NIAGARA AND THE LOW CARBON ECONOMY

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Discussion Paper

This report is intended to serve as an introduction to the risks, challenges and opportunities facing the Niagara business community as the globe transitions to a low carbon economy. Walker Industries, Coventry Connections and the Fallsview Casino are excellent examples of organizations that have begun to realize the opportunities associated with carbon reduction. To accompany these case studies, potential next steps for organizations to adopt sustainable, low carbon practices are discussed.

Small and medium sized businesses play a fundamental role in the Niagara region. They provide the main source of jobs and services, as well as act as the main economic drivers of the region's prosperity. With the recent economic downturn, many small and medium sized businesses are missing key opportunities to reduce costs, increase revenue and stimulate innovation by ignoring the possibilities offered by the emergence of a low carbon economy.

The emergence of a low carbon economy should be seen as an opportunity for the business community in Niagara to increase their competitiveness and profitability by becoming early adopters of these new opportunities. This report will introduce businesses to the concept of a low carbon economy and encourage small and medium sized businesses in Niagara to take advantage of these opportunities in order to create a more sustainable and prosperous Niagara.

What Is A Low Carbon Economy?

A low carbon economy simply refers to an economy which uses cleaner sources of energy, has a focus on conservation and produces lower levels of greenhouse gas (GHG) emissions. The low carbon economy represents a shift away from high energy, high emission output to a more efficient, environmentally friendly and economically sustainable economy[1].

The transition to a low carbon economy is already underway. From comprehensive carbon pricing in the European Union, cap and trade in multiple Canadian provinces, and support from Canadian energy companies for a carbon tax, the move towards reducing emissions is now a central part of creating a sustainable 21st century economy. The move to reduce carbon emissions and contribute to a low carbon economy can no longer be viewed as a political statement[2]; rather it is a necessity for small and medium sized businesses to remain competitive in Niagara and beyond.

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Through the adoption of appropriate legislation, policies and community leadership, Niagara has the potential to dramatically reduce carbon emissions, while becoming a leader in job creation and growth. The following section outlines some of the main challenges and opportunities that a transition to a low carbon economy may present.

Challenges and Opportunities

The major benefit of being a leader in the transition to a low carbon economy is the ability to innovate and develop new sources of revenue before competing businesses do so. The transition to a low carbon economy allows for the most entrepreneurial business leaders to be innovative and automatically places those businesses in

[1] National Roundtable on the Environment and the Economy, "Exploiting Opportunities in the Global Low-Carbon Transition", http://nrtee-trnee.ca/2-0-exploiting-opportunities-in-the-global-low-carbon-transition.
[2] Strebel, Heidi and Neil Walmsley, "Running a Successful Business in the low carbon economy".

leadership positions within the local economy. Those businesses who are willing to tackle energy inefficiency, supply chain inefficiency, and waste management are the companies who are going to survive to set the agenda for the business community in Niagara. The low carbon economy is an opportunity for innovation and entrepreneurship in Niagara.

In addition to fostering entrepreneurship in Niagara, the transition to a low carbon economy presents many immediate and practical benefits to small and medium sized businesses. Simple acts such as turning off office equipment at night can reduce an average office's energy use by as much as 70%.

For the low carbon economy to succeed it requires a profound change in attitude towards current business practices and a re-evaluation of investment priorities. Fortunately, many of the technologies that can assist in the transition to a low carbon economy are readily available and easily acquired by small and medium sized businesses. Five key benefits to businesses in a low carbon economy are:

- **Business growth**: sustainability can drive revenue growth, and can be a powerful marketing tool for businesses. As customers begin to demand more sustainable and eco-friendly products, a reputation of sustainable business practices can attract new customers and maintain brand awareness.

- **Lower Operating Costs**: investing in sustainable business practices can result in lower energy consumption, lower administrative overhead, and more efficient production standards. All this is to suggest, sustainable business practices result in noticeable cost reduction.

- **Risk Mitigation**: sustainable strategies can prepare companies for, and protect against impending regulatory changes, and insulate businesses from shocks in the prices of energy.

- **Supply Chain Accessibility Opportunities**: Major purchasers, such as the broader public sector, Wal-Mart, PepsiCo, Unilever, Johnson Controls, Microsoft and many others require their suppliers to report how GHG emissions are being managed.[3]

- **Employee Engagement**: employees are the most important asset held by any business. Employees become more committed to their company when they believe in what the company stands for. Adopting low carbon practices can lead to improved employee morale, as well as increase the likelihood of attracting and retaining young talent.

