



Austin Energy Green Building Residential Rating Updates

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8/15/2023

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Goal: Conservation

Energy | Water | Materials

- Resource Generation Plan
- Water Forward
- Zero Waste Plan
- Climate Equity Plan



Goal: Quality of Life

Environment | Transportation | Education | Equity

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



Austin Energy Green Building Ratings

AEGB rates new construction and major renovation projects for three markets



Theresa Passive House

Single Family

Production and Custom Homes

19,147

16.2 K Austin | 2.9 K Extended Area



Travis Flats

Multifamily

Residential < 8 Stories

214

41.2 M sq. ft. | 35.6 K dwelling units



Elizabeth Branch Park Pavilion

Commercial

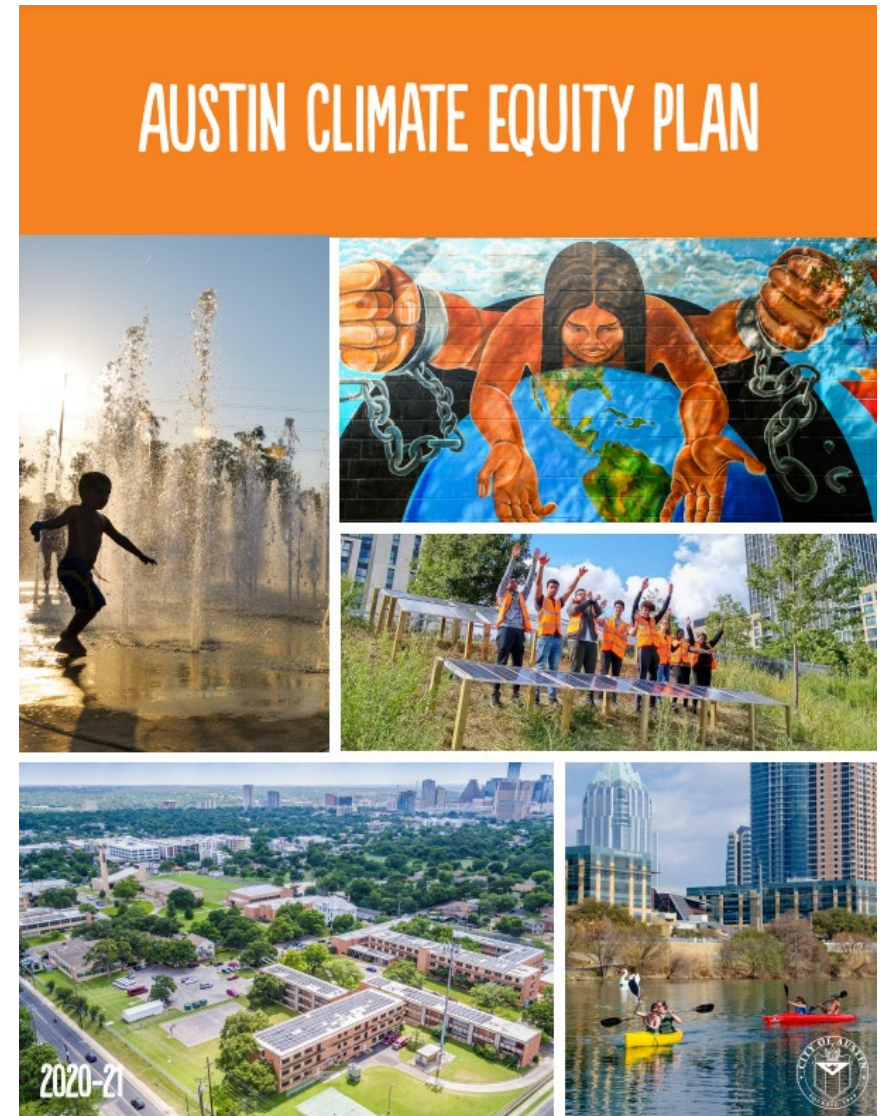
and Residential > 7 Stories

359

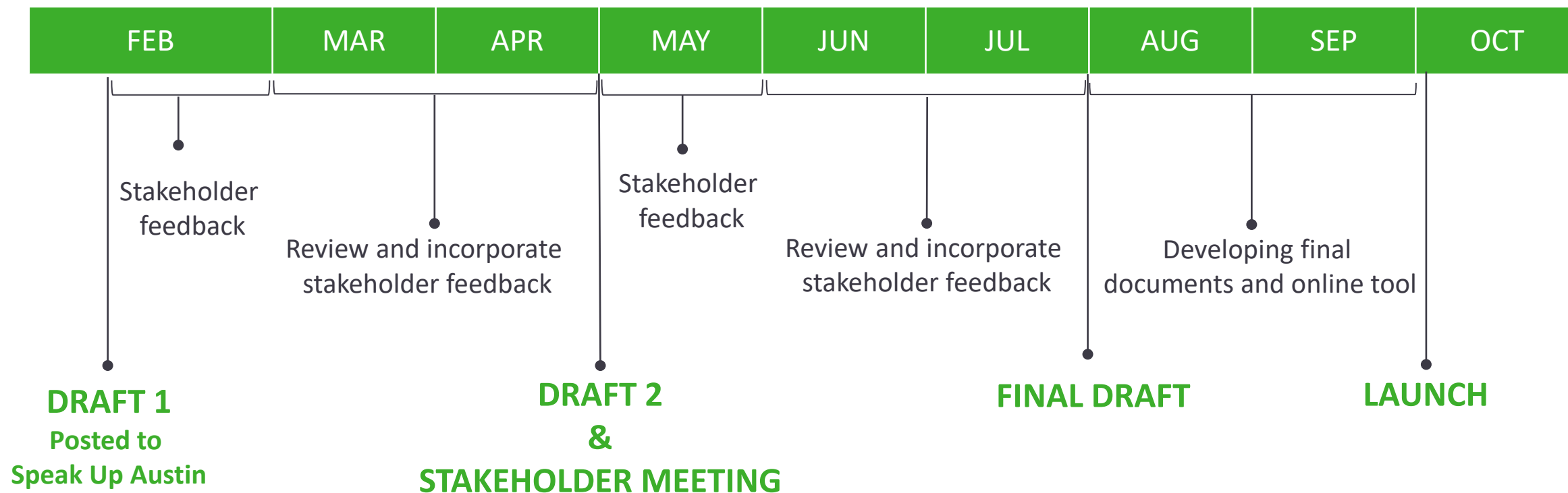
47.9 M sq. ft. | 13.4 K dwelling units

19,720 rated projects
total reported from FY 1991 - 2022

Why an update?

