APPENDIX C

City of Santee

GREENHOUSE GAS EMISSIONS

Screening Tables

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Introduction

The Sustainable Santee Plan (Plan) includes reducing greenhouse gas emissions from new development by 2035 as compared to the 2035 Adjusted Business As Usual (ABAU) conditions. Reductions related to transportation, water, solid waste, energy, and renewable energy sources all play a part in gaining the level of efficiency needed within new development.

Mitigation of greenhouse gas (GHG) emissions impacts through the Development Review Process (DRP) provides one of the most substantial reduction strategies for reducing community-wide emissions associated with new development. The DRP procedures for evaluating GHG impacts and determining significance for CEQA purposes will be streamlined by utilizing Screening Tables to mitigate project GHG emissions and demonstrating compliance with the Sustainable Santee Plan. Projects will have the option of preparing a project-specific technical analysis to quantify and mitigate GHG emissions, or complete the Screening Tables to demonstrate compliance.

The California Environmental Quality Act ("CEQA") requires assessment of the environmental impacts of proposed projects including the impacts of GHG emissions. The purpose of this document is to provide guidance on how to analyze GHG emissions and determine the significance of those emissions during CEQA review of proposed development projects within the City. The analysis, methodology, and significance determination (thresholds) are based upon the Plan, the GHG emission inventories within the Plan, and the GHG reduction measures that reduce emissions to the SB-32 compliant reduction target of the Plan. The Screening Tables can be used by the City for review of development projects in order to ensure that the specific reduction strategies in the Plan 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 targets of the Plan.

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.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 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 San Diego has published draft thresholds that, when finalized, jurisdictions within the County can use if they do not have their own thresholds and GHG mitigation plans. However, the Plan for the City addresses cumulative GHG emissions, has reduction targets that reduces the cumulative GHG impacts to less than significant, has a set of reduction measures that achieves the reduction targets 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 CLIMATE ACTION PLAN

METHODOLOGY OVERVIEW

An individual project cannot generate enough GHG emissions to influence global climate change. The project participates in climate change 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 (AEP 2007). To address the State's requirement to reduce GHG emissions, the City prepared the Sustainable Santee Plan (Plan) with targets of reducing GHG emissions within the City by 15 percent below 2005 baseline emission levels by year 2020, 40 percent below 2005 baseline by 2030, and 49 percent below the 2005 baseline by 2035. The City's targets are consistent with AB 32, SB 32, and ensure that the City is providing GHG reductions locally that will complement the State and international efforts of stabilizing climate change.

Because the City's Plan addresses GHG emissions reduction, is in concert with AB 32, SB 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) and §15183.5.

GHG emissions are only important in the context of cumulative emissions; therefore, 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 Plan includes a set of reduction 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 Plan has the following components that fulfill cumulative mitigation for GHG emissions:

1. The Plan provides a community-wide GHG emissions reduction target that will substantially lessen the cumulative impact;
2. The Plan provides measures that new development projects must follow to meet the City's reduction target and substantially lessen the cumulative impact;
3. The Plan provides a set of GHG emission inventories that provides quantitative facts and analysis of how the measures within the Plan meet the reduction targets that substantially lessens the cumulative impact:
4. The Plan provides an implementation, monitoring and update program to insure that the reduction target is met.

The Plan satisfies the first condition by adopting targets of reducing GHG emissions within the City by 15 percent below 2005 levels by 2020, 40 percent by 2030, and 49 percent by 2035. The 2020 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 existing 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 impacts. The 2030 reduction target is compliant with SB 32 and the 2035 reduction target continues the GHG reduction trend (AEP 2012).

The Plan 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 targets are met.

The Plan satisfies the third criteria by providing a set of community-wide GHG emissions inventories for existing conditions (2005 baseline), for future 2020, 2030 and 2035 GHG emissions that are anticipated without the reduction measures (Adjusted Business As Usual; ABAU), and reduced levels of 2020, 2030, and 2035 GHG emissions which demonstrates how the implementation of reduction measures achieves the reduction targets. These community-wide GHG emission inventories are found in Appendix A of the Plan.

