INTRODUCTION

The Federal Electronics Challenge (FEC) is a partnership program that encourages federal facilities and agencies to: purchase greener electronic products; reduce impacts of electronic products during use; and manage obsolete electronics in an environmentally safe way.

Federal agencies and facilities participate as "Partners" in the program. The FEC provides Agency and Facility Partners with resources and technical assistance for improving electronics management practices, and gives annual recognition to Facility Partners that have achieved specific goals.

Through the provision of resources and recognition, the FEC assists all the participating federal agencies and facilities in meeting the electronics stewardship goals of Executive Order 13514, *Federal Leadership in Environment, Energy, and Economic Performance*.

FEC PARTNERS

The FEC has two complementary, non-overlapping partner levels: Agency and Facility.

As of December 31, 2010, the FEC had nineteen registered Agency Partners:

- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Education
- Department of Energy
- Department of Health and Human Services
- Department of Homeland Security
- Department of Interior
- Department of Justice
- Department of Labor
- Department of the Treasury
- Department of Transportation
- Department of Veterans Affairs
- Environmental Protection Agency
- Executive Office of the President
- General Services Administration
- Office of Personnel Management
- Social Security Administration
- United States Postal Service

By the end of 2010, the FEC also had 253 registered Facility Partners, representing 823,698 employees. These Facility Partners come from the nineteen agencies listed above, as well as the Department of State and the National Aeronautics and Space Administration.

FEC PROGRAM ACCOMPLISHMENTS

Development and Revision of FEC Resources

The FEC has over 60 resource documents and tools for federal agencies and facilities on the environmentally sound management of electronics.

In 2010, the FEC added a new resource area for Data Centers, in recognition of the data center and server goals included in Executive Order 13514. The current resource area provides direct links to resources developed by other federal programs, including the Department of Energy (DOE) Industrial Technologies Program Save Energy Now initiative, the DOE Federal Energy Management Program, and the Environmental Protection Agency ENERGY STAR program.

This past year, the FEC also added a new resource area for case studies from existing Partners. These resources allow partners to share their successes and lessons learned, and currently include case studies covering data center consolidation and virtualization; power management; and network printing.

The FEC implemented a significant overhaul of the Partner Services section of the program website. FEC Partners have access to this password protected area of the website, which contains a message board; contact information for Agency and Facility Partners via an interactive map; and links to Partner-only resources, such as recordings from educational conference calls.

FEC Educational Events

FEC Partners had the opportunity to participate in several educational and networking events in 2010, including GreenGov Symposium in October 2010 and monthly FEC Partner Education Conference Calls.

The FEC assisted in the development of the IT and Electronics track at the 2010 GreenGov Symposium, which was held October 5-7 2010, in Washington, DC.

The FEC held thirteen Partner Education Conference Calls in 2010. Guest speakers presented the latest information on a variety of topics, including: incorporating electronics stewardship into environmental management systems (EMSs); electronics stewardship considerations for handheld devices; print management and duplexing; green purchasing for electronics; and electronics reuse, donation, and recycling.

FEC Technical Assistance

The FEC Regional Champions network continued to be available to FEC Partners to provide information and guidance on FEC best management practices and related issues.

FEC PARTNER ACCOMPLISHMENTS

FEC Awards

Thirty-eight FEC Partners received a 2010 FEC Award for their accomplishments in fiscal year 2009. Eight Facility Partners from four agencies received an FEC Gold Award, fourteen Facility Partners from five agencies received an FEC Silver Award, and sixteen Facility Partners from eight agencies received an FEC Bronze Award.

Award applicants were required to complete all mandatory activities listed for the FEC Gold, Silver, or Bronze Award levels, as applicable, as well as complete a set number of optional activities for each award level. Gold Award applicants were also required to complete two mentoring activities.

FEC Partner Reporting

The FEC Annual Reporting Form, due each January 31 for the previous fiscal year, allows FEC Partners and the FEC program to track progress towards the FEC national program goals. The table below captures the results reported by FEC Partners for fiscal year 2010.

