## Northeast Recycling Council, Inc. Final Report EPA Grant # GL 00E00463 The State Electronics Challenge

## **INTRODUCTION**

This final report summarizes NERC's progress in completing its obligations under its grant from the U.S. EPA Great Lakes Restoration Initiative for the period of October 1, 2010 – September 30, 2014.

The State Electronics Challenge program received support from several sources within this timeframe. This final report highlights the activities and tasks supported by the Great Lakes grant only.

## STATUS OF DELIVERABLES AND ACTIVITIES

The table below summarizes the final status of activities, deliverables, and events. Following the table, a more detailed status report is provided.

**Summary of Deliverables and Activities** 

Summary of Deliverables and Activities			
Tasks	Months	Status	% Completed
Task 1: Advisory Committee			
Form Advisory Committee	1 - 3	Completed	100%
Conference calls	Ongoing	Completed	100%
Secure guidance & participation of Committee members	Ongoing	Completed	100%
Task 2: Partner Recruitment			
Develop state-specific recruitment strategy	1 – 3	Completed	100%
• Implement recruitment strategy, including individual contacts &	Ongoing	Completed	100%
presentations	- 8- 8	r	
Host 4 informational Webinars, including PowerPoint	2 - 18	Completed	100%
presentation			
Update and post PowerPoint presentation	4 – 6	Completed	100%
Write & distribute articles & announcements	Ongoing	Completed	100%
• Seek speaking opportunities & make 8 live presentations	1 - 24	Completed	100%
Task 3: SEC Expansion to Include Imaging Devices	_	<b>T</b>	
Develop SEC program requirements for imaging equipment	3 – 9	Completed	100%
<ul> <li>Modify SEC documents and forms to incorporate imaging equipment</li> </ul>	8 – 10	Completed	100%
Hire expert consultant	1 – 3	Cancelled	0%
Research measurement tools and incorporate into benefits calculations	7 – 12	Completed	100%
Research and update SEC resources	3 – 12	Completed	100%
Develop and post sample procurement language	11 – 13	Completed	100%
Partner Webinar introducing program changes	12 – 16	Completed	100%
• Announcements & Bulletin article about changes to program & website	12 – 13	Completed	100%
Task 4: Technical Assistance & Education	·		1
Provide one-on-one technical assistance	Ongoing	Completed	100%
Host 6 Partner-only Webinars, develop & post PowerPoint's	6 – 32	Completed	100%
Website enhancements and updates	Ongoing	Completed	100%
• Hire consultants	As needed	Completed	100%
Maintain Partner-only listsery & distribute announcements	Ongoing	Completed	100%

Task 5: Performance Measures, Outputs, & Environmental Outcomes							
Collect & analyze Annual Reporting Forms & Applications for Recognition	15–18, 27 – 29	Completed	100%				
Develop individual environmental benefit reports	17 -18, 28 – 29	Completed	100%				
Identify recognition venues & opportunities	Ongoing	Completed	100%				
• Publicize environmental results (press releases, Website, announcements, articles)	18 –19, 29 -30	Completed	100%				
Produce & distribute recognition awards	18 –19, 29 – 30	Completed	100%				
Collect & report on program metrics	Ongoing	Completed	100%				
Task 6: Dissemination of Project Resources & Results							
Publicize program & Partner results	15- 36	Completed	100%				
• Final Report posted	36	Completed	100%				
Email Bulletin article & SEC listserv announcement about Final Report	36	Completed	100%				
Efforts to secure ongoing funding	Ongoing	Completed	100%				
Task 7: Grant Administration							
Grant administration & financial oversight	Ongoing	Completed	100%				
EPA Semi-annual Reporting	Ongoing	Completed	100%				
• Final Report including Partner results & environmental benefits	34 – 36	Completed	100%				

## **Final Status Report**

## 1. Advisory Committee

Membership on the Advisory Committee was completed; it included 13 state representatives and EPA Region 5. NERC regularly requested the assistance of the Advisory Committee in publicizing introductory webinars, and providing contacts that NERC could use for recruiting SEC Partners. Their assistance was also sought with identifying and securing speaking and outreach opportunities. Most communications with the Advisory Committee were by email and individual phone conversations.

#### 2. Partner Recruitment

Four basic strategies were used for Partner recruitment:

- 1. Introductory Webinars
  - a. Widely promoted via emails, listserv announcements, LinkedIn, Facebook, advertising banners in the E-Scrap News national newsletter, Re-Trac Website, and NERC Email Bulletin articles.
  - b. After each webinar all registered participants were individually contacted and offered additional information and/or further presentations.
  - c. All individuals that registered for the webinar were added to the master announcement distribution list and sent a follow-up email query inviting them to engage in a conversation about the program.
  - d. Staff researched and developed extensive lists of contacts in cities, counties, colleges and universities, as well as associations in all Great Lake States, for use in Partner recruitment. These lists targeted sustainability, recycling, solid waste, purchasing, and information technology staff.