THE DEVELOPMENT REVIEW PROCESS

Integrating the reduction measures of the Plan into the CEQA development review process is the first step in determining how a proposed project will implement the GHG reduction measures within the Plan. The GHG emissions development review process is predicated on two questions. Appendix A of this document contains a flow chart that diagrams this development review process. The questions are as follows:

- **Question 1:** Is the proposed activity a "Project" as defined by CEQA? If the activity is not a Project under CEQA no further action is required concerning GHG emissions in the development review process.
- **Question 2:** Is the Project exempt under CEQA? If it is, then the California Air Resources Board has determined that GHG emissions are less than significant and no additional GHG reductions are needed. A list of CEQA Exemptions are found in CEQA Guidelines §15300 through §15332.

There are also exemption opportunities associated with transit oriented development (TOD) associated with the Sustainable Communities Strategy (SCS) for the region developed by the San Diego Association of Governments (SANDAG) and first introduced in the 2012 Regional Transportation Plan (RTP). Exemptions associated with TOD are divided into two categories, transit priority projects (TPP), and Sustainable Community Projects (SCP). A TPP and SCP Checklist is provided in Appendix B of this document to assist project applicants in determining if a project qualifies for these exemptions under CEQA. If the Project does not qualify for a CEQA exemption, then move on to the Methods for the Calculation of GHG Emissions and Screening Thresholds Tables.

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 7.

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 wastewater.

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 CCAR 2007), and guidance in the Association of Environmental Professionals (AEP) White Paper: Community-wide Greenhouse Gas Emission Inventory Protocols (AEP 2010). 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).

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 Plan, which includes GHG emission inventories (2005, 2008, 2012, and 2013), forecasts for years 2020, 2030, and 2035,2020, 2030, and 2035 emission reduction targets, and the goals and policies to reach the targets. The methodology for the development and application of the Screening Table is set forth in Appendix C of this document and uses the California Air Pollution Control Officers Association (CAPCOA), guidance on quantifying project level GHG reductions (CAPCOA 2010).

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. The point levels are based upon improvements compared to 2017 emission levels of efficiency. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the Sustainable Santee Plan (Plan). 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.

Note that the Screening Tables use a base level of efficiency that corresponds to the California Building Energy Efficiency Standards for Residential and Non-residential Buildings (Title 24, Part 6) that became effective January 1, 2017. These are the statewide minimum requirements of efficiency that are currently (2018) in effect.

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. For example, a mixed use project that is 50 percent commercial uses and 50 percent 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 City's Plan 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 Plan.

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

Feature	Description	Assigned Point Values	Project Points
Residential Energy Efficiency			
Building Envelope			
Insulation	2017 Title 24 Requirements (walls R-13:, roof/attic: R-30)	0 points	
	Modestly Enhanced Insulation (walls R-13:, roof/attic: R-38)	7 points	
	Enhanced Insulation (rigid wall insulation R-13, roof/attic: R-38)	9 points	
	Greatly Enhanced Insulation (spray foam wall insulated walls R-15 or higher, roof/attic R-38 or higher)	11 points	
Windows	2017 Title 24 Windows (0.57 U-factor, 0.4 solar heat gain coefficient (SHGC)	0 points	
	Modestly Enhanced Window Insulation (0.4 U-Factor, 0.32 SHGC)	3 points	
	Enhanced Window Insulation (0.32 U-Factor, 0.25 SHGC)	4 points	
	Greatly Enhanced Window Insulation (0.28 or less U-Factor, 0.22 or less SHGC)	5 points	
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	6 points	
	Enhanced Cool Roof(CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	7 points	
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	8 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.		
	Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)	6 points	
	Blower Door HERS Verified Envelope Leakage or equivalent	5 points	
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.		
	Modest Thermal Mass (10% of floor or 10% of walls: 12 inches or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	1 point	
	Enhanced Thermal Mass (20% of floor or 20% of walls: 12 inches or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	2 points	

