

Electric Cars; the Wave of the Future

By Richard van Leeuwen

In West Vancouver, if you build a house, you are required to install an electrical provision for an electric vehicle charging system for an electric car. Electric vehicle charging systems are regulated by Rules 8-200, 26-710, and Section 86 of the Canadian Electrical Code. There are three hundred insured electric cars in BC (Gordon Hoekstra, Vancouver Sun 2013 Feb 1).

It is nice to see that as a society, we are becoming more environmentally aware and planning for the future. Electric cars are pollution free and will be a great advantage to our cities.

Or are they?

In a controversial article published recently by the IEEE (the Institute of Electrical and Electronics Engineers) entitled "Unclean at Any Speed", the author argues that the additional electricity required to power these cars could come from coal fired generators rather than from oil; and coal generates an embarrassing amount of pollution; much more than oil. In addition, the construction of these cars requires a high amount of material and fossil fuel costs. The article also raises the issue of the difficulty in evaluating the true value of electric vehicles. Should new sources of electricity come from coal fired generating stations, nuclear stations, wind or photovoltaic? Each have their issues. Is pollution the only issue, or should we consider the cost of building the electric cars without including the government subsidies? Once the car's battery has reached the end of its useful life, how do you recycle it? Someone else's problem; right?

On a personal level, I have investigated several battery issues which indicates to me that we have a lot to learn before the safety of batteries is lowered to an acceptable level.

Reaction to the article was swift and judging who won of the controversy difficult for most of us.

Perhaps we should be thinking of improving public transit, facilitating bicycles or even walking.

(IW, Nov. 2013, pg 49)

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