

Managing the Placement of Carbon Intensive Concrete in the GS1 way

Leveraging GS1 Digital Link and 2D barcodes

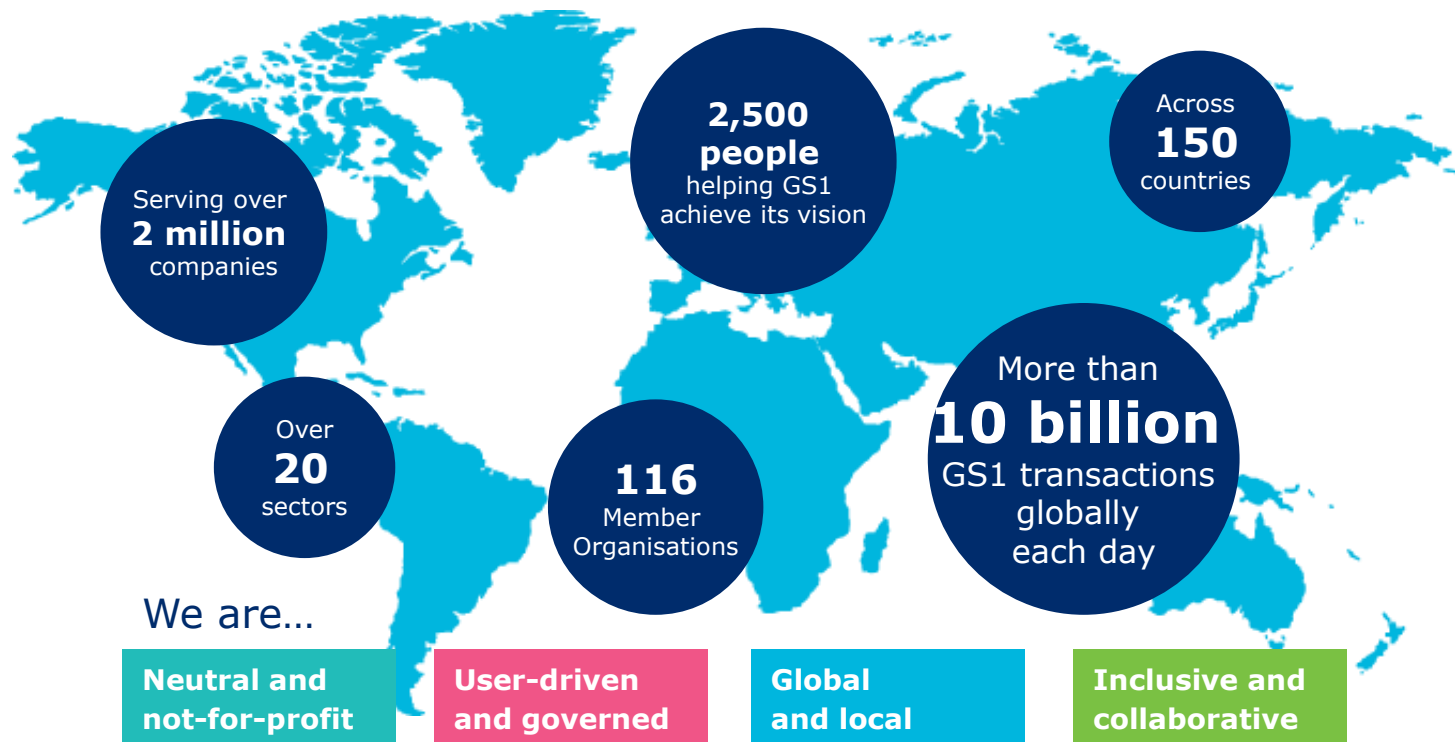
Dan O'Gorman
Engagement Consultant, Construction





User-defined Access to a
"Golden Thread"
of
"Verified Product Information"
in the form of the forthcoming
"Digital Product Passports."
Providing end-users with
"Trusted Product Data Flows"

An international standards organisation



The Centre of Excellence (Construction teams)



**12 in
European**

**22
Construction
Subject
Matter
Experts**

**3 in
Asia
Pacific**

Bringing it back to Site Level

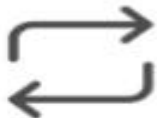


McKinsey
& Company

Focus on fixing pain points, not installing IT solutions

bre

Rethinking Construction



Up to **30%** of construction is rework

Labour is only utilized at **40-60%** efficiency



At least **10%** of site materials are wasted

Accidents account for **3-6%** of project costs.

