

# EICHLER GREEN

**LEED-H, Registered Project  
Goal: Platinum**

## **Renewable Energy**

48 - 175 watt photovoltaic solar panels (8.4 kWh) to be a net generator of electricity

3,000 ft ground loop in 25 concrete shoring piers for water-to-water geothermal heat exchange (both heating and cooling)

## **Indoor Air Quality**

Displacement air ventilation with low-velocity, continuous, filtered external air

Central vacuum with external exhaust and exhaust fan in garage

Polished concrete floor for enhanced indoor air quality, low maintenance and durability

## **Sustainable**

FSC-certified lumber and exposed beams are reclaimed locally

70% slag in all concrete and 50% slag in all shotcrete

Locally-manufactured hollow core concrete panels

Exposed fascia is natural zinc for durability and low maintenance

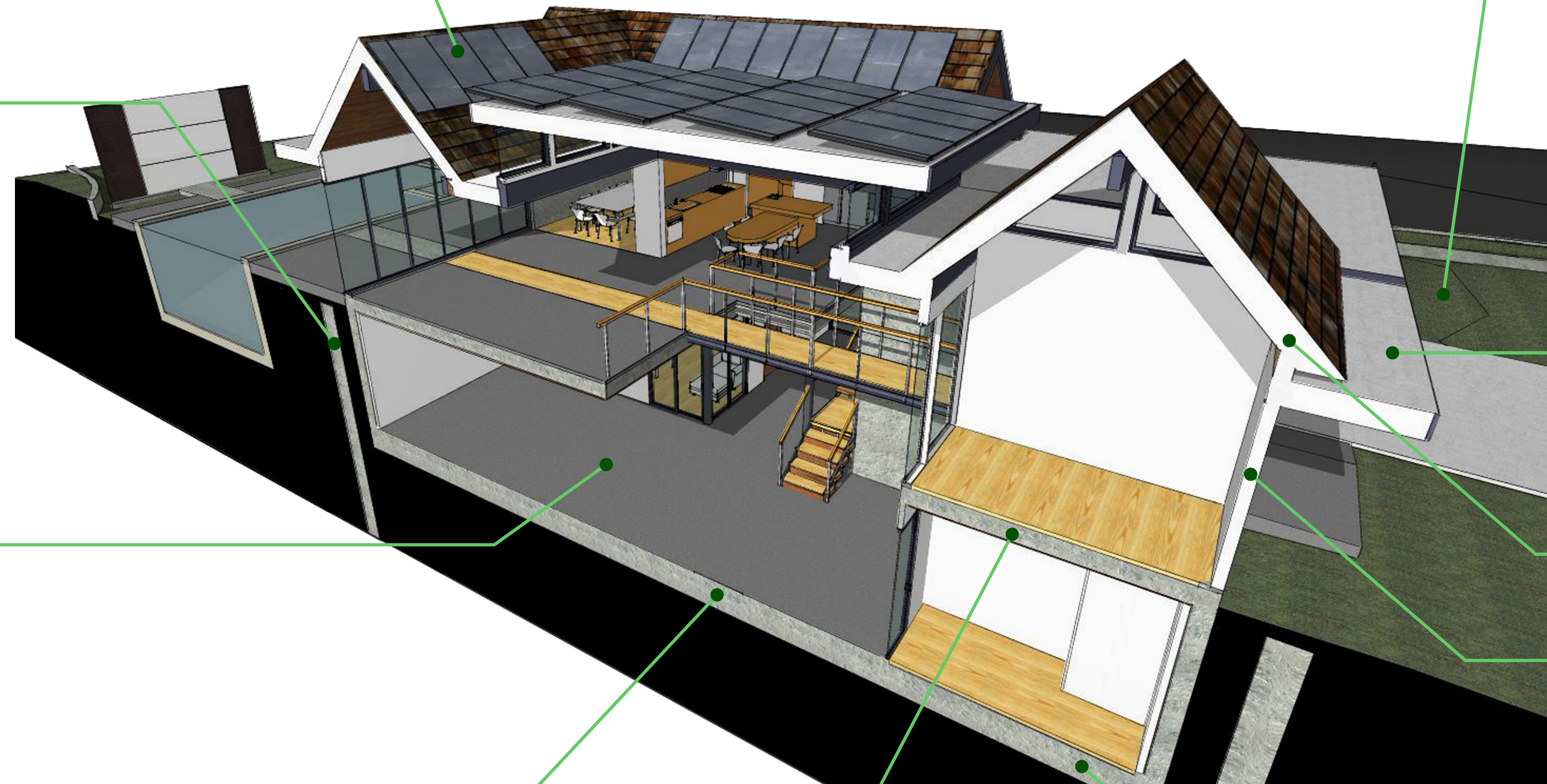
## **Overall**

Net zero energy, zero carbon (no combustion inside the house)

Exceeds Title 24 by 72.9% (highest in the State of California)

Deconstructed original house and reused 100% of original Redwood 2x6 roof decking and 4x Douglas Fir beams

Maintained original footprint and added 18 sq ft to reduce the external surface area to almost a perfect square (4,730 sq ft of conditioned space)



## **Water**

Harvest 100% of rainwater from the roof and store it in a 3,677 gallon underground cistern (made with recycled plastic) for irrigating drought-tolerant native California plants

100% of hardscape runoff goes to the cistern or to permeable landscaping

Dual flush toilets and low-flow water fixtures

Automated swimming pool cover to reduce evaporation and reduce heating requirements

## **Integrated Design**

Natural daylighting throughout the house to reduce lighting requirements

Deep roof overhangs for solar shading except in the Winter months

White, reflective 'cool roof' to reduce solar gain and light-colored hardscape to reduce heat island effects

Operable clerestory windows for cross-ventilation with prevailing winds

SIP roof (R-47) and SIP wall (R-24) to reduce heating/cooling requirements

Expanded existing wall cavity from 2x4 to 2x6 for additional insulation (closed cell natural soy foam)

High performance windows (dual pane, low-emissivity, argon-filled)

1.5 million pounds of insulated thermal mass inside the house (R-10 under the 20-inch concrete mat slab made with 70% slag)

[www.eichlervision.com](http://www.eichlervision.com)

**Jrider + Design**

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