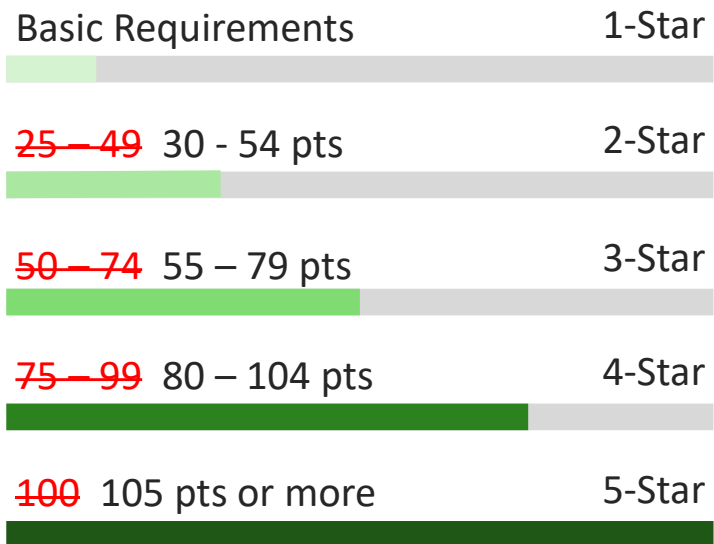


2023 Residential Rating Updates Timeline

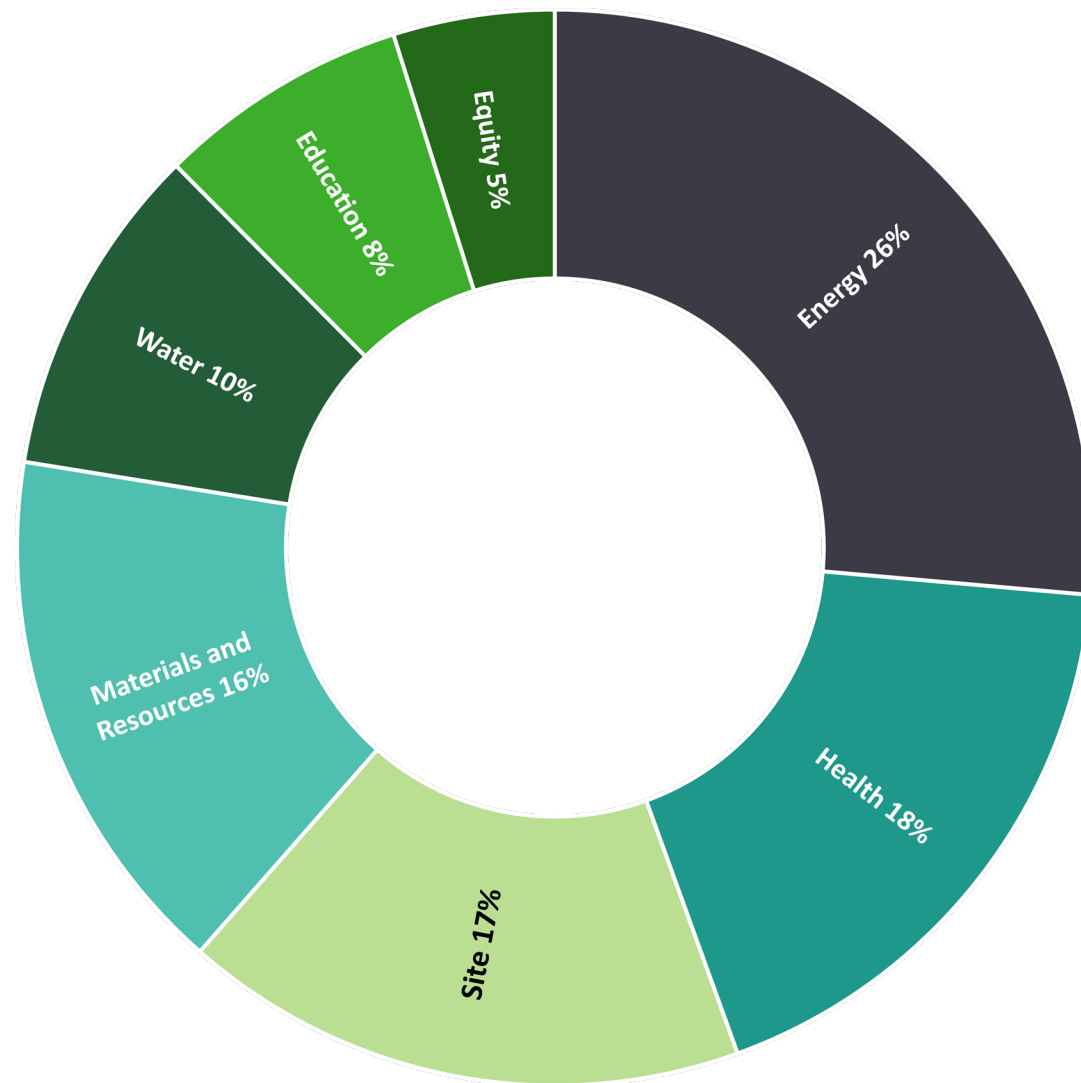


Single Family Rating

The number of sustainability measures a project incorporates determines its star rating.



+ Star level requirements



Single Family

2023 New Basic Requirements

Energy Performance

- Updated the minimum percentage above code requirement to 8%

HVAC Efficiency and Design

- Updated to new SEER2 and HSPF2 federal standards and increased efficiency requirements for HVAC equipment
- Gas furnace minimum increased to 90 AFUE
- Requiring static pressure testing port installation

Indoor Environmental Quality

- Updated to require emissions-based standard instead of VOC content

Embodied Carbon Reduction

- New requirement

Landscaping

- Changed WaterSense controller requirement to align with pressure regulation

Homeowner Education

- Added builder resource document

Electric Vehicle Readiness

- Updated measure to align with proposed 2024 IECC code language

Education and Site

Planning for Green Building

- Added new measure to strengthen green building project planning and better achieve green building goals

Green Building Education

- Added an option for attending on-demand offerings by AEGB

Local Food Production and Healthy Food Access

- Added new measure to align with Austin Climate Equity Plan to increase on-site food production and access to healthy food in Austin



Energy and Water

High Performance Systems

- Revised to accommodate new HVAC technology

Water Heater Efficiency

- Revised to align with ENERGY STAR® v5
- Added demand response capability requirement for electric resistance storage water heater option

Water Heating Design

- Added points for leak detection and a smart water valve

Indoor Water Conservation

- Now a 2-star requirement



Health

Low Emitting Products (2-star requirement)