During this grant, 22 introductory webinars were presented and publicized nationally. A total of 1,820 individuals participated in these webinars:

Date	<b>Participants</b>	Date	<b>Participants</b>						
September 2014	39	June 2012	126						
March 2014	13	April 2012	100						
February 2014	55	February 2012	146						
November 2013	73	January 2012	202						
September 2013	77	November 2011	108						
May 2013	40	October 2011	85						
March 2013	64	June 2011	69						
February 2013	66	March 2011	27						
January 2013	62	March 2011	89						
November 2012	95	February 2011	116						
September 2012 82		January 2011	86						
	TOTAI	L: 1,820	TOTAL: 1,820						

PowerPoint presentations were updated for each webinar and, as appropriate, posted on the SEC website. The most recent September 2014 introductory webinar is posted at Greening the Lifecycle of Office Equipment: The State Electronics Challenge. In addition, a recording of the September 2014, introductory webinar is available. Many announcements about the introductory webinars were distributed. Throughout the grant, efforts continued to expand the distribution list. At the conclusion of the grant, there were approximately 4,000 individuals, organizations and listservs to whom announcements were regularly sent and requests to publicize distributed. In addition, announcements were posted on nine national listservs, Advisory Committee members and Partners were included in the requests to spread the word, as were several hundreds of LinkedIn connections.

## 2. Presentations

## a. Live presentations at conferences and events

Thirteen (13) presentations were made at conferences and events in the Great Lakes Region and nationally to promote the State Electronics Challenge, reaching more than 550 individuals.

Date	Event	Participation
April 2014	Guest lecturer at graduate course, Sustainable Technology: Environmental and Social	35
	Impacts of Innovations, at Illinois Sustainability Technology Center, University of	
	Illinois, Urbana-Champaign.	
Nov. 2013	NYSAR <sup>3</sup> Annual Conference	100
May 2013	NYSAR <sup>3</sup> Federation Annual Conference	30
Sep. 2013	Northeast Southtowns Solid Waste Management Board, New York	10
Feb. 2013	Minnesota GREEN Group	17
Dec. 2012	Wisconsin Association of Procurement Professionals Conference	50
May 2012	Indiana Recycling Coalition	35
Feb. 2012	2 <sup>nd</sup> Annual Green Schools National Conference	25
May 2011	Michigan Recycling Coalition Annual Conference	35
June 2011	Illinois Recycling & Waste Management Conference & Trade Show	40
July 2011	Professional Recyclers of Pennsylvania Conference	40
August 2011	Resource Recycling Conference (Indianapolis)	100
Nov. 2011	Association of Ohio Recyclers	35
Total		552

b. Seeking webinar based opportunities to present to groups and committees

Supplementary introductory webinars to those scheduled and promoted nationally, were offered to groups and individuals.

Date	Event	Participation
August 2014	RPN Green Electronics National	115
September 2013	National Association of Procurement	20
	Officials	
December 2012	Michigan Green Communities	20
	Network	
April 2012	Mille Lacs Band of the Ojibwe	5
May 2011	Ohio Materials Management Working	10
	Group	
September 2011	EPA Region 5 Tribal Network	25
June 2011	Illinois Green Technology Committee	5
Total		200

## 3. Word of mouth and individual contacts

- At all events in which NERC participates, it promoted the Challenge and secured contact information for eligible entities. Individuals were then contacted by email and phone; often more than once. These contacts were also added to the distribution list.
- There was ongoing communication with State Recycling Organizations and Advisory Committee members seeking assistance in spreading the word and in opportunities to present to their constituents.

#### 4. Articles

- <u>Booting up e-cycling State Electronics Challenge.</u> Resource Recycling Magazine's <u>monthly feature on web-based resources</u>, written by columnist Roger Guttentag, includes the State Electronics Challenge as a resource for learning about green electronic systems; going beyond end-of-life management.
- Profitable, in-house 'green' disposal, The Municipal, September 2103, North Edition, by Dani Molnar.
- Illinois Counties Solid Waste Management Association, Illinois Solid Waste News, July/August 2011.

As a result of webinars and outreach made by SEC staff and consultants, there are 50 entities in the Great Lakes Region, representing almost 71,000 employees that are SEC Partners. A complete list follows on the next page.

The impact of the SEC program, however, extends beyond the number of Partners that officially joined the program. It is our belief that the SEC webinars and presentations influenced many more organizations that were able to take away important information about the environmental impacts of electronics and best management practices promoted by the SEC—such as purchasing EPEAT-registered products, the importance of power management and extending the life of electronics, and using certified electronics recyclers—to improve their operations.

