

# **BUILDOFFSITE MEMBER'S MEETING**

**21<sup>st</sup> October 2021**

## HOUSEKEEPING

- Please remain muted during presentations – we will have time for questions & comments after each presentation
- Feel free to type any **comments** in the Chat box
- Presentations will be shared with delegates post-event, where applicable
- Share your views:  
[@Buildoffsite](#) on Twitter & LinkedIn

# AGENDA

|                |  |
|----------------|--|
| <b>10.00am</b> | <b>Welcome &amp; Buildoffsite and Industry Update</b><br><u>Joe Dyde, Buildoffsite</u>                                   |
| <b>10.10am</b> | <b>BOPAS update</b><br><u>Terry Mundy, Lloyd's Register &amp; Jeff Maxted, BLP</u>                                       |
| <b>10.25am</b> | <b>Preservation of Embodied Carbon in the Built Environment</b><br><u>Graeme Jones, C-Probe</u>                          |
| <b>10.40am</b> | <b>How can the new 555-260R rotating telehandler help the industry</b><br><u>Jonathon Smith, JCB</u>                     |
| <b>10.55am</b> | <b>Meet Building Understanding, one of Buildoffsite's newest member</b><br><u>Sarah Mather, Building Understanding</u>   |
| <b>11.05am</b> | <b>Supply Chain Sustainability School update on DfMA Overlay to RIBA Plan of Work</b><br><u>Naomi Pratt, SCSS</u>        |
| <b>11.15am</b> | <b>National NHS Cabin Deployment</b><br><u>Jez Desmond, WS Transportation</u>  |
| <b>11.25am</b> | <b>Roadmap to 2030 - Feedback, thoughts on next steps</b><br><u>William Varah, Infrastructure and Projects Authority</u> |
| <b>11.40am</b> | <b>Summary &amp; Close</b>   |

# NEW MEMBERS



ENGINEERING  
TOMORROW



ROGER BULLIVANT



If you would like to connect with any of these members, please let us know!



# RECENT INITIATIVES



**We were delighted to part sponsor and contribute to the DfMA Overlay to the RIBA Plan of Work.**

**Launched in September 2021.**

**The report sets out drivers of change towards a manufacturing mindset as well as explaining why a DfMA approach must be adopted as a default to fulfil the outcomes our industry needs to achieve.**

**Freely available to download on the Buildoffsite, RIBA & Supply Chain Sustainability School websites.**


# RECENT INITIATIVES

Published in August 2021, the report details the findings of a survey of key industry players to understand the challenges to further adoption of MMC and how these can be overcome.

Focussing on;

- key trends
- the industry landscape
- supply chain visibility
  - geo-political risks
- policy and procurement
- opportunities for the offsite sector

Freely available on the Buildoffsite & BECG websites.



**Challenges and barriers to adoption and implementation of offsite and MMC**

*buildoffsite* | **becg**



# BOPAS Update

Terry Mundy, Lloyd's Register  
Jeff Maxted, BLP

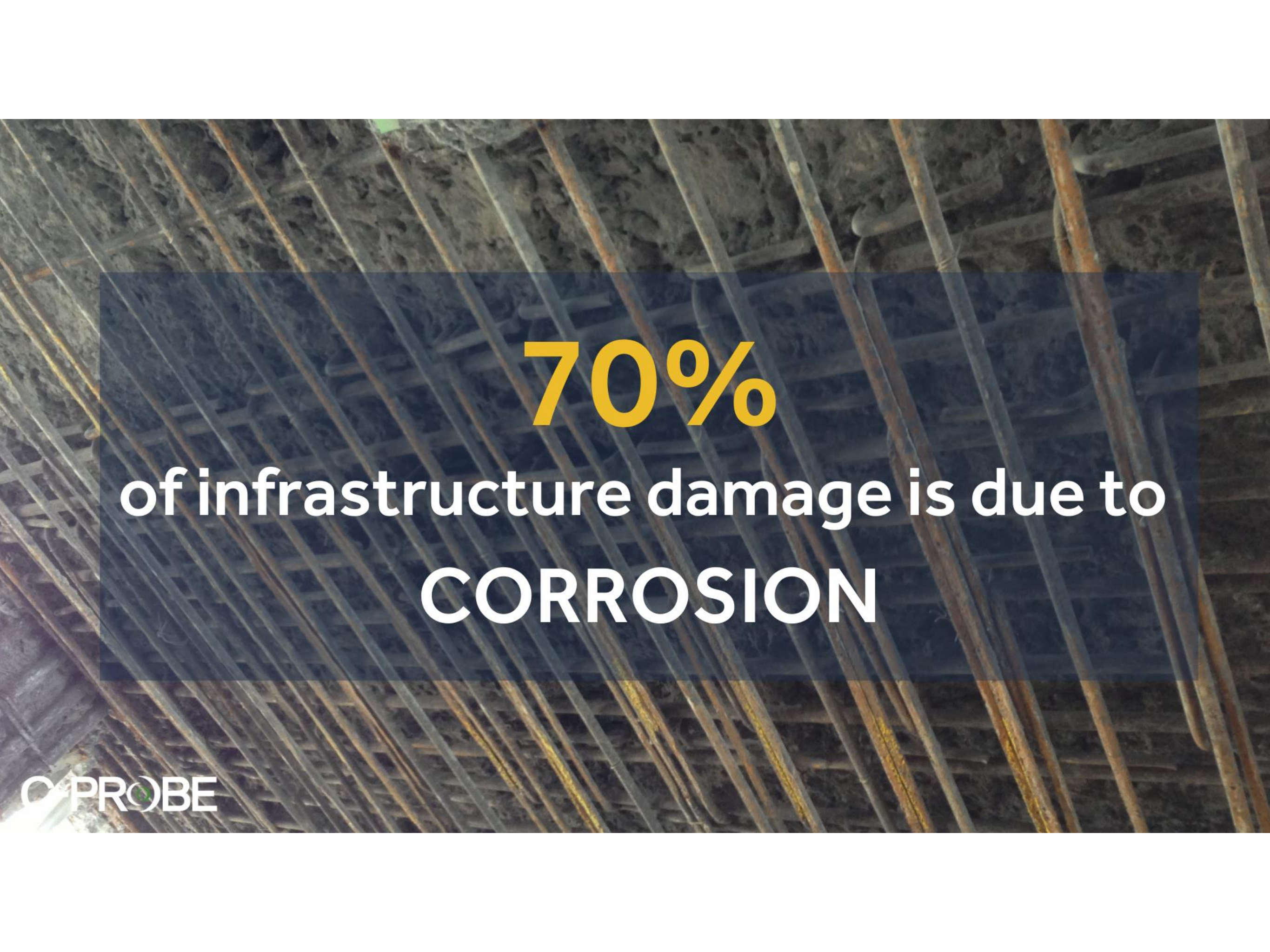


## PRESERVATION OF EMBODIED CARBON IN THE BUILT ENVIRONMENT

Buildoffsite Members Meeting – 21 October 2021







**70%**

of infrastructure damage is due to  
**CORROSION**



**The collapsed condo was about to begin corrosion repairs.**  - The New York Times, 2021

**We Prevent This  
From Happening!**

**C-PR<sup>o</sup>BE**







**We monitor and control  
corrosion in buildings  
and infrastructure**

**C-PRoBE**



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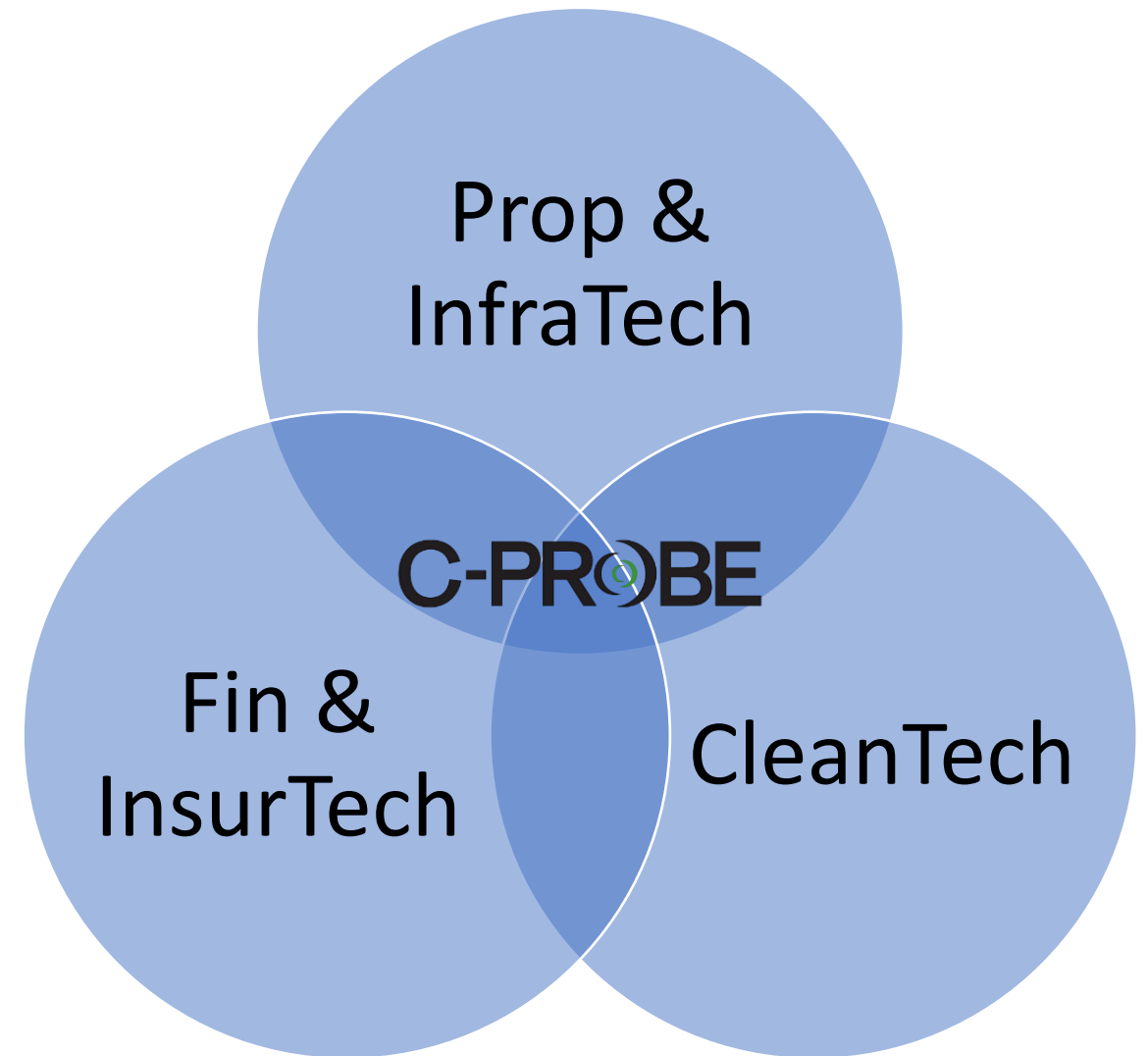
**The ecosystem supporting the “Built World”  
is one of the largest untapped markets for technology  
globally** Source: GCA Altium

