



Austin Energy Green Building Residential Rating Development Update

Heidi Kasper

Manager, Residential Green Building



5/19/2020

© 2020 Austin Energy

History & Mission

Austin Energy Green Building developed the first rating system in the U.S. for evaluating the sustainability of buildings, creating a model for many other cities as well as the U.S. Green Building Council's LEED certification system.

Since 1991, Austin Energy Green Building has provided:

- Ratings and programs
- Education and outreach
- Advocacy and planning

Mission

To cultivate innovation in building and transportation for the enrichment of the community's environmental, economic and human well-being



Goal: Conservation

Energy + Water + Materials

- Save money
- Reduce pollution
- Reduce resource extraction/waste
- Reduce the need for landfills
- Support the City of Austin Climate Protection Plan
- Support the local economy
(focus on local materials & market development)



Goal: Quality of Life

Environment + Transportation + Education + Equity

- Promote healthier indoor & outdoor environments
- Promote transportation options that work for everyone
- Increase human health & well-being
- Improve construction worker health and safety
- Provide buildings that work for everyone



Austin Energy Green Building Ratings

Austin Energy Green Building (AEGB) rates new construction and major renovation projects for three markets



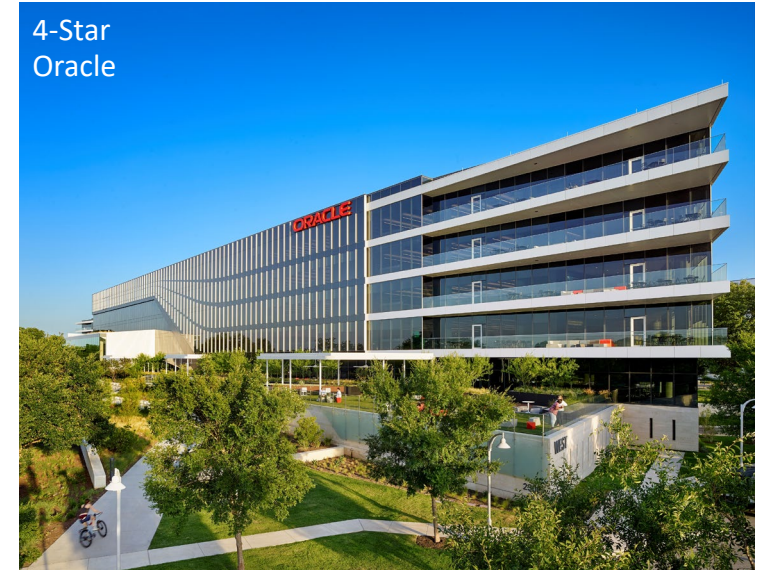
Single Family
Production & Custom Homes

16,445 Total Rated
15,233 Austin | 1212 Extended Area



Multifamily
Residential < 7 Stories

172 Total Rated
27,505 dwelling units

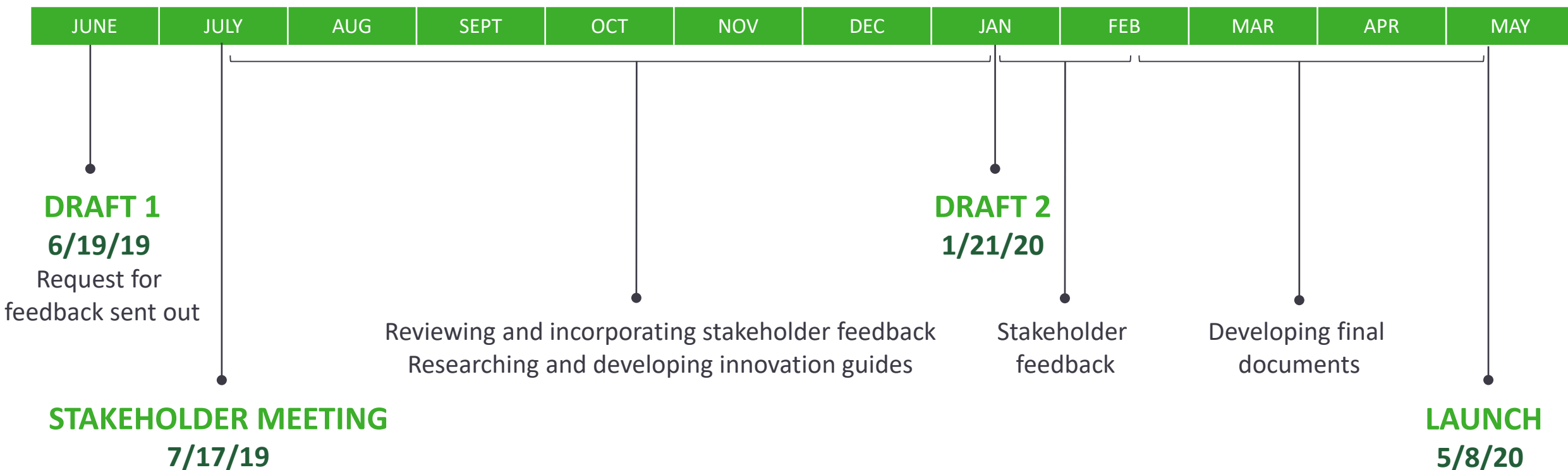


Commercial
& Residential ≥ 7 Stories

291 Total Rated
35,702,219 sq. ft.

16,908 AEGB Total Rated Projects
total reported from FY 1991 - 2019

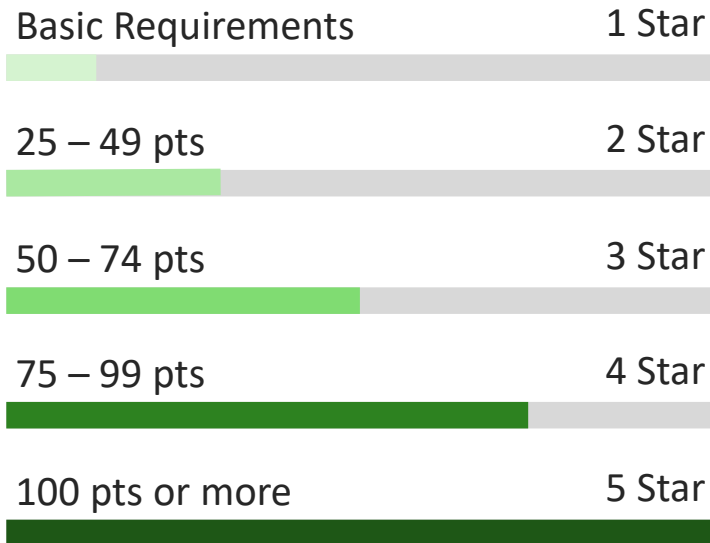
Residential Rating Development Timeline





2020 Single Family Rating

The star rating achieved by a project is determined by the number of sustainability measures incorporated into the project.



+ Star level requirements



Single Family

2020 New Basic Requirements

- Digital Ventilation Controller
- Electric Vehicle Readiness



Energy & Water

Water Heater Efficiency

- More emphasis on heat pump water heaters

Residential Commissioning and Additional Testing

- Added points for commissioning HVAC system
- Added points for building envelope commissioning

High Efficiency Fixtures and Appliances

- Reduced points for LED lighting

Electric Readiness

- Aligning with 2021 IECC code requirement

Indoor Water

Water Efficient Home



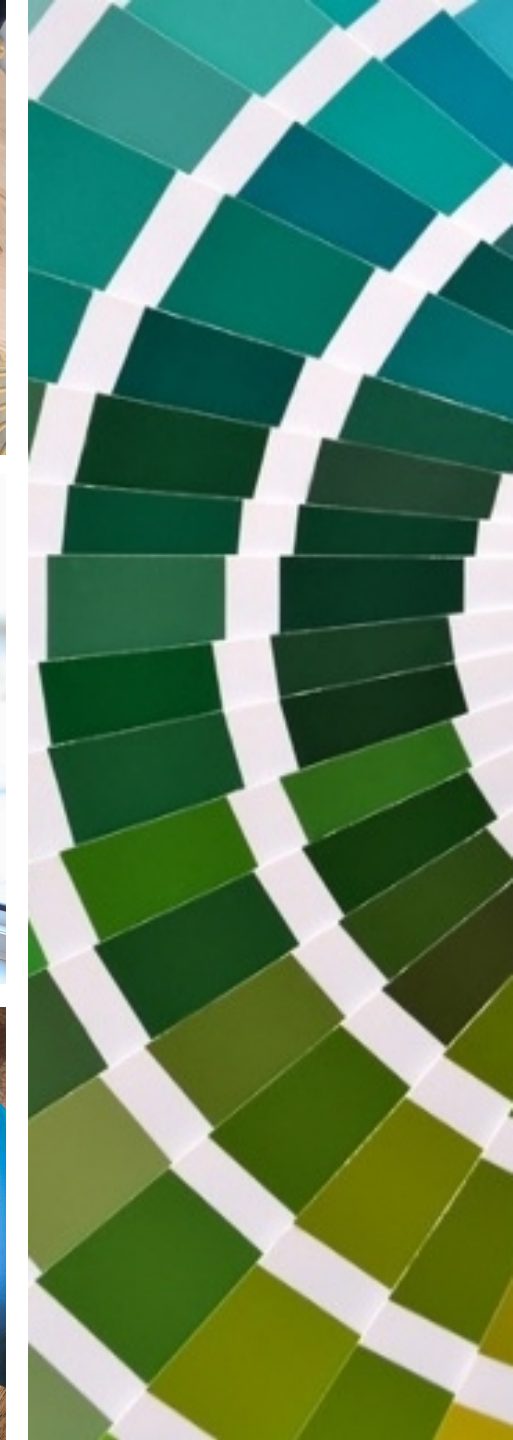
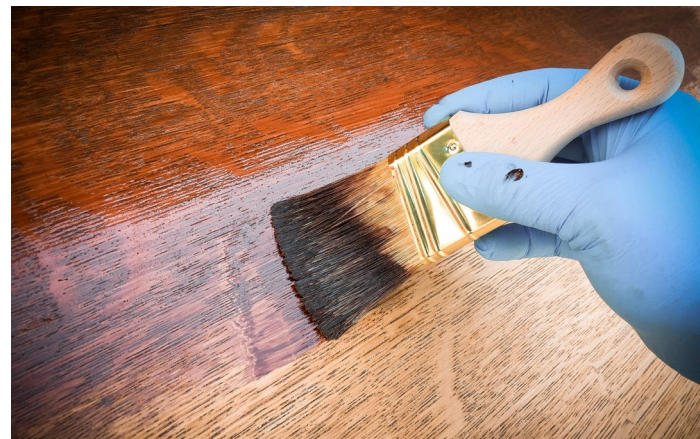
Health & Materials

