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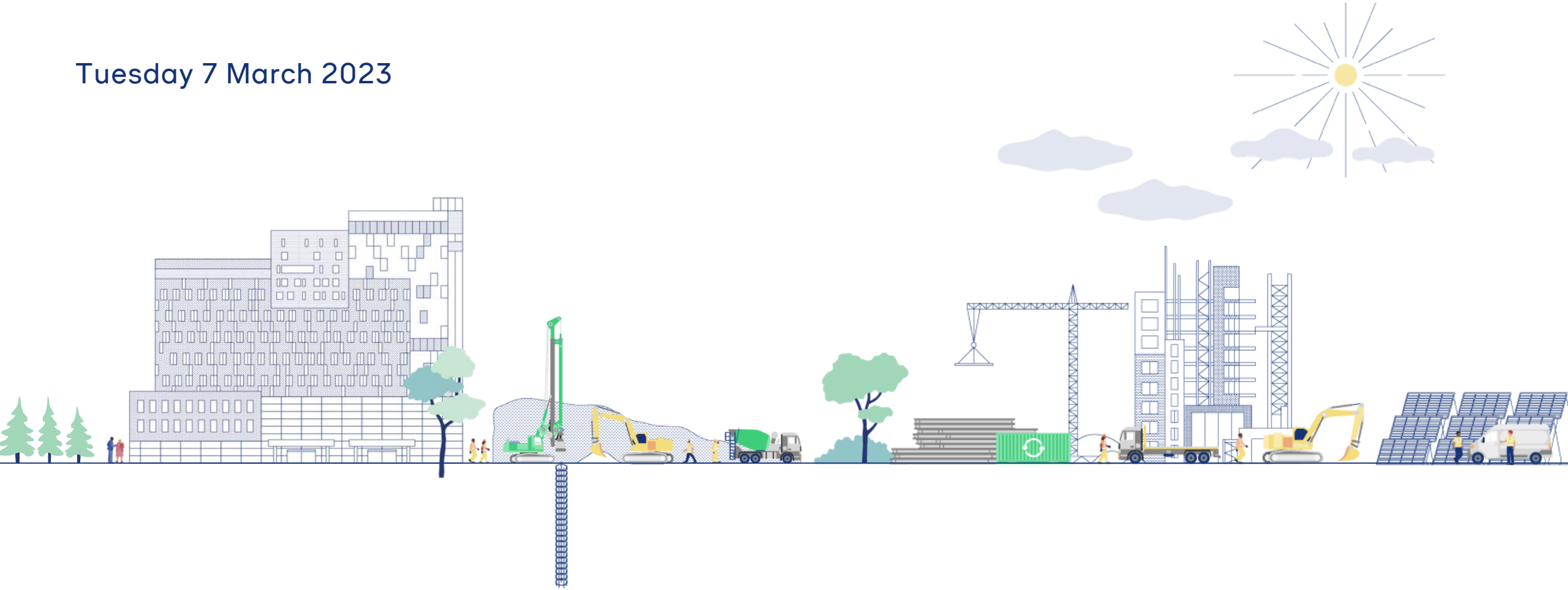
Steps to net-zero