**Built World includes the following markets:**

**Real Estate, Architecture, Engineering, Construction, Infrastructure, Security, Utilities & Energy,  
Logistics, Facilities Management**

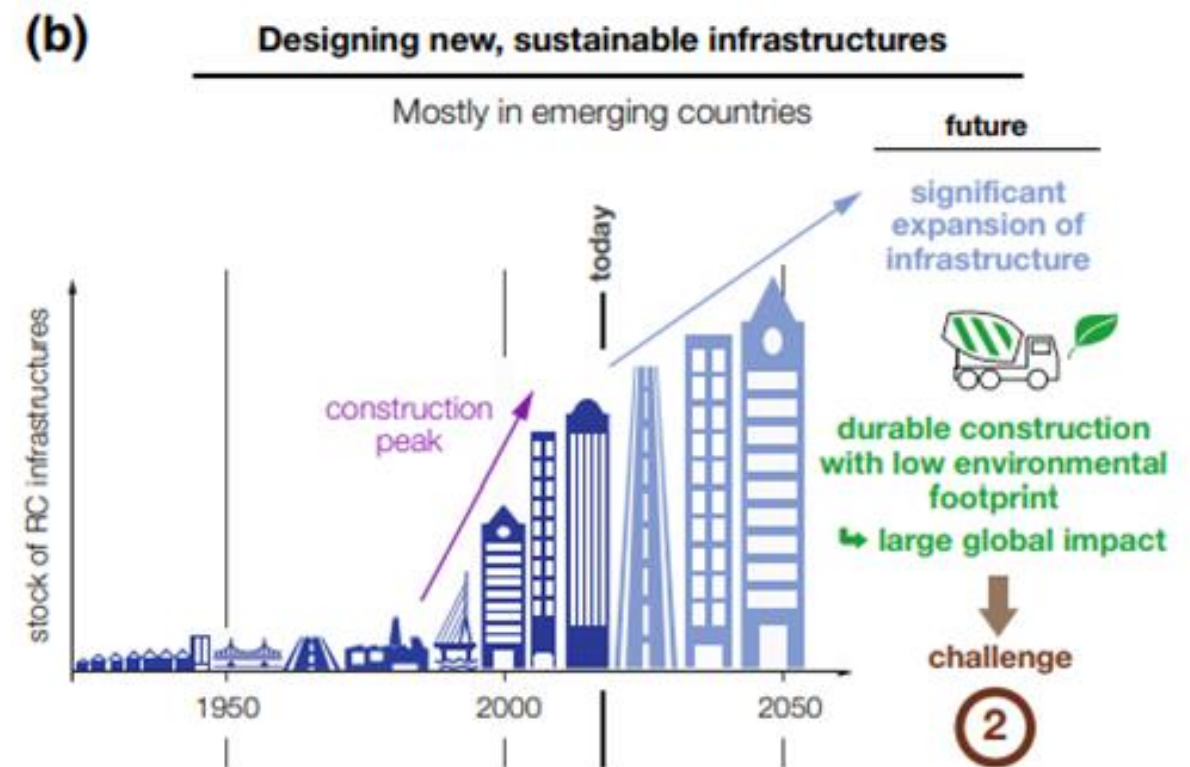
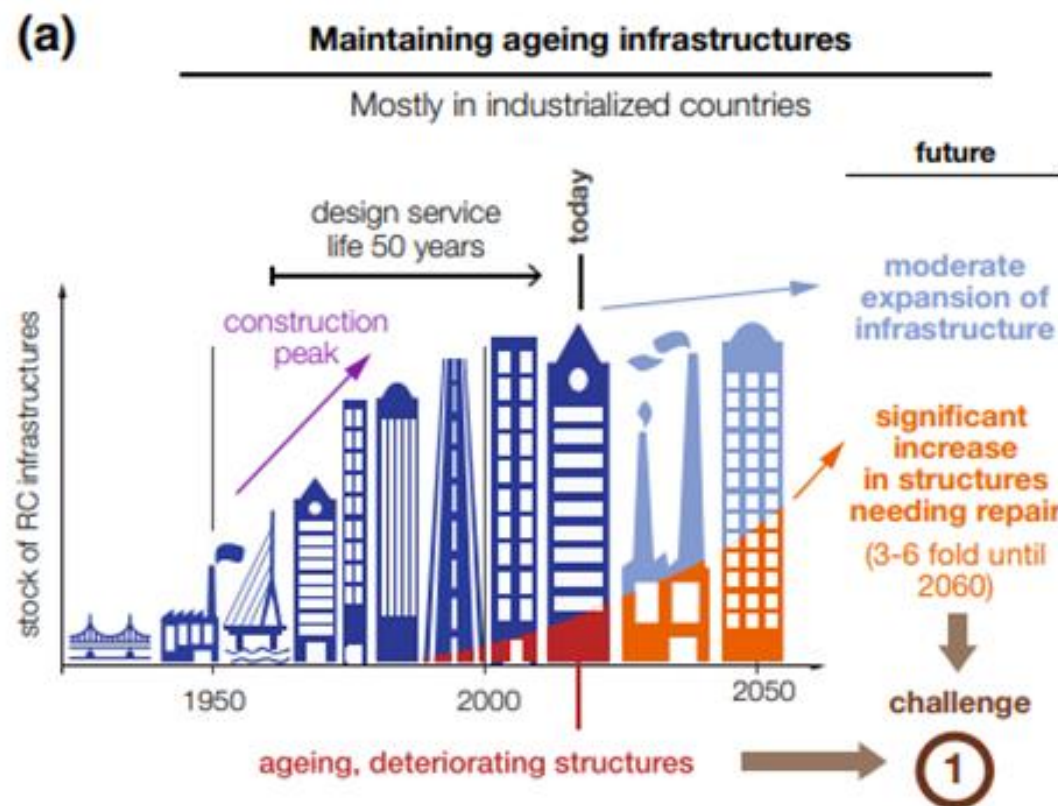


**C-Probe has the technology to automate, streamline and improve the way we buy & warrant, build and manage buildings and infrastructure on a low carbon sustainable basis**



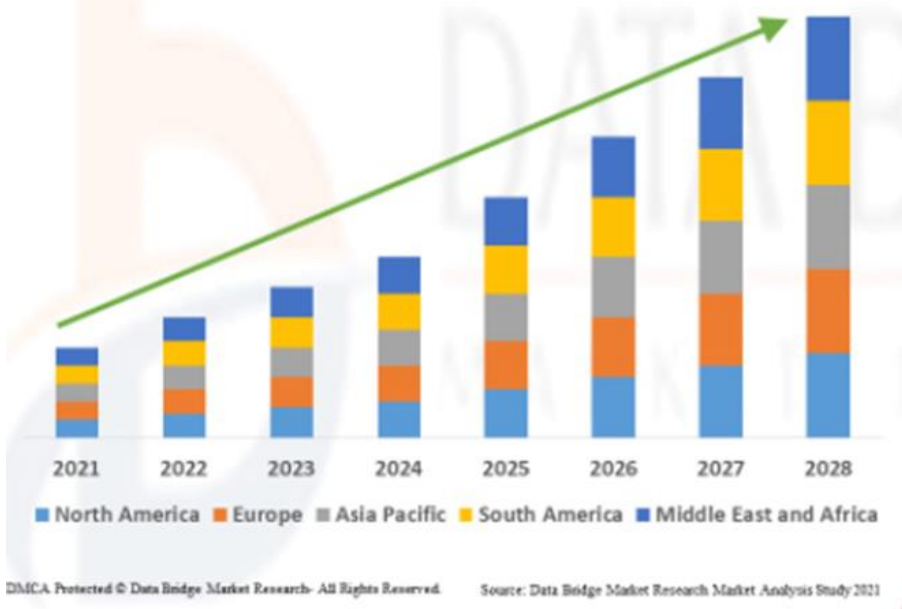
# A Changing Landscape with Challenges

## Technological challenges



ref: Angst, U.M., *Challenges and opportunities in corrosion of steel in concrete*, *Materials and Structures*, 51:4, 2018

Global Concrete Repair Mortars Market is Expected to Account for USD 2,481,810.25 Thousand by 2028



DMCA Protected © Data Bridge Market Research- All Rights Reserved. Source: Data Bridge Market Research Market Analysis Study 2021

## Global Cathodic Protection Market



Market Value of more than **US\$ 7.3 Bn** by the end of 2028



Value CAGR of **5.6%**

### Aspects Contributing to Market Growth

- 01 Increasing Demand for Corrosion Protection to Reduce the Cost of Corrosion
- 02 Supporting Government Regulations for Corrosion Protection
- 03 Surging Infrastructural Demands in Developing and Developed Regions
- 04 Surging Demand Attributed to Growth in the Power Sector

### Analysis by Type

- Galvanic (Sacrificial Anodes)**  
Conventional and Economical Method
- Impressed Current**  
More Effective and Comparatively Durable than Galvanic

### Analysis by Application

- Pipelines – Largest Market Share & Highest CAGR
- Storage Facilities
- Processing Plants - High Value CAGR
- Water & Wastewater
- Transportation
- Building
- Others

### Analysis by Region



- Asia Pacific**
  - Most Lucrative
  - Dominating Region
  - Highest Growth in China Market
- North America**
  - 2nd Most Dominating Region
  - Expanding Oil & Gas
  - Infrastructure



### Market Restraints

Highly Fragmented Market and Availability of Substitutes

### Key Players

- Aegion Corporation
- Matcor, Inc
- BAC Corrosion Control Ltd.
- Nakabohtec Corrosion Protecting Co., Ltd.

