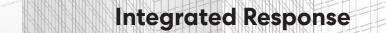


**Aerial Looking Northwest from State & Van Bure** 

EXISTING GARAGE





The environmental and programmatic elements of the building and park are intertwined into a mixed use development that energizes and harmonizes connections to nature in an urban ecosystem.

The ecoVIBE development provides an opportunity to bring housing density to the area. The generous southern exposure and adjacency to Pritzker Park provides a framework for integrated stormwater management, solar shading and renewable energy solutions.

As it stands today, the project site within the Loop offers great potential with its proximity to the CTA, visibility from State Street, and the opportunity to enhance Pritzker Park while increasing development density and community-driven commercial opportunities.

EXISTING PARK

**Current Condition** 

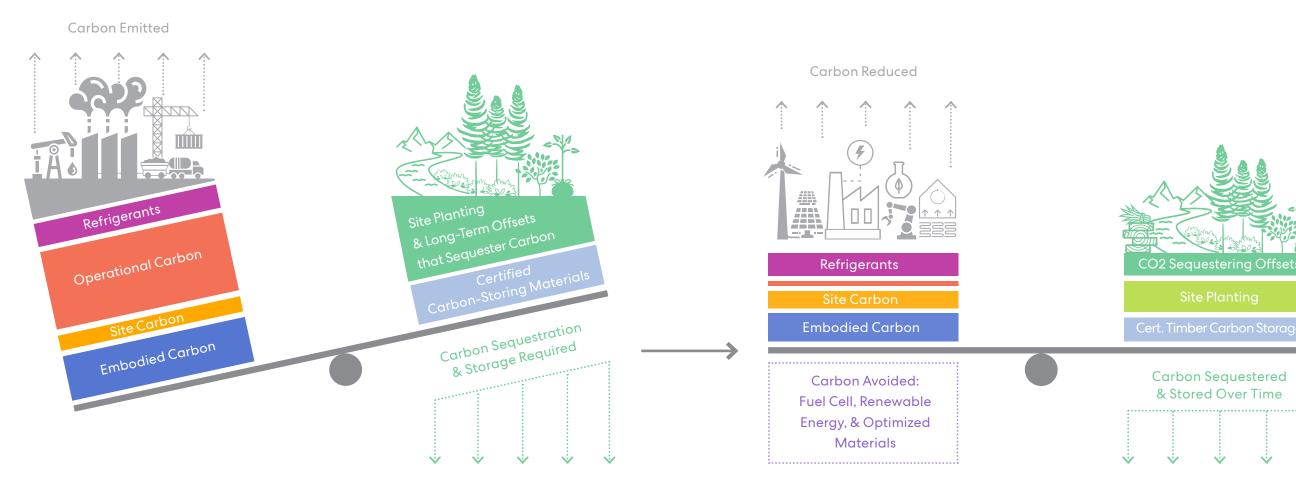
# **Structural Design**



ecoVIBE is a new kind of development - one that challenges the dichotomies between environmental sustainability and high design, affordability and luxury, and inclusivity and identity. The development's main goal is not only to be a living, breathing work-of-art, but to live in harmony with the planet and improve the life of its denizens.

A long-held belief is that high-rise development is not sustainable, yet we know that increased density leads to enhanced sustainability and livable communities. The project is organized into a series of vertical districts. These districts organize the building into functions that support one another through efficient resource management to increase opportunities for reuse and repurposing of energy and water, and to benefit the tenants with an increased sense of community.

The districts create an opportunity for the building structure, which will set a new benchmark in Chicago for sustainable building performance and mass timber construction. Mass timber was selected in response to C40's Challenges – Energy Efficiency and Low Carbon Energy Consumption and Life-Cycle Assessments and Sustainable Construction Materials. ecoVIBE will achieve carbon neutrality, including operational, embodied, sequestered, and avoided carbon in less than 2.5 years.

