

## **EV Ready Quick Guide**

A new incentive program has launched for developing an Electric Vehicle (EV) Ready Plan and Electrical Infrastructure in Multi-Unit Residential Buildings (MURBs). Total maximum rebates of up to \$108,000 are available.

AES is Canada's leading EV charging system engineering experts, serving condominiums, rental buildings, workplaces and fleets. We can help design cost-effective, smart charging systems that meet immediate and future needs. Contact us to discuss how we can help your project take advantage of the EV Ready incentive program.

## What are the benefits?

The EV Ready rebate program provides an incentive for MURBs to develop an EV Ready Plan and implement EV Ready parking. Rebates include:



75% rebate of the total costs of an approved EV Ready Plan, up to a maximum of \$3,000



Up to \$600 per EV Ready parking space, to a maximum

of **\$80,000** per



**\$4,400** per charging

station, up to **\$25,000** per MURB



\$108,000 in total maximum rebates available

## Who is eligible?

The program is available to MURBs located in BC, constructed prior to August 31, 2021



BC residents



Building owners



Building managers



Strata councils



Building representatives who reside in or have oversight of an eligible MURB



Owners or managers of MURBs that provide Level 2 EV charging parking spaces, including shared parking areas or private garages

## The Future is Electric

# Electric Vehicle Charging in Multifamily Condominiums & Rental Buildings

Electric vehicles (EVs) are growing increasingly popular - EVs now comprise over 10% of all vehicle sales in British Columbia, and a significantly higher percentage of sales in Metro Vancouver. The adoption of EVs is only going to accelerate – the International Council on Clean Transportation, Bloomberg New Energy Finance, and other analysts project that EVs will cost the same to produce as gasoline or diesel vehicles by 2024 and fall below conventional vehicle costs thereafter.

### Charging in Multifamily Buildings

Residents of multifamily condominiums and rental buildings are demanding access to EV charging. While some buildings have installed charging stations in shared parking areas, the most convenient and preferred form of charging is at a driver's permanent home parking space.

Most new residential buildings in BC are now required to be 100% EV Ready by having an electrical outlet adjacent to all parking spaces, where a charging station can be easily installed. Likewise, AES Engineering is increasingly helping existing multifamily buildings implement comprehensive "EV Ready Plans" that ensure all residents will have access to EV charging.

## Major advantages of a comprehensive EV Ready Plan

#### Lowest life-cycle costs

By designing electrical systems that allow all residents to adopt EVs, the complexity and cost of implementing EV charging per parking space is greatly reduced. Designing for 100% EV Ready parking from the outset reduces the cost per parking space by 5-7 times compared to conventional piece-meal approaches.

#### Avoid stranded assets

Adding EV charging on a piece-meal basis typically results in sub-optimal electrical configurations that will ultimately need to be replaced as demand for EV charging grows. AES's approach ensures that buildings implement scalable, cost-effective solutions.

#### Simple process

Once a comprehensive electrical renovation is complete, residents will have a quick, simple process to implement EV charging. This avoids needing to install electrical infrastructure each time a resident adopts an EV.

## No complicated sharing of visitor parking spaces

EV charging in high-demand, common parking areas may cause conflicts that require residents to move their vehicles at inconvenient times. AES's smart charging designs allow drivers to charge in their regular home parking space, avoiding complications and hassle.

### Add value to your property

Most new multifamily building construction in BC, and an increasing amount of existing buildings, are 100% "EV Ready". Implementing the same EV Ready parking infrastructure will help keep your building competitive.



## How to be EV Ready



## Assessments & EV Ready Plan

AES performs assessments to develop EV charging strategies for residential and commercial buildings. As EV adoption continues to increase, these strategies support cost-effective implementation of charging stations to meet demand for today and tomorrow.



### Design

Our team strategically designs the infrastructure for charging stations to achieve scalable and costeffective solutions to meet required charging performance.



## Management Advising

AES helps clients select an EV charging service provider. Our experts can assist starters interested in understanding how to recoup electricity costs from drivers, update strata rules and bylaws and manage EV charging infrastructure.

## Top benefits of EVs





## Low fuel costs

costs are equivalent to about \$0.20/L gasoline.



# Low maintenance

Average
maintenance
costs on EVs are
less than half of
traditional
vehicles



# Excellent driving experience

Due to their low center of gravity, Evs are quite, have instant torque and handle exceptionally well



### Zero emissions

Evs have zero air pollutants and GHG emissions when charging on BC's clean electrical grid.



# Declining purchase costs

As battery costs decline in the next 5 years, EVs will become lower cost to produce than conventional

## Steps to be EV Ready

## Assessment

- Review existing drawings
- Site inspection
- Review BC Hydro bills
   Perform capacity calculations
- Perform metering (if necessary) Charging performance
- assessment Develop options
- Perform preliminary design
- Cost estimates
- · Options analysis
- Incentives analysis
- Recommendations

### Consideration of recommendations (by Strata or Property Manager)

Consider recommendations and designate scope of work

# Design &

Prepare design for pricing, permit and construction purposes

### Incentive application process

- Complete relevant forms
- Incorporate requirements/ conditions into project

### **Annual operating** permit

(by Electrical Contractor or Manufacturer)

- Complete forms
- Pay fees
- Obtain permit

# Construction

- Shop drawing process
- Installation
- · Testing and commissioning
- Inspections and approvals

## Construction contract award

(by Strata or Property Manager and/or Electrical Engineer)

- Select contract type
- Prepare contract
- Obtain signatures to enact contract

#### Bid process (by Strata or Property Manager and/or **Electrical Engineer)**

- Determine proponent listDetermine process type (tender,
- Determine process terms and
- conditions Issue bid documents
- Evaluate responses Select proponent

# charging policy

- Develop bylaw amendments
- Tenant consultation
- Strata

approval/enactment

### **EV** network services provider contract (by Strata or Property Manager)

- Assess options
- Negotiate with service providers
- Sign contract

### Close out (by Electrical

Contractor, reviewed by Electrical Engineer)

- Prepare as-built drawings
- Prepare operation and maintenance manuals



### **About AES**

AES Engineering Ltd. is a leading Canadian consulting firm providing electrical engineering, lighting, and technology services for the built environment. Established in 2001, AES has grown to 130 people in three offices across British Columbia and Alberta. Driven by a vested interest in the growth of neighbouring communities, AES is familiar with local infrastructure needs and is well-equipped for projects across Canada.

We provide solutions for building construction and infrastructure through mindful design and future-proof technology. Our unique approach prioritizes long-lasting sustainability, innovation, and well-being.

Our focus is simple: We are designing a better tomorrow.

# Start your EV Ready Plan today.

Reach out to AES for next steps: <a href="mailto:info@aesengr.com">info@aesengr.com</a>



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