Sustainable Transportation and Logistics in the Consumer Packaged Goods Industry
INTRODUCTION

Transportation and Logistics represent opportunities to further sustainability efforts within the Consumer Packaged Goods (CPG) industry. The transportation, warehousing and logistics associated with moving products from nature to factory to store shelf affects our planet. We need to understand these impacts and find workable solutions to minimize these effects. While this topic is neither high profile nor something the consumer market is concerned about, some leading companies are exploring a variety of initiatives to advance their sustainability agendas. These opportunities range from collaborative logistics and retail-ready packaging to the more recent and interesting topic of ecommerce.

One major opportunity lies in the basic recognition of how sustainability is actually defined. Often, projects are initiated solely from a cost-reduction or efficiency standpoint, and while there may be sustainable benefits, until recently, they have not typically been acknowledged as such.

Supply chains have continued to increase in complexity over the past half century for a variety of reasons; one major reason is the intrinsic relation to economic development and globalization. As transport and communication networks improve, companies have been able to extend their logistical reach to source better, cheaper and more diverse supplies and sell their products to more distant markets. At the same time, companies look for economies of scale and ways to eliminate costs, so centralization occurs, hence transportation and distribution have increased without much thought given to rising greenhouse gas emissions and other environmental impacts from transport.

To aid in the recognition and adoption of sustainable transportation and logistics, the third annual Leaders in Sustainable Thinking round table was convened by Kruger Products L.P. and Canadian Grocer magazine in Toronto, Ontario on May 27, 2014. The purpose of this event was to bring together leading companies that have embarked on projects in this area and openly discuss challenges and opportunities to collaborate and find more sustainable solutions. The roundtable was moderated by Howard Green, the former anchor of Headline with Howard Green, the flagship interview program on Business News Network (BNN) in Canada. Participants included:

Allen, Jeff – Senior Director Logistics & Distribution, Metro Ontario
Buna, Michael – Senior Manager, Strategic Transportation Management, Walmart Canada
Currie, Wayne – General Manager of Supply Chain & e-Commerce, Overwaitea
Gerlsbeck, Rob, Editor, Canadian Grocer magazine
Mastroieni Dave – Vice President, Distribution, Operation and Transportation, Longos
O’Hara, John – Corporate Vice President, Logistics, Kruger Products
Scali, Frank – Director of Supply Chain & Customer Service, Nestlé
Smyth, Stephen – Senior Director, Logistics, Walmart Canada
For the purpose of this white paper, information and research is focused on the CPG industry and relevant consumer-facing retailers. The discussion is summarized in the following seven sections:

1.0 Logistics and sustainability
2.0 Lack of recognition
3.0 The role of the government
4.0 Does the consumer care?
5.0 Barriers
6.0 Solutions
7.0 Conclusions

To support the roundtable discussion, Rogers Media conducted an internet-based survey in January-February, 2014 using senior professionals in logistics and transportation roles at CPG and retailers as the respondent pool. Results cited throughout this white paper are based on 53 qualified participants and referenced as Rogers Connect Market Research 2014.
1.0 LOGISTICS AND SUSTAINABILITY

Logistics is a core part of basic operations and it includes a variety of activities from freight transport, storage and inventory management to materials handling and all the related information processing, data collection and measurement of these activities. Historically, the main objective of logistics has been to coordinate these elements in the most effective way to meet customer demands and minimize monetary costs.

In many cases, reducing costs also results in reducing different aspects of environmental impact. More recently, ‘cost’ has started to evolve its meaning to incorporate other factors – social and environmental. However, the consideration of achieving multiple objectives is more difficult because often these objectives are in conflict and determining a single performance metric that adequately evaluates them is challenging.

Some companies are realizing that under the umbrella of logistics and transportation lie a host of opportunities for sustainable changes. According to recent research of professionals in Logistics, Transportation and Supply Chain roles in Canada, the most common sustainability practices used within their departments include technological (e.g. load optimization and energy consumption) and vehicular (route optimization, hybrid vehicles and reduction of idling vehicles)\(^1\).