Tuesday 7 March 2023



Skanska UK targets

Net zero emissions by

2045

Reduce carbon emissions to

50%

of 2010 level by 2030

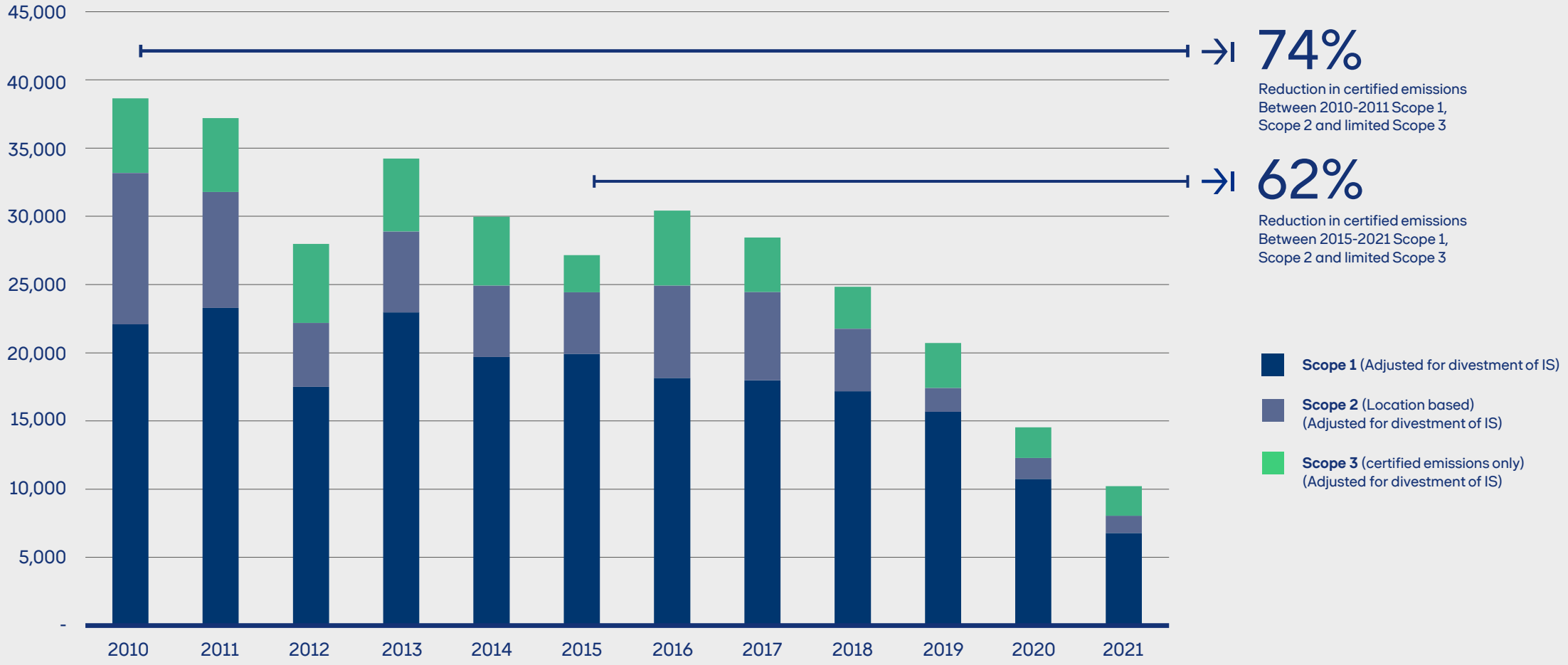
Reduce carbon intensity to

130 tCO_2e

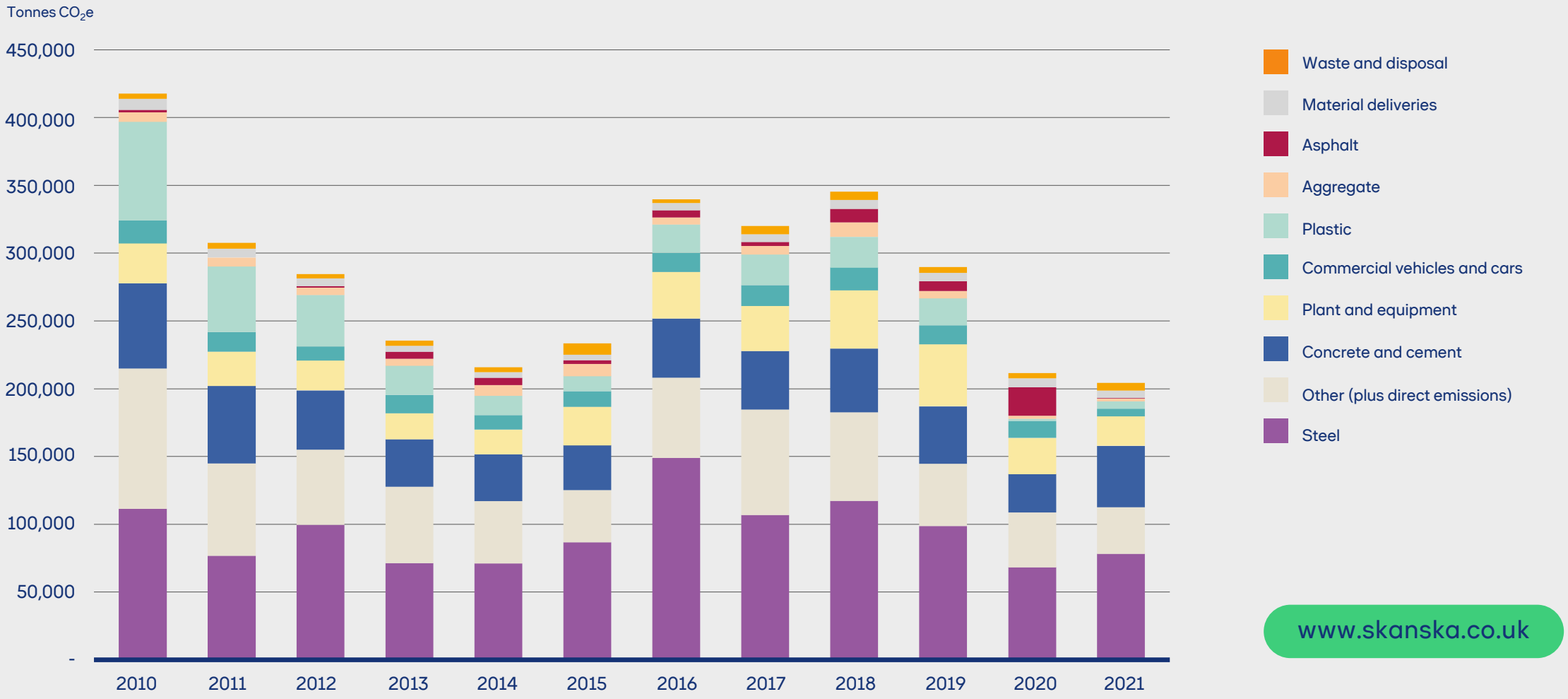
per £m of revenue by 2030

Across the Skanska Group we will be net-zero by 2045, within the whole value chain

Scope 1, Scope 2 and mandatory Scope 3 emissions



Skanska UK: total emissions, including supply chain, broken down by source



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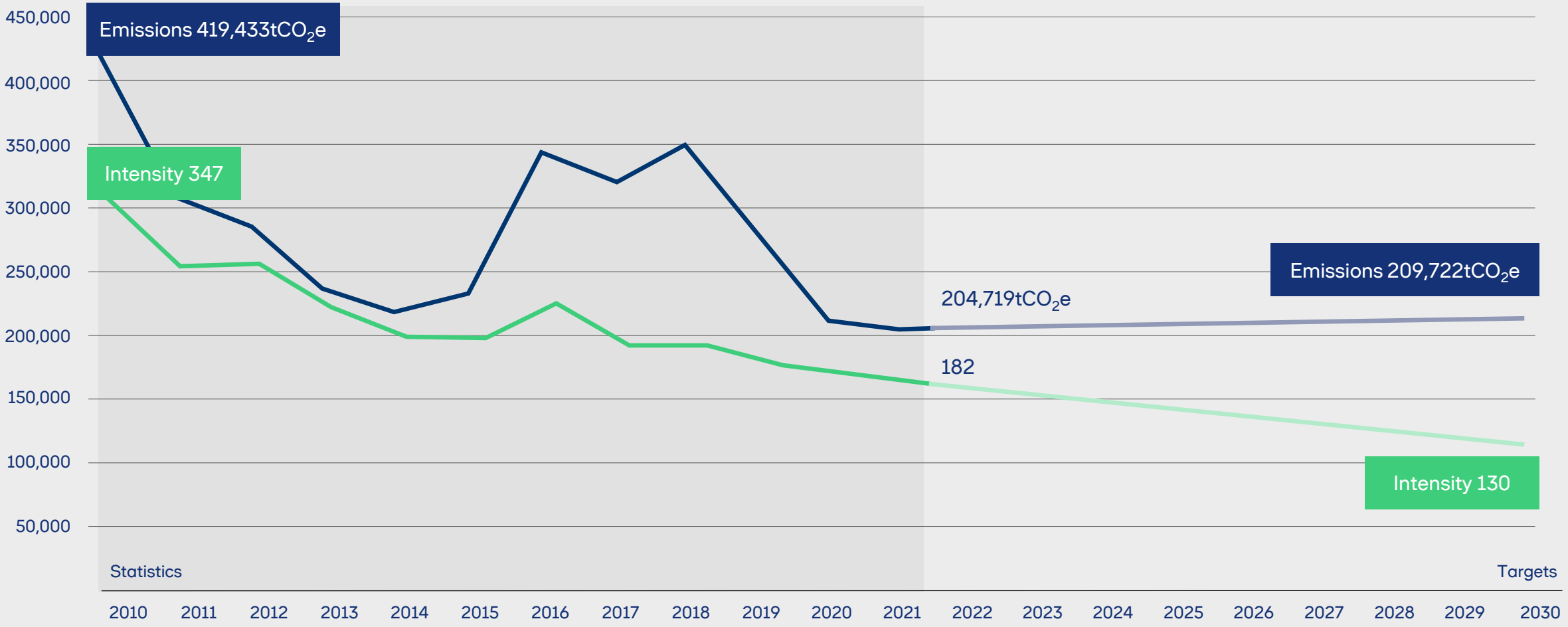
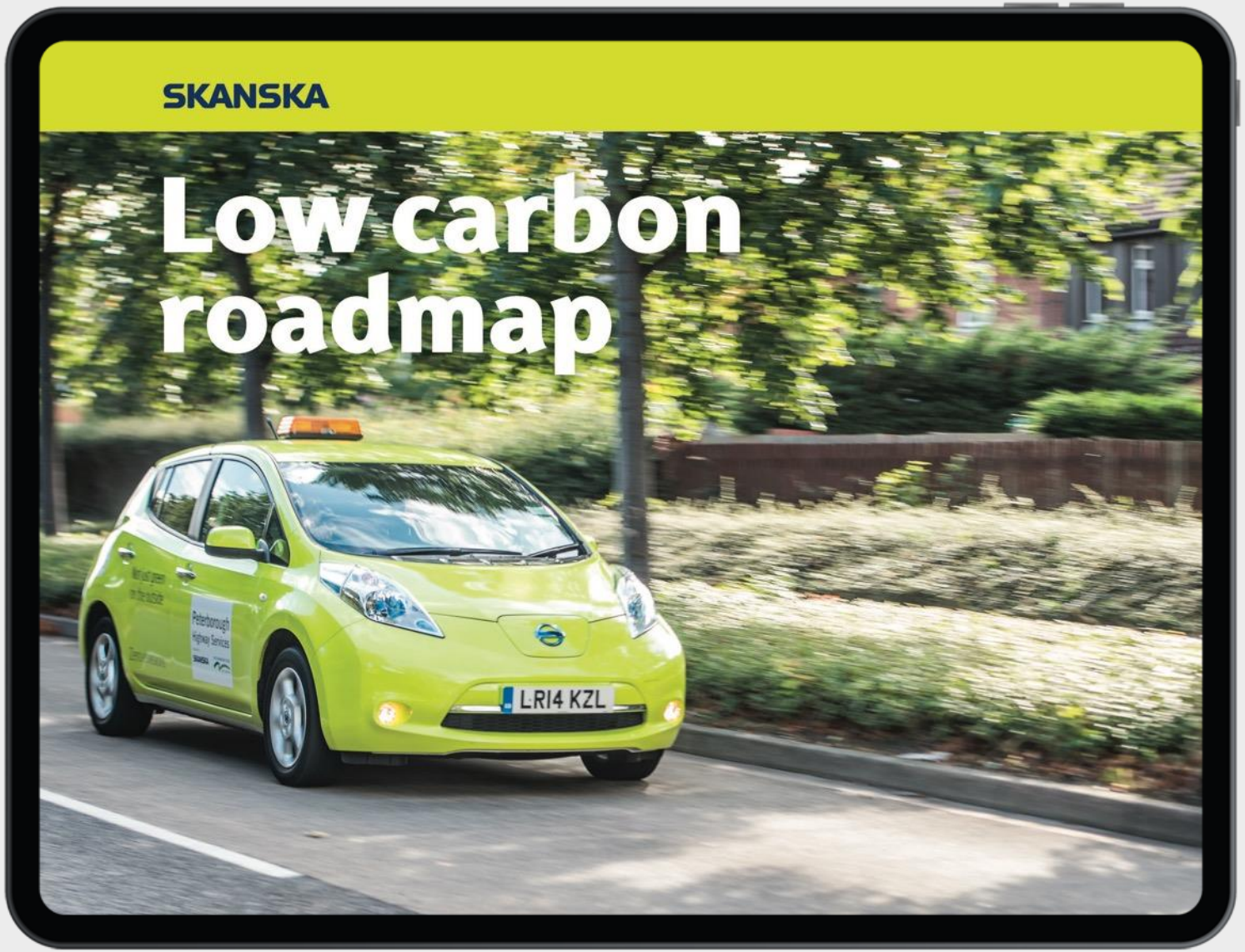
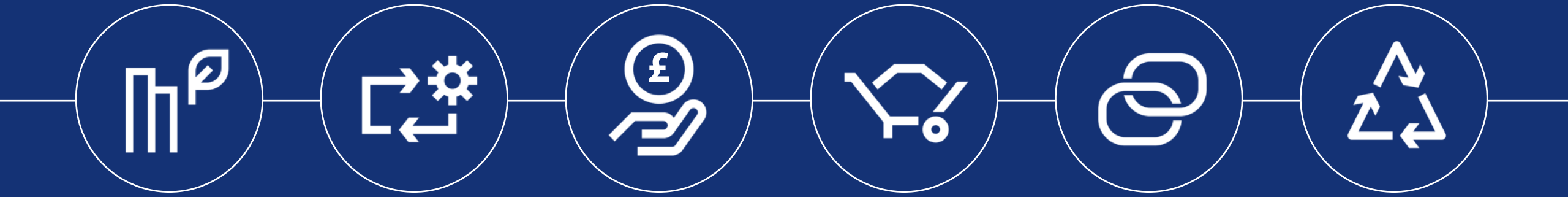
Projection of estimates carbon emissions and intensity to 2030, including supply chain



