PRINTING INDUSTRIES OF AMERICA

From the Office of the President and CEO

October 8, 2010

Mr. Fred Hiatt
Editorial Page Editor
The Washington Post
1150 15th St. NW
Washington, DC 20071

Dear Mr. Hiatt:

This letter is in response to the 8/24/10 article *"iPads and Kindles are better for the environment than books"* by Mr. Brian Palmer which appeared in The Green Lantern column of The Washington Post. Unfortunately, the article did not present a full and complete representation of the comparison between printed books and e-readers and their impact on the environment. Therefore, Printing Industries of America would like to provide information on several areas of environmental impact of e-readers and books that were not included in the article and if considered, would not support Mr. Palmer's conclusion.

The conclusions drawn by Mr. Palmer in regards to the environmental impact of e-readers and printed books are based on a limited number of attributes and fail to consider the complete life cycle of the two products. The only way to accurately compare the environmental impact of a product is to evaluate its entire lifecycle which includes raw material procurement, transportation, production process, product use, and final disposition. This article explores only some of the production aspects of each product and falls short of what would be considered an objective review of the facts.

Most concerning is the absence of a discussion about several critical aspects, specifically the issue of raw material sourcing, product use, and end of life implications. In addition, the assumptions made about ink production are not accurate.

Regarding raw material sourcing, books are made primarily from paper, a completely renewable resource. North American forests are well managed and continue to increase in both land area and volume of timber grown.[i] E-readers, on the other hand, are made primarily from plastics derived from fossil fuels, and metals and minerals mined from the earth, which are not renewable.

The article compares the carbon footprint of producing e-readers and books, but misses one of the most critical components of any carbon footprint, the source of carbon emissions from the energy required to manufacture and use the product. A significant portion of the energy required to manufacture paper is renewable. In 2008, members of the American Forest and Paper Association derived 65% of the energy used at pulp and paper mills from renewable sources.[ii] E-readers are manufactured primarily in Asia, where the most prevalent source of electricity is coal, a nonrenewable resource.

Paper based books require no energy to use. E-readers use batteries that must be charged with electricity on a frequent basis and the infrastructure that allows for the origination, storage, and dissemination of electronic data represented 1.5 percent of all electricity consumed in the United States in 2000.[iii] In 2009, nearly 70 percent of electricity in the United States, used both to charge e-readers and power electronic data centers, was generated from fossil fuels, which are not renewable.[iv]

The article also claims that ink production for books has a worse effect on the environment than production of e-readers. The author provides no references or meaningful support for this statement. Several lifecycle assessment studies of printed products indicate that paper represents the majority of the overall environmental impact of printed matter. Ink represents less than five percent of the overall impact of a printed product.[v] An article which compares the impact of e-readers and books found that the health effects of producing an e-reader (mainly due to air pollution) is 70 times that of producing a book.[vi]

Lastly, the article does not consider the end of life implications for each product. Books and e-readers have very different environmental impacts when it comes to end of life. First, paper based books can be easily recycled. As of 2008, American's recycled 55.5 percent of all waste paper generated.[vii] The American Forest and Paper Association recently reported that in 2009, 63.4 percent of all waste paper available was collected for recycling.[viii]

Of the 2.76 million tons of electronic waste collected in 2008, only 13.6 percent was recovered for recycling.[7] The remaining 2.38 million tons were discarded primarily in landfills, where improper management leads to releases of the heavy metals and other toxic chemicals contained in electronics, or shipped overseas. According to the Basal Action Network, 50-80 percent of electronics that are collected for "recycling" in America, are shipped overseas where they are often unsafely dismantled which includes the practice of burning the electronic devices to recover the exposed metals.[ix] Such practices often involve children who are exposed to the extremely toxic smoke and fumes and the residues also contaminate the air, soil, and groundwater.

Printing Industries of America continues to work with its members and the industry as a whole to foster an understanding of the environmental and economic benefits that can be achieved through the use of sustainable printing practices. Printing Industries of America is proud to be a founding organization of the Sustainable Green Printing Partnership (UUwww.sgppartnership.org), a program designed to recognize printers that are superior environmental performers. Printing Industries of America encourages The Washington Post to continue its focus and recognition of sustainable practices while providing objective and comprehensive reviews.

If you have any questions or need additional information, please feel free to contact me at 412-259-1777 or mmakin@printing.org.

Michael Makin
President and CEO
Printing Industries of America

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[v] Nichols-Dobson, Phillipa. *LCA applied to the Printing Industry.* Pira International, September 8, 1997
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[vii] U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery. *Municipal Solid Waste Generation, Recycling, and Disposal in the United States Detailed Tables and Figures for 2008.* November, 2009. http://www.epa.gov/osw/nonhaz/municipal/pubs/msw2008data.pdf
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[ix]Puckett, Jim, et al. *Exporting Harm.* February 25, 2002. http://www.ban.org/E-Waste/technotrashfinalcomp.pdf.