Macroeconomic factors resisting adoption is lifting with market opportunity driven by awakening of:

- ✓ Climate change needs
  - ✓ ESG compliance
- ✓ Preservation of embodied carbon
  - ✓ Scarcity of essential materials

... & the Genoa & Miami tragedies







**Cathodic Protection (CP) is  
*'the only rehabilitation technique  
that has been proven to stop  
corrosion'***

Federal Highways Administration (FHWA)





**\$850 billion**

saved per year in the USA if

**CONTROL SYSTEMS**

were adopted

NACE 2021

## Systems Combine 3 Proprietary Product Suites

**C-PR<sup>o</sup>BE**

**LoCem<sup>®</sup>: Low Carbon Cement Binders**



**Achilles<sup>™</sup>: Sensors & Control Network Electronics**

**AiMS<sup>™</sup>: Online Performance Control & Reporting System**

**AiMS**  
**C-Probe.com**  
The informed choice

## Think of us as pacemakers for structures...



The pacemaker (anode) is inserted...

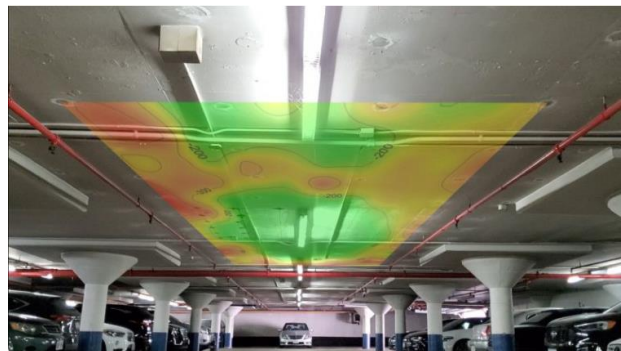
An electrical current is passed turning the steel to a cathode so it cannot corrode

Resulting in an extended life-span!

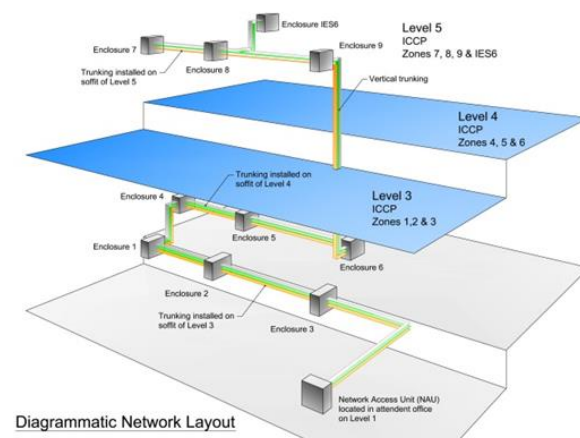




# Cradle to Grave Project Involvement



Define the need



Form the solution

## Typical Project Scope:

- Condition Assessments (5%)
- Designed Solution (3%)
- Product Package (75%)
  - Embeddable sensors
  - Embedded LoCem® materials
  - Achilles control electronics
  - Open network expansion nodes
  - Ancillary electricals
- Site Testing & Commissioning (15%)
- Online Performance Services (2% per annum recurring for 25+yrs)



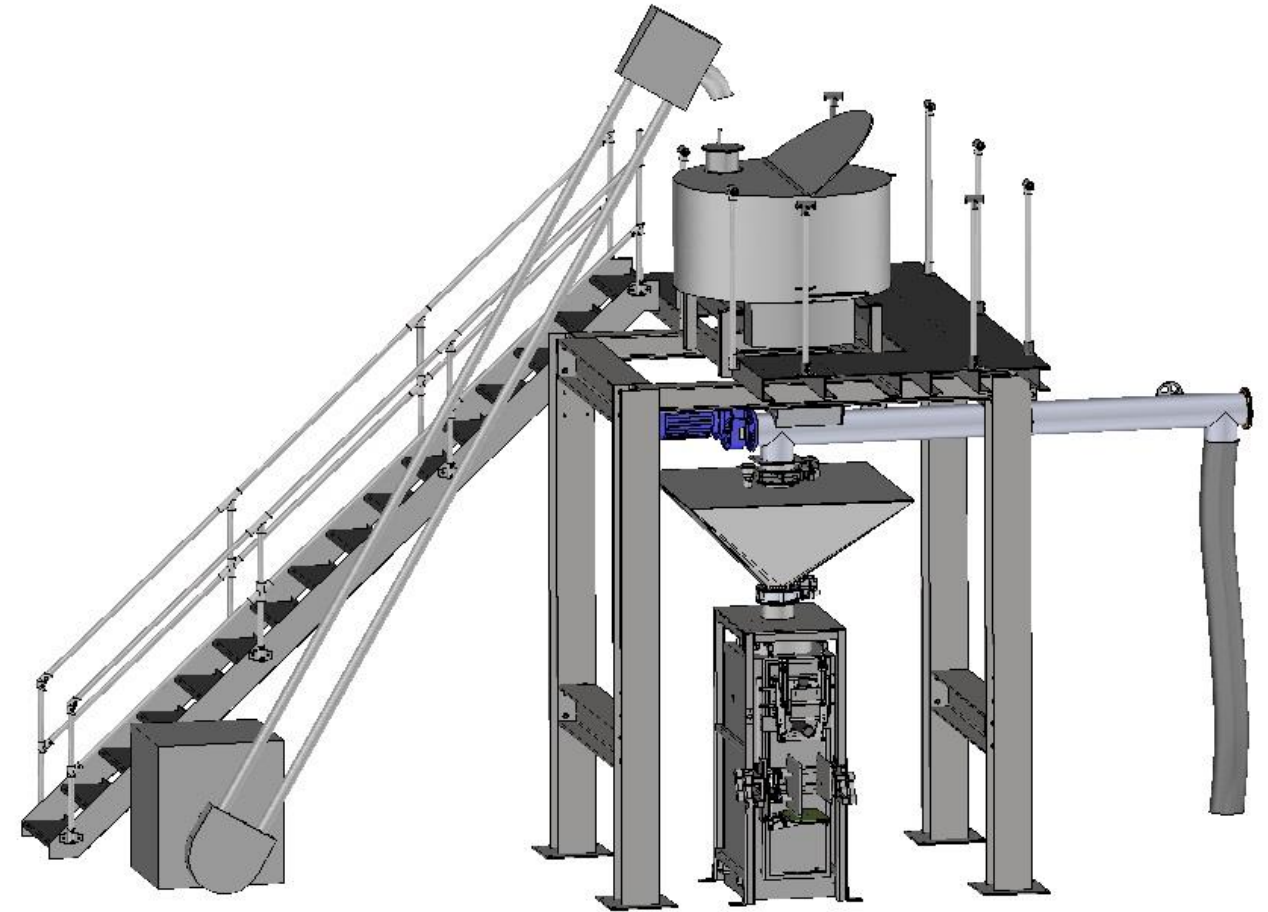
Control the future

Smart Cities Need Smart Infrastructure



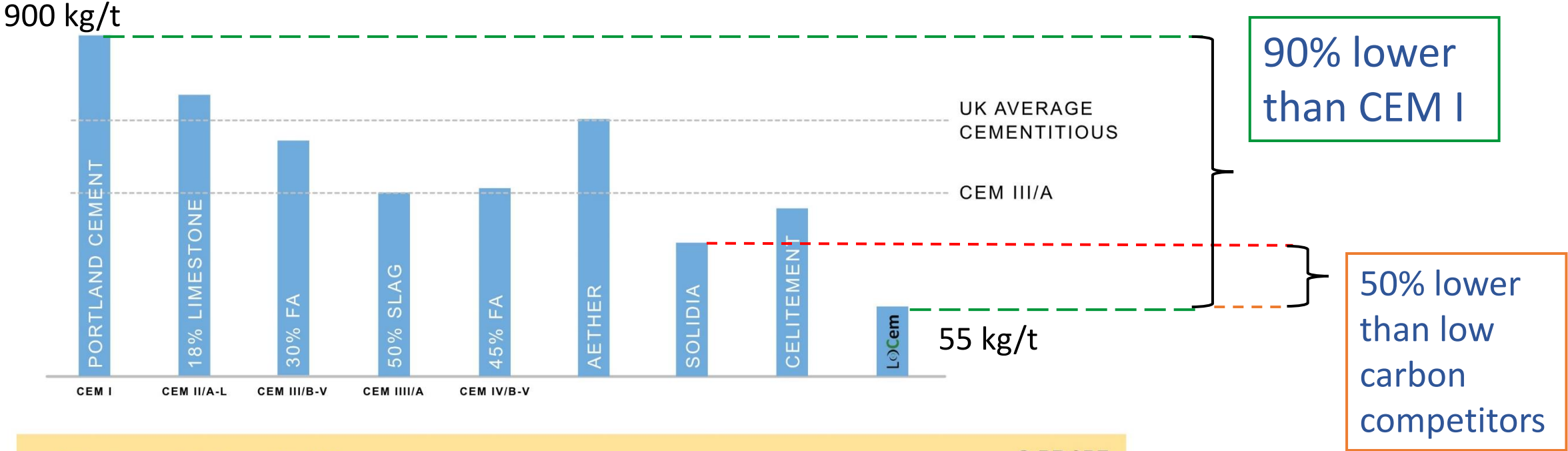
## Low-Cost Sustainable Production – LoCem<sup>®</sup> cement anodes

