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Texas Computer Equipment Recycling Program

Texas Computer Equipment Recycling Program

Prepared by
Small Business and Environmental Assistance Division

SFR-99/12
February 2013



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Overview

The Texas Commission on Environmental Quality supports market development for recycling and plays an important role in assisting Texans with establishing recycling programs. The TCEQ has programs that provide public education, online resources, and assistance for industries interested in increasing recycling at their facilities. Through compliance and technical assistance, the TCEQ provides guidance to the recycling community. Multiple programs support and encourage recycling, including the agency's Take Care of Texas, pollution prevention technical assistance, and solid waste grants programs. Additional programs support recycling markets directly, such as the Resource Exchange Network for Eliminating Waste ([RENEW](#)¹). Other recycling programs target specific materials, such as recycled newsprint, used oil, and computer equipment.

The Texas Legislature established the Computer Equipment Recycling Program through House Bill 2714 in the 80th Legislative Session. Under the program, manufacturers offering to sell new computer equipment in or into Texas are required to provide a free and convenient program for collecting and recycling home business and personal computer equipment. As part of the management of this program, the TCEQ continues to inform and educate the general public and maintain Web pages to provide compliance and technical assistance to recyclers, consumers, retailers, and manufacturers.

Under the Computer Equipment Recycling Program, computer equipment is defined as a desktop or notebook computer, including a computer monitor or other display device that does not contain a tuner (30 Tex. Admin. Code (TAC) §[328.135](#)²). The definition also includes the accompanying keyboard and mouse made by the same manufacturer.

The Computer Equipment Recycling Program is not the only outlet for computer-equipment recycling in Texas. Many other resources are available for consumers who wish to recycle their used electronics, including computer equipment. Municipalities, local nonprofit groups, and community-oriented businesses often coordinate collection events for electronics recycling in their areas. Charity groups, such as Goodwill and The Salvation Army, may take computer donations for refurbishing and resale or recycling. The Computer Equipment Recycling Program provides one way, among others, that consumers can recycle their computers in Texas.

Requirements

The Computer Equipment Recycling Program requires that each of the parties involved be responsible for different aspects of the program. Computer-equipment

¹ Available at <www.tceq.texas.gov/p2/recycle/renew/renew.html>.

² Available at

<[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=328&rl=135](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=328&rl=135)>.

manufacturers, retailers, recyclers, consumers, and state agencies have requirements under the law.

Each computer-equipment manufacturer is responsible for collecting and recycling its own brand(s) of computer equipment. A manufacturer's program must be convenient for consumers and free at the time of recycling. The program must cover all of the computer brands made by the manufacturer, both in use and no longer in use. The program applies to computer equipment that is purchased primarily for personal or home-business use—regardless of when it was purchased. Additionally, manufacturers are responsible for submitting an annual recycling report to the commission by Jan. 31 of each year, reporting the weight of the computer equipment collected, recycled, and reused during the preceding calendar year. The first year of the program was 2009, and the first reports were due Jan. 31, 2010.

Retailers may not sell or offer to sell new computer equipment in Texas unless the equipment is labeled with the manufacturer's brand(s) and the manufacturer is included on the TCEQ's online list of manufacturers. This list is available at <www.TexasRecyclesComputers.org>. This requirement applies to online and in-store sales.

Consumers are responsible for any information, in any form, that is left on the consumer's computer equipment.

Computer-equipment recyclers are required to make efforts to reuse or refurbish all computer equipment they collect. They must then recycle what is economically feasible to recycle in an environmentally sound manner (30 TAC §328.149³). Only after reusing, refurbishing, or recycling what they reasonably can, may recyclers properly dispose of any remaining materials.

Texas state agencies must meet certain requirements under the Computer Equipment Recycling Program. State agencies must give a purchasing preference to manufacturers who have a program to recycle other manufacturers' computer equipment. State agencies also must ensure that any contractor for computer-equipment leases or purchases is in compliance with the program. The Department of Information Resources adopted [rules](#)⁴ to implement this requirement. The TCEQ must conduct consumer outreach and education on collecting, recycling, and reusing computer equipment; maintain a website providing information about computer-equipment reuse and recycling and an online list of manufacturers; and issue an annual report to the Texas Legislature no later than March 1. The TCEQ must also, in cooperation with the attorney general's office, enforce the law for this program.

³ Available at

<[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=328&rl=149](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=328&rl=149)>.

