



Planning EV Charging for your Condominium Strata Corporation

Version #1

March, 2023

About this workbook

This workbook is a guide for strata corporations with condominium buildings or any residential **strata corporation** planning for electric vehicle charging stations that will use common electricity (electricity billed directly to the strata corporation). The workbook is split into the following sections, we recommend the reader use the workbook in its intended order.

- EV Charging 101
- Glossary
- Gather Information About Your Strata
- Hiring Professionals
- Working with Owners
- Operating Costs, User Fees, Bylaws, and Low Carbon Fuel Credits
- Acknowledgments and Resources
- Learn about Rebates and EV Charging (Appendix B)

This workbook was developed in collaboration between Vancouver Island Strata Owners Association and the Capital Regional District Charge Your Ride program.

About the authors

The Vancouver Island Strata Owners Association (VISOA) is an independent, non-profit society, celebrating its 50th anniversary in 2023. It provides information, education, and support to BC strata owners and councils. VISOA advocates the interests and concerns of strata owners and strata corporations (such as condominiums, townhouses, and bare land stratas) to facilitate improvements in legislation and policy. Since 2016, VISOA has delivered education regarding EV charging in stratas, and has worked with provincial and local governments to development funding and education programs about EV charging. BC strata owners and council members can submit questions by email to EVcharging@visoa.bc.ca

<https://www.visoa.bc.ca/>

The Capital Regional District - Charge Your Ride program is made possible by a financial contribution from Natural Resources Canada's Zero-Emission Vehicle Awareness Initiative.

<https://www.crd.bc.ca/education/climate-action/charge-your-ride>

Acknowledgements

We also thank the Vancouver Island Strata Owners Association, PlugIn BC, Community Energy Association, and EV Condo for their assistance in preparing this workbook.

Table of Contents

[EV Charging 101](#)

- What is an EV Charger?
- How does EV Charging work?
- Types of EV Chargers
- A Closer look at level 2 Chargers
- What types of vehicles can charge at a Level 2 station?

[Glossary](#)

[Gather Information About Your Strata](#)

- Strata Plan and Parking Areas
- Current Bylaws and Rules
- Legal Assistance
- Buildings and Electrical Layout
- Peak Load Data

[Hiring Professionals](#)

- Engineer, Electrician or Both?
- EVITP Certification
- Choosing a Contractor
- Questions to Ask

[Working With Owners](#)

- Grow Support
- Understand Current Priorities
- Owner/Occupant Surveys
- Town Hall Meetings and Information Meetings

[Operating Costs, User Fees, Bylaws, and Low Carbon Fuel Credits](#)

- Annual Budget
- Operating Costs
- User Fees
- Bylaws and Rules
- Low Carbon Fuel Credits

[Acknowledgements & Resources](#)

[Appendix A](#) - Example of a Strata Plan

- [Appendix B](#) - Learn about Rebates and EV Charging
- CleanBC - Go Electric EV Charger Program Rebates
- EV Ready Plan
- Electrical Infrastructure
- EV Charging Stations

EV Charging 101

What is an EV Charger?

An EV charger is that equipment that transfers electricity from the grid to the car battery. They are the equivalent of a gas pump that moves gas from the holding tank at the gas station to the fuel tank in your car. But rather than standing to pump gas into a car to power it, you just plug your car into the EV charger like you plug in your cell phone to charge. In both cases you're pulling electricity from the grid to recharge the battery.

How does EV charging work?

When it comes to charging from a Level 2 station, it's quite simple. Just unhook the charging head from the station and insert it into the charging port on your car. It's not all that different from plugging in your cell phone.

Types of EV Chargers

There are three types of EV chargers, the primary difference among them is the rate at which they can provide electricity to the battery in a car:

Level 1 is known as "trickle charging". All EVs come with a cordset that you can plug into any standard wall outlet. This is the slowest way to charge as it adds 5-10km of driving range per hour, but can still be adequate for many local commuters. The Electrical Code requires all new outlets that will be used for EV charging to be on a dedicated circuit.

Level 2 chargers are commonly used for charging at home or at public locations such as community centres and shopping malls. Many strata corporations install systems that support level 2 charging stations. Level 2 chargers can add up to 30-40 km of range per hour. This means you can have a meal at a restaurant, take the dog or kids for a walk, go shopping or visit a tourist destination. In some cases, you can get your bike off the car and enjoy local trails!

All BEVs (battery electric vehicles) and PHEVs (plug-in hybrid electric vehicles) can use the plug on a Level 2 charger, known as an SEA J1772 plug.

Most people refer to **Level 3** stations as **DCFCs** - Direct Current Fast Chargers. DCFCs are often sited close to highways or local amenities like a downtown core, perfect for plugging in and grabbing a quick bite to eat or visit a few stores. DCFCs are not a practical choice for strata corporations as they run off 480-volt power lines and can cost in excess of \$100,000 each.

