



Electrification of transportation and Insurance: Together against Climate Change

A couple of weeks ago, Electric Mobility Canada (www.emc-mec.ca) held its 6th annual conference and trade show, EV2014VÉ, in Vancouver.

The event was a great success on a number of levels: excellent technical sessions, strong networking opportunities, inspiring student competition and first EV dealer awards, to name but a few.

It marked the first year where Canada's leading insurer was involved in an electrification of transportation industry event.

Insurer representatives and brokers had the opportunity to see, touch, hear about and drive some of the latest plug-in models available in this country.

Having accompanied the brokers to the "ride & drive" event organized the day before the conference began, I witnessed their reactions to the vehicles and

questioned them to determine what they liked and didn't like

about their experience.

Broker comments and reactions were generally similar to those heard from most Canadians who experience electric vehicles for the first time: WOW!

Some of the "wows":

- Smoothness of the drive
- How quiet they are
- Number of models available (increasing number of models every year)

- Acceleration
- Ease of use
- Sexiness of some of the vehicles, including the Teslas that were at the ride & drive
- ...and, the positive impact that even a single electric vehicle can have in reducing GHG emissions.

Why insurance?

The insurance industry, more than most industries, is keenly aware of the impact of GHG emissions and climate change on their operations and the bottom line.

Climate change has resulted in billions of dollars in payouts by insurers in recent years and all indications are that climate-related catastrophes will have an increasingly significant impact on insurer claims payouts and their bottom lines.

Canadian context

In Canada, approximately two-thirds of electricity generated is clean, renewable. Thanks to the efforts of several electric utilities across the country, an even greater percentage of our future generation mix will be clean and renewable.

In fact, replacing a conventional (ICE) vehicle with an electric is the single-most important action that

just about any policyholder can make to reduce GHG emissions.

In this “cleaner electricity” context, using electric vehicles makes significant environmental and economic sense (remember, our electricity is almost entirely Canadian).

Given that transportation is a leading generator of GHG emissions, by diminishing our emissions, we can limit the impacts of climate change. The

insurance industry, policyholders and society are winners.

EVs for Canadians

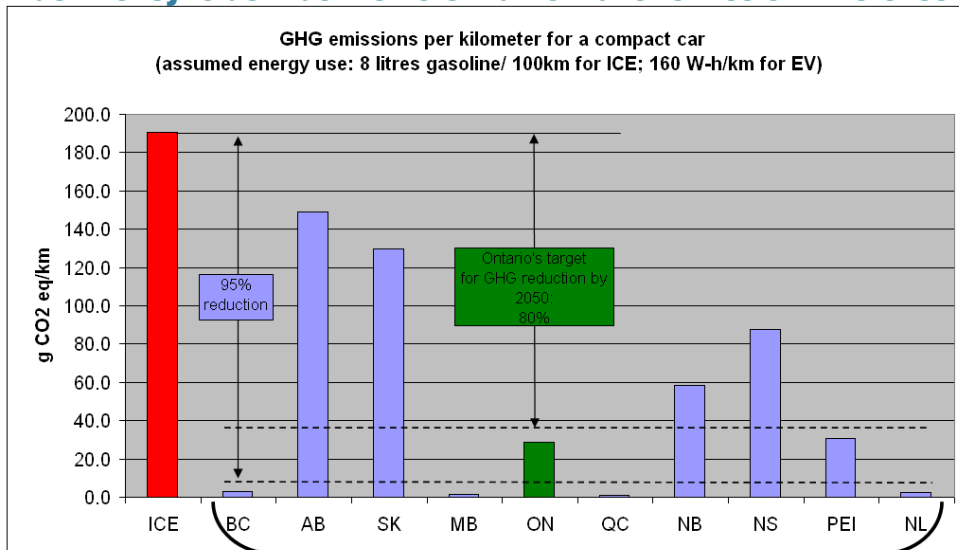
Time and again, studies have concluded that 85-95% (depending on the source) of individual trips can be completed with the electric vehicles available on the market today, certainly meeting the large majority of road travel needs of Canada’s highly urbanized population.

