



Highlights from
Collected Reports on Consumer Attitudes & Behaviors
Toward Packaging Recycling and Sustainability

December 2013

INTRODUCTION

The PAC NEXT Consumer Engagement committee presents this reference document to share key highlights based upon 30+ collected reports on consumer attitudes and behaviors toward packaging recycling and sustainability.

The committee was established with objectives to identify the key drivers and barriers that influence consumer actions when purchasing and discarding packaging materials.

Over the past 24 months the committee has (1) collected information on consumer attitudes and behaviors (2) actively engaged with the National Zero Waste Council interim committee looking at consumer behavior change to drive waste reduction and material recovery (3) developed a survey on public engagement when introducing new materials to a municipal recycling program and tools used to measure success. During this time period, the committee has accumulated reports and surveys on Box.com while also providing a valuable resource to the broader PAC NEXT membership. This report will summarize some of the major topics and findings for those reports and surveys along with a summary for the reports that can be found on Box.com.

Moving forward, the committee will continue to investigate success stories comparing voluntary and mandated programs and how it affects consumer behavior and packaging material recovery and recycling rates. PAC NEXT will continue to monitor the latest consumer reports through services provided by i2 (Industry Intelligence).

We thank committee members and guest presenters who shared their experiences and valuable insights. Please contact us if you would like to receive more information about PAC NEXT consumer engagement projects. And, we hope that you find the attached report helpful.

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Disclaimer

This document was supported by a PAC NEXT Technical Committee consisting of member volunteers with packaging, materials management and policy experience from across the public and private sectors. The conclusions and views expressed in this document do not necessarily reflect the views of every PAC NEXT Member Company or Affiliate.

HIGHLIGHTS

Consumers are often considered the missing link in packaging sustainability. When reviewing the literature on consumers' attitudes and behaviors towards the environment and packaging, there were three main areas found in the 30+ collected reports. Below are the highlights of the key concepts presented over the past 24 months. Please refer to the annotated bibliography following this summary.

1. Attitude vs. Action

- Research that seeks to understand consumer attitudes and behaviors when making purchasing decisions reveal that consumers' attitude to protect the environment often do not translate into their buying behavior
- Consumers want sustainable packaging but with no trade-offs on convenience, product performance and value
- Consumers need motivation, ability and opportunity to change their behaviors

2. Importance of Recycling to Consumers

- Studies that aim to understand consumers' attitudes and behaviors when discarding packaging reveal recycling as a top-of-mind sustainability attribute for packaging
- Recycling represents consumers primary environmental effort but it must be easy and convenient
- Consumers want to be confident that they are doing the right thing – need a harmonized approach to list recyclable materials to avoid confusion and disengagement

3. Communication Best Practices

- Communication strategies that work towards solutions for consumers to improve the recovery of packaging materials were identified as using simple and consistent messaging, strong visuals and credible facts (examples provided on the next page)
- Incentives for behavior change include motivation and encouragement methods, such as a call to action, rewards and consultation to measure success

CONCLUSION AND FUTURE WORK

Sustainable behavior change for consumers is complex because there are many factors that play a role such as policy, local infrastructure and economy, convenience, interpersonal influence and so forth. The findings from the collected reports reveal that although consumers' concerns for the environment do not necessarily reflect their behavior, there is an opportunity to motivate them to act on their interests and attitudes. Motivation must be accompanied with the ability and opportunity to engage in packaging sustainability issues. Future PAC NEXT projects will focus on contributing factors of motivation through volunteer and mandated programs, such as pay-as-you-throw, and aim to share consumer engagement success stories.

Examples:

The following are examples of campaign materials that use visual, simple and repetitive messaging with a call to action.

“CREATE MEMORIES, NOT GARBAGE”

“RECYCLE MORE”



Image courtesy of Metro Vancouver

Image courtesy of Stewardship Ontario

ANNOTATED BIBLIOGRAPHY

Note: Selected documents are accessible (based on permission rights) in the ‘[Shared Resources & Public Reports](#)’ folder Box.com – an online resource made available to all PAC NEXT members. For more information, please contact Rachel Morier at rmorier@pac.ca.

ACADEMIC PAPERS

Buelow, S., Lewis, H., and Sonneveld, K. (2009). *The Role of Labels in Directing Consumer Packaging Waste.* Noosa, Queensland: *Environmental Research Event 2009*, 1-11.
http://espace.uq.edu.au/eserv/UQ:179585/Buelow_-_ERE2009.pdf

Keywords: Labeling, Consumer understanding, Recycling schemes

The research argues that consumers’ understanding of labeling on common household packaging is often poor. Misguided on-pack labels and system complexity combined with consumer confusion leads to incorrect sorting behavior. This results in unnecessary costs to the system where recyclable materials go to landfill or unrecyclable items go to recycling facilities.

