

Our responsibility to the environment:

LCBO SUSTAINABILITY
REPORT, 2011-2012





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SECTION

1

A Message
from the
President
& CEO

A MESSAGE FROM THE PRESIDENT & CEO

The LCBO is a large retailer with more than 620 stores across Ontario and, including our warehouses and office space, a six million square foot footprint. We clearly have a responsibility to ensure our operations are environmentally sustainable.

We sell millions of containers of beverage alcohol every day and hundreds of millions of containers every year.

With this responsibility comes opportunity: —we're big enough to influence the way in which beverage alcohol is made, packaged, shipped, stored and recycled globally.

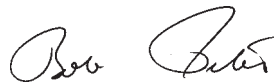
As a responsible retailer and government enterprise, we must operate in a way that is environmentally sustainable, consistent with running a business efficiently and providing good customer service.

We achieved a combined container diversion rate of 93 per cent for the containers we sell, when returned through the Ontario Deposit Return Program and Blue Box systems.

We announced the implementation date for the migration of mainstream wine bottles to lightweight glass bottles with a standard maximum weight of 420 grams.

We established the systems necessary to better manage utilities usage across our network, which is already starting to pay off with real savings in energy and carbon emissions.

I hope you find our second sustainability report interesting, informative and helpful in assessing the LCBO's environmental performance.



Bob Peter
President & Chief Executive Officer



SECTION

2

Ontario Deposit Return Program (ODRP)

MORE THAN ONE BILLION CONTAINERS RECYCLED— AND COUNTING

As of February 2012, more than 1.3 billion beverage alcohol containers have been returned under the Ontario Deposit Return Program—and counting.

Introduced in February 2007 by the provincial government and fully funded by LCBO net revenues, the program has been a great success, with a return rate of 80 per cent in 2011-12, amounting to more than 523,000 tonnes of glass as well as cans, plastic and other containers.

In addition, the LCBO provides funding to municipal Blue Box systems for the curbside collection of beverage alcohol containers that don't make it into the ODRP system. With ODRP and municipal Blue Box systems combined, Ontarians are recycling 93 per cent of their LCBO beverage containers.

ONTARIO DEPOSIT RETURN PROGRAM (ODRP): MORE THAN ONE BILLION CONTAINERS RECYCLED—AND COUNTING

The Ontario Deposit Return Program (ODRP), also known as *Bag It Back*, was introduced to encourage the return of beverage alcohol containers for a refund. Included are glass bottles, cans, plastic and other containers.

ODRP has one simple goal: to help protect the environment. While the Blue Box has been—and continues to be—an effective method of recovering recyclable material,

ODRP boosts recovery rates to an even higher level. Prior to the program's inception, each year 80 million alcohol bottles, cans and containers ended up in Ontario landfills. ODRP helps preserve valuable green space by diverting these items to a recycling facility where they can be used to create new products like new glass bottles and fibreglass insulation. The program also frees up room in blue boxes so Ontarians can maximize the amount of items recovered, recycled and put to environmentally safe use. See also the ODRP website *Bag It Back* at <http://www.bagitback.ca>

BAG IT BACK ADVERTISEMENT



**Make Ontario greener,
one bag at a time.**

You're making a difference, Ontario. Keep bagging back your empty wine, beer and spirit containers to The Beer Store and help make our province a little more green.



How does it work?

All wine, beer and spirit containers purchased in Ontario after February 5, 2007, carry a deposit of 10 or 20 cents, depending on size, and are eligible for a full refund when returned. This includes wine sold at Ontario Winery Retail Stores, beer and spirits sold at on-site manufacturers' stores and beverage alcohol products sold through Ontario restaurants and bars. Rates depend on container size, as set out below.

Eligible containers can be returned to any one of over 775 locations across the province, including almost 440 The Beer Store outlets,

and in rural communities, to almost 220 Agency stores and over 120 empty-bottle dealers.

How well is the program performing?

By February 2012, more than 1.3 billion containers had been returned under ODRP since its inception.

Glass collected through ODRP amounts to more than 523,000 tonnes—as much as 76,000 truck loads.

DID YOU KNOW?

By February 2012, 1.3 billion containers had been returned under ODRP since its inception. The return rate was 80 per cent in 2011-12, amounting to more than 523,000 tonnes (as much as 76,000 truck loads) of glass as well as cans, plastic and other containers.

ONTARIO DEPOSIT RETURN PROGRAM CONTAINER SUMMARY

Eligible containers (glass bottles, plastic bottles (PET), Tetra Pak cartons, bag-in-box, aluminum and steel containers)	Deposit/Refund Amount
Containers less than or equal to 630 mL Aluminum and steel containers less than or equal to 1 L	10¢
Containers over 630 mL Aluminum and steel containers over 1 L	20¢
Exempt containers	
Containers with a volume of 100 mL or less (e.g., 50 mL minis) Containers purchased at duty-free stores, U-Vint and U-Brew	No deposit collected or refund offered for these items.

More than 90 per cent of this glass is recycled into high-value products, such as new bottles, carpeting and fibreglass insulation.

Large glass bottles account for about 50 per cent of all beverage alcohol containers sold by the LCBO and private retailers—and have a return rate of 90 per cent.

Clear glass bottles are turned into new bottles. Half of the green and amber bottles are turned into new coloured bottles and half into fibreglass.

Why The Beer Store?

When the provincial government decided to establish a deposit return system for all beverage alcohol containers, the alternatives were examined. The LCBO did not have the infrastructure to handle the close to 400 million wine, spirits and beer containers that were not already channeled to The Beer Store and establishing such a system would be very costly across more than 600 LCBO stores.

Unlike some other provinces, Ontario also didn't have a return depot system for other recyclables such as paper and food containers (the municipal Blue Box system made such unnecessary).

By relying on the existing and successful deposit return infrastructure of The Beer Store, greater efficiencies, both from a capital and operating perspective, could be achieved while significantly increasing diversion rates.

The Beer Store's existing beer container recovery system has a 95 per cent return rate. Some 86 per cent of Ontarians of legal drinking age are within a five-minute drive from a retail beer location where they can return their empties.

The Beer Store's report *Responsible Stewardship 2010-2011* provides an extensive summary of ODRP performance: http://www.thebeerstore.ca/sites/default/files/widget/right/0429_TBS_2011Stewardship_Sept29_3.pdf



How about the Blue Box?

As noted (on page 3), the LCBO provides funding to municipal Blue Box systems for the curbside collection of consumer recyclables that it generates, including beverage alcohol containers that don't make it into the ODRP system.

Through the ODRP and municipal Blue Box systems combined, Ontarians are recycling 93 per cent of their empty beverage alcohol containers—one of the best rates of return of any such system in the world.

Since 2008, the LCBO has been a designated steward under Ontario's *Waste Diversion Act*, mandating responsibility for the handling and processing of its consumer recyclables that aren't otherwise diverted through ODRP.

This responsibility includes funding to municipalities, via Stewardship Ontario, for beverage alcohol containers, cardboard and boxboard carriers, magazines, promotional materials and paper bags, among other items.

Prior to being designated under the *Waste Diversion Act*, the LCBO took a leadership role in funding municipal Blue Box systems for eight years and for a total of over \$30 million.

More information regarding Stewardship Ontario can be found at:

<http://www.stewardshipontario.ca>



SECTION

3

Energy and Utilities Conservation

REDUCING ENERGY CONSUMPTION

Reducing energy consumption across the LCBO real estate portfolio is a key focus within our corporate environmental strategy. The LCBO operates over 630 facilities including stores, warehouses and office locations. Energy consumption across this network is carefully tracked and comparatively analyzed, resulting in targeted efficiency retrofits, efficient new facilities and trending over 7 per cent in same-store energy reduction in 2011/12.

LCBO store energy use is being reduced through a comprehensive array of initiatives, including installing computerized building automation systems to replace temperature and lighting controls, saving 16 per cent in electricity. New stores built using green initiatives can cut up to 40 per cent. Free cooling cold rooms can cut utilities up to 10 per cent, and updating lighting, equipment and exteriors of our facilities all contribute to LCBO's overall reduction.