Fast chargers can add between 150 and 240 km of range per hour. There are a few factors that could affect charging speed. For example:

- your vehicle's maximum charging rate
- the battery's state of charge
- the temperature of the battery

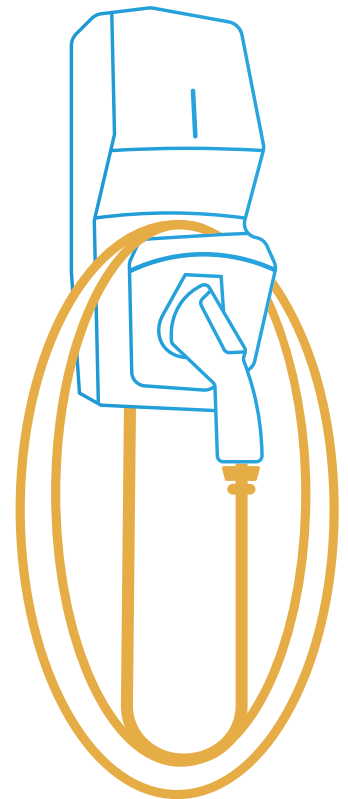


Figure 1, a level 2 charger

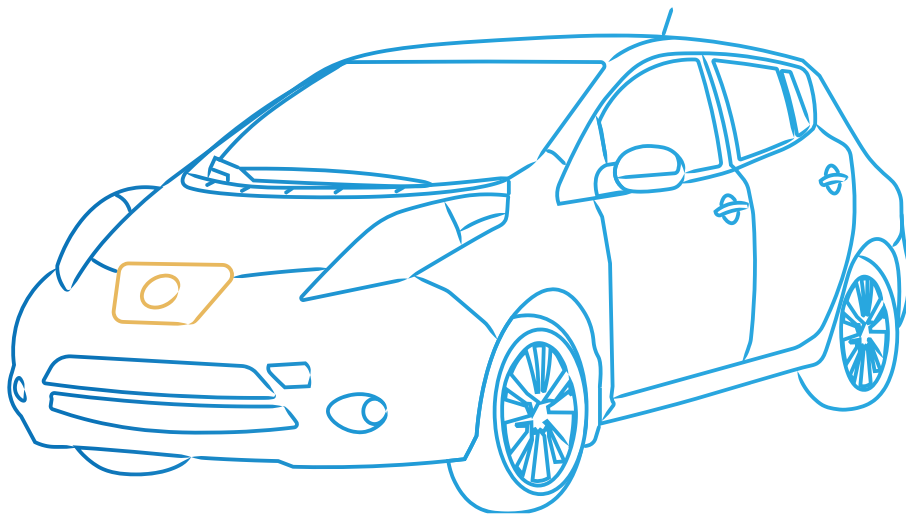
Public fast chargers have two plug options: 1 “CCS” plug and 1 “CHAdEMO” plug but only one plug can be used at a time. A Tesla driver will need to buy an adapter to use a CHAdEMO plug, and there is no adapter for any make of model other than a Tesla to use a Tesla charging station.

A closer look at Level 2 chargers – a perfect fit for Strata

- They deliver an 80% charge in approximately four to six hours
- The amount of time it actually takes depends on how full the battery is when you start your charging session and how full you need it to be to get to your next destination.

What types of vehicles can charge at a Level 2 station?

All BEVs (Battery Electric Vehicles) and PHEVs (Plug-in Hybrid Electric Vehicles) can charge at a Level 2 station. Different vehicle manufacturers have different charging connector types but Level 2 stations can accommodate all of them (Tesla owners will have to use and provide their own adapter).



Glossary

EV Glossary

- **Electric vehicle charging station** - A charging station, also known as a charge point or electric vehicle supply equipment (EVSE), is a piece of equipment that supplies electrical power for charging plug-in electric vehicles.
- **EVSE** - The technical term for an electric charging station is Electric Vehicle Supply Equipment (EVSE).
- **EV Ready** - EV Ready means getting the property ready to accommodate future EV charging. For strata corporations this generally means that all or most parking spaces have an energized outlet with a cover that provides a final connection point in an electrical wiring installation for a Level 2 EV charger. In other words, the system is ready for a Level 2 EV charging station to be attached.
- **Electrical design For EV charging** - Electrical design involves planning the installation of electrical infrastructure and equipment, including electrical panels, meters, wiring, conduit, energy management systems, data communications infrastructure, charging stations, and any other components or equipment required to supply electricity for charging plug-in electric vehicles.
- **Energy management system** - An EV energy management system (EVEMS) optimizes the charging of multiple electric vehicles simultaneously. For example, EVEMS could distribute electricity to charge four vehicles instead of one without exceeding the amount of power available.
- **Networked charging stations** - Networked charging stations are connected so they can communicate with other stations and/or communicate with a server or the cloud through a cellular or wireless signal. Communication allows software to report on usage and/or other capabilities such as providing real-time status of charging stations.
- **Low carbon fuel credits** - The BC government has introduced legislation that provides credits to fuel suppliers who supply electricity to EV charging stations. Some strata corporations will be eligible to receive credits under this legislation.

Strata Glossary

- **Strata corporation** - A strata corporation is a legal entity created when a strata plan is filed at the Land Title Office. The strata plan is divided into separate strata lots which are individually owned.
- **Strata Property Act** - *The Strata Property Act*, regulations and the strata corporation's bylaws and rules provide the legal framework under which all strata corporations must operate in British Columbia. Link: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/98043_00
- **User Fee** - Under the *Strata Protection Act* a strata corporation can pass bylaws and rules that set out fees for use of common property or common assets. Examples include a fee to use a guest suite, to rent a storage locker, to use a common laundry machine, or to charge an electric vehicle.
- **Personal Information Protection Act (PIPA)** - Strata corporations must comply with the *Personal Information Protection Act*. This legislation governs the collection, use, storage, and access to personal information. Link: https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/00_03063_01
- **Land Title Office** - All properties in BC, and the owners of those properties, are registered with the Land Title Office. Other documents on file at the Land Title Office include strata plans and bylaws.

Gather Information About Your Strata

Information to Collect:

- Strata Plan & Parking Areas
- Current Bylaws & Rules
- Legal Assistance
- Buildings & Electrical Layout
- Peak & Load Data

Before you jump into assessing electrical capacity or learning about electric vehicle charging stations, **electrical design**, and load management systems, take some time to gather the following information about your strata corporation. This information will provide a basis that will inform all your decisions and planning throughout your project to implement electric vehicle charging. Every strata is unique depending on the following information, so it is important to not rely on the methods used by other strata corporations to achieve their EV charging goals.