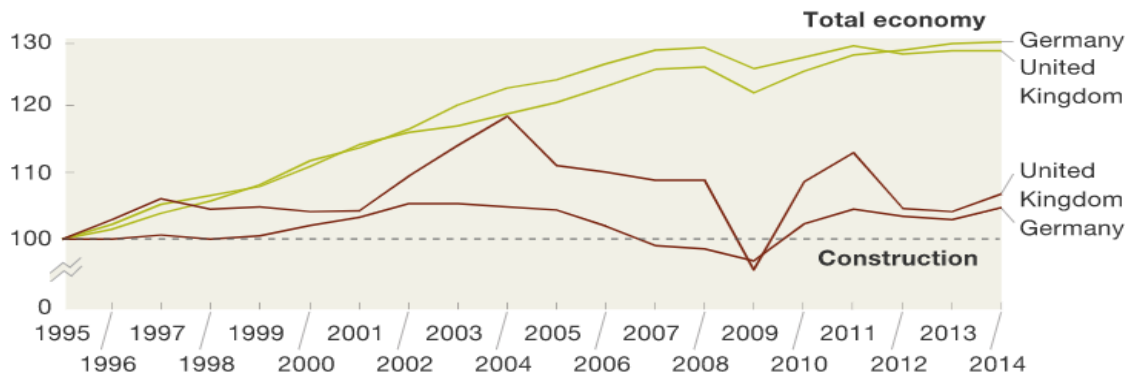


Where there are Inefficiencies, there are always Opportunities



Construction labor productivity has not kept pace with overall economic productivity.

Labor productivity, gross value added per hour worked, constant prices,¹
index: 100 = 1995



¹Based on 2010 prices.

McKinsey&Company | Source: Organisation for Economic Co-operation and Development



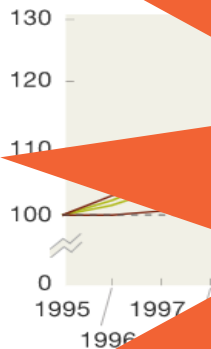
Between 2010 and the end of 2023, average rents in the EU increased by almost 23% and house prices by nearly 48%, leading to protests in cities from Dublin to Amsterdam or Lisbon about the loss of purchasing power.

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Labor productivity, gross value added at basic prices
index: 100 = 1995



¹Based on 2010 prices.

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A €12 Trillion Global Sector
Therefore, a mere 1% improvement in productivity would deliver
€120 Billion in savings or the equivalent of 480 Thousand extra homes

Latest Europe World EU Policy Business Travel Euroviews Next Green Health
on der Leyen has promised an EU commissioner
housing crisis - what would be



European Commission President Ursula von der Leyen has promised MEPs
EU commissioner with a mandate on housing, an area of limited
influence for the bloc - how might these new powers be unveiled in
practice?

Between 2010 and the end of 2023, average rents in the EU increased by almost 23% and house prices by nearly 48%, leading to protests in cities from Dublin to Amsterdam or Lisbon about the loss of purchasing power.

