

GREENHOUSE GAS EMISSIONS

Screening Tables County of Riverside, California

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Introduction

The County of Riverside Climate Action Plan (CAP) includes reducing 4,288,863 Metric Tons of Carbon Dioxide Equivalents (MTCO₂e) per year from new development by 2020 as compared to the 2020 unmitigated conditions.

Mitigation of GHG emissions impacts during the development review process of projects provides one cost effective way of implementing the GHG reduction strategies for reducing community-wide emissions associated with new development. The development review process procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by (1) applying an emissions level that is determined to be less than significant for small projects, and (2) utilizing Screening Tables to mitigate project GHG emissions that exceed the threshold level. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions. A threshold level above 3,000 MTCO₂e per year will be used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

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 greenhouse gas (GHG) emissions and determine the significance of those emissions during CEQA review of proposed development projects within the County of Riverside. The analysis, methodology, and significance determination (thresholds) are based upon the Riverside County GHG Technical Report, the GHG emission inventories within the Technical Report, and the GHG implementation measures that reduce emissions to the AB-32 compliant reduction target of the Technical Report. The screening tables can be used by the County of Riverside Planning Department for review of development projects in order to insure that the specific implementation measures in the Technical Report are applied as part of the CEQA process for development projects. The screening tables provide a menu of options that both insures implementation of the measures and flexibility on how development projects will implement the measures to achieve an overall reduction of emissions, consistent with the reduction target of the Technical Report.

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 require 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.3rd 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.3rd 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.” The County of Riverside CAP addresses cumulative GHG emissions, has a reduction target that reduces the cumulative GHG impacts to less than significant, has a set of reduction measures that achieves the reduction target and provides an implementation plan to implement the reduction measures. This document provides guidance in how to address GHG emissions in CEQA analysis and determine the significance of project generated GHG emissions.

QUANTITATIVE ANALYSIS RELATIVE TO THE RIVERSIDE GHG TECHNICAL REPORT

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 County prepared the CAP with the target of reducing GHG emissions within the unincorporated County by 15% below 2008 levels by the year 2020. The County's target is consistent with the AB 32 target and ensures that the County is providing GHG reductions locally that will complement the State and international efforts of stabilizing climate change.

Because the County's CAP addresses GHG emissions reduction 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 CAP fulfills the description of mitigation found in CEQA Guidelines §15130(a)(3) and §15183.5.

No single project has the ability to generate GHG emissions in sufficient quantities to change the global climate. Rather, it is the incremental contribution of all past, present, and future projects that when combined with all other anthropogenic sources of GHG emissions globally generates climate change impacts. 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 a project's effects will result in significant impacts. The CAP has the following components that fulfill cumulative mitigation for GHG emissions:

1. The CAP provides a community-wide GHG emissions reduction target that will substantially lessen the cumulative impact;
2. The CAP provides measures that new development projects to follow to meet the County's reduction target and substantially lessen the cumulative impact;
3. The CAP provides a set of GHG emission inventories that provides quantitative facts and analysis of how the measures within the CAP meet the reduction target that substantially lessens the cumulative impact:

4. The CAP provides an implementation, monitoring and update program to insure that the reduction target is met.

The CAP satisfies the first condition by adopting a target of reducing GHG emissions down to 15 percent below existing levels within the County of Riverside 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). . In this way, the City is teaming with the State’s 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 implementation of reduction measures achieves the reduction target (15 percent below existing GHG emission levels by 2020).

The CAP satisfies the fourth criteria through the implementation and monitoring program described in detail in Chapter 7 of the CAP.

3,000 MT CO₂e Emission Level

The County determined the size of development that is too small to be able to provide the level of GHG emission reductions expected from the Screening Tables or alternate emission analysis method. To do this the City determined the GHG emission amount allowed by a project such that 90 percent of the emissions on average from all projects would exceed that level and be “captured” by the Screening Table or alternate emission analysis method.

In determining this level of emissions the County used the database of projects kept by the Governor’s Office of Planning and Research (OPR). That database contained 798 projects, 60 of which were

extremely large General Plan Updates, Master Plans, or Specific Plan Projects. The 60 very large projects were removed from the database in order not to skew the emissions value, leaving a net of 738 projects. In addition, 27 projects were found to be outliers that would skew the emission value to high, leaving 711 as the sample population to use in determining the 90th percentile capture rate.