Strata Plan and Parking Areas

Check your strata plan to confirm the legal designation of the parking stalls. See Appendix A for an example of a page from a strata plan.

Limited Common Property (LCP)

If a parking stall on the strata plan says “LCP #” it is Limited Common Property for the exclusive use of the owner of the strata lot number indicated. Neither the strata council, nor the strata corporation can reassign these stalls. It is also not recommended for strata owners to enter into agreements to switch these stalls as these agreements may not be legally binding on new owners when one or both of the owners sell their strata lots.

Strata Lot

If a parking stall is part of a strata lot such as is the case with some townhouses, the stall will usually say “Pt #”, meaning part of “strata lot #”. In rare cases a parking stall may be a separate strata lot. In that case the stall has its own strata lot number (SL #) and is not part of any residential or commercial strata lot. Council/the strata corporation cannot reassign these stalls.

Common Property (CP)

The strata plan might show parking stalls or parking areas as common property (CP). Under the Strata Property Act, these stalls can only be assigned to residents for short-term exclusive use for up to one year. These assignments must be renewed or reassigned each year. Reassignment is useful when planning the ideal location for EV charging stations. However, there are exceptions. If CP stalls have been designated as Limited Common Property (LCP) by $\frac{3}{4}$ vote at an annual or special general meeting and the designations have been filed at the **Land Title Office**, they can only be reassigned by another $\frac{3}{4}$ vote to change those designations and refiled at the Land Titles Office.

Long-term Leases

Another exception is that the CP stalls may be controlled by the developer or a corporation set up by the developer by way of long-term leases with individual owners. In that case, it is recommended to consult a lawyer to check the lease agreements and determine what options may be available.

**Residential parking stalls:**

Number of CP stalls: _____

Number of LCP stalls: _____

Number of SL stalls (rare): _____

**Characteristics of residential parking stalls:**

Number of stalls in surface parking lot: _____

Number of stalls in one or more carports: _____

Number of stalls in one or more parkades: _____

If there are different building types add notes such as the type of parking for condominium units vs. townhouse units:

**Visitor/Guest stalls:**

Number of stalls: _____

Are these common property (CP)? (check one) Y N

**Commercial stalls:**

If your strata has residential and commercial strata lots, how many parking stalls are for the use of the commercial strata lots only? (e.g., for owners, staff, and customers).

Number of commercial stalls: _____

**Total number of all residential, visitor and commercial parking stalls:** _____

Additional notes about parking stalls or parking areas:

Current Bylaws and Rules

Check your current strata bylaws filed at the [Land Title Office](#). If your strata hasn't repealed and replaced all the *Strata Property Act* Standard Bylaws, then some or all of the Standard Bylaws may apply.

Read all of your bylaws including:

- Use of property
- Repair and maintenance of property by owner
- Repair and maintenance of property by strata corporation
- Obtain approval before altering a strata lot
- Obtain approval before altering common property
- Parking
- Insurance
- User Fees
- Fines
- Any existing bylaws about using a common property electrical outlet, and charging an electric scooter, e-bike, or electric vehicle

Many strata corporations also have rules about the use, safety and condition of the common property and common assets. If your strata has rules, read all the rules including:

- Use of common area facilities
- Parking
- User Fees

 **Make notes** about your current bylaws and rules:

Which of the above bylaws and rules do you have and how do you think they apply to requests from owners to install and/or use EV charging stations? (Later in this workbook, you can review suggestions for changes or additions to your bylaws and rules.)

Legal Assistance

It's money well spent to get some legal advice at this point from a lawyer with experience in strata law. They can help council understand your strata plan, LCP designations (if any), leases (if any), bylaws, rules and other legal details you might not be aware of. For example, air space parcel and sectioned stratas are complex and some stratas have legal agreements such as easements or covenants.

Asking questions at this point could save you time and money, and prevent you from making mistakes that may lead to legal action in the future.

 As you go through this workbook, list questions for your lawyer here:

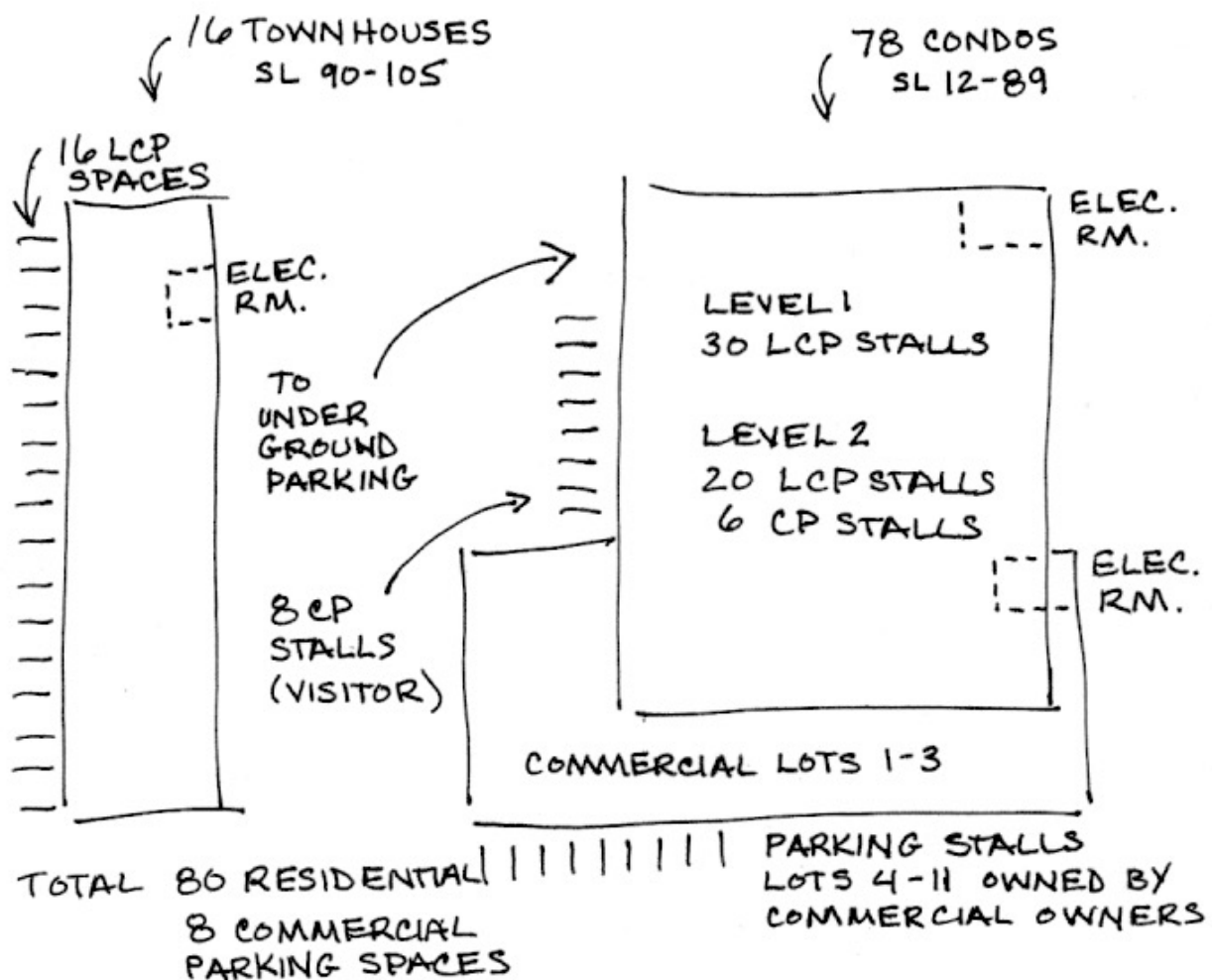
Buildings and Electrical Layout

Factors that effect electrical design include the number of buildings, how many common property electrical rooms exist, and where they are located. A strata property that has parking areas with different characteristics such as a surface parking lot, carport, and an underground parkade will have a different electrical design than a building with underground parking levels.

Whose electricity, is it? If common electricity (billed to the strata by BC Hydro) will be used for electric vehicle charging, there are rebates available to the strata corporation. If the electricity that will be used by a charging station is billed to an owner by BC Hydro, such as in a townhouse garage, there are rebates available to the individual owner.

Sketch out the characteristics of your strata. Mark the location of all common property electrical panels/rooms. If you don't know where these rooms are, check your strata plan or building drawings, or ask your manager, caretaker, or electrician.

Here is an example:



 Use the space provided to sketch/upload your own:



Peak Load Data

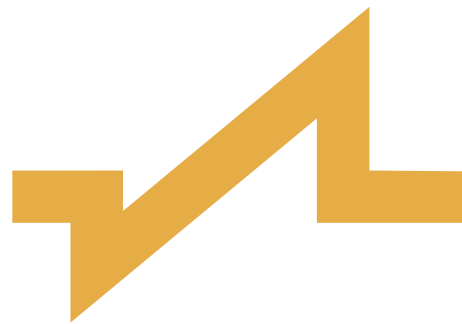
What is peak load data?

To understand whether there is sufficient power to supply electricity for EV charging, your electrical engineer or electrical contractor needs to know how much electricity is used by all residents of your strata. The peak load is when residents are using the most electricity, such as when many households are cooking and watching TV, or on a hot day when everyone has turned on air conditioning.

Your engineer and/or electrical contractor can use this data to perform a load calculation to determine if your electrical system has sufficient capacity for EV charging. They can then develop an electrical design that stays within the available capacity or determine whether an electrical service upgrade is required to provide more capacity.

Where to get peak load data?

If your building has 10 or more units, you can request peak load data from BC Hydro. There is no cost to obtain this information. The strata council can complete and sign a [BC Hydro Request for Customer Load Data form](#). BC Hydro will provide an excel file with 12 months of your building's most recent hourly load consumption (shown in kWh).



Hiring Professionals

Please review Appendix B for detailed information and videos about rebates available to strata corporations. Now that you have an understanding of the rebates, process, and basic knowledge about electrical installations and charging stations, you're ready to talk to electrical professionals.

Engineer, Electrician, or Both?

As you learned in the EV Ready Plan rebate section, the plan can be prepared by a licenced electrical contractor or registered professional electrical engineer or both. If you have a complex electrical situation you may want to hire an engineer. You may want the engineer to work with, or consult with, a licenced electrical contractor that does the installations to ensure that the budget is based on current models, prices, and availability.

