

# **GREENHOUSE GAS EMISSIONS**

## **CEQA Thresholds and Screening Tables City of Corona, California**

January 2012

Prepared for:

CITY OF CORONA  
400 S Vincentia Ave  
Corona, California 92882

Prepared by:

**ATKINS**

650 East Hospitality Lane, Suite 450  
San Bernardino, California 92408

# CONTENTS

**Introduction**..... 1

**California Environmental Quality Act** ..... 1  
     CEQA Mandates for Analysis of Impacts ..... 1

**Greenhouse Gas Impact Determination** ..... 2  
     Statewide or Regional Thresholds of Significance ..... 2  
     Quantitative Analysis Relative to the Corona Climate Action Plan ..... 2  
         Methodology Overview ..... 2  
         Methodology for the Calculation of GHG Emissions ..... 3

**Screening Threshold Tables**..... 4

**Instructions for Residential, Commercial, or industrial Projects**..... 4

**Instructions for Mixed Use Projects**..... 5

**References**..... 18

APPENDIX A – Methodology for the development and application of the Screening Table

# TABLES

Table 1: Screening Table for Implementation of GHG Reduction Measures for Residential Development ..... 6

Table 2: Screening Table for Implementation of GHG Reduction Measures for Commercial Development ..... 12



---

## Introduction

---

The California Environmental Quality Act (“CEQA”) requires assessment of the environmental impacts of proposed projects including the impacts of greenhouse gas emissions. The purpose of this document is to provide guidance on how to analyze green house gas (GHG) emissions and determine the significance of those emissions during CEQA review of proposed development projects within the City of Corona. The analysis, methodology, and significance determination (thresholds) are based upon the Corona Climate Action Plan (CAP), the GHG emission inventories within the CAP, and the GHG reduction measures that reduce emissions to the AB-32 compliant reduction target of the CAP. The Screening Tables can be used by the City of Corona Community Development Department for review of development projects in order to ensure that the specific reduction strategies in the CAP are implemented as part of the CEQA process for development projects. The Screening Tables provide a menu of options that both–ensures implementation of the reduction strategies and flexibility on how development projects will implement the reduction strategies to achieve an overall reduction of emissions, consistent with the reduction target of the CAP.

---

## California Environmental Quality Act

---

### CEQA MANDATES FOR ANALYSIS OF IMPACTS

CEQA requires that Lead Agencies inform decision makers and the public regarding the following: potential significant environmental effects of proposed projects; feasible ways that environmental damage can be avoided or reduced through the use of feasible mitigation measures and/or project alternatives; and the reasons why the Lead Agency approved a project if significant environmental effects are involved (CEQA Guidelines §15002). CEQA also requires Lead Agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data (CEQA Guidelines §15064[b]). A determination of whether or not a particular environmental impact will be significant must be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15064f[5]).

The recently amended CEQA Guidelines (CEQA Guidelines §15064.4[a] [b]) explicitly requires Lead Agencies to evaluate GHG emissions during CEQA review of potential environmental impacts generated by a proposed project. To assist in this effort, two questions were added to Appendix G of the CEQA Guidelines:

- Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

- Would the Project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

Finally, under the “rule of reason,” an EIR is required to evaluate impacts to the extent that is reasonably feasible ([CEQA Guideline § 15151; *San Francisco Ecology Center v. City and County of San Francisco* (1975) 48 Cal.App.3<sup>rd</sup> 584]). While CEQA does require Lead Agencies to make a good faith effort to disclose what they reasonably can, CEQA does not demand what is not realistically possible ([*Residents at Hawks Stadium Committee v. Board of Trustees* (1979) 89 Cal.App.3<sup>rd</sup> 274, 286]).

---

## Greenhouse Gas Impact Determination

---

### STATEWIDE OR REGIONAL THRESHOLDS OF SIGNIFICANCE

There are currently no published statewide or regional thresholds of significance for measuring the impact of GHG emissions generated by a proposed project. CEQA Guidelines §15064.7 indicates only that, “each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects.”

