



ENVIRONMENTAL MARKETS ADD BUSINESS VALUE

AN OVERVIEW OF EPEAT®

Wayne Rifer

Agenda

- EPEAT in Brief
- Growth of EPEAT
- A case in Point – Use of Recycled Plastics
- Questions

What is EPEAT?

EPEAT is “a comprehensive environmental rating that helps identify greener computers and other electronic equipment”

- The most impactful green purchasing system for electronics
- System that ...
 - ... rates individual products ...
 - ... as Bronze, Silver or Gold ...
 - ... based on a broad range of environmental criteria contained in international public consensus standards.
- Rates products as sold in 42 countries
- Registry: www.epeat.net
- Now covers PCs & Displays, Imaging Equipment, TVs

The EPEAT System



IEEE 1680.1 Environmental Criteria for Computers

Performance Category	Example	Required	Optional
Product-Specific Criteria			
Environmentally Sensitive Materials	RoHS & beyond	3	8
Material Selection	Recycled content	3	3
Design for End-of-life	Ease of recycling	6	5
Product Longevity/Lifecycle Extension	Warranties, spare parts	2	2
Energy Conservation	ENERGY STAR & beyond	1	3
Packaging	Recyclable, recycled content	3	4
Corporate Criteria			
End-of-life Management	Take-back and recycling	2	1
Corporate Performance	EMS, environmental policy, report	3	2
Overall Total Number of Criteria		23	28

Environmental Performance Tiers



EPEAT Bronze– Meets all required criteria



EPEAT Silver– Meets all required criteria and at least 50% of the optional criteria



EPEAT Gold– Meets all required criteria and at least 75% of the optional criteria

	Desktops	Notebooks	Displays
Required	22	23	22
Optional	25	28	26



How do stakeholders use EPEAT?

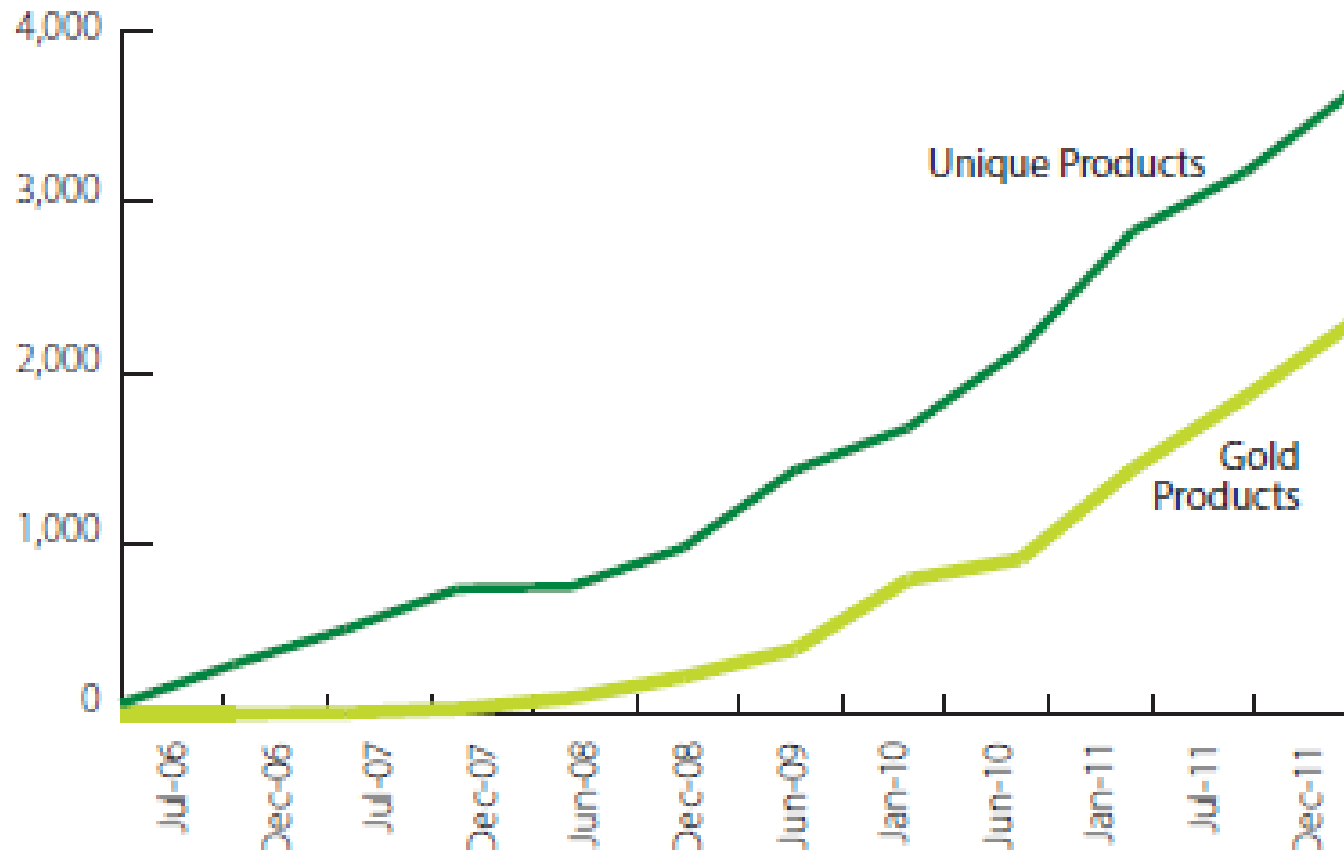
- Institutional purchasers of electronics use EPEAT as a spec on purchase contracts to meet their green purchasing policies
- Consumers increasingly use EPEAT to inform their purchase decisions
- Electronics manufacturers use the standards as a guide to design greener products and services
- Resellers, e-tailers, retailers use EPEAT as a simple way to identify and message greener electronics

