



Low Carbon Materials in Pennsylvania

Workshop on Low-Carbon Concrete

October 2025

Virgilio Barrera



INTRODUCTIONS

Virgilio “Lio” Barrera
Vice President, Government &
Public Affairs, North America



INTRODUCING AMRIZE

BUILD YOUR AMBITION WITH US



19,000 colleagues who rise for our customers

Whether plant managers or marketing leads, engineers or operators, our talented teams share a desire to deliver the advanced solutions our customers depend on.



1,000 sites, one unparalleled footprint

Delivering from foundation to rooftop, our sites span cement, aggregate and ready-mix plants, to terminals, roofing and wall system facilities, to R&D hubs.



100% focus on North America

A local partner, nationwide we serve customers in every U.S. state and Canadian province, with full operational and strategic focus on our region.



100 years of experience

Our businesses have been building North America's cities and communities for over a century, including some of our most iconic buildings and structures.

ADVANCED BUILDING SOLUTIONS FROM FOUNDATION TO ROOFTOP

BROADEST PORTFOLIO UNDER ONE ROOF

BUILDING MATERIALS

Cement



Aggregates



Ready-Mix Concrete



Asphalt & Concrete Products



BUILDING ENVELOPE

Roofing Systems



Adhesives, Coatings & Sealants



Wall Systems



Foundation to Rooftop Solutions

DATA CENTER EXAMPLE



Heat
dissipation
concrete

Low
Carbon
Concrete

Advanced Building
Materials for Foundations,
Flooring and Walls

Permeable
Concrete

Roofing Systems
ELEVATE DURO-LAST
THE WORLD'S BEST ROOF

Insulation Systems
DX Engineered Products ENVERGE

Adhesives, Coatings
& Sealants Gaco

Locally
Available
Aggregates

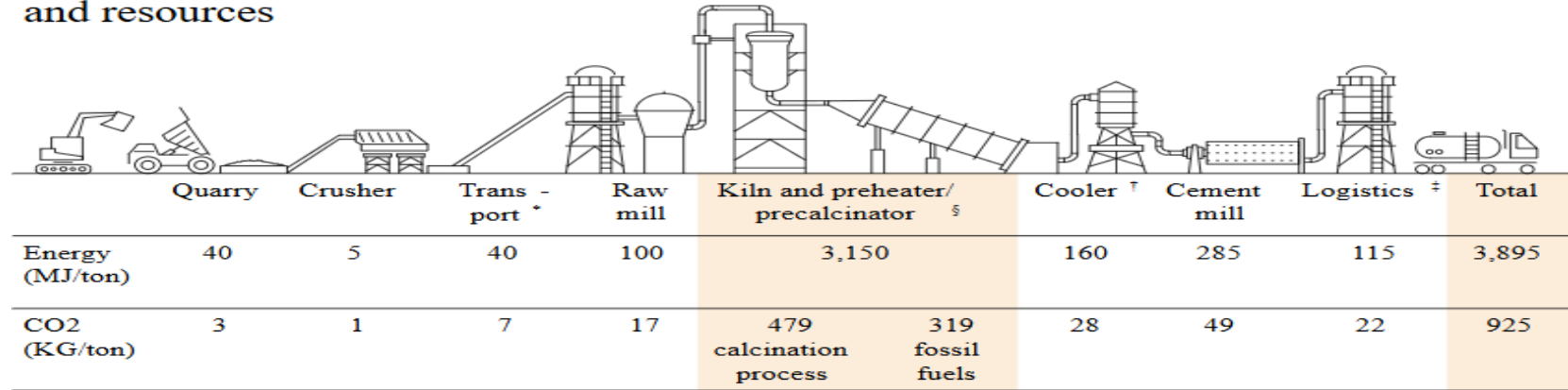
THE CEMENT MANUFACTURING PROCESS

THE PROCESS EMISSIONS PROBLEM

Calcination and heating are the most carbon intensive stages of cement manufacturing

Raw materials, energy and resources

Clinker and cement manufacturing



* Assumed 1kWh/tonne/100m.

§ Assumed global average, data from Global Cement and Concrete Association (2017).

† Assumed reciprocating grate cooler with 5kWh/tonne clinker.

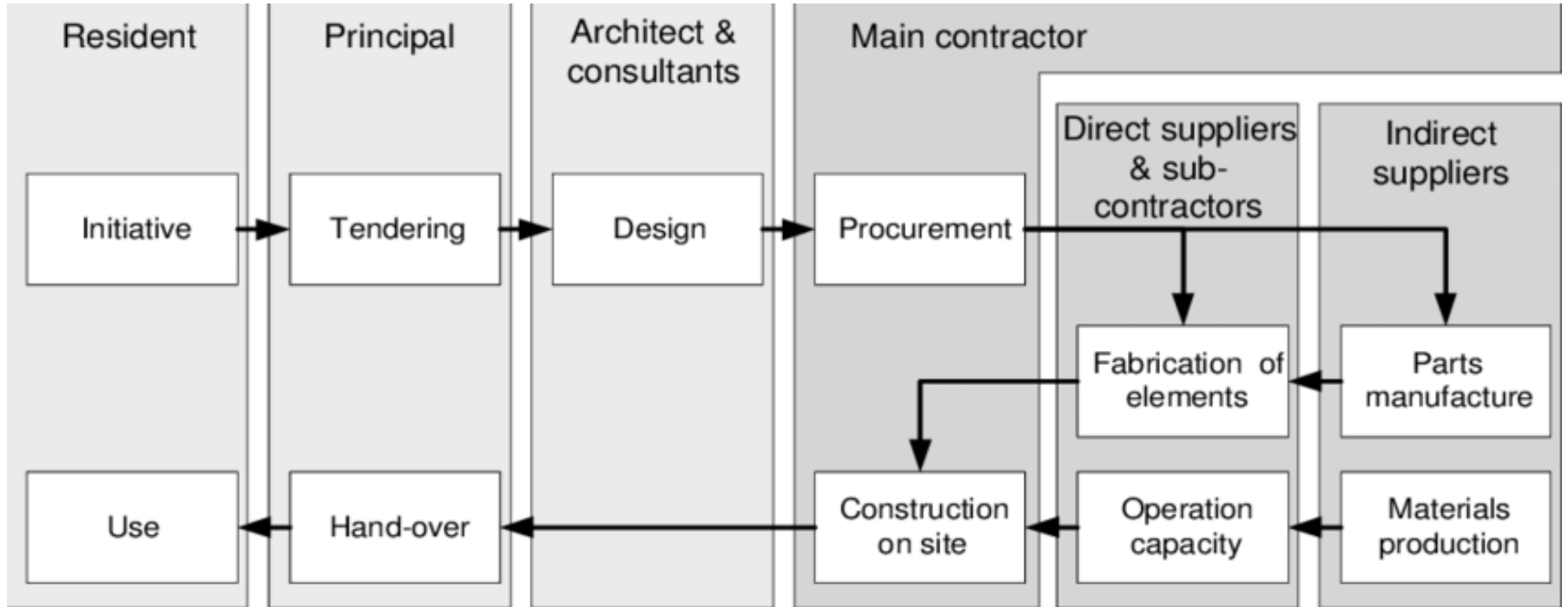
‡ Assumed average truck transportation of 200 km.

Source: Mckinsey data.

© 2022 S&P Global.

THE CONSTRUCTION SUPPLY CHAIN

THE BIGGEST BARRIER TO ENTRY





BUILD YOUR AMBITION