Our roadmap



Our roadmap



Targets and measurements

Estimating and design

Commercial and financial

Plant and transport

Collaboration

Asset management

Carbon reduction is built into our business-as-usual process

Skanska UK
Corporate initiatives

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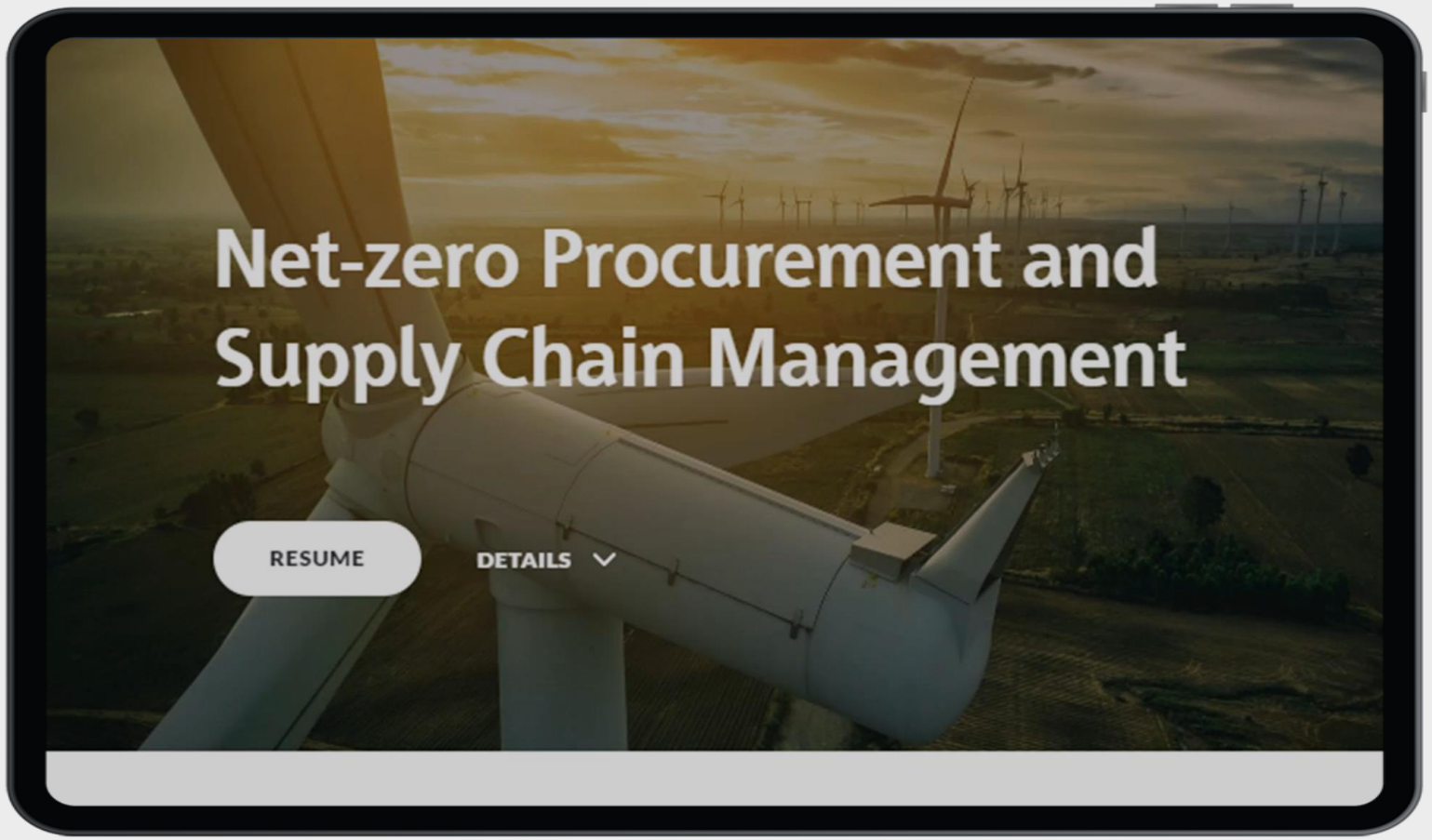
Skanska Carbon Academy

In 2020 Skanska rolled out an internal carbon skills academy, focused on the key high influencing roles; operational leaders, designers, procurers and commercial teams.



De-carbonising our plant and fleet

HVO

In 2021 Skanska UK switched fully to the alternative transition fuel Hydrotreated Vegetable Oil (HVO), since then we've procured:

4.49 million litres

avoiding

12,241tCO_2e

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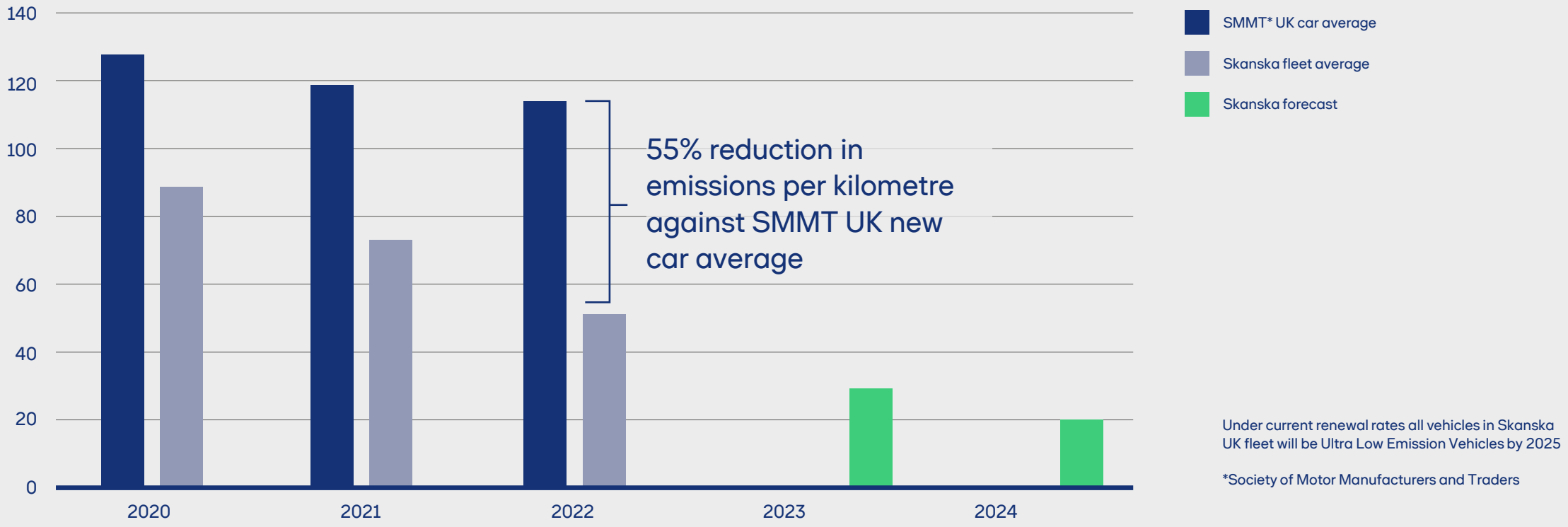
Electric Vehicle-first: policy and facilities

