

Electric Bicycles

Low Cost Financing of Clean Transportation Through Rebates and PST Elimination

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September 2018



Electric bicycles (e-bikes) remove accessibility barriers by allowing riders to conquer hills, speeds, and distances that would otherwise be difficult or impossible for some people. This new type of transportation also allows people to move more freely, and transport young children, groceries, and other heavier loads more readily.

They allow people to continue riding in high temperatures that would otherwise be unadvisable or uncomfortable for them to cycle in. Electric bicycles are particularly popular among seniors and people with disabilities that make walking difficult or painful, providing a more flexible faster option than a wheelchair and a more affordable option than driving. A study by the University of Basel found that e-bikes were as good as regular bicycles in improving fitness among those who were overweight¹.

The electric bike can increase the amount people cycle as they grow older. In 2013, a survey reported that 5% of the total population in The Netherlands owned an e-bike. Among those who were aged 60+, the ownership level was at 10%.²

It was noted that those seniors with an e-bike tend to ride twice the distance of kilometres than those with a regular bicycle. The increase is greater among women aged 60+ with electric bicycles accounting for 24% of their bicycle kilometres.³ E-bikes are also recently gaining traction with younger populations as well, becoming a more frequent use of transportation among students and young parents.

These vehicles, that emit zero greenhouse gases (GHG), make active transportation a viable option for a broader population by opening it up to all ages and abilities, especially in combination with safe cycling infrastructure⁴.

This is particularly true in rural and suburban areas where distances are too far to walk, and sometimes even cycle, and transit service is infrequent or non-existent. In the Netherlands, the average commute by e-bike is almost 10km. In B.C., 65% of commutes are under 10 km. In urban areas, conventional bikes are faster than cars for distances of up to 5 km. With e-bikes, this distance increases to 10 km. Even for longer distances of up to 20 km the time

¹ <https://insights.ovid.com/crossref?an=00042752-201805000-00002>

² <http://www.bike-eu.com/sales-trends/nieuws/2014/1/e-bikes-boosts-bike-usage-among-elderly-1019868>

³ page 10, http://supercykelstier.dk/sites/default/files/El-cykelrapport_høj_opløsning_compressed.pdf Accessed Aug 11, 2015.

⁴ Cycle highways are bicycle paths separated from traffic with few intersections connecting communities and popular destinations that facilitate longer distance cycling by e-bikes and pedal powered bicycles. More at: http://www.bccc.bc.ca/cycle_highways

difference for cars is marginal.⁵ In 2017, 31% of all bicycles sold in the Netherlands were electrically assisted.⁶ The Dutch ride a total of 14.5 billion kilometers on their bikes annually.

These numbers are growing every year mainly because of the use of e-bikes; 12% of all travelled kilometers by bikes are on electric ones.⁷ Dutch, who have e-bikes, ride 22% more kilometres per week, leading to the average commuting distance on electric bikes to being 9.8 km. In 2018, 8.9% of people surveyed by the BC Cycling Coalition owned or had access to an electric bicycle.

E-bikes suitable for commuting typically cost between \$1,500 and \$4,500 while electric cargo bikes cost around \$5,000. High quality kits that enable the conversion of a pedal powered bicycle to an electric bicycle can cost between \$1000 and \$3000.

Recommendations

Among the most effective ways of encouraging electric bicycle use are programs that reduce the cost. Possibilities include:

- Rebates (consider means testing)
- Low cost financing options that allow the purchase, lease or use of electric bicycles by those of limited financial means
- Eliminate the PST on electric bikes
- Include electric and pedal powered bicycles on the list of medical equipment and devices eligible for subsidies for those using electric and pedal powered bicycles for essential basic mobility
- Grants for municipalities, nonprofits, universities and businesses for programs enable people to try and use electric bicycles

We encourage the B.C. Provincial Government to engage individuals with mobility limitations, and the groups that represent them, to determine what kind of financial assistance would be the most effective for these types of programs.

Rebates - Means Tested

The rebates could be means tested, providing greater rebates for those with lower incomes. In addition to rebates, other methods of providing financial assistance should be explored including low cost financing, leases and rental programs.

- Rebates or funding could also be provided for higher-cost pedal-powered mobility devices including cargo bikes, adult tricycles, tandems, custom bicycles, and hand cycles, especially for persons with disabilities. Programs should also be considered to increase access to bicycles for lower income individuals and families.