Partner	State	# Employees
1. DuPage County	Illinois	2,386
2. Engineering IT at University of Illinois, Urbana	Illinois	60
3. Illinois Arts Council	Illinois	20
4. Illinois Environmental Protection Agency	Illinois	950
5. Illinois Sustainable Technology Center (ISTC)	Illinois	36
6. Ogle County Solid Waste Management Dept.	Illinois	3
7. Solid Waste Agency of Northern Cook County	Illinois	5
8. Ball State University	Indiana	21,000
9. Wayne County	Indiana	405
10. City of Lansing	Michigan	1,010
11. Michigan Recycling Coalition	Michigan	3
12. Oakland County	Michigan	3,000
13. Hennepin County	Minnesota	7,000
14. ISD 197	Minnesota	7,000
15. Mille lacs Band of Ojibwe Indians	Minnesota	350
	Minnesota	177
16. Ramsey County Library	New York	
17. Buffalo State College		2,000
18. Colgate University	New York	950
19. Cornell Cooperative Extension Tompkins County	New York	26
20. New York State Department of Environmental Conservation	New York	3,400
21. North Syracuse Central School District	New York	1,200
22. NYS Environmental Facilities Corporation	New York	105
23. OCRRA	New York	66
24. SUNY Fredonia	New York	6,037
25. SUNY Geneseo	New York	1,000
26. SUNY New Paltz	New York	1,500
27. Tompkins County	New York	736
28. Town of Bethlehem, NY	New York	220
29. Ulster County Government	New York	2,100
30. Wayne County	New York	1,000
31. West Irondequoit Central School District	New York	650
32. Association of Ohio Recyclers	Ohio	1
33. City of Cincinnati	Ohio	5,322
34. Licking County Health Department	Ohio	58
35. Metro Parks of Franklin County	Ohio	240
36. Ohio Environmental Protection Agency	Ohio	1,300
37. Bermudian Springs High School Recycling Club	Pennsylvania	30
38. Centre County Recycling & Refuse Authority	Pennsylvania	55
39. Erie County	Pennsylvania	300
40. Intermunicipal Relations Committee	Pennsylvania	4
41. Marywood University	Pennsylvania	559
42. Pennsylvania Recycling Markets Center	Pennsylvania	5
43. Regional Technology Coalition/State College	Pennsylvania	385
44. The Monroe County Municipal Waste Management Authority	Pennsylvania	16
45. Upper Merion Township	Pennsylvania	250
46. City of La Crosse	Wisconsin	900
47. City of Madison Information Technology	Wisconsin	2,500
48. University of Wisconsin Platteville	Wisconsin	900
49. UW-Milwaukee Surplus Program	Wisconsin	4
50. Village of Grafton	Wisconsin	50
Total	** 15COH5H1	70,974
1 Octal		10,714

## 3. SEC Expansion to Include Imaging Equipment

In 2012, the EPEAT Registry was expanded to include imaging equipment. With the purchasing tool now available, the SEC program requirements were modified to incorporate imaging equipment into all three lifecycle phases. These changes were rolled out across the SEC program, including updates to the website, announcements to Partners, Partner-only webinar explaining the changes, and the addition of imaging equipment resources. The benchmark and annual reporting form and request for recognition form were also updated to reflect these changes.

A Partner-only webinar about the program expansion was developed and held on September 20, 2013 —Imaging Equipment: New Purchasing Standard and SEC Program Requirements. Subsequent Partner-Only webinars on green purchasing, such as the one on December 5, 2013, also incorporated imaging equipment: <a href="Green">Green</a>
<a href="Purchasing of Office Equipment and Recycling Services">Purchasing of Office Equipment and Recycling Services</a>. This Partner-only webinar provided information and tools for purchasing equipment and recycling services that meet SEC program goals. The presentation included an overview of the Electronics Product Environmental Assessment Tool (EPEAT), and how to identify and contract for qualifying products. It also discussed procurement of equipment recycling services using third party certified vendors. A recording of the webinar is available.

#### 4. Technical Assistance to Partners

The SEC provided Partner-only webinars throughout the grant period. These provided background information and technical assistance to Partners on topics related to SEC program requirements. The posting of the PowerPoint presentations on the SEC website, along with a recording of the webinar, allowed Partners and others to access these webinars at their convenience, as well.

The SEC hosted a total of 14 webinars addressing the following topics.

- Purchasing "green" electronic equipment and services;
- Implementing power management on computers, displays and other office equipment;
- Environmentally-sound disposition of electronics and importance of using certified recyclers;
- Strategies to reduce paper and ink consumption; and
- Lessons learned from SEC award recipients.

A complete list of webinars is in Attachment A.

Regular offers of one-on-one assistance were made to all Partners via the listserv and individual conversations. Technical assistance provided during the grant included:

- Assistance with completing the Annual Reporting and Request for Recognition forms.
- Reviewing Benchmark Survey of Current Practices and helping Partner determine how to proceed with the implementation of SEC best practices.
- Providing sample policies for joining the SEC program and purchasing EPEAT.
- Determining the EPEAT status of equipment.
- Reviewing state procurement contracts to determine if state requires EPEAT.
- Determining if recycler is certified and if not how to convince others to change long-term recycler.
- Understanding meaning of certification and its importance.
- Determining whether the disposition of office equipment through auction is in compliance with SEC requirements.

## 5. Annual Sustainability Reports & Awards

Partners were asked to submit Annual Reports reflecting their activities under the SEC during the previous calendar year. From this information individualized sustainability reports were generated, using several benefits calculators; but most notably the EPA Electronics Environmental Benefits Calculator. In 2013, a graphic designer was hired (using non-Great Lakes Restoration funds) to have the report format redesigned. See attachment C for an example.

Over the course of this grant (calendar years 2010 - 2013), 54 Annual Reports were submitted by Great Lakes Partners. This represents 23 unique Partners.

Calendar Year	2010	2011	2012	2013	Total
<b>Number of Great Lakes Partners</b>	5	15	16	18	54

Partners were also invited to submit a request for recognition. The requirements for recognition were that they submit an Annual Reporting form and have completed all of the requirements of one, two or three of the lifecycle phases. Partners were also required to submit documentation verifying that those requirements were met. Over the course of the grant, 15 awards were given to 7 Partners in the Great Lakes; several showing progress at having completed more lifecycle phase requirements over the previous year. We expect additional awards in 2014. <sup>1</sup>

Calendar Year	2010	2011	2012	2013	Total
Bronze	0	2	1	2	5
Silver	1	0	1	1	3
Gold	0	3	2	2	7
Total	1	5	4	5	15

## 4. Performance Measures, Outputs, & Environmental Outcomes

Attachment A chronicles the outputs and outcomes to date.