However, the round table uncovered other areas in which companies are investigating ways to incorporate sustainability into their logistics:
- Reconfiguring product packaging/box design
- Fuel types
- New types of trucks
- Driver training
- Alternative modes of transportation
- Collaboration with customers and/or competitors

Integrating any of these initiatives into a company’s operations is a good start. For many companies, using smaller initiatives to demonstrate value is the only way to gain approval for larger projects that may require more investment.

1.1 The role of technology

As the complexity of supply chains continues to increase, particularly for global companies, the use of software programs to systemize logistics are becoming more and more common. While this may result in environmental benefits, most programs do not yet include the impact on the environment in their assessments when determining the most optimal logistics solutions.

\(^1\) Rogers Connect Market Research 2014
Yet, there are some companies that use programs that do take sustainability into account. For instance, Nestle’s international program takes every detail into consideration for the distribution of every product, including the analysis of ecological impacts. This process has uncovered opportunities for sustainable changes throughout the supply chain. Recently, the Logistics team has earned a say in new product development, so the team can now influence factors such as stackability and cube optimization, thereby improving the sustainability of products and the company overall. This new approach certainly came with challenges because marketing and branding teams may not always appreciate or agree with the goals of the logistics team.

Similarly, infrastructure modeling, a strategic decision process that influences tactical and operational level decisions for the long-term efficient operation of a network, can aid companies in determining the optimum number, capacity, location and allocation of facilities (e.g. warehouses, distribution centres) to ensure efficient commodity flows from industry to the market. Unfortunately, research reveals that little attention is paid to infrastructure modeling that incorporates green logistics. An example of such a program is ProcessModel 2000®, which demonstrates the consequences of ignoring resource preservation and recycling activities as part of a company’s network design.²

If environmental assessment is incorporated as part of infrastructure modeling, the possibility of achieving both economic and environmental savings is far greater. Logistics designs should include industry specific environmental assessments to prevent pollution and help preserve the environment.

1.2 Retail-ready packaging

Retail-ready packaging, sometimes referred to as shelf-ready or display-ready packaging, gained popularity in the CPG industry several years ago, but the concept has since fizzled in North America. But, there is value in investigating retail-ready packaging opportunities because not only does it reduce waste sent to landfills and improve the efficiency of transporting products to retailers, but it also reduces required storage space and labour dedicated to restocking or ‘facing up’ products on store shelves.

The notion was first introduced in the U.K. about a decade ago and started making its way into Canada with Walmart and Loblaw leading the trend. To mitigate one major challenge experienced in the U.K., the Food and Consumer Products of Canada (FCPC) and the former Canadian Council of Grocery Distributors (CCGC) collaborated to develop industry-wide standards for retail-ready packaging in Canada, such as 22-inch shelf depths for stores to stock cases two deep.³

But there are other challenges, including manufacturers bearing the burden of package re-design, American retailers not demanding it, and the lack of sustainable evidence for low-volume categories.

Campbell Soup Company has been exploring different retail-ready packaging opportunities for a number of years. A recent example can be found here [http://www.behance.net/gallery/Campbells-retail-ready-packaging-and-pallet/8815165](http://www.behance.net/gallery/Campbells-retail-ready-packaging-and-pallet/8815165).

European retailer, Aldi, was one of the earliest drivers of retail-ready packaging. It has realized cost efficiencies, improved productivity and contributed to its sustainability goals.

Walmart believes that there is value in retail-ready packaging, even for manufacturers. If companies can get the packaging right, it can improve shopability and, ultimately, result in higher sales. For instance, Walmart’s U.K. subsidiary, Asda, introduced retail-ready packaging in the frozen pizza category a few years ago. This resulted in a change from the pizza boxes laying flat in the freezer to standing up in the new packaging so shoppers could actually see the front of the boxes. Sales increased after this change.

### 1.3 Online retail / ecommerce

Online retail has been popular in Europe for several years. According to IGD ([www.igd.com](http://www.igd.com)) research, online grocery sales in the U.K. will double between 2013 and 2018, reaching £8.1 billion ($13.69 billion U.S.).

In France, one in five shoppers report having used click-and-collect services from grocery chains, including Carrefour, Casino and Leclerc. In fact, Leclerc has 325 pickup locations in France and reported a 68% increase in click-and-collect sales in the past year, 3/4 of which are likely gains at the expense of other retailers.