ENERGY AND UTILITIES CONSERVATION: REDUCING ENERGY CONSUMPTION

The LCBO is a relatively large retailer, with over six million square feet of store, retail service centre and office space—and facilities that range in age from over 100 years old to brand new. Depending on the location, this network consumes electricity, natural gas, fuel oil, propane and water to keep operations running.

Energy demand across LCBO operations is growing as often larger new stores are built to keep pace with community growth and as customers seek more refrigerated products. Improving the environmental performance of the LCBO's built environment represents both a significant challenge and, as one of its largest sources of energy consumption, a great opportunity.

New and renovated stores

New stores are being built using LCBO green building specifications. Major initiatives include the commissioning of all new stores, building automation systems, free cooling cold rooms, use of natural light, energy efficient lighting and mechanical systems, increased insulation and preventative maintenance programs. The results in these areas have been impressive, showing an average between 25 to 30 per cent in **total energy** reduction in new construction compared to LCBO stores built five years ago.

Store and refrigeration temperature and lighting settings are programmed to automatically adjust based on store operations, which reduce use when occupancy of the store is minimal.



LEED (Leadership in Energy and Environmental Design) designation and learning

Limits to available capital and an expansive 620-store (and growing) network means that not every LCBO store can be built to LEED designation.

LEED-designated stores mean state-of-the-art practices in energy efficiency and reduced environmental impact in all elements of store construction and operation.

To date, the green building specifications have resulted in LCBO's ability to partner with our building developers to build eight LEED-designated stores. It is estimated these standards reduce our carbon footprint by approximately 20 tonnes per year.

LCBO LEED-designated stores can be found at the following locations:

- Kingston Road and Morningside, Toronto
- 300 King George Road, Brantford
- 11 Winchester Road, Brooklin
- 365 Mountainview Road S., Georgetown
- 321 Cornwall Road, Oakville
- 9310 Bathurst Street, Vaughan
- 655 Fairway Road, Kitchener
- Appleby Mall, 501 Appleby Line, Burlington

For more information regarding Leadership in Energy and Environmental Design, visit Canada Green Building Council:

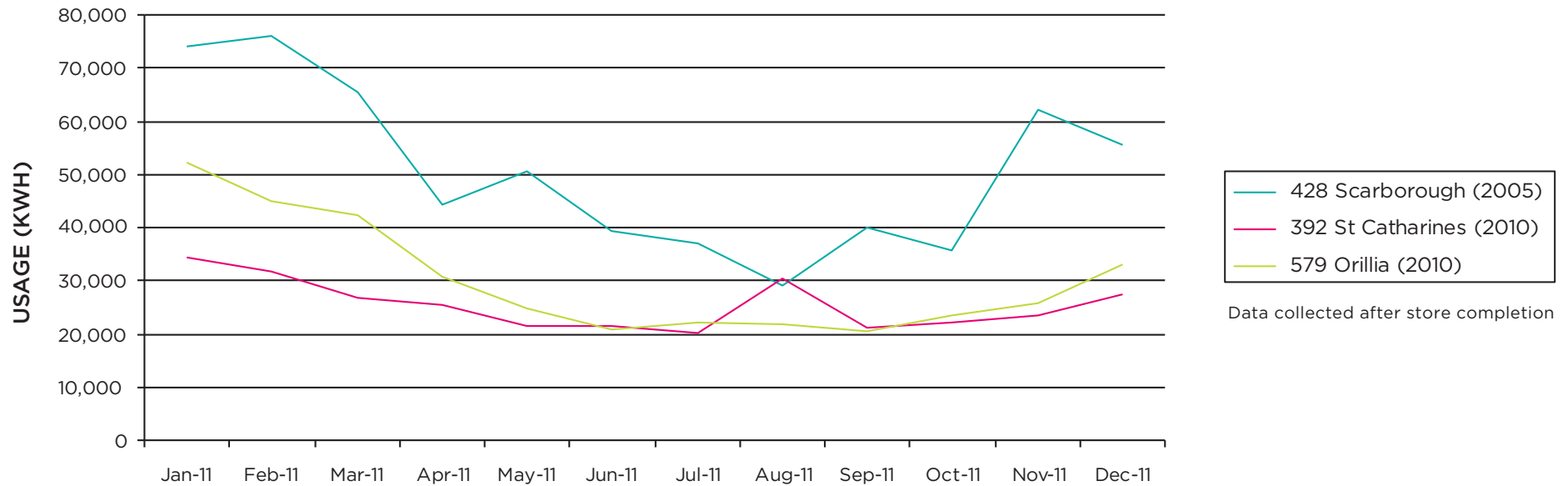
<http://www.cagbc.org>

DID YOU KNOW?

Using outside air for several months of the year, rather than refrigerated air, keeps cold rooms cool at little to no cost and with significant environmental benefits. LCBO currently has over thirty with these cold rooms.



TOTAL ENERGY CONSUMPTION 2005 CONSTRUCTION VS NEW STORES 2010



Comparative Analysis

The above chart highlights the benefits of green construction on two new LCBO stores completed in 2010. St Catharines and Orillia are of similar size to a store built in Scarborough in 2005. The new stores are consuming approximately 50 per cent

less **total energy** than the Scarborough store as a result of energy efficiencies built into the new store.

With facilities that have a wide range of ages we find renovating and retrofitting for energy efficiency in our existing stores provides great opportunities along

with unique challenges. LCBO green projects and centralized energy utilization comparison enable us to determine which initiatives produce the best environmental (and economic) return for renovations and retrofits.

More chilling for less (environmental and \$) cost

Energy is being saved through fitting glass doors on open refrigeration units, free air cooling and replacement of refrigeration and HVAC units with more efficient models.

The LCBO's initial pilot conversion of open refrigeration units to the "dairy door" format showed a 68 per cent reduction in energy usage.

This year, capital replacements resulted in 1,300 linear feet of energy efficient refrigeration replacements with approximately 100 cooler doors being installed.

The "free air" system continues to show energy savings. Using outside air for several months of the year, rather than refrigerated air, keeps cold rooms cool at little to no cost and has significant environmental benefits.

To date we have built and retrofitted more than thirty stores using "free air".

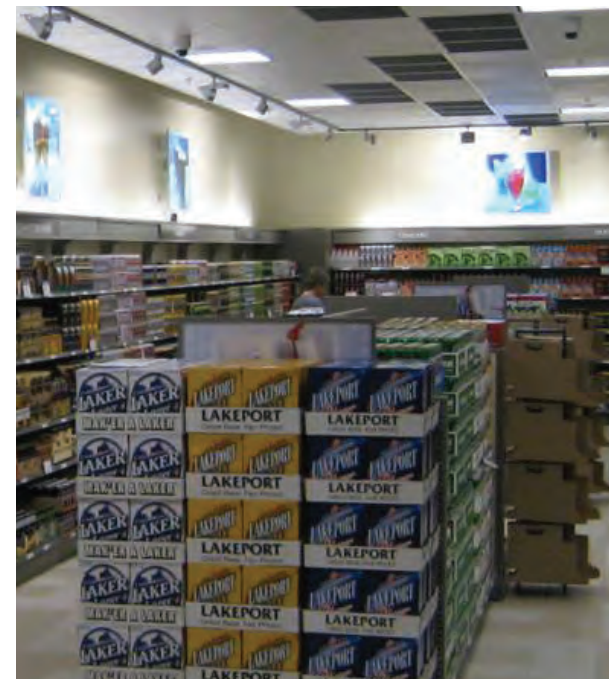
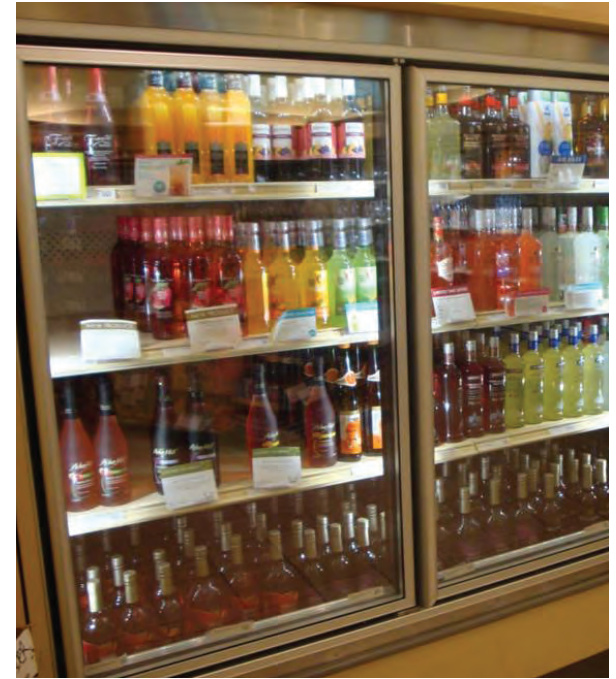
Centralized data helps set priorities for the biggest impact

By using its centralized energy utility tracking system, the LCBO has been able to compare the consumption of similar buildings to observe reductions by as much as 40 per cent in new or renovated locations.

