



PRIORITIES FOR CANADA'S 2015 BUDGET

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EXECUTIVE SUMMARY

Sun Country Highway has established world-leading Level 2 electric vehicle infrastructure in Canada - in terms of charging power and capability – all without public funding – with a mission to achieve social, economic and environmental sustainability.

NRCan: Electricity as an alternative to traditional transportation energy is becoming a near-term reality for many countries, including Canada. Electric vehicles (EVs) will contribute to promoting sustainable energy development while addressing air quality and climate change.

In addition to the economic development opportunities that can come from nurturing the growth of the EV sector; there are also inherent social and environmental benefits – like achieving GHG reduction targets, improving air quality and overall health and well-being of Canadians.

We are advocating for a Federal Strategy to grow and develop Canada’s EV sector – with a sole focus on incentives and rebates to achieve widespread EV adoption.

Favourable electric vehicle purchase, import and tax rebates are all that’s needed to spur EV adoption – no other programs, no advocacy, no transfers to provinces – just great incentives to get people into electric vehicles. Make EV adoption the best financial choice for Canadians.

PROPOSAL

Natural Resources Canada recognizes the importance of the EV industry and its impact on our economic, social and environmental sustainability and development:

By 2018, there will be at least 500 000 highway-capable plug-in electric-drive vehicles on Canadian roads, as well as what may be a larger number of hybrid-electric vehicles. All these vehicles will have more Canadian content in parts and manufacture than vehicles on the road in Canada in 2008.

Electricity as an alternative to traditional transportation energy is becoming a near-term reality for many countries, including Canada. Electric vehicles (EVs) will contribute to promoting sustainable energy development while addressing air quality and climate change.

With our significant amounts of energy and a growing EV industry, Canada is well positioned to capitalize on this form of clean transportation. Our industry is well placed to be a major supplier of EV components and vehicles, not only in Canada but also internationally.
(<http://www.nrcan.gc.ca/energy/efficiency/transportation/7689>)

Canada has an opportunity to become a dynamic part of a global EV supply chain. Sun Country Highway has established infrastructure that puts Canada the top in terms of power and capability. Canada is **the** world leader in Level 2 charging stations whereby all electric vehicles can charge at the highest speed possible and a few hundred percent faster than most EV's can currently use ... leaving room for new vehicle technologies and future-proofing our network. Approximately 95% of Canada's highways will be "greened" with Sun Country Highway chargers by the end of the year (2014). By comparison, the Government of Canada's latest plan to bring high-speed Internet to 280,000 rural households, between now and 2017, will cost \$305 million and reach 98 percent of Canadian homes (<http://news.gc.ca/web/article-en.do?nid=869539>). More people have direct access to our EV charging network than to high speed internet in Canada.

In addition to the economic development opportunities surrounding the EV sector; there is also the inherent motivation to achieve social and environmental sustainability. The Organisation for Economic Co-operation and Development (OECD) and the World Health Organization (WHO) have released staggering statistics and reports connecting individual health and air quality to the transportation sector. Outdoor air pollution kills more than 3.5 million people a year – now the biggest environmental cause of premature death in the world. The estimated societal cost of this pollution is \$1.7 Trillion/year with half of this cost attributable to transportation emissions (<http://www.oecd.org/environment/cost-of-air-pollution.htm>; <http://www.who.int/mediacentre/factsheets/fs313/en/>). Environment Canada has also connected 25% of Canada's GHG emissions to the transportation sector. Implementing strategies to get Canadians into low emission vehicles will have a significant and direct impact on air quality and health; as well as achieving Canada's target Green House Gas footprint. Happier and healthier Canadians enjoying improved air quality translates to fewer deaths and better workers - increased productivity, fewer sick days, reduced healthcare costs, etc. (http://depts.washington.edu/hhwb/Thm_Mental.html; <http://www.airquality.utah.edu/#air%20quality%20program>)

Sun Country Highway implemented Canada's impressive infrastructure by relying solely on private funding. The Canadian government has been able to spend dollars on other worthwhile initiatives rather than our EV charging network. This doesn't mean that Federal support isn't needed. We are advocating for a Federal Strategy to grow and develop Canada's EV sector; with a focus on incentivizing EV adoption.