⁵ Electro Mobility for All, European Cyclists' Federation, https://ecf.com/sites/ecf.com/files/FINAL%20for%20web%20170216%20ECF%20Report_E%20FOR%20ALL-%20FINANCIAL%20INCENTIVES%20FOR%20E-CYCLING.pdf

⁶ <http://www.bike-eu.com/sales-trends/nieuws/2018/03/e-bike-puts-dutch-market-back-on-growth-track-10133083>

⁷ EU's Leading E-Bike Market Sees Sales Grow by 16%, Bike Europe, March 3, 2015, <http://www.bike-eu.com/sales-trends/nieuws/2015/3/eus-leading-e-bike-market-sees-sales-grow-by-16-10119267> Accessed Aug 11, 2015.

Low Cost Financing

While many private companies have set up in-store loan programs or low-cost financing for their electric bike sales, we strongly recommend the provincial government to create a low-cost financing program that allows individuals and businesses to purchase e-bikes more readily. As an example, Scottish government this year (2018) created The Low Carbon Transport Loan Fund that has £500,000 available for interest free loans up to £3,000 for purchase of electric bikes and electric cargo bikes.

Eliminate the PST

Bicycles and transportation fare are exempt from PST, and electric vehicles are often given large rebates that make up for the taxes added to the sale. Electric bicycles though are not PST exempt, though they were given some tax exemptions when B.C. was only running HST taxes. E-bikes also only have one form of rebate available for them and that is the SCRAP-IT Program, requiring the consumer to first scrap their vehicle in order to gain an \$850 rebate on the purchase of a new electric bicycle. If the provincial government won't create better rebates for electric bicycles, we strongly recommend the government to instead remove the PST taxes off of electric bikes.

Current Rebate Program - B.C. SCRAP-IT Program

We applaud the effort made in B.C., such as the \$850 incentive for e-bikes provided by the non-for-profit SCRAP-IT Program, but we also recognize that there is much to be done. While the Program has been around since 1996 and in that time has scrapped over 43,000 vehicles across the province, we find it to be limited in its incentives and procedures regarding electric bicycles. These limitations include a lack of authorized e-bike retailers in the northern part of the Province, and an onus on authorized retailers to provide \$100 of the \$850 per e-bike bought through the Program, among others. We recommend that the Province of British Columbia and the SCRAP-IT Program make adjustments regarding these concerns and refer to the below examples for other electric bike initiatives for future B.C. specific initiatives.

Examples Around the World - Rebates

Oslo

Another example is the program piloted in Oslo, which sees the city provide a subsidy of \$1,200 towards the purchase of an electric bike.

Sweden

The Swedish Government is providing a 25% subsidy for electric bikes. They are allocating €35 million (\$51 million CAN) per year for this program.⁸ The population of Sweden is 10 million, just over twice that of BC.

⁸ <http://www.cadencemag.co.uk/news-e-bikes-now-subsidised-sweden-25-purchase-grant/>

Spain

Spain introduced a €200 (\$300 CAN) subsidy on electric bikes in 2014 and as a result saw the sale of e-bikes increase by 39% in 2015.

Scotland

Scotland has recently (2018) introduced the e-bike Grant Fund which will allocate £700,000 for local authorities, public sector agencies, community organisations, and colleges/universities to encourage large-scale electric bike uptake. The grant is meant to fund e-bike pools, secure cycle parking and safety equipment.

Conclusion

The potential for electric bikes to drastically change the way we get around our province's urban centers and rural areas alike is promising. Across the world, cities that have embraced this new mode of transportation have seen immediate and encouraging results. By combining incentives to purchase new electric bikes with increases to investments in cycling infrastructure, the government and people of British Columbia will see a province-wide reduction in emissions, shorter commute times, and a healthier and more active population.

We urge the province to implement rebates and/or financing options on electric bikes and pedal powered mobility devices as part of a reformed Clean Energy Vehicle Program or as part of any new clean energy or climate programs administered.

Contact

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Our Member Organizations

Our 27 member organizations represent over 58,000 people passionate about cycling across BC.

AMS Bike Co-op	BC Randonneurs Cycling Club	Bike to Work BC
Comox Valley Cycling Coalition	Cross Canada Cycle Tour Society	Bike Abbotsford
Canada Bikes	Greater Nanaimo Cycling Coalition	Greater Victoria Cycling Coalition
HUB - Metro Vancouver	Island Pathways	Juan De Fuca Cycling Coalition
Kelowna Area Cycling Coalition	Mission Cycling Coalition	Oceanside Cycling Coalition
Penticton and Area Cycling Association	North Shore Safety Council	Cycle Alberni
Pedal Society	Trails BC	Fernie Mountain Bike Club
North Okanagan Coalition for Active Transportation	Mission Community Cycling Coalition	Streets for Everyone
	Powell River Cycling Association	Trac Sunshine Coast
	Whistler Cycling Club	



Thanks to the [Real Estate Foundation of BC](http://real-estate-foundation-bc.ca) for supporting our Moving Active Transportation Forward in BC initiative.