Feature	Description	Assigned Point Values	Project Points
Indoor Space Efficiencies			
Heating/ Cooling Distribution System	Minimum Duct Insulation (R-4.2 required)	0 points	
	Modest Duct insulation (R-6)	4 points	
	Enhanced Duct Insulation (R-8)	5 points	
	Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	7 points	
Space Heating/ Cooling Equipment	2017 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF)	0 points	
	Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF)	2 points	
	High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF)	4 points	
	Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF)	5 points	
Water Heaters	2017 Title 24 Minimum Efficiency (0.57 Energy Factor)	0 points	
	Improved Efficiency Water Heater (0.675 Energy Factor)	7 points	
	High Efficiency Water Heater (0.72 Energy Factor)	9 points	
	Very High Efficiency Water Heater (0.92 Energy Factor)	11 points	
	Solar Pre-heat System (0.2 Net Solar Fraction)	2 points	
	Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	5 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.)	1 point	
	All rooms daylighted	1 points	
Artificial Lighting	Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)	5 points	
	High Efficiency Lights (50% of in-unit fixtures are high efficiency)	6 points	
	Very High Efficiency Lights (100% of in-unit fixtures are high efficiency)	7 points	
Appliances	Energy Star Refrigerator (new)	1 point	
	Energy Star Dish Washer (new)	1 point	
	Energy Star Washing Machine (new)	1 point	

Feature	Description	Assigned Point Values	Project Points
Miscellaneous Residential Building Efficiencies			
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	
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st.	2 Points	
Energy Star Homes	EPA Energy Star for Homes (version 3 or above)	15 points	
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	
Residential Renewable Energy Generation			
Photovoltaic	Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments:		
	30 percent of the power needs of the project	9 points	
	40 percent of the power needs of the project	12 points	
	50 percent of the power needs of the project	17 points	
	60 percent of the power needs of the project	21 points	
	70 percent of the power needs of the project	23 points	
	80 percent of the power needs of the project	25 points	
	90 percent of the power needs of the project	28 points	
	100 percent of the power needs of the project	31 points	
Wind turbines	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:		
	30 percent of the power needs of the project	9 points	
	40 percent of the power needs of the project	12 points	
	50 percent of the power needs of the project	17 points	
	60 percent of the power needs of the project	21 points	
	70 percent of the power needs of the project	23 points	
	80 percent of the power needs of the project	25 points	
	90 percent of the power needs of the project	28 points	
	100 percent of the power needs of the project	31 points	

Feature	Description	Assigned Point Values	Project Points
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 renewable energy within the City. 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	
Residential Water Conservation			
Irrigation, Landscaping, and Potable Water Supplies			
Water Efficient Landscaping	Limit conventional turf to < 50% of required landscape area	0 points	
	Limit conventional turf to < 25% of required landscape area	2 points	
	No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed)	4 points	
	Only California Native Plants that requires no irrigation or some supplemental irrigation	5 points	
Water Efficient irrigation systems	Low precipitation spray heads < .75 inch/hour or drip irrigation	1 point	
	Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use)	2 points	
Recycled Water	Recycled connections (purple pipe) to irrigation system on site	4 points	
	Recycled connections to entire water supply (feeds both irrigation systems and potable water supply) of residential units (requires additional requirements under the Direct Potable Reuse (DPR) framework (AB 547) to ensure uniform health standards are met).	7 points	
Water Reuse	Gray water Reuse System collects Gray water from clothes washers, showers and faucets for irrigation use.	7 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	

Feature	Description	Assigned Point Values	Project Points
Potable Water Appliances			
Showers	Water Efficient Showerheads (2.0 gpm)	2 points	
Toilets	Water Efficient Toilets (1.5 gpm)	2 points	
Faucets	Water Efficient faucets (1.28 gpm)	2 points	
Dishwasher	Water Efficient Dishwasher (6 gallons per cycle or less)	1 point	
Washing Machine	Water Efficient Washing Machine (Water factor <5.5)	1 point	
WaterSense	EPA WaterSense Certification	7 points	
Land Use Based Trips and VMT Reduction			
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	

