



CLIMATE ACTION PLAN CONSISTENCY CHECKLIST B-50

PURPOSE

This checklist is intended to help building permit applicants identify which Climate Action Plan (CAP) ordinance requirements apply to their project. This completed checklist (B-50) and summary (B-55) must be included with the building permit application. The Carlsbad Municipal Code (CMC) can be referenced during completion of this document.

NOTE: The following type of permits are not required to fill out this form

❖ Patio	❖ Decks	❖ PME (w/o panel upgrade)	❖ Pool
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The B-50 checklist was originally developed several years ago to support implementation of the CAP. Recent updates to the California Building Standards Code have imposed newer performance standards on building permit applications. Therefore, the applicant is advised to review all applicable code sections and apply the maximum performance standard, which may exceed the CAP consistency checklist requirements

Consultation with a certified Energy Consultant is encouraged to assist in filling out this document. Appropriate certification includes, but is not limited to: Licensed, practicing Architect, Engineer, or Contractor familiar with Energy compliance, IECC/HERS Compliance Specialist, ICC G8 Energy Code Specialist, RESNET HERS rater certified, certified ICC Residential Energy Inspector/Plans Examiner, ICC Commercial Energy Inspector and/or Plans Examiner, ICC CALgreen Inspector/Plans Examiner, or Green Building Residential Plan Examiner.

If an item in the checklist is deemed to be not applicable to a project, or is less than the minimum required by ordinance, check N/A and provide an explanation or code section describing the exception.

The project plans must show all details as stated in the applicable Carlsbad Municipal Code (CMC) and/or Energy Code and Green Code sections.

Application Information

Project Name/Building
Permit No.: _____ BP No.: _____ Date: _____

Property Address/APN: _____

Applicant Name/Co.: _____

Applicant Address: _____

Contact Phone: _____ Contact Email: _____

Contact information of person completing this checklist (if different than above):

Name: _____ Contact Phone: _____

Company name/address: _____ Contact Email: _____

Use the table below to determine which sections of the Ordinance checklist are applicable to your project. For alterations and additions to existing buildings, attach a Permit Valuation breakdown on a separate sheet. For purposes of determining valuation, the amount should be upon either the actual contract price for the work to be permitted or shall be determined with the use of the current "ICC Building Valuation Data" as published by the International Code Council, whichever is higher (refer to Section 18.04.035 of the CMC).

Building Permit Valuation (BPV) \$ breakdown _____

Construction Type	Complete Section(s)	Notes:
<input type="checkbox"/> Residential		
<input type="checkbox"/> New construction	2A*, 3A*, 4A*	*Includes detached, newly constructed ADU
<input type="checkbox"/> Additions and alterations:		
<input type="checkbox"/> BPV < \$60,000	N/A	All residential additions and alterations
<input type="checkbox"/> BPV ≥ \$60,000 <input type="checkbox"/> Electrical service panel upgrade only	1A, 4A	1-2 family dwellings and townhouses with attached garages only.
<input type="checkbox"/> BPV ≥ \$200,000	1A, 4A*	*Multi-family dwellings only where interior finishes are removed and significant site work and upgrades to structural and mechanical, electrical, and/or plumbing systems are proposed
BPV ≥ \$1,000,000	2B*	*Multi-family dwellings only where ≥\$1,000,000 BPV AND affecting ≥75% existing floor area
<input type="checkbox"/> Nonresidential and hotels/motels		
<input type="checkbox"/> New construction	1B, 2B, 3B, 4B and 5	
<input type="checkbox"/> Alterations:		
<input type="checkbox"/> BPV ≥ \$200,000 or additions ≥ 1,000 square feet	1B, 5	
<input type="checkbox"/> BPV ≥ \$1,000,000	1B, 2B, 5	Building alterations of ≥ 75% existing gross floor area
≥ 2,000 sq. ft. new roof addition	2B, 5	1B also applies if BPV ≥ \$200,000

Instructions:

1. Choose first between residential or non-residential based on the type of project being submitted.
2. Next chose between new construction or addition/alteration for residential or non-residential.
3. The columns to the right of your selection will determine which sections of the CAP program are applicable to your project.
4. Appropriate details must be included on the plans for selections made.

EXAMPLE:

Scope of work includes a new, 2 story, single family residential structure.

The selections would be: Residential and New construction in the table above. For a 2-story structure, CAP sections 2A, 3A and 4A would be applicable. (Solar PV, water heating, EV charging) The * indicates that new detached ADU's are included.

EXAMPLE:

Scope of work includes a tenant improvement (i.e., alterations) valued at over one million dollars.

