Dear Tony: Our strata council has received a letter from an owner demanding that the strata corporation install a charging station in a designated parking area, for the new electric hybrid that he purchased. In his letter it indicates that a city official told him it was the obligation of the strata corporation to install the station. We wouldn’t install a gas station for owners with conventional vehicles, so why should we be obliged to install a charging station for electric vehicles. Considering the cost that we have been quoted, our strata council is unwilling to consider the installation or to bring this matter to the owners for a vote. How are other strata corporations dealing with this issue. Dustin C.

Dear Dustin: As the trend towards electric vehicles grows, electric vehicles charging stations (EVCS) are becoming a common facility and service in public areas, and placing pressure on multi family developments to consider the installation of the service. It’s a bit of a catch 22 right now. Buyers don’t buy electric vehicles because they don’t have stations in their condo, and the strata won’t install stations because the costs benefit very few. EVCS installation is a much more complicated issue than simply installing a station and letting owners charge at leisure; however, it is both feasible and manageable for the strata corporation and the owner(s) making the request.

A strata corporation does not have any obligation to install an EVCS on the common area of the strata and it is unlikely that 100 owners will vote in favour of expenses or alterations that are only for the use and benefit of 1-4 owners, especially when there are so many other pressures on common budgets with rising insurance costs, utilities and operating costs. The strata corporation however does have a viable option. They may agree to permit the installation of an EVCS at the request of an owner(s), if the owner(s) agree to the related costs of installation.

There are 3 types of charging currently.

Level 1 (1,4kW) is a standard 110 AC receptacle, often located in most areas of the parking garages. The cost of installation is negligible and the user costs for utilities are normally low as they usually do not incur demand charges. The strata corporation can easily set a user fee for the utility cost in a rule that has to be ratified at a general meeting by majority vote. The draw back is the charging period is long, 10-25 hours, and the charge pattern is not reliable for all types of electric vehicles.

Level 2 (3.8kW – 16.8kW) requires a higher demand and the installation of a charging station. There are many types of market charging stations available, and there are even some limited government programs to assist with funding of the station installation. Depending on the demand charges and location of the station, installation, electrical installation and possible upgrades, the costs will be higher than a level 1 charging system. With level 2 stations the monitoring of use and direct billing for consumption are possible. There is only a 2-8 hour charge time required, and better charge conditioning will provide more convenience and predictable charging use for the owners.
A Level 3 (30kW – 60kW) station is a high speed charging system that is currently rarely used due to cost, capacity, and recommended limited use by manufacturers.

If you live in a townhouse with your own dedicated garage that is part of the strata lot, or a bare land strata with an exclusive location on your strata lot, you the owner may install your own charging station, subject to the bylaws of the strata corporation; however, most townhouse and apartment style condos have common area parking and common electrical facilities. Before you consider the installation of an EVCS, the strata corporation and applicant owner will have to determine the location of the station, any electrical alterations, capacity of electrical service in the building, civil and engineering requirements, future depreciation obligations and costs, installation costs (which can be anywhere from $0 for Level 1 access to $5,000-10,000+ if major electrical upgrades are required for level 2 or 3), access, future costs of the operations, utilities, insurance, liability and responsibility for the EVCS. The strata council will also have to determine where the station is best located and if parking is even possible to reallocate for use. In many buildings parking has been allocated as limited common property or assigned by an owner developer lease, and the strata council cannot reallocate the parking to accommodate an EVCS, although the strata corporation may be able to consider the use of visitor parking, if the strata corporation approves the use by a three quarters vote, and you have the space to spare.

As the trend to electric vehicles grows, so will the demand of owners to have EVCS installed into their multi family buildings. We may only have one or two requests now, but in 5-10 years a marked percentage of vehicles will likely be requiring access to an EVCS. Local governments are now requiring electrical ready conduit for new developments, and progressive developers are looking at innovative methods of installation for the new strata market. In addition to the anticipated energy costs, electric vehicles reduce green house gas emission by up to 98% over combustion engines. They almost eliminate vehicle noise and emissions in buildings and contribute to healthier communities.

CHOA is just completing a 6 month research project into the installation of EVCS which looked at 25 variations of strata buildings across the province. The consumer guide on installation procedures along with the research results will be published by mid November. Go to www.choa.bc.ca for more information.