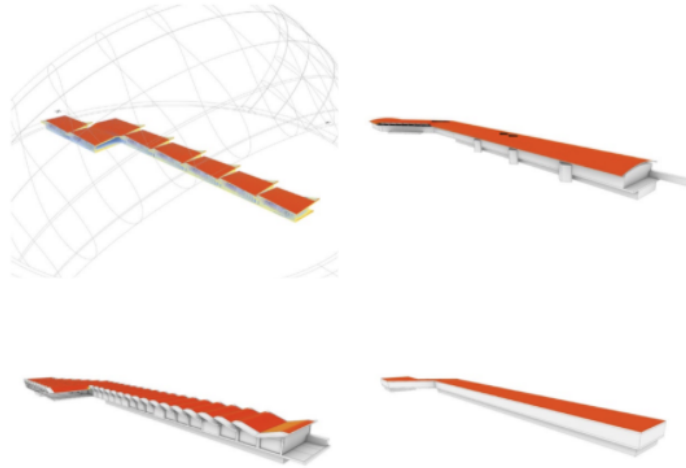


Autocase Informs Massing Options by Showing Tradeoff Between Upfront & Operational CO₂



Project Description

A design team was considering how to compare four different massing options to select the best design from a life cycle carbon perspective, while also accounting for costs.

They had to weigh up upfront costs vs. EUI, embodied carbon, solar PV potential, and an outdoor patio with vegetation.

Strategies Assessed



Upfront costs



Renewables



Embodied CO₂



Natural gas



Electricity use



Landscaping

PARTNERS

Engineering Firm

DESIGN PHASE

Massing

BUILDING TYPE

Airport Concourse

SIZE

<100,000 sq ft

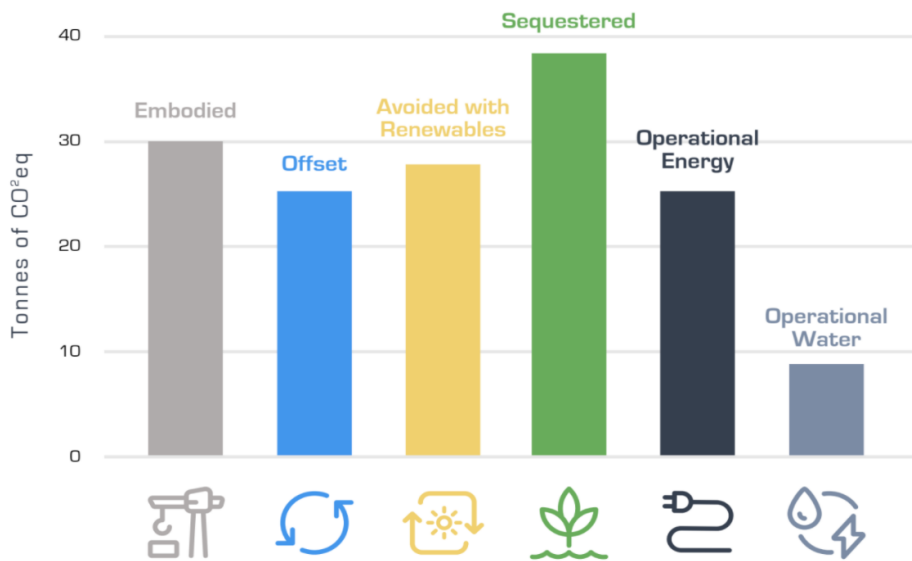
LOCATION

Confidential

How Autocase was Used

For each massing option, the design team entered into Autocase:

- Initial capex estimates;
- EUI estimates for electricity and natural gas;
- kWh potential from available roof area and slope;
- Early stage embodied CO2 information from Tally;
- Area of vegetation on the patio



The Outcome

The design team was able to use Autocase's location-specific whole carbon story feature to quantify and value in dollar terms the project's lifetime CO₂ from energy, PV, materials, and sequestration to compare against capex.

The client was then able to inform which of the four massing options was best from a triple bottom line perspective to move in to SD.

Want to learn more?

info@autocase.com



autocase.com