- Repurposing waste materials from steel, power & mining for binder powder production
- Local feedstock sourcing
- Lower energy consumption than Portland (ambient vs 1400C)
- Less water used in wet mix designs through alkali-activation
- Simple lean, automated blending and moulded component equipment so easily scaled at low cost



# LoCem<sup>®</sup> CO2e Comparison with other Cements

## EMBODIED CARBON OF UK CEMENTS VS. ALTERNATIVES



Data sources: C-Probe and the MPA C-PROBE

Smart Cities Need Smart Infrastructure





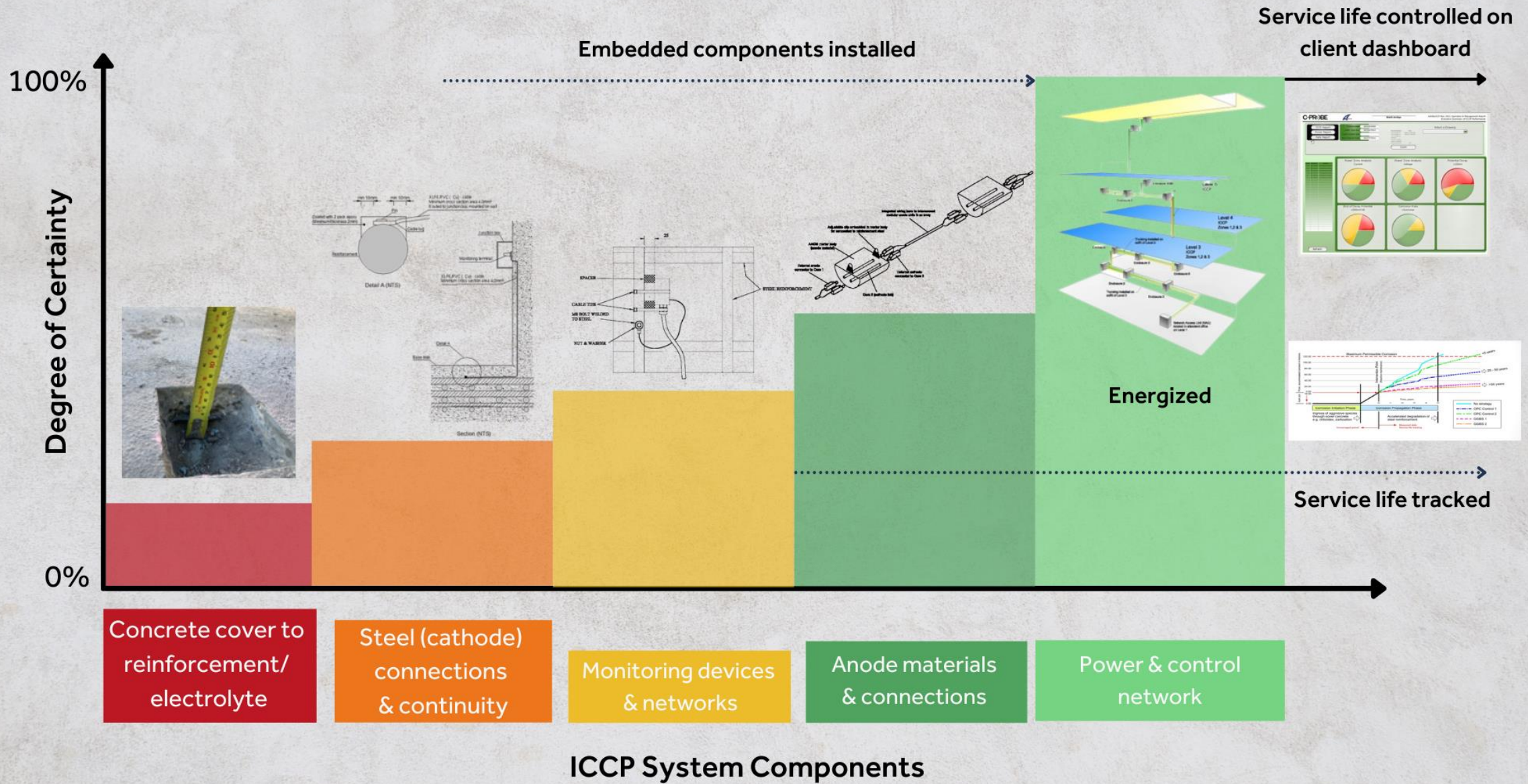


**100yrs old and  
derelict..**

**..restored and  
preserved for  
another  
century!**









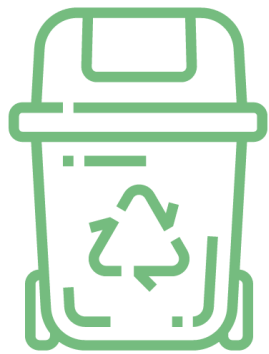


Lord Deben comments on the UK Gov's embodied carbon statements:

"We need to think differently. **It's not acceptable to pull buildings down like this. We have to learn to make do and mend...** We are simply not going to win the battle against climate change unless we fight on every front."

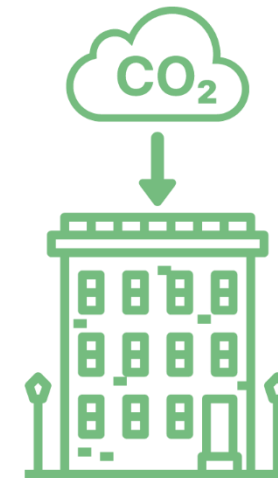
C-PROBE





## Repurposing Industrial Wastes

## Securing Embodied Carbon



## Sustainability with Futureproofing



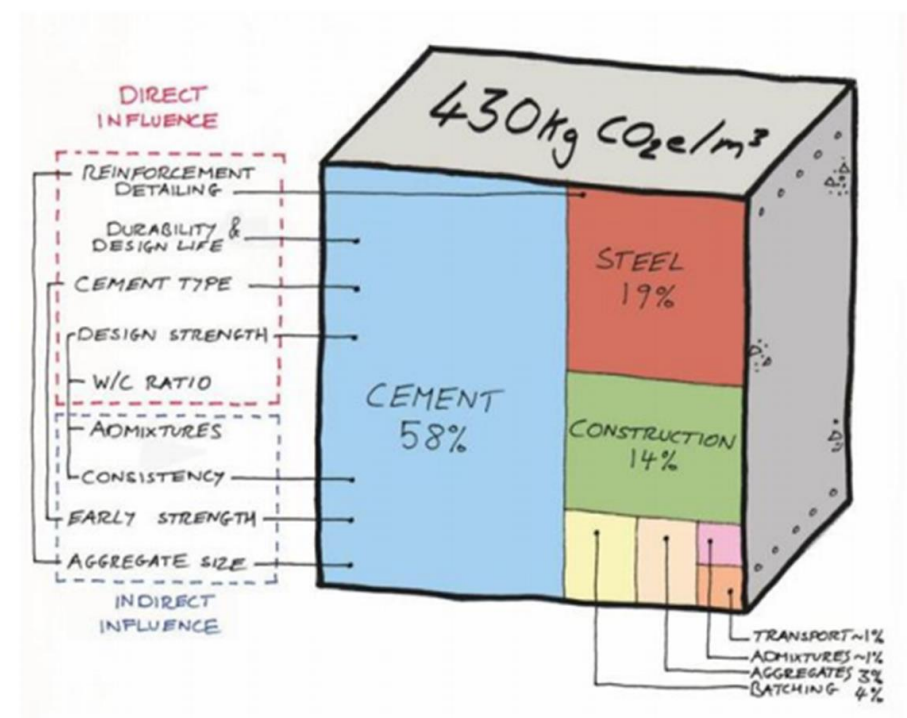
## Embodied Carbon Savings

...the difference between extending the life of old buildings and replacing them amounts [on average] to 19,100 tonnes of CO<sub>2</sub>e – that’s equivalent to 4,171 cars driven for a year!

*The Architects Journal, 2021*

### C-Probe example for a reinforced concrete Plaza deck project in New York City:

- Footprint of 40,000sqm with 18,500sqm being removed and replaced at a depth of 600mm
- @348kg CO<sub>2</sub>e/ m<sup>3</sup> (81% ex steel) = loss of 3.9kte CO<sub>2</sub>e due to the slow decision to treat early
- However, ICCP to 21,500sqm saves 5.5kte CO<sub>2</sub>e @430kg CO<sub>2</sub>e/ m<sup>3</sup>
- Futureproofing 40,000sqm of Plaza decks with ICCP means no further loss and preservation of 10.3kteCO<sub>2</sub>e.
- Data and remote-control acts as assurance of performance