And, with already more than 2,200 charging stations across Canada (already more than another 1,000 committed for 2015), range anxiety is becoming less and less of an issue.

Numerous benefits

Given the numerous environmental and economic benefits that electric vehicles provide to policyholders and the impact of these vehicles in reducing the impacts of climate change, shouldn’t the insurance industry be a strong proponent of electro-mobility? Shouldn’t insurance carriers and brokers install charging stations for use by employees? Shouldn’t the insurance industry be offering preferential premiums to those “doing the right thing”?

Each Policyholder has the Potential to Make Tonnes of Difference



Courtesy of Dan Guatto, COO, Burlington Hydro

Grid emissions created by charging the EV, by province

SPEAKING AT THE FOLLOWING EVENTS

P. Ducharme speaking at **Canadian Urban Transit Association Conference**, November 15-19th, Niagara Falls | P. Ducharme sera conférencier à la conférence de l'**ACTU**, à Niagara Fall, du 15 au 19 novembre

C. Kargas sera conférencière à l'**événement organisé conjointement par les regroupements sectoriels de recherche industrielle, Prompt et Consortium Inno-VÉ**, 18 novembre à Montréal

P. Ducharme sera conférencier au **Colloque sur les transports électrifiés, intelligents et**

interconnectés, le 2 décembre, à l'Université Laval, Québec

C. Kargas speaking at a closed (by invitation only) **insurance industry** event being held in Scottsdale, Arizona, November 30-December 3

C. Kargas speaking at the **Smart and Healthy Municipal Public Transport International Conference**, April 21-22nd, Pilsen, Czech Republic

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In the news | Les nouvelles

► Shared mobility

Car sharing and ride sharing are increasingly part of the news. The entry of companies, like [Uber](#), in cities around the world is certainly creating a “buzz” with taxi companies on the defensive and governments on the fence.

The insurance industry is still cautious about ride sharing organizations. In Canada, as Uber looks to Calgary as a potential market of entry, the [Insurance Bureau of Canada warned](#) that carrying passengers for payment could void Alberta drivers’ policies if they do not carry commercial coverage. If UberX is backed by \$5 million of contingent auto liability insurance, is this enough?

Canadian insurers have yet to take a stance. Will any of Canada’s carriers develop a product that specifically target the growing ride sharing market?

► European cities looking to sharing to lower congestion, CO2 emissions

In a past newsletter, we discussed Helsinki’s efforts to make personal car ownership useless. [London](#) is yet another city looking to car sharing to reduce congestion and emissions. It is estimated that mainstreaming car clubs would result in 820 million fewer miles driven across London, reducing CO2 emissions by about 6%. Further, reduced congestion would increase productivity by more £181 million.

► Turning the ride sharing environment into your own

In a shared driverless world, users will be able to turn the shared vehicle into their “own” and their smart phone/device will be the key to this customization. Walking in those footsteps, [Uber and Spotify](#) are set to announce a partnership that will allow ride-sharers to listen to their Spotify tunes when they climb into an Uber vehicle.

► If you missed it ...

If you missed Catherine Kargas’ article on [SEAMless](#) (Shared, Electric, Autonomous, Multimodal) mobility, have a [read](#).

► Preferring transit & other mobility to cars

Yet another [report](#) concludes that millennials are taking fewer and shorter trips than previous generations and they tend to take public transit or multiple modes of travel more often. In fact, from 2001 to 2009, the [average number of miles driven](#) by 16 to 34-year olds in the US fell by an astounding 23%.

Socio-economic reasons, lifestyle choices (including living in urban areas) and technology giving rise to new forms of mobility are the leading reasons for the difference between this generation and previous ones.

With new mobility options sprouting in urban areas, including [carpooling](#) made possible by several apps, younger people will find less and less use for car ownership. This is contributing to a variety of [doom & gloom scenarios](#) for the auto manufacturing industry. It clearly also has implications for the insurance industry.

► To own or not to own

More and more [articles/postings/blogs](#) are [discussing](#) the subject of auto ownership and whether those who live in urban areas are best served by using the growing variety of mobility options that are available to them. In fact, [18% of Americans have used a car sharing service](#). This is huge given the relative youth of this industry.