Feature	Description	Assigned Point Values	Project Points
Bicycle Infrastructure			
Bicycle Infrastructure	Provide bicycle paths within project boundaries.	TBD	
	Provide bicycle path linkages between residential and other land uses.	1 points	
	Provide bicycle path linkages between residential and transit.	3 points	
Electric Vehicle Infrastructure			
Electric Vehicle Recharging	Provide circuit and capacity in garages of residential units for use by an electric vehicle. Charging stations are for on-road electric vehicles legally able to drive on all roadways including Interstate Highways and freeways.	1 point	
	Install one electric vehicle charging station per dwelling unit in the garages of residential units	5 points	
Neighborhood Electric Vehicle (NEV) Infrastructure	NEVs are electric vehicles usually built to have a top speed of 25 miles per hour, and a maximum loaded weight of 3,000 pounds.		
	Provide NEV safe routes within Project site.	4 points	
	Provide NEV safe routes between the Project site and other land uses.	5 points	
Total Points Earned by Residential Project:			

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

Feature	Description	Assigned Point Values	Project Points
Commercial/Industrial Energy Efficiency Development			
Building Envelope			
Insulation	2017 Title 24 Requirements (walls R-13; roof/attic R-30)	0 points	
	Modestly Enhanced Insulation (walls R-13, roof/attic R-38))	9 points	
	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)	11 points	
	Greatly Enhanced Insulation (spray foam insulated walls R-15 or higher, roof/attic R-38 or higher)	12 points	
Windows	2017 Title 24 Windows (0.57 U-factor, 0.4 solar heat gain coefficient [SHGC})	0 points	
	Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC)	4 points	
	Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC)	5 points	
	Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC)	7 points	
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7 points	
	Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	8 points	
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	10 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.		
	Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent).	7 points	
	Blower Door HERS Verified Envelope Leakage or equivalent	6 points	
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage include strategically placed water filled columns, water storage tanks, and thick masonry walls.		
	Modest Thermal Mass (10% of floor or 10% of walls 12 inches or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials).	2 points	
	Enhanced Thermal Mass (20% of floor or 20% of walls 12 inches or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials).	4 points	
	Enhanced Thermal Mass (80% of floor or 80% of walls 12 inches or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials).	14 points	

Feature	Description	Assigned Point Values	Project Points
Indoor Space Efficiencies			
Heating/ Cooling Distribution System	Minimum Duct Insulation (R-4.2 required)	0 points	
	Modest Duct insulation (R-6)	5 points	
	Enhanced Duct Insulation (R-8)	6 points	
	Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	8 points	
Space Heating/ Cooling Equipment	2017 Title 24 Minimum HVAC Efficiency (EER 13/75% AFUE or 7.7 HSPF)	0 points	
	Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF)	4points	
	High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF)	5 points	
	Very High Efficiency HVAC (EER 16/82% AFUE or 9 HSPF)	7 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	2017 Title 24 Minimum Efficiency (0.57 Energy Factor)	0 points	
	Improved Efficiency Water Heater (0.675 Energy Factor)	8 points	
	High Efficiency Water Heater (0.72 Energy Factor)	10 points	
	Very High Efficiency Water Heater (0.92 Energy Factor)	11 points	
	Solar Pre-heat System (0.2 Net Solar Fraction)	2 points	
	Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	5 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 point	
	All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.)	3 points	
	All rooms daylighted	4 points	
Artificial Lighting	Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficiency is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)	5 points	
	High Efficiency Lights (50% of in-unit fixtures are high efficiency)	7 points	
	Very High Efficiency Lights (100% of in-unit fixtures are high efficiency)	8 points	

