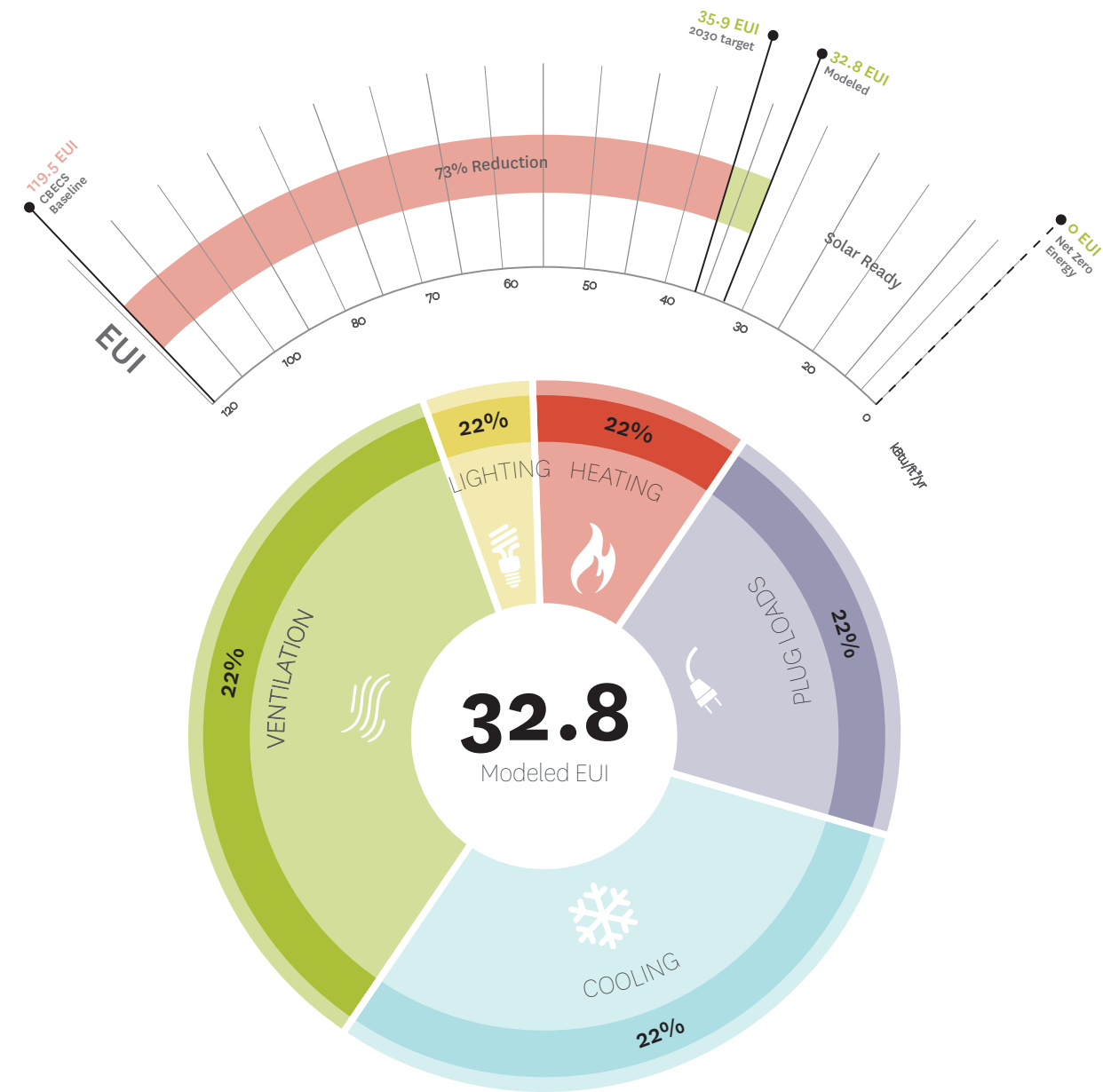


First Tech Federal Credit Union Corporate Office
Sustainability Summary

Project Type: Commercial Office
Location: Hillsboro, Oregon
Built Area: 156,725 SF
Scope: New Building, Completed 2018
Certification: LEED Gold

Architect: Hacker
Energy Consultant: SolArch
Daylight Modeling: SORA
Sustainability Consultant: JLL



Design Summary

This new corporate office for First Tech Federal Credit Union is the first building designed and constructed specifically for this client. First Tech’s motto is “People First,” and their new headquarters is designed to support and promote the health, comfort, and happiness of their employees. Special emphasis is placed on creating equal access to natural light and views to the outside from every work station in this open office design.

The primary objective of the project was to create a central hub for the company to gather around, and to forge a relationship between the company, its clients, and the surrounding landscape of Dawson Creek Park. The new campus includes a large central commons capable of accommodating large gatherings and presentations; a kitchen, lunch room, and coffee bar; a game room; training rooms; private huddle rooms; and flexible collaboration spaces with retractable walls allowing teams and work groups to define their own spaces as needed.

In an effort to integrate the park with the public spaces on the lower floors, the topography has been

brought through the building, culminating in a large, dynamic company commons designed to hold hundreds of people at the “heart” of the organization. This space opens to a courtyard located between the current building and a second building to be built in a later phase.

Key Sustainability Concepts

Energy modeling was conducted early and often, running parallel models with different mechanical systems in order to find the best possible solution for the lowest cost.

Daylighting studies (initially intended to help pursue LEED credits that were ultimately forgone in a trade-off for building footprint and floor-to-floor height) worked to inform the orientation of the building and the tuning of the lighting system. All lights are LED and controlled by a Digital Addressable Lighting Interface (DALI) system that tracks occupancy and daylight levels.

A high efficiency variable air volume HVAC system brought down the cooling energy loads. This system has been integrated into the raised access floor, allowing individuals to control their own environmental comfort.

Most importantly, the mass timber structural system acts as a carbon-sink, sequestering massive amounts of carbon rather than producing it. Moreover, all the heavy timber was sourced from within 500 miles of the site, a decision that drastically reduced the embodied carbon of the building.

Designing these sustainable systems required early and deeply engaged collaboration with consultants. The owner’s rep, JLL, also served as the sustainability consultant for the project. To go beyond LEED certification requirements, client conversations regarding both the quantitative and qualitative advantages and the financial incentives offered by Energy Trust of Oregon, First Tech was convinced and offered an extra two million dollars for other energy saving measures. This additional investment allowed the addition of a PV system as well as upgraded mechanical systems.