

"Recycling Electronics: A Common Sense Solution for Enhancing Government Efficiency and Protecting Our Environment."

Testimony of Brenda Pulley, Senior Vice President, Recycling, Keep America Beautiful Before the Senate Homeland Security and Governmental Affairs Committee February 27, 2014

Chairman Carper, Ranking Minority Member Coburn, and other members of the Committee, thank you for your interest in recycling – and for purposes of today – electronics recycling.

In a society where each American produces 4.4 pounds of trash each day, there is a critical need to raise awareness and ultimately provide the motivation to change behaviors to position recycling as a daily social norm.

On behalf of Keep America Beautiful we appreciate this opportunity to re-ignite the dialogue on recycling and share information about how to increase recycling participation.

Keep America Beautiful is a leading national non-profit organization that brings people together in their communities to transform public spaces into beautiful places. Whether it is a waterway cleanup, restoring a vacant lot or enhancing recycling, we work to build and sustain vibrant communities. Founded over 60 years ago, our legacy is based on executing actionable strategies in environmental education and behavior change. We are most known for helping to abate litter in the 60s and 70s, and while that is still much of our work, today we are also very focused on engaging individuals, business, and governments to reduce waste and recycle more.

A roadblock that spurs our work is the fact that the national recycling rate for municipal solid waste hovers at around 34% -- and this is for typical household recyclable items like cans, bottles, other packaging material, yards trimmings etc. For the recycling of electronics some estimates indicate that the recycling of electronics is around 20%. Whatever the exact number, we believe the recycling rates for electronics and other commonly generated waste materials can be made much higher.

While recycling is considered one of the easiest environmental behaviors for the general public to perform, it is actually riddled with complexities.

First, it is important to note that to increase recycling of any goods, the key elements of a sustainable recycling market and infrastructure to collect and process material—have to be in place. Further, there must be market demand for the recycled materials to be used in the manufacture of new products.

The good news for the electronics sector is that there is a market for the recovered scrap; this has led to investment to build the infrastructure to collect and process used electronics. The existing system has significant room for improvement, but it is important to note that the electronics sector has many market based and technological factors at work to support the post-recovery economic use of electronic products.



However, the critical link to electronics recycling is capturing these materials to feed into the recycling system, and doing this relies on businesses or individuals to take action. For individuals this means participating in a special drop off recycling event, or other drop off locations or mail in opportunities. Because the nature of the infrastructure for recycling electronic goods requires individual action, what we ask ourselves is "What can we do to make recycling second nature?"

There are behavioral barriers to recycling. Let's take a look at what we know about recycling behavior.

Behavioral psychologists describe recycling as a human behavior that can be positively influenced. Further, there has been some research conducted to date to identify factors that encourage recycling behavior most effectively.

Here are some highlights:

- 20-60-20 Population: Recent research classifies the general population into three recycling categories. An estimated 20 percent of the general population is "habitual recyclers," the 60 percent majority is "sometimes or sporadic recyclers," and another 20 percent is non- or antirecyclers. The challenge is to move more of sporadic recyclers into the "habitual recycling" category.
- Recycling at Home: Homeowners recycle more than renters, although single family homes tend
 to generate more recycled material than do multi-family dwellings. We know that used
 packages and products generated in or near the kitchen are recycled more often than those
 generated in the bathroom, or home office.
- Recycling Bins Matter: Attributes such as color, size, positioning, wheels, bin lid cutouts and labeling can all cumulatively impact the success of recycling.

Using a body of research on environmental behaviors including recycling compiled during the past 35 years and conducting a "meta-analysis," (or analysis of all of the analyses), a recent meta-analysis reviewed 87 public studies that described 253 experimental treatments that measured observed, not self-reported environmental outcomes, including recycling. This analysis found that while approaches to engage individuals in recycling can vary from place to place, material to material, there are some clear indicators of what can influence recycling – convenience being the most important.

Summarizing much research, surveys and "in the field" learnings -- at KAB we the key areas for improvement are:

- Convenience
- Communication
- Cause (in other words make recycling matter)

Let's start with convenience which has the greatest potential to increase participation. We need to build better infrastructure to offer recycling opportunities proximate to the actions or behaviors that generated the recyclable material. So, for example, for beverage container recycling, this could involve placing recycling bins where the consumption will occur, such as in office break rooms, in school



cafeterias, or, on major airlines. For electronics recycling, the challenge is even greater – you are trying to capture material that may have been purchased 7 years earlier not 7 minutes. The creation of easy access to recycling – such as at retail locations where consumers go to replace their obsolete electronics (Best Buy and Staples currently offers such collection) is an excellent example of overcoming the convenience barrier. Special collection events where you have a specific date and time of collection, and there is usually significant promotion about a special event has proven fairly effective at raising the profile of recycling opportunities. Particularly where there are not other ready available options. One of our affiliates in a community in Georgia with a population of 100,000 has been hosting used electronics collection events twice a year for 7 years. 50,000 – 70,000 pounds are collected at each event.

