

Highlights of GAO-10-626, a report to the Chairman, Committee on Science and Technology, House of Representatives

## Why GAO Did This Study

Low recycling rates for used televisions, computers, and other electronics result in the loss of valuable resources, and electronic waste exports risk harming human health and the environment in countries that lack safe recycling and disposal capacity. The **Environmental Protection Agency** (EPA) regulates the management of used electronics that qualify as hazardous waste and promotes voluntary efforts among electronics manufacturers, recyclers, and other stakeholders. However, in the absence of a comprehensive national approach, a growing number of states have enacted electronics recycling laws, raising concerns about a patchwork of state requirements. In this context, GAO examined (1) EPA's efforts to facilitate environmentally sound used electronics management, (2) the views of various stakeholders on the state-by-state approach, and (3) considerations to further promote environmentally sound management. GAO reviewed EPA documents, interviewed EPA officials, and interviewed stakeholders in five states with electronics recycling legislation.

### What GAO Recommends

GAO recommends that the Administrator, EPA, (1) examine how EPA's partnership programs could be improved to contribute more effectively to used electronics management and (2) work with other federal agencies to finalize a legislative proposal on ratification of the Basel Convention for congressional consideration. EPA agreed with the recommendations.

View GAO-10-626 or key components. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.

## ELECTRONIC WASTE

# Considerations for Promoting Environmentally Sound Reuse and Recycling

#### What GAO Found

EPA's efforts to facilitate the environmentally sound management of used electronics consist largely of (1) enforcing its rule for the recycling and exporting of cathode-ray tubes (CRT), which contain significant quantities of lead, and (2) an array of partnership programs that encourage voluntary efforts among manufacturers and other stakeholders. EPA has improved enforcement of export provisions of its CRT rule, but issues related to exports remain. In particular, EPA does not specifically regulate the export of many other electronic devices, such as cell phones, which typically are not within the regulatory definition of hazardous waste despite containing some toxic substances. In addition, the impact of EPA's partnership programs is limited or uncertain, and EPA has not systematically analyzed the programs to determine how their impact could be augmented.

The views of stakeholders on the state-by-state approach to managing used electronics have been shaped by the increasing number of states with electronics recycling legislation. To varying degrees, the entities typically regulated under the state laws—electronics manufacturers, retailers, and recyclers—consider the increasing number of state laws to be a compliance burden. In contrast, in the five states GAO visited, state and local solid waste management officials expressed overall support for states taking a lead role in the absence of a national approach. The officials attributed their varying levels of satisfaction more to the design and implementation of individual state recycling programs, rather than to the state-by-state approach.

Options to further promote the environmentally sound management of used electronics involve a number of policy considerations and encompass many variations, which generally range from a continued reliance on state recycling programs to the establishment of federal standards via legislation. The first approach provides the greatest degree of flexibility to states but does not address stakeholder concerns that the state-by-state approach is a compliance burden or will leave some states without electronics recycling programs. Moreover, EPA does not have a plan for coordinating its efforts with state recycling programs or articulating how EPA's partnership programs can best assist stakeholders to achieve the environmentally sound management of used electronics. Under the second approach, a primary policy issue is the degree to which federal standards would allow for stricter state standards, thereby providing states with flexibility but also potentially worsening the compliance burden from the standpoint of regulated entities. As a component of any approach, a greater federal regulatory role over exports could address limitations on the authority of states to regulate exports. GAO previously recommended that EPA submit to Congress a legislative proposal for ratification of the Basel Convention, a multilateral environmental agreement that aims to protect against the adverse effects resulting from transboundary movements of hazardous waste. EPA officials told GAO that the agency had developed a legislative proposal under previous administrations but had not finalized a proposal with other federal agencies.