

by Clarissa Morawski

"Aluminum food trays and dishes have an access rate of 82 per cent in British Columbia, but only 26 per cent in Saskatchewan."



Recycling Access in Canada

Access across the country and what it means for diversion

s recycling stewardship evolves in Canada, so too does the need to measure the success of various programs. Diversion rates and recycling rates are primary key performance indicators (KPIs), but other information can also offer insight into the strengths and weaknesses of a particular program.

DEFINING "ACCESS" TO RECYCLING

In the case of packaging waste, which is generally collected by individual municipalities or regional districts in Canada, an increasingly important measurement (especially for packaging stewards) is the per cent of the population that has "access" to recycling of these materials — from basic newspaper and cans to more complex packaging like film plastics and coffee cups.

Defining "access" can be the subject of great debate. While some suggesting that access is when you get free recycling at your home, others argue that access also encompasses those that can purchase private recycling services on a subscription basis (something that's more common in the US).

For our purposes, a resident is considered as having access to recycling when they can recycle discards via their municipal curbside programs or municipal drop-off depots, as well as redemption locations (for deposit-bearing packaging like beverage containers).

The opportunities for Canadians to recycle packaging from consum-

er goods is constantly changing. Across the country, some recycling programs have increased the range of materials accepted; others continue to refine the list of acceptable materials to suit the needs of local material recovery facilities (MRFs).

Just as different regions of Canada are diverse politically and culturally, so too is their level of recycling access.

BEST WAYS TO MEASURE

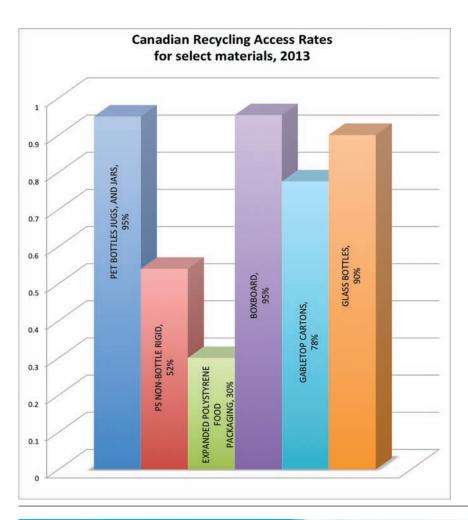
In the past, material-specific research measured access based on a series of data call surveys to municipalities. The method was reasonable, but encountered margins or error related to different factors: respondents who didn't send back the survey; respondents who mis-reported, based on a lack of understanding of material classifications; and, various levels of extrapolation.

CM Consulting believes the best way to measure access is to base it on what the resident is *informed* they have access to. To attain this information, the consulting team plays the role of the resident and uses a series of tools available to residents to attain the information, like visiting a community website for example (as a first step), and a phone call (as a second step).

This virtual tour of nearly every single recycling program across the country offers real-time accuracy, where different language and terminology is interpreted using a specific set of guidelines that are continually

Opposite page: Artwork by Charles Jaffe.

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updated and improved upon as new packaging materials are introduced.

The consultant compared the accepted materials to statistics from the 2011 census to determine national and provincial access rates for the materials. The data can be organized to show how many people nationwide or provincially can access recycling programs for different materials, or the data can be used to compare access for a specific material in different provinces.

The results are very interesting.

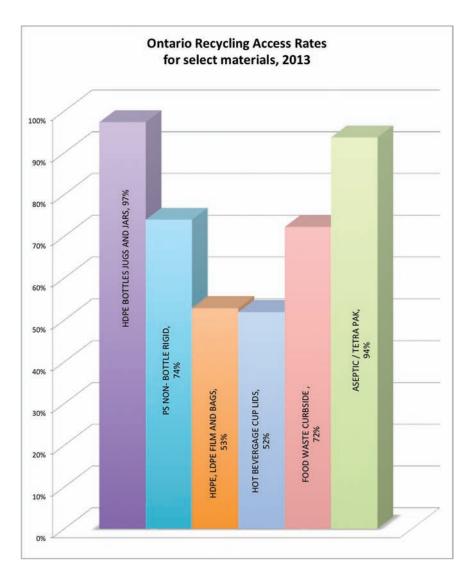
SOME TOP LINE FINDINGS

Across the country, 95 per cent of Canadians have access to recycling via a municipal curbside or depot drop-off facility for bottles, jugs and jars (e.g., for beverages, cleaning products, food, etc.) made from PET plastic.

Most types of plastic containers show similarly high rates. Some systems do not ac-



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cept plastic containers that are not bottles with screw on caps, while others exclude certain resins, such as #6 Polystyrene or #3 PVC containers.

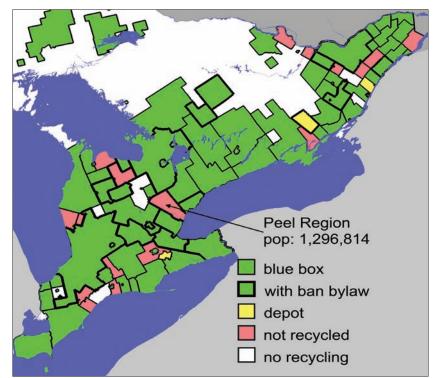
PET non-bottle rigid containers are accepted in programs serving nearly 90 per cent of Canadians, while only 52 per cent have access to recycling programs for non-bottle rigid containers (like bakery trays) made from poly-

Most of the traditional paper fibre materials - such as OCC, boxboard, glossy magazines, and newsprint — can be recycled by roughly 90 per cent of Canadians.

