



## LOAN PROGRAM

### Residential Eligible Measures List

#### ENERGY EFFICIENCY MEASURES

Category	Measure	Minimum Efficiency / Certification Requirements
<b>Air Sealing and Ventilation</b>	Air sealing	Air sealing level must be measured by a blower door before and after improvement is made, and mechanical ventilation must be installed if air sealing reduces air changes per hour to below 0.35.
	Duct sealing	
	Energy or heat recovery ventilator	
	Whole house fan	Must have controls (thermostat or timer, multi-speed). Fan opening must be properly insulated and sealed in winter.
	Attic fan	Must have controls (thermostat or timer, multi-speed). Fan opening must be properly insulated and sealed in winter. May be solar-powered.
<b>Insulation</b>	Attic	R-38 minimum required in open attic; cathedral ceilings will vary.
	Wall	R-19 minimum, or fill wall cavity (e.g. for 2x4, R-13 will fill wall cavity)
	Floor (over unconditioned space)	R-19 minimum
	Ducts (in unconditioned space)	R-8 minimum
	Perimeter (foundation)	R-10 minimum
<b>Space Heating and Cooling</b>	High efficiency furnace	AFUE $\geq$ 90 %, plus sealed combustion. If home design precludes direct venting, an upgrade to minimum 80% AFUE is eligible.
	Boiler	AFUE $\geq$ 84%
	Ground source heat pump	Closed loop only. Must meet Energy Star: EER $>$ 14.1, COP $\geq$ 3.3. Installer must be IGSPHA certified.
	Radiant heating and cooling (floor, wall, and ceiling)	Radiant systems must be powered by a heat pump (electric or gas-fired, or ground-source), efficient gas boiler, or solar system (not by electric resistance)
	Evaporative cooler	May not be installed along with an AC system; a home may have one or the other.
	Central air conditioner	14 SEER and 12 EER or higher for split systems; 14 SEER and 11 EER or higher for packaged systems. Only homes that currently have a central air system are eligible for an upgrade to a more efficient AC system. However, new evaporative coolers may be installed under this program.
	Programmable Thermostats	

## ENERGY EFFICIENCY MEASURES CONTINUED

Category	Measure	Minimum Efficiency / Certification Requirements
<b>Water Heating</b>	Demand/tankless	Energy Factor of 0.82 or higher (Energy Star Listed)
	High efficiency natural gas storage	Energy Factor of 0.62 or higher (Energy Star Listed). R-16 tank insulation; Anti-Siphon valves; and hot water pipe insulation of at least 6 feet
<b>Lighting</b>	Fixtures, ballasts	T-4, T-5 or T-8 fixtures with electronic ballasts
	Timers, sensors	
<b>Day lighting</b>	Light shelves	
	Tubular skylights	
<b>Windows, Doors and Skylights</b>	Exterior windows and glass doors	Replacements only; not newly created windows and doors. U Value of 0.35 or less, low-e glass. <i>Replacement windows permitted only as part of a package that includes air sealing and/or insulation (see insulation &amp; air sealing on front page of this sheet), unless applicant can verify they have already completed priority air sealing and insulation measures. You can verify this through an energy audit or an invoice that shows your home has air sealing and/or insulation.</i>
	Storm windows	Meets IECC in combination with the exterior window over which it is installed, for the applicable climate zone.
	Insulating shutters	
	Insulating exterior doors	R-6.5 minimum fiberglass doors only with weather-stripping and threshold. Any glass must be double paned and tempered.
	Skylights	Upgrades only, not new skylights. U value of 0.35 or less, low-e glass.
<b>Reflective Roof</b>	Metal or asphalt roof	Reflective Shingles/Energy Star Listed
<b>Pool Equipment</b>	High efficiency pool circulating pump	Variable flow and/or multi-speed with controllers.
	Automatic pool cover	
	Air source heat pump	HSPF >= 9, EER >= 13, SEER >= 15.
<b>Landscaping</b>	Focused on heating/cooling	Example: Plant deciduous trees on south side of house. Consider future shading as trees grow.

## RENEWABLE ENERGY MEASURES

<b>Solar hot water</b>	Rooftop (Includes replacement for orphan solar hot water systems)	Must be rated by the Solar Rating and Certification Corporation
	Pool	Must be rated by the Solar Rating and Certification Corporation.
	Hot tub	Must be rated by the Solar Rating and Certification Corporation
<b>Solar photovoltaics</b>		Must be on California Energy Commission approved product list.
<b>Small wind</b>		
<b>Wood/pellet stoves (Biomass only, no gas)</b>	Pellet stoves	Minimum efficiency 78%, must be right-sized (not too big for house). Only upgrades to a more efficient model are eligible, not new stove installations, unless home does not have access to natural gas.
	High efficiency fireplaces & fireplace inserts	Only retrofits of existing fireplaces are eligible; not newly constructed fireplaces. Minimum efficiency 75%.
	Advanced combustion / gasification wood or pellet stoves	Minimum efficiency 75%. Only upgrades to a more efficient model are eligible, not new stove installations, unless home currently uses electric heat.