Similarly, Asda introduced this option at select stores; and French grocery chain, Groupe Auchan, pioneered the drive-through pickup concept in 2000. Between Auchan, Leclerc and Carrefour, there are 1,000 drive-through grocery locations across the country.

U.K. retailer Tesco launched curbside pickups for a small charge. According to Planet Retail’s recent report, *UK Click & Collect: retail fad or future of the high street?* The proportion of people using the service in the country will double to 76% by 2017. In the U.S. and Germany, 13% and 5%, respectively, use click-and-collect. However, the industry still has work to do to satisfy this growing consumer demand. Only 14% of the U.K.’s top 50 retailers offer more than one collection option.

Other options include train and subway stations, lockers, schools, and third-party stores. Recently, some retailers, including Walmart and Tesco, have tested mobile shops at subway stops and other convenient locations to offer efficiency to the online purchasing model for consumers. This also contributes to sustainability because consumers are already travelling along these routes, so while it provides convenience in a busy life, they also are not wasting emissions on driving to and from a grocery store to pick up their items.

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It seems that every year for the past several, North America has hit new records for people shopping online. While this might be true for the apparel and beauty categories, the same has not held true for household grocery items, until recently.

There are obvious sustainability implications, such as the transportation of products to consumers, but as this purchasing option grows in popularity in other parts of the world, Canadian companies will also have to figure out ways to make it work so as not to lose shoppers. A major challenge to consider is efficiently moving products from manufacturer to retailer to consumer.

Longo’s Grocery Gateway has been around for more than a decade but, with Walmart beginning to sell food online and the impending threat of Amazon Inc. moving its delivery of fresh produce services into Canada, retailers are anxiously working to find their own methods to offer consumers such options to maintain shoppers. Recently, Grocery Gateway improved its bottom line by shifting distribution to one site, rather than having staff pick and pack groceries from stores after they closed, which resulted in extra labour costs and sometimes limited food options. This centralized system has reduced labour and out-of-stock items to meet the growing demand for this service. The company expects sales to rise by 10% in 2014.7

Amazon boldly launched an online grocery store in Canada in 2013. It offers 15,000 dry food items, such as packaged beverages, breakfast foods, pantry supplies and snacks, from major brands, including Pepsi, Kellogg, Nestle and Campbell’s Soup, as well as baby food.

In 2013, Walmart began selling grocery items to Canadian consumers online. Deliveries are generally free. It is currently testing same-day shipping in Toronto, Ontario, with Canada Post. In the U.S., online sales make up 2.5 to 3% (less than $10 billion), but it has grown each year since the concept was first introduced.

Manufacturers are re-evaluating the packaging of their products to make some more suitable for online retail. Reducing the bulk and excess packaging will have important shipping implications.

In 2014, Loblaw Companies announced plans to introduce click-and-collect grocery pickup whereby shoppers purchase groceries online and pick their orders up at a store. After investigation, the company believes this is a more profitable way for grocers to sell food online as compared to delivering door-to-door service, particularly in a country where population is as spread out as Canada.

1.4 Industry collaboration

Whether they label it as sustainability or not, companies are certainly working on more efficient logistics, but taking these initiatives further and improving results will only come with collaboration among manufacturers and retailers. The biggest challenge with collaboration is safeguarding corporate information, which becomes an even bigger challenge when private companies are involved.

However, as two leading beer companies have proven, the right collaboration will achieve far greater results. Molson Coors and Labatt Breweries began coordinating their deliveries in Western Canada to help offset the ever-increasing cost of doing business. But the two companies also found other benefits as the joint program unrolled. From improved customer satisfaction to increased efficiencies, the two companies are enjoying the benefits of this groundbreaking relationship and have created a model that many other categories should be trying to replicate.

In a similar fashion, collaborative logistics can pragmatically support sustainability goals through creating efficiencies, which will also result in reduced costs and a more streamlined supply chain. It will likely also reduce required storage space. Collaborative logistics entails the more efficient moving of products from where they are sourced and manufactured to where they are sold. While the logistics and transportation community is familiar with this process, there is little discussion of it within any other area of business and a relatively low understanding of how it can positively impact sustainable operations and manufacturer-retailer relationships.

