

**GREENHOUSE GAS EMISSIONS SCREENING TABLES**

Those projects that do not garner 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 that require the preparation of an EIR due to 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 reduction measures and GHG reduction quantities in the forthcoming GHG Reduction Plan Update.

**Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development**

Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure Energy : Exceed Energy Efficiency Standards in New Residential Units</b>			
<b>Building Envelope</b>			
Insulation	<ul style="list-style-type: none"> <li>2019 Title 24 Requirements (walls R-8, roof/attic R-30)</li> <li>Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)</li> <li>Greatly Enhanced Insulation (spray foam wall insulated walls R-18 or higher, roof/attic R-38 or higher)</li> </ul>	4 points 9 points 11 points	11
Windows	<ul style="list-style-type: none"> <li>2019 Title 24 Windows (0.3 U-factor, 0.23 solar heat gain coefficient [SHGC])</li> <li>Enhanced Window (0.28 U-Factor, 0.22 SHGC)</li> <li>Greatly Enhanced Window (less than 0.28 U-Factor, less than 0.22 SHGC)</li> </ul>	2 points 4 points 5 points	4
Cool Roofs	<ul style="list-style-type: none"> <li>Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)</li> <li>Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)</li> </ul>	6 points 7 points	6
Air Infiltration	<p>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.</p> <ul style="list-style-type: none"> <li>Air barrier applied to exterior walls, caulking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)</li> <li>Blower Door HERS Verified Envelope Leakage or equivalent</li> </ul>	6 points 5 points	5
Thermal Storage of Building	<p>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.</p> <ul style="list-style-type: none"> <li>Modest Thermal Mass (10% of floor or 10% of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)</li> <li>Enhanced Thermal Mass (20% of floor or 20% of walls 12” or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood, or other insulating materials)</li> </ul>	1 point 2 points	1
<b>Indoor Space Efficiencies</b>			
Heating/ Cooling Distribution System	<ul style="list-style-type: none"> <li>Minimum Duct Insulation (R-6 required)</li> <li>Enhanced Duct Insulation (R-8)</li> <li>Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)</li> </ul>	2 points 4 points 5 points 7 points	5

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Feature	Description	Assigned Point Values	Project Points
Space Heating/Cooling Equipment	<ul style="list-style-type: none"> <li>2019 Title 24 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF)</li> <li>Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF)</li> <li>High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF)</li> <li>Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF)</li> </ul>	1 points 2 points 4 points 5 points	4
Water Heaters	<ul style="list-style-type: none"> <li>2019 Title 24 Minimum Efficiency (0.57 Energy Factor)</li> <li>Improved Efficiency Water Heater (0.675 Energy Factor)</li> <li>High Efficiency Water Heater (0.72 Energy Factor)</li> <li>Very High Efficiency Water Heater (0.92 Energy Factor)</li> <li>Solar Pre-heat System (0.2 Net Solar Fraction)</li> <li>Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)</li> </ul>	4 points 7 points 9 points 11 points 2 points 5 points	9
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. <ul style="list-style-type: none"> <li>All peripheral rooms within the living space have at least one window (required)</li> <li>All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)</li> <li>All rooms daylighted</li> </ul>	0 points 1 point 1 point	1
Artificial Lighting	<ul style="list-style-type: none"> <li>Efficient Lights (25% of in-unit fixtures considered high efficiency. 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 &gt;40watt)</li> <li>High Efficiency Lights (50% of in-unit fixtures are high efficiency)</li> <li>Very High Efficiency Lights (100% of in-unit fixtures are high efficiency)</li> </ul>	5 points 6 points 7 points	7
Appliances	<ul style="list-style-type: none"> <li>Energy Star Refrigerator (new)</li> <li>Energy Star Dishwasher (new)</li> <li>Energy Star Washing Machine (new)</li> </ul>	1 point 1 point 1 point	3
<b>Miscellaneous Residential Building Efficiencies</b>			
Building Placement	North/south alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting.	3 points	3
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21 <sup>st</sup> .	2 points	0
Energy Star Homes	EPA Energy Star for Homes (version 3 or above)	15 points	15
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 increase 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	/

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**Table 1: Screening Table for Implementing GHG Performance Standards for Residential Development**

Feature	Description	Assigned Point Values	Project Points
Existing Residential Retrofits	<p>Having residential developments within walking and biking distances 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 off site 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 daycare, banking/ATM, restaurants, vehicle refueling, and shopping.</p>	TBD	
<b>Reduction Measure Energy 3: All Electric Homes</b>			
All-Electric Homes	All electric homes reduce GHG emissions, as the grid electricity they use is generated using less carbon over time. Grid electricity in California will be 60 percent renewable energy by 2030 and 100 percent renewable energy by 2040.	12 points	12
<b>Reduction Measure Energy-7: Clean Energy</b>			
<b>Residential Renewable Energy Generation</b>			
Photovoltaic	<p>Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments:</p> <ul style="list-style-type: none"> <li>• 30 percent of the power needs of the project</li> <li>• 40 percent of the power needs of the project</li> <li>• 50 percent of the power needs of the project</li> <li>• 60 percent of the power needs of the project</li> <li>• 70 percent of the power needs of the project</li> <li>• 80 percent of the power needs of the project</li> <li>• 90 percent of the power needs of the project</li> <li>• 100 percent of the power needs of the project</li> </ul>	<p>9 points</p> <p>12 points</p> <p>17 points</p> <p>20 points</p> <p>23 points</p> <p>25 points</p> <p>28 points</p> <p>31 points</p>	9
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. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments:</p> <ul style="list-style-type: none"> <li>• 30 percent of the power needs of the project</li> <li>• 40 percent of the power needs of the project</li> <li>• 50 percent of the power needs of the project</li> <li>• 60 percent of the power needs of the project</li> <li>• 70 percent of the power needs of the project</li> <li>• 80 percent of the power needs of the project</li> <li>• 90 percent of the power needs of the project</li> <li>• 100 percent of the power needs of the project</li> </ul>	<p>9 points</p> <p>12 points</p> <p>17 points</p> <p>21 points</p> <p>23 points</p> <p>25 points</p> <p>28 points</p> <p>31 points</p>	
Off-site Renewable Energy Project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes. These off-site renewable energy retrofit project proposals will be determined on a case-by-case basis and shall be accompanied by a detailed plan that documents the quantity of renewable energy the proposal would generate. Point values will be determined based upon the energy generated by the proposal.	TBD	