Durable Finished Floor: vinyl products no longer accepted to achieve these points

Improved Indoor Air Quality:

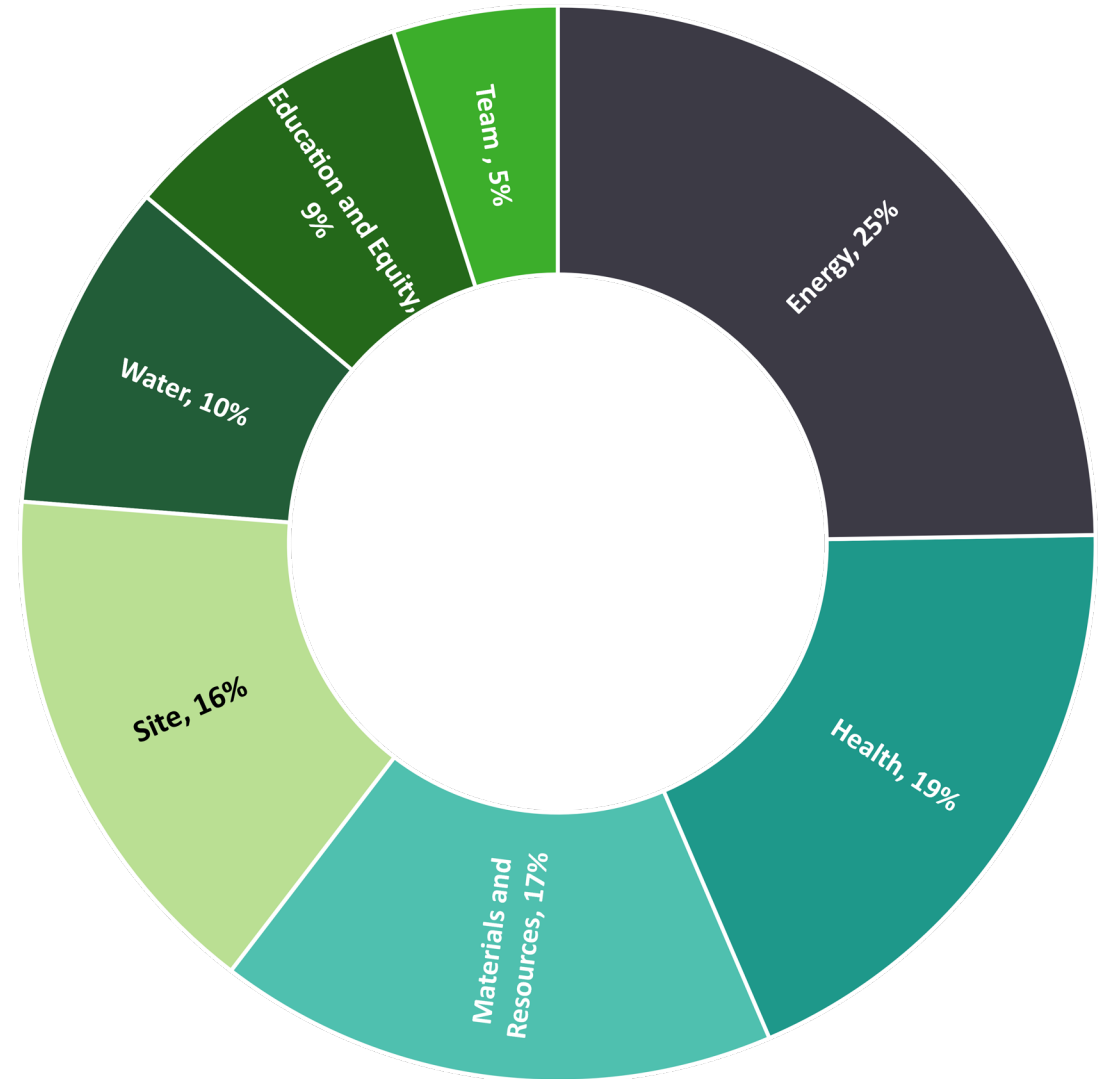
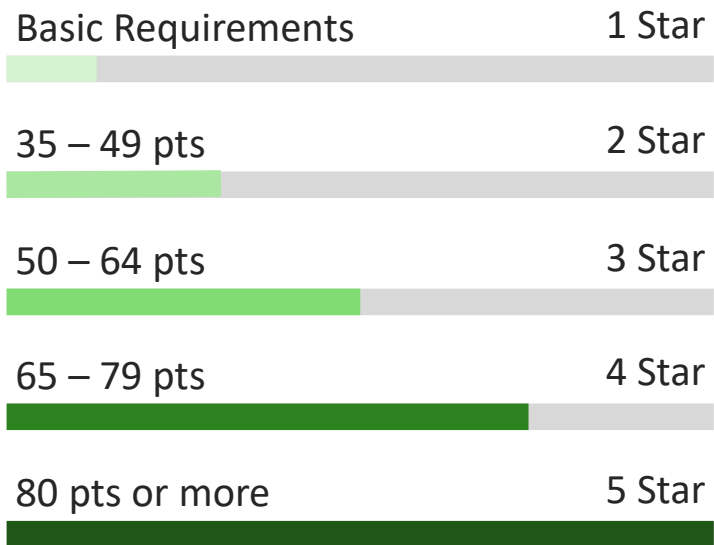
- New point for GS 11, Green Guard Gold or SCS Indoor Advantage Gold paints without APE's
- New point for Green Guard Gold or SCS Indoor Advantage Gold sealants
- Changed cabinet point to require no added urea-formaldehyde.