Purchasers that Specify EPEAT

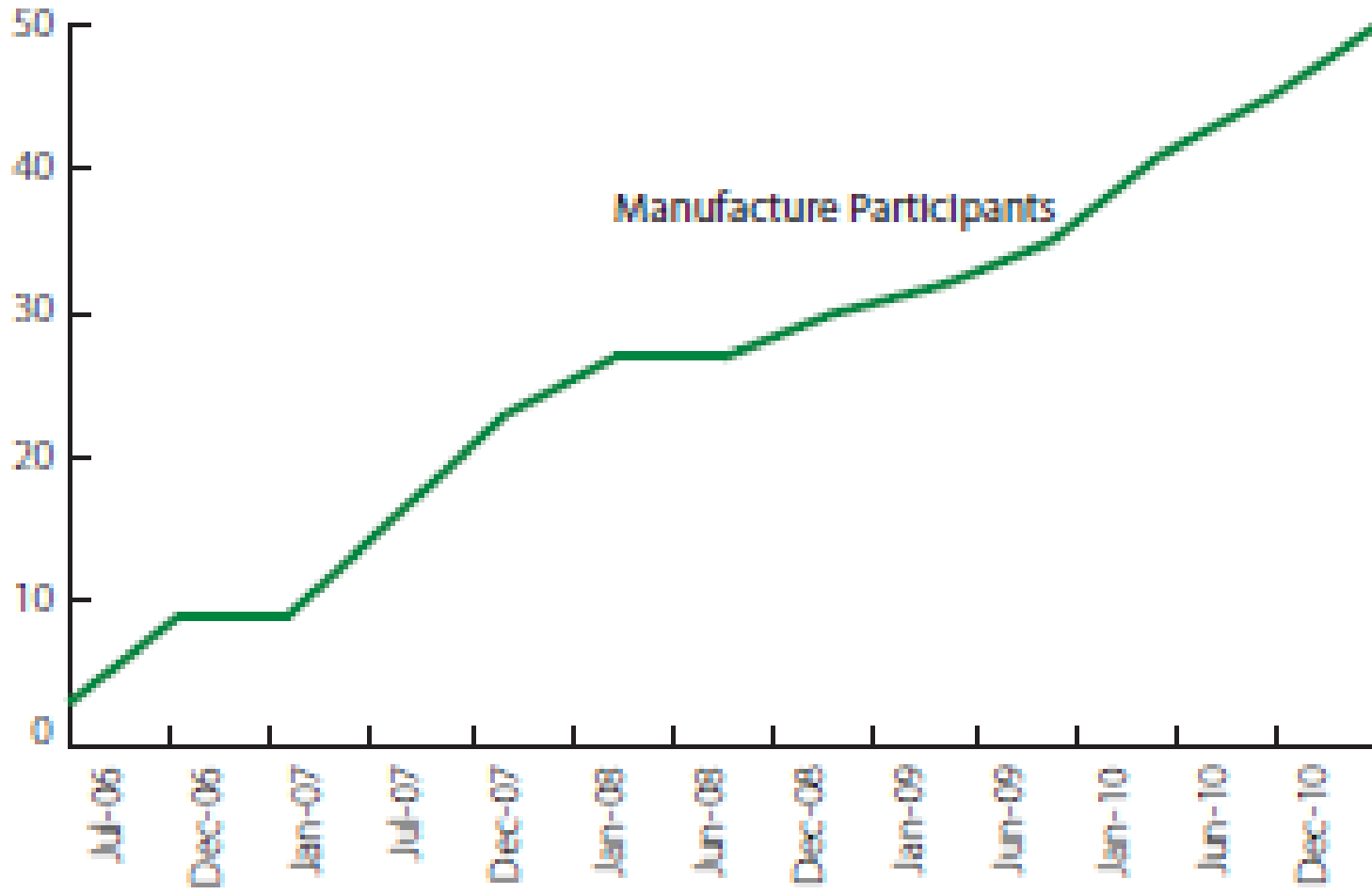
- US Federal Government, all agencies
- Other national gov agencies: Canada, Australia, New Zealand, France, Brazil, Singapore, Mexico, Poland, etc.
- States/Provinces: 38 US states, most Canadian provinces, many other worldwide
- Municipalities: King County, LA County, Cities of San Jose, Seattle, San Francisco, Phoenix, etc.
- Higher Ed: University of California, Yale, Cornell, Penn State, U. Washington, etc.
- Private Sector: Nike, Microsoft, KPMG, McKesson, Kaiser Permanente, HDR, etc.