The analysis of the 738 projects within the sample population combined commercial, residential, and mixed use projects. Also note that the sample of projects included warehousing and other industrial land uses but did not include industrial processes (i.e. oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by SCAQMD to provide a consistent method of emissions calculations across the sample population further reducing potential errors in the statistical analysis. In calculating the emissions from projects within the sample population, construction period GHG emissions were amortized over 30-years (the average economic life of a development project).

This analysis determined that the 90th percentile ranged from 2,983 MT to 3,143 MT CO₂e per year. The **3,000 MT CO₂e per year** value is the low end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below.

The **3,000 MT CO₂e per year** value is used in defining small projects that, when combined with the modest efficiency measures shown in the bullet points below are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis described below. The efficiency measures required of small projects are summarized below:

- Energy efficiency of at least five percent greater than 2010 Title 24 requirements, and
- Water conservation measures that matches the California Green Building Code in effect as of January 2011.

Projects that Exceed 3,000 MT CO₂e Emission Level

METHODOLOGY FOR THE CALCULATION OF GHG EMISSIONS

Analysis of development projects exceeding the 3,000 MT CO₂e emissions level can either be done through emissions calculations or by using the screening tables beginning on Page 7.

CEQA THRESHOLDS AND SCREENING TABLES

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).

Analysis of development projects not using the screening tables should use the latest version of the California Emissions Estimator Model (CalEEMod). Two modeling runs should be completed. The first modeling run calculates GHG emissions at 2011 levels of efficiency using energy efficiency standards (Title 24) and the California Air Resources Board (CARB) on road vehicle emissions factors (EMFAC2012) set at 2011. A second modeling run is required that calculates GHG emissions at Project buildout year levels of efficiency and includes Project design features and/or mitigation measures to reduce GHG emissions such that the levels of efficiency result in a 25% reduction of GHG emissions compared to the model run using 2011 levels of efficiency.

For analysis of development projects using the screening tables, please refer to the process described on page 7.

Screening Tables

The purpose of the Screening Tables 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 Riverside County GHG Technical Report, which includes GHG emission inventories, a year 2020 emission reduction target, and the goals and policies to reach the target. The methodology for the development and application of the Screening Table is set forth in Appendix A, attached hereto.

Instructions for Application to 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 County’s GHG Technical Report. 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.

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 County’s authority to adopt a statement of overriding consideration for projects with requiring the preparation of an EIR due to a project’s significant GHG impacts. The following tables provide a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the implementation measures and GHG reduction quantities in the GHG Technical Report.

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 ½ 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 County’s GHG Plan and are considered less than significant for GHG emissions.

Table 1: Screening Table for GHG Implementation Measures for Residential Development

Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM RE1: Energy Efficiency for New Residential			
E1.A Building Envelope			
E1.A.1 Insulation	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	1 point	
	Enhanced Insulation (15%> Title 24)	3 points	
	Greatly Enhanced Insulation (20%> Title 24)	5 points	
E1.A.2 Windows	Title 24 standard (required)	0 points	
	Modestly Enhanced Window Insulation (5% > Title 24)	1 point	
	Enhanced Window Insulation (15%> Title 24)	3 points	
	Greatly Enhanced Window Insulation (20%> Title 24)	5 points	
E1.A.3 Doors	Title 24 standard (required)	0 points	
	Modestly Enhanced Insulation (5% > Title 24)	1 point	
	Enhanced Insulation (15%> Title 24)	3 points	
	Greatly Enhanced Insulation (20%> Title 24)	5 points	
E1.A.4 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)	1 point	
	Reduced Building Envelope Leakage (15%> Title 24)	3 points	
	Minimum Building Envelope Leakage (20% > Title 24)	5 points	
E1.A.5 Thermal Storage of Building	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	3 points	
	Thermal storage to reduce heating/cooling by 10°F within the building	6 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
E1.B Indoor Space Efficiencies			
E1.B.1 Heating/ Cooling Distribution System	Title 24 standard (required)	0 points	
	Modest Distribution Losses (5% > Title 24)	1 point	
	Reduced Distribution Losses (15%> Title 24)	3 points	
	Greatly Reduced Distribution Losses (15%> Title 24)	5 points	
E1.B.2 Space Heating/ Cooling Equipment	Title 24 standard (required)	0 points	
	Efficiency HVAC (5% > Title 24)	1 point	
	High Efficiency HBAC (15%> Title 24)	3 points	
	Very High Efficiency HBAC (20%> Title 24)	5 points	
E1.B.3 Water Heaters	Title 24 standard (required)	0 points	
	Efficiency Water Heater (Energy Star conventional that is 5% > Title 24)	1 point	
	High Efficiency Water Heater (Conventional water heater that is 15%> Title 24)	3 points	
	High Efficiency Water Heater (Conventional water heater that is 20%> Title 24)	5 points	
	Solar Water Heating System	7 points	
E1.B.4 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	1 points	
	All rooms daylighted to at least 1,000 lumens	3 points	
E1.B.5 Artificial Lighting	Title 24 standard (required)	0 points	
	Efficient Lights (5% > Title 24)	1 point	
	High Efficiency Lights (LED, etc. 15%> Title 24)	3 points	
	Very High Efficiency Lights (LED, etc. 20%> Title 24)	5 points	
E1.B.6 Appliances	Title 24 standard (required)	0 points	
	Efficient Appliances (5% > Title 24)	1 point	
	High Efficiency Energy Star Appliances (15%> Title 24)	3 points	
	Very High Efficiency Appliances (20%> Title 24)	5 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
E1.C Miscellaneous Residential Building Efficiencies			
E1.C.1 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 points	
E1.C.2 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	
E1.C.3 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	
E1.C.4 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 unincorporated County 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 Riverside County 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 provide co-benefits important to the County?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p>	TBD	
Implementation Measure IM E2: New Home Renewable Energy			
E2.A.1 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>4 points</p> <p>6 points</p> <p>8 points</p> <p>10 points</p> <p>12 points</p> <p>14 points</p> <p>16 points</p> <p>18 points</p> <p>20 points</p> <p>22 points</p>	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
E2.A.2 Wind turbines	<p>Some areas of the County 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>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>4 points</p> <p>6 points</p> <p>8 points</p> <p>10 points</p> <p>12 points</p> <p>14 points</p> <p>16 points</p> <p>18 points</p> <p>20 points</p> <p>22 points</p>	
E2.A.3 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 homes.</p> <p>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.</p>	TBD	
E2.A.4 Other Renewable Energy Generation	<p>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.</p>	TBD	
Implementation Measure IM W1: Water Use Reduction Initiative			
W1.A Residential Irrigation and Landscaping			
W1.A.1 Water Efficient Landscaping	<p>Limit conventional turf to < 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>	
W1.A.2 Water Efficient irrigation systems	<p>Drip irrigation</p> <p>Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)</p>	<p>1 point</p> <p>3 points</p>	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
W1.A.3 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	
W1.A.4 Recycled grey water	Grey water (purple pipe) irrigation system on site	5 points	
W1.B Residential Potable Water			
W1.B.1 Showers	Title 24 standard (required) EPA High Efficiency Showerheads (15% > Title 24)	0 points 1 points	