#### **Total Environmental Results & Partner Benefits**

The SEC promoted best practices and collects data from Partners on purchasing EPEAT registered office equipment, reusing and recycling equipment at the end-of-life, and the use of recyclers certified to either R2 or e-Stewards for the environmentally-sound disposition of equipment. The table below summarizes the number of EPEAT registered products purchased and units reused and recycled reported by Partners in calendar years 2010 through 2013. Of the 23 Great Lake Partners providing data over the course of the grant, 17 reported purchasing EPEAT registered products, 17 reported on power management, 18 reported on double-sided copying, and 16 used recyclers certified. Note: Imaging equipment was only reported by Partners in calendar year 2013, when the SEC expanded to include this equipment.

<sup>&</sup>lt;sup>1</sup> Annual reports and recognition requests are due January 31, 2015 for calendar year 2014. Final Report, EPA Grant # GL 00E00463 Page - 6 - of 18

EPEAT purchases, reuse, and recycling by Great Lake Partners CY2010-CY2013

El Elli purchases, rease, and recycling by Great Earle rathers C12010 C12010									
		-•-		4					
Reported unless of indicated		DESKTOP PROCESSORS	LCD MONITORS	CRT MONITORS	NOTEBOOK COMPUTERS	COPIERS <sup>1</sup>	PRINTERS <sup>1</sup>	MULTI- FUNCTION DEVICES <sup>1</sup>	Total
PURCHASING									
EPEAT®	BRONZE	1	1	N/A	48	0	0	3	53
	SILVER	239	430	N/A	39	1	1	15	686
	GOLD	9,976	7,147	N/A	8,236	200	0	186	25,745
END OF LIFE MANAGEMENT									
REUSE/T	RANSFER <sup>2</sup>	4,137	2,192	540	3,911	38	40	60	10,918
RECYCLIN	NG							11,309	
RECYCLIN phones (u	IG: mobile units)	bile 798 units 7					7		
RECYCLING: mixed office electronics (lbs.) 798,856 lbs.									

EPEAT purchases for imaging equipment were not included in benefits calculations in 2014 as a calculator tool was not yet available. For recycling, unit data reported by Partners was converted to pounds for benefits calculations.

Below are the environmental benefits accruing from Partner activity tallied in table above, including the EPEAT registered product purchases and equipment reuse and recycling. The total benefit, calculated using the Electronics Environmental Benefits Calculator, also include use-phase best practices, including power management and extending the life of equipment in service.

<sup>&</sup>lt;sup>2</sup> Some Partners reported equipment transfer within their organization, which is then sent for recycling

Aggregate Environmental Benefits for Great Lake Partners, CY 2010-CY 2013

		PURCHASING	USE	REUSE & RECYCLING	TOTAL BE	NEFITS
	Reduction in:		HOW MUCH		HOW MUCH	EQUIVALENT TO
鸒	Energy use	7.6 million kWh	51.4 million kWh	38.6 million kWh	97.6 million kWh	Electricity to power 7,771 homes/year
	Greenhouse gas emissions	1,302 metric tons of carbon equivalents	9,751 metric tons of carbon equivalents	5,412 metric tons of carbon equivalents	16,465 metric tons of carbon equivalents	Removing 11,649 cars from the road/year
	Toxic materials, including lead & mercury	1,664 lbs.	2,249 lbs.	680 lbs.	4,593 lbs.	Weight of 1,051 bricks
	Municipal solid waste	193,232 lbs.	600,760 lbs.	1,296,082 lbs.	2,090,074 lbs.	Waste generated by 592 households/y ear
<b>8</b> 8	Hazardous waste	51,314 lbs.	56,320 lbs.	276,753 lbs.	384,387 lbs.	Weight of 1,389 refrigerators

Calculations for computers made using the Electronic Environmental Benefits Calculator (EEBC), Version 3.1, July 2012, at <a href="https://www.epa.gov/fec/publications.html#calculator">www.epa.gov/fec/publications.html#calculator</a> for CY 2011-CY2013. CY 2010 used EEBC, V 2.0, 3-2-2009. Imaging equipment calculations for CY 2013 only, using the U.S. Department of Energy calculator (<a href="https://energy.gov/eere/femp/energy-and-cost-savings-calculators-energy-efficient-products">https://energy.gov/eere/femp/energy-and-cost-savings-calculators-energy-efficient-products</a>) for the use phase, and the EEBC for recycling. Paper reduction calculations were made using the WARM model conversion factors, <a href="https://www.epa.gov/climatechange/wyed/waste/downloads/paper%20products.pdf">www.epa.gov/climatechange/wyed/waste/downloads/paper%20products.pdf</a>, February 2012.

#### 5. Grant Administration

Semi-annual updates and financials were submitted to the Great Lakes database, as well as semi-annual progress reports submitted (7), annual financial reports (3), and annual MBE/WBE reports (3).

#### 6. Other

## Website

During the course of the grant, the website went through several significant transitions. A programmer was hired to develop online reporting forms for the annual report and request for recognition, as well as joining as a Partner. This resulted in a significant shift in the way Partners provided information to the program.