The selections would be: Non-residential and Alteration BPV ≥ \$1,000,000. CAP sections 1B, 2B and 5 would be applicable to this project. (Energy efficiency, Solar PV and Transportation Demand Management (TDM)*)

It may be necessary to supplement the completed checklist with supporting materials, calculations or certifications, to demonstrate full compliance with CAP ordinance requirements. For example, projects that propose or require a performance approach to comply with energy-related measures will need to attach to this checklist separate calculations and documentation as specified by the ordinances.

CAP Ordinance Compliance

Checklist Item

Check the appropriate boxes, explain all not applicable and exception items, and provide supporting calculations and documentation as necessary.

1. Energy Efficiency

Please refer to Section 18.30.060 of the Carlsbad Municipal Code (CMC) and Section 150.2 of the CEC for more information. Appropriate details and notes must be placed on the plans according to selections chosen in the design.

- A. **Residential addition or alteration \geq \$60,000 building permit valuation. Details of selection chosen below must be placed on the plans referencing CMC 18.30.060.**
- N/A _____
 Exception: Home energy score \geq 7 (attach certification)

Year Built	Single-family Requirements	Multi-family Requirements
<input type="checkbox"/> Before 1978	Select one option: <input type="checkbox"/> Duct sealing <input type="checkbox"/> Attic insulation <input type="checkbox"/> Cool roof	<input type="checkbox"/> Attic insulation
<input type="checkbox"/> 1978 and later	Select one option: <input type="checkbox"/> Lighting package <input type="checkbox"/> Water heating package	
<input type="checkbox"/> Between 1978 -1991		Select one option: <input type="checkbox"/> Duct sealing <input type="checkbox"/> Attic insulation <input type="checkbox"/> Cool roof
<input type="checkbox"/> 1992 and later		Select one option: <input type="checkbox"/> Lighting package <input type="checkbox"/> Water- heating package

- B. **New Nonresidential construction (including additions over 1,000sf), new hotel/motel construction AND alterations \geq \$200,000 building permit valuation. See Section 18.21.050 of the CMC and CALGreen Appendix A5.**

At least one measure from each applicable building component required. N/A _____

A5.203.1.1 Choose one:

- Outdoor lighting Restaurant service water heating (Section 140.5 of the CEC)
 Warehouse dock seal doors Daylight design PAFs Exhaust air heat recovery
- N/A _____

- A5.203.1.2.1** Choose one: .95 Energy budget
 (Projects with indoor lighting OR mechanical)
 .90 Energy budget
 (Projects with indoor lighting AND mechanical)
- N/A _____

- A5.211.1**** On-site renewable energy:
- N/A _____

- A5.211.3**** Green power: (If offered by local utility provider, 50% minimum renewable sources)
- N/A _____

- A5.212.1** Elevators and escalators: (Project with more than one elevator or two escalators)
- N/A _____

- A5.213.1** Steel framing: (Provide details on plans for options 1-4 chosen)
- N/A _____

* High-rise residential buildings are 4 or more stories.

** For alterations \geq \$1,000,000BPV and affecting $>$ 75% existing gross floor area, OR alterations that add 2,000 square feet of new roof addition: comply with Section 18.030.040 of the CMC (section 2B below) instead.

2. Photovoltaic Systems

- A. Residential new construction. Refer to Section 150.1(c)14 of the CEC for single-family requirements and Section 170.2(d) of the CEC for multi-family requirements. If project includes installation of an electric heat pump water heater pursuant to CAP section 3 below (residential water heating), increase system size by .3kWdc if PV offset option is selected.

Floor Plan ID (use additional sheets if necessary)	CFA or SARA	#d.u.	Calculated kWdc*	Exception
				<input type="checkbox"/> _____
				<input type="checkbox"/> _____
				<input type="checkbox"/> _____
				<input type="checkbox"/> _____
Total System Size:			_____ kWdc	

$$\text{kWdc} = (\text{CFA} \times .572) / 1,000 + (1.15 \times \text{\#d.u.})$$

*Formula calculation where CFA = conditional floor area, #du = number of dwellings per plan type
If proposed system size is less than calculated size, please explain.

- B. Nonresidential, hotel/motel and multifamily additions, alterations and repairs of these projects $\geq \$1,000,000$ BPV AND affecting $\geq 75\%$ existing floor area, OR addition that increases roof area by $\geq 2,000$ square feet. Please refer to Section 18.30.040 and 18.30.070 of the CMC when completing this section.