Tracking the energy use in all 630 facilities was possible following the development of centralized billing for utilities and an energy management program that analyzes consumption patterns and helps manage energy use.

These numbers give a deeper understanding of energy consumption and costs, corporately and within a single store. One building can be compared to another to identify where greater efficiency can be achieved and to evaluate the effectiveness of projects to cut energy use.

Projects that are successful go into a compendium of best practices to be used in other stores and to assist in making capital spending decisions.



SECTION

4

Carbon Measures

MEASURING GREENHOUSE GAS EMISSIONS

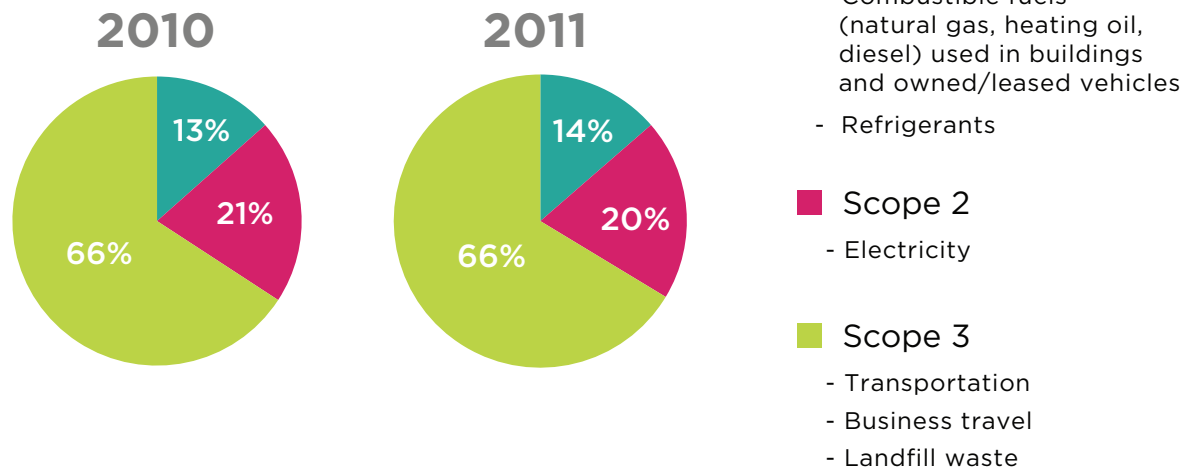
The LCBO is measuring the greenhouse gas (GHG) emissions associated with both its direct operations, and where possible, that of its suppliers and plans to issue its first GHG report in 2013-2014.

This report will help the LCBO better understand its impacts and prioritize its operational decisions to promote environmental sustainability.

Customers can also go online to learn about their individual carbon footprint when making a purchase at the LCBO.

INDIRECT - SCOPE 3 EMISSIONS REPRESENT THE LARGEST SHARE OF LCBO'S FOOTPRINT

Emissions by Scope



DID YOU KNOW?

Customers can learn about their carbon footprint when visiting an LCBO store by going online and answering questions including how they travelled to the store, whether they had a reusable bag and whether the product was recycled.

CARBON MEASURES: MEASURING GREENHOUSE GAS EMISSIONS

The LCBO is measuring greenhouse gas emissions and relating the data to day-to-day operations to help managers

understand better how to make decisions that promote environmental sustainability.

The measurement system is aligned with the international standard ISO14064-1 and will, when fully implemented, include all of LCBO's Scope 1 and Scope 2, and many Scope 3 greenhouse gas emissions.

Scope 1 emissions refer to the carbon directly emitted by sources owned or controlled by a company, such as furnaces or company vehicles. **Scope 2** are emissions from purchased electricity or heat, generated by other companies. **Scope 3** emissions include all other greenhouse gases emitted from the production of goods and services by other companies, or the end-use and disposal of the products or services a company provides.

LCBO's greenhouse gas measurement system will include and report on emissions from:

- Energy used in stores, retail service centres and offices
- Refrigeration equipment leakage
- Shipments to retail service centres and stores
- Business travel
- Transport of waste
- Landfill waste management.

The LCBO's 2009-10 fiscal year is used as the baseline period. Year-over-year data is now available and will provide the LCBO with better information in which to assess areas of improvement.

Carbon measuring programs and projects lead to a better understanding of how operations can be managed to keep greenhouse gas emissions to a minimum, help identify opportunities for greater conservation and establish key performance indicators to guide future programs and projects. Similar operations can be compared and opportunities for reducing emissions can be identified.

Calculate your alcohol carbon footprint

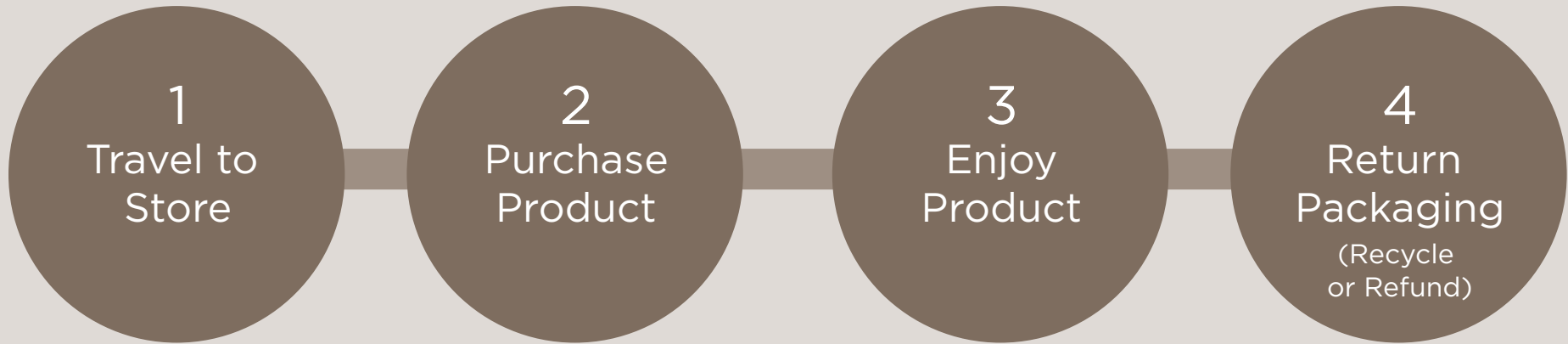
Customers can also learn about their carbon footprint when visiting an LCBO store by going online and answering questions including how they travelled to the store, whether they had a reusable bag and whether the product was recycled.

To try this fun tool visit:

www.lcbo.com/enviro



**THE LCBO CARBON CALCULATOR
ESTIMATES THE QUANTITY OF CARBON PER CUSTOMER VISIT**



1
Travel to
Store

**The total distance I
travelled to and
from store**

My travel mode

- Non-motorized
(e.g., walk or bike)
- Public transit
- Low-emission vehicle
(e.g., compact, electric
or hybrid)
- Car or taxi

My trip objective

- Single errand
- Multi-purpose trip

2
Purchase
Product

**I brought my
own bags**

**Number of units
I bought**

3
Enjoy
Product

**Keep in room
temperature**

**Keep in separate
“beverage” fridge**

- Fridge purchased
before 1997
- Fridge is ENERGY
STAR qualified
- Fridge is of
“compact” size

4
Return
Packaging
(Recycle
or Refund)

**My empty
containers are:**

- Recycled
- Put into general
garbage
- Reused for
other purpose

NOTE: Carbon values associated with specific products purchased and their place of manufacture vary across the thousands of products sold.