Langley, J., Turner, N., Yoxall, A. (2011). *Attributes of Packaging and Influences on Waste.* *Packaging Technology and Science*. 24: 161-175.

Keywords: Consumer attitudes, Packaging value

This paper states that the consumer needs to be convinced of plastic as having more ‘worth’ in order to drive consumers to divert materials. The authors state, “A higher perceived value is likely to divert more plastics away from landfill into alternative waste routes” (Langley et al., 2010, p. 174).

Mee, N., Clewes, D., Phillips, P.S., and Read, A.D. (2004). *Effective implementation of a marketing communications strategy for kerbside recycling: a case study from Rushcliffe, UK.* *Resources, Conservation and Recycling*. 42: 1–26.

Keywords: UK, Marketing strategy, Communication, Promotion, Curbside recycling

This paper reveals ‘Push’ and ‘Pull’ factors that contribute to effective communication strategies for curbside recycling programs. Policy can either ‘push’ consumers towards behavior change through consequence strategies, or ‘pull’ consumers through antecedent strategies that provide incentives for positive consumer behavior.

Morier, Rachel. (2012). *Master in Environmental Studies, Major Paper: ‘Linking the Success of Sustainable Packaging with Consumers: A Study of Consumer Trends and Opportunities for Canadian Initiatives.’* Unpublished manuscript.

Keywords: Canada, Consumer engagement, Sustainable packaging initiatives

This paper reveals the criticisms and challenges to current sustainable packaging initiatives and the drivers and barriers to engaging Canadian consumers. This paper argues that the consumer is an integral part of sustainable packaging initiatives, and these initiatives must continually evolve as consumer behaviors change.

Nordin, N., and Selke, S. (2010). Social Aspect of Sustainable Packaging. *Packaging Technology and Science*. 23: 317-326.

Keywords: Consumer understanding, Sustainable packaging, Social considerations

This paper argues that there is relatively little known about the consumers' insights of packaging sustainability and that the social aspects of sustainability packaging are often overlooked. This paper investigates consumers' perceptions on packaging sustainability, their perceptions of packaging impacts to the environment and discusses factors that drive consumers' preferences and purchase decisions.

Timlett, R.E., and Williams I.D. (2008). Public participation and recycling performance in England: A comparison of tools for behaviour change. *Resources, Conservation and Recycling*. 52: 622–634.

Keywords: England, Communication tools, Behavior change

This paper reveals that there are four main drivers that present possibilities for sustainable packaging initiatives to engage consumers: Enablers, Encouragement, Engagement and Exemplify. This research suggests communication messages should: Personalize benefits where it is important for people and not just the environment; Associate messaging with other causes because the environment is not the only thing that matters to people (e.g. safe communities, ethical or economical living); Move away from exhortation and blame, Avoid chastising people for occasional mistakes; Focus on strong, visual images; Focus on positivity and optimism; Recognize that different people have different values; and Create a sense of 'every little bit counts' (Timlett and Williams, 2007).

Wever, R., van Onselen, L., Silvester, S., Boks, C. (2010). Influence of Packaging Design on Littering and Waste Behaviour. *Packaging Technology and Science*. 23: 239-252.

Keywords: Litter behavior, Behavior change strategies

This article considers littering a packaging-related problem where environmental, social and economic aspects of sustainability meet. It explains and provides examples of antecedent and consequence strategies.

INDUSTRY REPORTS

Agriculture and Agri-Food Canada. (2010, March). Consumer Attitudes Toward the Agri-food System and the Environment. *Her Majesty the Queen in Right of Canada*. http://www.gov.mb.ca/agriculture/statistics/food/consumer_attitudes_agrifood_environment_en.pdf

Keywords: Canada, Consumer attitudes, Agri-food system

This market analysis report examines consumers' attitudes regarding the link between the agri-food system and the environment. It explores consumers' unwillingness to trade convenience packaging over sustainability and how this attitude varies from country to country.

Agriculture and Agri-Food Canada. (2010, May). The Canadian Consumer—Behaviour, Attitudes and Perceptions Toward Food Products. *Her Majesty the Queen in Right of Canada.*
<http://www.ats.agr.gc.ca/info/5505-eng.htm>

Keywords: Canada, Consumer attitudes, Consumer behavior, Food products

This report reveals the changes in packaging trends due to changing dynamics of the Canadian household. It discusses a number of factors have contributed to an increase of packaging such as more people buying smaller portions of food, transport over long distances, and higher demands for convenience and processed food. It also explores how sustainability is not a primary purchase motivator, but there is a growing expectation that companies should adopt green business practices.