### QUANTITATIVE ANALYSIS RELATIVE TO THE CORONA CLIMATE ACTION PLAN

#### METHODOLOGY OVERVIEW

An individual project cannot generate enough GHG emissions to influence global climate change. The project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together may have a significant impact on global climate change. To address the State’s requirement to reduce GHG emissions, the City prepared the CAP with the target of reducing GHG emissions within the City by 15% below existing levels by 2020. The City’s target is consistent with the AB 32 target and ensures that Corona is providing GHG reductions locally that will complement the State and international efforts of stabilizing climate change.

Because the City’s CAP addresses GHG emissions reduction, is in concert with AB 32 and international efforts to address global climate change, and includes specific local requirements that will substantially lessen the cumulative problem, compliance with the Plan fulfills the description of mitigation found in CEQA Guidelines §15130(a)(3).

Because GHG emissions are only important in the context of cumulative emissions, the focus of the analysis is on answering the question of whether incremental contributions of GHGs are a cumulatively considerable contribution to climate change impacts. The CAP, includes a set of mitigation measures

designed to substantially lessen cumulative impacts associated with GHG emissions as described in CEQA Guidelines §15130(a)(3), in determining if the Project’s effects will result in significant impacts. The CAP has the following components that fulfill cumulative mitigation for GHG emissions:

- The CAP provides a community-wide GHG emissions reduction target that will substantially lessen the cumulative problem;
- The CAP provides measures that new development projects must follow to meet the City’s reduction target and substantially lessen the cumulative impact; and
- The CAP provides a set of GHG emission inventories that provides quantitative facts and analysis of how the Plan meets the reduction target that substantially lessens the cumulative impact.

The CAP satisfies the first condition by adopting a target of reducing GHG emissions down to 15% below existing levels within the City of Corona by 2020. This reduction target is compliant with AB 32; the AB 32 Climate Change Scoping Plan states: “In recognition of the critical role local governments will play in the successful implementation of AB 32, ARB recommended a greenhouse gas reduction goal for local governments of 15 percent below today’s levels by 2020 to ensure that their municipal and community-wide emissions match the State’s reduction target” (Scoping Plan page ES-5, CARB, December 2008). The City’s Plan matches the State’s reduction target, which also coincides with the reduction targets of the Kyoto Protocol. In this way, the City is teaming with the State and international efforts to reduce GHG emissions globally and substantially lessen the cumulative problem.

The CAP satisfies the second condition through the implementation of the reduction measures for new development. This document supplies the specific criteria that new development must follow to ensure that the reduction measures associated with new development are implemented and the reduction target is met.

The CAP satisfies the third criteria by providing a set of community-wide GHG emissions inventories for existing conditions, for future 2020 GHG emissions that are anticipated without the reduction measures (Business As Usual; BAU), and reduced levels of 2020 GHG emissions which demonstrates how the that implementation of reduction measures achieves the reduction target (15% below existing GHG emission levels by 2020). These community-wide GHG emission inventories are found in Appendix B of the CAP.

## **METHODOLOGY FOR THE CALCULATION OF GHG EMISSIONS**

Analysis of development projects can either be done through emissions calculations or by using the screening tables beginning on Page 6.

Total GHG emissions are the sum of emissions from both direct and indirect sources. Direct sources include mobile sources such as construction equipment, motor vehicles, landscape equipment; and

stationary sources such as cooling and heating equipment. Indirect sources are comprised of electrical, and potable water use, and the generation of solid waste, and waste water.

Direct GHG emissions from mobile and stationary sources are determined as the sum of the annual GHG emissions from construction equipment, motor vehicles, landscape equipment, and heating and cooling equipment.

Indirect sources are determined based on source as follows. Electrical usage is reported as annual emissions from electrical usage. Potable water usage is reported as the annual emissions from electricity used for potable water treatment and transportation. Solid waste is reported as the sum of annual emissions from solid waste disposal treatment, transportation, and fugitive emissions of methane at the solid waste facilities. Wastewater usage is reported as the annual emissions from wastewater transport and treatment.