Feature	Description	Assigned Point Values	Project Points
Appliances	Star Commercial Refrigerator (new)	2 points	
	Energy Star Commercial Dish Washer (new)	2 points	
	Energy Star Commercial Cloths Washing	2 points	
Miscellaneous Commercial/Industrial Building Efficiencies			
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	
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st.	4 Points	
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	
Commercial/Industrial Renewable Energy			
Photovoltaic	Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:		
	30 percent of the power needs of the project	8 points	
	40 percent of the power needs of the project	12 points	
	50 percent of the power needs of the project	16 points	
	60 percent of the power needs of the project	19 points	
	70 percent of the power needs of the project	23 points	
	80 percent of the power needs of the project	26 points	
	90 percent of the power needs of the project	30 points	
	100 percent of the power needs of the project	34 points	
Wind turbines	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. Wind turbines as part of the commercial development such that the total power provided augments:		
	30 percent of the power needs of the project	8 points	
	40 percent of the power needs of the project	12 points	
	50 percent of the power needs of the project	16 points	
	60 percent of the power needs of the project	19 points	
	70 percent of the power needs of the project	23 points	
	80 percent of the power needs of the project	26 points	
	90 percent of the power needs of the project	30 points	
	100 percent of the power needs of the project	34 points	

Feature	Description	Assigned Point Values	Project Points
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 commercial/industrial that will help implement reduction measures associated with existing buildings. 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	
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	
Commercial/Industrial Water Conservation			
Irrigation and Landscaping			
Water Efficient Landscaping	Eliminate conventional turf from landscaping Only moderate water using plants Only low water using plants Only California Native landscape that requires no or only supplemental irrigation	0 points 2 points 3 points 5 points	
Trees	Increase tree planting in parking areas 50% beyond City Code requirements	TBD	
Water Efficient irrigation systems	Low precipitation spray heads< 0.75 inch/hour or drip irrigation Weather based irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	1 point 3 points	
Recycled Water	Recycled water connection (purple pipe)to irrigation system on site Recycled connections to entire water supply (feeds both irrigation systems and potable water supply) of residential units (requires additional requirements under the Direct Potable Reuse (DPR) framework (AB 547) to ensure uniform health standards are met).	3 points TBD	
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	

Feature	Description	Assigned Point Values	Project Points
Potable Water			
Showers	Water Efficient Showerheads (2.0 gpm)	2 points	
Toilets	Water Efficient Toilets/Urinals (1.5 gpm) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	2 points 3 points	
Faucets	Water Efficient faucets (1.28 gpm)	2 points	
Commercial Dishwashers	Water Efficient dishwashers (20% water savings)	2 points	
Commercial Laundry Washers	Water Efficient laundry (15% water savings) High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)	2 points 4 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	
Land Use Based Trips and VMT Reduction			
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	
Bicycle Infrastructure			
Bicycle Infrastructure	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 1 points 3 points	

Feature	Description	Assigned Point Values	Project Points
Electric Vehicle Infrastructure			
Electric Vehicles	Provide public charging station for use by an electric vehicle (six points for each charging station within the facility).	6 points	
Neighborhood Electric Vehicle (NEV) Infrastructure	NEVs are electric vehicles usually built to have a top speed of 25 miles per hour, and a maximum loaded weight of 3,000 pounds. Provide NEV safe routes within the facility. Provide NEV safe routes between the Project site and other land uses.	 3 points 5 points	
Employee Based Trip &VMT Reduction Policy			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site: 5 days per week 4 days per week on site 3 days per week on site	TBD	
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above	TBD	
Employee Bicycle/ Pedestrian Programs	Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program (Note combine all applicable points for total value)	TBD	
Shuttle/Transit Programs	Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note combine all applicable points for total value	TBD	

Feature	Description	Assigned Point Values	Project Points
CRT	Employer based Commute Trip Reduction (CRT). CRTs 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: Incentive based CRT Programs (1-8 points) Mandatory CRT programs (5-20 points)	TBD	
Other Trip Reductions	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	
Total Points from 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, September 2010.