	Nov 2020 (baseline)	Dec 2022
Vehicle fleet	1482 vehicles	1089 vehicles
Electric	41 Electric (3%)	366 Electric (34%)
Hybrid	153 Hybrid (10%)	126 Hybrid (11.5%)
PHEV	263 PHEV (18%)	249 PHEV (23%)
Average gCO_2/km	90.3g (*UK new car average 128gCO_2*)	50.6 (*UK new car average 115gCO_2/km*)
Ultra Low Emission Vehicles *(vehicles with emissions <75gCO_2/km)*	23%	65%

Our new UK Head Office has been designed for an EV fleet, with 100 EV chargers

Average CO_2 emissions Skanska fleet vs UK new car



Under current renewal rates all vehicles in Skanska UK fleet will be Ultra Low Emission Vehicles by 2025

*Society of Motor Manufacturers and Traders

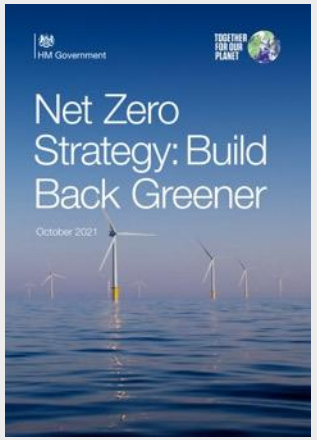
The H_2 collaboration group

bre

SKANSKA

bam nuttall

H_2 Construction Stakeholder Group



SteelZero

- 50% steel procured through one or combination of three options by 2030
  - Responsible Steel Certified producer
  - Steelmaking site covered by verified science based target
  - Steel which is low embodied carbon
- 100% net-zero steel by 2050
  - Not carbon content in steel – emissions associated with steel making
  - Carbon emissions reduced as close to zero as operationally possible
  - Residual emissions offset

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CLIMATE GROUP
STEELZERO

ConcreteZero

- 30% low embodied carbon concrete 2025
- 50% low embodied carbon concrete 2030
- 100% net zero concrete by 2050
  - Carbon emissions reduced as close to zero as operationally possible
  - Residual emissions offset

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CONCRETE ZERO

Net-zero sector focus

Infrastructure

Digital carbon tracking tool: A428 project

Enabling teams to alter asset quantities and instantly track carbon and cost to make better informed decisions.

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Infrastructure

M42

Low carbon concrete trial.

Earthworks excavation reduced emissions by **15%** and delivered **£2.8 million savings**.

Efficient earthworks reduced carbon emissions by **560tCO_2e**.

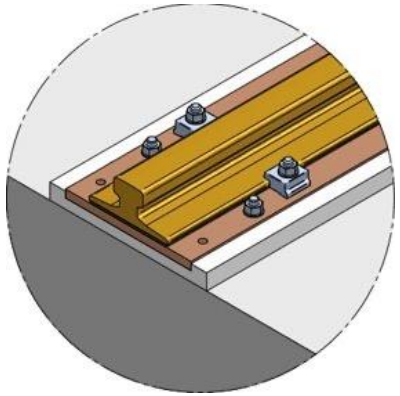
Euston IP Central

Substation construction with lower carbon EAF steel resulting in **88%** emissions reduction compared with traditional BF steel, and 50% GGBS concrete mix saving **30tCO_2e**.

SAS Bridge 13

Overall carbon savings from baseline **7,180tCO_2e** from re-used materials, lower carbon concrete mixes, de-scoping/ changing elements of the design.

Skanska Costain STRABAG joint venture for HS2



Victoria Road crossover box

GeoPura hydrogen power units expected to save circa **500tCO_2e** over its lifecycle.

Atlas Road

Earth Friendly Concrete and reduced steel save more than **50tCO_2e**.

Euston

70% cement replacement was used for a significant amount (over 4,000m^3) of concrete.

Anglian Water: Enabling whole life carbon in design

- OfWat funded project to integrate Anglian's Carbon Modeller into the BIM environment
- Enables carbon calculation automation along with visual "hotspotting" of carbon
- Builds on Skanska's BIM learning from highways sector carbon digitalisation work.

Piling, foundations and ground engineering

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Bentley Works

Offices and workshops transformed in 2015 into green facilities, with near zero impact on the environment including natural lighting and cooling, solar panels and a dual-fuel heating system that uses biomass and HVO.

Workshop energy usage reduced by:

40%

and the office energy by

25%

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Use of ‘Foundation’ carbon calculator embedded within the estimating software which automatically populates the industry standard EFFC Carbon Calculator.

Credit: S1 Project Carbon Reduction Overview dashboard

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Concrete mixes

Working in collaboration with Hanson, Skanska developed a 79% cement replacement mix for use in permanent piling works on HS2 S1 project – this is believed to be the lowest carbon concrete of an equivalent strength that has been used in permanent piling works in the UK to date.

Potential carbon saving of

45% CO_2e/m^3

Award-winning basalt reinforcement use

Federation of Piling Specialists Carbon Reduction Award 2022 for Low Carbon Guide Wall System.

The innovation replaces conventional steel and concrete with basalt reinforcement and low carbon concrete; basalt results in 62% less CO_2e than steel during manufacture.

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New BAUER eBG33 piling rig

Procurement of industry leading electric piling rig cutting carbon by

1.2tCO_2e per day

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Dual fuel hydrogen and diesel piling rig

Conversion to dual-fuel will save up to

50% CO_2

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SR30 rig

Building solutions

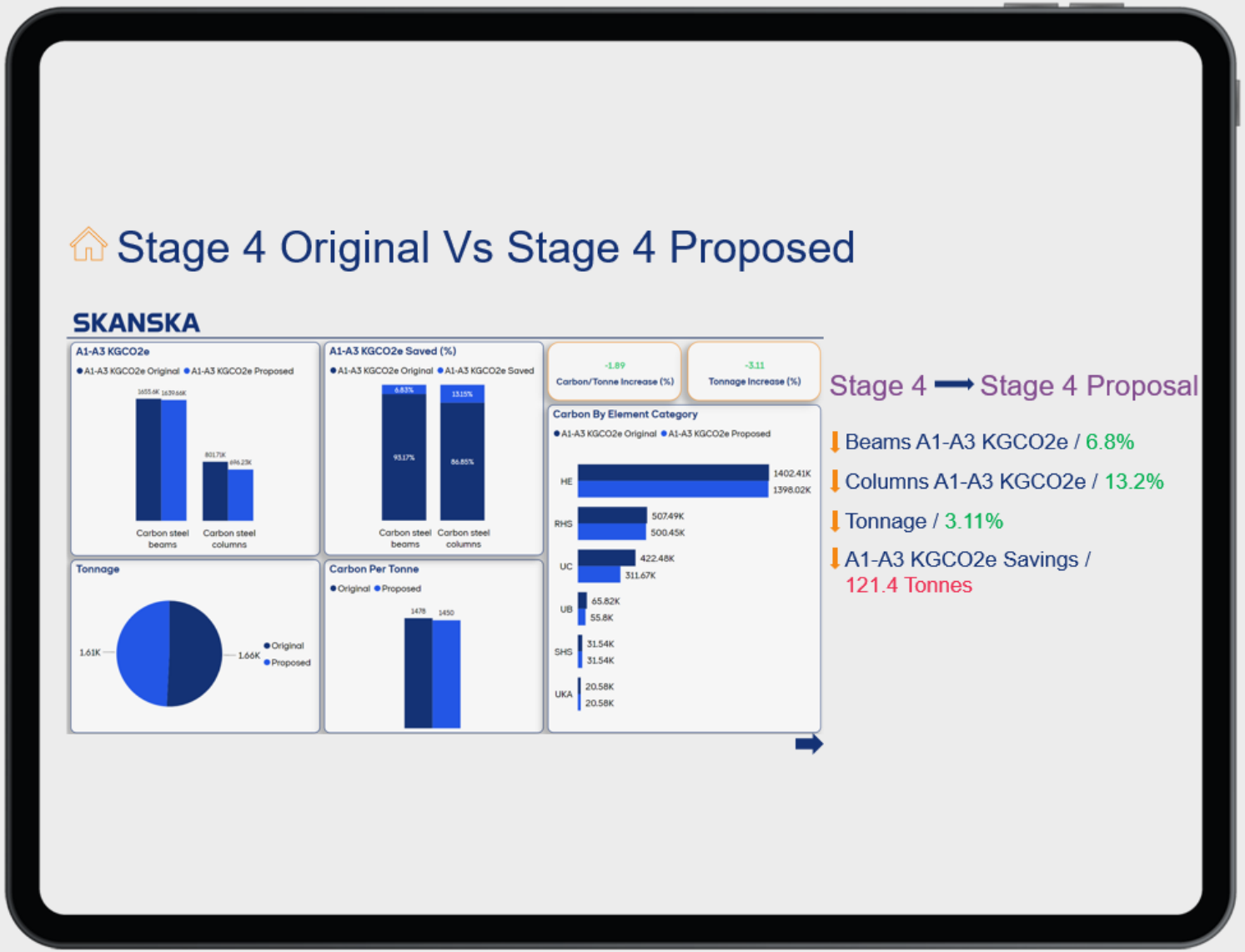
Integrating carbon emissions with the design process

Skanska - Buildings UK

KGCO2e by Level | KGCO2e by Area | Cost by Level | Cost by Area

Re-use of second hand materials

Ability to compare thousands of assets in a live stock list of second hand steel, instantly calculating potential carbon savings.



