

SKANSKA

Steve Clem, SVP Project Planning
& Sustainability



Who Are We? A Global Development and Construction Company

28

Offices

11

Operates in 11 countries

27K

Employees worldwide

3

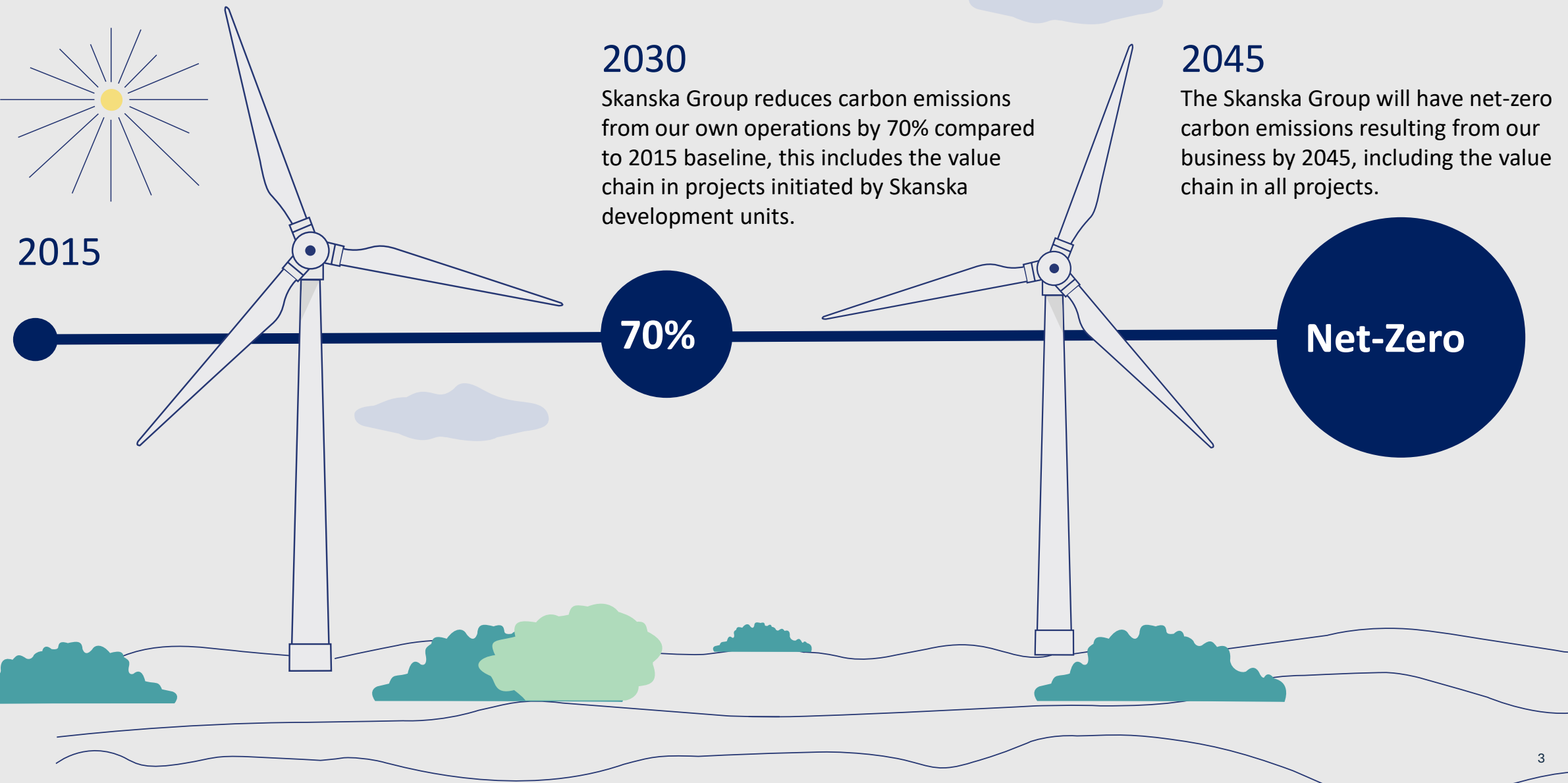
Business Units

1887

Founded in Sweden

Norway
Finland
Sweden
Denmark
United Kingdom
Poland
Czech Republic
Slovakia
Hungary
Romania

Skanska Climate Goals



Skanska Sustainability Team



Steve Clem - OR
SVP, Sustainability



Tolga Tutar - OR
Senior Sustainability Director



Mark Chen - WA
National Carbon Manager



Bailey Zak - WA
Senior Sustainability Engineer



Kevin Casey - WA
Sustainability Engineer



Myrrh Caplan - NJ
SVP, Sustainability



Elsa Mullin - MA
Sustainability Director



Jimmy Mitchell - GA
Sustainability Manager



Ladan Haji-Mohamed - NY
Senior Sustainability Engineer



Thomas Fitzgerald - NY
Sustainability Engineer

Our Services:

- Project Support for Green Building certifications
- Carbon Emissions Tracking & Reporting
- Sustainability Consulting
- Sustainability Education and Advocacy

Every year, our sustainability team updates our USA Climate Plan, detailing specific steps to meet the 2030 and 2045 targets.