Association of Environmental Professionals (AEP) White Paper: Next Steps, Projections and Target Setting in Climate Action Plans, March 2012

Association of Environmental Professionals (AEP) California Environmental Quality Act 2018 Statute & Guidelines, February 2018.

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, 2017 Scoping Plan Update, December 2017.

California Climate Action Registry, General Reporting Protocol, Version 2.2, March 2007

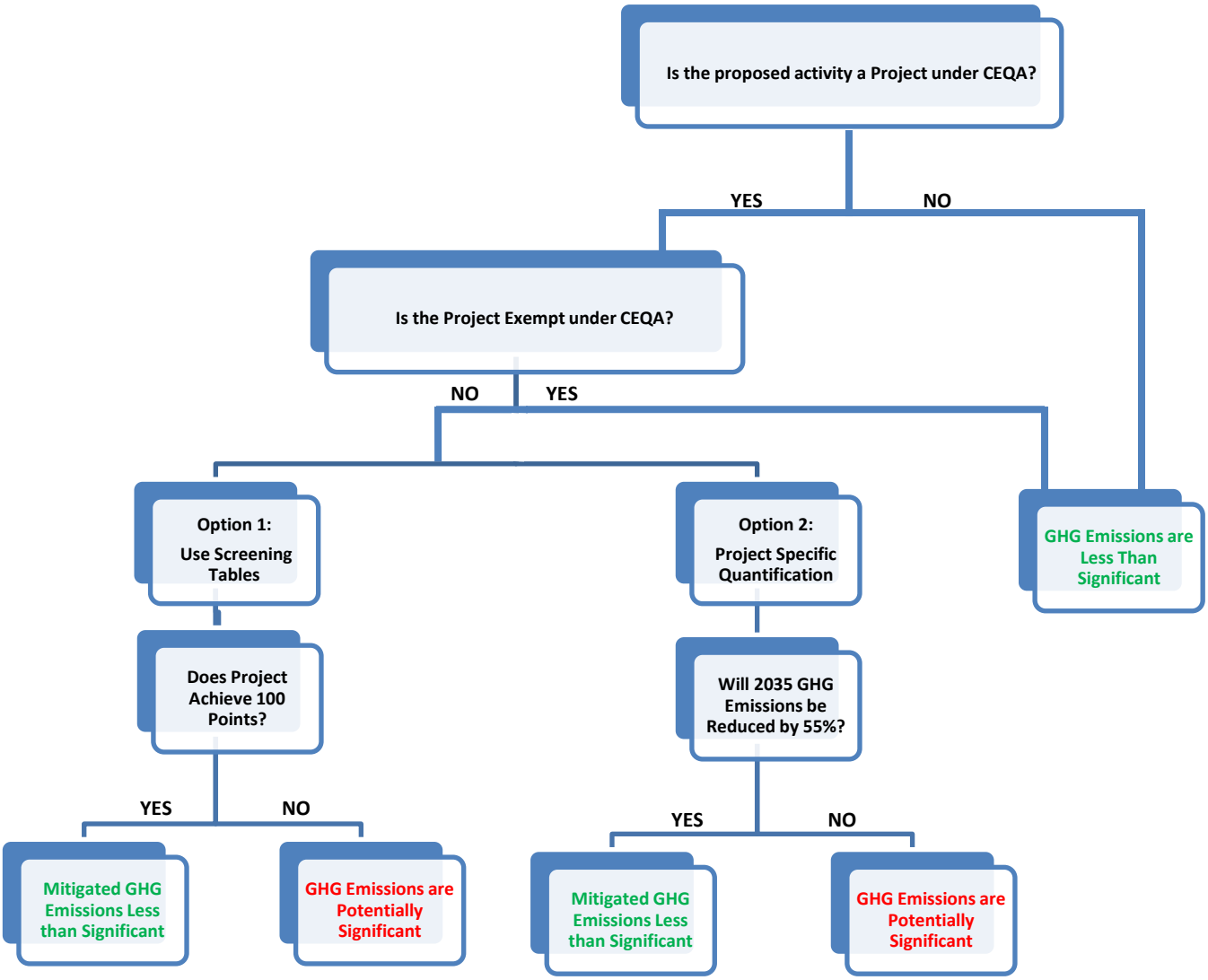
California Energy Commission (CEC), Refining Estimates of Water Related Energy Use in California, 2006.

