Solving Both Sides of the Equation

In Practice

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Real Estate & Facilities

A planet-sized challenge
Microsoft is committed to harnessing the power of technology to help everyone, everywhere build a more sustainable future.

Putting a Price on Carbon

**Track** carbon emissions from operation of our datacenters, labs, offices, manufacturing sites, and business air travel

**Charge** business groups a carbon neutral fee for their portion of emissions

**Invest** in renewable energy, carbon offsets, technology innovation for sustainability, and emissions tracking/reporting
Investing in our Home

Building Materials and Construction 11%

GLOBAL CARBON EMISSIONS

A Data Driven Approach

Total Carbon Emissions of New Construction 2020-2050

Global Average Building Carbon Footprint: Business as Usual

OPERATIONAL CARBON 51%
EMBODIED CARBON 49%

Building Operations
Building Materials and Construction

BUILDING CARBON IMPACT OVER TIME
Solving Both Sides of the Equation

Operational Carbon

**Energy Efficient**
Performance EUI target for each building

**Renewably Sourced**
100% of electricity comes from renewable sources

**No Fossil Fuels**
Daily operations will run on electricity – including cafes that serve over 10k people daily

Embodied Carbon

**Design for Flexibility**
Ensuring building design allows for maximum flexibility as workplace evolves

**Maximize Reuse**
Trees and concrete to be reused where feasible onsite

**Embodied Carbon Reduction**
15-30% reduction target for embodied carbon on the project

Embodied Carbon Target

**EC3 Tool**
15-30% reduction in GWP from Baseline

Conservative Embodied Carbon Estimate (80th percentile)

Achievable Embodied Carbon Target (20th percentile)

Zero Embodied Carbon

Large variance in emissions of rebar based on manufacturing location

Washington produced rebar
Scaling Globally

Policy

Operational Carbon

**EUI**
(Energy Use Intensity)
Kbtu/SF/Yr

Embodied Carbon

**ECUI**
(Embodied Carbon Use Intensity)
Kg CO2e/SF