Smart Cities Need Smart Infrastructure







We can save over a  
**GIGATON** of CO<sub>2</sub>e  
and a lot of money



**Over 100 structures restored  
with ongoing monitoring  
using C-Probe's technology**



## Awards and Recognition



Smart Cities Need Smart Infrastructure



# Thank you for listening

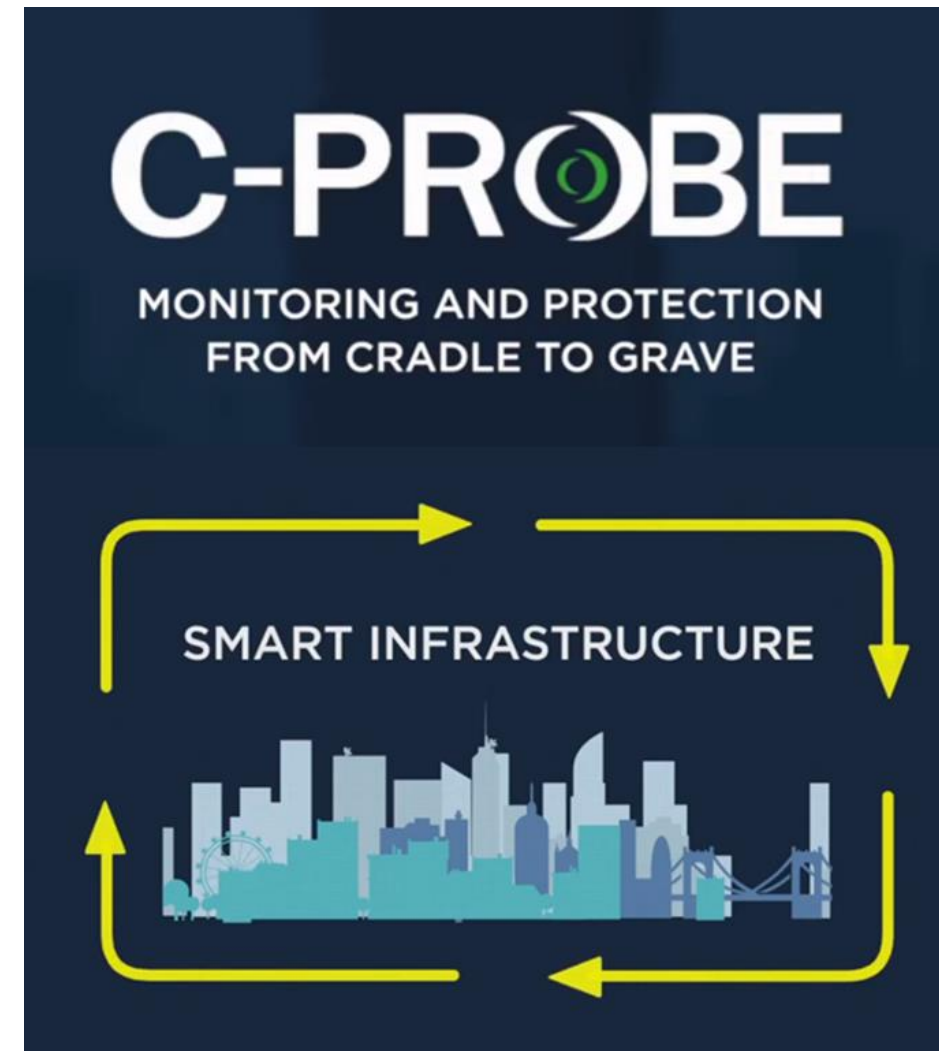
How to get in touch:

**Email address**

[gjones@c-probe.com](mailto:gjones@c-probe.com) (Graeme Jones)

**Website**

[www.c-probe.com](http://www.c-probe.com)





**Always looking  
for a better way**

**Jonathon Smith**

**Product Specialist - Rotating Telehandler**







# History - RTH



**1977** - First Telescopic handler, new concept to the industry.



**1998** - JCBs trial number 1 of the Rotating Telehandler mocked up by the R&D team.



**2008** - World number 1 in Telehandler / Loadall machines.



**2012** - JCBs trial number 2 of the Rotating Telehandler mocked up by the R&D team.



**2015** - First official design concepts for the JCB with the green light to bring this to market.



**2019** - The first RTH machine launch in JCB – 555-210R.  
**2021** - The second RTH machine launch – 555-260R.



# Why JCB RTH?

Housing sector on the rise

MMC & Modular construction is growing

... Reduced construction time on site

... Better supervision in offsite manufacturing

Barret Developments plc. Increase MMC to 30% of housing by 2025

Global modular & prefab housing to grow \$17 billion to \$28 billion in 2025

Mobile, Manoeuvrable & productive Telehandl

3 in 1 – Telehandler, Crane and MEWP





# Machine range - 555-210R (21m) / 555-260R (26m)

## SPECIFICATION

555-210R / 555-260R

Max lift height - 20.5m / 25.5m

Max reach - 17.8m / 21.4m

Max lift capacity - 5500kg

Capacity at max height - 2500kg / 2000kg

Capacity at max reach - 850kg / 300kg

Turning radius (over tyres) - 4.29m

112kW (150hp) Stage V DieselMax Engine

## VERSATILITY

3 machines in 1. Telehandler, Crane and Mobile work platform (MEWP).

Man platform enabled as standard.

Mechanical Q-Fit carriage with RFID tag as standard.

Permanent 4-wheel drive and 3 steer modes: 2WS, AWS & crab.

Remote control options available.

## PRODUCTIVITY

Simple JCB Automated technology.

40kph road speed and 13kph site gear speed.

Class leading winch raise and lower speeds.

Auto auxiliary venting for faster changes between attachments.

Simple setup of slew and extension limits.

## SIMPLICITY

Dedicated load monitoring and machine display screens.

One touch: Auto deploy, retract and level outrigger. Simple and fast set up in 27 seconds.

Familiar cab and controls enable quick and easy machine configuration.

Radio frequency identification (RFID) for automatic attachment and load chart selection.

Engine bay & service bay doors can be opened with the machine in any position

## SAFETY

Easy access on all sides of the machine for safe access/egress.

5.25m<sup>2</sup> square outrigger setup with 0.72m<sup>2</sup> feet

Unique twin lift ram design for maximum stability and increased visibility.

All round mirrors, LED lighting and optional camera systems.

Automatic axle lock when lifting over the tyres.

## EFFICIENCY

Class leading JCB LiveLink (Telematics).

JCB's unique, regenerative hydraulic system design reduces fuel consumption and cycle times.

Graphite impregnated bushes and single point greasing kits extend service intervals and reduce downtime.

Chain driven boom design enables greater system efficiency.





# Attachments



**Carriage mounted winch, 5500kg.**  
RFID enabled with auto load chart selection.



**Winch jib, 2000kg, 2000mm.**  
RFID enabled with auto load chart selection.



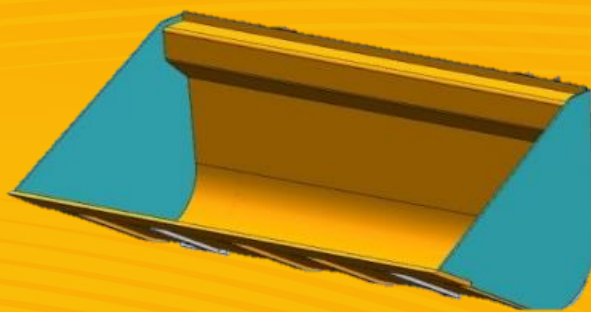
**Reduced height jib.**  
Manual attachment / load chart selection.



**Carriage mounted hook, 5500kg @ 500mm**  
RFID enabled with auto load chart selection.



**Man Platform 1000kg.**  
RFID enabled with auto load chart selection.



**Trash Bucket 1850mm wide.**  
Manual attachment / load chart selection.



**Waste Skip 1.1m<sup>3</sup>.**  
Manual attachment / load chart selection.



**Clearview Q- fit carriage Fork frame.**  
RFID enabled with auto load chart selection.



**360° Rotating Forks.**  
Manual attachment / load chart selection.









**Always looking  
for a better way**

**Should you have any other enquires please get in touch via email:**

**[Jonathon.smith@jcb.com](mailto:Jonathon.smith@jcb.com)**

**[Gareth-c.evans@jcb.com](mailto:Gareth-c.evans@jcb.com)**



# Introducing Building Understanding

*build*offsit  
member

October 21<sup>st</sup> 2021



# Why we've joined Buildoffsite

- We've joined Buildoffsite to help us to learn more about the Offsite sector.
- We hope to apply the learning we have gathered, from providing high quality customer and end user feedback in traditional construction, to Offsite.
- We'd like to connect with companies that are interested in listening to their clients, and using their feedback to strengthen their relationships, retain customers, improve their chances of repeat business and bolster their reputation in the market.

# Introducing Building Understanding

- Specialist independent research agency
- Highly experienced in the construction and development sectors
- Based in London, with broad coverage of the UK
- Company Partner of Market Research Society



The Market Research Society (MRS) is the professional body for market and social researchers.

This project is being conducted by an MRS Company Partner. You can verify this by calling MRS Freephone **0500 39 69 99** and giving the name of the organisation that interviewed you.

Under the MRS Code of Conduct, you have the right:

- To know the purpose of the interview
- To know who is interviewing you
- To end the interview at any point
- To know that any personal information provided will only be used for the purposes about which you have been told

[www.mrs.org.uk](http://www.mrs.org.uk)



# What we do

- ❑ Client priorities studies
- ❑ Customer satisfaction studies
- ❑ Loss/win interviews following a tender
- ❑ 'Off piste' interviews where the relationship is faltering
- ❑ POE interviews and studies



RELATIONSHIP



RETENTION



REPUTATION

# Introducing Building Understanding

*build*offsit  
member

October 21<sup>st</sup> 2021





# DfMA OVERLAY LAUNCH

- Over 250 attendees – clients, architects, consultants, manufacturers, contractors
- Panel discussions with expert speakers
- ‘It was really useful to hear from those working within the MMC supply chain and share their own experiences’
- Overlay can be downloaded at [tinyurl.com/DfMAOverlay](https://tinyurl.com/DfMAOverlay) or scan the QR code >

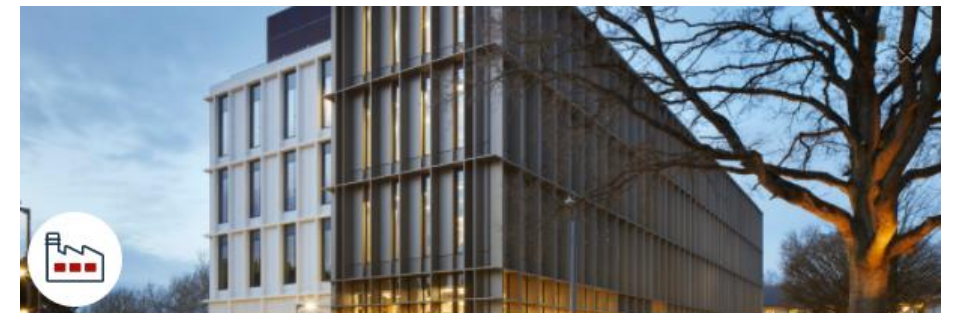






# DFMA OVERLAY – ONGOING WORK

- Weekly videos to accompany the Overlay – check our social media @SupplyCSSchool / Supply Chain Sustainability School on LinkedIn
- Webinar series covering key topics and case studies across different MMC categories
- Register on our website for upcoming events – [supplychainschool.co.uk](http://supplychainschool.co.uk)



## DESIGN FOR MANUFACTURE AND ASSEMBLY

### The New RIBA Plan of Work DfMA Overlay - Lunch 'n' Learn


#### EVENT OR WORKSHOP

A 1-hour Lunch 'n' Learn introducing the recently-launched DfMA Overlay to the RIBA Plan of Work. This Lunch 'n' Learn will be delivered virtually online. See the 'what is the session about?' section for more details below.