While the emergence of a low carbon economy offers many opportunities to the business community in Niagara, there are also barriers which may prevent certain industries or businesses from benefitting from a low carbon economy. The two major barriers to a low carbon economy are financial costs and legislative challenges which may impact access to contracts and clients:

- **Financial**: the major financial obstacle to transitioning to a low carbon economy is the high cost of capital equipment. Purchasing equipment that uses low energy and results in lower emissions can be an expensive investment; however, their long term use will often offset any upfront costs associated with capital expenditures.

- **Legislative**: Federal, provincial and municipal legislation all play a fundamental role in establishing more sustainable business practices. Regulation 397/11 in Ontario's 2009 Green Energy Act demands that

[3] Carbon Disclosure Project, Supply Chain Members, https://www.cdproject.net/en-US/Programmes/Pages/CDP-Supply-Chain.aspx#members

public agencies "prepare, publish, make available to the public and implement energy conservation plans".[4] It is the responsibility of businesses to understand how legislation and regulatory frameworks impact their business model. For example, the government of Ontario is working in conjunction with British Columbia, Manitoba, Quebec and California in the Western Climate Initiative, in which these various jurisdictions are designing a regional cap and trade system[5]. While Quebec and California have already initiated cap and trade, British Columbia has had a carbon tax since 2008 and Ontario has recently released a discussion paper to prepare for the implementation of cap and trade. Undoubtedly, cap and trade is looming in Ontario. Staying up to date on impending legislative and regulatory developments allows businesses to make necessary changes before new legislation and regulations require them to do so.

There are already many organizations in Niagara committed to reducing their carbon footprint and are embracing the idea of a low carbon economy. The following section profiles three companies in Niagara and their efforts to reduce carbon output.

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Case Studies

A carbon footprint is the total amount of greenhouse gas (GHG) emissions caused by an organization, event, product or person. There are an increasing number of organizations across North America, Canada, Ontario and the Niagara Region that are focused on reducing impact on the environment and their organizational carbon footprint.

A recent survey of several high profile companies in the Niagara Region revealed that a focus on GHG emissions is vital. A brief look at these companies may reveal how a low carbon economy is establishing itself in the Niagara Region.

Walker Industries

Since 1887, Walker Industries has proven to be a dynamic and diversified company. The Walker Industries group of companies includes aggregates, construction, emulsions, environmental project management, waste management, renewable energy projects and green buildings.

Moving well beyond regulatory requirements, Walker Industries has integrated carbon management into its core business activities. Citing financial, environmental and regulatory concerns as reasons for reducing its carbon footprint, Walker has realized a moderate amount of financial upsides from doing so.

There is little doubt that reducing organizational GHGs have provided a competitive advantage. From lighting improvements to heating, ventilation and air conditioning upgrades, Walker Industries has been able to conduct

[4] Government of Ontario, "Green Energy Act 2009, Regulation 397/11" http://www.e-laws.gov.on.ca/html/source/regs/english/2011/elaws_src_regs_r11397_e.htm
[5] Government of Ontario, Ministry of the Environment, "Participation in Emissions Trading" http://www.ene.gov.on.ca/environment/en/category/climate_change/STDPROD_078899.html

daily business operations while seeing measurable reductions in carbon and operating costs. There are indirect benefits as well, as the company has seen happier and healthier work environments for their employees.

Although there have been challenges in implementing carbon footprint measurement, there is a firm and ongoing commitment to measurement and mitigation of GHGs at Walker Industries.

Coventry Connections

Coventry Connections is one of the largest operators of taxis in Canada, moving close to 35,000 people per day. In Niagara, the company is widely recognized as Central Taxi. Boasting established processes for efficiency in customer service and dispatching, carbon footprint reductions have become part of doing business at Coventry Connections.

In contrast to Walker Industries, Coventry has not quantified its organizational carbon footprint. However, it is to be expected that an overwhelming majority of Coventry's footprint would originate from their taxi fleet. As a result, the organization – and unlike other taxi fleets in Niagara – has adopted the use of hybrid vehicles. This action is with good reason; in Ontario, 35% of climate impacting emissions originate from transportation[6]. A 2008 report from Climate Change Central on hybrid taxi vehicles demonstrates a carbon reduction of at least 50% when comparing traditional taxi vehicles such as a Crown Victoria to a variety of hybrid vehicles[7].

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Of course, there is a financial benefit in using hybrid vehicles. Although there is a premium price tag for hybrid vehicles, the return on investment is significant when looking at the distances driven by a taxi fleet. The average passenger vehicle in Canada drives approximately 16,000 kilometres per year, while the average taxi drives about 100,000 kilometres a year. Transitioning to a hybrid fleet can result in lower operating costs and quick payback periods for Coventry Connections.

Fallsview Casino

Owned by the Government of Ontario through the Ontario Lottery and Gaming Corporation (OLG), the Fallsview Casino is amongst the largest business entities in the Niagara region. The casino boasts a number of amenities, including: a large casino floor, a 374 room hotel, a full service spa, a fitness centre, shopping amenities, restaurants, a theatre and conference centre.