W1.B.2 Toilets	Title 24 standard (required) EPA High Efficiency Toilets (15% > Title 24)	0 points 1 points	
W1.B.3 Faucets	Title 24 standard (required) EPA High Efficiency faucets (15% > Title 24)	0 points 1 points	
Implementation Measure IM W2: Increase Reclaimed Water Use			
W2.A.1 Recycled Water	5% of the total project's water use comes from recycled/reclaimed water	5 points	
Implementation Measure IM T2: Increase Residential Density			
T2.A.1 Residential Density	Designing the Project with increased densities, where allowed by the General Plan and/or Zoning Ordinance reduces GHG emissions associated with traffic in several ways. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. This strategy also provides a foundation for implementation of many other strategies which would benefit from increased densities. 1 point is allowed for each 10% increase in density beyond 7 units/acre, up to 500% (50 points)	1-50 points	
Implementation Measure IM T3: Mixed Use Development			
T3.A.1 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) Infill location that reduces vehicle trips or VMT beyond the measures	TBD	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
	described above (points TBD based on traffic data).		
T3.A.2 Residential Near Local Retail (Residential only Projects)	<p>Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.</p> <p>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)</p> <p>The suburban project will have at least three of the following on site and/or offsite within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office.</p> <p>The mixed-use development should encourage walking and other non-auto modes of transport from residential to office/commercial locations (and vice versa). The project should minimize the need for external trips by including services/facilities for day care, banking/ATM, restaurants, vehicle refueling, and shopping.</p>	1-16 points	
Implementation Measure IM T5: Traffic Flow Management Improvements			
T5.A.1 Signal Synchronization	<p>Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds.</p> <p>Signal synchronization</p> <p>Traffic signals connected to existing ITS</p>	<p>1 point/signal</p> <p>3 points/signal</p>	
Implementation Measure IM T6: Bicycle/Pedestrian Infrastructure			
T6.A.1 Sidewalks	<p>Provide sidewalks on one side of the street (required)</p> <p>Provide sidewalks on both sides of the street</p> <p>Provide pedestrian linkage between residential and commercial uses within 1 mile</p>	<p>0 points</p> <p>1 point</p> <p>3 points</p>	
T6.A.2 Bicycle paths	<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>	
Implementation Measure IM T7: Electric Vehicle Use			
T7.A.1 Electric Vehicle Recharging	<p>Provide circuit and capacity in garages of residential units for installation of electric vehicle charging stations</p> <p>Install electric vehicle charging stations in the garages of residential units</p>	<p>1 point</p> <p>8 points</p>	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM T9: Increase Public Transit			
T9.A.1 Public Transit Access	The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility (1-15 points)	TBD	
Implementation Measure IM L1: SCAQMD No New Wood Burning Stoves			
L1.A.1 Wood Burning	As part of Rule 445 and the Healthy Hearths™ initiative, the South Coast Air Quality Management District adopted a rule for no permanently installed indoor or outdoor wood burning devices in new development. Project contains no wood burning stoves or fireplaces	10 points	
Implementation Measure IM L2: Prohibit Gas-Powered Equipment			
L2.A.1 Landscape Equipment	Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscape equipment is used in place of conventional gas-powered equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. Project provides electrical outlets on the exterior of all building walls so that electric landscaping equipment is compatible with all built facilities.	8 points	
Implementation Measure IM SW1: 80 Percent Solid Waste Diversion Program			
SW1.A.1 Recycling	County initiated recycling program diverting 80% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal: Provide green waste composting bins at each residential unit Multi-family residential projects that provide dedicated recycling bins separated by types of recyclables combined with instructions/education program explaining how to use the bins and the importance of recycling.	4 points 3 points	
Implementation Measure IM SW2: Construction and Demolition Debris Diversion Program			
SW2.A.1 Recycling of Construction/ Demolition Debris	50% of construction waste recycled (required) Recycle 55% of debris Recycle 60% of debris Recycle 65% of debris Recycle 70% of debris Recycle 75% of debris	0 points 2 points 3 points 4 points 5 points 6 points	
Total Points Earned by Residential Project:			