The focus this time is on Embodied Carbon

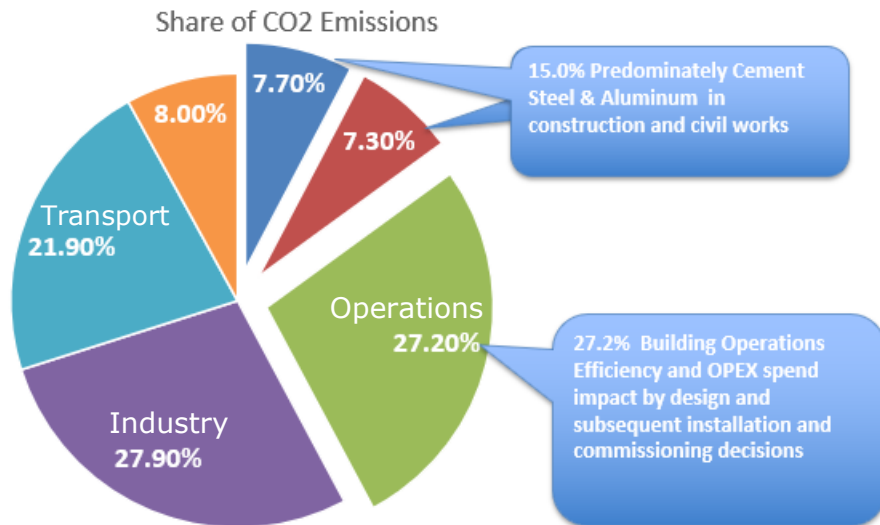


Understanding Carbon



SKANSKA

The Built Environment is a Major Contributor



CURRENT STATE

The built environment is responsible for about 42% of annual global CO2 emissions.

- Construction (Cement, Steel & Aluminum)
- Infrastructure Civil Works (Cement, Steel & Aluminum)
- Building Operations
- Industry
- Transport
- Other

Not an impact as the gradual introduction of CPQ platforms will be an equally powerful driver

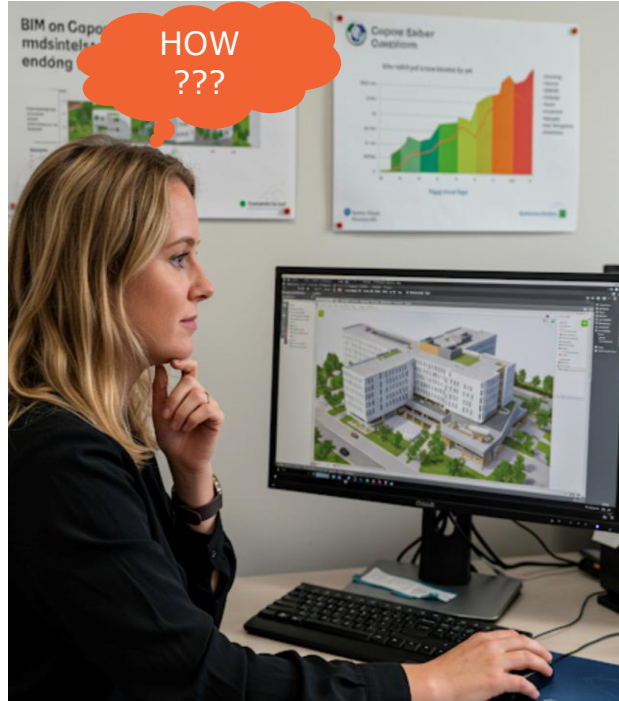


The Simplification Omnibus Package on Sustainability

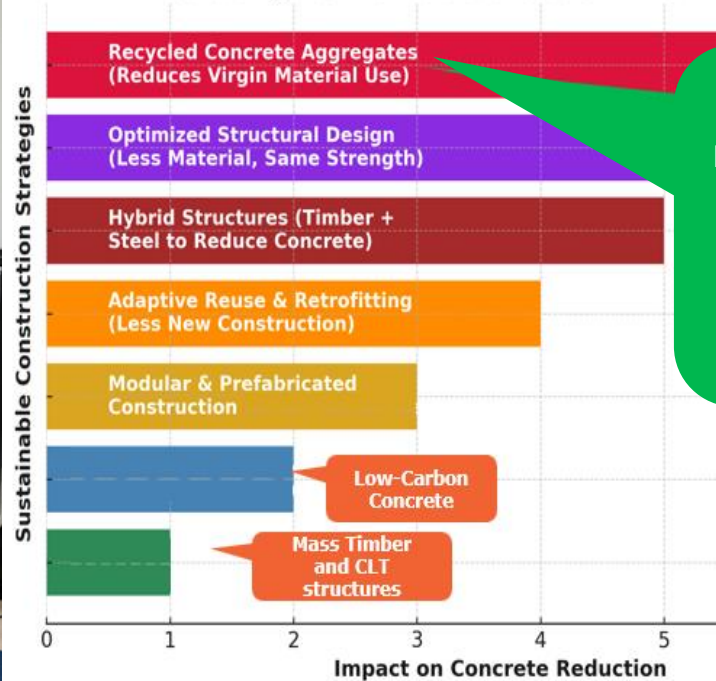
- The Draghi report on EU competitiveness.
- CSRD, CSDDD and EU Taxonomy
- The EU Commission proposed the “Simplification Omnibus Package”.
- The CSRD simplification proposal’s scope includes:
 - Raising the threshold for companies which must report under CSRD.
 - Postponing the reporting from 2026 to 2028.
 - Value chain cap defined by VSME.
 - No sector specific standards.
 - Reduced amount of data points in ESRS and focus on quantitative ones over narrative.