Analysis of development projects not using the screening tables should use the emission factors found in the latest version of the California Climate Action Registry (CCAR) General Reporting Protocol. Quantification of emissions from electricity used for potable water treatment and transportation as well as wastewater transport and treatment can be found in the California Energy Commission (CEC) document titled "Refining Estimates of Water-Related Energy Use in California (CEC December 2006). For analysis of development projects using the screening tables, please refer to the process described on page 6.

---

## Screening Threshold Tables

---

The purpose of this Screening Table is to provide guidance in measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology, and significance determination (thresholds) are based upon the City of Corona Climate Action Plan (CAP), which includes GHG emission inventories, a year 2020 emission reduction target, the goals and policies to reach the target, together with the Programmatic EIR prepared for the CAP. The methodology for the development and application of the Screening Table is set forth in Appendix A, attached hereto.

---

## Instructions for Residential, Commercial, or Industrial Projects

---

The Screening Table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as "feature"). The point values correspond to the minimum

emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the City's CAP. As such, those projects that garner a total of 100 points or greater would not require quantification of project specific GHG emissions. Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

---

## Instructions for Mixed Use Projects

---

Mixed use projects provide additional opportunities to reduce emissions by combining complimentary land uses in a manner that can reduce vehicle trips. Mixed use projects also have the potential to complement energy efficient infrastructure in a way that reduces emissions. For mixed use projects, fill out both Screening Table 1 and Table 2, but proportion the points identical to the proportioning of the mix of uses. As an example, a mixed use project that is 50% commercial uses and 50% residential uses will show  $\frac{1}{2}$  point for each assigned point value in Table 1 and Table 2. Add the points from both tables. Mixed use Projects that garner at least 100 points will be consistent with the reduction quantities in the City's CAP and are considered less than significant for GHG emissions.

Those Projects that do not garnish 100 points using the screening tables will need to provide additional analysis to determine the significance of GHG emissions. Nothing in this guidance shall be construed as limiting the City's authority to adopt a statement of overriding consideration for projects with significant GHG impacts. The following tables provides a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the reduction measures and GHG reduction quantities in the CAP.

**Table 1: Screening Table for Implementation of GHG Reduction Measures for Residential Development**

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure R2 E1: Energy Efficiency for New Residential</b>			
<b>Building Envelope</b>			
Insulation	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	3 points	
	Enhanced Insulation (15%> Title 24)	7 points	
	Greatly Enhanced Insulation (20%> Title 24)	9 points	
Windows	Title 24 standard (required)	0 points	
	Modestly Enhanced Window Insulation (5% > Title 24)	3 points	
	Enhanced Window Insulation (15%> Title 24)	7 points	
	Greatly Enhanced Window Insulation (20%> Title 24)	9 points	
Doors	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	3 points	
	Enhanced Insulation (15%> Title 24)	7 points	
	Greatly Enhanced Insulation (20%> Title 24)	9 points	
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.		
	Title 24 standard (required)	0 points	
	Modest Building Envelope Leakage (5% > Title 24)	3 points	
	Reduced Building Envelope Leakage (15%> Title 24)	7 points	
Thermal Storage of Building	Minimum Building Envelope Leakage (20% > Title 24)	9 points	
	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.		
	Thermal storage designed to reduce heating/cooling by 5°F within the building	5 points	
	Thermal storage to reduce heating/cooling by 10°F within the building	10 points	
	Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.		