BBMG, GlobeScan, SustainAbility. (2012, November 27). *Re:Thinking Consumption: Consumers and the Future of Sustainability.*
<http://www.globescan.com/component/edocman/?task=document.download&id=46&Itemid=591>

Keywords: Consumer motivation, Consumer segments

This goal of this study is to uncover consumer motivations that drive their interest in living sustainable lives. The study is based on results of an online survey conducted in September to October 2012 of over 6,000 respondents in Brazil, China, Germany, India, United Kingdom and United States. This study reveals four consumer segments on sustainability spectrum: Highly committed Advocates (14%), Style and social status-seeking Aspirationals (37%), Price and performance-minded Practicals (34%) and, Less engaged Indifferenters (16%). Aspirationals offer greatest opportunity as it is the largest consumer segment and they seek both consumption and sustainability.

Canadian Plastics Industry Association. (2013, May). *Population Access to the Recycling of Post Consumer Plastic Recycling in Canada.*
http://www.plastics.ca/_files/file.php?fileid=itemwryxaCoNMq&filename=file_MAY13_Final_CPIA_Report_Recycling_Access_2013.pdf

Keywords: Canada, Plastic recycling access

This report provides an updated insight into recycling access for post consumer plastic in Canada, prepared by CM Consulting in May 2013. “Access” is defined in this study as residential municipal curbside or depot recycling programs, and private subscriptions programs for a variety of plastic packaging types. It provides estimates of recycling access in terms of permanent households covered and as a percent of population.

Cone Communications. (2013, April 2). *2013 Cone Communications Green Gap Trend Tracker.*
Boston: Cone Communications LLC.

Keywords: Consumer attitudes, Purchasing behavior, Green products

This fact sheet is used to benchmark consumer attitudes and behaviors toward ‘green’ products over a five-year period. Consumer understanding remains a challenge where 71% of consumers wish companies would do a better job to help them to understand environmental messaging. Furthermore, 45% say they are most likely to use on-pack resources for information about how to properly use and dispose of environmental products.

GfK Roper Public Affairs & Media. (2011). *The Environment: Public Attitudes and Individual Behaviour – A Twenty-Year Evolution.*

http://www.scjohnson.com/Libraries/Download_Documents/SCJ_and_GfK_Roper_Green_Gauge.sflb.ashx

Keywords: U.S., Consumer attitudes, Consumer behavior, Green products

This article discusses research from SC Johnson that led to the Green Gauge® survey among U.S. consumers. The survey measures green attitudes and behaviors while exploring the three tiers of influence: monetary, personal and organizational.

Munro, A. (2010). *Recycling by Canadian Households, 2007. Ministry of Industry, Statistics Canada. (Catalogue no. 16-001-M, no. 13).*

<http://www.statcan.gc.ca/pub/16-001-m/2010013/part-partie1-eng.htm>

Keywords: Consumer attitudes, Purchasing behavior, Green products

This study is based on data from the 2007 Households and the Environment Survey (HES), conducted as part of the Canadian Environmental Sustainability Indicators project. Munro states that when asked why they recycled, recyclers said it was due to a sense of social responsibility (82%) or a desire to reduce waste in landfills (75%). Munro states that the reasons given non-recycling households were likely because it was too inconvenient (43%), it was too time-consuming (40%) or it took up too much space (33%).

Nielsen. (2011). *Environment and Sustainability: A Canadian Perspective.*

http://www.nielsen.com/content/dam/nielsen/en_ca/documents/pdf/reports/Environment-and-Sustainability-Canadian-Perspective.pdf

Keywords: Canada, Consumer attitudes, Environmental sustainability

This summary report reflects the organization's 2011 Global Online Environment and Sustainability Survey that gathered opinions of over 25,000 Internet respondents in 51 countries, including Canada. By a margin of four to one, Canadian consumers will opt for the money-saving option but they will make a sustainable choice in-store as long as they do not have to pay more for it. The study reveals that consumers consider recyclable packaging as the top feature of sustainable products that have a positive impact on the environment.

Network for Business Sustainability. (2013, February 20). *Driving Social Change: Best Practices for Business Leaders and Social Entrepreneurs.*

<http://nbs.net/wp-content/uploads/NBS-Executive-Report-Social-Change.pdf>

Keywords: Behavior change, Business leadership, Social considerations

This research seeks to understand how can companies help change people's behavior in order to benefit society. The research revealed three conditions are necessary for people to change their behavior: Motivation, Ability and Opportunity. This research argues that all three conditions must be met for people to change their behavior and provides practical case studies.