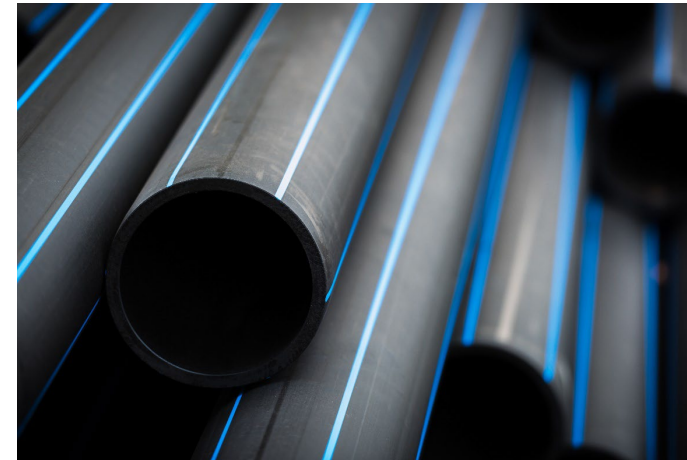
- Split out from improved air quality to emphasize the importance of healthy building materials
- Added points including a point for using products with Health Product Declarations

Red List-Free Products

- New measure to minimize the use of products that expose humans to the known harmful classes of chemicals

Extreme Temperature Resilience

- New measure to promote safer and more resilient construction in the context of severe weather events



Materials & Resources

Embodied Carbon Reduction

- New measures moved from the innovation guide

Lower Greenhouse gas refrigerants

- New measure to promote the phase out of hydrofluorocarbons (HFC) to reduce greenhouse gas emissions