105 Victoria Street

- Working collaboratively to assess the carbon impact of every potential idea or change, alongside cost and programme.
- Coordinating and informing balanced decision making to ensure 105 Victoria Street's leading carbon ambitions are always front of mind.

Commercial development

Featherstone Building

Redesign of façade from hand laid brick system to unitised glass reinforced concrete (GRC) backed façade panels, saving **273tCO_2e** on embodied carbon (A1-A3).

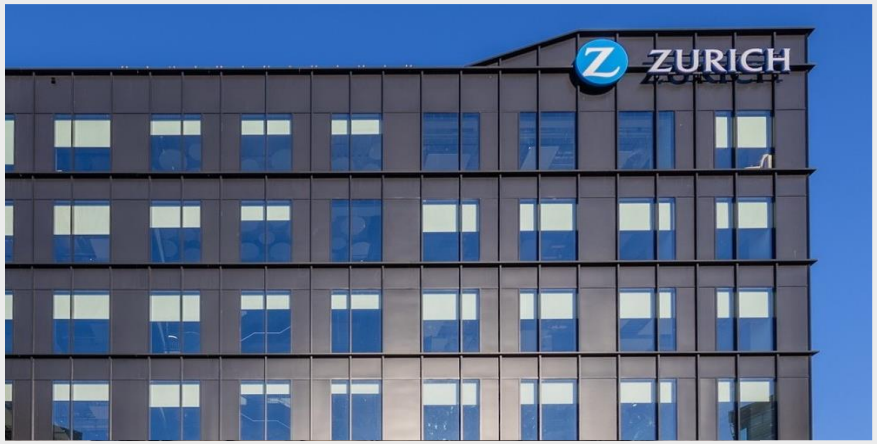
Norton Folgate

Our Modern Methods of Construction strategy changed the façade panels to ultra-high-performance concrete, resulting in less material use and projected carbon savings of up to **20%**.

Leavesden Park

Re-used internal temporary Plashoc hoarding saved **12.5 tCO_2e**. By refurbishing rather than replacing 650m of lighting, we saved **17tCO_2e**.

Low carbon site set up



Zurich

12 low carbon solutions evaluated, including cabin reuse from a previous project, Wysebase cabin bases and EV charging points, which resulted in a reduction in site setup carbon emissions of 86.5%.

VSSP

Renewable energy contributing to over 10% of construction electricity use, solar lighting and power generation for noise, dust and vibration monitoring, EPC rated B site cabins with water efficient fittings and PVs.

Building services

Walsall Manor Hospital

Refrigerant replacements lowers f-gas related carbon emissions, saving over

222tCO_2e

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Virtus Data Centre

We used HVO to run the client's generators and applied a new load management approach, which combined to save over

66tCO_2e

and over

£7k

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Facilities management commercial fleet

Switching from diesel to electric vans on the City of Edinburgh project has reduced our commercial fleet-related carbon emissions by

75.4%

Annual carbon savings in 2022 of

67.5tCO_2e

Hydrogen and EV dual fuel van trial completed on Midlothian Schools sites

SKANSKA

Continued sustainability leadership through second year as joint winners of the Sustainable FM Index

SFMI
The Sustainable FM Index

SKANSKA

Intellekt

Since being implemented at Skanska's flagship London office, 51 Moorgate, Intellekt has enabled the following savings:

35% energy saving

10% FM efficiency gain

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Skanska’s new suite of targets

2023

Our company car fleet will average less than

35g CO_2 per km

by the end of 2023[1]

2024

60%

of our company cars will be full battery EVs by the end of 2024[1]

The car fleet average will be less than 20g CO_2 per km by the end of 2024[1]

[1] *At time of publishing company car emissions reduction targets exclude car allowance vehicles and short-term hires*

2025

30%

of total concrete consumption we specify and procure will be aligned with the ConcreteZero Low Embodied Carbon Concrete Threshold

Our overall carbon intensity will be at or below 160tCO_2e per £m revenue

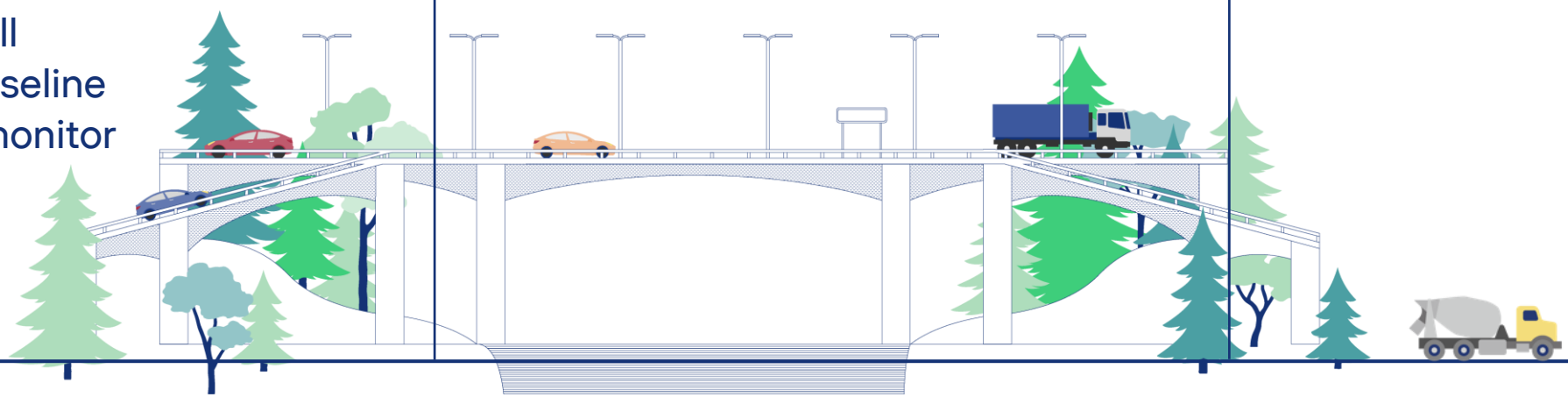
All our projects will have a carbon baseline and will set and monitor against a carbon budget[2]

2027

All our light road-going commercial fleet will be net-zero[3]

2028

We will only order fully zero emissions company cars[1,4]



[2] Applies to all projects above £15m project value (or above £1m project value for our Cementation business)

[3] LCVs defined as commercial vehicles weighing less than 3.5 metric tonnes, and excluding 4x4s

[4] Zero emission' could be electric vehicles, hydrogen fuel cell or other transmission technology which is zero emission at tailpipe

2029

We will celebrate 10 years of certification to PAS2080: *Carbon Management in Infrastructure*