SECTION

5

Logistics Efficiencies

MORE ENERGY-EFFICIENT TRANSPORTATION

Less use of temperature-controlled containers and increased use of energy-efficient transportation resulted in avoiding 158,397 kg Carbon dioxide equivalent CO₂e for 2010-2011.

LOGISTICS EFFICIENCIES: MORE ENERGY-EFFICIENT TRANSPORTATION

Reducing the use of temperature control units called "gensets" or generator sets, has minimized diesel consumption again this year. For 2010-2011 there was a 10 per cent reduction in terms of temperature controlled containers requiring gensets compared to the baseline year, 2009-2010. This in effect reduced fuel consumption by 13 per cent or approximately 60,000 liters of fuel for fiscal year 2010-2011. Total GHG emissions avoided as a result was 158,397kg carbon dioxide equivalent (CO₂e).

This amount of fuel would take roughly 52 full-size, fully loaded highway trucks from Toronto to Vancouver.

Using these temperature control units less is possible by studying weather forecasts and ensuring shipments are not delayed in transit and unloaded promptly on arrival.

Products from around the world

Many of the products coming to Ontario from more than 80 countries around the world travel thousands of miles by highway, rail and ocean.

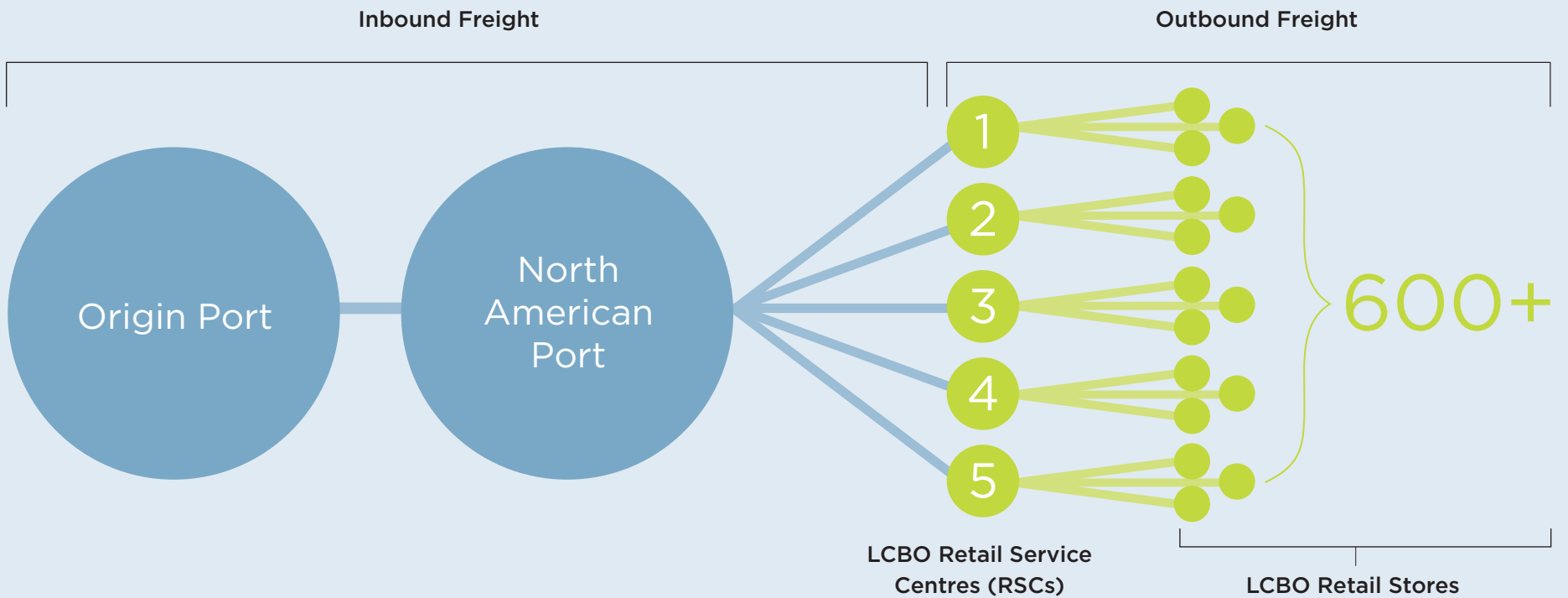
These products arrive at retail service centres in Toronto, Whitby, Ottawa, London and Thunder Bay, and are delivered to more than 600 LCBO stores across the province. Many of The Beer Stores are also supplied.

Trucks making deliveries from retail service centres to stores travel almost 11 million kilometres a year.

We are continuing to increase the use of water and rail transportation in place of highway transportation. Water transportation is the most energy-efficient, followed by rail, highway and air.

We continue to actively pursue an "H2O highway" - a barge service to Lake Ontario for overseas shipments. Logistical barriers have been identified and solutions are being reviewed. Various other multi and inter-modal transportation options are still under review including the increased use of rail transportation from Mexico and the United States, Long Combination Vehicles and Less than Truckload (LTL). Less than Truckload is a term used to describe mixed shipments of consumer goods.

LOGISTICS/QUALITY ASSURANCE FREIGHT MOVEMENT (IMPORTED PRODUCTS)



Traffic and customs

Almost 80,000 wooden shipping pallets have been removed from circulation. Many pallets conform to international standards but many suppliers use non-standardized pallets that cannot be reused. By eliminating these throw away pallets and maximizing the contents of containers, more products can be shipped using the same amount of fuel. Non-standardized containers have been reduced by 50 per cent overall.

We have also begun a paperless freight payment system which eliminates hard copy invoice submission by freight forwarders and utilizes electronic invoices instead.

LCBO's retail service centres (RSC)

LONDON RSC:

- London RSC started retrofitting its lighting fixtures in 2007 and completed the project in 2010. Approximately 1,400 fluorescent fixtures were replaced with 235 (400 Watt) metal halide fixtures. Additionally, 150 (T5 fluorescent) fixtures in the warehouse and 24 outside fixtures with mercury filled lamps were replaced with metal halide lamps. In addition to the light fixtures replacement, motion sensors were installed in all aisles in the main warehouse. Comparing 2009 baseline data to 2010 data, there has been a 21 per cent reduction in kWh usage or 132,649kg CO₂e reduction.

OTTAWA RSC:

- At our Ottawa RSC we replaced 1,086 old, obsolete and inefficient magnetic tubular T12 lamps ballasts and fixtures with 477 high efficiency T5 lighting fixtures. This is expected to have a 30 per cent reduction or save 310,000 KWH per year. The Ottawa RSC applied for and received a \$62,463 rebate from Hydro Ottawa and also earned a Crystal Award in recognition of this environmental initiative. Other initiatives included:
 - Replacing old dock doors to high-speed, temperature retaining doors, and
 - Replacing the oil fired boiler with an energy efficient natural gas one.



THUNDER BAY RSC:

- This year the Thunder Bay RSC replaced non-insulated leaky overhead doors at their loading docks with insulated doors. They also replaced the 50 year old steam boiler system with a hydronic heating system. This is estimated to decrease gas usage by 31,000 cubic meters per year.

Measuring the environmental impact

The Logistics division of the LCBO is measuring the environmental impact of its operations and identifying ways to reduce energy and fuel consumption.

Measuring will be based on the international standard ISO14064-1.

Five main areas under study are:

- Reducing energy consumption in retail service centres
- Reducing greenhouse gas emissions
- Waste reduction and disposal
- Traffic management of loads and delivery routes to save on fuel
- Using green procurement practices when evaluating and selecting contractors.

DID YOU KNOW?

The Ottawa RSC applied for and received a \$62,463 rebate from Hydro Ottawa and also earned a Crystal Award in recognition of this environmental initiative.