⁴ Available at

<[http://info.sos.state.tx.us/pls/pub/readtac\\$ext.ViewTAC?tac_view=4&ti=1&pt=10&ch=217](http://info.sos.state.tx.us/pls/pub/readtac$ext.ViewTAC?tac_view=4&ti=1&pt=10&ch=217)>.

Program History and Outreach

When HB 2714 passed in 2007, TCEQ staff began developing rules, policies, and procedures for the new Computer Equipment Recycling Program. To establish a reliable program for consumers, the program's implementation began with a focus on ensuring that manufacturers and retailers knew the requirements. Multiple resources, including the Office of the Comptroller and the U.S. Environmental Protection Agency (EPA), contributed to developing a list of computer-equipment manufacturers that staff contacted with information about program requirements and compliance assistance. With help from the Texas Retail Association, the TCEQ also notified retailers of the new requirements established by the program. Through e-mail, phone calls, and an online workshop, the TCEQ launched its initial program outreach, educating manufacturers and retailers about new requirements.

Continued outreach, expanded to include recyclers and consumers, broadened knowledge of the new program and provided resources for all responsible parties. The resources include recycler compliance tools such as a [checklist](#)⁵ to help certain recyclers address relevant TCEQ regulations and a [Web page](#)⁶ that explains TCEQ regulations for electronics recyclers. Manufacturers also can use these resources to verify that the recyclers they select are in compliance with Texas regulations.

Consumer outreach included steps to increase public awareness of the Computer Equipment Recycling Program. Since the program's inception, the TCEQ has used multiple outlets to educate consumers, municipalities, and nonprofit groups about the program. Statewide measures include distribution of close to 150,000 brochures, e-mails, and website links reaching more than 300,000 Texans, presentations to more than 1,000 people, radio public service announcements in 16 metropolitan regions, more than 100 direct-contact phone calls to city governments, and more than 10 feature articles in widely distributed publications.

Moving forward, the outreach for the Computer Equipment Recycling Program will merge with the marketing of a new television recycling program. With the development of the new Television Equipment Recycling Program, TCEQ outreach efforts encourage electronics recycling and provide continued compliance assistance resources for all responsible parties. The central focus of both programs remains on public education and outreach.

Results from Manufacturers' Annual Reports

For all reporting years of the program, the TCEQ received reports from all manufacturers that were required to submit annual reports. In 2009, the total combined weight of computer equipment collected was 14,456,399 pounds. The total amount recycled was 12,258,379 pounds. The total amount reused was 2,197,997 pounds. For 2010, the total combined weight of computer equipment collected was 19,524,917

⁵ Available at <www.tceq.texas.gov/assets/public/assistance/sblga/checklists/e-Recycle.pdf>.