2030

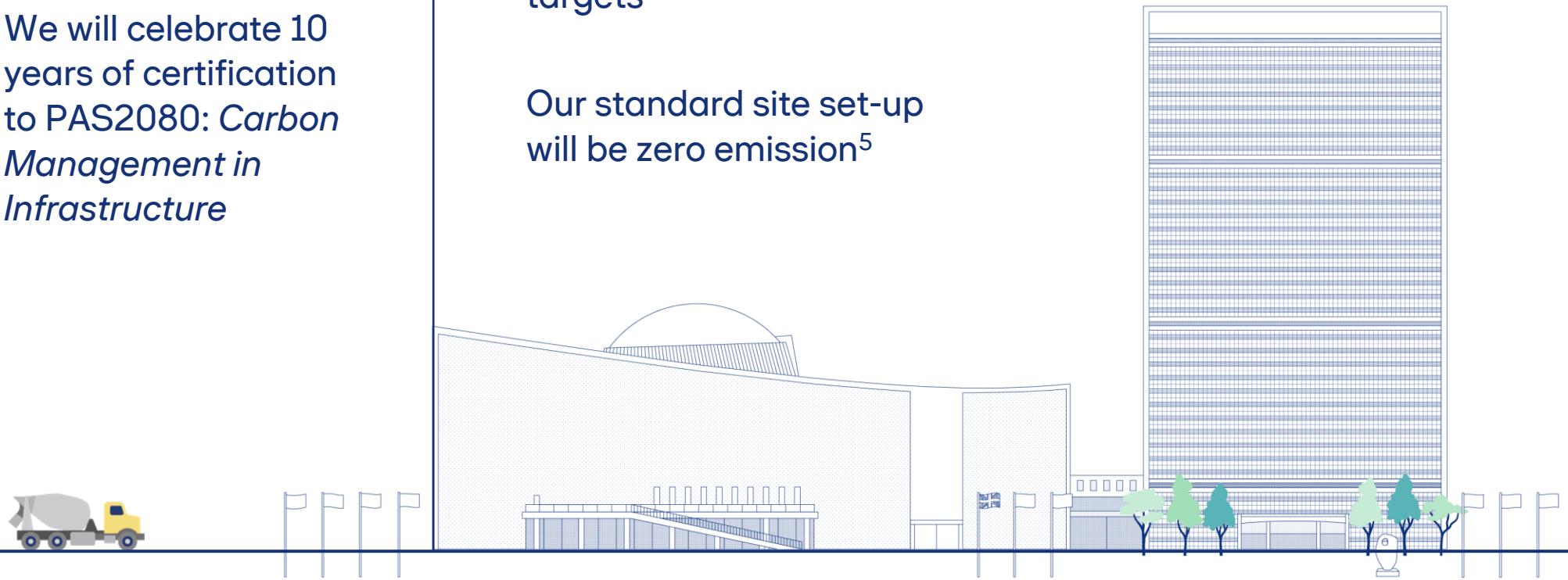
50%

of our steel will be specified, procured or stocked from manufacturers who are Responsible Steel certified or from site with science based targets

Our standard site set-up will be zero emission[5]

50%

of total concrete consumption we specify and procure will be aligned with the ConcreteZero Low Embodied Carbon Concrete Threshold



[5] *'Standard site set-up' includes 5 selected items: electricity, generators, lighting, hoarding and welfare accommodation*

2030

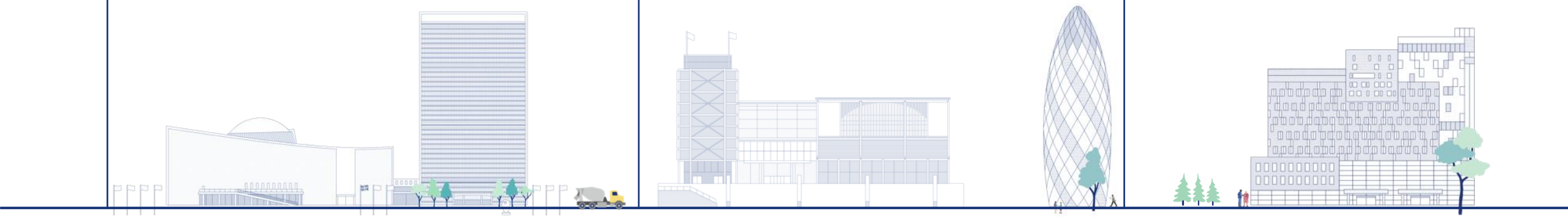
We will celebrate a 20-year record of transparent Scope 3 emissions estimating and reporting

All our commercial building projects will be net-zero aligned with the Building Better Partnerships Net Zero Carbon Pathway[6]

We will have reduced our Scope 3 emissions by 50% from 2010 baseline and our overall carbon intensity will be at 130 tCO_2e per £m revenue

We will have reduced our Scope 1 and 2 emissions by more than 70% from our 2015 baseline

All our 4x4s will be zero emissions by the end of 2030



[6] *Applies only when Skanska UK is Principal Contractor (excludes FM and MEP work) and works on the assumption that in order for commercial buildings to be compliant with the Net-Zero Carbon Pathway they'll need to demonstrate compliance with industry approved targets, such as LETI's 2030 net-zero targets and RIBA's 2030 Climate Challenge target metrics*

2045

100%

of total concrete consumption we specify and procure will be net-zero

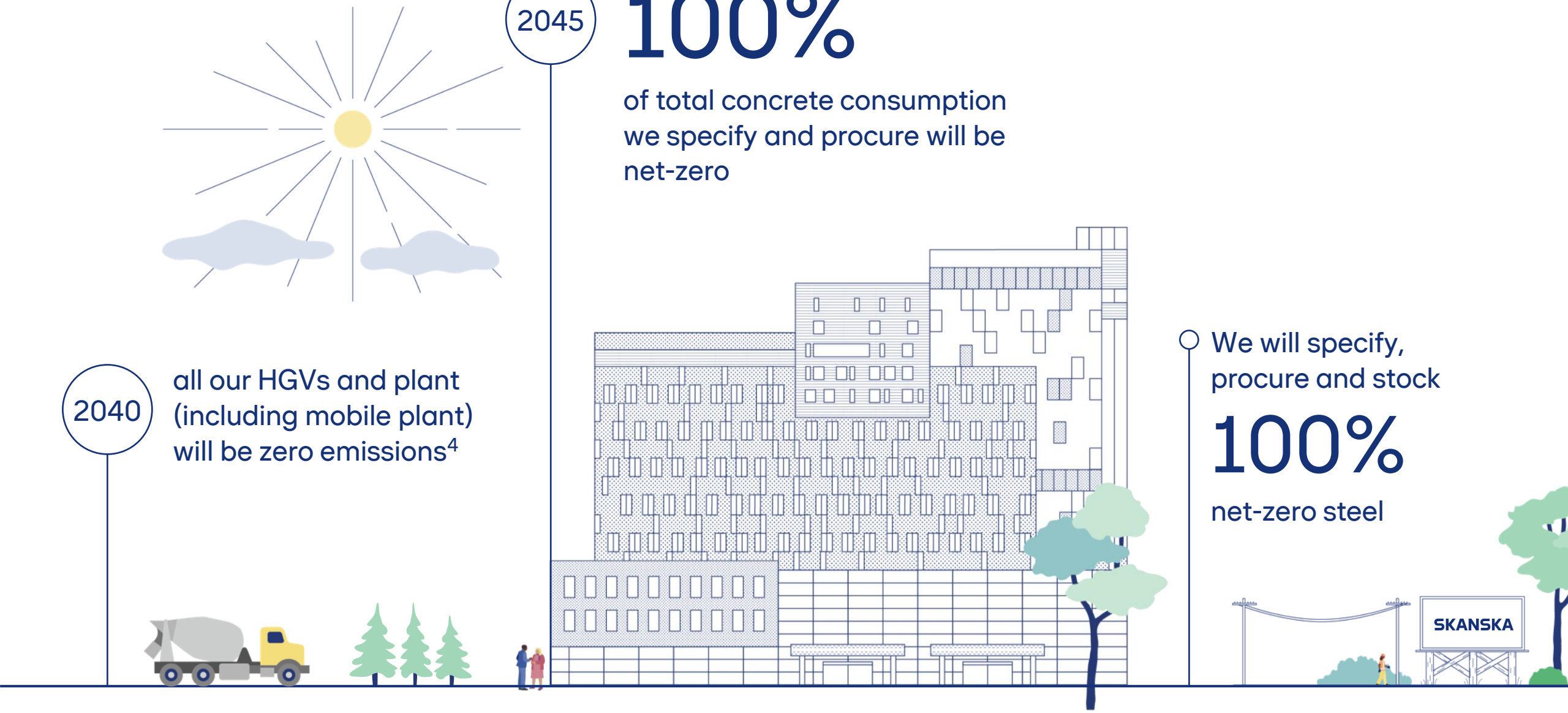
2040

all our HGVs and plant (including mobile plant) will be zero emissions[4]

We will specify, procure and stock

100%

net-zero steel



[4] *Zero emission' could be electric vehicles, hydrogen fuel cell or other transmission technology which is zero emission at tailpipe*