SECTION

6

In-store Waste Reduction

STORES REDUCE WASTE BY OVER A HALF—AND PLASTIC WASTE TO ZERO

LCBO store staff have eliminated plastic (shrink wrap) waste and through reduce, reuse and recycle principles have been able to reduce store level garbage to an average half a bag per day, from a previous high of six bags per day.

A wide range of measures has been employed to reduce waste, from reusing and recycling cardboard to collecting and recycling damaged or spoiled products (including the alcohol contents) for recycling and conversion into ethanol.

IN-STORE WASTE REDUCTION: STORES REDUCE WASTE BY OVER A HALF—AND PLASTIC WASTE TO ZERO

Across its more than 620-store network, the LCBO has found numerous opportunities to reduce the waste it generates.

All of this plastic adds up

Plastic shrink wrap is found on cardboard flats of 24 individual cans of beer. Many coolers and ciders are also shrink-wrapped four to a carton to make for a more conveyable shipping unit. As well, plastic neck rings around six-packs of beer go into the shrink wrap recycling program.

Large stores have as many as six pallet loads of beer delivered every week—enough shrink wrap for two large bundles picked up by delivery trucks returning to LCBO retail service centres.

Once returned to LCBO retail service centres, the shrink wrap is placed into a compactor and sold to companies to be put back into the recycling stream to make new shrink wrap and other plastic products.

Far fewer garbage bags

Garbage was reduced by looking closely at what was being disposed daily and examining what steps could be taken to reduce garbage consumption at the store level. Store employees have contributed to this recycling initiative by incorporating the 3Rs into their workday.

This has led to the introduction of:

- Blue boxes at all checkouts for torn paper bags and cash receipts not taken by customers
- Blue boxes in store offices for waste paper, pop cans and plastic water bottles
- Staff in some stores have established “litter-less lunches” and make sure employees take home whatever waste they bring to the store.



What's an alcohol recycling bin?

In many large LCBO stores and all warehouses, alcohol recycling bins are used to collect cans/bottles/Tetra Pak cartons/PET products that are leaking, damaged or customer returns. As well, any product left over from customer tasting events is also disposed into the alcohol recycling bin.

The bins are four-foot, square plastic containers located at over 150 (and growing) LCBO stores and warehouses throughout Ontario.

The bins are picked up every four to six weeks by a recycling company under contract with the LCBO. Once these bins are full, they are picked up and all bottles/cans/Tetra Pak cartons/PET containers are recycled and the alcohol turned into ethanol.



DID YOU KNOW?

Alcohol recycling bins are located in over 150 LCBO locations throughout Ontario. They collect products that are leaking, damaged, leftover from tastings or returned by customers. All bottles/cans/Tetra Pak cartons/PET containers collected are recycled, and the alcohol is turned into ethanol.

SECTION

7

Lightweight Containers

GLASS AND ALTERNATIVES

The LCBO has been an international leader in reducing waste in beverage alcohol containers by encouraging its suppliers to lightweight their packaging since 2004.

Initially, the LCBO's lightweight packaging strategy focused on encouraging alternative, lighter containers such as aluminum cans for beer and PET plastic bottles for distilled spirits and resulted in almost 25 million kilograms of waste diverted from the waste stream per year.

The LCBO's strategy has now expanded to encourage the lightweighting of glass bottles. In 2011, the LCBO established a 420-gram maximum weight standard for most 750 mL wine bottles.

LIGHTWEIGHT CONTAINERS: GLASS AND ALTERNATIVES

At every stage of a container's lifecycle, there are environmental consequences:

- Resource extraction: the energy, waste and pollutants associated with extracting, processing and making glass bottles from sand, plastic bottles from oil, aluminum cans from bauxite, etc.
- Manufacturing: including the energy needed to create containers from processed raw materials
- Shipping: from resource extraction, to manufacturing plant, to winery (or brewery or distillery), to warehouse, to retail outlet, and from recycling plant back to manufacturing plant—and the energy needed to move the container around
- Recycling and other waste disposal: the waste, energy and pollutants associated with diverting and processing used containers.

While some container materials may have greater impacts at the resource extraction stage, others impose greater environmental consequences in their shipping and disposal. The LCBO's strategy for reducing the environmental impacts of its containers takes into account the greatest impacts associated with product weight, while also being mindful of consumer preferences.

Lightweight glass

Notwithstanding significant progress on lightweighting through alternative container formats, glass will, for the foreseeable future, be the dominant package format, particularly for wine. The LCBO sources wine from over 80 countries around the world, with container ships, trains, trucks and planes travelling almost 265.5 million kilometres per year to bring products to our market.

The LCBO sells approximately 80 million 750 mL wine bottles every year. The weight of these bottles varies from 350 grams to over 900 grams. The average 750 mL wine bottle in the LCBO currently weighs slightly over 500 grams.

Through a review of international production availability, discussions with suppliers, research in other jurisdictions and analysis of the strength of existing bottles in market, the LCBO has determined that a reasonable maximum weight for wine bottles is 420 grams.

By encouraging other provinces to adopt this target as well, the LCBO will help make Canada a lightweight glass country.

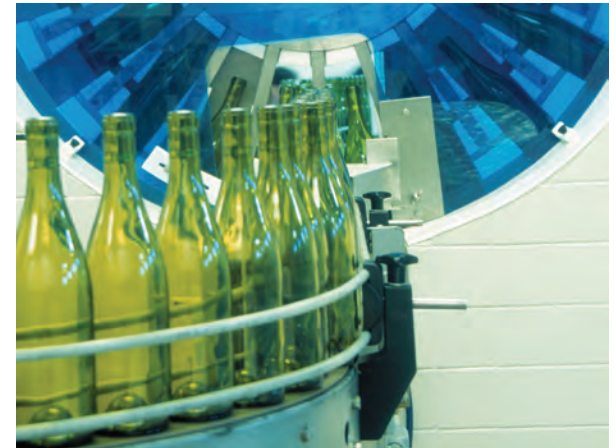


TABLE WINE BOTTLES AND MORE

The LCBO has chosen to put a primary focus on lightweighting wines that cost \$15 and under, as this represents the vast majority of wines sold and, realistically, it would be more difficult to effect change on smaller volume, super-premium products. Similarly, sparkling wines, such as Champagnes and Proseccos, are bottled under pressure and require heavier glass bottles than still or table wines. Notwithstanding these exceptions, the LCBO is working with its suppliers to find weight savings across its product portfolio, including sparkling wines, large format bottles, spirits and beer.

STANDARD ROLLOUT PLAN

The LCBO announced in June, 2011 the official date for implementation of the 420-gram standard for wines under \$15 which will commence in January, 2013.

LOCAL WINE, LOCAL GLASS

The LCBO's number-one wine region, with over \$300 million in sales a year, is Ontario, and the vast majority of these products retail under \$15. Until recently, however, there was no domestic lightweight glass production. The LCBO is working with the Ontario wine industry and **Owens-Illinois** (http://o-i.com/nth_us.aspx?id=385&mode=1) to support the availability of lightweight glass in our home market.

The environmental benefits of lightweight glass would have been compromised if Ontario suppliers had to source bottles from outside the province. Owens-Illinois has stepped up and is responding with a range of lightweight glass bottles manufactured at its glass plant in Brampton. Glass bottles sourced from this plant have the additional environmental benefit of very high recycled content, which is supported by the recycled glass supply made available by the LCBO-funded **Ontario Deposit Return Program**.

DID YOU KNOW?

Lightweight glass doesn't mean weaker bottles. LCBO studies have shown that the rate of breakage for lightweight glass wine bottles is no different from that for heavy bottles.

PERCEPTIONS OF LIGHTWEIGHT GLASS AND QUALITY

For many years, wineries have seen the competitive merits of heavyweight glass bottles. There's a clear perceived advantage when a customer sees and feels they're getting more—whether it's a perception of higher quality or as simple as the assumption that the heavy bottle may contain more wine. Historically, it's often been some of the least expensive wines that used the heaviest bottles for this reason.