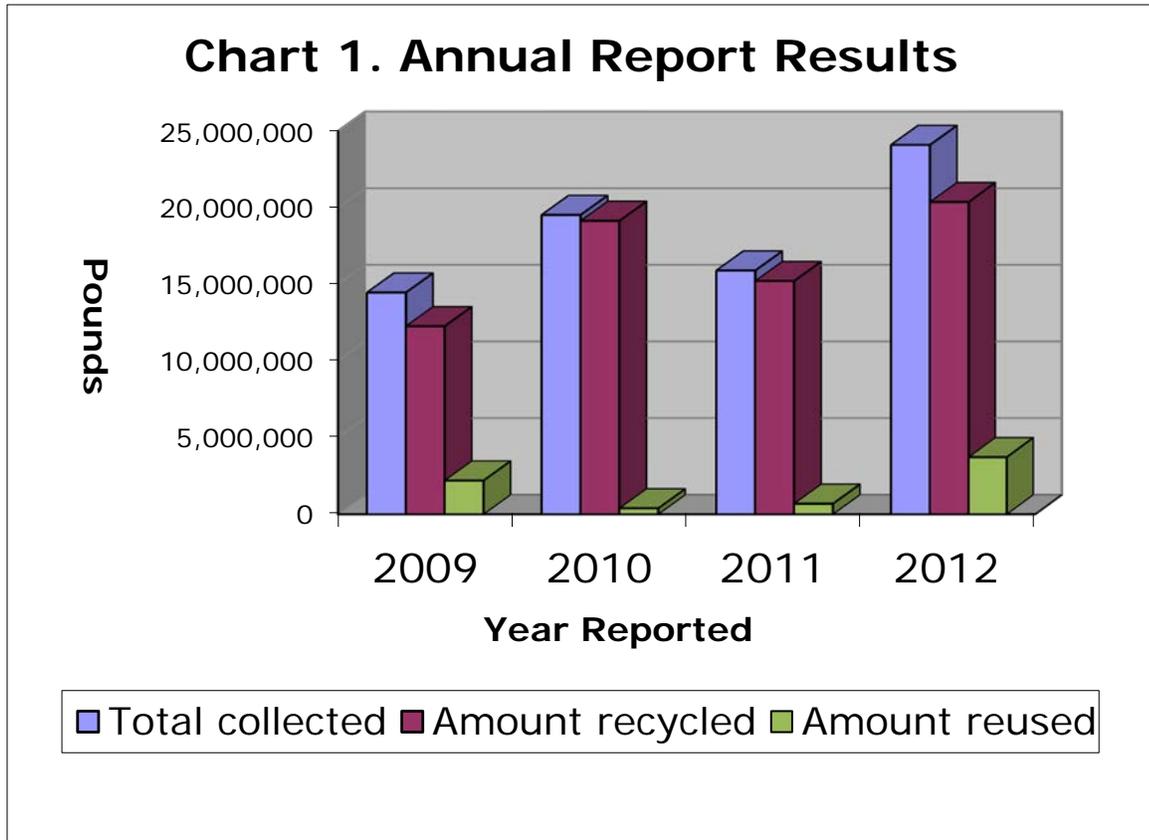
⁶ Available at <www.tceq.texas.gov/assistance/industry/e-recycling>.

pounds. The total amount recycled was 19,136,669 pounds. The total amount reused was 388,125 pounds. For 2011, computer manufacturers reported 15,894,379 pounds of computer equipment collected, 15,208,366 pounds recycled, and 686,292 pounds reused. During 2011, in addition to the total computer equipment collected, manufacturers voluntarily reported collecting 5,586,454 pounds of noncovered electronics.

The total weight of computer equipment collected in 2012 is 24,093,143 pounds. Of that collected weight, 20,367,271 pounds were recycled and 3,716,242 pounds were reused. This number is higher than the amount reported for any other reporting year. The second highest year was 2010 when computer manufacturers collected for reuse or recycling a total of 19,524,917 pounds of computer equipment. The reported totals for 2012 computer equipment collections are greater in part because 23 percent of manufacturers reported larger numbers this year compared with last year.

In addition to recycling covered computer equipment, many computer manufacturers also voluntarily collect TVs and other electronics for recycling. The TCEQ allowed computer manufacturers to report other electronics collected, not just the computer equipment covered under the program. For 2012, manufacturers reported collecting 19,739,371 pounds of additional, noncovered electronics.

Texans have many opportunities to recycle their computer equipment and other electronics outside of the Computer Equipment Recycling Program. Collection events coordinated by municipalities, local nonprofit groups, private recyclers, and community-oriented businesses are additional ways Texans can recycle their computers. Since some of the recyclers don't report to the TCEQ, the agency's reported number doesn't fully represent recycling activity in Texas.



In all years, some reports listed zero pounds of computer equipment collected, reused, or recycled. A common reason for a manufacturer to report collecting no computer equipment is because the manufacturer is a small business with a clientele limited to surrounding homeowners, who do not often buy new equipment. Additionally, in situations where manufacturers’ customers are primarily businesses, and personal equipment is rarely sold, little or no personal or home business computer equipment was returned for recycling or reuse.

Table 1 lists amounts reported by each manufacturer for the 2012 calendar year. Some numbers reported by manufacturers as recycled or reused may have been collected in a previous year.

Table 1. 2012 Manufacturers' Reported Amounts (shown in lbs)