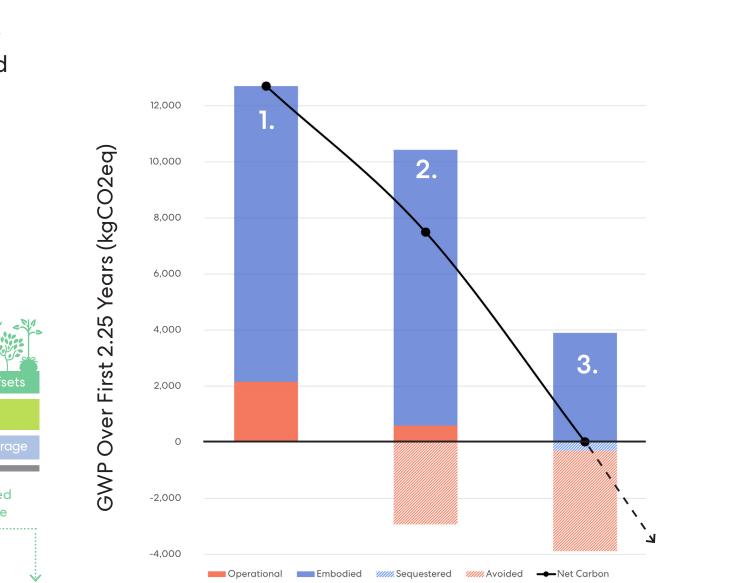


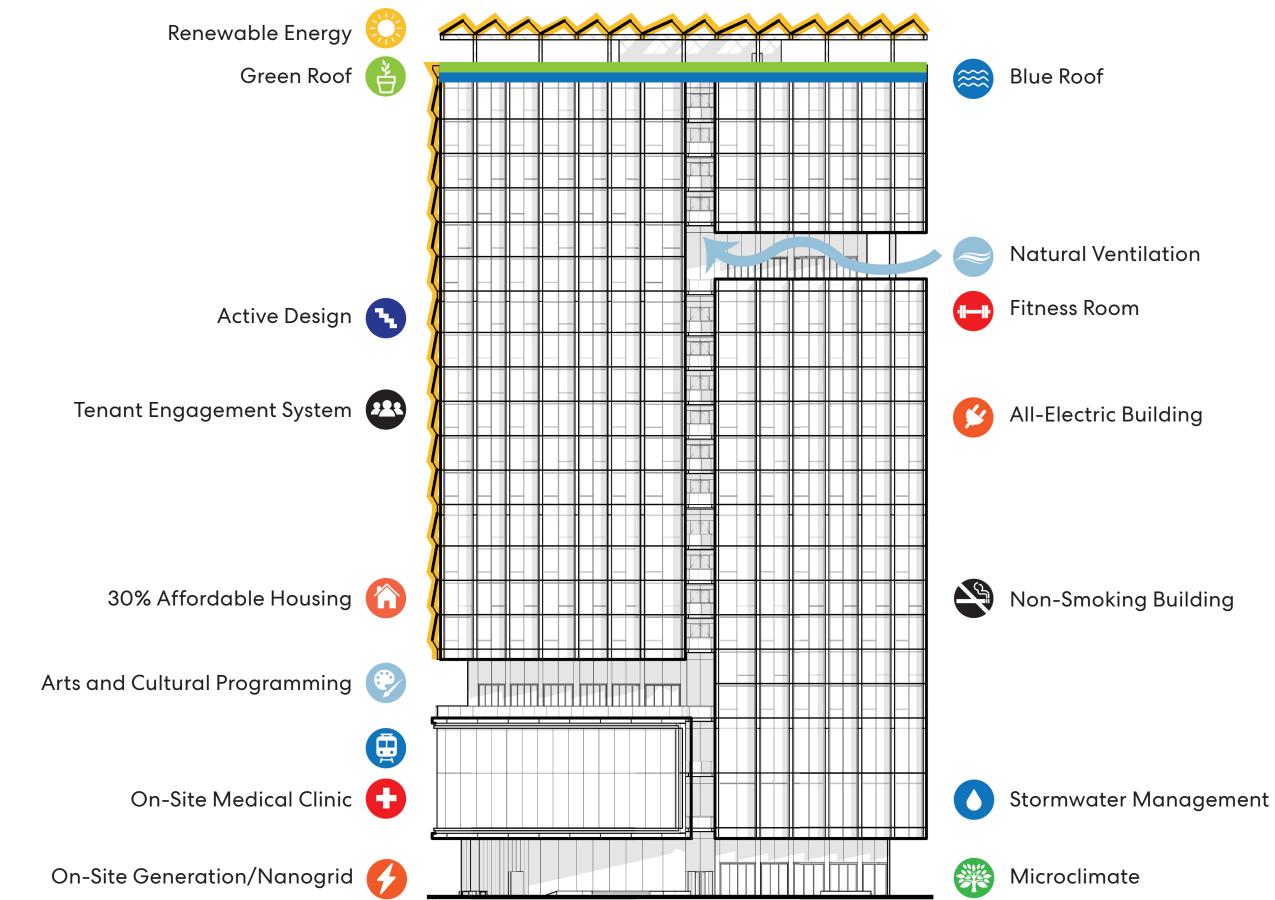
## **Carbon Neutral Timeline**

1. Baseline: Indefinite Emissions

2. Conventional Carbon Neutral Approach: Avoid a portion of Emissions

3. ecoVIBE: Carbon Neutral after 2.25 years (27 months) of Operation





Healthy for the people. Harmony with the planet.

## C40 10 Challenges



#### **O1. Energy Efficiency and Low Carbon Energy Consumption**

- ILFI Zero Energy Certification
- Full electrification of building systems
- Rooftop and facade photovoltaics
- On-site fuel cell (basis of design)
- High-performance envelope
- Smart switching and metering
- On-site generation
- Geo-piles
- Geo-exchange system in Pritzker Park (under consideration)
- Energy-efficient HVAC, water heaters, lighting, appliances

#### 02. Life Cycle Assessments and Sustainable Construction Materials

- Mass timber structure
- Perkins&Will Precautionary List-free materials
- Low-carbon concrete

#### 03. Low Carbon Mobility

- Public transit oriented
- Bike share and parking
- Zero parking provided off-street

#### 04. Climate Resilience and Adaptation

- Heat island mitigation
- Flood-resistant critical infrastructure
- Hybrid natural ventilation
- Community spaces for residents
- Smart-building tenant engagement system
- Battery back-up and Nanogrid

### 05. Ecological Services for the Neighborhood and Green Jobs

• Waste-to-energy system supported by the neighborhood • Green jobs in building maintenance and management • On-site Arts Cafe

### 06. Sustainable Water Management

#### • Blue-green roof

- Rainwater capture and garden
- Permeable Pavers
- Lower-flow than WaterSense fixtures
- Increased capacity stormwater management system

#### 07. Sustainable Waste Management

- Waste-to-energy system
- Source-separated waste collection

#### 08. Bio-diversity, Urban Revegetation, and Agriculture

- Dense tree canopy
- Pollinator garden
- Native and adapted plant species
- Micro-Climate
- Urban apiary

#### 09. Inclusive Actions, Social Benefits, and Community Engagement

- Inclusive affordable transit-oriented development
- Neighborhood Medical Clinic
- Improved public park
- Activated open space
- WELL Certification
- Partnerships with local educational institutions
- Local art work on display

#### 10. Innovative Architecture and Urban Design

- Building activates Pritzker Park
- Unique hybrid structural system
- Self-shading facade
- Stormwater Fountain
- Outdoor space for cross-ventilation

ecoVIBE Create Community Room

ecoVIBE Create 2 Bed Uni