A Federal Strategy can be very simple yet provide the clear commitment needed to achieve widespread EV adoption. Favourable electric vehicle purchase, import and tax rebates is the solution needed to spur EV adoption – no other programs, no transfers to province – just a good incentive to get people into electric vehicles - making EV adoption the best financial choice for Canadians. We would like to discourage funding education, consultation, infrastructure and advocacy in order to divert this money to Canadians - getting people into vehicles. Every vehicle purchased gets friends and neighbours into EV's,

spurs more interest, and leads to adoption. Rebates will have a much greater impact than other initiatives. Testing and experiencing EV's is what leads to adoption. The effects of a rebate initiative are exponential. The cost of advocacy and education are eliminated.

EV adoption will naturally benefit and develop Canada's EV industry and infrastructure; such as:

- Encouraging further electric vehicle design, components, testing, manufacturing, development, education (including vocational requirement) and services in Canada;
- Growing a new, attractive consumer demographic
- Revolutionizing the commercial transportation sector with the introduction of electric service fleets
- Increasing demand for green buildings and homes with pre-wiring for EV chargers;
- Embracing EV's within all levels of government based on public needs
- Economic growth in associated services and industries such as solar power (i.e. In California 32% EV owners have solar panels and 16% plan to install - <http://energycenter.org/clean-vehicle-rebate-project/vehicle-owner-survey/feb-2014-survey>).

Budgeting for a Federal EV Sector Strategic Plan can address the 6 key areas under Financial Committee review:

1. Balancing the federal budget to ensure fiscal sustainability and economic growth
 - Electric vehicle infrastructure promises to bring economic, social and environmental sustainability to families, communities, industries and the country as a whole
2. Supporting families and helping vulnerable Canadians by focusing on health, education and training
 - Our health is linked to the Environment, Air Quality, GHG Emissions, Pollution
 - Renewable energies and low emission transportation can have significant health benefits
 - Rebates for making green choices – electric vehicle rebates – encouraging early adopters to move Canada forward as a global leader
 - Getting more EV's on the roads, reducing Canada's emissions, meeting Global commitments
3. Increasing the competitiveness of Canadian businesses through research, development, innovation and commercialization
 - EV rebates/ incentives will lead to increased electric vehicle manufacture, research, development and adoption in Canada
 - Implementation will breed innovation and jobs
4. Ensuring prosperous and secure communities, including support for infrastructure
 - EV adoption will increase demand for EV infrastructure, which we can continue to develop
 - Today Canada is the leader in Level II infrastructure. Other countries are coming along fast. Canada should continue to lead – keep our competitive edge.
 - EV's have lower operating costs, improve owner's standard of living
 - EV's provide quiet, cleaner transportation which can be 100% renewable
 - Norway has had tremendous success based on Government commitment and incentives
 - Norway EV Association: www.gronnbil.no/english
 - Federal incentives to bring electric vehicles with power storage capabilities to Canada – vehicle can be used as generator during major disaster and emergency response situations (offers community safety / critical infrastructure)

5. Improving Canada's taxation and regulatory regimes

- Generous electric vehicle purchase, import and tax rebates will spur EV adoption
- The effects are exponential and the cost of EV advocacy and education is eliminated
- Rebates will make the initial transition to EV's the best economical choice for Canadians (not just the better environmental choice)
- EV adoption will spur EV manufacturing and imports (economic development) – note that Toyota's electric RAV 4 is already being built in Canada
- Federal rebates for EV purchases versus transferring to Provinces
- Charger incentive when purchased with the vehicle \$500
- Incentive to convert commercial fleets to electric
 - Suggest rebate of up to 89% of cost for the first vehicle in a commercial fleet
 - Chicago offering up to 80% of cost of conversion of commercial fleet
 - China and Bhutan – examples of governments announcing switch to electric vehicles (Bhutan – 100% conversion, entire country)
 - http://www.greencarreports.com/news/1090485_nissan-to-work-with-bhutan-toward-electric-car-nation-goal
 - http://www.greencarreports.com/news/1093390_china-to-mandate-one-third-of-government-vehicles-be-plug-ins