By 2045

Skanska UK will be net-zero emissions across all scopes

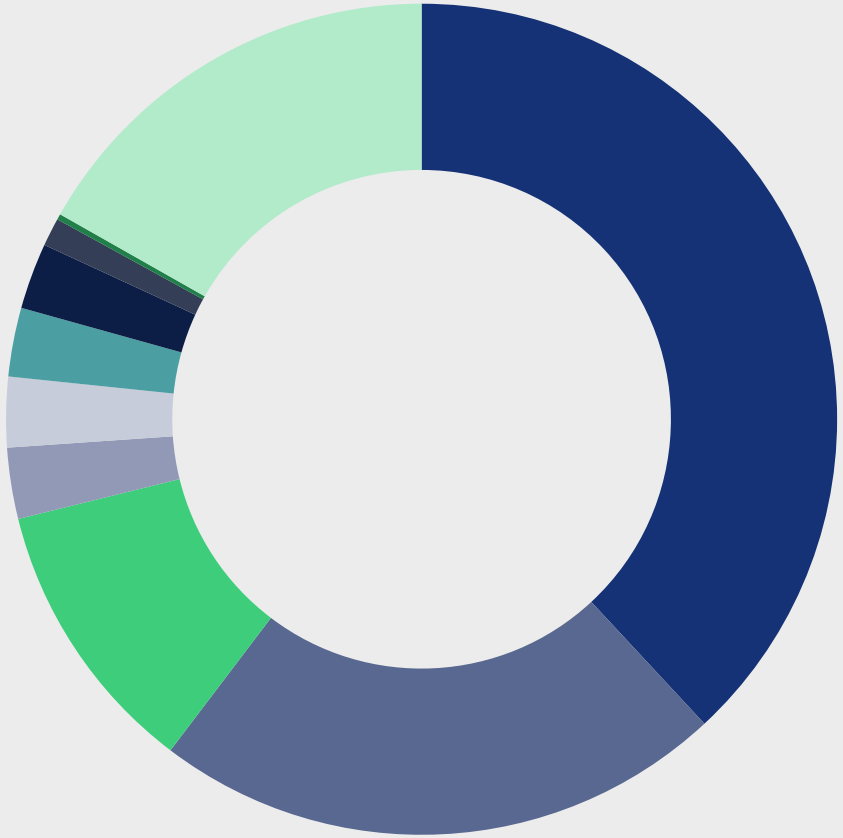
Why 2045?

Why net-zero by 2045?

To create our 2045 target we used the following principles:

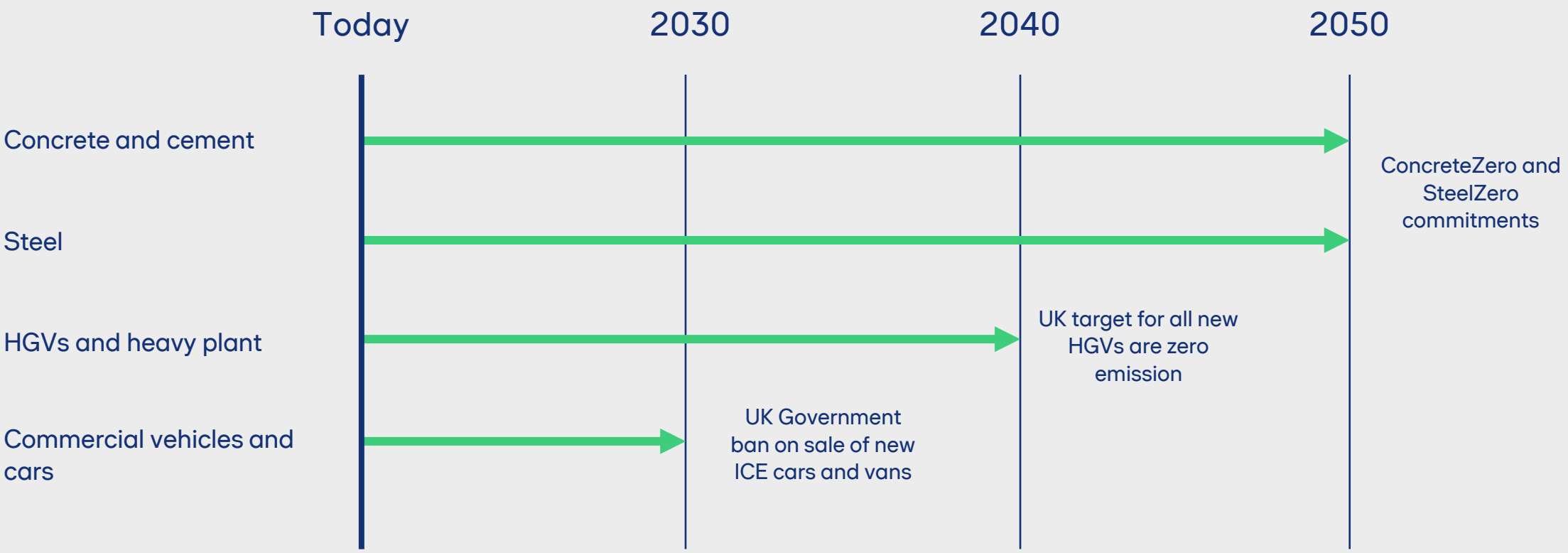
- Ambitious but achievable
- Backed by the latest and best available industry data
- Transparent on the scale of the challenge
- Include our entire supply chain including multiple industries and cutting edge innovation e.g. concrete, steel, automotive, carbon capture and storage

2021 emissions breakdown

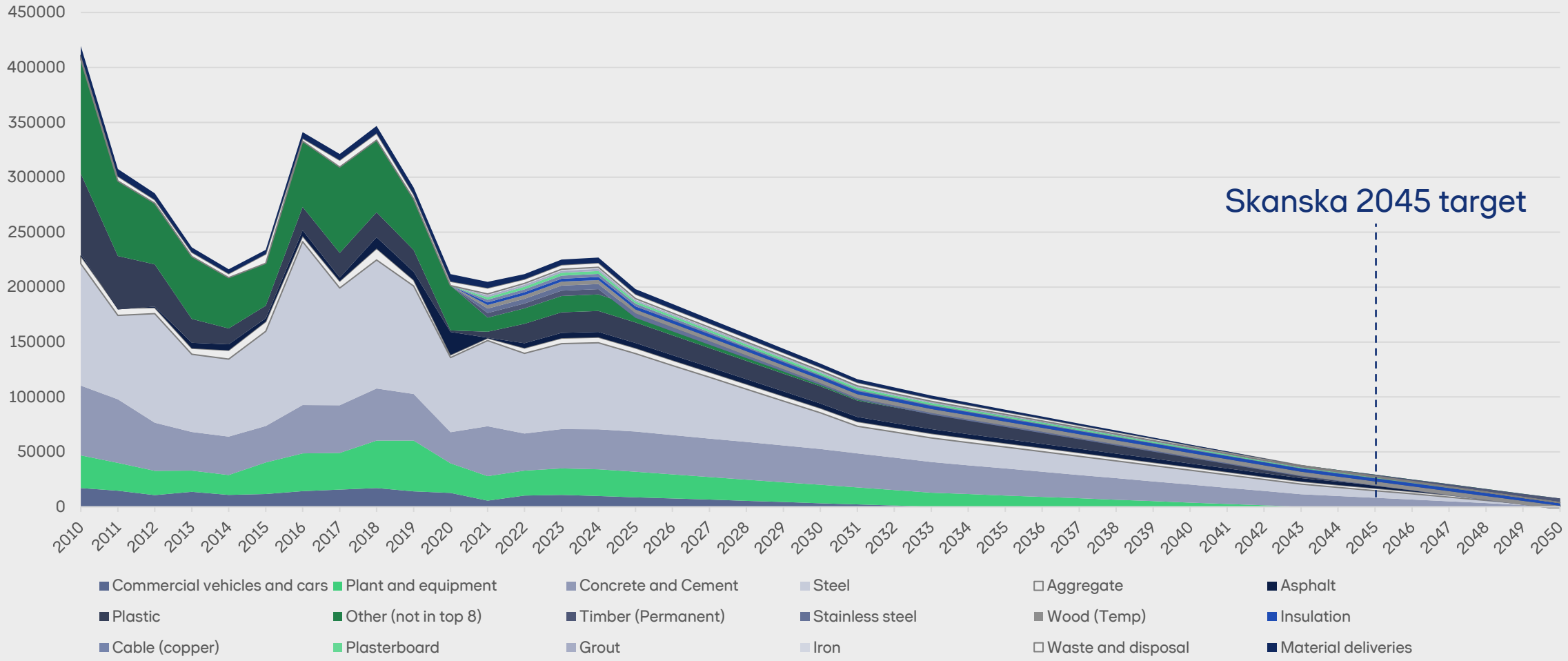


- Steel
- Concrete and cement
- Plant and equipment
- Commercial vehicles and cars
- Waste and disposal
- Material deliveries
- Plastic
- Aggregate
- Asphalt
- Other

Major emission sources net-zero targets



Construction industry: decarbonisation pathways



Next steps

Phase out dates for new non-zero emission goods vehicles

2035

Light Goods Vehicles
(Under 3.5t)

All new vehicles required to have significant zero emission capability and 100% zero emissions at the tailpipe from 2035