Embedded within this topic is the consideration of what type of transportation is used – trucks, hybrid vehicles, rail, ships, planes, etc. There are different sustainability and financial implications associated with each mode of transportation, and these implications will differ for every company because of how its operations are structured.

The benefits are more apparent for retailers because of the increased efficiency of receiving products from a multitude of manufacturers and distributors, however, the benefits to manufacturers are typically not as obvious. In order to encourage more collaborative logistics, retailers and manufacturers will have to find a way to share the benefits for it to be successful.
2.0 LACK OF RECOGNITION

A major hurdle for companies to overcome in the integration of sustainable transportation and logistics is the basic recognition of what this actually encompasses. While most CPG companies and retailers have dedicated sustainability departments or professionals, many have not broadened this reach to others within the company, unless it is part of a specific project. Several of the participants of the 2014 round table even remarked that they were surprised at the invitation to participate in a sustainability discussion, citing that they are not the lead sustainability person at their company. Upon further discourse, they quickly realized how their roles were in fact important to achieving corporate sustainability objectives, and became very engaged with the discussion.

Part of any company’s objectives should be to ensure employees and departments across the company incorporate sustainability into their day-to-day decisions. In order to truly reap the benefits of a sustainability strategy, sustainability practices should not be restricted to the sustainability department, but integrated throughout the company as a whole. Each employee and department needs an understanding of how that role or department can help the company reach sustainability goals. This needs to be encouraged from the top-down so that employees recognize a company’s dedication to sustainability. Incorporating sustainability into performance evaluation and measurement is an important way to demonstrate how serious a company is about making sustainable progress. With this approach, over time, sustainability will become a normal part of doing business for all levels of employees, no matter their departments.

Further, many companies undervalue the sustainable opportunities within the logistics and transport areas of their operations. Monetary savings from production, procurement, inventory management, warehousing and sales are typically given priority over logistics or transport. For instance, inventory savings from just-in-time replenishment or reductions in handling costs accruing from the use of roll-cages may exceed the additional cost of running a truck only part-loaded, without consideration of the environment that is. Many companies even justify small deliveries to important customers in the hopes that it secures long-term relationships. Yet, if vehicle capacity was planned and evaluated on a more consistent basis, and had more weight within a company, it is possible to identify ways to satisfy customer demand while also maintaining sustainable costs and reducing environmental impact.  

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3.0 THE ROLE OF THE GOVERNMENT

Globally, the movement of freight accounts for roughly one-third of all consumed energy by transport. Transport as a whole is sharply increasing its output of CO$_2$e. Within the transport sector, freight tonne-km are expected to grow at 2.5% per annum between 2000 and 2030 by comparison with a 1.6% annual increase in passenger-kms. This increase in freight traffic is partially a function of the expansion of production and consumption, but it is also attributable to the extension of the average distance that each unit of freight is moving.

To help improve the CPG industry’s impact on the environment, governments can certainly play a role. There are four broad ways that government can influence this area:

- Incentives
- Emissions trading
- Advisory programs
- Infrastructure support

3.1 Incentives

Implementing road taxes can help shift the industry to rely more heavily on rail and water transportation as well as improve cube optimization, increase the use of low carbon emitting vehicles and the scheduling of product deliveries to off peak hours. However, other factors must also be considered, such as offsetting the increased cost of taxation to the consumer or dealing with community relationships if deliveries occur during off peak hours, such as the evening, overnight or early mornings. Within this approach, the social cost is also something companies need to consider in addition to the monetary and environmental costs.

Similarly, incentivizing companies to make sustainable adjustments through grant programs would help improve the rate of CPG companies implementing sustainable solutions to their logistics and transport operations.

3.2 Emissions trading

If transportation of goods was part of an established carbon trading system, companies would be incentivized to reduce emissions or else pay for offset credits. However, in countries where such programs do not exist, it would be difficult to establish such a program for the CPG industry specifically, and could deter some companies from operating within those jurisdictions.