In Canada, where the large majority of the population resides in increasingly live-in cities, a growing number of car owners is probably making this assessment. With car sharing and ride sharing operations expanding across the country (since the last newsletter, [POGO](#) car share started up in Edmonton), how many current owners of automobiles will decide not to own?

Already, Canada is a strong adopter of car sharing (the NA car sharing market is expected to grow at a rate of [46% annually](#) in the short to medium term and Canadian cities, like [Vancouver](#), are ahead of the curve). What does this mean for sales of automobiles in Canada as well as for auto insurance? Is it time for insurers to consider products specifically destined for this market?

Interested in daily updates on future mobility? Check out the following:
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<http://www.scoop.it/t/evolution-of-transportation>

In the news | Les nouvelles

› Goods delivery by drone

Europe, the US and others are preparing for [commercial usage of drones](#). With the former VP of Google X as the new [US Chief Technology Officer](#), expect things to move quickly in the United States. Making “[space](#)” for drones without being too restrictive will allow for this emerging industry to “take off” (pun intended). Even the [Canadian government](#) has introduced a campaign on drone safety and two [exemptions](#) that simplify drone operations in Canada.

› Before a completely driverless future ...

Before arriving at a completely driverless future, auto manufacturers are introducing a variety of semi autonomous features. One of interest is Ford’s sensors to [monitor drivers for heart attacks behind the wheel](#). In a context of an aging population where 30% of those 65+ have some kind of heart irregularity, this can potentially be a lifesaving feature. With those 50 & older [controlling 70%](#) of the US’s total disposable income, future vehicle designs will increasingly reflect the older consumer’s needs.

› Driverless buggies in Singapore

Driverless vehicles are making their entry in numerous theme parks and other off-road applications around the world. Most recently, in [Singapore](#), driverless buggies are carrying passengers in a mobility-on-demand model through national gardens.

› Driverless technology & rail, transit

In recent weeks, several articles suggested that the arrival of driverless vehicles would spell doom for [rail](#) or other transit. Despite the fact that driverless vehicles will meet a very important need, we cannot assume that they will displace all other forms of land travel. Rail, particularly high speed rail, will continue to play an important role in an integrated multimodal transportation system. With respect to urban transit, our transit properties will need to prepare appropriately for the changing mobility landscape and determine how to remain relevant. If driverless technology is considered taboo out of fears of upsetting the unions, [transit will not be ready](#) and may very well lose an excellent opportunity to [reposition](#) itself and return to profitability.

› UK: driverless vehicles, drones welcome!

From the [Digital Industries Minister](#) to the Secretary of State for Business, Innovation and Skills and others in between, the UK is welcoming automation and new mobility of goods and people. In fact, Claire Perry, Parliamentary Under-Secretary of State for Transport, dared discuss [driverless buses](#) as a way of providing “better and more frequent” services, particularly in rural areas of the country.

I wonder what would happen in Canada, if the government would suggest driverless buses as a way of providing better service at reduced cost... Strike anyone???

“Driverless technology is the future. We can’t avoid it and I don’t want us to.”

Claire Perry, UK Parliamentary
Under-Secretary of State for Transport

› More jurisdictions opening doors to driverless tech

The UK, Sweden, [Netherlands](#): European countries are preparing the rules and regulations for testing (and in some cases, use) of driverless technology.

However, [China](#) may prove to be more eager for self-driving cars than the West and may, in fact, leapfrog in transportation technology the same way this country leapfrogged in telecommunications technology.

In the US, [NJ](#) prepares to join California, Nevada, Florida, Michigan and Washington DC in welcoming driverless vehicles as this state’s Senate panel passed a bill that would allow the testing and use of driverless vehicles on NJ roads. It is interesting to note that one of the principal reasons for the bill is to “**attract and retain new jobs, innovation and entrepreneurship** in New Jersey.” Surprisingly, some Canadian governments are avoiding this technology because they perceive it does NOT create economic value. Hmm..could all these countries around the world be wrong and Canadian politicians (excl. Ontario’s CVAV) be right?

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