Table 2: Screening Table for GHG Implementation Measures for Commercial Development and Public Facilities

Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM E5: Energy Efficiency for Commercial/Public Development			
E5.A Building Envelope			
E5.A.1 Insulation	Title 24 standard (required) Modestly Enhanced Insulation (5% > Title 24) Enhanced Insulation (15%> Title 24) Greatly Enhanced Insulation (20%> Title 24)	0 points 4 points 8 points 12 points	
E5.A.2 Windows	Title 24 standard (required) Modestly Enhanced Window Insulation (5% > Title 24) Enhanced Window Insulation (15%> Title 24) Greatly Enhanced Window Insulation (20%> Title 24)	0 points 4 points 8 points 12 points	
E5.A.3 Doors	Title 24 standard (required) Modestly Enhanced Insulation (5% > Title 24) Enhanced Insulation (15%> Title 24) Greatly Enhanced Insulation (20%> Title 24)	0 points 4 points 8 points 12 points	
E5.A.4 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) Modest Building Envelope Leakage (5% > Title 24) Reduced Building Envelope Leakage (15%> Title 24) Minimum Building Envelope Leakage (20% > Title 24)	0 points 4 points 8 points 12 points	
E5.A.5 Thermal Storage of Building	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 Thermal storage to reduce heating/cooling by 10°F within the building Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.	6 points 12 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
E5.B Indoor Space Efficiencies			
E5.B.1 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	
E5.B.2 Space Heating/ Cooling Equipment	Title 24 standard (required)	0 points	
	Efficiency HVAC (5% > Title 24)	4 points	
	High Efficiency HVAC (15%> Title 24)	8 points	
	Very High Efficiency HVAC (20%> Title 24)	12 points	
E5.B.3 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	
E5.B.4 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	
E5.B.5 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 point	
	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	
E5.B.6 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
E5.B.7 Appliances	Title 24 standard (required)	0 points	
	Efficient Appliances (5% > Title 24)	4 points	
	High Efficiency Energy Star Appliances (15%> Title 24)	8 points	
	Very High Efficiency Appliances (20%> Title 24)	12 points	
E5.C Miscellaneous Commercial Building Efficiencies			
E5.C.1 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 points	
E5.C.2 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	
E5.C.3 Existing Commercial building 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 commercial buildings within the unincorporated County 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 Riverside County Planning Department. The decision to allow applicants 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 communities?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the County?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p>	TBD	
Implementation Measure IM E6: New Commercial/Industrial Renewable Energy			
E6.A.1 Photovoltaic	Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:		
	Solar Ready Roofs (sturdy roof and electric hookups)	2 points	
	10 percent of the power needs of the project	8 points	
	20 percent of the power needs of the project	14 points	
	30 percent of the power needs of the project	20 points	
	40 percent of the power needs of the project	26 points	
	50 percent of the power needs of the project	32 points	
	60 percent of the power needs of the project	38 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
	70 percent of the power needs of the project	44 points	
	80 percent of the power needs of the project	50 points	
	90 percent of the power needs of the project	56 points	
	100 percent of the power needs of the project	62 points	
E6.A.2 Wind turbines	Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Wind turbines as part of the commercial development such that the total power provided augments: 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project	8 points 14 points 20 points 26 points 32 points 38 points 44 points 50 points 56 points 62 points	
E6.A.3 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 residential or existing commercial/industrial. 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.	TBD	
E6.A.4 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	
Implementation Measure IM W1: Water Use Reduction Initiative			
W1.C Irrigation and Landscaping			
W1.C.1 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	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
W1.C.2 Water Efficient irrigation systems	Drip irrigation Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	1 point 5 points	
W1.C.3 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	
W1.D Potable Water			
W1.D.1 Showers	Title 24 standard (required) EPA High Efficiency Showerheads (15% > Title 24)	0 points 3 points	
W1.D.2 Toilets	Title 24 standard (required) EPA High Efficiency Toilets/Urinals (15% > Title 24) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	0 points 3 points 3 points	
W1.D.3 Faucets	Title 24 standard (required) EPA High Efficiency faucets (15% > Title 24)	0 points 3 points	
W1.D.4 Commercial Dishwashers	Title 24 standard (required) EPA High Efficiency dishwashers (20% water savings)	0 points 4 points	
W1.D.5 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	
W1.D.6 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	
Implementation Measure IM W2: Increase Reclaimed Water Use			
W2.A.1 Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM T1: Employment Based Trip and VMT Reduction Policy			
T1.A.1 Alternative Scheduling	<p>Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks.</p> <p>Provide flexibility in scheduling such that at least 30% of employees participate in 9/80 work week, 4-day/40-hour work week, or telecommuting 1.5 days/week.</p>	5 points	
T1.A.2 Car/Vanpools	<p>Car/vanpool program</p> <p>Car/vanpool program with preferred parking</p> <p>Car/vanpool with guaranteed ride home program</p> <p>Subsidized employee incentive car/vanpool program</p> <p>Combination of all the above</p>	<p>1 point</p> <p>2 points</p> <p>3 points</p> <p>5 points</p> <p>6 points</p>	
T1.A.3 Employee Bicycle/ Pedestrian Programs	<p>Complete sidewalk to residential within ½ mile</p> <p>Complete bike path to residential within 3 miles</p> <p>Bike lockers and secure racks</p> <p>Showers and changing facilities</p> <p>Subsidized employee walk/bike program</p> <p>Note: combine all applicable points for total value</p>	<p>1 point</p> <p>1 point</p> <p>1 point</p> <p>2 points</p> <p>3 points</p>	
T1.A.4 Shuttle/Transit Programs	<p>Local transit within ¼ mile</p> <p>Light rail transit within ½ mile</p> <p>Shuttle service to light rail transit station</p> <p>Guaranteed ride home program</p> <p>Subsidized Transit passes</p> <p>Note: combine all applicable points for total value</p>	<p>1 point</p> <p>3 points</p> <p>5 points</p> <p>1 points</p> <p>2 points</p>	
T1.A.5 CTR	<p>Employer based Commute Trip Reduction (CTR). CTRs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges:</p> <p>Incentive based CTR Programs (1-8 points)</p> <p>Mandatory CTR programs (5-20 points)</p>	TBD	
T1.A.6 Other Trip Reduction Measures	<p>Point values for other trip or VMT reduction measures not listed above may be calculated based on a TIA and/or other traffic data supporting the trip and/or VMT reductions.</p>	TBD	