Most of the programs that accept these materials also accept less traditional paper materials such as fibre-based egg cartons and hot beverage trays (like those used to serve multiple coffee cups at a drive-through restaurant).

While a specific material may show a high national rate, individual provinces sometimes show significant differences from one another.

The data provides the access rates for each specific materials by province. For example, aluminum food trays and dishes have an access rate of 82 per cent in British Columbia, but only 26 per cent in Saskatchewan.



The research is updated annually, which provides valuable trending information.

For example, in 2009 only 25 per cent of Canadians had access to recycling food packaging made from polystyrene or "expanded polystyrene" (EPS). (Polystyrene is often called by the brand name "Styrofoam.") Because of improvements in densifying technologies, more municipalities began to accept it in their programs; by 2013, jurisdictions serving 30 per cent of Canadians are now accepting this material. (For more about polystyrene recycling, see article, page 38.)

The 2014 update (due out in January) will also offer insight on if and how much China's "green fence" has impacted recycling access rates for some materials, which may be more difficult to sort and sell.







The research also covers access to curbside food waste composting (40 per cent nationally), and the per cent of Canadians living in regions where recyclables are banned from disposal (i.e., subject to a landfill ban). Currently, such bans are in place in municipalities that serve 13 per cent of the country's population.

APPLICATION OF GIS SYSTEMS

Visual representation of access to recycling using geographic information system (GIS) mapping demonstrates strengths and weaknesses of regional or municipal programs in terms of where access gaps are located, and what percentage of the population they represent.

This is especially helpful to identify where the greatest concentration of those unable to recycle a certain material reside, so that efforts to increase access to recycling of that material can target the most populated, unserved regions.

As an example, consider the that map shows the municipalities of South-Central Ontario that accept PET non-bottle rigid containers in their curbside program (green), at drop-off depots (yellow) or do not accept them at all (pink). The areas with dark out-

lines have by-laws banning disposal of recyclables in the garbage.

To determine the greatest opportunity for growth (the lowest hanging fruit) the municipality that could have the greatest impact on recycling access rates for this material is Peel Region, with its population of over one



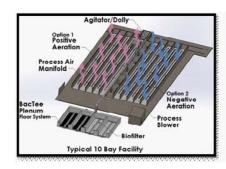




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COVER STORY

million. If Peel accepted PET non-bottle rigid in its recycling program, access rates in Ontario would increase from 84 to 94 per cent, and the national rate would increase to 93 per cent.

WHY IS THIS DATA SO IMPORTANT?

For producers and stewards of packaging materials trying to increase recycling of their materials, this information is invaluable as it helps to pinpoint populations who cannot presently recycle a given material, allowing the steward or their collective organization (IFO, PRO, etc.) to target efforts to expand collection and processing.

Producers and stewards may also be faced with having to know what percentage of their customers can recycle their packaging, because labeling a package as "recyclable" will require due diligence.

The Sustainable Packaging Coalition (SPC) in the US is an industry organization whose membership includes most industry leaders in retailing, food service, and packaging. The SPC has developed a new recyclability labeling system that identifies a package as having one of three levels of recyclability. How the package is labeled depends entirely on the level of access that people have to recycling that particular material.

Any product that can be recycled by 60 per cent or more of the population via curbside pickup or depot drop-off is considered "Highly Recyclable" and would be labeled as such. Materials that can be recycled in the same manner by 20-59 per cent of the population are considered "Limited" in recyclability. If less than 20 per cent of the population has access to recycling a specific type of packaging, it will be labeled as "not yet recycled."

For municipal and district governments, the ability to compare programs using standardized measurements such as access rates gives rise to the opportunity for decision makers to see what others are doing and communicate with those municipalities to determine if programs can be expanded to cover — or to better manage — certain materials.

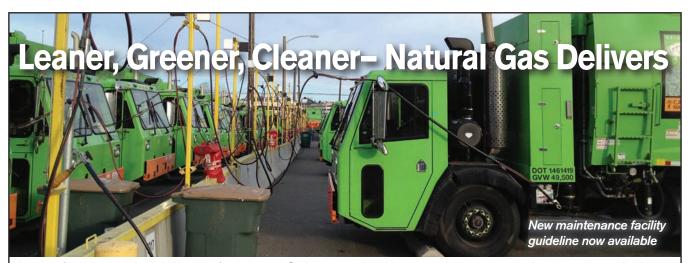
Lastly, for the general public, a database with up-to-date access rates can be easily interfaced with a national postal code-based search tool that takes users directly to their own municipal program page (or calendar, info phone line, etc.).

Note that it's important when discussing access to recycling that these rates should not be interpreted as participation in recycling or the actual recycling rate. Just because a percentage of people in Canada have the opportunity to recycle a gable-top milk carton in their blue box or at the local depot, for example, does not mean that people will recycle it. In fact, cases where access rates to some materials are high, but diversion rates are low, suggests that access alone is not enough to stimulate increased recycling. This is extremely valuable information for those tasked with increasing recycling rates.

For those interested in learning more around the specific rates for each material type and province, please contact jason@cmconsultinginc.com



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