Manufacturer	Brands	Collected	Recycled	Reused
@Xi Computer Corp.	Xi Computer, @Xi Computer	0	0	0
Acer America Corporation	Acer, Acer View, Aspire, eMachines, Gateway	997,761	997,761	0
Advanced PC Products, Inc.	Advanced PC, Advanced PC Quasar	50	50	0
AG Neovo	AG Neovo	0	0	0
Altex Electronics Ltd.	Altex Electronics	28,450	25,888	2,562
AMAX Engineering Corporation	AMAX	0	0	0
Amazon Fulfillment Services	Kindle Fire	22	22	0
Apple Inc.	Apple, Next	3,700,237	3,700,237	0
ASUS Computer International	ASUS	18	18	0
Austin Computing Solutions	Austin Computing Solutions	0	0	0
Barnes & Noble	Barnes & Noble (Nook)	2	2	0
Bass Computers, Inc.	Bass Computers, Inc.	511	511	0
BenQ America Corp.	BenQ	0	0	0
Best Buy	Dynex, Insignia	1,290,123	1,120,480	169,643
Bits Technical Corporation	Bits Technical Corporation	1,837	1,837	0
Bright Ideas Computing	Bright Ideas Computing	145	145	0
Coby Electronics Corporation	Coby	0	0	0
Computer Shak, Inc.	Computer Shak, Inc.	1,000	100	900

Manufacturer	Brands	Collected	Recycled	Reused
Cyberpower PC	Cyberpower	1,510	150	1,360
David Anderson Consulting	David Anderson Consulting	300	0	50
Dell Inc.	Alienware, Dell	10,087,389	6,827,544	3,259,845
DoubleSight Displays	DoubleSight	386	386	0
DRS Tactical Systems Inc.	ARMOR C12, ARMOR X10, Hammerhead	0	0	0
Elo Touch Solutions, Inc	Elo	64	64	0
eMatic	eMatic	0	0	0
Envision Peripherals, Inc. (EPI)	AOC, Envision	1,000	1,000	0
Equus Computer Systems	Mirus, Nobilis, Nobleview, VitaMobility	0	0	0
Fuhu, Inc	Nabi	0	0	0
Fujitsu Computer Systems Corporation	Fujitsu, Fujitsu-Siemens	0	0	0
GammaTech Computer Corp.	Durabook, Slimnote	0	0	0
General Dynamics Itronix	General Dynamics, Itronix, Tadpole	0	0	0
Hannspree North America, Inc.	Hanns-G, Hannspree, I-Inc	0	0	0
Hewlett Packard Company	Apollo Computer, Compaq, Digital Equipment (DBC), Hewlett-Packard, VooDoo PC	2,896,565	2,896,385	180
Howard Technology Solutions	Howard	0	0	0

Manufacturer	Brands	Collected	Recycled	Reused
HTC Corporation	HTC	0	0	0
Hyundai IT	Hyundai, Hyundai Imagequest	0	0	0
International Business Machines	IBM	823	823	0
IPSG	Powerspec, Winbook	16,580	6,600	600
Kobo, Inc.	Kobo	0	0	0
Komputer+ Peripherals	Komputer+	2,500	0	2,500
Lenovo (United States) Inc.	Lenovo	6	6	0
LG Electronics USA, Inc.	Goldstar, LG, Zenith	2,032,422	2,032,422	0
M&A Technology	M&A Technology, Manda	391,886	114,856	277,030
Magic Box Solutions	Magic Box Solutions	250	150	100
Maverick Computer Services	Maverick Computer Services	20	20	0
Maylong	Maylong	0	0	0
Medion AG	Medion	5	5	0
MicroAge College Station	MicroAge College Station	9,235	9,235	0
Microsoft Corporation	Microsoft	68	68	0
Midwest Trading Group	Crystal View, Sound Logic	0	0	0
Motion Computing, Inc.	Motion	0	0	0
Motorola Mobility	Motorola	0	0	0
MSI Computer Corp.	MSI	0	0	0

Manufacturer	Brands	Collected	Recycled	Reused
NEC Display Solutions of America, Inc.	Mitsubishi DiamondPoint, Mitsubishi DiamondPro, NEC, NEC AccuSync, NEC MultiSync, NEC Multeos	500	500	0
Nokia, Inc.	Nokia Booklet3G	0	0	0
NorTex	NorTex	0	0	0
Office Depot	Ativa	25,000	25,000	0
Oracle	Sun	0	0	0
Oregon Scientific, Inc.	Meep	33.6	33.6	0
Panasonic	Panasonic	37,642.53	37,642.52	0
Pantech Wireless	Pantech	0	0	0
Paxson Enterprises, Inc.	Paxson Enterprises, Inc.	25	0	25
PC & Cable	PC & Cable	0	0	0
Phantom Technologies	iBoss	0	0	0
Planar Systems, Inc.	Planar	7	7	0
PLR IP Holdings, LLC	Polaroid	0	0	0
Premio, Inc.	Premio	0	0	0
RCS Technologies, Inc.	RCS Technologies	0	0	0
Research In Motion	BlackBerry PlayBook	0.9	0.9	0
Samsung Electronics Co.	Samsung, Samtron, Syncmaster	2,277,511.40	2,277,511.40	0