CEQA THRESHOLDS AND SCREENING TABLES

Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM T3: Mixed Use Development			
T3.B.1 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	
T3.B.2 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	
Implementation Measure IM T4: Preferential Parking			
T4.A.1 Parking	Provide reserved preferential parking spaces for car-share, carpool, and ultra-low or zero emission vehicles. Provide larger parking spaces that can accommodate vans used for ride-sharing programs and reserve them for vanpools and include adequate passenger waiting/loading areas.	1 point 1 point	
Implementation Measure IM T5: Signal Synchronization and Intelligent Traffic Systems			
T5.B.1 Signal improvements	Techniques for improving traffic flow include: traffic signal coordination to reduce delay, incident management to increase response time to breakdowns and collisions, Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions, and speed management to reduce high free-flow speeds. Synchronize signals along arterials used by project. Connect signals along arterials to existing ITS.	1 point/signal 3 points/signal	
Implementation Measure IM T6: Bicycle and Pedestrian Infrastructure			
T6.B.1 Sidewalks	Provide sidewalks on one side of the street (required) Provide sidewalks on both sides of the street Provide pedestrian linkage between commercial and residential land uses within 1 mile	0 points 1 point 3 points	
T6.B.2 Bicycle paths	Provide bicycle paths within project boundaries Provide bicycle path linkages between commercial and other land uses Provide bicycle path linkages between commercial and transit	TBD 2 points 5 points	

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Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM T7: Electric Vehicle Use			
T7.B.1 Electric Vehicle Recharging	Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations. Install electric vehicle charging stations in garages/parking areas	2 points/area 8 pts/station	
Implementation Measure IM T8: Anti-Idling Enforcement			
T8.A.1 Commercial Vehicle Idling Restriction	All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks.	2 points Required of all Commercial	
Implementation Measure IM T9: Increase Public Transit			
T9.B.1 Public Transit	The point value of a projects ability to increase public transit use will be determined based upon a Transportation Impact Analysis (TIA) demonstrating decreased use of private vehicles and increased use of public transportation. Increased transit accessibility (1-15 points)	TBD	
Implementation Measure IM L2: Prohibit Gas-Powered Landscaping Equipment			
L2.B.1 Landscaping Equipment	Electric lawn equipment including lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saws are available. When electric landscape equipment is used in place of conventional gas-powered equipment, direct GHG emissions from natural gas combustion are replaced with indirect GHG emissions associated with the electricity used to power the equipment. Project provides electrical outlets on the exterior of all buildings so that electric landscaping equipment is compatible with all built facilities.	2 points	
Implementation Measure IM SW1: 80 Percent Solid Waste Diversion Program			
SW1.B.1 Recycling	County initiated recycling program diverting 80% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal: Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up Provide commercial/industrial recycling programs that fulfills an on-site goal of 80% diversion of solid waste	2 points 5 points	

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Feature	Description	Assigned Point Values	Project Points
Implementation Measure IM SW2: Construction and Demolition Debris Diversion Program			
SW2.B.1 Recycling of Construction/ Demolition Debris	Recycle 2% of debris (required)	0 points	
	Recycle 5% of debris	1 point	
	Recycle 8 % of debris	2 points	
	Recycle 10% of debris	3 points	
	Recycle 12% of debris	4 points	
	Recycle 15% of debris	5 points	
	Recycle 20% of debris	6 points	
Total Points Earned by Commercial/Industrial Project:			

References

- Association of Environmental Professionals (AEP) White Paper: Alternative Approaches to Analyzing Greenhouse Gases and Global Climate Change Impacts in CEQA Documents, June 2007.
- Association of Environmental Professionals (AEP) White Paper: Community-wide Greenhouse Gas Emission Inventory Protocols, March 2011.
- Association of Environmental Professionals (AEP) White Paper: Forecasting Community-wide Greenhouse Gas Emission and Setting Reduction Targets, May 2012.
- Association of Environmental Professionals (AEP) California Environmental Quality Act 2010 Statute & Guidelines, January 2012.
- California Air Pollution Control Officers Association (CAPCOA), White Paper: CEQA and Climate Change, January 2008
- California Air Pollution Control Officers Association (CAPCOA), Quantifying Greenhouse Gas Mitigation Measures, August 2010
- California Air Resources Board, AB 32 Scoping Plan, December 2009
- California Air Resources Board, Final Supplement to the AB 32 Scoping Plan, August 2011
- California Climate Action Team's Final Report to the Governor and Legislature, March 2007
- California Climate Action Registry, General Reporting Protocol, Version 3.1, January 2009
- Riverside County, Draft Greenhouse Gas Technical Report, November 2010
- South Coast Air Quality Management District, Rules and Regulations, 2012
- U.S. Environmental Protection Agency, AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition, September 1995
- U.S. Environmental Protection Agency, AP-42, Final Rule on Update to the Compilation of Air Pollutant Emission Factors, October 2009