# OFFSITE LEADERSHIP GROUP







- Current discussions around decarbonisation and social value, resource availability, data and the golden thread, and behavioural change
- Offsite Training Needs Assessment – in development
- Next meeting early December – get in touch if you're interested in joining or becoming a Partner

 Personal assessments

Complete your confidential individual assessment, track your score, and generate your bespoke action plan.

Once you have completed your action plan you will be able to reassess, see how you have improved, and generate your next action plan.

[Assessment history](#)

| ASSESSMENT   | YOUR SCORE         | BASELINE |                             |
|--|--------------------|----------|-----------------------------|
|  Digital        | 2.00<br>2021-10-15 | 2.00     | Reassess                    |
|  Lean           |                    |          | <a href="#">ASSESS &gt;</a> |
|  Management     |                    |          | <a href="#">ASSESS &gt;</a> |
|  Offsite        |                    |          | <a href="#">ASSESS &gt;</a> |
|  Procurement    | 1.25<br>2021-05-12 | 1.25     | Reassess                    |
|  Sustainability | 2.35<br>2021-05-11 | 2.35     | Reassess                    |

# SCHOOL UPDATES

- Brand new e-learning modules:
  - Introduction to Environmental Management
  - Introduction To Materials
  - Heat Mapping: how to prioritise your impacts
  - + more
- COP26 Training Pack
- Carbon Learning Pathways
- 500 suppliers have now registered to use our new Carbon Calculator

<https://carbon.sustainabilitytool.com/>



## COP26 Training Pack – Supply Chain Sustainability School

We are pleased to provide you with this **COP26 Training Pack**, giving you direct links to FREE resources, e-learning modules and training sessions, to help your organisation and supply chain gain a better understanding of carbon and climate change.

Login to your School account to get started!

### FREE Carbon Training Sessions



Tue 19 Oct, 13:00-14:00 [How to break the cycle of climate change leading to forced labour](#), external event hosted by Action Sustainability (the delivery team behind the School)

Mon 1 Nov, 14:00-15:00 [Introduction to Climate Change & Carbon – Lunch 'n' Learn](#)

Wed 3 Nov, 10:30-12:00 [Climate Change: How it impacts on everything – Business Bytes with the Environment Agency, Welsh Water, Network Rail and SSE](#)

Wed 3 Nov, 16:00-17:00 [A Focus on Scopes 1, 2 and 3 – Lunch 'n' Learn](#)

Thu 4 Nov, 14:00-15:00 [Carbon Reporting – Lunch 'n' Learn](#)

Fri 5 Nov, 14:00-15:00 [Net Zero & Carbon Offsetting – Lunch 'n' Learn](#)

<https://www.supplychainschool.co.uk/get-ready-for-cop26-with-our-new-training-pack/>



# WS Transportation

## National Covid Response and Cabin Deployment

Thursday 21<sup>st</sup> October 2021

Jez Desmond – Head of Commercial





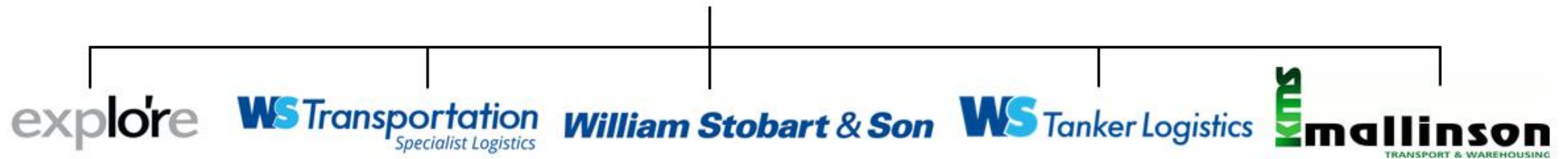
# About WS Transportation

*build*offsite

**WS Transportation is a logistics company offering a diverse range of logistics services across the UK including; general ambient transport, flat bed transport, high & heavy machinery / building transport, bulk tanker transport, mechanical offload as well as warehousing & contract logistics.**

- WS Transportation was established in 2014 by William Stobart and his son Edward Stobart. The business started with just 50 trucks dedicated to flatbed work. There are now in excess of 300 trucks and 400 trailers within the operation.
- There is a wider WS Transportation Group of joint venture transport businesses including Explore Transport, KMS Transport and Graylaw Transport. Together these provide an additional 700 trucks and 1,400 trailers.
- We are highly innovative and have invested millions of pounds in ensuring that our fleet, systems and technology is some of the most advanced in the industry and also the safest.
- We operate 24/7 across the UK and Ireland and that includes a 24/7 customer services department so an agent of WS Transportation is only ever a phone call away.
- Our Ireland Bases are in Enniskillen and Coleraine.

# WS Transportation





# WS Fleet

**WS Transportation utilises best-in industry equipment and the best people in order to lead a step change in the logistics sector through maximising safety and customer service.**

The WS Group Fleet currently consists of over 700 vehicles and 1,400 trailers and our fleet is ever expanding as the company continues to grow.

WS Group leads a vehicle purchasing consortium which purchases over 1,500 trucks and 1,000 trailers per year.

All of our vehicles are Euro 6 compliant and our average age is less than 18 months old ensuring our fleet is modern, up to date and incorporates the latest technologies and environmental compliances.

**WS Transportation operates a variety of equipment covering the following transport sectors:**

- Flatbed transport
- Temperature Controlled Distribution
- Pallet Distribution
- Low Loaders and specialist vehicle transport

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# Customers





# Systems & Processes

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## Driver Management & Training

WS Transportation operate an in-house training facility, compliant to both **FORS Gold**, **CLOCS** and **IPAF** standards, to train all our drivers.

All our drivers complete a 3-day induction prior to going out on the road. Our facilities cover all training including:

- Load Securing for all aspects of construction materials & equipment
- Industry-leading standards of induction training, CPC and other courses

We also use Trutac to monitor and manage our drivers driving performance, including tachograph analysis, speeding, harsh breaking and high rev's. It allows us to continually train drivers and give them real facts on where they can improve.

## ISO 9001

- WS Transportation are actively working towards achieving ISO9001 to ensure robust process and quality management. It is anticipated that WS Transportation shall achieve this status in 2021.

## Subcontracting

- All of our Subcontractor undergo a vigorous vetting process to ensure they meet the same high standards as ourselves. This includes Training, Insurance, Accreditations and load security.



# National Covid Response and Cabin Deployment

*build*offsite

The below is the total amount of deliveries to all postcodes over the period October 2020 – October 2021. Totalling 1168 deliveries.

| 2021 Volume |      |
|-------------|------|
| Total       | 1168 |



**WS** Transportation



# Contacts

*build*offsite

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Email: [chelsea.allen@wstransportation.com](mailto:chelsea.allen@wstransportation.com)

## **Emma Desmond**

Commercials

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Infrastructure  
and Projects  
Authority

# Transforming Infrastructure Performance (TIP): Roadmap to 2030

Will Varah

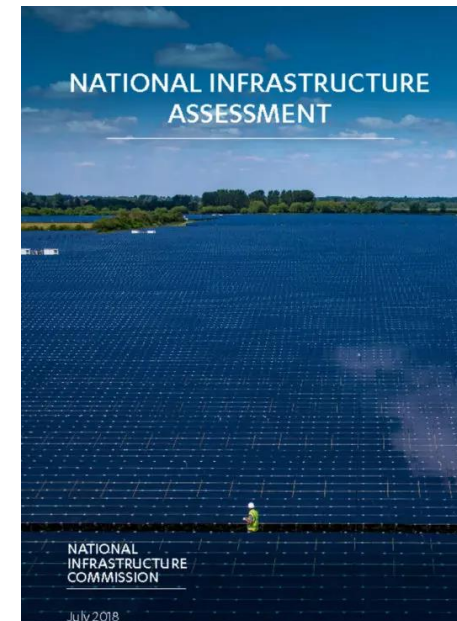
**NOT FOR FURTHER CIRCULATION**





## Why is this important?

- Improve **delivery performance** in the near term – better quality projects, on time and budget
- **Increase government and market capability to deliver** our large and complex portfolio in the medium term
- Support projects to exploit the opportunities presented by **industry 4.0** in pursuit of better productivity, quality and outcomes for citizens
- Begin the **transformation required** to deliver long term policy objectives through infrastructure investment – **net zero GHG emissions, levelling up across the UK, improving our natural environment**



## TIP purpose, vision and objectives

Transforming Infrastructure Performance is the IPA's change programme for infrastructure.

Its **purpose** is to transform how government and industry intervene in the built environment to drive a step change in infrastructure performance.

Its **vision** for 2030 is for a future where we collectively prioritise the societal outcomes we need, and use **data, technology and improved delivery models** to achieve them through our interventions in the built environment.