City of Santee, Sustainable Santee Plan, December 2018.

San Diego Association of Governments (SANDAG), The 2012 Regional Transportation Plan, 2012.

ATTACHMENT A: THE GHG DEVELOPMENT REVIEW PROCESS FLOW CHART DIAGRAM

Approach to Implementation of GHG Development Review



ATTACHMENT B: TRANSIT PRIORITY PROJECT AND SUSTAINABLE COMMUNITY PROJECT CHECKLIST

TRANSIT PRIORITY PROJECT CHECKLIST

The following checklist will assist in determining if your Project qualifies as a Transit Priority Project (TPP) and a Sustainable Community Project (SCP) as defined in PRC 21155(a), (b), and PRC 21152.

Yes	No	Is the Project:	
☐	☐	1.	Located within ½ mile from a Trolley Station, future Station, or Transit Center?
☐	☐	2.	At least 50% residential use based upon total square footage, and non-residential uses within the Project between 26% to 50% of total square footage with FAR of not less than 0.75?
☐	☐	3.	At or above a minimum net density of at least 20 dwelling units per acre?
☐	☐	4.	Is your project consistent with the general land use designations in the SCP (if you answered yes to questions 1 thru 3, then answer yes to this one)?

If you answered **Yes** to questions 1 through 4 then your Project is a Transit Priority Project (TPP) as defined by PRC Section 21155(b). Continue with the next list of environmental questions:

Yes	No	Does the Project:	
☐	☐	5.	Contain sites on the Cortese List?
☐	☐	6.	Site contain any hazardous substances, contaminated soil or hazardous material?
☐	☐	7.	Site include historical resources?
☐	☐	8.	Have an unusually high risk of fire or explosion from material stored or used at properties within ¼ mile of the Project site?
☐	☐	9.	Site currently developed as Open Space (parks, habitat, etc.)?

Continue with the next list of land use questions below:

Yes	No		
☐	☐	10.	Does the Project design have all the buildings at least 15% more efficient than Title 24 energy standards and uses 25% or less water than average households?
☐	☐	11.	Is the Project site eight acres or less in size?
☐	☐	12.	Does the Project not include any single level of a building exceeding 75TSF?
☐	☐	13.	Project does not conflict with nearby industrial uses?
☐	☐	14.	The Project will sell at least 20% of housing to families of moderate income, or 10% of housing will be rented to families of low income, or at least 5% of housing rented to families of very low income, or the Project provides open space equal or greater than 5 acres per 1,000 residents, or the developer will pay in-lieu fees sufficient to result in the development of affordable housing meeting one of the criteria described above?

Determining Eligibility based upon the answers:

Full CEQA Exemption for Sustainable Community Projects (SCPs)

If you answered **Yes** to all the TPP questions 1 through 4, **No** to all the environmental questions 5 through 9, and **Yes** to all the land use questions 10 through 14, then your Project is a SCP and is eligible for a full CEQA Exemption under SB 375.

Transit Priority Projects (TPP)

If you answered **Yes** to all the TPP questions 1 through 4, but did not qualify as a SCP then your project is a TPP. Your TPP needs to incorporate all appropriate mitigation measures required by an applicable CEQA document (such as an adopted EIR for a Specific Plan) for your Project location. If your TPP meets these two criteria then your TPP does not need to analyze the following impacts in the Sustainable Communities Environmental Assessment (SCEA) or CEQA analysis:

- Growth inducing impacts,
- Regional transportation impacts, and
- GHG emissions related to passenger cars and light duty trucks.