6. Maximizing the number and types of jobs for Canadians

- Create jobs by incentivizing EV adoption – jobs will naturally arise in associated industries, manufacturing, infrastructure, education, auto mechanics, utilities, renewable energy sectors, electricians, services, etc. – Green economy job
- Electric vehicle sector is growing at a faster rate than hybrids
 - http://www.greencarreports.com/news/1085724_electric-cars-sell-faster-than-hybrids-did-at-same-point

The EV community recognizes Canada as a global leader in EV services, thanks to our advanced charging network. Sun Country Highway's implementation in Canada has been seen as the global standard (<http://www.teslamotorsclub.com/showthread.php/20011-Best-non-Tesla-commercial-charging-stations?p=411858&viewfull=1#post411858>). Americans are even envious of our infrastructure (based on Tesla forum discussions). We've got a lot to be proud of and reason to continue our efforts. Sun Country Highway plans to replicate this success - greening many countries (up to 50) in 2015.

We've proven that Canada can be a world leader. Our example empowers others to become leaders themselves. Opportunities are bountiful in Canada.

We encourage the Government of Canada incentivize EV purchases to facilitate widespread EV adoption. Attractive rebates will make electric transportation a smart and easy choice for Canadians.

Sun Country Highway Credentials

- International Award Winner: "[Best Automotive Solution](#)" New Economy, Clean Tech Awards 2013
- Launched Vancouver Island and Prince Edward Island as 100% EV-friendly regions
- Most powerful Level 2 chargers available in the world today – up to 100 amp (240 volts) – capable of charging vehicles even faster than current vehicle technologies (ready for EV improvements)
- Most reliable and deployed product in industry – over 15,000 installed worldwide
- Completed [World's Longest Green Highway](#), the Trans-Canada, +10,000km (2012)
- Electrified Ontario's 400 series highways
- [Most of Canada now accessible by Electric Vehicle](#), covering 95% of highways, in over 100 municipalities
- More than 1500 publicly accessible EV Chargers installed in Canada

- Rapidly covering the USA, 10 locations and expanding in Caribbean, and entering Europe
- Founded [E-mazing Race](#) - world's longest electric vehicle race (Seattle-PEI) – 2013
- SCH brought EV demand, design, parts, crash tests and engineering to Canada with the intent of manufacturing in country
- Working with major corporations, including Best Western, Canadian Tire, Costco, Desjardins, Mitsubishi Motors, Fairmont Hotels, Tesla Motors, Tim Horton's, Via Motors, etc.
- Established Peavey Mart as first retailer in Canada to green all locations (33 stores)
- Making Best Western the world's leading EV charging hotel chain - over 80 North American BW properties have Sun Country Highway chargers
- Endorsed by Tesla Motors - our chargers will be integrated into Tesla vehicle screens
- Distributor for Via Motors VTRUX, world's first electric full-sized services vehicles (vans and pickup)
- Via Motors will have Sun Country Highway EV Charger map and special OEM App features that will attract EVs to the Sun Country Highway network
- Canada's largest oil producer and retailer endorses our company and has been a major sponsor of the E-mazing Race as well as consulting on various clean energy solutions and beta tests
- SCH developed an auto manufacturer testing program – we test vehicles for a year under various conditions and report back to OEM regarding performance and suggest improvements (i.e. Mitsubishi)
- SCH is developing a technical curriculum /education program for colleges and universities to train mechanics to support the future EV market
- Sun Country Highway speaks globally at conferences and conducts presentations to leading OEMs on EV product development and charging solutions
- SCH is constantly developing new technologies that will move the industry forward. If a host location has an issue, we create solutions and products to resolve and address the challenges.
- Manufacturing signs and pedestals and technical solutions in Canada (including the development of a retractable cord solution to support disabled community needs)