Number of Registered Products



Growth in Manufacturer Participation



Global Unit Sales of EPEAT Registered Products

YEAR	DESKTOPS	NOTEBOOKS	DISPLAYS	INTEGRATED SYSTEMS	TOTAL
2006	12,100,081	8,858,208	15,602,431	In DT number	36,560,720
2007	35,865,425	24,156,128	48,709,354	1,196,680	109,927,587
2008	19,512,831	31,671,055	38,612,720	1,145,067	90,942,673
2009	7,904,561	40,298,554	30,617,703	1,629,802	80,450,620
2010	8,021,529	61,694,686	20,115,100	3,532,100	93,363,415
2011	13,211,272	65,977,390	30,863,890	10,758,426	120,810,978
Cumul. TOTAL	96,615,699	232,656,021	184,521,198	18,263,075	532,055,993

Product Standards in EPEAT

- Current
 - IEEE 1680.1 for PCs and Displays
 - IEEE 1680.2 for Imaging Equipment (printers, copiers, etc.)
 - IEEE 1680.3 for TVs
- In Process
 - UL 110 for Mobile Phones
 - NSF 426 for Servers

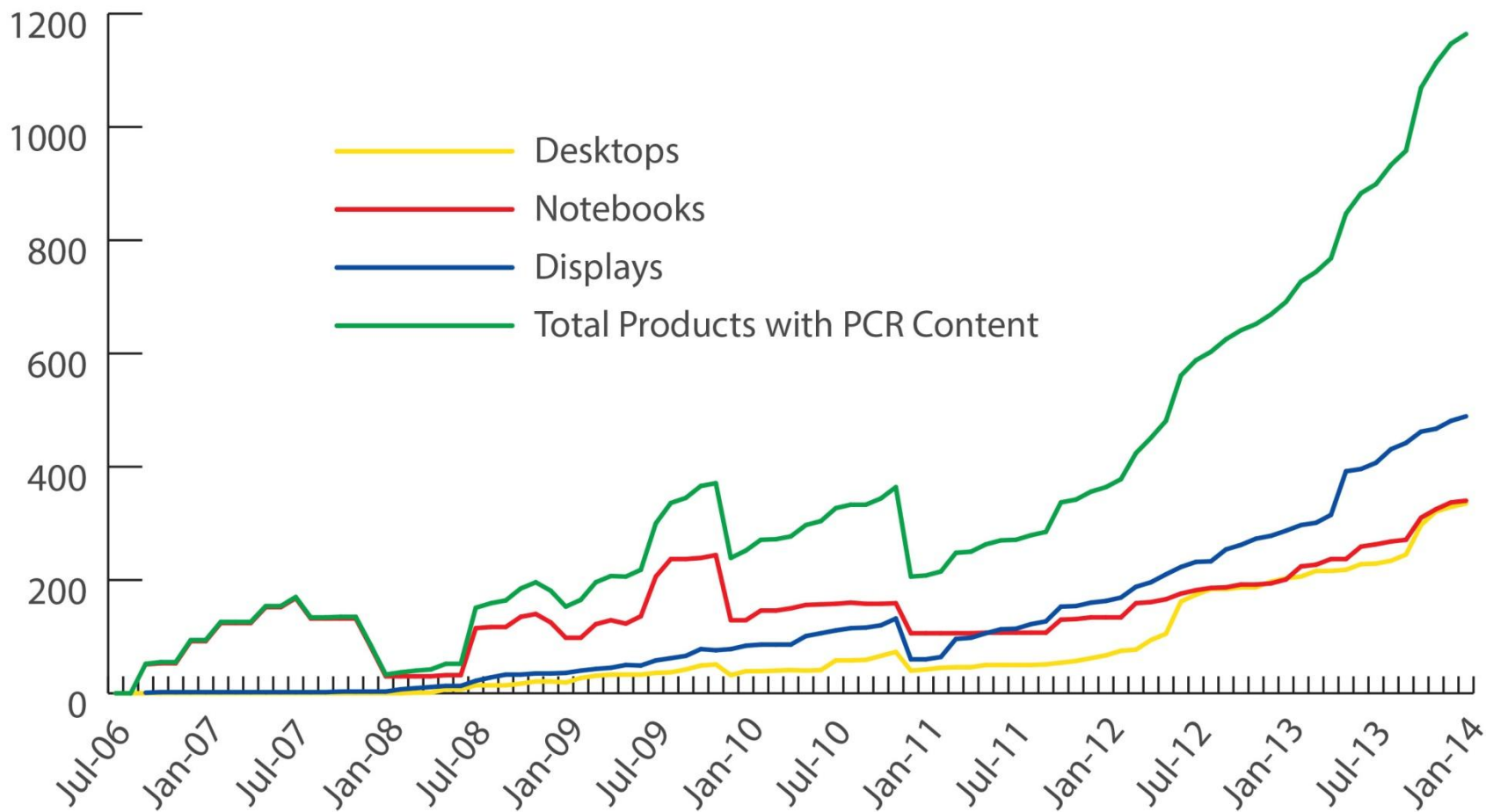
Do Markets Respond to Environmental Standards?