Another key factor is better communication. Consumers need to be informed on what, where and when the material can be recycled. In recent consumer research, potential recyclers indicate they want easily accessible information regarding what and where to recycle.

While information can make it easier to recycle, there is evidence that increasing knowledge doesn't mean individuals are motivated to engage in the behavior. We recommend that information and knowledge be combined with a "cause" or making it matter to recycle to induce behavior change. It is critical to strike the emotional chord with consumers. And, at Keep America Beautiful that is the approach we have taken in our most recent efforts.

In partnership with the Advertising Council, we recently released a national advertising campaign designed to motivate Americans to recycle every day. Based on our consumer research, we learned that when people understood that they could give their garbage another life, they wanted to take the extra step to recycle. Thus the campaign is based on the theme: "I want to be recycled" and each ad provides examples of what a plastic bottle, an aluminum can, and so on can become when recycled. What we found based on the feedback provided was that recycling went from being an "obligation" to a "responsibility"

In addition to convenience, communication and cause (or motivation) there are some other known strategies that have been identified as effective at changing behavior. A few of these include: goal setting, social modeling and commitment.

There is research evidence that indicates that making a commitment to take an action – the more specific that action can be and making it public -- results in an increase in that action.

Additionaly, there are several studies that indicate social modeling or norming has great potential to increase pro-environmental behavior (much of this work has been done in the health and energy sectors). For recycling, the most powerful social norms are those that are at the same time both ubiquitous and deeply ingrained. Take the example of the seat belt – it is simply what we do because our society expects us to do it and has created many touch points to remind us to do it. Or for example a study conducted among 600 households on curbside recycling – when residents were provided descriptive normative feedback – information about the percentage of their neighbors that had recycled



that day and the amount of material recycled – there was a 19% increase in recycling among the residents.

As stakeholders interested in increasing recycling -- we can take these learnings and start applying them more. For example, at Keep America Beautiful, in addition to conducting new research, we strive to incorporate these known approaches in our various national recycling programming – America Recycles Day, or our programs targeted to certain sectors – schools, college campuses or recycling at work. For the members of this Committee, as public officials, you have a powerful role to lead by example and be seen recycling, or talk about recycling in a positive way to your colleagues and constituents.

Now before I get to a few recommendations for your consideration, I would like to add that used electronics recycling has an additional unique aspect that influence how recycling is perceived by consumers. Specifically that electronics have a perceived value. That perceived value causes people store their old televisions, computers and printers rectronics basements, and garages rather than recycle them. So when purchasing a new laptop there could be prompts on the packaging, on the instructions about recycling the old product included in the new product, better yet, that sales person when selling a new product can prompt the new purchaser on the recycling of the old product, will help overcome this barrier. It is an interesting aspect about the Dell partnership with Goodwill Industries. Goodwill locations are now drop-off points for not just clothing and other household items, but also electronics. Not only is it more convenient for donors to also bring along their used electronics for donation, but the perceived value issue is addressed. Donors knwing that their used electronics will go to good use makes it easy for them to donate them for reuse and recycling.

Yes, recycling is complex and recycling of electronics has some additional complexities. However, we have the benefit of a growing body of behavioral and market research, and, yes while there is more to learn, there are informed approaches we can take now to increase recycling participation by motivating environmental behavior. Here are some recommendations:

Recommendations:

- Increase awareness to make recycling a daily social norm: Talk about electronics recycling, attend collection events that occur in your states, publicly pledge to recycle and invite your constituents to do the same. Encourage municipalities to use the national "I want to be recycled" campaign to raise awareness and make that emotional connection to recycling.
- 2. Engage the industry manufacturers and retailers: Encourage OEMs and retailers to continue to make recycling collection more accessible and to provide information about recycling embedded throughout their various communications with consumers -- in advertising, on product packaging and set of instructions, at point of purchase, etc. For example when you go to buy a new electronic good you are asked if you have one to recycle.
- 3. Design products for recycling: Encourage OEM's to factor in end-of-life recyclability of new products and packaging.
- 4. Conduct a study: Conduct a study specific to identifying the barriers for individuals to recycle electronics and approaches on how to most effectively overcome those barriers.



Thank you to the members of this committee for the opportunity to share information about what we know about recycling behaviors and look forward to further exploring actions that can be taken to increase recycling participation.