Example Climate Plan Action Steps



Skanska Purchased Fuels (Scope 1)
Renewable Diesel, Electrified Vehicles and Equipment, Hydrogen



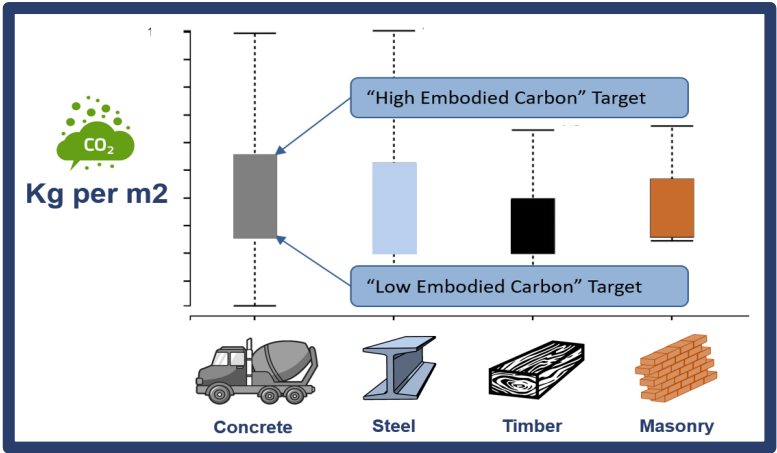
Skanska Purchased Electricity (Scope 2)
Renewable Energy Purchasing and Energy Reduction at Jobsites and Offices



Skanska Business Air Travel (Scope 3)
Sustainable Aviation Fuel Purchasing



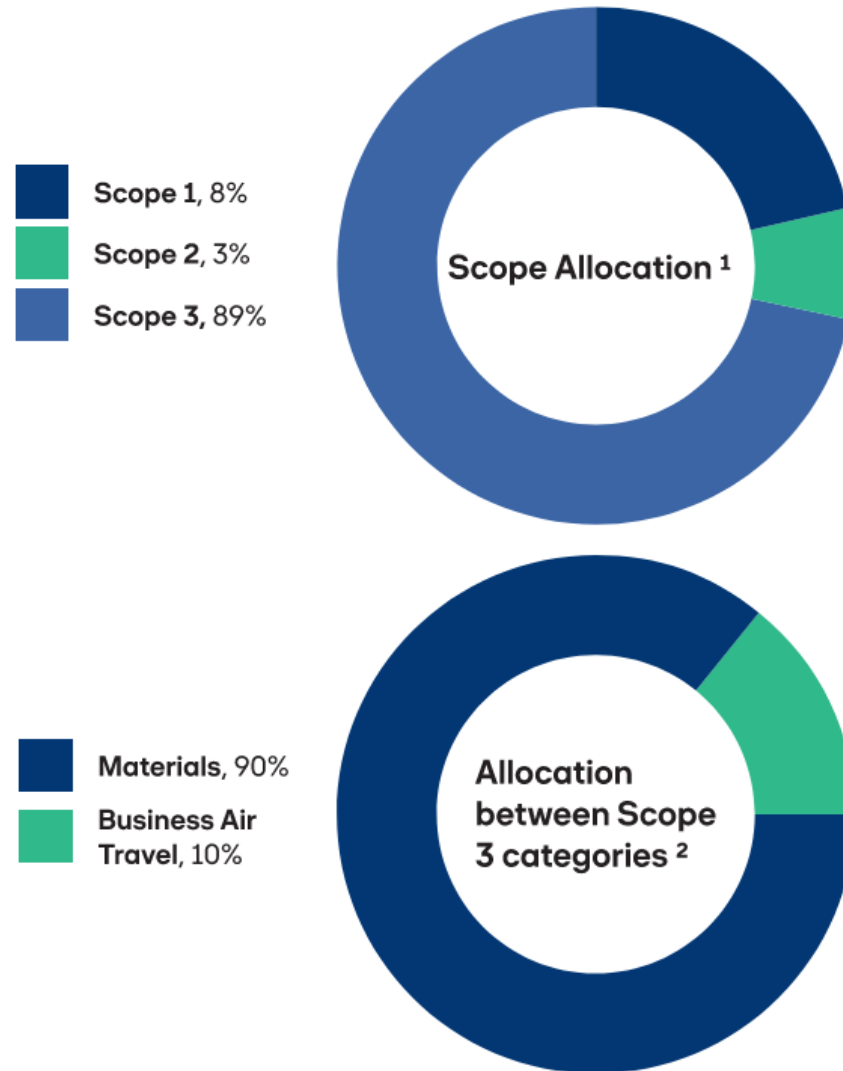
Construction & Demolition Waste (Scope 3)
On Site Recycling and Reuse