- A case in point – Requirements for use of post-consumer recycled plastic

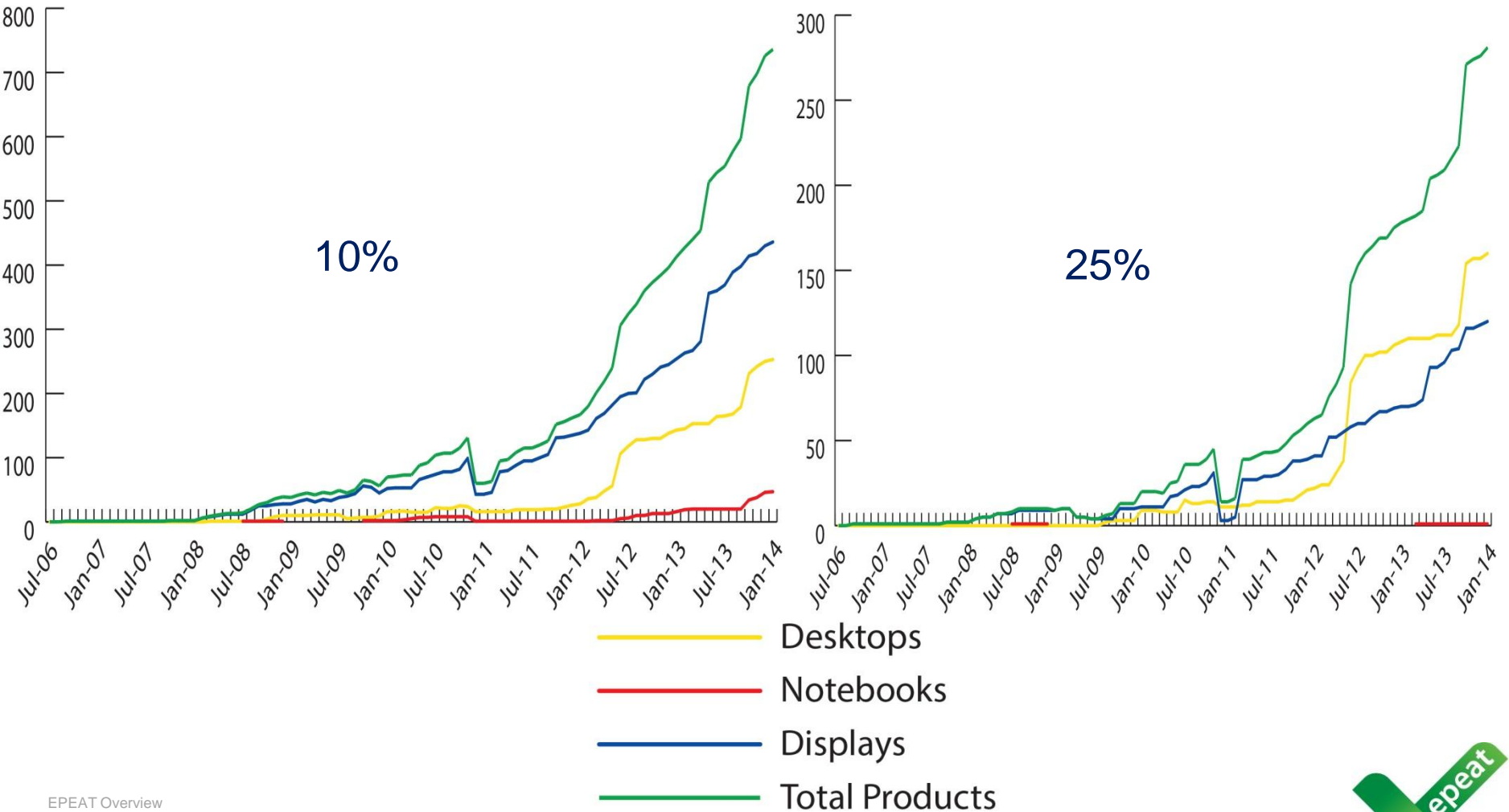
PCR Criteria in the Three Active Standards

- IEEE 1680.1 (computers, monitors), 2006
 - Required – report amount of PCR in product
 - Optional – declare 10%+ (1 point) or 25%+ (2 points)
- IEEE 1680.2 (printers), 2012
 - Required – report amount of PCR in product
 - Required – Minimum PCR content
 - Amount is small – 5g PCR if >100g plastic in product
 - Accounts for supply disruptions
 - Optional – 5% or 10% depending on amount of plastic in product
 - Optional – 25%
- IEEE 1680.3 (TVs), 2012
 - Same as printers, except no required minimum criterion due to aesthetic concerns
- Server standard – under development