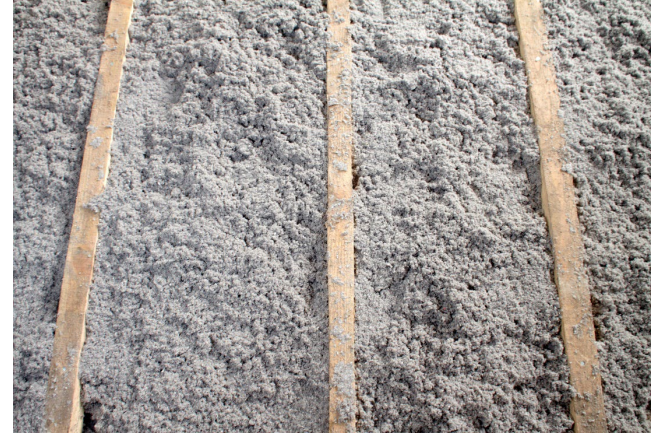
Equity

Housing Affordability

Universal Design

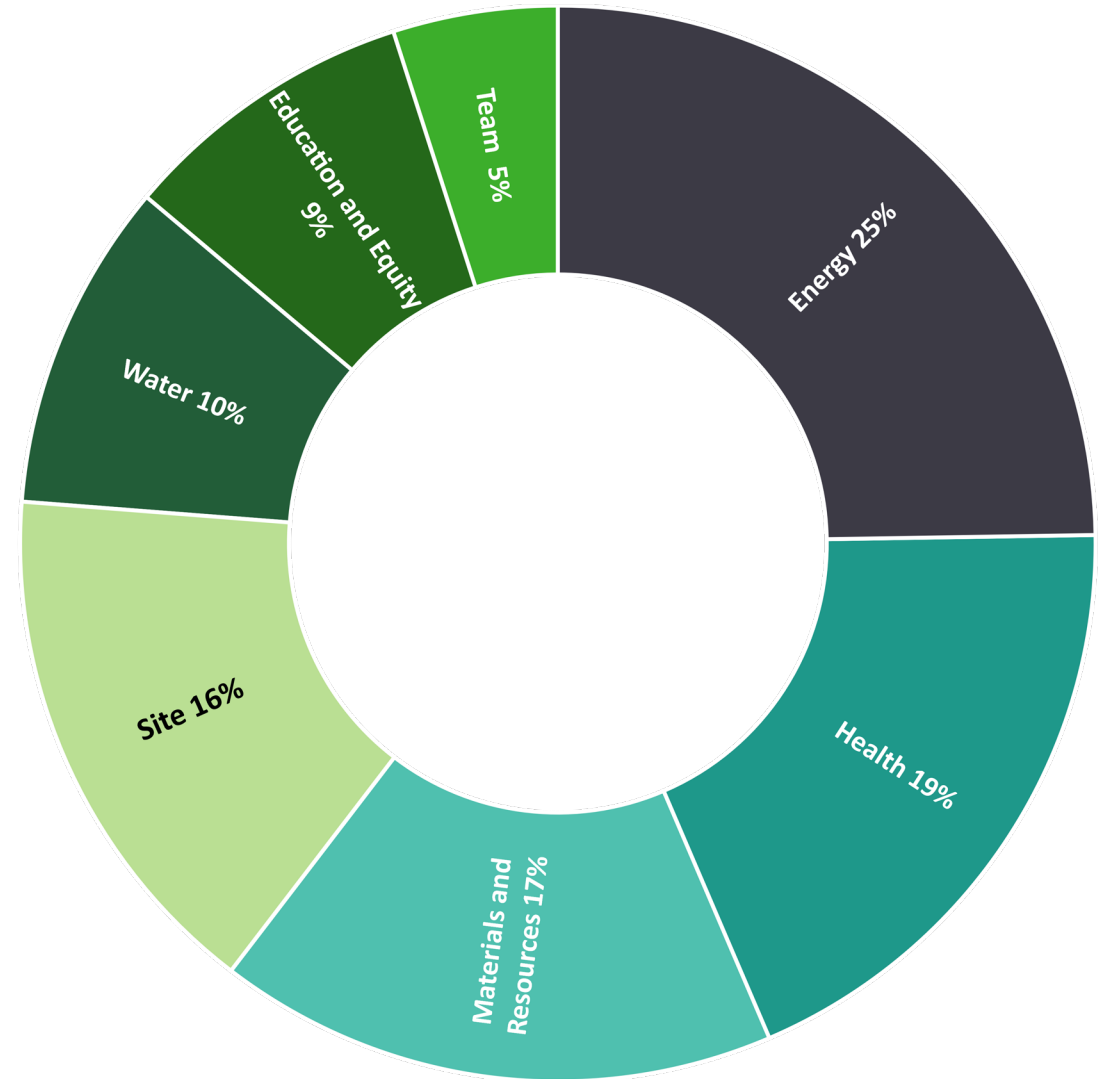
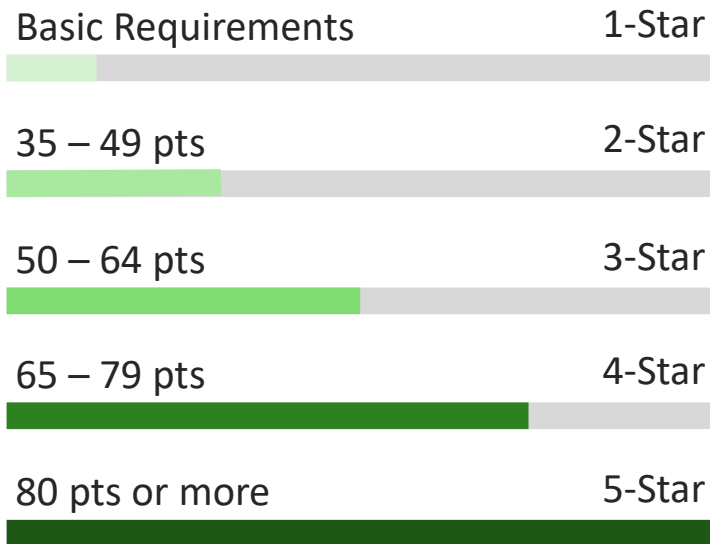
Construction Worker Equity

- New measure moved from the innovation guide



2020 Multifamily Rating

The number of sustainability measures a project incorporates determines its star rating.



Multifamily

2023 New Basic Requirements

Electric Vehicle Charging Infrastructure

- New basic requirement that 40% of parking provided be a minimum of EV capable

Concrete Quantity

- New basic requirement to track and report all concrete quantities used on the project