Manufacturing of Major Purchased Construction Materials (Scope 3)
Utilize the EC3 Tool to Procure Low Carbon Concrete, Steel, Asphalt

Impact areas

Materiality



US Building's most significant area of emissions is Scope 3 materials by a wide and growing margin.

With material selection typically being decided between the Owner and design team, ***Skanska's role is primarily in:***



Awareness

Educating the market and clients about low carbon strategies for the built environment.



Leadership

Being the first or early adopters of proven decarbonization strategies.



Scale

Using our size and geographic reach to amplify reduction efforts.

SKANSKA

Executive Announcement

USA Building Expands Embodied Carbon Assessments to Projects Nationwide



Concrete



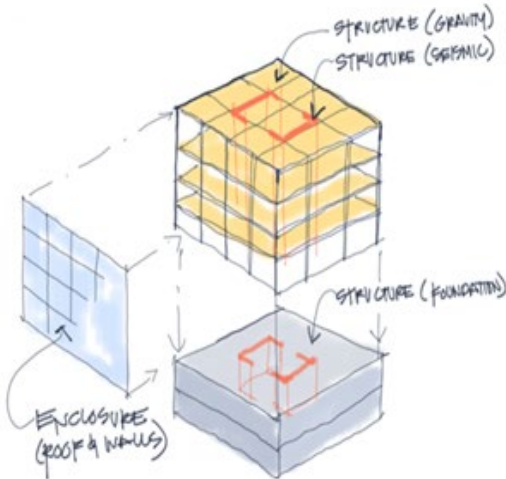
Rebar



Structural Steel



Asphalt



Life Cycle Impact Results (per m³)

Declared Unit: 1 m³ of 10,000 psi concrete at 28 days

OPERATIONAL IMPACTS		Perform TM PECC10K
Plant Operating Energy (MJ)		38.6
On-Site Plant Fuel Consumption (MJ)		11.1
Concrete Batch Water (m³)		1.68E-01
Concrete Wash Water (m³)		1.91E-02
On-Site Waste Disposal (kg)		0.0
ENVIRONMENTAL IMPACTS		
Total Primary Energy (MJ)		3,017
Climate Change (kg CO ₂ eq)		445
Ozone Depletion (kg CFC 11 eq)		1.31E-08
Acidification Air (kg SO ₂ eq)		2.96
Eutrophication (kg N eq)		0.09
Photochemical Ozone Creation (kg O ₃ eq)		0.61