EVITP Certification

If you hire a licenced electrical contractor check to see if they have electricians who have completed the Electric Vehicle Infrastructure Training Program (EVITP). Find certified EVITP installers here: <https://ejtcenterprises.com/evitp-certified-installers/>

Choosing a Contractor

Watch the video **Choosing a Contractor for EV Charging Installations in Stratas** featuring a speaker from the Electrical Joint Training Committee, responsible for the EVITP program. It covers the contractor's responsibilities including compliance with electrical and building codes, obtaining electrical permits, working with BC Hydro, standards, best practices, safety, and keeping up with new technology. <https://youtu.be/DTZ-zeeNSHQ>

You may find the following resources helpful to research licenced electrical contractors:

Find a licenced contractor in BC at:

<https://www.technicalsaftybc.ca/regulatory-resources/find-a-licensed-contractor>

Find a contractor by submitting an EV Electrician Referral Request Form at:

<https://electricvehicles.bchydro.com/ev-electrician-referral-request-form>

Check the certification of an individual electrician/installer:

<https://legacy.technicalsaftybc.ca/regulatory-resources/find-certified-individual>

Check to see if a company has WorkSafeBC coverage at:

<https://www.worksafebc.com/en/insurance/why-clearance-letter/get-clearance-letter>

Questions to Ask

When speaking with an engineer or electrical contractor you may want to ask:

EV Ready Plans

- Can you provide references from other strata corporations with their contact information where you have completed an EV Ready Plan that qualifies for the CleanBC – Go Electric EV Charger Rebate program?
- How many EV Ready Plans have you completed for strata corporations?
- Have all those EV Ready Plans been approved? If not, why not?
- Can you provide a sample of an EV Ready Plan that you completed?
- Can you provide more than one option for EV charging solutions for our strata corporation?

EV charging electrical installations

- How many EV charging electrical installations has your company completed?
- Can you provide references from other strata corporations where you have completed an EV charging installation?
- What brands of system/charging stations do you install?
- For each manufacturer/supplier can you provide information about the operating costs of these systems and charging stations?
- For systems that include an option(s) for processing payments from users, can you provide information about the process, how fees are structured, and operational fees/commissions?
- For each manufacturer/supplier can you provide information about warranties, service contracts (if any), maintenance requirements, and availability of parts?

Other information

- (If an engineer) What installers have you worked with?
- (If an installer) Are your installers EVITP certified?
- What is your company's Technical Safety BC licence number?
- What is your company's WorkSafe BC number?
- Can you show proof of commercial liability insurance?



Make notes here:



Working with Owners

Now that you have information about your strata corporation and property, rebates and the steps in the process, you're ready to talk to other strata owners.

Grow Support

Familiarity with electric vehicles and charging varies greatly, and many strata owners and the public in general may need help getting on board with the idea. To gain support, put yourself in their shoes. They may have different priorities. They might not even own a vehicle at all or drive their vehicle very little in the first place. Take time to understand their needs and priorities before you try to convince them to support your idea.

EV Champions can get tips in this video: EV Charging – Working with Your Strata Council

<https://youtube/nhCPwM5t8go>

Understand Current Priorities

The Strata Property Act places a legal obligation on the strata corporation to repair and maintain common property and common assets. EV charging is often seen as a “nice to have” not a “must have”. A strata corporation and its owners have a finite amount of funds. Some strata owners can afford to pay special levies, other cannot. So, the cost of a project for an EV electrical installation is in essence competing with other priorities. To understand what your proposal is competing with, it is helpful to understand the current priorities for repair, maintenance and renewal projects, and the financial health of the strata corporation.

Read the most recent depreciation report. List the three most expensive projects that are identified in the next five years and the cost that the depreciation report estimates for each:



Name of project

Cost

Read the minutes of the annual general meetings (AGMs) and special general meetings (SGMs) from the last 2 years.

Were there any resolutions to approve funding from the contingency reserve fund (CRF) or by special levy? If so, what were the projects, what was the cost for each, and was the resolution passed?



Name of project

Cost

Approved?
Yes/No



Reflect.

Is there adequate funding in the CRF to fund upcoming repair, maintenance, and renewal projects?

Do you think special levies will be required?

Based on voting at past AGMs and SGMs do owners usually approve funding for projects or is it difficult to get enough votes?

Do you think adding a project for an EV charging installation would cause financial strain?

Owner/Occupant Surveys

A survey can be useful to gauge interest in electric vehicles. However, strata corporations must follow the ***Personal Information Protection Act (PIPA)*** which governs collection, use, storage, and access to personal information. In general, a survey should ask only questions that are necessary, and request the minimum amount of information required to achieve its purpose.

Example: The following survey collects information without requesting any personal information. This example was created using Google Forms. If the strata council or property manager has a Gmail account, they can use Google Forms for free. In the settings, select anonymous. When the survey is ready, send an email to the owners and tenants inviting them to complete the anonymous survey. The strata council and manager should not provide the email addresses of owners and tenants to any other person. This would be a violation of *PIPA*. Survey: <https://forms.gle/xNRq1TziTJaGJySdA>

Initially a survey can be helpful to find out how many owners are interested in purchasing electric vehicles in the next 1-5 years, and their attitudes towards supporting installation of EV charging infrastructure.

Later in the process, the engineer or contractor writing the EV Ready Plan will usually have their own, more detailed, survey to collect information they need to make certain calculations. The EV Ready Plan must provide a solution that gives enough charging power to achieve a reasonable driving range that meets the needs of the average owner in your strata. Therefore, the calculations consider factors such as demographics (age, household sizes), average daily distance travelled by vehicles, vehicle sizes, climate etc. The contractor must also comply with *PIPA*. Their survey should request the minimum amount of personal information necessary.

Town Hall and Information Meetings

It's a good idea to have several town hall or information meetings throughout the process. The one solution presented in the EV Ready Plan should reflect the wishes of the owners regarding features of the system, the ongoing operating costs, and the bylaws and rules that will be needed. Learn more about bylaws and rules below.

Town hall and information meetings are informal. There are no requirements to make an agenda or take minutes. They often feature a guest speaker giving a presentation.