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3.3 Advisory programs

Advisory programs and working groups could be effective, if solutions that are actually workable are developed. European countries are ahead of other parts of the world in this area. A recent evaluation of the UK government’s Freight Best Practice Programme (www.freightbestpractice.org.uk), which provides guidance to manage and operate freight transport systems more efficiently in order to cut fuel consumption and resulting CO₂ emissions, concluded that over a four-year period, it helped road freight operators reduce CO₂ emissions by 65,000 tonnes and saved £83 million in vehicle operating costs.¹¹ Similar to this, the Dutch government runs a Transport Avoidance Project that advises companies on how to reduce their demands on freight transport and the European Commission’s Marco Polo II programme contains a scheme that aims to integrate transport into production logistics to avoid a large percentage of freight transport by road.

In Canada, in contrast, the Freight Integration and Motor Carrier Policy is responsible for monitoring and providing policy advice on the state of intermodal transportation developments and issues; the economic performance of Canada’s motor carrier industry (truck and bus); and the understanding of domestic logistical flows and the identification of infrastructure needs on strategic gateways and trade corridors. While this Branch of Transport Canada works in collaboration with provincial/territorial departments of transportation and other federal departments, the Rail Policy runs independently. This policy is responsible for monitoring Canada’s rail industry to ensure it meets the varied requirements of the Canadian economy and Canadian shippers. A joint group or at least frequent communication could result in more multi-modal solutions with both financial and sustainable benefits.

3.4 Infrastructure programs

The government should work with the CPG industry to understand some of its challenges in implementing what could be more sustainable logistical solutions so that adjustments to infrastructure are identified. Simply expanding the network and terminal capacity of certain types of transport modes would improve access and facilities for intermodal transfer and companies would take advantage of these opportunities.

Trucks account for at least two-thirds of the total energy consumed by freight transport, so fuel efficiency should be a top priority for the government and industry. Major improvements in fuel efficiency were made during the 1970s and 80s, but since the 1990s that rate has leveled off. The only government to introduce a fuel economy standard for new trucks is Japan, which, through its ‘top runner’ concept, aims to make the best-in-class performance the average by a target date. As it relates to trucks, the average fuel efficiency should be improved from 6.3 km/litre in 2002 to 7.09 km/litre in 2015, which would result in CO₂ emissions declining from 415 to 370 grams of CO₂ per vehicle km.¹²

Not only should fuel efficiency be considered, but so, too, should the diversion from truck to other modes of transportation. Companies can certainly achieve a level of results from simple internal changes. Kruger Products L.P. continues to focus on reducing its reliance on trucks for

deliveries of its tissue products. In 2009, the year before the company launched its Sustainability 2015 initiative, trucks accounted for 97% of deliveries, while in 2013, this figure had dropped to 89.5%. When big companies make changes, the results are also sizable.
4.0 DOES THE CONSUMER CARE?

Companies have chosen to address several areas of sustainability, partially because of the cost savings and partially because of the anticipated influence it was suppose to have on consumers. However, as most companies and brands have found, the consumer interest is not as high as expected, which is especially true for more complex issues, such as sustainable transportation and logistics.

During the round table, participants agreed that as sustainability became more popular, companies assumed that consumers would drive the sustainability agenda and guide companies in the directions they wanted to go. This has not been the case, however. Companies have realized that sustainability is overwhelming for consumers and, for a variety of reasons, it has not risen to prominence in decision making. While many consumers may report that they consider sustainability when purchasing products, in actuality very few actually do.

For the most part, it is up to industry to drive sustainability and provide products that are sustainable according to all three pillars – economic, environment and society. Consumers want to be able to trust that companies are offering good, sustainable choices so that they don’t have to do the guesswork themselves.

Where consumers can actually impact sustainability in the CPG industry is through cost. Consumers do not want to pay ever-increasing prices for the brands and products they enjoy, so in an effort to offset the increasing costs of doing business, companies are looking for ways to be more efficient, reduce complexities and streamline operations. Many of these decisions will indirectly impact sustainability as well, so consumers will inadvertently be influencing corporate sustainability. While this may not be the ideal situation, in that consumers are not truly engaged in sustainability, it can make a difference, regardless.

The recent focus on finding ways to make eCommerce a part of grocery retail is proof in point that consumers are influencing decisions. eCommerce, while not born out of the sustainability movement, can have its sustainable benefits, while also satisfying consumer demand.
5.0 BARRIERS

While there is no denying many of the benefits of sustainable opportunities with logistics and transportation, it has not become a focal point within many CPG companies for a variety of reasons, including:

**Cost and investment** – many companies have strict pay-back periods for capital investment projects, thereby making projects related directly to sustainability more challenging to gain consent. Understanding the financial, environmental and social benefits of a project will better position the project for approval.