**APPENDIX A:
METHDOLOLGY FOR THE DEVELOPMENT
AND APPLICATION OF THE SCREENING TABLES**

METHODS SUMMARY

The point values in the Screening Tables were derived from the projected emissions reductions that each of the Implementation Measures (IM) within the Riverside County GHG Technical Report would achieve. The total emission reductions offered by each measure is based on both changes in existing land use activities as well as how new development is designed and built. In order to correctly allocate the emission reductions within the Screening Table, the amount of emission reductions afforded new development had to be segregated out of the aggregate total in a manner that is described below. Once the process of segregating new development out of the aggregate reduction totals was completed, the points were then proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial/industrial uses by the year 2020 and proportioning the appropriate IM reduction quantities for new development to the residential and commercial/industrial land use sectors within the Screening Table. These calculations result in point values that are allocated by residential unit or commercial/industrial square footage (measured in 1000 sq.ft.). Because of this, the size of the project is not relevant to the Screening Table. Regardless of size, each project needs to garnish 100 points to demonstrate consistency with the Technical Report. Efficiency, not size of the Project is critical. The following emission factor can be used in determining the amount of emissions reduced per point in the Screening Table:

The respective calculated emission values are in metric tons of carbon dioxide equivalents (MTCO_{2e})

For Residential Projects:

0.069 MTCO_{2e} per Point per Residential Unit

For Commercial and Industrial Projects:

0.031 MTCO_{2e} per Point per 1,000 Square Feet of gross Commercial/Industrial building area

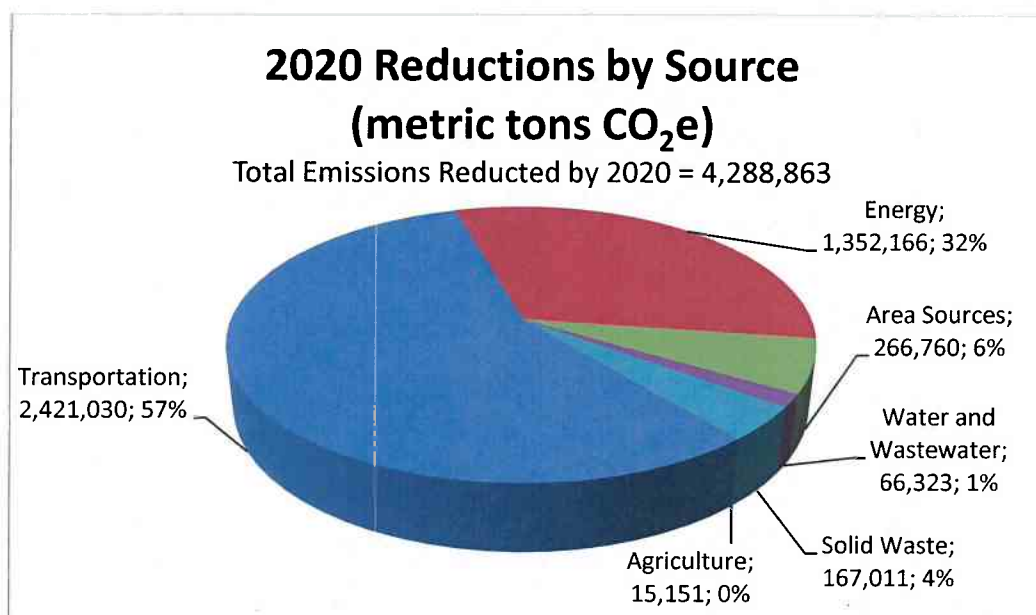
Note that the Screening Table and point values are best used for typical development projects processed by the County. Examples of typical development projects include residential subdivisions, multi-family residential apartments, condominiums and townhouses, retail commercial, big box retail, office buildings, business parks, and typical warehousing. Mixed use projects can use the Screening Tables following the instructions. Transit oriented development (TOD), and infill projects are able to use the Screening Tables, but the Screening Table points are likely to underestimate total emission reductions afforded these types of projects. Note that the Screening Tables include the opportunity to custom develop points (using the formula above) in order to account for the predicted reductions in vehicle trips and vehicle miles traveled within a project specific traffic study and GHG analysis. TOD and infill projects can be more accurately assessed and allocated points using this method.

However, more unusual types of industrial projects such as cement manufacturing, metal foundries, refrigerant manufacturing, electric generating stations, and oil refineries cannot use the Screening Tables because the emission sources for those types of uses were not contemplated in the table.

DEVELOPMENT OF THE POINT VALUES

The first step in developing the point system was the need to determine the total reductions afforded the GHG Plan. Figure 1 below shows the total emission reductions achieved by the GHG Plan. In total 4,288,863 MTCO₂e will be reduced as a result of the GHG Plan.