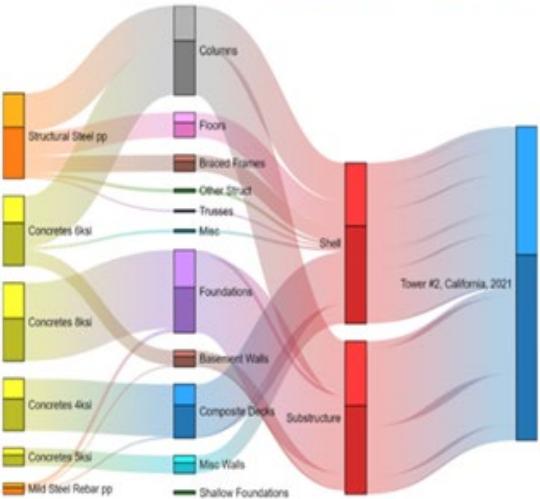
MATERIAL
QUANTITY
ESTIMATE



EMBODIED
CARBON
PER MATERIAL
EPDs

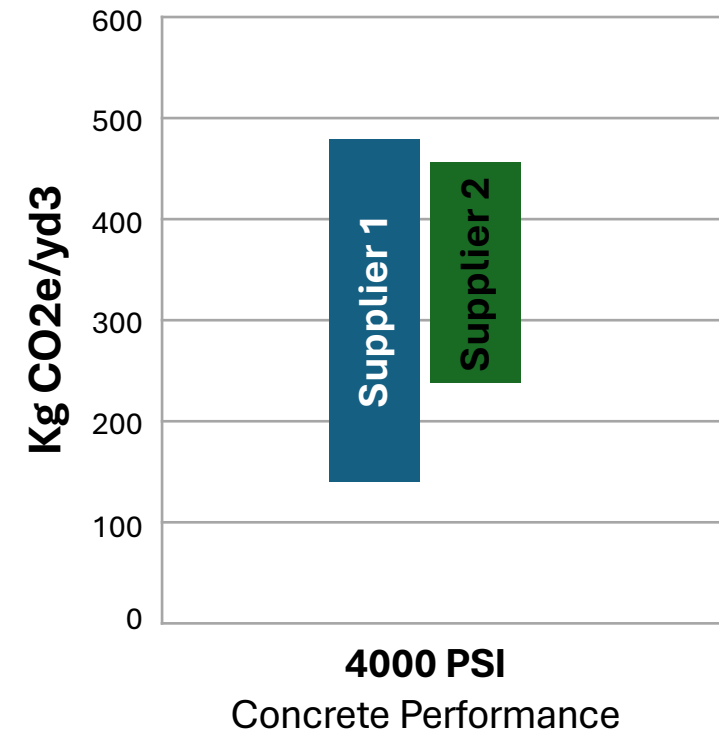


BUILDING
EMBODIED
CARBON (EC)
ESTIMATE



Carbon Smart Product Procurement

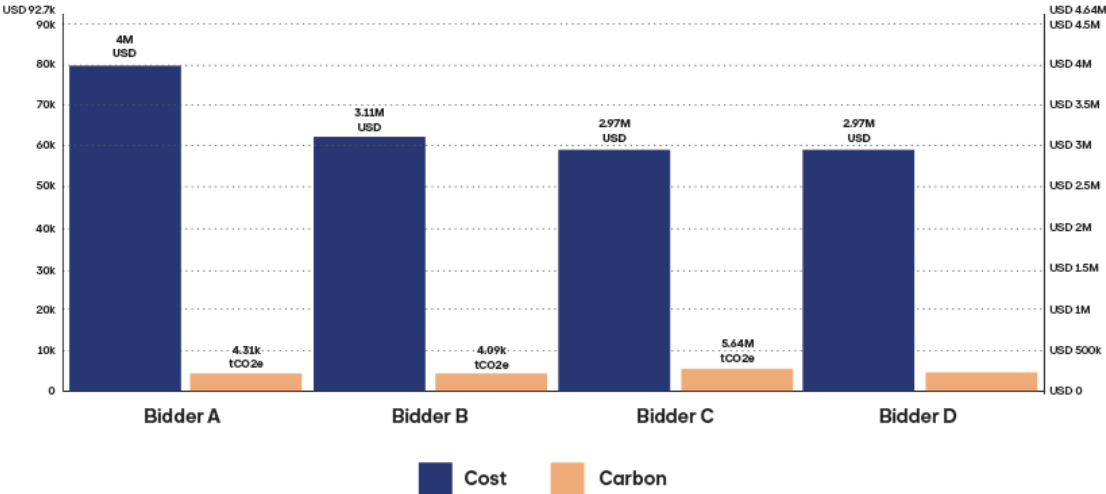
Using the EC3 tool, our teams can examine manufacturer specific data for common building materials and make better informed procurement decisions. To date, we've been able to reduce over 8,400 metric tons of CO2 emissions, just by having visibility to this supply chain specific data.