A study by the UK environmental group **WRAP** (<http://www.wrap.org.uk>) explored consumer perceptions regarding glass bottle weight and wine. Given the impact that weight has on consumer behaviour,

it would be logical that many suppliers would feel disadvantaged by doing the right thing for the environment if some of their competitors still had heavy bottles. By implementing the 420-gram lightweight glass standard, the LCBO is removing the commercial competitive risk that suppliers would otherwise face by having a lighter product on shelf.

WHO'S LIGHTWEIGHT?

Here's a list (<http://www.lcbo.com/lightweightglass>) of more than 230 lightweight-bottle wines available in the LCBO (as of April 2012). Check <http://www.lcbo.com/products/index.shtml> for product availability at your local store.



Alternative containers, refillables and package sizes

The LCBO has encouraged its suppliers to explore lighter-weight packaging alternatives since 2004, including:

- Aluminum for cans (typically beer and coolers, though sometimes spirits and wines). A 500 mL aluminum can typically weighs 13.6 grams.
- PET (polyethylene terephthalate) plastic bottles (for spirits, though occasionally beer and wine as well). A 750 mL PET plastic spirits bottle typically weighs 54 grams.
- Aseptic or Tetra Pak cartons composed of paper, aluminum and plastic film (for wine). A one-litre Tetra Pak wine container typically weighs 31.4 grams.

- Plastic laminate pouches (typically for coolers or other ready-to-drink products, though some wines have also been offered in this format). A laminate pouch typically weighs less than 30 grams.

- Bag-in-box containers, composed of a plastic laminate bag inside a corrugated or boxboard box (for wine). A three-litre bag-in-box typically weighs 200 grams.

Each of these formats is fully recyclable and offers a very light alternative to glass, with attendant environmental savings associated with lower transport and disposal impacts. As noted, the processing and manufacturing of these containers also entail different environmental impacts than glass, which will affect overall net environmental impacts.

The net environmental impact of any one container will vary significantly based on the raw materials and how they were extracted and processed, the extent of recycled content in new containers, the location of manufacture and other considerations. Given this variability, the LCBO has put the greatest emphasis on lightweighting as a consistent means of reducing environmental impacts.

DID YOU KNOW?

All LCBO packaging containers are fully recyclable, from aluminum to Tetra Pak carton containers, glass and PET plastic.



Aluminum for cans



PET plastic bottles



Aseptic or Tetra Pak cartons

ALTERNATIVES AND RECYCLING

- Aluminum packaging, used extensively for beer, has the highest material value of all beverage alcohol containers and is used for a range of products, from new beer cans to automobile parts.
- PET (polyethylene terephthalate) plastic bottles are recycled into new plastics, textiles (including clothing) and other consumer goods.
- Aseptic or Tetra Pak cartons are “pulped” in a manner similar to cardboard recycling, so the component parts (paper, aluminum and plastic) can be separated for recycling. Other uses for recycling the component parts together (such as heating the aggregate material) have also been employed in some markets.
- Bag-in-box containers are separated so the cardboard or boxboard box can be recycled into other fibre products, and the plastic “bladder” is also available for recycling.

REFILLABLE CONTAINERS

The environmental benefits of refillable containers are well established. The closed-loop convenience of The Beer Store (TBS) network in Ontario provides the infrastructure to make viable a refillable beer bottle system for hundreds of millions of beer

bottles every year. While the LCBO has a smaller share of the beer market in Ontario, it supports TBS’s refillable beer system through the sale and promotion of beer in refillable containers. To learn more about TBS’s refillable beer system, see <http://www.thebeerstore.ca/tbs-environmental.html>

While Ontario has what is likely one of the largest refillable beer container systems in the world, there is very little-to-no refilling of wine or spirits containers occurring outside of the u-ferment sector. Given expenses and environmental impacts associated with shipping empty containers, refillable systems typically occur only with locally produced products. The LCBO would be interested in reviewing proposals from Ontario wine and spirits manufacturers of products offered in refillable containers.

LARGER PACK SIZES

Environmental savings can also be achieved with larger package sizes that utilize less packaging material per litre of product sold. In addition to bag-in-box products, hundreds of LCBO products come in large format sizes of one litre, 1.5 litres and higher.



SECTION

8

Organic and Biodynamic Products

MORE SELECTION,
BETTER INFORMATION

More organic, biodynamic and environmentally sustainable products are now available at the LCBO, supported by staff and consumer education and product promotions aimed at enhancing customer knowledge and awareness of these products.

ORGANIC AND BIODYNAMIC PRODUCTS: MORE SELECTION, BETTER INFORMATION

LCBO is always looking to expand the selection of quality earth-friendly products. Whether it is organic, bio-dynamic or fair trade, we are on a mission to offer premium products to our customers.

Customers can look for “shelf talker” literature in the VINTAGES sections of stores and can ask employees for help and advice. The product index section of VINTAGES’ Releases includes the organic symbol to highlight organic products. As well, online searches through LCBO’s **product-search** function guides customers to store-specific availability of the many organic and biodynamic products carried by the LCBO: <http://www.lcbo.com/lcbo-ear/jsp/ProductSearchNonVintages.jsp?language=EN>

LCBO has developed the following descriptions to help guide customers:

ORGANIC: A return to natural farming methods; no synthetic fertilizers or pesticides used.

BIODYNAMIC: Holistic approach; no synthetic fertilizers or pesticides used; harvesting/pruning to nature’s cycles.

SUSTAINABLE: Ecological balance; protects environment and workers through conservation, renewable energy and fair wages.

Through quality assurance testing, LCBO ensures that all the products it sells are authentic, safe for consumers and comply with federal government regulations.

We are currently working on developing a “green section” in select stores to feature sustainable products. Look out for this new section in 2012-2013.

Canada Organic standard

The LCBO provided comments and suggestions to the Canadian Food Inspection Agency when regulations were being drafted for the **Canada Organic standard** (<http://www.inspection.gc.ca/english/fssa/orgbio/orgbioe.shtml>), which came into effect in June 2009.

The regulations include the need for such products to be certified by an agency accredited by the Canadian Food Inspection Agency, and the LCBO is helping suppliers understand and meet these requirements. Information is posted on the **Trade Resources** section (<http://www.lcbotrade.com/index.htm>) of the LCBO website.



Domestic and international eco-producers

In addition to those suppliers profiled last year (Malivoire, Featherstone, Southbrook, Tawse, Bonterra, Familia Zuccardi, Domaine Marcel Deiss and Miguel Torres), some examples of various organic, biodynamic and sustainable domestic and international producers include the following:

DOMESTIC (ONTARIO)

- **Stratus Vineyards:** When Stratus built their winery, they used recycled materials wherever possible and incorporated environmentally responsible features, like a super-insulated roof and geothermal heating and cooling. They also chose native plants and flowers for landscaping because these can thrive without the support of chemical fertilizers or pesticides. They even considered sustainability when paving their parking lot - selecting a stone that reduced light-reflected heat. Stratus became the first fully LEED-certified winery in the world in 2005 (Leadership in Energy and Environmental Design). For more information on Stratus Vineyards, visit: www.stratuswines.com
- **Frogpond Farm:** Frogpond Farm does not use insecticides, herbicides, synthetic fungicides or chemical fertilizers. All wines

are organically grown, processed and certified by Organic Crop Producers & Processors. All grapes are hand-picked and crafted into lively, genuine wines using only gentle traditional winemaking techniques. Rainwater caught in the pond provides a habitat for a great number of species that add to the biodiversity of their family farm. Frogpond Farm is Bullfrog powered with 100 per cent green electricity. For more information on Frogpond Farm, visit: www.frogpondfarm.ca

- **Steam Whistle:** Steam Whistle uses four all natural, GMO-free ingredients (pure spring water, malted barley, hops and yeast) in their beer. They use Bullfrog Power and Canada Clean Fuels. Steam Whistle's truck fleet uses B20 Bio Fuel, containing soya fuel and recycled restaurant oil. Their new and highly efficient Brewhouse reduces waste water output by a 1/3 compared to their old Brewhouse. The same new technology also reduces the energy needed to brew by recirculating steam-heated water back into the cycle. For more information on Steam Whistle's comprehensive green initiatives, visit: www.steamwhistle.ca