For example, you might hold a town hall or information meeting:

- To discuss BC's transition to electric vehicles, incentives, property values, and other benefits of having EV charging at your strata. This is a good time to learn about the features of different systems, and electrical engineers and electrical contractors in your area. Your owners are now informed and ready to hold an AGM or SGM to approve funding to get an EV Ready Plan.
- After receiving an EV Ready Plan, you could ask the person who wrote the plan to do a presentation or be on hand to answer questions. This is a good time to get feedback from owners about the solution presented in the plan and the proposed budget for the project.
- The next town hall meeting could discuss how the proposed EV charging system works, the future annual operating costs, and the associated bylaws and rules (including user fees) that owners want to have. You might invite a strata lawyer to answer questions. Your owners are now ready to hold an AGM or SGM to approve funding to install the electrical infrastructure and vote on bylaws and rules.

See a typical sequence of meetings and other steps in the infographic [How to Get EV Ready](#).

Operating Costs, User Fees, Bylaws, and Low Carbon Fuel Credits

Annual Budget

Each year at the annual general meeting (AGM), the owners hold a majority vote to pass the budget, often called the operating budget. It presents the estimated revenue from all sources and the estimated expenses for the day-to-day operations of the strata corporation.

The revenue generally lists revenue from strata fees, and interest. Some strata corporations have revenue from user fees such as when residents rent a guest suite or storage locker, or use a common laundry machine. Strata corporations that have EV charging stations could potentially have lines for revenue from **low carbon fuel credits** and user fees. However, neither the strata corporation, nor a third-party payment processor, may collect a fee from a user unless a valid bylaw has been passed by a $\frac{3}{4}$ vote, or a Rule has been ratified by a majority vote of the owners at an annual general meeting (AGM) or special general meeting (SGM). Bylaws don't come into effect until they are filed at the Land Title Office.

Operating Expenses

A typical budget includes expenses such as utilities, insurance, waste removal, and much more. The consumption of electricity that is billed to the strata corporation is a common expense. Any other expenses associated with operating the EV charging system will also be expenses of the strata corporation. These expenses will vary depending on the brand and features of the system.

Operating expenses might include:

- Annual electrical operating permit
- Annual fee for each charging station
- Service contract for maintenance
- Payment processing charges
- Other fees



Make notes:

Have a discussion with the engineer or electrical contractor who is writing the EV Ready Plan.

What are the operating costs of the systems they might be suggesting?

Is there an alternative with lower operating costs?



User Fees

Generally, strata owners want the residents who will be using EV charging stations to pay a fee to cover the operating expenses, however there is no requirement to do so. It is a choice of the owners by a vote at a general meeting. Under the Strata Property Act this is called a User Fee. Neither the strata corporation, nor a third-party payment processor may collect a fee from a user unless a valid bylaw has been passed by a $\frac{3}{4}$ vote, or a rule has been ratified by a majority vote of the owners at an annual general meeting (AGM) or special general meeting (SGM).

Gauging owners' wishes regarding operating costs and user fees early in the process is essential in order for your engineer or contractor to write an EV Ready Plan that presents one solution that best fits the wishes of your owners.

Bylaws and Rules

It's a good idea for owners to have a discussion about their wishes for bylaws and rules. When the EV Ready Plan is completed, you can confirm the associated operating expenses. You need to know how the system works and all the costs involved before you can think about the associated bylaws or rules. It's best to work with a lawyer experienced in strata law.

The following questions are intended to initiate discussion. Once you have an idea of the wishes of your owners, then you'll have a list to give your lawyer. This will save you time and money. Your lawyer can then review your strata plan, your current bylaws, and draft your new bylaws and rules. Consider the following:

- What is the process for a resident to request approval to install a charging station? You might want a request to be in writing and to include certain information.
- What are the conditions of approval? You might want a copy of a permit, require a certain installer, a certain brand of charging station, and compatibility with networked system (if applicable.)
- Who pays for the cost of the charging station and installation?
- If the owner installs it, is an Indemnity Agreement required?
- Once installed, does the station become limited common property or common property? Consider whether stalls can be reassigned (common property), and eligibility for federal carbon credits.
- Who is responsible to repair and maintain the charging station? To insure it?
- If annual servicing or maintenance is required, who is responsible to organize it? Who pays for it? It may be in the best interests of safety and insurance for the strata corporation to keep the stations in good working order.
- If an owner sells, can they remove the station? Is the subsequent owner responsible for it? Does it become property of the strata corporation?
- Who is an authorized user? The owner of a strata lot? A tenant? A visitor? Commercial vehicles?
- Should every EV owner sign a user agreement to be an authorized user, identify their vehicle, and indemnify the strata corporation?
- If applicable, what are the rules about shared use of a charging station?
- What happens if an unauthorized vehicle uses a charging station? Can it be towed?
- Are there situations where access to a charging station can be withdrawn or denied?
- Are there any safety considerations?

- What about responsibility when equipment isn't used according to the manufacturer's instructions?
- If there will be a User Fee, how will it be calculated? Strata Property Regulation 6.9 permits 4 methods (or a combination of these methods) for the basis of calculating a User Fee. Give your lawyer a list of the operating expenses and a brief explanation of how the system works regarding data tracking and payment processing (if applicable):
 - By "the user's rate consumption". This may require signing an agreement with Measurement Canada. Most systems that track electrical consumption by individual users are not yet approved by Measurement Canada.
 - "Recovery of operating or maintenance costs"
 - By "the duration of use". Some systems or stations have the capability to track time/bill by the hour.
 - "A fixed amount" which is a flat fee per month. This could be a reasonable amount to cover all operating expenses.
 - By "the number of users" such as dividing the operating expenses equally by the number of users.