Dedicated Dehumidification: (new points)



2020 Multifamily Rating

The star rating achieved by a project is determined by the number of sustainability measures incorporated into the project.



Multifamily

2020 New Basic Requirements

- Digital Ventilation Controller
- Exhaust fans vented to outside at all cooktops
- All ductwork registers and grills kept covered during construction
- Projects must demonstrate irrigation water demand reduction of 30% from the baseline
- Updated recycling capacity requirements



Energy & Water

Prescriptive Energy Performance

- Reduced points for LED lighting
- Removed points for standard gas appliances

Additional Testing and Quality Installation

- Grade 1 insulation
- 100% testing

Electric Readiness

- Aligning with 2021 IECC code requirement

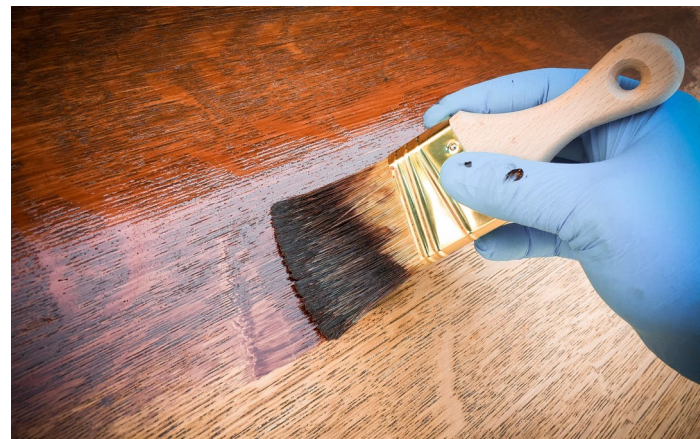
Irrigation Controls

Water Use Benchmarking



Health & Materials

- Auditory Comfort (NEW)
- Interior Paints and Coatings (NEW)
- Composite Wood
- Humidity Control: 3 points for dedicated dehumidification system with programmable relative humidity controls
- Durability (NEW)
- PVC's and Phthalates: increased number of points for choosing PVC free materials



Site, Education & Equity

Electric Vehicle Readiness

- 10% of all new parking

Housing Affordability

- Added an affordability calculator

Car Free Living

- New points for accommodating electric bikes and scooters



INNOVATION