In addition, the website was regularly updated to reflect new Partners, to announce introductory and Partneronly webinars, and presentations and recordings from introductory and Partner-only webinars were posted. In addition, resources and tools, including sample policy statements and contracts, were added to the website, and updated as needed.

## **Program Modifications**

During the course of the project, the program requirements were periodically updated and made more rigorous. Changes included modifications related to the addition of imaging equipment, strengthening the power management requirements, strengthening of the requirements for using a certified recycler, and adding and enhancing paper use reduction. Whenever program modifications were made, the Partners were informed, the website (and forms) was updated, and the introductory webinar modified.

## Sponsorship & Program Sustainability

Among the efforts during the course of the grant was to seek and secure a non-grant based source of funding in order to sustain the program. In this regard, we were extremely successful. Beginning in 2010 and continuing through September 2014, sponsorships were secured from Samsung, Panasonic, Sims Recycling Solutions, Metech Recycling, the Consumer Electronics Association, the R2/RIOS program, and one anonymous sponsor. Sponsors have been recognized on the SEC website, in introductory webinars, in NERC Email Bulletin articles, Partner-only listserv announcements, and press releases. Because of these sponsorships, the program was able to expand beyond the Great Lake States and become national, as of January 2011. This revenue source has also supported additional activities in the Great Lakes region, for the website, the hiring of consultants and programmers, the hiring of a graphic designer for the sustainability reports, and other program enhancements. Due to this outstanding support, we are confident that the SEC will be sustained and grow for many years to come.

#### Financial

Following is a summary of grant expenditures through September 30, 2014.

October 1,	2010 – September 30, 2014		TOTAL	% of Budget	
Great Lake	es State Electronics Challenge	Total Budget	Transactions	Expended	
Income	EPA reimbursements	\$175,197	\$175,197	100%	
		·	·	-	
Expense					
Contract L	abor	\$14,000	\$13,827	99%	
Other		\$1,100	\$1,179	107%	
Payroll Exp	penses	\$97,013	\$99,309	102%	
Supplies		\$ -			
Travel		\$7,500	\$8,543	114%	
Total Direc	t Expense	\$19,613	\$122,858	103%	
Indirect Ra	te Applied to Expenses (.4647%)	\$55,584	\$57,092	103%	
TOTAL		\$175,197	\$179,950	103%	

The date and amount of the most recent drawdown was: July 1, 2014, \$1,472.00.

This brings the total drawdown to \$175,197, representing 100% of the total budget.

#### Attachments

- Attachment A: Outputs and outcomes
- Attachment B: List of Partner-only listsery announcements
- Attachment C: Sample sustainability report

# **Attachment A: Outputs & Outcomes**

# **Outputs**

Output	Status
Advisory Committee	Formed
4 one-hour introductory Webinars with 15 or more	Held 22 introductory webinars with average of 83 per
participants expected for each session	webinar.
Introductory PowerPoint presentation updated and posted on website.	Done, and updated with each webinar and presentation
One-on-one contact with potential Partners.	Made more than 800 individual contacts
8 live presentations about the SEC, targeting each of the Great Lake States	Made 13 live presentations: Illinois (2), Indiana (2), Michigan, Minnesota, New York (3), Ohio, Pennsylvania, Wisconsin, and 1 national.
Articles and announcements written and distributed.	Wrote and distributed 54 NERC Email Bulletin articles and several press releases.
Links to SEC website on Advisory Committee member websites.	Several states and organizations posted links.
40 Partners or Partners representing 60,000 employees from the Great Lakes Region.	50 Partners representing almost 71,000 employees have joined during this project, to date.
Revised program requirements incorporating imaging equipment.	Completed
Updated SEC documents, forms, PowerPoint presentation, resources, and website to incorporate imaging equipment modifications.	Completed
Partner webinar and PowerPoint presentation about revised program requirements and guidance regarding implementation.	Completed
Announcements written and distributed about program	1 announcement distributed in addition to Partner-only
expansion.	webinar announcements.
Sample procurement language relative to imaging equipment.	Completed
Developed and posted new resources on the SEC website, including web pages for each of the Great Lakes States.	Completed
Maintain, update, and identify new SEC website resources.	Updates & new pages/resources: completed
Approximately 500 visits per month to the SEC website.	Averaged 505 visits per month.
Partner-only Listserv maintained and items posted.	More than 130 listserv announcements were distributed to the Partner-only list
Respond to approximately 120 technical assistance inquiries from 40 organizations.	Responded to requests from 23 Great Lake Partners
6 one-and-a half hours Partner-only educational webinars with 25 or more participants expected for each session.	Fourteen (14) Partner-only webinars:  • 1/27/11 – Power Management (28 participants)  • 3/2/11 – Ink Savings (7 participants)  • 5/5/11 – Responsible Recycling (11 participants)  • 6/2/11 – EPEAT (9 participants)  • 9/27/12 – Power Management (16 participants)  • 3/21/12 – EPEAT 101 (23 participants)  • 5/17/12 - Printer & Paper Usage Reduction – How to Achieve Success (13 participants)  • 6/12/12 – E-Scrap & Certification (65 participants)  • 9/27/12 – New Imaging Equipment Requirements (15 participants)  • 2/25/13 – Buying Green Office Equipment using EPEAT (14 participants)

