This conceptual plan demonstrates how to design, build, and budget a net-zero carbon pathway for an existing office tower in downtown Seattle. The roadmap addresses risks from climate change, market instability, earthquakes, and public health by investing in affordable housing, mobility, resilience, the 3rd Avenue Vision, low carbon materials and renewables. Our strategy is broken into four distinct phases: Infrastructure Upgrades, Envelope & Structural Upgrades, Warm Shell Office & Amenities, and Residential Conversion.

The nested donut chart on the right shows the cumulative district emissions (operational, embodied and transportation) between 2025-2040 for Business as Usual (inside) and the Proposed design (outside). Emissions from transportation dominate the chart, shifting the focus beyond the project site to regional mobility patterns. Emissions from building materials is the second largest impact, prompting a need for low carbon, carbon sequestering supply chains. Operational carbon (energy) emissions are a sliver of the pie because of the decarbonizing electric grid – investing in efficiency and renewables brings this to zero.

The proposed concept has 75% lower carbon emissions by investing in: 1) adaptive reuse that prioritizes equitable housing downtown to leverage transit and the walkshed, 2) seismic upgrades to extend the lifespan of existing structural embodied carbon, 3) Envelope and mechanical updates to reduce energy while improving indoor health and wellness.