Choose one of the following methods: (Gross floor area or Time-Dependent Valuation method)

Gross Floor Area (GFA) Method

GFA: _____ Min. System Size: _____ kWd

If $< 10,000$ s.f. Enter: 5 kWdc

If $\geq 10,000$ s.f. calculate: $15 \text{ kWdc} \times (\text{GFA}/10,000)$ **

**Round building size factor to nearest tenth, and round system size to nearest whole number.

Time- Dependent Valuation Method

Annual TDV Energy use:*** _____ x .80= Min. system size: _____ kWdc

***Attach calculation documentation using modeling software approved by the California Energy Commission.

- C. *All newly constructed non residential, hotel/motel and highrise multifamily buildings that are required by CEC section 140.10(a) to have a PV system shall also have a battery storage system meeting CEC section 140.10(b). Non residential, hotel/motel and multifamily additions, alterations or repairs that trigger solar due to the Carlsbad Climate Action Plan will NOT require battery storage. Battery storage is required when triggered by CEC section 140.10(a) and/or 170.2(g).

3. Water Heating

- A. **Residential. Refer to Section 18.30.050 of the CMC and Sections 150.1(c)8 or 170.2(d) of the CEC when completing this section. Provide complete details on the plans.**
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Residential new construction and alterations:

- Required:** 60% of energy needed for service water heating from on-site solar or recovered energy.

For systems serving individual units, choose one system:

- Single 240-volt heat pump water heater AND compact hot water distribution AND Drain water heat recovery (low-rise residential only)
- Single 240-volt heat pump water heater AND PV system .3 kWdc larger than required.
- Heat pump water heater meeting NEEA Advanced Water Heating Specification Tier 3 or higher.
- Solar water heating system that is either .60 solar savings fraction or 40 s.f. solar collectors
- Gas or propane system with a solar water heating system and recirculation system.

For systems serving multiple units, choose one system:

- Heat pump water heating system with recirculation loop tank and electric backup.
- Solar water heating system that is either:
- .20 solar savings fraction
 - .15 solar savings fraction, plus drain water heat recover

OR:

- System meets performance compliance requirements of section 150.1(d) or 170.2(d) and deriving at least 60% of energy from on-site solar or recovered energy.**

- Exception: _____
-

- B. **Nonresidential and hotel/motel new construction. This section also applies to high-rise residential. Refer to Sections 18.030.020 and 18.040.030 of the CMC and Sections 140.5 and 170.2 of the CEC when completing this section. Provide complete details on the plans.**

1. Non-residential:

- Required:** Water heating system derives at least 40% of its energy from one of the following:
- Solar-thermal
 - Photovoltaics
 - Recovered energy
- Required:** High-capacity service water heating system

2. Water heating system is (choose one):

- Heat pump water heater
- Electric resistance water heater(s)
- Solar water heating system with .40 solar savings fraction

3. Hotel/motel:

- Required:** High-capacity service water heating system (meeting Section 170.2(d) of the CEC)
- Required:** Located in garage or conditioned space

Exception:

4. Electric Vehicle Charging

A. **Residential - New construction and major alterations.* This section also applies to hotel/motel projects. Refer to Section 18.21.030 of the CMC and Section 4.106.4 of the GBSC when completing this section.**

Choose one:

- One and two-family residential dwelling alterations with attached private garage. (not required if a panel upgrade would be needed)
- New detached ADU. (no EV space required when no additional parking facilities are added)
- New one and two-family residential dwellings and townhouse with attached private garage.
 - One EV Ready parking space required Exception: _____
- New and major alterations to multi-family and hotel/motel projects: Exception: _____

Total Parking Spaces Proposed	EVSE Spaces		
	EV Capable (10% of total)	EV Ready (25% of Total)	EV chargers (5% of Total)

***Major alterations are:**

- (1) for one and two-family dwellings and for town houses with an attached garage, alterations have a building permit valuation \geq \$60,000 or include an electrical service panel upgrade.
- (2) for multifamily dwellings (three units or more without attached garages), alterations have a building permit valuation \geq \$200,000, interior finishes are removed and significant site work and upgrades to structural and mechanical, electrical, and/or plumbing systems are proposed.