Figure 1



The next step in developing the point system is to segregate out the State efforts in reducing GHG emissions within the County. Table 1 shows the reductions allocated to State measures and County strategies.

Table 1

Sector	2020 Reduction (MTCO ₂ e)		Total
	State Strategies	County Strategies	
Transportation and Land Use	914,490	1,506,540	2,421,030
Building Energy -Energy Efficiency and Alternative Energy	860,205	491,962	1,352,166
Area Sources	0	266,760	266,760
Water Conservation	33,172	33,151	66,323
Solid Waste/Landfills	0	167,011	167,011
Agriculture	0	15,573	15,573
Total	1,807,866	2,448,997	4,288,863

CEQA THRESHOLDS AND SCREENING TABLES

As shown in Table 1, 2,448,997 MTCO₂e are reduced by the County's Implementation Measure. This amount includes reductions afforded existing building retrofits, other changes to activities associated with existing land uses, as well as reductions associated with new development.

The next step is to segregate out of the County strategies total the amount of emissions that will be reduced within new development.

Table 2 on the next page summarizes the reduction in emissions afforded new development from the Implementation measures. Table 2 shows 1,302,569 MTCO₂e being reduced from new development as a result of the County strategies. Within the 1,302,569 MTCO₂e of new development reductions afforded County strategies, 619,336 MTCO₂e of emissions reduced is accomplished through new Commercial and Industrial Projects, and 683,233 MTCO₂e of emissions reduced is accomplished through new residential projects.

The next step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated by year 2020. The County predicts that 100,477 new residential units will be needed by 2020 to accommodate the population growth by 2020. A total of approximately 195,547,000 square feet of new commercial and industrial buildings within the unincorporated County area is needed to accommodate anticipated job growth. This estimate is based on the relationship between past growth in employment to the average growth in commercial/industrial building area for Riverside County.

Dividing the 683,233 MTCO₂e reductions of emissions afforded the Implementation Measures for new residential development by the anticipated 100,477 new residential units that will be built yields 6.80 MTCO₂e per residential unit that needs to be reduced to fulfill the anticipated reductions of the GHG Technical Report. That amount equals 100 points, producing the following for the point values:

0.0680 MTCO₂e per Point per Residential Unit

A similar process was used to derive the point value for new commercial/Industrial development. Because commercial/industrial land uses are typically described in thousand square feet of building space, the point value was calculated as follows: **0.031 MTCO₂e per 1,000 Sq. Ft. of gross Commercial/Industrial building area.**

The final step was to allocate points to each of the reduction measures in order to provide the menu of point values. The spreadsheet on the next page shows emission reductions afforded each measure. Note that emissions associated with new development are reduced by the State's measures, as well as the County's Implementation measures. The Screening Tables focus on those measures the County is implementing associated with new development within the unincorporated County area. For this reason, the menu of options pertains to all of the Implementation Measures pertaining to new development.

CEQA THRESHOLDS AND SCREENING TABLES

Table 2

Reduction Number	Reduction Measure Name	Reduced Emissions(MTCO ₂ e)	
		Commercial/Industrial	Residential
IM-E1	New Residential Energy Efficiency		72,228.9
IM-E2	New Residential Renewable Energy		83,347.0
IM-E5	New Commercial Energy Efficiency	126,589.3	
IM-E6	New Commercial/Industrial Renewable Energy	34,576.5	
IM-T1	Employer VMT Reduction	150,960.2	
IM-T2	Increased Residential Density		109,947.0
IM-T3	Mixed Use Development	108,134.7	108,134.7
IM-T4	Preferential Parking	848.9	
IM-T5	Road Imp/Sig.Sync/TFM	18,718.0	40,647.4
IM-T6	Bicycle/Ped Infrastructure	4,123.5	8,954.5
IM-T7	Electric Vehicle Use	8,537.0	18,538.7
IM-T8	Anti-Idling Enforcement	14,552.0	
IM-T9	Increase Public Transit	31,147.2	67,638.3
IM-T10	Employee Commute Alt. Schedule	28,592.8	
IM-L1	SCAQMD No New Woodburning Stoves		68,559.3
IM-L2	Prohibit Gas-Powered Equipment	6,483.1	41,861.6
IM-W1	Water Use Reduction Initiative	6,118.6	4,911.8
IM-W2	Increase Reclaimed Water Use	991.2	795.7
IM-SW1	County Diversion Program	46,140.0	24,844.6
IM-SW2	Construction Diversion Program	32,823.3	32,823.3
Total IM Reductions for New Development		619,336.4	683,233.0