Reducing Embodied Carbon With the EC3 Tool

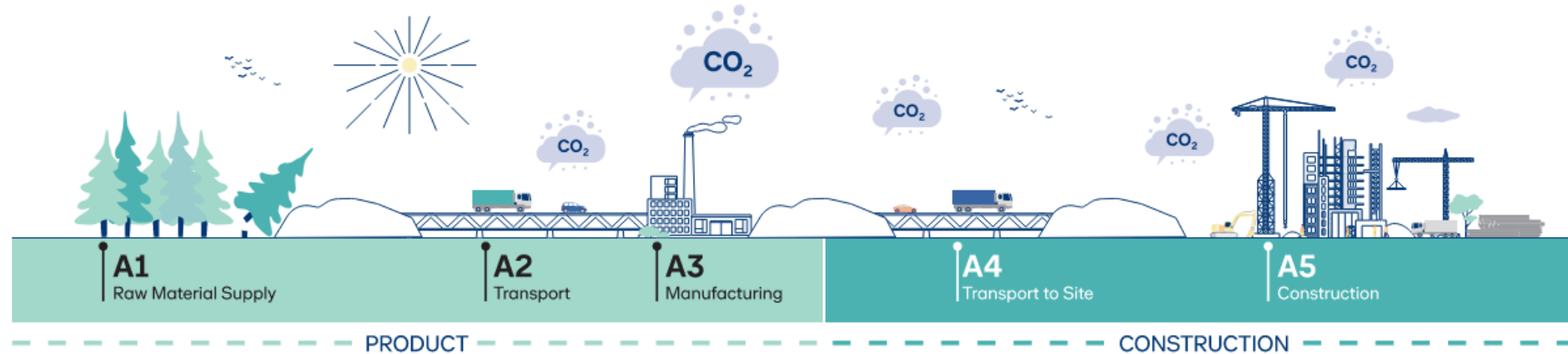


Tracking embodied carbon trends on a kgCO2 per ft2 basis, as shown in the graphic to the left, is a powerful way to track progress over time, similar to tracking project cost trends on a cost per ft2 basis.



Example of the bid-leveling function in EC3 to ensure embodied carbon is part of our bid package award decisions. Above you will see the results of our analysis—we looked at both cost and carbon so we could choose the lowest carbon concrete bidder while also considering the project budget.

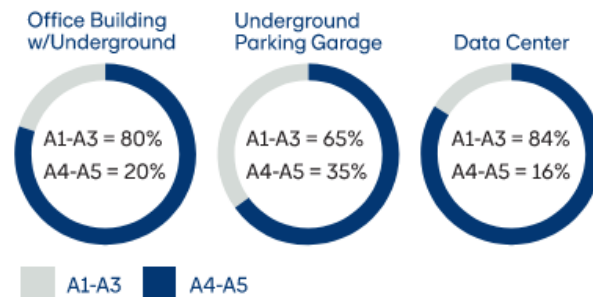
On this day five years ago, in partnership with Microsoft, the University of Washington and C-Change Labs, Skanska publicly launched the Embodied Carbon in Construction Calculator (EC3) tool. This report summarizes our key findings and results over the past five years, leveraging EC3 and our in-house methodology for tracking construction activity emissions across the value chain:



Key Findings and Data Points

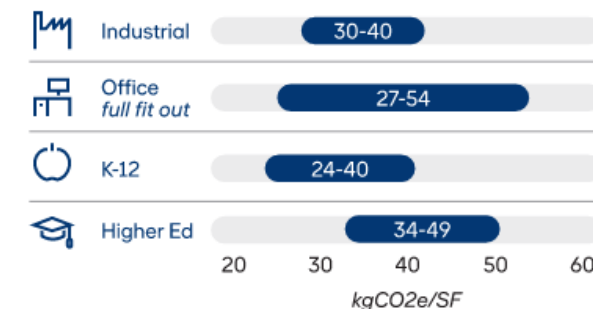
A1-A5: Project Lifecycle

While A1-A3 stage emissions tracked in EC3 are the largest source of embodied carbon, actual construction data for A4-A5 stages shows higher emissions than estimated by other software. Adding A4-A5 emissions from demolition, earthwork, utilities and drilling/shoring reveals significant contributions to total A1-A5 embodied carbon on past Skanska projects.



A1-A3: Product Stage

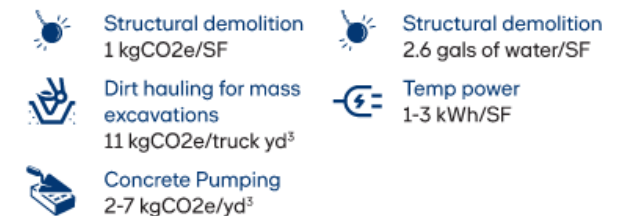
With over 270 EC3 models of Skanska project data compiled, we are beginning to benchmark building sector A1-A3 emissions, similar to how we benchmark building sector cost per square foot. Below are some observed ranges in EC3 for ground-up, new construction:



A4-A5: Construction Stage

A4 – Key factors impacting transportation to site include travel distance and mode of travel. We have seen up to an 81% reduction in transportation emissions by sourcing more locally and reductions between 70% to 73% by switching from truck transport to rail transport or from air freight to ocean barge transport.

A5 – key metrics for high carbon impact construction activities:



A black and white photograph showing a car driving on a road that crosses a stone bridge. The car is in motion, blurred, and is positioned in the upper right portion of the frame. The bridge is made of rough-hewn stone and has a dark, arched opening underneath. The foreground and sides of the bridge are overgrown with dense foliage and tall grass. The word "SKANSKA" is superimposed in large, bold, white capital letters across the middle of the image, partially covering the bridge and the foliage.

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