Some EV drivers think that some of the methods above are unfair since some people drive longer distances than others. However, take into consideration, that some systems have higher operating costs. A simple method such as flat fee or dividing expenses by the number of users might result in a lower fee for all drivers than a more sophisticated system that has higher overhead.



Low Carbon Fuel Credits

The BC government has introduced legislation that provides credits to fuel suppliers who supply electricity to EV charging stations. Some strata corporations will be eligible to receive Low Carbon Fuel Credits under this legislation

This is revenue of the strata corporation and should be included in the annual budget as a revenue source. All sources of revenue are pooled to pay all types of expenses in the budget. Owners might support an EV charging project if they know that the revenue from BC Low Carbon Fuel Credits will help pay for the strata corporation's expenses.

The Government of British Columbia passed the *Low Carbon Fuels Act* (New Act) in Spring 2022 to replace the *Greenhouse Gas Reduction (Renewable and Low Carbon Fuel Requirements) Act*. The Renewable and Low Carbon Fuel Requirements Regulation is currently in force and new regulations are expected in 2023 to be in force as of January 1, 2024.

A strata corporation supplying common electricity (electricity billed to the strata corporation and paid by strata fees) to charging stations is considered a fuel supplier. In short, the legislation requires fuel suppliers who supply electricity to charging stations to register every EV charging station and report the total electrical consumption annually. The strata corporation must have a measurement system to ensure an accurate and reliable measurement of the quantity of electricity provided to all stations, such as a reading from a BC Hydro meter that provides electricity to all stations. The first reporting period is January 1 to December 31, 2022 with a deadline of March 31, 2023.

These strata corporations will generally qualify to receive BC Low Carbon Fuel Credits. Credits can then be traded in a "credit market" by an agent acting on behalf of the strata corporation. The credits are usually purchased by fossil fuel suppliers. In simplest terms this is like trading in a stock market.

New regulations expected to be in force as of January 1, 2024 should make the process easier for small fuel suppliers such as strata corporations to find agents (also known as representatives or aggregators) to represent them. In the meantime, strata corporations can "bank" their credits. Credits don't expire.

Learn more at <https://gov.bc.ca/lowcarbonfuels>

Resources

Vancouver Island Strata Owners Association
Electric Vehicle Charging for Stratas
https://www.visoa.bc.ca/?page_id=10774

PlugIn BC
<https://pluginbc.ca/>

MetroVancouver: EV Strata Condo
<http://www.metrovancouver.org/services/air-quality/climate-action/climate-solutions/ev-strata-condo/Pages/default.aspx>

CleanBC – Go Electric EV Charger Rebate Program Guide
<https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/power-smart/electric-vehicles/EV-incentive-program-guide.pdf>

Federal Zero Emission Vehicle Infrastructure Program (ZEVIP)
<https://www.nrcan.gc.ca/energy-efficiency/transportation-alternative-fuels/zero-emission-vehicle-infrastructure-program/21876>

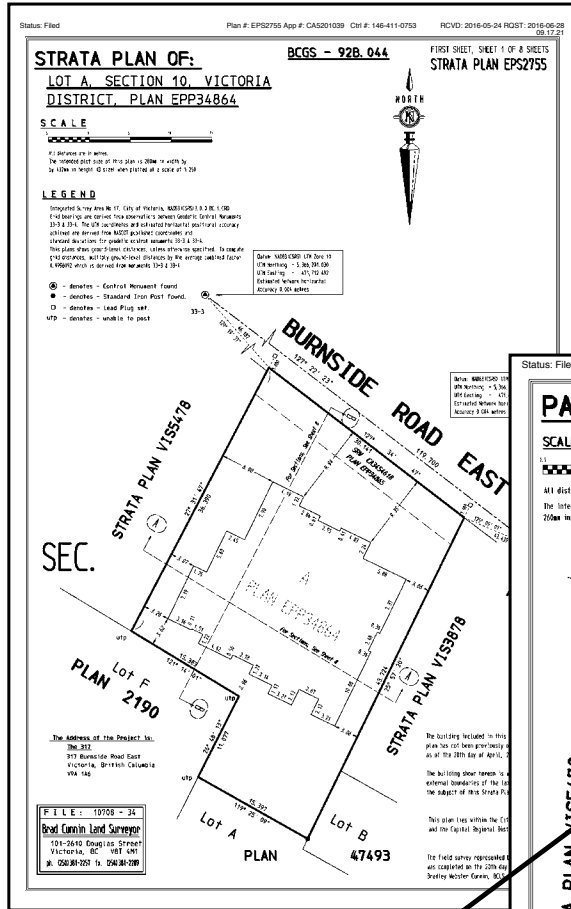
CleanBC Passenger Vehicle Rebates
<https://goelectricbc.gov.bc.ca/personal-rebate-offers/passenger-vehicle-rebates/>

Federal Incentives for Zero-Emission Vehicles (iZEV) Program
<https://tc.canada.ca/en/road-transportation/innovative-technologies/zero-emission-vehicles/light-duty-zero-emission-vehicles/incentives-purchasing-zero-emission-vehicles>