	<ul> <li>5/16/13 - Responsible Recycling: Demonstration of E-Scrap Recycling &amp; Why Certification Matters (18 participants)</li> <li>6/27/13 - SEC Program Implementation: Learning from Award Recipients (16 participants)</li> <li>9/24/13 - IT Energy Savings For Non-Techies: Identifying &amp; understanding opportunities to reduce costs (34 participants)</li> <li>12/5/13 - Green Purchasing of Office Equipment &amp; Recycling Services (15 participants)</li> <li>6/19/14 - Navigating the EPEAT Registry (35 participants)</li> <li>Average of 21participants/webinar.</li> </ul>
6 PowerPoint presentations, one for each webinar,	Presentations were developed and posted for each
developed and posted.	introductory (23) webinars & Partner- only webinars (14)
Collect and analyze data from 36 Partner organizations	2010 – Data from 5 Partner organizations was collected & analyzed.  2011 – Data from 15 Partner organizations was collected & analyzed.  2012 - Data from 16 Partner organizations was collected & analyzed.  2013 – Data from 18 Partner organizations was collected & is in the process of being analyzed.  Total: 54
Environmental benefits reports for 36 Partner organizations.	54 reports provided to 23 Great Lakes Partners.
Recognition applications for approximately 18 Partners.	<ul> <li>1 in April 2011</li> <li>5 in April 2012</li> <li>4 in April 2013</li> <li>5 in April 2014</li> <li>Total: 15</li> </ul>
Recognition awards for approximately 18 Partners.	<ul> <li>1 Silver awarded April 2011</li> <li>2 Gold, 1 Silver, 2 Bronze awarded April 2012</li> <li>2 Gold, 1 Silver, 1 Bronze awarded April 2013</li> <li>2 Gold, 2 Silver, 1 Bronze awarded April 2014</li> <li>Total: 15</li> </ul>
Publicize Partner accomplishments and update website	April 2011, April 2012, April 2013, & April 2014 – completed

# Attachment B Partner-only Listserv Announcements

2014	Subject line
January 3	The SEC reporting year has closed - Annual Reports due this month
January 16	SEC Annual Reports due January 31
February 3	Annual Reporting & Request for Recognition Deadline Extended
February 3	Get Recognized for your 2013 Activities - Apply for an Award
February 19	Sustainability report? It's in your hands
March 2	
March 7	Suggestions for Partner-only Webinars Requested
June 12	Partner-only Webinar: How to Navigate the EPEAT Registry June 24, 2 p.m. Eastern
June 19	Last Chance to Register for the SEC Partner-only Webinar: How to Navigate the EPEAT
	Registry
	June 24, 2 p.m. Eastern
August 1	News from EPEAT: Model Contract Language Available
September 1	Green Imaging Equipment – In-depth webinar presentation & resources now available
September 1	Great News! Samsung Renews Distinguished Sponsorship of the State Electronics
~ · F · · · · · · ·	Challenge
September 22	R2/RIOS & the Consumer Electronics Association (CEA) Step-up to Support the State
~ · <b>F</b> · · · · · · · · · · · · · · · · · · ·	Electronics Challenge
2012	
2013	Subject line
January 3	Attention SEC Partners: Calendar 2012 Annual Reporting Forms are due January 31, 2013!
January 24	Reminder - SEC 2012 Annual Reporting Forms due January 31, 2013!
February 4	Deadline Extended for Annual Report Submission - State Electronics Challenge
February 13	EPEAT Registry Expands with Imaging Equipment Category
February 15	Don't miss - SEC Partner-only Webinar on Green Purchasing with EPEAT - Monday,
•	February 25
March 2	110 Partners – 151,000 employees!
March 2	Hold the Date: E-Scrap Demonstration - Partner-only Webinar Scheduled: May 15
April 12	Annual Award Winners Announced
April 19	What were the environmental results of your SEC activities? Big!
April 19	Big News! The Benchmark/Annual Reporting Form has been Streamlined
April 19	Register now for the Partner-only E-Scrap Recycling Webinar - May 15
April 26	Don't Delay – Be sure to Register for the Upcoming Partner-only Webinar Responsible
	Recycling: Demonstration of E-Scrap Recycling & Why Certification Matters
May 6	Last Chance to Register for the Upcoming State Electronics Challenge Partner-only Webinar
May 17	Upcoming SEC Partner-only Webinars - Not to be Missed!
May 22	New ENERGY STAR specifications go into effect on June 1
June 7	SEC Program Implementation: Learning from Award Recipients
June 17	Don't Miss This Upcoming Webinar – SEC Program Implementation: Learning from
	Award Recipients
June 24	LAST CALL to REGISTER: SEC Partner-only Webinar—SEC Program Implementation:
	Learning from Award Recipients, June 27
August 13	Federal Electronics Challenge – Retires
August 20	IT Energy Savings for Non-Techies: Identifying & understanding opportunities to reduce
	costs
August 20	Great News - Samsung Renews Distinguished Sponsorship of the State Electronics
_	Challenge
September 3	It's time to register - IT Energy Savings for Non-Techies - September 24, 3 pm eastern
September 14	IT Energy Savings for Non-Techies - Don't miss out