Stewardship Ontario (2011). *Summary Report – Research on Consumers' Attitudes Towards the Blue Box Program and Recycling.*

<http://www.stewardshipontario.ca/download/the-blue-box-program-summary-report-research-on-consumers-attitudes-towards-the-blue-box-program/>

Keywords: Ontario, Consumer attitudes, Curbside recycling

This report highlights quantitative research to understand consumers' attitudes towards environmental issues related to product packaging, and their usage and recycling of such packaging through Ontario's Blue Box. Most respondents in this study (83%) said that the introduction of the Blue Box impacted on how their households operate, and also had some impact on people's purchasing behavior.

NEWS ARTICLES

Berry, Jennifer. (2011, April 6). S.C. Johnson CEO: Convenience Wins Over Sustainable Innovations. *Earth911.com*.

<http://earth911.com/news/2011/04/06/s-c-johnson-ceo-fortune-green/>

Keywords: Behavior change, Green products

This article highlights an interview with S.C. Johnson's CEO, Fisk Johnson. He presents an example of a household product launch using a concentrated formula and expresses the resulting challenges with consumer behavior.

Guidoni, George. (2010). Cleaning Up Our Act: Keeping environmental sustainability at the forefront of consumer awareness a tricky balancing act for leading brand-owners, retailers and packaging industry insiders. Toronto: *Canadian Packaging*.

<http://www.canpaco.com/images/newspdf/07cpac-sus-mag.pdf>

Keywords: Consumer engagement, Sustainable packaging

This article presents interviews from stakeholders throughout the packaging value chain and presents their thoughts regarding consumers' role in achieving packaging sustainability initiatives.

Johnson, Steven. (2013, March 22). Communicating sustainability: lessons from public health. *The Guardian*.

<http://www.theguardian.com/sustainable-business/communicating-sustainability-behaviour-change-public-health>

Keywords: Behavior change, Communication

This article discusses the huge task of shifting consumer behaviors downstream using lessons learned in the public health sector that can be transferred sustainability community. The article argues that people need more practical tools, not additional information and that behavior change interventions take a holistic approach. The article discusses the need for tailored strategies and an empowering approach that has positive depictions of a future built from behaviors that is sought.

Spencer, Bob. (2013, October 7). How can green packaging be simultaneously more AND less important to today's consumers? *Packaging World*.

<http://www.packworld.com/sustainability/recycled-content/how-can-green-packaging-be-simultaneously-more-and-less-important>

Keywords: Consumer attitudes, Sustainable packaging

This article discusses the latest study by Mintel, which reveals recyclability of packaging as the preferred green product benefit. The study indicates that consumers lack education on issues and definitions, in particular biodegradability, and their willingness to pay more varies with the attribute. The younger generation continues to express interest in sustainability.

PRESENTATIONS

MacKenzie, Alexis. (2012, April). *Consumer Engagement*. [Presentation slides]. Calgary: Alberta Beverage Container Recycling Corporation (ABCRC).

Keywords: Alberta, Consumer engagement, Recycling

Alberta Beverage Container Recycling Corporation (ABCRC) performs various forms of consumer engagement research: Attitudinal research to understand who is or isn't recycling, Barrier research to understand why people do not recycle, and Landfill Waste Audits to understand sectors that are not recycling and observe what items are placed in the garbage.

McConnell, B. and Beverly, M. (2013, June). *Adding "All Plastic Bottles & Containers:" Are residents getting the message?* [Presentation slides]. Mississauga: CPIA.

Keywords: Promotion, Communication, Recycling

The presentation shares research findings in identifying best practices in promotion and education (P&E) among jurisdictions that have added plastic bottles and containers to their recycling program. The research reveals that P&E applications vary widely and there are many best practice elements across programs. These programs are continually evolving and improving. The presentation features the ASSETS© concept which stands for *Are you talking to me?; Show me; Simple language and call to action; Everywhere; Thanks; and Success*.

Shelton, Suzanne. (2013, April 24). *What Consumers Really Care About: It's Not What You Think*. [Presentation slides]. Knoxville: Shelton Group.

Keywords: U.S., Marketing strategy, Consumer attitudes, Sustainable packaging

The research by the Shelton Group states 48% of Americans agrees that corporate environmental reputation impacts product choices. It also shows that most Americans care about recycling and like less packaging, but they are confused about what constitutes 'sustainable packaging'.

Sigmund, Sandy. (2012). *Encorp Pacific Consumer Engagement*. [Presentation slides]. Burnaby: Encorp Pacific.

Keywords: British Columbia, Consumer engagement, Recycling

Encorp Pacific shares their understanding that in order to get consumers to recycle, it must be simple and convenient. They use mass media to maximize reach and frequency against individual targets. Encorp Pacific is an example of a stewardship program that shares its creative media with other organizations doing the same kind of work.