FEC Reported Results for Fiscal Year 2010[1]

2010 Goals for FEC Partners	FY2010 FEC Partner Reporting Results
95% of eligible electronic equipment purchased or leased annually by FEC Partners is EPEAT® registered	**92%** of computer desktops, laptops and monitors purchased or leased were EPEAT registered **3%** were EPEAT Bronze; **18%** were EPEAT Silver; **79%** were EPEAT Gold
Electronic equipment in operation at FEC Partner facilities have an average life span of at least **four years**	**59%** of reporting Partners have a computer lifespan of at least 4-years, with a weighted average life span of **48 months**

[1]122 FEC Facility Partner Annual Reporting Forms were received for FY2010. These 122 reporting partners represent 395,417 federal employees

100% of eligible computers and monitors in operation at FEC Partner facilities have ENERGY STAR® features enabled	**82%** of monitors and **49%** of computers had ENERGY STAR power management features enabled
100% percent of non-reusable electronic equipment disposed of annually by FEC Partner facilities is recycled using environmentally sound management, as defined by the Responsible Recycling (R2) Practices	**36%** of electronics taken out of service were reused; **52%** were recycled; **7%** were sold or had an unknown disposition; and **5%** were disposed of

FEC has also calculated the environmental benefits of the activities reported by FEC Partners for fiscal year 2010. These environmental benefits were calculated using version 2.0 of the Electronics Environmental Benefits Calculator (EEBC).

FEC Reported Environmental Benefits for Fiscal Year 2010

Environmental Benefit	Achievement	Equivalent to
Energy savings	345,432 MWh	Electricity to power over **28,000** U.S. households for one year
Primary material savings	167,453 metric tons	Weight of **1.3 million** refrigerators
Air emission savings, including	1,381,996 metric tons	
Greenhouse gas emission savings	30,975 metric tons	Removing over **20,000** passenger cars from the road for one year
Water emission savings	2,964 metric tons	
Toxic material savings	10 metric tons	Weight of almost **5,000** bricks
Municipal solid waste savings	2,396 metric tons	Solid waste generated by over **1,200** U.S. households in one year
Hazardous waste savings	547 metric tons	Weight of more than **273,000** bricks
Cost savings	**$32.7 million**	

FEC PROGRAM CHANGES

While FEC partners have made great progress in electronics stewardship management, the results reported by our partners indicate that many federal facilities were unable to meet all of their electronics stewardship goals by the end of fiscal year 2010. The program attributes this to a number of factors:

- *Program participation fluctuates from year to year.* Even through 2010, the program had new partners registering, many of whom were just starting their electronics stewardship programs and who were unable to meet the program goals by the end of the year. The number of partners that submitted reporting data also dropped from last year.
- *Federal electronics stewardship goals are challenging.* Many agencies and facilities continue to encounter challenges in meeting federal electronics stewardship goals. Implementing power management, finding recyclers that follow environmentally sound practices, and procuring environmentally preferable products continue to be difficult for some partners.

- *The program goals were focused on an end-state.* While the FEC had goals focused on achieving specific targets by the end of 2010, federal electronics stewardship is an ongoing effort. Many of the goals require specific activities to be completed each year, such as purchasing green products or recycling obsolete products, while other goals require ongoing maintenance each year, such as enabling power management.

In recognition of these challenges and the current federal requirements for electronics stewardship, the FEC is revising its program goals to evaluate partner activities each year and to better align with the requirements of Executive Order 13514.

FEC Program Goals
- 95% of eligible electronic equipment purchased or leased annually by FEC Partners facilities is EPEAT-registered.
- 100% of eligible computers and monitors in operation at FEC Partner facilities have ENERGY STAR® power management features enabled.
- 100% of eligible computers and imaging equipment in operation at FEC Partner facilities have duplexing features set to default.
- Desktop computers in operation at FEC Partner facilities have an average life span of at least four years.
- Used electronic equipment from FEC Partner facilities is reused internally or donated for reuse, to the maximum extent practicable.
- 100% percent of non-reusable electronic equipment disposed of annually by FEC Partner facilities is recycled using third-party certified recyclers.
- Data centers at FEC Partner facilities utilize best management practices.

FEC Awards

Starting in 2011, the FEC is adding an award level to its recognition program. The FEC Platinum Award will recognize program partners that have received an FEC Gold Award in a prior year, and who have maintained their electronics stewardship program and continue to meet federal electronics stewardship requirements.

Also starting in 2011, FEC Facility Partners will only be able to receive one Bronze Award, one Silver Award and one Gold Award in 2011 and future years. Facility Partners may receive any number of Platinum Awards in 2011 and future years. This change recognizes that while facilities may not be able to meet all their federal electronics stewardship goals at once, they should be making progress each year towards meeting all of the goals across the electronics lifecycle.

Emerging Issues

The FEC will continue to evaluate the program to ensure that it is providing needed assistance to participating federal agencies and facilities. In particular, the FEC will be examining how best to address the new federal electronics stewardship goals for data center management and printing duplex, as required in Executive Order 13514.

CONTACT INFORMATION

If you have questions related to this resource or need other assistance with the Federal Electronics Challenge, please contact your Regional Champion: http://www.epa.gov/fec/technical.html.

Visit the FEC online: http://www.epa.gov/fec/

E-mail the FEC: fec@epa.gov