Manufacturer	Brands	Collected	Recycled	Reused
Sceptre, Inc.	Sceptre	0	0	0
Seneca Data Distributors	Nexlink	0	0	0
Shuttle Computer Group, Inc.	Shuttle Computer Group, Inc.	0	0	0
Sony Electronics Inc.	Sony	249,500	249,500	0
Systemax Inc.	Systemax, Ultra	0	0	0
Techno Source USA	Kurio	0	0	0
Toshiba America Information Systems, Inc.	Toshiba	22,585.52	22,585.52	0
University Computer Stores	University Computer Store	0	0	0
V7	V7	0	0	0
Velocity Micro	Velocity Micro	0	0	0
VideoTex	VideoTex Systems	0	0	0
ViewSonic	Cybervision, Nokia (CRT & LCD), Optiquist, Utobia, ViewSonic	153	153	0
Wacom Technologies	Wacom	0	0	0
Wakstar, LLC	Wakstar	1,094	1,015	79
Wallingford Computer Services	Wallingford	4,000	3,700	300
Westgate Computers	Westgate Computers	628	0	628
Workhorse Computers	Workhorse	100	60	40

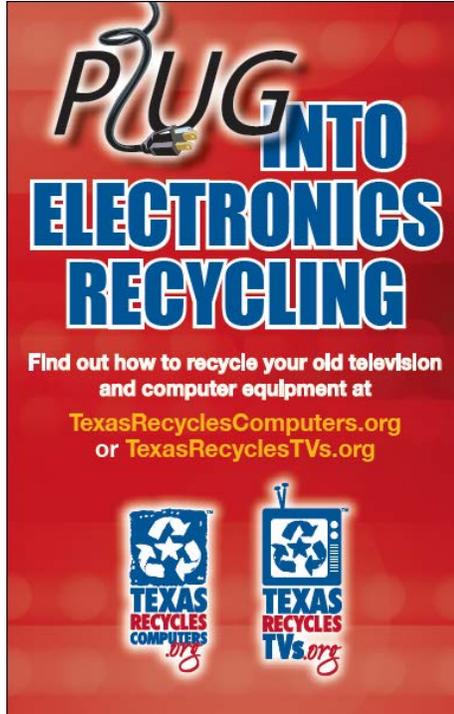
Manufacturer	Brands	Collected	Recycled	Reused
Wyse Technology	Wyse Technology	11,192	11,192	0
ZT Systems	ZT, ZT Systems	0	0	0
Zydeco Technologies	Zydeco Technologies	2,005	1,605	400

Future of the Program

With the start of the fifth year of the program, the TCEQ will continue direct contact with local governments and homeowners to emphasize the benefits of recycling. The TCEQ will also continue outreach and compliance assistance for consumers, recyclers, manufacturers, and retailers through presentations, brochure distribution, and resource development. Through these efforts in the coming years of the program, the Texas Computer Equipment Recycling Program expects to offer additional compliance assistance as new program participants are identified.

With the implementation of the new Television Equipment Recycling Program, the TCEQ has merged this new program's outreach with the existing one. The development of a new brochure, shown below, and presentations covering both programs emphasize the support for electronics recycling rather than focusing on a single program. Moving forward, the TCEQ will continue to seek cooperation with other states' recycling programs and with TV and computer manufacturers to offer the most up-to-date recycling information and benefits to Texans.

Appendix 1—Program Brochure



PLUG INTO ELECTRONICS RECYCLING

Find out how to recycle your old television and computer equipment at
TexasRecyclesComputers.org
or TexasRecyclesTVs.org

TEXAS RECYCLES COMPUTERS
TEXAS RECYCLES TVS

Texas law now requires television and computer-equipment manufacturers to offer opportunities for consumers to recycle these electronics.

Please visit
TexasRecyclesTVs.org
or
TexasRecyclesComputers.org
for more information.

Questions? Send an e-mail to recycle@tceq.texas.gov
or call toll free
1-855-TV-Recycle
(1-855-887-3292).



Take Care of Texas
TakeCareOfTexas.org

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