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Feature	Description	Assigned Point Values	Project Points
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	/
<b>Reduction Measure Water : Exceed Water Efficiency Standards</b>			
<b>Residential Irrigation and Landscaping</b>			
Water Efficient Landscaping	<ul style="list-style-type: none"> <li>Limit conventional turf to &lt; 25% of required landscape area</li> <li>Limit conventional turf to &lt; 50% of required landscape area</li> <li>No conventional turf (warm season turf to &lt; 50% of required landscape area and/or low water using plants are allowed)</li> <li>Only California Native Plants that require no irrigation or some supplemental irrigation</li> </ul>	0 points 2 points 4 points 5 points	5
Water Efficient Irrigation Systems	<ul style="list-style-type: none"> <li>Low precipitation spray heads &lt; 0.75"/hr or drip irrigation</li> <li>Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use)</li> </ul>	1 point 2 points	1
Storm Water Reuse Systems	Innovative on-site storm water collection, filtration, and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	/
<b>Residential Potable Water</b>			
Showers	Water Efficient Showerheads (2.0 gpm)	2 points	2
Toilets	Water Efficient Toilets (1.5 gpm)	2 points	2
Faucets	Water Efficient Faucets (1.28 gpm)	2 points	2
Dishwasher	Water Efficient Dishwasher (6 gallons per cycle or less)	1 point	1
Washing Machine	Water Efficient Washing Machine (Water factor <5.5)	1 point	1
WaterSense	EPA WaterSense Certification	7 points	0
<b>Increase Residential Reclaimed Water Use</b>			
Recycled Water	5% of the total project's water use comes from recycled/reclaimed water	5 points	5
<b>Reduction Measure On Road: Alternative Transportation Options</b>			
<b>Increase Residential Density</b>			
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 modes 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	0

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Feature	Description	Assigned Point Values	Project Points
<b>Mixed-Use Development</b>			
Mixed-Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed-use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges: <ul style="list-style-type: none"> <li>• Diversity of land uses complementing each other (2–28 points)</li> <li>• Increased destination accessibility other than transit (1–18 points)</li> <li>• Increased Transit Accessibility (1–25 points)</li> <li>• Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data).</li> </ul>	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). The suburban project will have at least three of the following on site and/or off site within ¼-mile: Residential Development, Retail Development, Park, Open Space, or Office. 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.	1–16 points	2
<b>Traffic Flow Management Improvements</b>			
Signal Synchronization	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. <ul style="list-style-type: none"> <li>• Signal synchronization</li> <li>• Traffic signals connected to existing ITS</li> </ul>	1 point/signal 3 points/signal	0
<b>Increase Public Transit</b>			
Public Transit Access	The point value of a project’s 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	/
<b>Reduction Measure: Install Electric Chargers</b>			
Single-family DU EV Chargers	Installation of Electric Vehicle (EV) chargers in the garage of single-family DUs: <ul style="list-style-type: none"> <li>• Level 1 110 volt AC Chargers</li> <li>• Level 2 240 volt AC Fast Chargers</li> </ul>	2 points 5 points	2
Multi-family DU EV Chargers	Installation of Electric Vehicle (EV) chargers in the parking areas of Multi-family Residential Development: <ul style="list-style-type: none"> <li>• Level 1 110 volt AC Chargers</li> <li>• Level 2 240 volt AC Fast Chargers</li> </ul>	2 points/charger 5 points/ charger	0

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Feature	Description	Assigned Point Values	Project Points
<b>Reduction Measure: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the County</b>			
Sidewalks	<ul style="list-style-type: none"> <li>Provide sidewalks on both sides of the street (required)</li> <li>Provide pedestrian linkage between residential and commercial uses within 1 mile</li> </ul>	1 point 3 points	1
Bicycle Paths	<ul style="list-style-type: none"> <li>Provide bicycle paths within project boundaries</li> <li>Provide bicycle path linkages between residential and other land uses</li> <li>Provide bicycle path linkages between residential and transit</li> </ul>	TBD 2 points 5 points	0
<b>Reduction Measure Waste-2 : Reduce Waste to Landfills</b>			
Recycling	<p>County-initiated recycling program diverting 100% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal:</p> <ul style="list-style-type: none"> <li>Provide green waste composting bins at each residential unit</li> <li>Multifamily 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</li> <li>Construction waste recycling</li> </ul>	4 points 3 points  4 points	4
<b>Other GHG Reduction Feature Implementation</b>			
Other GHG Emissions Reduction Features	This allows innovation by the applicant to provide residential design features for the GHG emissions from construction and/or operation of the project not provided in the table. Note that engineering data will be required documenting the GHG reduction amount and point values given based upon emission reductions calculations using approved models, methods, and protocols.	TBD	/
<b>Total Points Earned by Residential Project:</b>			123