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
<b>Indoor Space Efficiencies</b>			
Heating/ Cooling Distribution System	Title 24 standard (required)	0 points	
	Modest Distribution Losses (5% > Title 24)	3 points	
	Reduced Distribution Losses (15%> Title 24)	7 points	
	Greatly Reduced Distribution Losses (15%> Title 24)	9 points	
Space Heating/ Cooling Equipment	Title 24 standard (required)	0 points	
	Efficiency HVAC (5% > Title 24)	3 points	
	High Efficiency HBAC (15%> Title 24)	7 points	
	Very High Efficiency HBAC (20%> Title 24)	9 points	
Water Heaters	Title 24 standard (required)	0 points	
	Efficiency Water Heater (Energy Star conventional that is 5% > Title 24)	3 points	
	High Efficiency Water Heater (Conventional water heater that is 15%> Title 24)	7 points	
	High Efficiency Water Heater (Conventional water heater that is 20%> Title 24)	9 points	
	Solar Water Heating System	12 points	
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.		
	All peripheral rooms within the living space have at least one window (required)	0 points	
	All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.) such that each room has at least 800 lumens of light during a sunny day	3 points	
	All rooms daylighted to at least 1,000 lumens	5 points	
Artificial Lighting	Title 24 standard (required)	0 points	
	Efficient Lights (5% > Title 24)	3 points	
	High Efficiency Lights (LED, etc. 15%> Title 24)	7 points	
	Very High Efficiency Lights (LED, etc. 20%> Title 24)	9 points	
Appliances	Title 24 standard (required)	0 points	
	Efficient Appliances (5% > Title 24)	3 points	
	High Efficiency Energy Star Appliances (15%> Title 24)	7 points	
	Very High Efficiency Appliances (20%> Title 24)	9 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
<b>Miscellaneous Residential Building Efficiencies</b>			
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting.	3 point	
Independent Energy Efficiency Calculations	Provide point values based upon energy efficiency modeling of the Project. Note that engineering data will be required documenting the energy efficiency and point values based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	
Existing Residential Retrofits	<p>The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing residential dwelling units within the City is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the Corona Planning Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following:</p> <p>Will the energy efficiency retrofit project benefit low income or disadvantaged residents?</p> <p>Does the energy efficiency retrofit project fit within the overall assumptions in Reduction Measure R2E3?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the City?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p>	TBD	
<b>Reduction Measure R2 E2: New Home Renewable Energy</b>			
Photovoltaic	<p>Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments:</p> <p>Solar Ready Homes (sturdy roof and electric hookups)</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> <p>70 percent of the power needs of the project</p> <p>80 percent of the power needs of the project</p> <p>90 percent of the power needs of the project</p> <p>100 percent of the power needs of the project</p>	<p>2 points</p> <p>10 points</p> <p>15 points</p> <p>20 points</p> <p>28 points</p> <p>35 points</p> <p>38 points</p> <p>42 points</p> <p>46 points</p> <p>52 points</p> <p>58 points</p>	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Wind turbines	<p>Some areas of the City lend themselves to wind turbine applications. Analysis of the area’s capability to support wind turbines should be evaluated prior to choosing this feature.</p> <p>Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments:</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> <p>70 percent of the power needs of the project</p> <p>80 percent of the power needs of the project</p> <p>90 percent of the power needs of the project</p> <p>100 percent of the power needs of the project</p>	<p>10 points</p> <p>15 points</p> <p>20 points</p> <p>28 points</p> <p>35 points</p> <p>38 points</p> <p>42 points</p> <p>46 points</p> <p>52 points</p> <p>58 points</p>	
Off-site renewable energy project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes that will help implement R2E4. These off-site renewable energy retrofit project proposals will be determined on a case by case basis and must be accompanied by a detailed plan that documents the quantity of renewable energy the proposal will generate. Point values will be determined based upon the energy generated by the proposal.	TBD	
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	
<b>Reduction Measure R2 W1: Water Use Reduction Initiative</b>			
<b>Irrigation and Landscaping</b>			
Water Efficient Landscaping	<p>Limit conventional turf to &lt; 20% of each lot (required)</p> <p>Eliminate conventional turf from landscaping</p> <p>Eliminate turf and only provide drought tolerant plants</p> <p>Xeroscaping that requires no irrigation</p>	<p>0 points</p> <p>3 points</p> <p>4 points</p> <p>6 points</p>	
Water Efficient irrigation	Drip irrigation	1 point	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
systems	Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	3 points	
Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	
Storm water Reuse Systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	
<b>Potable Water</b>			
Showers	Title 24 standard (required)	0 points	
	EPA High Efficiency Showerheads (15% > Title 24)	3 points	
Toilets	Title 24 standard (required)	0 points	
	EPA High Efficiency Toilets (15% > Title 24)	3 points	
Faucets	Title 24 standard (required)	0 points	
	EPA High Efficiency faucets (15% > Title 24)	3 points	
<b>Reduction Measure R2 T1: Land Use Based Trips and VMT Reduction</b>			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges:  Diversity of land uses complementing each other (2-28 points)  Increased destination accessibility other than transit (1-18 points)  Increased transit accessibility (1-25 points)  Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data).	TBD	
Residential Near Local Retail (Residential only Projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.  The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT)	TBD	
Other Trip Reduction Measures	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project.	TBD	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure R2 T3: Bicycle Master Plan Development</b>			
Bicycle Infrastructure	<p>Corona’s Bicycle Master Plan is extensive and describes the construction on 11.5 miles of Class I bike paths and 23 miles of Class II and Class III bikeways to build upon the current 8 miles of bikeways.</p> <p>Provide bicycle paths within project boundaries.</p> <p>Provide bicycle path linkages between residential and other land uses.</p> <p>Provide bicycle path linkages between residential and transit.</p>	<p>TBD</p> <p>2 points</p> <p>5 points</p>	
<b>Reduction Measure R2 T4: WRCOG Neighborhood Electric Vehicle Plan</b>			
Electric Vehicle Recharging	<p>Provide circuit and capacity in garages of residential units for use by a neighborhood electric vehicle (NEV).</p> <p>Provide connections to NEV approved roads and bicycle lanes according to WRCOG NEV Plan.</p>	<p>1 point</p> <p>5 points</p>	
<b>Total Points Earned by Residential Project:</b>			