Lifecycle Carbon Assessment (LCA) plus CSDDD & CSRD targets must be achieved ???



Reducing Reinforced Concrete in New Buildings



This recycling effort must be the key focus area. Nevertheless, achieving ESG-related targets will be audited by these key Financial & Non-Financial auditing firms who are engaged by large stock-quoted corporates.



The Big Four accounting firms only make a fifth of their revenue from auditing © Alamy, Bloomberg

Achieving this level of harvesting and reuse for Reinforced Concrete Structures



That is 60 to 100 years later, supported by informed decision-making via leveraging the “I” in “BIM.”



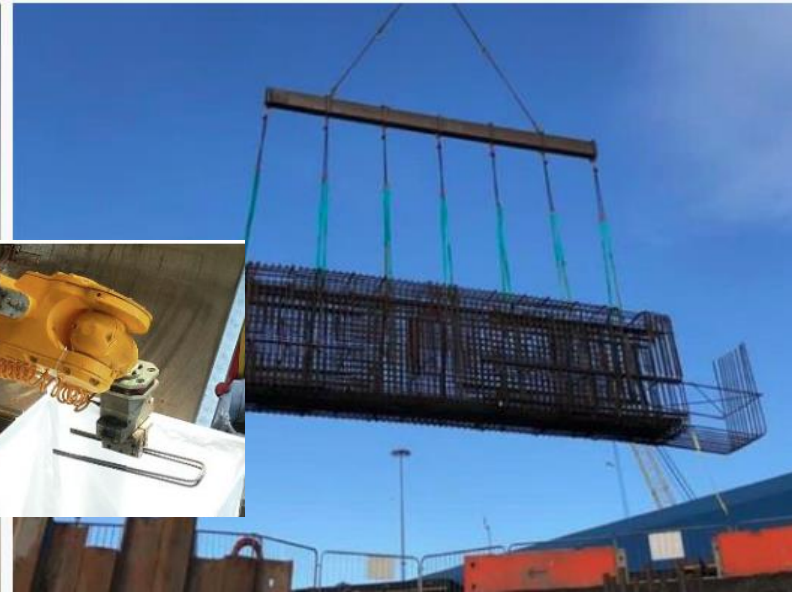
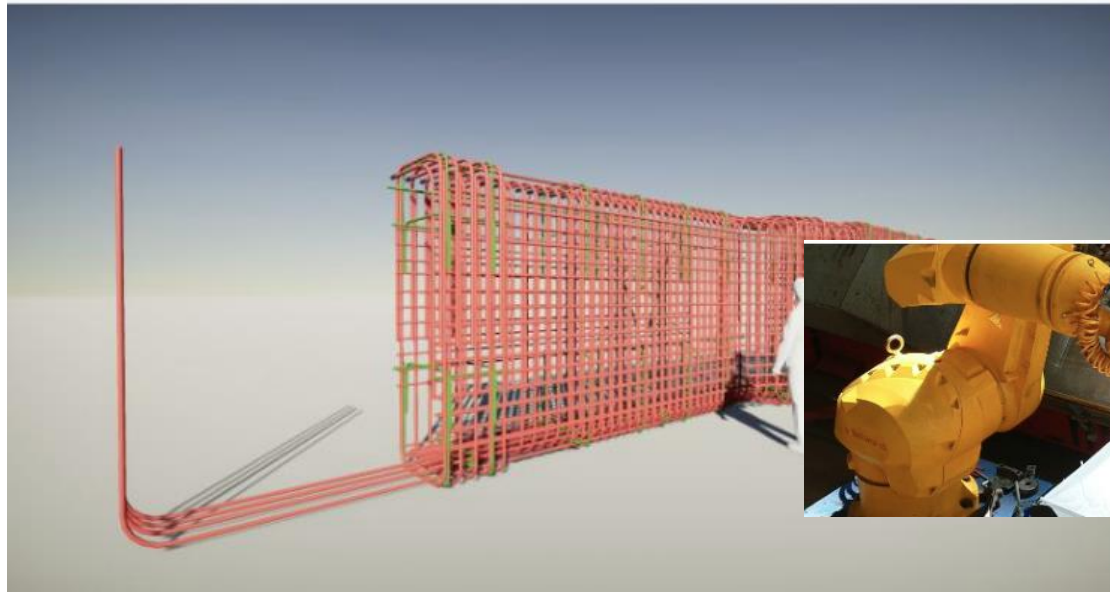
The solution lies in correctly managing the “I” in “Building Information Modelling” (BIM)