INTERNATIONAL

- **Ridge Vineyards:** This Santa Cruz, California-based vineyard is committed to sustainability. They have been recognized by the United States House of Representatives and the California State Legislature for excellence in water quality improvement and environmental stewardship. They use integrated Pest Management (IPM) for all insect and disease management. An important overall goal of IPM is to reduce or eliminate pesticide use of both organic and synthetic chemicals. For more information on IPM and other good things happening at Ridge, visit: www.ridgewine.com/about/sustainable%20Practices
- **Prairie Organic Vodka:** Crafted in Benson, Minnesota by a fifth-generation family of spirit makers and a co-op of over 900 farmers. Micro-distilled exclusively from organic, #2 yellow corn grown nearby on the distillery on three family farms, the leftover corn cobs are gasified to provide energy for the stills. www.prairievodka.com
- **Maison M. Chapoutier:** “Maison M. Chapoutier has chosen to use organic and bio-dynamic farming for most of its vines (certified in 1999). This is born out of a conviction: that one should let the land live and speak. Above all else, it is about enabling the terroir (soil, climate, know-how) to express itself fully. In fact, the expression, transmutation of mineral into vegetal, can only exist with a living terroir, able to transmit life.” <http://chapoutier.com/video-the-film.htm>

DID YOU KNOW?

The product index section of VINTAGES' Releases includes the organic symbol to highlight organic products. As well, online searches through LCBO's product-search function guides customers to store-specific availability of the many organic and biodynamic products carried by the LCBO.

SECTION

9

goLOCAL

SUPPORT FOR ONTARIO PRODUCTS

Supporting the sale of Ontario wines, beers and spirits stimulates the Ontario economy and creates jobs—and makes a lot of environmental sense.

These products are shipped only short distances, consuming much less energy than products coming from around the world.



GOLOCAL: SUPPORT FOR ONTARIO PRODUCTS

It makes environmental sense and good business sense to support the sale of Ontario wines and beer. It stimulates the Ontario economy, creates jobs and has less environmental impact than shipping products many thousands of kilometres from around the world.

A combination of highway, rail and marine transportation is used for many international products. Many also require temperature control while in transit, which can take many days, sometimes weeks.

Promotions such as LCBO's goLOCAL feature Ontario wines and beers prominently, and sales continue to increase.

LCBO sales of VQA Ontario table wines were up 9 per cent in 2011-12, over the previous year, and sales of Ontario craft beers were up 45 per cent.

Sales are also supported by the following initiatives.

Ontario wines

- The best location in stores, usually at the front where customers can easily see them
- High-quality wood fixtures to enhance product displays
- Many staff are specially trained to help and advise customers
- A dedicated team to manage all Ontario Wines (LCBO and VINTAGES combined), including a Category Manager, Product Manager and a Category Administrator
- An *Ontario Superstars* promotion featuring three VQA Ontario wines (two LCBO wines and one VINTAGES selection) every month in stores, with dedicated shelf space, promotional material and profiles in the LCBO consumer magazine *FOOD & DRINK*. Featured wines often enjoy a doubling of sales.
- Monthly promotions— Astrid’s Pick (Buyer’s selection) and Local Talent at VINTAGES, the premium wines and spirits section of the LCBO, including profiles in VINTAGES’ bi-weekly releases
- A “Wines to Watch”, craft winery incubator program, in which small Ontario wineries have dedicated shelving in 60 high-volume wine stores and receive marketing and promotional support from the LCBO

- A bi-monthly “Go Local” promotion, featuring four VQA wines in a prominent location supported by Free Standing Insert (FSI) promotion
- A *Go to Market* program that enables small VQA wineries to sell in as few as a single store, with minimum investment for maximum exposure
- An annual fall promotion, where Ontario wines take centre stage in stores, along with extensive advertising and promotional activities

Ontario beers

- Store signs and displays promoting Ontario craft beers
- *Discovery Packs*, combining the products of various brewers, to showcase the range and diversity of Ontario craft beers
- Destination end aisle displays dedicated to Ontario craft beer as well as other merchandising and promotional support throughout the year
- A “home store” program to promote craft brewers in their local LCBO store
- An annual fall promotion including a promotional brochure, advertising material and online promotion and in-store displays

DID YOU KNOW?

Buying local products stimulates the Ontario economy, creates jobs and has less environmental impact than shipping products many thousands of kilometres from around the world, which often use a combination of highway, rail and marine transportation, and require temperature control while in transit for days or weeks.

SECTION
10

Natural Heritage Fund (NHF)

PRESERVING WILDLIFE HABITAT

The LCBO established the Natural Heritage Fund in 2005 to support the protection of Ontario's natural environment through the preservation of wildlife habitat. The program provides the additional benefit of supporting volunteer opportunities for employees and suppliers.

The NHF has generated over \$2 million in funding for conservation and restoration projects through the sale of reusable bags, in-store tastings and contributions from LCBO suppliers.

Bring Back the Salmon is the flagship project of the NHF, which aims to return Atlantic salmon to Lake Ontario.

NATURAL HERITAGE FUND (NHF): PRESERVING WILDLIFE HABITAT

LCBO employees have long engaged in community-based, environmental stewardship initiatives across Ontario. Whether it was organizing river clean-ups or independently raising money for habitat restoration, our employees were contributing to preserving Ontario's natural heritage. Learning of the good work employees were engaged in, the LCBO saw an opportunity to give back to local communities and the environment through the establishment of the Natural Heritage Fund (NHF), which

aimed to support employee and supplier engagement in community-based stewardship activities. Over time, the LCBO agreed to support a multi-partner project to reintroduce Atlantic salmon to Lake Ontario in partnership with the Ontario Federation of Anglers & Hunters (OFAH).

Dollars and cents

To date, the LCBO has raised over \$400,000 for the NHF, primarily through a portion of sales of reusable bags and money raised through in-store tastings. Over the years, we have raised over \$2 million with our suppliers.

DID YOU KNOW?

To date, the LCBO has raised over \$400,000 for the Natural Heritage Fund (NHF), primarily through a portion of sales of reusable bags and money raised through in-store tastings. Supplier funding brings the NHF total to over \$2 million.



Bring Back the Salmon

Bring Back the Salmon is the flagship project of the LCBO's Natural Heritage Fund. The project began in 2006, when the Ontario Federation of Anglers & Hunters (OFAH) and the Ontario Ministry of Natural Resources launched the Lake Ontario Atlantic Salmon Restoration Program.

In March, 2012, the LCBO received a *Friends of the Credit Conservation Award* for our contributions in support of the Lake Ontario Atlantic Salmon Restoration Program, increasing restoration projects and outreach efforts in the Credit River Watershed.

The overall goal of the *Bring Back the Salmon* project is to restore self-sustaining

populations of Atlantic salmon to Lake Ontario and its tributaries. To achieve a self-sustaining population, there are three main components of the project: fish production, habitat restoration, and research and assessment.

To date more than 45 habitat projects have been completed in three tributaries, including Duffins Creek, Cobourg Creek and the Credit River.

So far, over 3.4 million fish have been stocked by approximately 600 volunteers, equaling 2,500 hours of stocking. We are pleased to report that these efforts are paying off with early signs of success. More detailed information can be found on the *Bring Back the Salmon* website.

For more information, visit:

Bring Back the Salmon

<http://www.bringbackthesalmon.ca>

Ontario Federation of Anglers & Hunters

<http://www.ofah.org>

Ministry of Natural Resources

<http://www.mnr.gov.on.ca>



The future of the Natural Heritage Fund

LCBO will continue to support Bring Back the Salmon in 2012. We are aiming to assist new projects and establish new and ongoing partnerships with our suppliers. We are encouraged by the successful outcomes of the different projects we have supported to date and will continue to encourage LCBO employees to volunteer with projects that strengthen our communities and preserve our natural heritage.

Not-for-profit organizations looking for project funding are encouraged to get an application package from the LCBO. Email envirolink@lcbo.com to obtain an application package.



SECTION

11

Marketing/ Promotional Products

PAPER RECYCLING ONLY PART OF THE PICTURE

LCBO's commitment to environmental sustainability extends to its marketing programs. Every piece of promotional literature produced by the LCBO uses paper that contains at least 10 per cent, post-consumer materials; many of the brochures and newspaper inserts include 30 per cent or more post-consumer materials.