B. **Non-Residential - New construction** Exception : _____

Please refer to Section 18.21.040 of the CMC when completing this section

Total Parking Spaces Proposed	EV Capable	EVCS (Installed with EVSE)	EV Ready (optional)	EV Space (optional)

Calculation: Refer to the table below:

Total Number of Parking Spaces provided	Number of required EV Capable Spaces	Number of required EVCS (Installed with EVSE)
<input type="checkbox"/> 0-9	1	1
<input type="checkbox"/> 10-25	4	1
<input type="checkbox"/> 26-50	8	2
<input type="checkbox"/> 51-75	13	3
<input type="checkbox"/> 76-100	17	5
<input type="checkbox"/> 101-150	25	6
<input type="checkbox"/> 151-200	35	9
<input type="checkbox"/> 201 and over	20 percent of total	25 percent of Required EV Spaces

Calculations: Total EV Capable spaces = $.20 \times$ Total parking spaces proposed (rounded up to nearest whole number)

EVSE Installed = Total EVSE Spaces \times .25 (rounded up to nearest whole number)

EVSE other may be "EV Ready" or "EV Space"

5. Transportation Demand Management (TDM): Nonresidential ONLY

An approved Transportation Demand Management (TDM) Plan is required for all nonresidential projects that meet a threshold of employee-generated ADT. City staff will use the table below based on your submitted plans to determine whether your permit requires a TDM plan. If TDM is applicable to your permit, staff will contact the applicant to develop a site-specific TDM plan based on the permit details.

Employee ADT Estimation for Various Commercial Uses		
Use	Emp ADT for first 1,000 s.f.	Emp ADT/ 1000 s.f.¹
Office (all) ²	20	13
Restaurant	11	11
Retail ³	8	4.5
Industrial	4	3.5
Manufacturing	4	3
Warehousing	4	1

¹ Unless otherwise noted, rates estimated from *ITE Trip Generation Manual, 10th Edition*
² For all office uses, use SANDAG rate of 20 ADT/1,000 sf to calculate employee ADT
³ Retail uses include shopping center, variety store, supermarket, gyms, pharmacy, etc.

Other commercial uses may be subject to special consideration

Sample calculations:

Office: 20,450 sf
 1. $20,450 \text{ sf} / 1000 \times 20 = \mathbf{409 \text{ Employee ADT}}$

Retail: 9,334 sf
 1. First 1,000 sf = 8 ADT
 2. $9,334 \text{ sf} - 1,000 \text{ sf} = 8,334 \text{ sf}$
 3. $(8,334 \text{ sf} / 1,000 \times 4.5) + 8 = \mathbf{46 \text{ Employee ADT}}$

Acknowledgment:

I acknowledge that the plans submitted may be subject to the City of Carlsbad's Transportation Demand Management Ordinance. I agree to be contacted should my permit require a TDM plan and understand that an approved TDM plan is a condition of permit issuance.

Applicant Signature: _____

Name: _____

Date: _____

Phone No.: _____



CAP Building Plan Template B-55

Development Services

Building Division
1635 Faraday Avenue
760-602-2719
www.carlsbadca.gov

CLIMATE ACTION PLAN (CAP) COMPLIANCE

The following summarizes project compliance with the applicable Climate Action Plan ordinances of the Carlsbad Municipal Code and California Green Building Standards Code (CALGreen), current version. **The following certificate shall be included on the plans for all building permits that are required to comply with the CAP measures:**

1. ENERGY EFFICIENCY APPLICABLE: YES NO

Complies with CMC 18.30.060 or 18.21.050 Yes N/A

Existing Structure, year built: _____ Yes No
Prepared Energy Audit? _____

Energy Score: _____

Efficiency Measures included in scope:

2. PHOTOVOLTAIC SYSTEM APPLICABLE: YES NO

Complies with CMC section 18.30.040 and 2022 California Energy Code section 150.1(c)14 Yes N/A

Size of PV system (kWdc): _____
Sizing PV by load calculations Yes No

If by Load Calculations:

Total calculated electrical load: _____

80% of load: _____
Exception Requested Yes No
Exception Approved Yes No

3. ALTERNATIVE WATER HEATING SYSTEM APPLICABLE: YES NO

Complies with CMC sections 18.30.020 18.20.030 and/or 18.30.050? Yes N/A

Alternative Source:
 Electric
 Passive Solar

Exception Requested Yes No
Exception Approved Yes No

4. ELECTRIC VEHICLE (EV) CHARGING APPLICABLE: YES NO

Complies with CMC section 18.21.030? Yes N/A
Panel Upgrade? Yes No

Required Provided

Total EV Parking Spaces: _____
No. of EV Capable Spaces: _____
No. of EV Ready Spaces: _____
No. of EV Installed Spaces: _____

Hardship Requested Yes No
Hardship Approved Yes No

5. TRAFFIC DEMAND MANAGEMENT APPLICABLE: YES NO

Compliant? Yes No
TDM Report on file with city? Yes No