**Table 2: Screening Table for Implementation of GHG Reduction Measures for Commercial Development**

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure R2 E5: Energy Efficiency for Commercial Development</b>			
<b>Building Envelope</b>			
Insulation	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	4 points	
	Enhanced Insulation (15%> Title 24)	8 points	
	Greatly Enhanced Insulation (20%> Title 24)	12 points	
Windows	Title 24 standard (required)	0 points	
	Modestly Enhanced Window Insulation (5% > Title 24)	4 points	
	Enhanced Window Insulation (15%> Title 24)	8 points	
	Greatly Enhanced Window Insulation (20%> Title 24)	12 points	
Doors	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	4 points	
	Enhanced Insulation (15%> Title 24)	8 points	
	Greatly Enhanced Insulation (20%> Title 24)	12 points	
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.		
	Title 24 standard (required)	0 points	
	Modest Building Envelope Leakage (5% > Title 24)	4 points	
	Reduced Building Envelope Leakage (15%> Title 24)	8 points	
Thermal Storage of Building	Minimum Building Envelope Leakage (20% > Title 24)	12 points	
	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.		
	Thermal storage designed to reduce heating/cooling by 5°F within the building	6 points	
	Thermal storage to reduce heating/cooling by 10°F within the building	12 points	
	Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.		