The impacts listed above are considered less than significant because the Project is a TPP and the SCEA or CEQA document should reference PRC Section 21155.2(c)

Other Residential and Mixed Use Projects

If you answered Yes to question 4, but did not qualify as an SCP or TPP your project may not need to analyze some of the impacts in the CEQA analysis, if your project is a **residential project or mixed-use project with 75%** of the total building square footage of the Project as residential units. Also, your Project needs to incorporate all appropriate mitigation measures required by an applicable prior CEQA document (such as an adopted EIR for a Specific Plan) for your Project location. If your project meets these criteria, then the CEQA analysis of your Project does not need to analyze the following Impacts:

- Growth inducing impacts,
- Regional transportation impacts, and
- GHG emissions related to passenger cars and light duty trucks.

The impacts listed above are considered less than significant because the Project meets the criteria in PRC Section 21155.2(c)

APPENDIX C: METHODOLOGY 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 would be achieved by each of the reduction measures associated with new development within the Sustainable Santee Plan (Plan). The points within the Screening Tables were proportioned by residential unit or square feet of commercial/industrial uses. This was accomplished by taking the predicted growth in households and commercial uses in 2035 and proportioning the appropriate reduction quantities for new development to the residential, commercial, and industrial land use sectors within the Screening Table. The result is point values that are proportioned by residential unit or commercial/industrial square feet. 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 Plan. Efficiency, not size of the project, is critical.

Note that the Screening Table and point values are best used for typical development projects processed by the City. 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 instructions at the beginning of the Screening Tables. Transit oriented development (TOD), and infill projects are able to use the Screening Tables, but the Screening Tables 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 provide points in the sections of the Screening Tables marked TBD and 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—including large alternative energy electric generation, and oil refineries cannot use the Screening Tables because the emission sources for those types of uses were not contemplated in the Sustainable Santee Plan.

DEVELOPMENT OF THE POINT VALUES

Within the City measures 1,308 MT CO_2e will be reduced using the Screening Tables for new development. The Screening Tables and the point allocation within the Screening Tables are tied to 1,308 MT CO_2e of reductions.

The first step in allocating point values is to determine the number of new homes and commercial buildings that are anticipated by year 2035. The City predicts that a total of 4,440 new residential units will be needed by 2035 and a total of approximately 4,052,000 square feet of new commercial and industrial buildings within the City is needed to accommodate anticipated job growth.

Approximately 4,440 new residential units and 4,052,000 square feet of new commercial and industrial buildings within the City are anticipated to either use the screening tables or provide an independent analysis demonstrating reductions. Evaluating the growth in residential and commercial/industrial land uses, approximately 69 percent is attributable to residential and 31 percent attributable to commercial/industrial land uses. Using those ratios, the Screening Tables will need to reduce 903 MT CO_2e from residential development and 405 MT CO_2e from commercial/industrial development by 2035.

Dividing the 903 MT CO_2e reductions of emissions afforded the Screening Table for new residential development by the anticipated 4,440 new residential units that will be built yields 0.2 MT CO_2e per residential unit that needs to be reduced to fulfill the anticipated reductions of the Plan. Using the same process, the Screening Tables for new commercial/industrial development needs to reduce 0.1 MT CO_2e per 1,000 gross square feet of commercial/industrial building area.

Levels of reduction efficiency for typical residential units in this climate zone yields:

0.002 MT CO_2e per Point per Residential Unit

The levels of reduction efficiency for the mix of commercial/industrial uses in this climate zone yields:

0.001 MT CO_2e per Point per 1,000 Sq. Ft. of gross Commercial/Industrial building area

Since each residential unit needs to reduce 0.2 MT CO_2e and each 1,000 square feet of commercial/industrial building area needs to reduce 0.1 MT CO_2e, each project needs to gain 100 points to provide the expected reductions from the Screening Tables.