The Fallsview Casino has cited financial incentives, environmental concerns, operational efficiencies and corporate social responsibility as reasons for mitigating its organizational carbon footprint. Some examples of carbon reduction initiatives implemented by Fallsview Casino include LED lighting upgrades, composting and recycling, as well as heating, ventilation and air conditioning upgrades.

While the organization hasn't measured its carbon footprint, a strong commitment to continue the implementation of green initiatives exists. This strong commitment can be seen through proactive workforce engagement to boost workplace sustainability, and continually investing in ongoing improvements to casino operations.

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[6] Ontario Ministry of the Environment, "Climate change Progress Report, Technical Appendix", http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/stdprod_100824.pdf

[7] Climate Change Central, "Hybrid Taxi Pilot Program Final Report", http://climatechangecentral.com/files/Hybrid_Taxi_Pilot_Program_Final_Report.pdf

The Next Steps

Corporate adoption of carbon footprint management is not a difficult task. In order to effectively seize the sizable economic opportunities that exist for environmentally responsible organizations, individuals and businesses must contribute to the creation of a business culture that is dedicated to environmental sustainability. Subsequent to a shift in corporate culture and a strong commitment sustainable business practices, the recommendations that follow are feasible and incremental steps towards a more sustainable, low carbon business. Below is a step-by-step approach that helps summarize how many organizations have adopted carbon footprint reductions:

1. **Approach things differently.** Innovation requires traditional ideas being challenged. Instead of saying "this is the way we've always done things," say "how can we do this differently to reduce our carbon footprint and resources (time, money, products) needed to produce the same result".
2. **Involve others.** People like to be part of something they helped create. Engaging employees in developing sustainable business practices fosters a sense of commitment and often leads to higher retention rates and higher employee morale. Green teams can be a great tool, but be sure to include people from different disciplines.
3. **Look at case studies/best practices.** There is nothing wrong with copying sustainable initiatives that other organizations have implemented. Building off the experiences of other organizations is a great way to learn about best practices, and can often lead to innovation.
4. **Make sure the project makes business sense.** There is little point in hemorrhaging money into "green" projects if it means an organization will be out of business in a year's time. The best projects reduce environmental impact while reducing costs. The green team can investigate projects to determine if they're viable or not. If an organization is large enough, somebody from finance is hopefully on the green team. If not, engage the finance department for assistance.
5. **Implement and celebrate.** Implementation of a carbon reduction project, whether it is lighting, waste reduction, paper reduction, using toner-free printing, or others, should be measured. Using the measurement of paper consumption over time, as an example, can illustrate improvements that would otherwise go unrecognized. Further, it is an important milestone that should be celebrated. Provide recognition and awards, luncheons or other activities that will create a positive atmosphere around environmental initiatives.

Conclusion and Helpful Sources

In addition to the aforementioned case studies, there are a diverse number of organizations participating in NSI's *The Carbon Project* program. A summary of carbon reducing initiatives from NSI member organizations can be viewed in the 2011 Annual Report here. Similar to the highlighted case studies in this report, Carbon Project members note environmental concerns, financial savings, regulatory concerns, corporate citizenship and reputational benefits as reasons for measuring and reducing organizational carbon footprint.

There is overwhelming evidence that a transition to a low carbon economy is not only financially beneficial, but ultimately an economic necessity. With multiple Canadian provinces already engaged in carbon pricing, Ontario moving towards some form of carbon regulation, and the United States actively considering emissions pricing, business leaders in Niagara must begin to adapt to a new reality. While there is not a need to change overnight, the business community in Niagara must be aware that a new economic reality is presenting itself. While a low

carbon economy will pose challenges to traditional business practices, it also offers a multitude of new economic opportunities for those businesses that adopt carbon reduction strategies.

This report is intended to serve as an introduction to some of the issues, challenges and opportunities that are associated with a low carbon economy. Walker Industries, Coventry Connections and the Fallsview Casino all provide excellent examples of organizations that have realized the opportunities associated with carbon reduction and have committed themselves to fostering a more sustainable business community.

We encourage you to become more aware of how you may begin to reduce your organization's carbon footprint. The following are a list of useful resources that can provide some tips, examples and best practices for creating a more sustainable and prosperous business.

Please check out:

Niagara Sustainablity Initiative- www.niagarasustainability.org

Carbonzero- www.carbonzero.ca

Carbon Disclosure Project- https://www.cdproject.net/en-US/Pages/HomePage.aspx

Sustainable Prosperity- www.sustainableprosperity.ca

National Round Table on the Environment and the Economy- www.nrtee-tree.ca

Please also look at the great work being done by NSI's member organizations in the 2011 annual report.