September 19	Last Chance to Register - IT Energy savings for non-techies - NEXT TUESDAY
October 23	Lots of New Partners – Including First Recycling Club & First Hospital
October 25	SEC Partners in the News!
November 7	Educational resources for promoting electronics recycling
November 8	Green Purchasing Webinar December 5 <sup>th</sup> – 1 <sup>st</sup> announcement
November 14	Second Tribal Partner, Second Indiana Partner, Third Partner in Virginia, & Fifth Ohio Partner
November 14	Panasonic Does it Again
November 15	How to Purchase EPEAT Registered Products: A Tutorial
December 9	Reminder SEC Annual Report is Due January 31 for Calendar 2013 - and it's easy to do!
2012	Subject line
January 3, 8, 16, 19, 24,	Announcement/publicity about January & February Introductory Webinars – with
& 30, February 7 & 13	request to forward
	Sample Policy For Meeting The Procurement & End-Of-Life Management
February 6	Requirements Of The Challenge Posted
February 8	Remember – Annual Reports due February 17
February 8	Remember – Apply for an Award
February 28	Revised Power Management & Duplexing Posters Posted
February 28	New Partners
•	Reminder - Partner-only Webinar - Learn about How to Buy "Green Computers &
March 5	What it Means
March 19	Time is Running out to Register: How to Buy "Green" Computers
March 30	Announcing the SEC 2011 Award Winners!
March 30	2011 SEC Partner Environmental Results
March 21, 27, & April 4	Announcement/publicity about March Introductory Webinar – with request to forward
April 11	Partner-only Webinar Delayed
May 21	Updated FEC Webinar Schedule
May 30	92 Partners
June 5	20 New Documents & Video Resources Available – Paper Consumption & Printer
June 3	Management Tuper Consumption & Timer
June 5	Invitation: June Partner Call on Electronics Stewardship for Imaging Equipment
June 26	E-scrap Recycling & Certification Webinar Recording Available
July 16	Apple Returns to EPEAT
July 24	First Tribal National Joins the "State & Tribal Electronics Challenge"
September 26	Imaging Equipment Added to SEC Program Requirements in 2013!
2011	
January 5	Subject line SEC Introductory Teleconference scheduled - please help spread the word!
January 6	New Partner Mapping Feature on SEC Website
January 10 January 12	Reminder - State Electronics Challenge Annual Reports due this month  Partner-only Webinar Scheduled - Power Management – January 27
· · · · · · · · · · · · · · · · · · ·	
January 18	Avoid throwing money away - It's time to sign-up for the Partner-Only Webinar on Power Management
January 24	First Great Lakes SEC Partner
January 26	Partner #49 and counting
February 2	Numbers 50 & 51 Join the Challenge! and Power Management Presentation Posted
	Ink Savings as Part of a Paper & Energy Management Program - SEC Partner-only
February 8	Webinar

February 9	How Many SEC Partners are There?
February 9	Remember - FEC Webinars open to SEC Partners
February 12	Offer of Free Power Management Assistance
February 14	Reminder - it's time to register for ink management Webinar
February 16	SEC Program Requirements have been Updated
February 22	Partner-only Webinar Next Week - be sure to sign-up
February 23	SEC Welcomes 3 New Great Lakes Region Partners this Week!
March 25	SEC Welcomes 3 New Great Lakes Region Partners this Week!
March 31	SEC Partner-only Webinar - End-of-Life Management
	Be sure to register for the upcoming Partner-only Webinar on End-of-Life
April 7	Management
April 15	SEC End-of-Life Webinar - date change & guest speaker
April 21	Reminder - Be sure to register for End-of-Life Management Webinar
	Reminder – One of Benefits of Being a Partner is the Opportunity to Participate in
April 25	Federal Electronics Challenge Webinars
May 3	Learn about responsible computer recycling – Webinar this Thursday
May 5	Green Computer Procurement - Partner-only Webinar on June 2
	REMINDER- SEC Partner-only Webinar on Purchasing EPEAT Computers,
May 25	Monitors and Notebooks - REGISTRATION REQUIRED
June 2	LAST CHANCE - SEC June 2 Webinar on Purchasing Green Computers
June 9	State Electronics Challenge Introductory Webinar - June 16, 3 pm Eastern
June 10	SEC Now Spans Coast to Coast
June 20	SEC Trow Spans Coast to Coast  SEC Update - New Partners & New States
June 24	Refresh for EPEAT June 2011
June 27	
June 27	70 Partners, 27 States, 85,000 Employees  New Page Part Comparison of a Weste Third Porty Contification
June 27	New Resource Posted - Comparison of e-Waste Third Party Certification
July 8	71 Partners, Sample Resolution, & Endorsement by Green Electronics Council— It's been a busy few weeks!
July 13	Information about FEMP seminar on Energy Efficient Product Procurement
August 26	Staff Support for the Challenge Expands
August 26	First Indiana Partner Joins the SEC
	Decrease the Environmental Footprint of your Computers - Help spread the word
September 9	please
September 20	Panasonic Renews SEC Sponsorship
September 26	State Electronics Challenge - Introductory Webinar - October 5th
September 28	New Resources Posted for Power Management
September 29	Great News – Samsung Renews Sponsorship of SEC
_	Metech Recycling Becomes SEC Sponsor, Sims Recycling Solutions Renews
October 6	Support, & DuPage County, Illinois Becomes a Partner – It's been quite a week!
October 15	State Electronics Challenge - Introductory Webinar - October 5th
October 24	Banner Week at the Challenge
	Question – We are looking for examples of RFPs/RFQs with language about third-
November 2	party certification of electronics recyclers
November 22	Remember – It's Annual Report Season
November 22	Presentation files from GreenGov now available
	Invitation – December 8 Partner Call on Extending the Life of Computer
December 6	Equipment
December 8	New Partners

