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

Feature	Description	Assigned Point Values	Project Points
Reduction Measure 2.1: Exceed Energy Efficiency Standards in New Residential Units			
2.1.A Building Envelope			
2.1.A.1 Insulation	• 2016 Title 24 Requirements (walls R-13, roof/attic R-30) • Modestly Enhanced Insulation (walls R-15, roof/attic R-38) • Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38) • Greatly Enhanced Insulation (spray foam wall insulated walls R-18 or higher, roof/attic R-38 or higher)	0 points 7 points 9 points 11 points	7
2.1.A.2 Windows	• 2016 Title 24 Windows (0.57 U-factor, 0.4 solar heat gain coefficient [SHGC]) • Modestly Enhanced Window (0.4 U-Factor, 0.32 SHGC) • Enhanced Window (0.32 U-Factor, 0.25 SHGC) • Greatly Enhanced Window (0.28 or less U-Factor, 0.22 or less SHGC)	0 points 3 points 4 points 5 points	4
2.1.A.3 Cool Roofs	• Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance) • Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance) • Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	6 points 7 points 8 points	8
2.1.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. • Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent) • Blower Door HERS Verified Envelope Leakage or equivalent	6 points 5 points	
2.1.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. • 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) • 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)	1 point 2 points	
2.1.B Indoor Space Efficiencies			
2.1.B.1 Heating/ Cooling Distribution System	• Minimum Duct Insulation (R-4.2 required) • Modest Duct insulation (R-6) • Enhanced Duct Insulation (R-8) • Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	0 points 4 points 5 points 7 points	4
2.1.B.2 Space Heating/ Cooling Equipment	• 2016 Title 24 Minimum HVAC Efficiency (SEER 13/75% AFUE or 7.7 HSPF) • Improved Efficiency HVAC (SEER 14/78% AFUE or 8 HSPF) • High Efficiency HVAC (SEER 15/80% AFUE or 8.5 HSPF) • Very High Efficiency HVAC (SEER 16/82% AFUE or 9 HSPF)	0 points 2 points 4 points 5 points	5
2.1.B.3 Water Heaters	• 2016 Title 24 Minimum Efficiency (0.57 Energy Factor) • Improved Efficiency Water Heater (0.675 Energy Factor) • High Efficiency Water Heater (0.72 Energy Factor) • Very High Efficiency Water Heater (0.92 Energy Factor) • Solar Pre-heat System (0.2 Net Solar Fraction) • Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	0 points 7 points 9 points 11 points 2 points 5 points	11

Feature	Description	Assigned Point Values	Project Points
2.1.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) • All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.) • All rooms daylighted	 0 points 1 point 1 point	1
2.1.B.5 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) • High Efficiency Lights (50% of in-unit fixtures are high efficiency) • Very High Efficiency Lights (100% of in-unit fixtures are high efficiency)	5 points 6 points 7 points	7
2.1.B.6 Appliances	• Energy Star Refrigerator (new) • Energy Star Dishwasher (new) • Energy Star Washing Machine (new)	1 point 1 point 1 point	2
2.1.C Miscellaneous Residential Building Efficiencies			
2.1.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	3
2.1.C.2 Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on June 21st.	2 points	2
2.1.C.3 Energy Star Homes	EPA Energy Star for Homes (version 3 or above)	15 points	
2.1.C.4 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	
2.1.C.5 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	
2.1.C.6 Existing Residential Retrofits	Having residential developments within walking and biking distances 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 daycare, banking/ATM, restaurants, vehicle refueling, and shopping.	TBD	

Feature	Description	Assigned Point Values	Project Points
Reduction Measure 9.1: Clean Energy			
9.1.A Residential Renewable Energy Generation			
9.1.A.1 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 • 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	 9 points 12 points 17 points 20 points 23 points 25 points 28 points 31 points	
9.1.A.2 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. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments: • 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	 9 points 12 points 17 points 21 points 23 points 25 points 28 points 31 points	
9.1.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 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	
9.1.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	
Reduction Measure 5.2: Exceed Water Efficiency Standards			
5.2.A Residential Irrigation and Landscaping			
5.2.A.1 Water Efficient Landscaping	• Limit conventional turf to < 25% of required landscape area • Limit conventional turf to < 50% of required landscape area • No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed) • Only California Native Plants that requires no irrigation or some supplemental irrigation	0 points 2 points 4 points 5 points	4
5.2.A.2 Water Efficient Irrigation Systems	• Low precipitation spray heads < .75"/hr or drip irrigation • Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use)	1 point 2 points	2

Feature	Description	Assigned Point Values	Project Points
5.2.A.3 Stormwater 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	
5.2.B Residential Potable Water			
5.2.B.1 Showers	Water Efficient Showerheads (2.0 gpm)	2 points	
5.2.B.2 Toilets	Water Efficient Toilets (1.5 gpm)	2 points	2
5.2.B.3 Faucets	Water Efficient faucets (1.28 gpm)	2 points	
5.2.B.4 Dishwasher	Water Efficient Dishwasher (6 gallons per cycle or less)	1 point	
5.2.B.5 Washing Machine	Water Efficient Washing Machine (Water factor <5.5)	1 point	1
5.2.B.6 WaterSense	EPA WaterSense Certification	7 points	
5.2.C Increase Residential Reclaimed Water Use			
5.2.C.1 Recycled Water	5% of the total project's water use comes from recycled/reclaimed water	5 points	
Reduction Measure 7.1: Alternative Transportation Options			
7.1.A Increase Residential Density			
7.1.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 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	50
7.1.B Mixed-Use Development			
7.1.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 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	

Feature	Description	Assigned Point Values	Project Points
7.1.B.2 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	
7.1.C Traffic Flow Management Improvements			
7.1.C.1 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. • Signal synchronization • Traffic signals connected to existing ITS	 1 point/signal 3 points/signal	
7.1.D Increase Public Transit			
7.1.D.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	
Reduction Measure 7.2: Adopt and Implement a Bicycle Master Plan to Expand Bike Routes around the City			
7.2.A.1 Sidewalks	• Provide sidewalks on one side of the street (required) • Provide sidewalks on both sides of the street • Provide pedestrian linkage between residential and commercial uses within 1 mile	0 points 1 point 3 points	3
7.2.A.2 Bicycle Paths	• Provide bicycle paths within project boundaries • Provide bicycle path linkages between residential and other land uses • Provide bicycle path linkages between residential and transit	TBD 2 points 5 points	
Reduction Measure 8.1: Reduce Waste to Landfills			
8.1.A.1 Recycling	City-initiated recycling program diverting 100% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the City 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 or recycling	 4 points 3 points	3
Other GHG Reduction Feature Implementation			
O.A.1 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	
Total Points Earned by Residential Project:			119