**MIDLAND
STEEL**

FasterFix
Modular Rebar

Innovative off site, patented solution



True BIM and ICMS3 in action





Product Key
https://qr.brand.com/01/4059285000027
your Domain Product GTIN

Connecting everything back to the BIM model via the tag fitted in the offsite fabrication shop



- On the back of a truck

All the info
connected via a
scan of the label



Labor-Saving Solutions



<https://www.nvent.com/difference-few-turns-saving-time-and-labor-high-profile-construction-project>

All Connected via a QR coded Tag



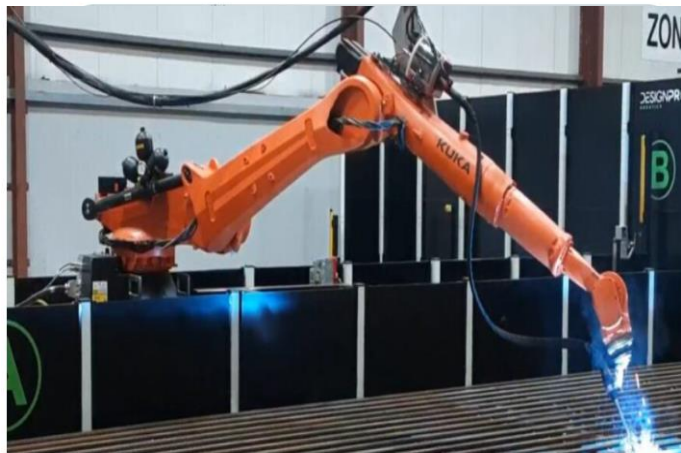
All Connected via a QR coded Tag



60 to 100 years later



A Win-Win OUTCOME



Leading the Industry with the World's First Robotic Welding Cell for Rebar.



Start with End in Mind

Be Ready for CSRD and CSDDD NOW

Trust supported by Auto-ID WORKS



Transparency



Responsibility



User focus



Sustainability



Technology



[Please tap here
for the Video](#)

The Global Language of Business

[Please click here for
the Application
gs1ie.app/ie](#)

In Summary



- Using QR-coded space and asset tags to the GS1 standard across the construction and facilities management lifecycle ensures:
 - Seamless traceability,
 - Accurate data exchange,
 - Globally unique identification.
- This approach supports the 'Golden Thread' of information by linking assets to validated, rules-driven product data.
- This disciplined approach delivers the “G” in ESG.
- It enhances operational efficiency, compliance, and informed decision-making from design through to maintenance and inspection activities.

Contact information if you want to learn more



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