



How the EPEAT Ecolabel Helps You Address Climate Change

The EPEAT ecolabel empowers purchasers to meet their organizational sustainability goals through their purchasing decisions. Products available through EPEAT include computers, monitors, copiers, mobile phones, televisions, and servers. EPEAT is just one of several sustainable purchasing resources freely available from the Green Electronics Council (GEC).

Why is Climate Change a Sustainability Concern?

Climate change is creating irreversible damage to the planet and threatening conditions for all life on earth – extreme temperatures and weather conditions, rising sea levels, melting ice caps, and loss of biodiversity have already been documented as a result of climate change. Humankind’s release of greenhouse gases (GHGs) into the atmosphere, through the burning and other manufacturing uses of fossil fuels, is one of the primary contributors to hastening climate change. The manufacturing and use of electronic products contribute to the release of greenhouse gases, including the cumulative energy used to mine, manufacture and assemble electronic components (embodied energy), as well as the greenhouse gas emissions associated with the manufacturing, transport, and use of products. Extending the lifecycle of a product through increased durability and repair, along with high recycling and recovery rates, help in preserving some of the embodied energy.



Not all greenhouse gases are equal in their impact. Fluorinated greenhouse gases (F-Gases), including perfluorocarbons, hydrofluorocarbons, nitrous trifluoride, and sulfur hexafluoride, created in flat panel display and semiconductor manufacturing, are up to 23,000 times more heat-trapping than carbon dioxide, another greenhouse gas. Fortunately, abatement equipment exists that enables manufacturers of flat panel displays and semiconductors to destroy more than 90% of the F-Gases created during the manufacturing process, preventing them from ever entering the atmosphere. Manufacturers need to be incentivized to use these technologies to reduce F-Gases. EPEAT has two criteria, applicable across product categories, that address F-Gases. By preferring EPEAT-registered products, purchasers are supporting manufacturers who are making a choice to control the release of highly detrimental F-Gases and associated climate change impacts.

How EPEAT-Registered Products Address Climate Change

The EPEAT ecolabel has both required and optional criteria. The required criteria ensure that the product is credibly sustainable, and a product must meet every required EPEAT criterion to be considered an “EPEAT-registered” product. Optional criteria are additional criteria that a manufacturer can choose to have their product meet. By choosing to go beyond the required criteria, manufacturers show their commitment to addressing additional environmental and social issues. The more purchasers prefer products with optional criteria that address greenhouse gases, the faster we will address the causes of climate change.

Products from different EPEAT categories may address climate change differently because each product category has product-specific criteria.

EPEAT Required Criteria Address Climate Change

EPEAT-registered products must meet stringent energy efficiency requirements as outlined by ENERGY STAR, the most widely recognized and implemented energy efficiency program for electronic products globally. Manufacturers of EPEAT-registered computer, imaging equipment, and television products must also make annual public disclosure of energy use and the Scope 1 & 2 greenhouse gases associated with their product design and manufacturing operations. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy.



Using Optional EPEAT Criteria to Assess and Address Climate Change

EPEAT optional criteria address the fluorinated greenhouse gases (F-Gases), which are among the most potent and persistent GHGs contributing to global climate change. Manufacturers that ensure their products meet fluorinated greenhouse gas-related optional EPEAT criteria are showing their commitment to addressing climate change. These optional criteria require that 75% of their suppliers employ techniques that reduce at least 90% of F-Gases related emissions annually. Widespread adoption of these optional criteria, especially by manufacturers of flat panel displays and semiconductors, help mitigate climate change and associated impacts.

Examples of optional EPEAT criteria that assess and address climate change include:

- Reduction of fluorinated GHG emissions from flat panel display manufacturing
 - Reduction of fluorinated GHG emissions from semiconductor production
 - Conducting and publishing product lifecycle assessment
 - Accounting of greenhouse gas emissions from product transport
 - Corporate carbon footprint
 - Further reduction in product energy consumption
 - Reduction of energy lost from power conversion
 - Reduction of energy consumption of battery charging systems
 - Annual reporting by suppliers of Scope 1 & 2 greenhouse gas emissions.
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Finding the EPEAT-Registered Products That Address Climate Change

To find products that meet EPEAT criteria associated with climate change, purchasers can search the EPEAT Registry at epeat.net. Optional criteria can be found at the bottom of the FILTERS box by clicking on "VIEW ADVANCED SEARCH OPTIONS." Search results will include products that meet all of the selected optional criteria.



Quantifying Your Positive Impact

The Green Electronics Council provides an EPEAT Benefits Calculator that can quantify specific environmental and cost savings associated with the purchase of EPEAT-registered products including energy savings, non-hazardous solid waste reductions, avoided toxic substances, acidification potential savings, material conservation, cost savings for non-hazardous solid waste disposal, water consumption savings, eutrophication potential savings, and energy cost savings. Additionally, the calculator measures greenhouse gas emission reductions and smog formation potential savings, which are a direct benefit of both required and optional climate change criteria.

GEC developed the EPEAT Benefits Calculator with the support of the Eastern Research Group (ERG). ERG previously developed and maintained the US EPA Electronics Environmental Benefits Calculator. GEC established an external technical review panel comprised of representatives from government, academia, research institutes, industry, and organizations purchasing IT products to review the data, assumptions, and analysis underlying the benefits calculator.

Need assistance connecting your organization's sustainability priorities to EPEAT criteria?

Contact PurchaserResources@greenelectronicscouncil.org