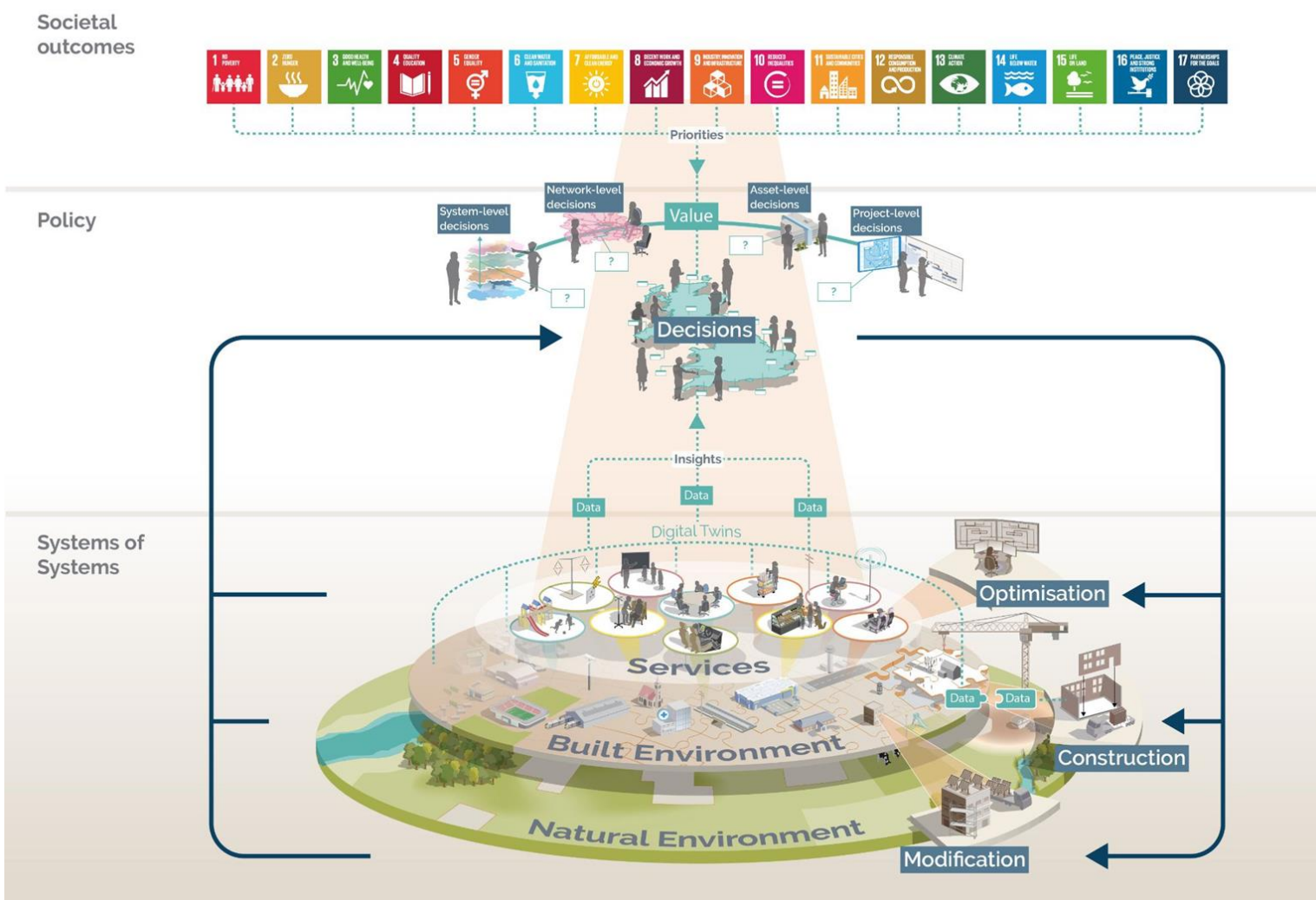
**Transforming Infrastructure Performance: Roadmap to 2030** is due for publication in July 2021.

TIP's objectives by 2024 are for government interventions in the built environment to:

- Consistently use trusted **data, insight and emerging technology** to deliver better societal outcomes for the UK
- Apply robust delivery model assessments and use **delivery models** that are aligned to desired outcomes
- Be optimised through a robust understanding of **market capacity and risk appetite**
- Have outcomes for **Net Zero, sustainability and environmental enhancement** embedded across the asset lifecycle
- Be developed and delivered by people with the **skills, expertise and capability** to support high quality outcomes in a complex environment
- Demonstrate the highest standards of **building safety and quality**
- Have best practice in **occupational health and safety** fully embedded across the asset lifecycle



# The Built Environment Model



The Built Environment Model has been developed in partnership with government, industry and academia. It describes a new approach to decision making, founded on an understanding of the **interlinked nature of our infrastructure systems**, which are rooted in the **natural environment** and encompass the **built environment and the services** on which we all depend.

In this new approach:

- We must understand the **societal outcomes** that are needed in the context of this system
- Outcomes must be translated into **delivery strategies**, balancing the addition of new assets and the need to intervene in existing ones
- The success of our strategies in delivering the desired outcomes **must be tracked and fed back into decision making**

# Focus areas

## Delivering new economic infrastructure

The starting point for all of our interventions in the built environment should be defining and incorporating strategic outcomes (that address a range of societal challenges – from changing patterns of use to the need for adaptation and resilience) into longer term collaborative delivery models in which industry partners are incentivised to deliver them.

## Place-based regeneration and delivery

Strategic outcomes should be rooted in an understanding of local context and enabled by data and decision making structures so that interventions can be joined-up across departmental, national, regional, and local silos.

## Addressing the need for social infrastructure using a platform approach

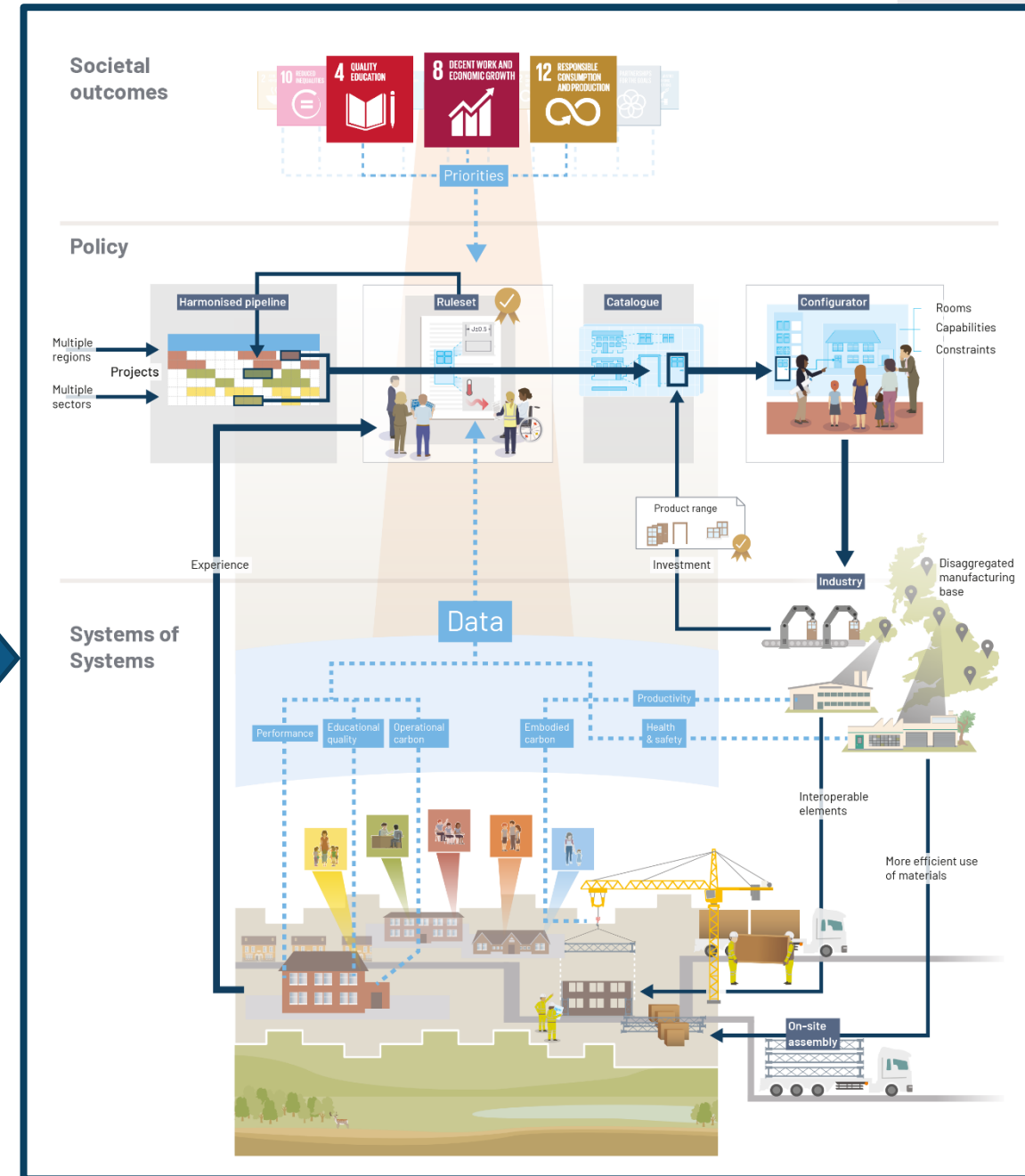
Through platform approaches the government will generate greater societal outcomes from its pipeline, by enabling a disaggregated manufacturing industry that creates stable and inclusive employment across all regions of the UK.

## Retrofitting existing buildings to achieve net zero GHG emissions emissions by 2050

Through public-private collaboration, enabling a self-sustaining retrofit market, the government will create the means to adapt our buildings to address sustainability imperatives and a market for green jobs appropriate for varying regional adaptation needs.

## Optimising the performance of our existing built environment

Given finite resources, adding to the built environment can't be our main way of improving the outcomes we derive from it. Insight into a dynamic system must underpin the interventions we make. The effectiveness of the interventions in achieving desired strategic outcomes must be monitored, with relevant stakeholders incentivised to adapt accordingly.