**Shared costs** – some sustainable initiatives can benefit both retailers and manufacturers, but only one party incurs the cost. Such is the case with retail-ready packaging. The manufacturer bears the cost of product re-design, yet both the retailer and manufacturer benefit from sustainable impacts.

**Urban infrastructure** – with the continued growth of Canadian and American cities, many cities are finding it difficult to keep up with proper infrastructure updates, thereby making grocery deliveries more challenging. From narrower streets to residential noise bylaws and complaints, manufacturers are finding more and more challenges in delivering products to retailers.

**Uncoordinated jurisdiction regulations** – the lack of consistency from one jurisdiction to the next makes coordinating multi-stop deliveries and backloading more challenging, making the effort to collaborate and find sustainable solutions seem to be more trouble than it’s worth.

**Unequal benefits** – collaboration takes a lot of work from all parties involved, but if one party does not perceive the same benefits as others, projects can quickly fold before they have a chance to come to fruition. Identifying these gaps and working through them to share benefits is key to moving past such roadblocks.

**True commitment to sustainability** – if a given company, retailer or manufacturer, is not committed to finding sustainable solutions across its business, more complex projects, such as sustainable opportunities for logistics and transportation, will be much more difficult to gain approval and funding.

**Category differences** – the CPG industry is varied, so each opportunity may not be possible with every category. For instance, while generally moving away from truck transport to rail transport has environmental benefits it is not appropriate with every category of product because routes are not as direct, therefore typically take longer.

**Mother Nature** – North America experiences the full range of weather conditions, so companies have to be prepared. Poor conditions impact delivery timing and customer service levels. During bad weather, such as the particularly harsh and long winter of 2014, many companies opt to put more trucks on the road to make sure deliveries are on time, rather than relying on rail because of the potential for backlog and slower service.

**Perceived pre-competitiveness** – companies are typically reluctant to share information, especially if they believe it is proprietary. However, as this round table uncovered, many companies are actually working on similar internal initiatives that if cross-collaboration were to occur, benefits would be far greater. In Western Canada, Molson and Labatt – leading competitors – have coordinated their beer deliveries using joint trucks to decrease costs and improve efficiencies.
6.0 SOLUTIONS

While logistics and transportation is a complex part of the CPG industry, there are solutions that companies can integrate into their operations. Some companies have invested in this area and are reaping the benefits, however, more companies need to also be invested in this area to see more profound results.

Streamlining the supply chain – by evaluating their supply chains, many companies will identify opportunities to bypass certain steps and deliver goods to consumers more efficiently. The key is to bypass steps that benefit economic, environmental and social factors.

Technology and efficiency – simply implementing the appropriate software program can optimize factors along the supply chain, including route and load optimization to find greater efficiencies and ultimately result in cost and environmental savings.

Shifting transportation modes – reducing the reliance on high carbon-emitting transport modes, such as air and road, to those with much lower carbon emissions, such as rail and water, can help reduce a company and overall industry’s CO2 emissions. While this is not always applicable to companies operating in smaller regions, it certainly applies to companies with far reaching supply chains and markets.

Improved collaborative back-loading – load matching agencies, online freight procurement, factory-gate pricing or other logistical initiatives can help reduce CO2 emissions and make distribution far more sustainable. The challenge will lie in working with other companies and sharing information.

Encourage transport-efficient order cycles – through working with customers to adhere to an ordering and delivery timetable that is more efficient from a cost and environmental standpoint, companies can achieve greater environmental savings.

Transition to larger vehicles – in some jurisdictions, larger transport vehicles are permitted and should be utilized to reduce the total number of trucks on roads. Longer, heavier vehicles offer significant reductions in CO2 emissions per tonne.

Improved inter-company collaboration – companies will need to collaborate both vertically and horizontally across throughout the supply chain in order to experience the full range of benefits possible through sustainable logistics.

Better vehicle maintenance and design – this would result in improved fuel savings. Improvements to engine and exhaust systems can also result in fuel efficiency gains.