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
<b>Indoor Space Efficiencies</b>			
Heating/ Cooling Distribution System	Title 24 standard (required)	0 points	
	Modest Distribution Losses (5% > Title 24)	4 points	
	Reduced Distribution Losses (15%> Title 24)	8 points	
	Greatly Reduced Distribution Losses (15%> Title 24)	12 points	
Space Heating/ Cooling Equipment	Title 24 standard (required)	0 points	
	Efficiency HVAC (5% > Title 24)	4 points	
	High Efficiency HBAC (15%> Title 24)	8 points	
	Very High Efficiency HBAC (20%> Title 24)	12 points	
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings.	TBD	
Water Heaters	Title 24 standard (required)	0 points	
	Efficiency Water Heater (Energy Star conventional that is 5% > Title 24)	4 points	
	High Efficiency Water Heater (Conventional water heater that is 15%> Title 24)	8 points	
	High Efficiency Water Heater (Conventional water heater that is 20%> Title 24)	12 points	
	Solar Water Heating System	14 points	
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.		
	All peripheral rooms within building have at least one window or skylight	1 points	
	All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) such that each room has at least 800 lumens of light during a sunny day	5 points	
	All rooms daylighted to at least 1,000 lumens	7 points	
Artificial Lighting	Title 24 standard (required)	0 points	
	Efficient Lights (5% > Title 24)	4 points	
	High Efficiency Lights (LED, etc. 15%> Title 24)	6 points	
	Very High Efficiency Lights (LED, etc. 20%> Title 24)	8 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Appliances	Title 24 standard (required) Efficient Appliances (5% > Title 24) High Efficiency Energy Star Appliances (15%> Title 24) Very High Efficiency Appliances (20%> Title 24)	0 points 4 points 8 points 12 points	
<b>Miscellaneous Commercial Building Efficiencies</b>			
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting.	4 point	
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	
Existing Commercial building Retrofits	The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing commercial buildings within the City is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the Corona Planning Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following:  Will the energy efficiency retrofit project benefit low income or disadvantaged communities?  Does the energy efficiency retrofit project fit within the overall assumptions in Reduction Measure R2E7?  Does the energy efficiency retrofit project provide co-benefits important to the City?  Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.	TBD	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure R2 E6: New Commercial/Industrial Renewable Energy</b>			
Photovoltaic	<p>Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:</p> <p>Solar Ready Roofs (sturdy roof and electric hookups)</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> <p>70 percent of the power needs of the project</p> <p>80 percent of the power needs of the project</p> <p>90 percent of the power needs of the project</p> <p>100 percent of the power needs of the project</p>	<p>2 points</p> <p>8 points</p> <p>14 points</p> <p>20 points</p> <p>26 points</p> <p>32 points</p> <p>38 points</p> <p>44 points</p> <p>50 points</p> <p>56 points</p> <p>62 points</p>	
Wind turbines	<p>Some areas of the City lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature.</p> <p>Wind turbines as part of the commercial development such that the total power provided augments:</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> <p>70 percent of the power needs of the project</p> <p>80 percent of the power needs of the project</p> <p>90 percent of the power needs of the project</p> <p>100 percent of the power needs of the project</p>	<p>8 points</p> <p>14 points</p> <p>20 points</p> <p>26 points</p> <p>32 points</p> <p>38 points</p> <p>44 points</p> <p>50 points</p> <p>56 points</p> <p>62 points</p>	
Off-site renewable energy project	<p>The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing residential that will help implement R2E4, or existing commercial/industrial that will help implement R2E7. These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.</p>	TBD	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	
<b>Reduction Measure R2 W1: Water Use Reduction Initiative</b>			
<b>Irrigation and Landscaping</b>			
Water Efficient Landscaping	Limit conventional turf to < 20% of each lot (required)	0 points	
	Eliminate conventional turf from landscaping	3 points	
	Eliminate turf and only provide drought tolerant plants	4 points	
	Xeroscaping that requires no irrigation	6 points	
Water Efficient irrigation systems	Drip irrigation	1 point	
	Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	5 points	
Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	
Storm water Reuse Systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	
<b>Potable Water</b>			
Showers	Title 24 standard (required)	0 points	
	EPA High Efficiency Showerheads (15% > Title 24)	3 points	
Toilets	Title 24 standard (required)	0 points	
	EPA High Efficiency Toilets/Urinals (15% > Title 24)	3 points	
	Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	3 points	
Faucets	Title 24 standard (required)	0 points	
	EPA High Efficiency faucets (15% > Title 24)	3 points	
Commercial Dishwashers	Title 24 standard (required)	0 points	
	EPA High Efficiency dishwashers (20% water savings)	4 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Commercial Laundry Washers	Title 24 standard (required) EPA High Efficiency laundry (15% water savings) EPA High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)	0 points 3 points 6 points	
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings.	TBD	
<b>Reduction Measure R2 T1: Land Use Based Trips and VMT Reduction Policies</b>			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Local Retail Near Residential (Commercial only Projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
<b>Reduction Measure R2 T3: Bicycle Master Plan Development</b>			
Bicycle Infrastructure	Corona's Bicycle Master Plan is extensive and describes the construction on 11.5 miles of Class I bike paths and 23 miles of Class II and Class III bikeways to build upon the current 8 miles of bikeways. Provide bicycle paths within project boundaries. Provide bicycle path linkages between project site and other land uses. Provide bicycle path linkages between project site and transit.	TBD TBD 2 points 5 points	
<b>Total Points Earned by Commercial/Industrial Project:</b>			