Resident Recycling and Construction

Waste Management

- Now part of City code, so no longer a basic requirement



Energy and Water

Lower Greenhouse Gas Refrigerants

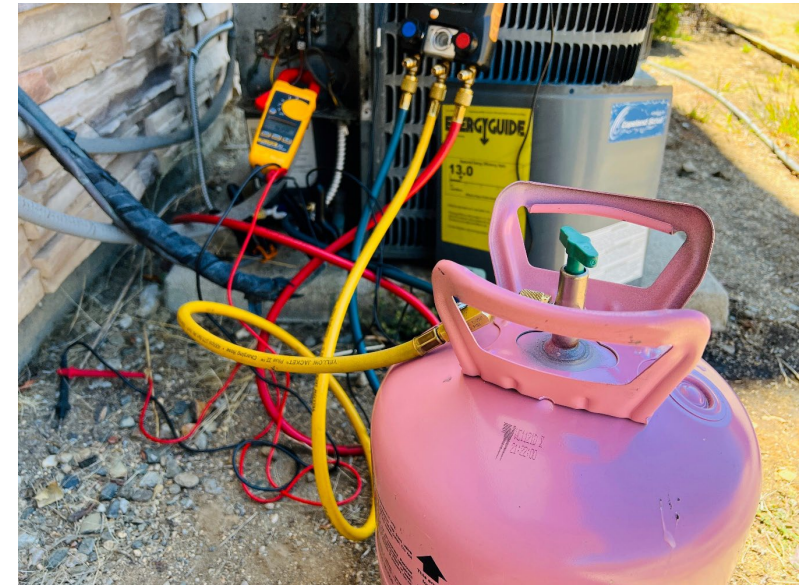
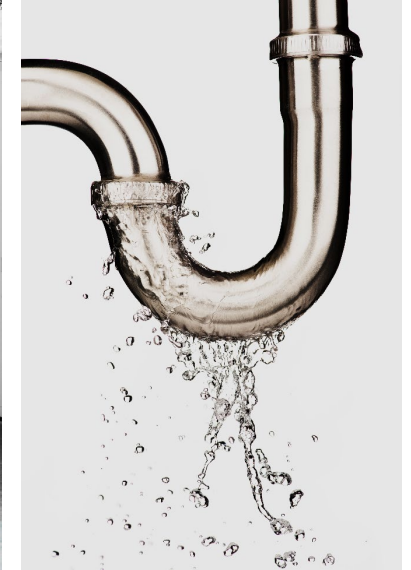
- New points for equipment using refrigerants with lower global warming potential

Grid Flexibility

- 2-4 points available for strategies that support demand response programs and improve electric grid system reliability

Leak Detection

- Previous Innovation point brought into rating



Health

Healthier Material Selection

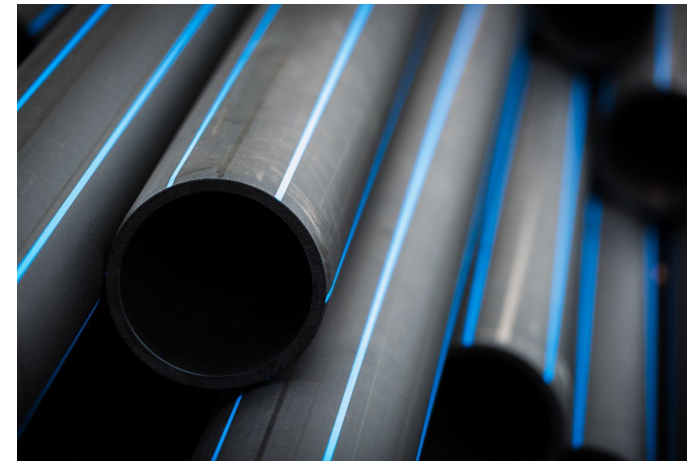
- New points for using products participating in material ingredient transparency labelling programs and for products earning improved material health designations such as Declare LBC Red List Free products

Antimicrobial Avoidance

- New point for avoiding products with added antimicrobials that are marketed with claims of being beneficial to human health

PVC Reduction

- New points available for using HDPE pipe for wastewater and irrigation piping
- Points moved from materials section to Health section for better alignment and emphasis



Materials

Embodied Carbon Reduction

- New points for incorporating practices to allow project teams to better understand embodied carbon impacts of building materials

Compost Collection

- Previously an innovation measure

Sustainably Sourced Materials

- No longer offering these points in favor of a more wholistic approach to evaluating building materials and their impacts



Site

Intentional Site Selection

- Removed points for Environmental Sensitivity and Desired Development
- Added point for avoiding prime farmland
- Brownfield point consolidated under this measure

Resilience – Designated Areas

- New points to provide space in the complex that offers day-to-day services and supports the community before, during and after a disaster

Enhance Tree Canopy Cover

- New point to promote increased tree canopy cover

Equity

Construction Worker Equity

- Points increased



Image courtesy of Brendan Hurley, City of Coquitlam

INNOVATION