# Summary & Updates

## **SOME OF OUR CURRENT & UPCOMING RESEARCH & GUIDANCE**

- **Achieving Sustainable Resilience in New Precast Concrete Structures**

Collaborative guidance with Mott MacDonald, C-Probe & pre-casters. *Due for publication late 2021/early 2022.*

- **Offsite Construction: Concept Design & Delivery**

Major joint report alongside CIRIA; with authors from WSP, Laing O'Rourke & Sheppard Robson & input from Advisory Group. *Commencing November 2021, and concluding Autumn 2022.*

- **Ensuring Long-Term Quality in Housing**

Report aimed at local authorities and housing associations to better adopt MMC into their developments. *Being reviewed by industry partners, due for publication early 2022.*

- **How to manage Intellectual Property for Offsite and MMC**

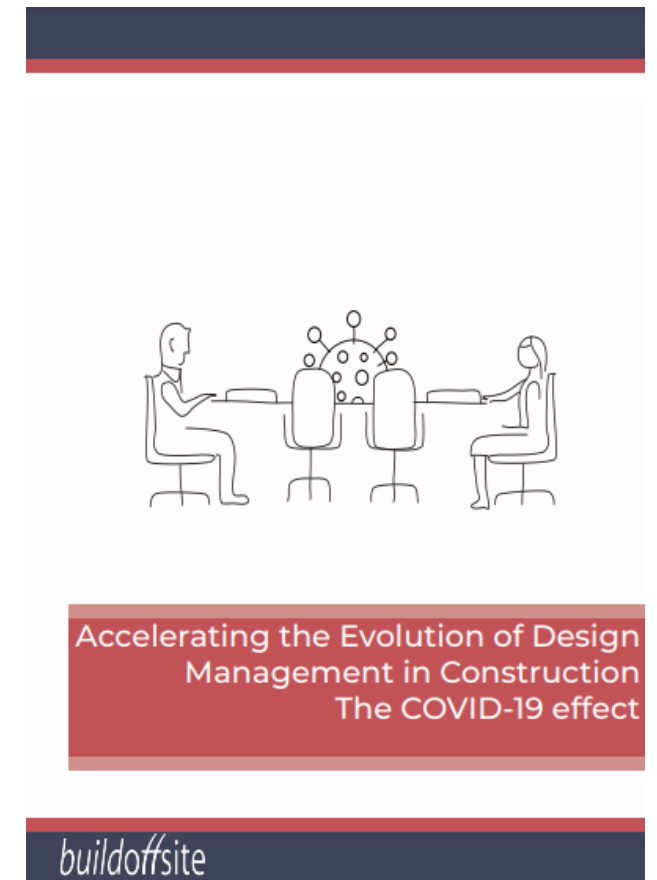
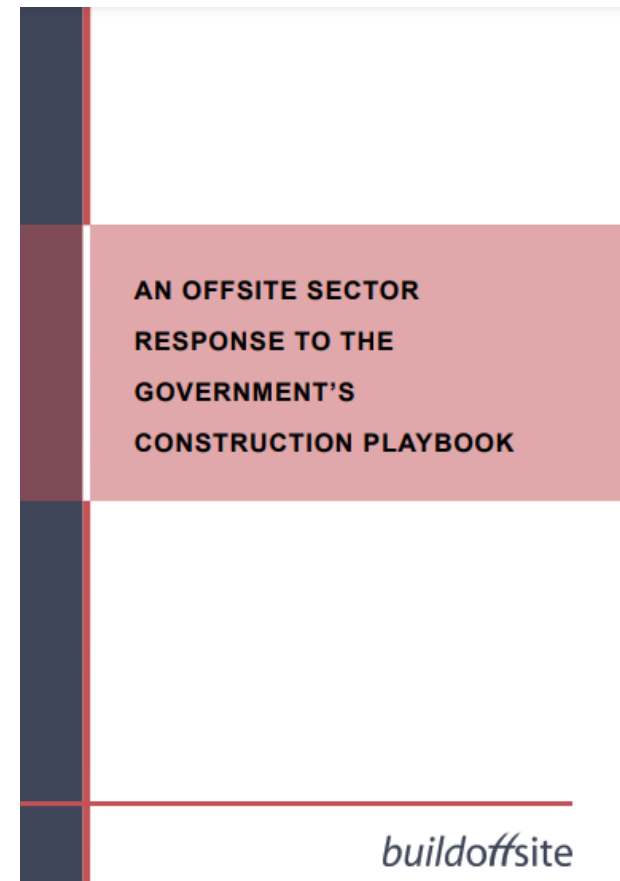
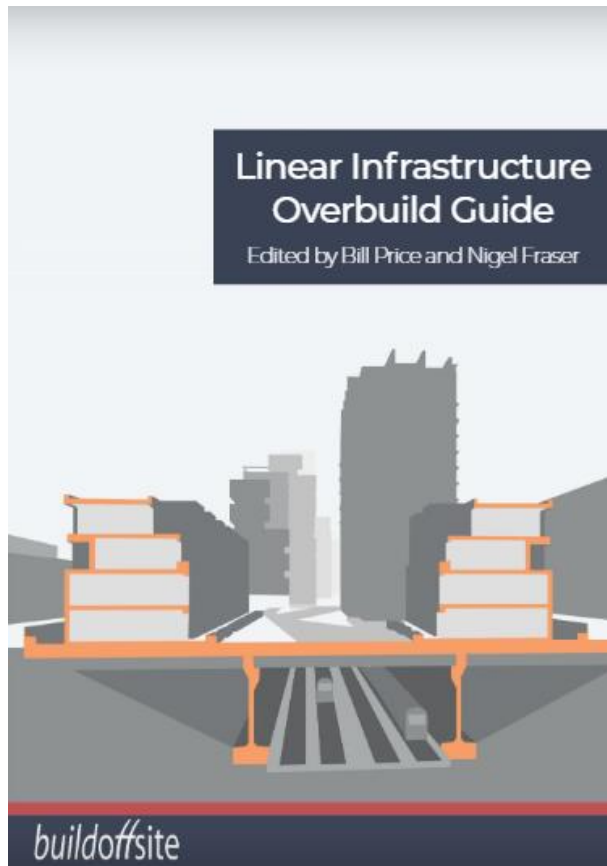
Aims to help clients, designers and manufacturers achieve workable arrangements with respect to intellectual property development, ownership, commercial exploitation and protection. *Brief being finalised with Client Group, with aim to commence in January 2022.*

- **How to develop Performance Specifications for Offsite and MMC**

Intended to aid the development of Performance Specifications suitable for use across different sectors, but which can be specialised for particular disciplines. *Brief being finalised with Client Group, with aim to commence in January 2022.*



# REPORTS & GUIDANCE



<https://www.buildoffsite.com/publicationsguidance/publications/>

Buildoffsite Updates



**RIBA publishes new Design for Manufacture and Assembly guidance**

The Royal Institute of British Architects (RIBA) has published a new edition of the Design for Manufacture and Assembly (DfMA) Overlay to the RIBA Plan of Work, alongside an accompanying guide.

The new Overlay aligns with the 2020 Plan of Work and details the relevant tasks that must be actioned at each project stage to successfully deploy the DfMA approach.

It reflects the huge technological advances that have been made to popularise the design process, and uses case studies to demonstrate the potential of the evolving method.

The Overlay has been produced by a group of industry experts led by Nigel Ostime, Partner at Hawkins/Brown, and Ian Heptonstall, Director of the Supply Chain Sustainability School. Publication of the report has been kindly supported by Akerlot, Buildoffsite, Kier, Supply Chain Sustainability School and UK Research and Innovation, and endorsed by Mark Farmer, Founder of Cast Consultancy and UK Government MMC Champion for Homebuilding.

[Click here for full article](#)



**Challenges and barriers to adoption and implementation of offsite and MMC**

At the beginning of 2021, BECG commissioned Buildoffsite to provide insight into the challenges in adoption of Modern Methods of Construction (MMC) and how these can be overcome. A survey was conducted of the Buildoffsite membership and also promoted to the sector via industry roundtables and stakeholders including the CIH [Construction Industry Hub], CLC [Construction Leadership Council], and Offsite School. This reports sets out the findings of the survey and provides insight and knowledge on the offsite sector including:

- key trends,
- the industry landscape,
- supply chain visibility,
- geo-political risks,
- policy and procurement,
- and opportunities for the offsite sector.

[Download report](#)



**Find out more about our working groups**

Join the collaborative network.

Through collaboration, knowledge sharing, or the production of research and guidance the Sector Working Groups will deliver outputs and impacts; to benefit members own business objectives, the Client Group, other Buildoffsite members and the wider offsite industry. These outputs will aim to:



As always, our weekly news summary and monthly Member Newsletter contains latest updates.

For any marketing, communications, social media, website and content ideas & feedback do get in touch with Sara ([sara.kotsani@buildoffsite.com](mailto:sara.kotsani@buildoffsite.com)).

18.10.2021

NEWS SUMMARY

Latest news from the sector



Buildoffsite News



[Register now – Members Meeting, 21st October](#)



[Register now – R&D in the offsite sector, 2nd November](#)



[Interested in exhibiting, partnering or visiting the Offsite Show, 3-5 May 2022?](#)



[Project Proposal - Offsite Construction: Concept Design & Delivery](#)

Member News



[Re-energised Kier tops September contracts league](#)



[DfMA for Architects Workshop, 20 October 2021](#)



[The importance of digital experience in the built environment](#)





## Nationwide Tax Specialists

Access2Funding is a business growth specialist that works to secure funding for SMEs to allow for business development, with a specialist focus on research and development (R&D). With an expert team of in-house accountants and tax specialists, Access2Funding span all areas of England, Scotland and Wales.

Join Access2Funding alongside Buildoffsite on **Tuesday, 2<sup>nd</sup> November 2021** to find out more about how your Offsite Build business could be benefitting from the HMRC tax incentives scheme.

With an average claim value of £67k and an estimated £400m claimed back for UK construction business in 2019-20, what could you unearth?



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<https://www.offsiteshow.com/> to register your interest in exhibitor and sponsorship opportunities



## **Upcoming Activity for the remainder of 2021**

### **2<sup>nd</sup> November**

R&D in the Offsite Sector

### **W/C 15<sup>th</sup> November**

Managing your Supply Chain with DHL

### **W/C 22<sup>nd</sup> November**

How MMC can help the Town Funds Scheme with Arup

### **W/C 6<sup>th</sup> December**

Member's Meeting – venue TBC

### **W/C 13<sup>th</sup> December**

The Construction Playbook: Impacts & Adoption sponsored by National Highways

In addition, a number of Client Group & project workshops with further details to follow.

**THANK YOU!**