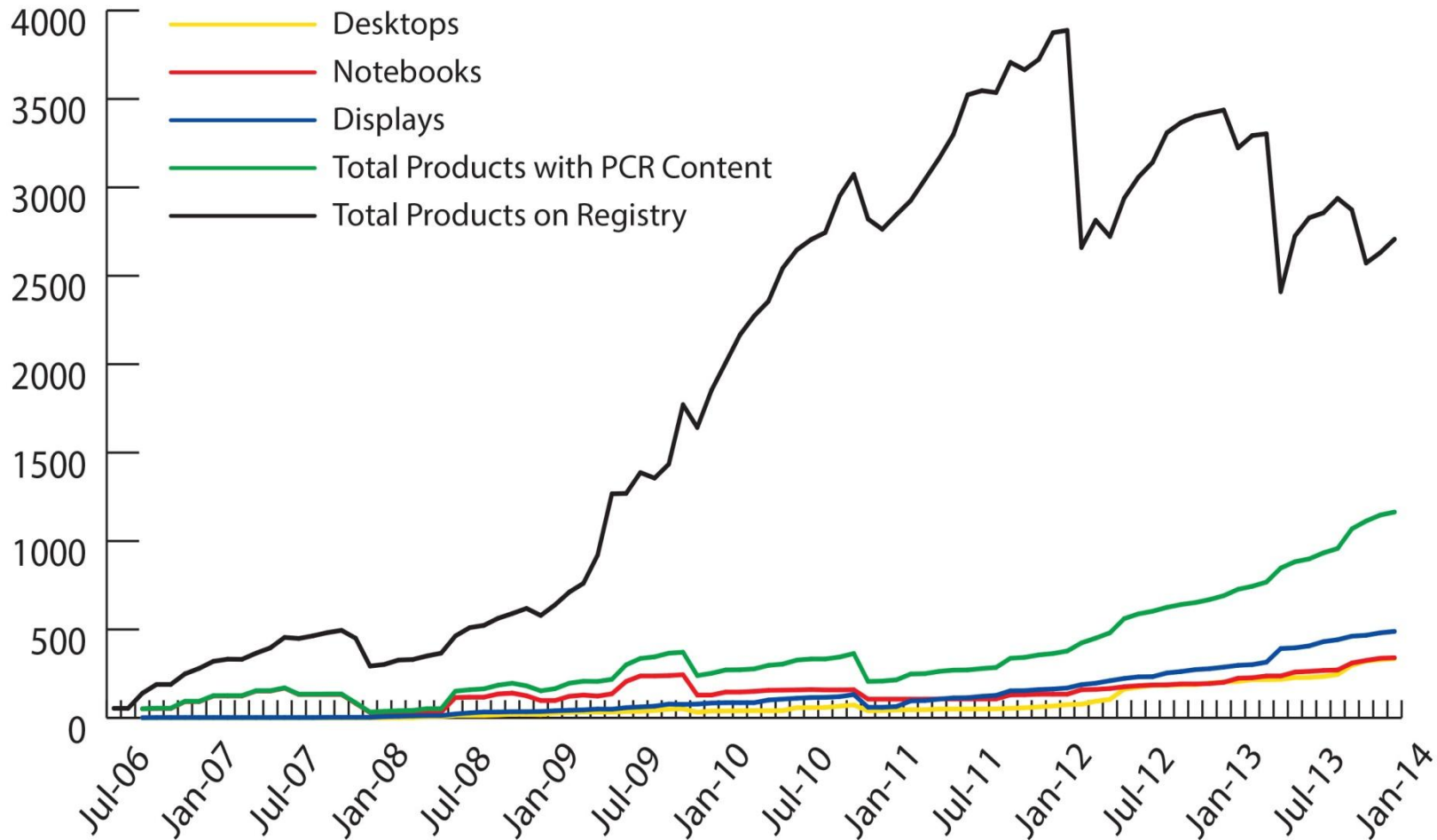
PCs & Displays Using Some PCR



PCs & Displays – Optional Higher Levels



Some PCR in Comparison with Total Products Registered



Conclusions:

In EPEAT optional criteria drive the market.

But incorporation of PCR takes time.

But PCR use is definitely practical in electronics.

Wayne Rifer
Director of Research
Green Electronics Council / EPEAT
wayne.rifer@greenelectronicscouncil.org

www.epeat.net