronics industry into a driving force for environmental preservation and global well-being.

Our EPEAT Ecolabel

The Global Electronics Council (GEC) envisions a world with only sustainable electronic technology that enhances the well-being of people and planet. Our mission is to accelerate the transformation of markets toward prioritizing the most sustainable electronic products and services.



As stewards of the EPEAT ecolabel, we set global standards for electronics that empower brands, their value chains and their buyers to achieve ambitious sustainability goals. Through our thought leadership, advocacy, and EPEAT ecolabel, GEC is helping to reshape the electronics industry into a driving force for environmental preservation and global well-being.

EPEAT Climate+™

Climate change is reshaping how the world thinks about technology. EPEAT Climate+™ was created to meet this moment.

Climate+ is a designation available to EPEAT® registered products that have been designed and manufactured with climate mitigation at the forefront. It highlights brands taking measurable steps to reduce greenhouse gas emissions throughout their operations and supply chains—supported by third-party verification and grounded in science-based expectations.