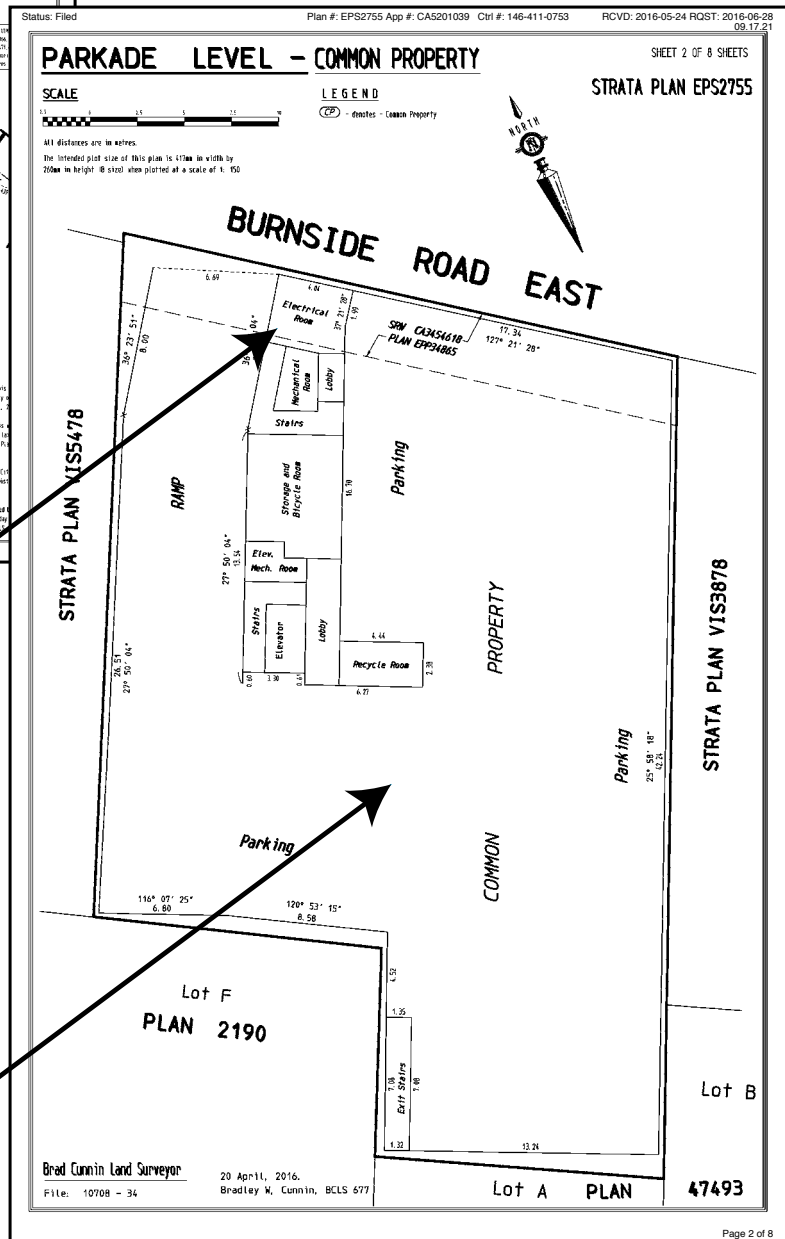
*Partial Funding by
Natural Resources
Canada*

Canada 

Strata Plan - 8 Sheets



Sheet 2 - Parkade Level



Electrical room

All parking areas are Common Property

Appendix B (Current as of Spring 2023)

Learn about Rebates and EV Charging

Learning what rebates are available to your strata is a great way to filter out information that doesn't apply to you, focus on strategies that are most beneficial to your strata, and understand your options.

CleanBC – Go Electric EV Charger Program Rebates

For strata corporations that will use common electricity for their charging stations such as the typical condominium strata, there are three rebates available:

EV Ready Plan

An EV Ready Plan is a professional document that includes details of how your strata corporation will provide each residential unit with at least one “EV Ready” parking space. “EV Ready” means the parking space has an energized outlet with a cover that provides a final connection point in an electrical wiring installation for a Level 2 EVSE (electrical vehicle supply equipment) commonly called a charging station. That’s a long way of saying all the equipment, wiring, conduit, junction boxes, panels, communications wiring etc. is installed and ready for charging stations to be installed at the parking spaces.

Getting a licenced electrical contractor or registered professional electrical engineer to prepare this plan will help your council and owners understand your current electrical capacity, your spare capacity, physical or electrical limitations of your situation (if any), and provides one recommended solution and budget.

Watch the video **EV Ready Plans for Condominium Stratas** by VISOA to learn more about EV Ready Plans, the CleanBC rebate, eligibility, and how to apply: https://youtube/_AFUa3p-baY



Make notes here:

For example:

What did you learn?

How do you think your strata would benefit from getting an EV Ready Plan?

Do you think your strata is eligible for a rebate?



Electrical Infrastructure

The second rebate under the CleanBC Go Electric EV Charger program is called the Electrical Infrastructure Rebate. If the program approves your EV Ready Plan, this rebate helps you implement the plan. It covers some of the costs of purchasing and installing equipment, wiring, conduit, junction boxes, panels, communications wiring etc. to make the parking spaces EV Ready.

Watch the video **EV Electrical Infrastructure Rebates for Condominium Stratas** by VISOA to learn more about electrical infrastructure, the CleanBC rebate, eligibility, and how to apply: <https://youtube/OpiXAoru0Mk>



Make notes here:

For example:

What tips can you use in your strata to proceed from an EV Ready Plan to installation of electrical infrastructure?

Is your strata eligible for the rebate?

What did you learn about the legal process for the strata owners to approve an electrical infrastructure project?



EV Charging Stations

The third rebate in the CleanBC Go Electric Charger Rebate program is the MURB Charger Rebate. It provides rebates towards the purchase and installation of Level 2 charging stations (**EVSE**). If the strata corporation has installed the electrical infrastructure to a parking space, the charging station can be installed.

Watch the video **EV Charging Stations: Rebates for Stratas** by VISOA to learn more about types of charging stations and examples of the fees the strata corporation can charge an owner or tenant for using them, the CleanBC rebate, eligibility and how to apply: <https://youtube/twgPd4rxK9o>



Make notes here:

For example:

Which of the three examples of **networked charging stations** do you think is the best for your strata? Why?