2010	Subject line
October 6	Six More States Eligible to Participate in the State Electronics Challenge
October 20	Welcome to the Latest SEC Partner
October 20	New Sanitization Documents Posted on the SEC Website
October 24	More Partner Teleconferences – 2011 Federal Electronics Challenge Call Schedule
November 2	Reminder - SEC Annual Reporting Form due January 31 - Plan now!
November 4	First Distinguished SEC Partner - Samsung - and Second Trade Association joins as well -
	Consumer Electronics Association
November	FEC Partner Call - Electronics Stewardship for Imaging Equipment - 12/2/10
29	
December 1	SEC Annual Reports due January 31 - don't be left out!
December	Teleconferences Scheduled for Early 2011
10	
December	Harrison School District 2 Receives Award
14	

Attachment C – Next Page Sample Partner Sustainability Report



## **ENVIRONMENTAL SUSTAINABILITY REPORT CY 2013**

Partner: xxxx

Date: April 16, 2014



	ENVIRONMENTAL BENEFITS										
		PURCHASING	USE	TOTAL BENEFITS							
	Reduction in:		HOW MUCH		HOW MUCH	EQUIVALENT TO					
爱	Energy use	118,890 kWh	1.8 million kWh	253,439 kWh	2.2 million kWh	Electricity to power 173 homes/year					
	Greenhouse gas emissions	20 metric tons of carbon equivalents	347 metric tons of carbon equivalents	23 metric tons of carbon equivalents	390 metric tons of carbon equivalents	Removing 280 cars from the road/year					
K	Toxic materials, including lead & mercury	19 lbs.	31 lbs.	0 lbs.	50 lbs.	Weight of 31 bricks					
W	Municipal solid waste	3,940 lbs.	7,788 lbs.	28,604 lbs.	40,332 lbs.	Waste generated by 10 households/year					
<b>8</b> 8	Hazardous waste	570 lbs.	775 lbs.	6,945 lbs.	8,290 lbs.	Weight of 11 refrigerators					

Calculations for computers made using the Electronic Environmental Benefits Calculator (EEBC), Version 3.1, July 2012, at <a href="https://www.epa.gov/fec/publications.html#calculator">www.epa.gov/fec/publications.html#calculator</a>. Imaging equipment calculations used the U.S. Department of Energy calculator (<a href="http://energy.gov/eere/femp/energy-and-cost-savings-calculators-energy-efficient-products">http://energy.gov/eere/femp/energy-and-cost-savings-calculators-energy-efficient-products</a>) for the use phase, & the EEBC for recycling. Paper reduction calculations were made using the WARM model conversion factors, <a href="https://www.epa.gov/climatechange/wyed/waste/downloads/paper%20products.pdf">www.epa.gov/climatechange/wyed/waste/downloads/paper%20products.pdf</a>, February 2012.

## **Partner Commitments to Green Electronics**

EPEAT® Purchasing:
The Partner included Electronic Product Environmental Assessment Tool
(EPEAT®) registered computer products as a required or preferred standard in bids, contracts, and/or leases for IT equipment in calendar 2013.

Certified Recyclers:
The Partner used a recycler that was certified to R2,
R2/RIOS, or e-Stewards in this calendar year.



## ENVIRONMENTAL SUSTAINABILITY REPORT CY2013 1 Partner: XXX Date: April 16, 2014 continued

						ä			
DATA INPUT Reported in		DESKTOP	LCD	CRT	NOTEBOOK	COPIERS	PRINTERS	MULTI-	Total
Units	Units		MONITORS	MONITORS	COMPUTERS	1	1	<b>FUNCTION</b>	
unless otherwise	indicated							DEVICES1	
	PURCHASING PURCHASING								
<b>EPEAT®</b>	BRONZE								
	SILVER								
	GOLD	175			26	200			401

<sup>&</sup>lt;sup>1</sup> EPEAT purchases for imaging equipment were not included in benefits calculations in 2014 as a calculator tool is not yet available.

DATA INPUT Units unless otherwise	•	n DESKTOP PROCESSORS	LCD MONITORS	CRT MONITOR S	NOTEBOOK COMPUTERS	COPIERS	PRINTER S	MULTI- FUNCTION DEVICES	Total
				USI	E				
Power Management Enabled	100 %	1,400	1,600		27	200	2		3,229
Average Lifespan	36-72 months	1,400	1,600		27	200	2		3,229
Paper Reduction	Reams		N,	/A					

**Duplex Copying:** The Partner had 80% of its copiers and 75% of its printers set to default double sided printing.

DATA INPUT Reported in Units Unless otherwise indicated <sup>1</sup>	DESKTOP PROCESSORS	LCD MONITORS	CRT MONITORS	NOTEBOOK COMPUTERS	COPIERS	PRINTERS	MULTI- FUNCTION DEVICES	Total
		<b>END OF</b>	LIFE MA	NAGEMI	ENT			
REUSE								
RECYCLING	191	77	150	76	1		1	496
RECYCLING: mobile phones								
RECYCLING: mixed office			/	15,408 lbs.				
electronics (lbs.)								

<sup>&</sup>lt;sup>1</sup> For imaging equipment, unit data reported by Partners was converted to pounds for benefits calculations using the EEBC.

Final Report, EPA Grant # GL 00E00463 Page - 2 - of 18