As important as recycled content is, LCBO is fully committed to other sustainability initiatives, including sourcing only North American-manufactured papers certified by the Forest Stewardship Council (FSC) and monitoring the environmental reputation of our paper suppliers in our paper supply chain.

MARKETING/PROMOTIONAL PRODUCTS: PAPER RECYCLING ONLY PART OF THE PICTURE

Using paper that contains at least 10 per cent post-consumer material is an important component of LCBO's commitment to environmental sustainability, but it is only part of the picture.

In our efforts to be environmentally responsible marketers, LCBO is very mindful of where the paper used is sourced and what impact the use of that paper has on both the environment and the organization's overall carbon footprint.

The paper mills that manufacture the bulk of the paper used by LCBO are mostly located in Wisconsin, Michigan and Minnesota. All these mills are Elemental Chlorine Free (important for water quality), Green-E Certified (for their use of renewable energy resources) and ISO 14001 certified (environmental certification).

As a minimum standard, LCBO only uses paper certified by the Forest Stewardship Council (FSC). This non-profit global organization sets high standards to ensure forestry is practiced in an environmentally and socially responsible manner. The FSC certification process monitors the full supply chain and provides chain-of-custody certificates, so the source of the fibre used in any FSC paper can be traced back to the forest.

In addition to FSC certification, many of LCBO's paper suppliers hold certifications from the Sustainable Forestry Initiative (SFI) and the Programme for the Endorsement of Forest Certification (PEFC). These important credentials ensure that the paper used in LCBO marketing programs are secured in a manner that is environmentally responsible and, more importantly, that is sustainable.

DID YOU KNOW?

The bulk of the paper used by LCBO for marketing materials is manufactured by mills that are Elemental Chlorine Free (important for water quality), Green-E Certified (for their use of renewable energy resources) and ISO 14001 certified (environmental certification). As well, LCBO only uses paper certified by the Forest Stewardship Council (FSC).

In addition to sustainable forestry practices, all the mills that supply LCBO paper have advanced environmental sustainability practices, including responsible water treatment and management, renewable energy, certified green energy sources and waste reduction processes.

Current suppliers of paper for LCBO marketing programs include: NewPage Corporation, Sappi Fine Paper North America and Appleton Coated Papers Inc.

LCBO's marketing department is continually evaluating its programs and paper choices to ensure the organization has the most appropriate paper stock for marketing materials.

All materials produced by the LCBO are recyclable in municipal Blue Box programs across the province, which are funded in part by LCBO support to Stewardship Ontario (see also information in this report on **Ontario Deposit Return Program (ODRP): More than one billion containers recycled—and counting**).

For additional information, visit:

Forest Stewardship Council (FSC) Canada

<http://www.fsccanada.org>

Sustainable Forestry Initiative (SFI)

<http://www.sfiprogram.org>

Programme for the Endorsement of Forest Certification (PEFC)

<http://www.pefc.org>

NewPage Corporation

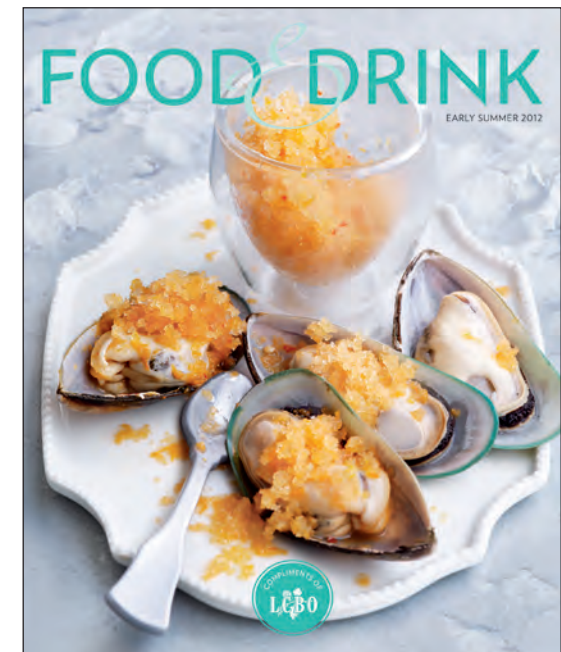
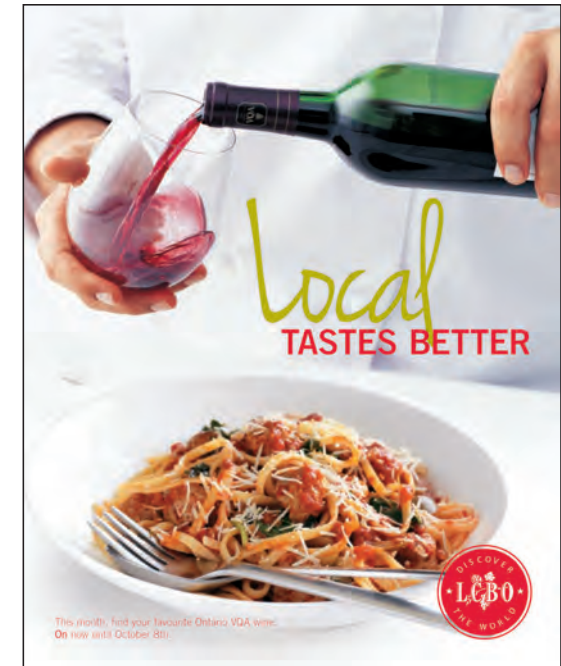
<http://www.newpagecorp.com>

Sappi Fine Paper North America

<http://www.na.sappi.com>

Appleton Coated Papers Inc.

<http://www.appletoncoated.com/greenzone>



SECTION
12

Other Initiatives

The LCBO continues to pursue a wide range of initiatives, large and small, to reduce its environmental footprint.

OTHER INITIATIVES:

In addition to the projects and practices already noted in this report, the LCBO has numerous other initiatives aimed at reducing our environmental footprint, including:

- Paper Reduction:** Paper used in printers, photocopiers and fax machines was reduced by 25 per cent, and the energy powering them cut by 58 per cent. The amount of paper saved is an estimated 3.3 million sheets each year, representing approximately 400 trees.
- Plastic Bags:** In 2008, the LCBO discontinued plastic bags across its store network, resulting in the annual elimination of over 80 million plastic bags. LCBO offers reusable bags for purchase or customers can bring their own reusable bags.
- Paper Bags:** The LCBO continues to offer its customers the convenience of paper bags which are made up of 40 per cent recycled content and are recyclable via the Ontario blue box program.
- Environmentally Friendly Cleaners:** LCBO stores have been switching to environmentally friendly cleaning products. According to managers and staff, the environmentally friendly, all-purpose cleaning products work just as well as conventional products and last longer than some products they were using without harming the environment.
- Electronics/Battery/Data tape recycling:** The LCBO recycles all old computer equipment from stores/offices/warehouses. The e-waste is collected, scrubbed and then sent to a facility for recycling. As well, data tapes and batteries are also recycled.
- Environmental Employee Engagement:** In 2011, LCBO initiated a committee to engage employees in sustainability. To date the committee has published five newsletters, organized the participation of LCBO in World Wildlife Fund Canada's Sweater Day, participated in the Great Canadian Shoreline Clean-up, launched LCBO's first sustainability report and is working to engage and inspire our employees in sustainability at work and at home.
- This Report:** The LCBO's Sustainability Report is available almost exclusively online although a small number of paper copies are produced for our staff who don't have regular access to a computer at work.

DID YOU KNOW?

In 2008, the LCBO discontinued plastic bags across its store network, resulting in the annual elimination of over 80 million plastic bags.



FOR MORE INFORMATION

For more information, please contact helloLCBO,
LCBO's bilingual Customer Service:

By phone

Toll-free: 1-800-ONT-LCBO (668-5226)

In Toronto: 416 365-5900

TTY (for the deaf and hard of hearing): 416 864-6898 or 1-800-361-3291

Online

www.lcbo.com/enviro