



## E-recycling and legislation

by Irwin Rapoport

The direct and indirect problems associated with the discarding of electronic waste by Americans from both residential and commercial sectors are compounding daily. Recycling can make a difference on the environmental front and should enough jurisdictions in the United States have comprehensive and solid e-waste solid recycling legislation, the recycling industry would enjoy long-term economic benefits and fulfill a serious responsibility of dealing with products that contain many toxic materials.

Four states have e-waste legislation – California, Washington, Maryland and Maine.

California's Electronic Waste Recycling Act of 2003 – SB20 (January 1, 2005), requires consumers to pay an advanced recycling fee of \$6, \$8 or \$10 depending upon the size of the screen for computer monitors and televisions with cathode ray tubes (CRT) and computer and television monitors with liquid crystal displays (LCD), lap top computers and plasma televisions. The fee is paid at the point of retail sale and the revenue generated is placed in a fund that pays for the collection and recycling of these devices.

"The financing mechanism is very solid," said Shirley Willd-Wagner, the manager of the Electronic Waste Recycling program with the California Integrated Waste Management Board, "but the law is not as comprehensive as far as manufacturing responsibility as the Washington state law. "We pay for good, sound, environmentally safe collection and recycling. Before the law, citizens were often charged between \$15 and \$35 to recycle a television."

In California it is illegal to place electronic devices in the trash, however a waste characterization study completed in 2004 for California landfills found that approximately 0.3 percent of the waste stream was computer-related waste and 0.7 percent was televisions and other CRT containing devices. The margin of error was 0.3 percent and 0.9 percent respectively.

Before SB20 took effect, consumers, and sometimes local governments, were burdened with the cost of collecting and recycling e-waste. Now that the new funding system is in place, the fees that were being charged by local governments and other collectors to accept certain types of e-waste of devices (including most televisions and many computer monitors), have been drastically reduced or eliminated.

The funding system covers only video display devices that the state's Department of Toxic Substances Control has tested and determined would be hazardous waste when discarded. This year, tests are being conducted on portable DVD players to determine whether they will be added to the list of covered devices. While California's list is not comprehensive, some of the products not covered by the legislation are sought by recyclers for re-sale and for recycling for plastics and metals.

Education programs are informing residents and businesses about the law and as the education level rises, so does the amount of recycling.

“It’s made a difference as far as disposal of the devices, including computers,” said Willd-Wagner. “The amount of covered electronic wastes recycled under the SB20 payment



Electronic Recyclers' John Shegerian with Governor Schwarzenegger on his China delegation.

system in the first quarter of 2006 is about 2.5 times of what it was in the first quarter of 2005.”

Estimates are that in California televisions are replaced every 7 to 10 years and computers every 3 years. While computer packages are popular, many people retain their monitors.

Washington State’s e-waste legislation – ESSB 6428, which was passed last spring, is based on producer responsibility – manufacturers have to come up with a plan to cover their fair share of the costs of recovery and recycling of the products they produce. They also have to submit their own plan or join a standard plan where the state will determine the rate that different manufacturers will have to pay.

The funds raised by the legislation will be managed by a third party organization comprised of members from industry and government. However, the law does not go into effect until January 1, 2009. Regulations and rules are currently being prepared.

Maryland and Maine’s laws have also been enacted. Maryland’s is similar to Washington’s, with manufacturers paying a pro-rata share for the recycling and local government paying for the collection of devices to consolidation centers.

Some states have bans on placing e-waste in the waste stream, but some of the bans exempt the residential sector.

Nearly 24 other states have had some type of legislation brought to the floor last year for discussion.

“Industry is continually meeting with those states and advocating for what they believe to be the best way to manage ewaste,” said Willd-Wagner. “Many manufacturers have stepped forward and developed environmental policies to manage electronic products from their customers. Several manufacturers have implemented take-back or recycling programs with retailers or non-profit organizations.”

For many, a national plan to deal with e-waste is the goal, but there are competing visions of what a national plan put forward by the federal government should contain.

The Product Stewardship Institute (PSI) supported a national effort between 2000 - 2003 - the National Electronic Product Stewardship Initiative (NEPSI), which was coordinated by the United States Environmental Protection Agency, and included state and local governments, environmentalists and representative groups from industry – manufacturers, retailers and recyclers.

Discussions covered the scope of products to be covered, regulations, financing, processing standards, preemption and other elements.

“At a certain point, the group recognized that the key to federal legislation was an agreement among manufacturers on a financing system,” said Scott Cassel, the executive director of the PSI. “The government and industry groups negotiated a joint resolution that provided a challenge to the industry group to come up with a consensus on what the funding would be – whether an advanced recycling fee, producer responsibility, or some hybrid system, and bring that back for discussion to the full stakeholder group. After one year of inaction, NEPSI ended.”

On September 13, 2006 four congressmen met with various government, industry and environmental representatives in Washington, DC to determine whether another national effort should be pursued.

“There have been three or four pieces of legislation introduced to deal with e-waste,” said Willd-Wagner, “but none have been moved to a formal vote.

Federal government has recognized the problem and ordered studies on the issue. This includes a Department of Commerce report (July 2006), along with recommendations and a report issued by the Government Accountability Office (November 2005).

Cassel notes that there are two ongoing regional efforts to establish common e-waste regulations. In the northeast, a model was developed by the Council of State Governments and the Northeast Recycling Council for several states.

Several mid-western states, including Minnesota and Iowa, are also making an effort to establish a regional standard. Attempts to bring in legislation for other states have so far failed.

“Legislation has not been passed because there is still disagreement among manufacturers as to the best way to finance the collection and recycling of e-scrap,” said Cassel. “That was the same problem that existed in the national effort and that same problem has been brought to bear at a state level. There are legislative battles between those who support an advanced recycling fee and those who support producer responsibility. A lot of that has to do with local political factors and the coalitions that develop in the states, particularly among manufacturers and retailers.”

“Many of the legislators don’t know enough about the issue or would prefer not to get into the battle at this time, so they don’t pass any legislation,” said Cassel.

But Cassel remains hopeful that action will be taken, be it a through a national program or individual state legislation despite the many hurdles.

“We have four states now and three years ago we didn’t have any,” he said. “That’s a big change and you have activity in Congress. There has been incredible movement in the United States towards stewardship solutions over the past three years.”

He added that states are looking at both the California and Washington models and that it is may be possible to find a common solution.

Cassel says that the manufacturers do recognize the problem of e-waste, as do all stakeholders. Willd-Wagner says that many manufacturers would still prefer voluntary regulations.

Rick Goss, senior director of environmental affairs for the Electronic Industries Alliance (EIA), says that the members of his group “broadly support and are very involved in efforts to properly recover to re-use, re-furbish and recycle used electronic equipment.”

Last year the EIA broached the electronics recycling issue with key members of the Congress and as a result of that action, says Goss, hearings on the subject were held for the first time in the House and Senate.

But EIA members are divided on the financing aspect – an advanced recycling fee versus product responsibility.

“Because of that,” he said, “the EIA does not have a formal position on how to finance a program. We believe that it is the responsibility of all the institutional stakeholders to coordinate under a shared responsibility approach to come up with a system that is inexpensive and convenient for the residential consumer.”

He said that the industry operates in a very competitive marketplace with very low margins and that there are not a “whole lot of opportunities to absorb additional costs without passing them along to consumers in the form of higher prices.”

The EIA believes that federal government has a role to play in terms of regulatory consistency and ensuring that end-of-life products can move freely across state boundaries for proper refurbishment, recycling and commodity management.