

EV Ready Plan Consultant Workbook

This workbook provides a basis for an EV Ready Plan. The consultant will provide the applicant with an EV Ready Plan (in their own report format) and a copy of this workbook.

Your EV Ready Plan must include the following elements:

1. Property and Company Details

EV Ready Plan ID (provided by Efficiency Nova Scotia):		
a. Date the EV Ready Plan was prepared:		
b. Building Address (EV Ready Plan is for this building):		
c. Applicant Information		
Business Name		
d. Building Contact		
Name	First	Last
Position		
Contact Phone Number		
Contact Email		
e. EV Ready Consultant		
Name	First	Last
Qualification		
Company Name		
Contact Phone Number		
Contact Email		

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I understand the EV Ready Plan program requirements.		
I confirm the recommended solution provided in this EV Ready Plan complies with the program requirements, applicable electrical and building codes, standards and local bylaws.		
I have provided the applicant with a signed and stamped EV Ready Plan.		
	Date	

2. Building Information

a. Project Type	
Existing Building	New Construction Building
b. Building Type	
Rental Building	Condo Building
Other	If other, list: _____
c. Number of residential units in the building:	
d. Number of residential parking spaces:	
e. Number of residential parking spaces to be made EV Ready:	
f. Number of commercial/visitor parking spaces owned by the residential building:	
g. Number of commercial/visitor parking spaces to be made EV Ready:	
h. Expected number of EVSE to be installed within one year:	
j. Additional information about the property:	

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3. Electrical Capacity Assessment

The electrical capacity assessment determines the current state of the existing main service of the building.

This assessment only includes the existing system and does not include any recommended electrical upgrades, or future EVSE loads.

All units of measure must be kilowatt (kW).

a. What is the existing electrical main service size (kW)?
b. What is the peak demand on the existing main service (kW)?
c. Describe how the peak kW demand was determined (provide additional information on electrical system if necessary).
d. What is the spare capacity of the existing main, prior to EVSE installation (kW)?

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5. Recommended EV Ready Solution and Implementation Options

The EV Ready Plan must include one recommended solution that describes the building owner's preferred option for making the parking spaces EV Ready. In addition, the plan should include a recommendation on using a phased approach to installing infrastructure and charging stations in a manner that aligns with the recommended solution.

If a service upgrade is necessary for the recommended solution, the consultant should engage the electrical utility for information on potential upgrade options and associated cost estimates, etc. If some information cannot be obtained, the consultant should provide their best estimates, and recommendations based on their experience, and can contact Efficiency Nova Scotia with questions related to EV Ready Plan reports.

A single line diagram for the recommended EV charging system must be provided. This diagram should provide relevant details from the main electrical service to the EVSE. Any phased installation approach should be indicated on the single line diagram.

a. Provide a general description of the recommended EV Ready solution.

For example: identify the electrical supply for the EVSE (is this a new or existing electrical supply, is this supply dedicated to EVSE use only, is the supply the existing common area power supply, or another shared supply, etc), identify electrical panels (new or existing panels, dedicated to EVSE use only, etc.), and any other key components of the recommended charging system.

b. What type of Electric Vehicle Energy Management System (EVEMS) arrangement is recommended and why was this chosen?

For example: dynamic circuit-sharing, panel-sharing, monitoring at main electrical service, or other type.

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c. Identify the EVSE to breaker ratio of the recommended solution (e.g., 5 chargers per 50A breaker).
Explain why this solution was chosen.

d. Describe the charging performance (kW) of the recommended solution. What is the minimum kW provided and under what conditions does this occur. Describe if and how the performance changes based on the number EVs charging at one time, or other factors. What is the maximum performance (kW) and under what conditions does this occur.

e. What is the utility tariff (rate) supplying the EVSE? Is it the same rate for all EV Ready spaces?

f. What is the total maximum potential EV charging system load based on the recommended solution (kW)?

g. What would be the main service spare capacity after EVSE installation (kW)?

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h. Describe if and how the existing service accommodate the recommended solution.

j. Is a service upgrade required to accommodate the recommended solution? If so, describe the service upgrade required.

If a service upgrade is required, was the electrical utility input included to determine feasibility and cost estimates?

Yes

No

k. If there are existing EV chargers installed, how they will be integrated into the new EV charging system, including load analysis and the effects on the main distribution.

l. Describe if and how the EVSE will impact the existing telecom/network infrastructure, and if the existing infrastructure can accommodate the recommended solution.

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m. Identify the costs associated with the telecom/network hardware and infrastructure required for the recommended solution. For designs where integration with an existing Energy Management System or establishment of a new Energy Management System is intended, the electrical infrastructure should include all communications equipment, control systems installation, licensing, and permitting required to operate the system.

n. What EV charging network provider(s) and what Level 2 networked EVSE model(s) will be compatible with the recommended design solution? If multiple EVSE models are compatible, describe any requirements that they must meet in order to be compatible. Describe any requirements (for example: OCPP certification) that an EVSE must have in order to be compatible with the recommended solution.

o. Does this EV Ready Plan and the recommended solution meet the program requirements?

Yes **No**

If not, the EV Ready Plan may still be eligible for rebates. Identify what requirements are not achieved, explain why meeting the requirement is not feasible.

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p. Provide a recommendation on implementing the recommended solution using phased approach. For example, describe if and how, EVSE can be added on existing infrastructure in a manner that aligns with the recommended solution.

Provide details for each phase, including the number of charging stations that can be added, their location, how they are supplied, electrical upgrades required, any other key details, etc.

q. Has an engineering single line diagram for the recommended solution been completed and provided to the applicant?

Yes

No

Provide a budgetary cost estimate for the recommended solution. Total project cost should include electrical infrastructure, telecom/network upgrades if required, and service upgrades if required. EVSE cost should not be included.

If a phased installation approach has been recommended, include budgetary costs for each of the phases that were provided.