Establish driver performance metrics – since driving style is the single greatest influence on fuel efficiency, companies have the opportunity to mitigate CO2 emissions through training programs, such as the UK’s Safe and Fuel Efficient Driving (SAFED) programme, which achieved a fuel efficiency improvement of 10% with more than 1,600 trained truck drivers.13

Eliminate pre-competitive thinking – companies are fearful of sharing proprietary information and losing market share. However, if leading competitors, Molson and Labatt, can find a way to coordinate beer deliveries, the same can occur in other CPG categories. Similar to outsourcing IT and manufacturing, companies need to decide if logistics is a core competency or a difference-maker. If not, they should be open to trying to reduce their impact on the planet and production and logistics.

Identify non-traditional partnerships – this will help retailers better integrate click-and-collect options for shoppers. It could also result in non-traditional business opportunities for retailers and manufacturers.
7.0 CONCLUSIONS

There are numerous ways to integrate sustainability into the logistics and transportation aspects of the CPG industry. Implementing even a few of these will result in substantial reductions in CO₂ emissions. Even simple tactics, such as better driver training and improving load optimization can make a difference.

However, only focusing on simple internal projects will not allow the CPG industry to reap the full benefits of sustainable transportation and logistics. Breaking the barriers and developing cross-company programs will result in more profound environmental savings, and perhaps cost savings, too.

Many companies have successfully incorporated sustainable transportation and logistics efficiency programs into their operations. Proctor and Gamble partnered with a third-party supply chain solution provider to develop a customized load planning software program for its pallet and parcel business. This program has improved truck utilization, reduced manpower in distribution centre planning, automatically created optimized truck loads, automated shuttling plan, and optimized stacking rules. Within one year, the project was running smoothly and achieving anticipated results. They are now considering how to expand this to other areas of their business.¹⁴

Similarly, to help achieve its goal to reduce truck transportation by 20% per unit of production by 2020, it reinvented a distribution centre in Colón, Panama, collapsing smaller product categories into common shipments and combining inventories of two or more countries. This achieved 40% shorter lead times and reduced inventory by 11%, but it also resulted in 580 fewer containers in transit, thereby decreasing shipping by five million km and CO₂ by 5,906 MT. It is also in the process of converting 20% of its for-hire truckloads to natural gas, which will reduce costs and GHG emissions by 5,000 MT/year. Through its annual Supplier Sustainability Scorecard, it has been able to act on ideas offered by suppliers to improve efficiencies – costs and sustainability.

Through Sustainability 2015, Kruger Products is working to increase its cube optimization by 15% (380m³) by the end of 2015. Since 2009, when the benchmark was set, the company has improved cube optimization by 8.8% (221m³), which is equivalent to eliminating more than 6,000 truck shipments each year. The Kruger Products 2012-2013 Sustainability Report is available at www.sustainability2015.ca.

Unilever is working towards improving CO₂ emissions from its logistics network by 40% by reducing truck mileage, using lower emission vehicles, employing alternative transport such as rail or ship and improving the energy efficiency of warehouses. To date, Unilever has improved CO₂ efficiency by 18% since 2010.¹⁵

Through the Business for Social Responsibility (BSR), Coke, Nike, Shell, Suncor, UPS, the Department of Defense and Walmart formed a working group in 2012 called the Future of Fuels. The group helps companies understand the sustainability impacts of their transportation and fuel systems. In 2014, it released a guide outlining strategies for companies to accelerate the transition to climate-friendly fuels while improving sustainability impacts of all fuels. It helps fleet operators and their value chain partners develop practical and impactful strategies to accelerate the transition and advance the dialogue and understanding of shared challenges.16

Through the Walmart Sustainable Packaging Global Initiative, Walmart challenged its 60,000 worldwide suppliers on their ability to re-develop packaging and conserve natural resources. This is projected to reduce overall packaging by 5%.

While there are certainly several examples of companies making changes throughout their logistics and transportations, the next step is collaborating with other companies, whether in similar industries, like Molson and Labatt, or with the government, like the Future of Fuels working group, or with totally new categories, like subway stops for click-and-collect pick up locations. It is encouraging that there are some collaborative initiatives underway, however, this needs to become the norm, not the exception.