2035

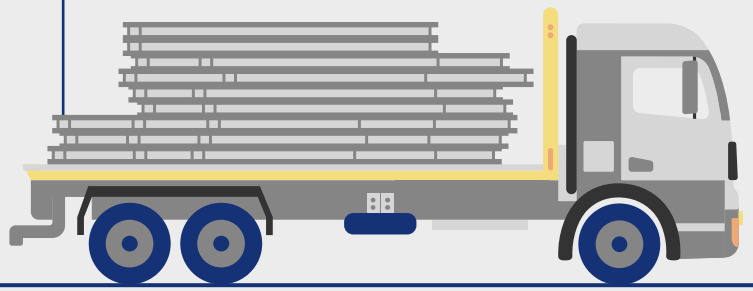
Heavy Goods Vehicles
(3.5t to 26t)

End the sale of new non-zero emission HGVs in category by 2035 or earlier if a faster transition seems feasible*

2040

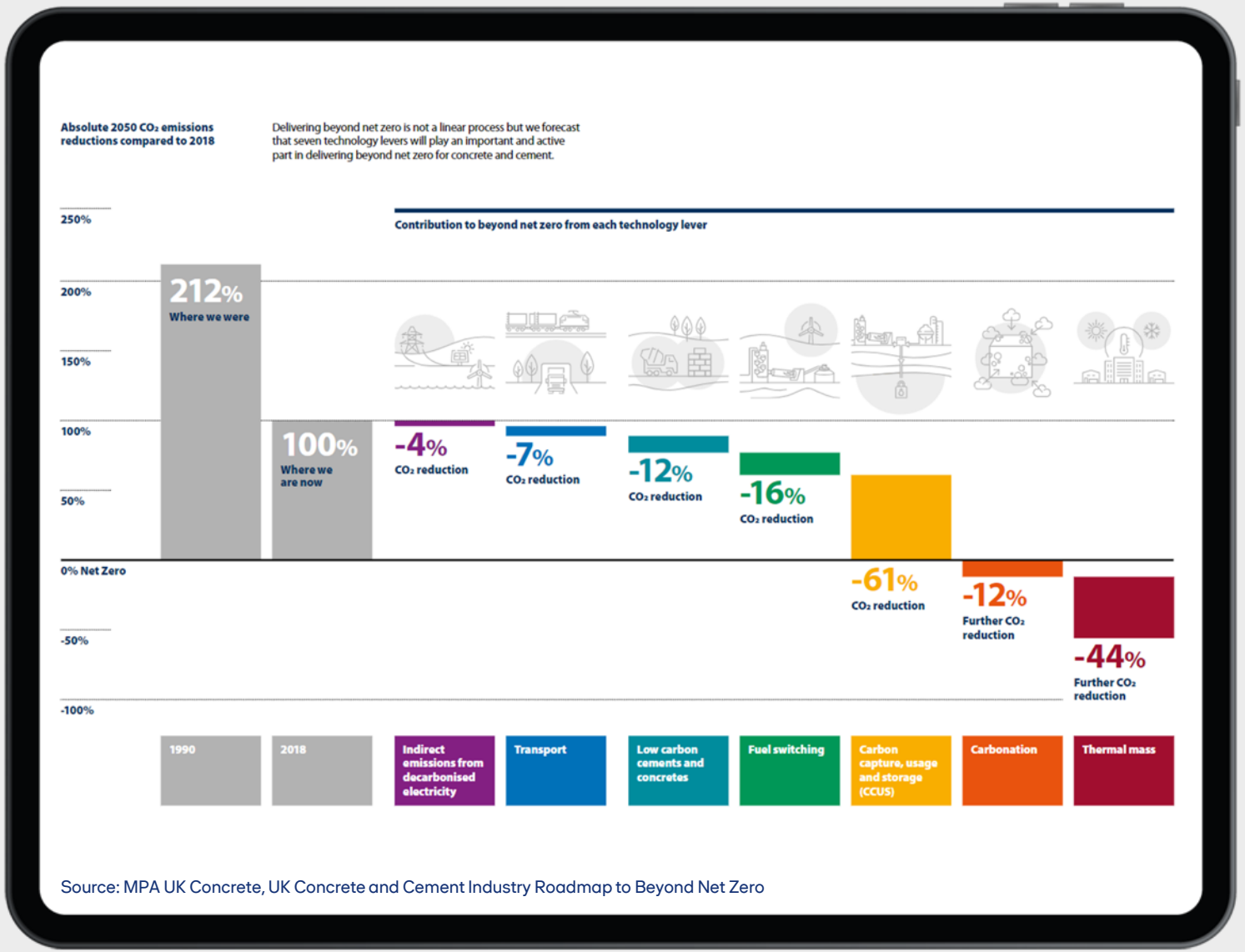
Heavy Goods Vehicles
(Above 26t)

End the sale of all new non-zero emission HGVs by 2040 or earlier if a faster transition seems feasible*

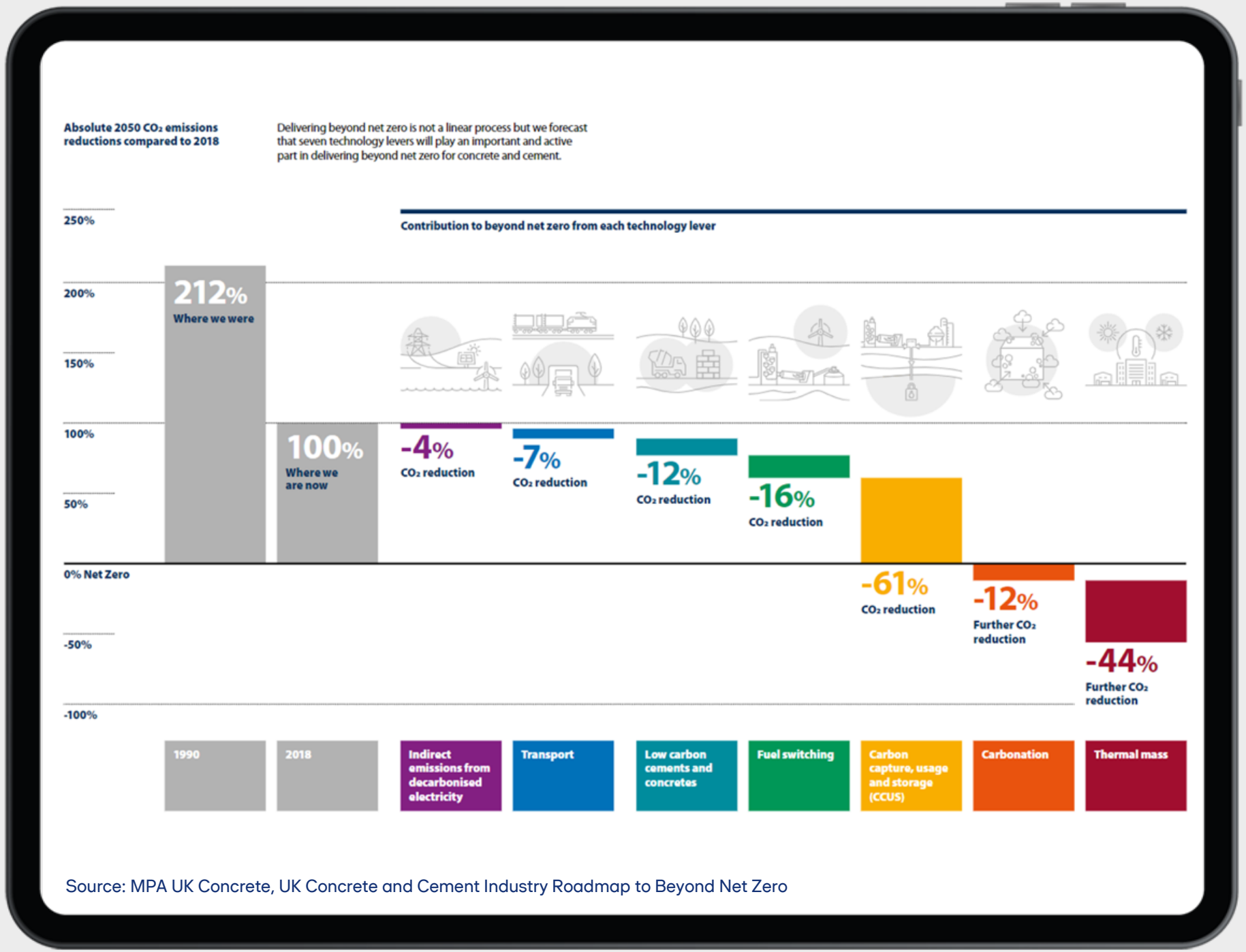


* Subject to consultation

Concrete roadmap

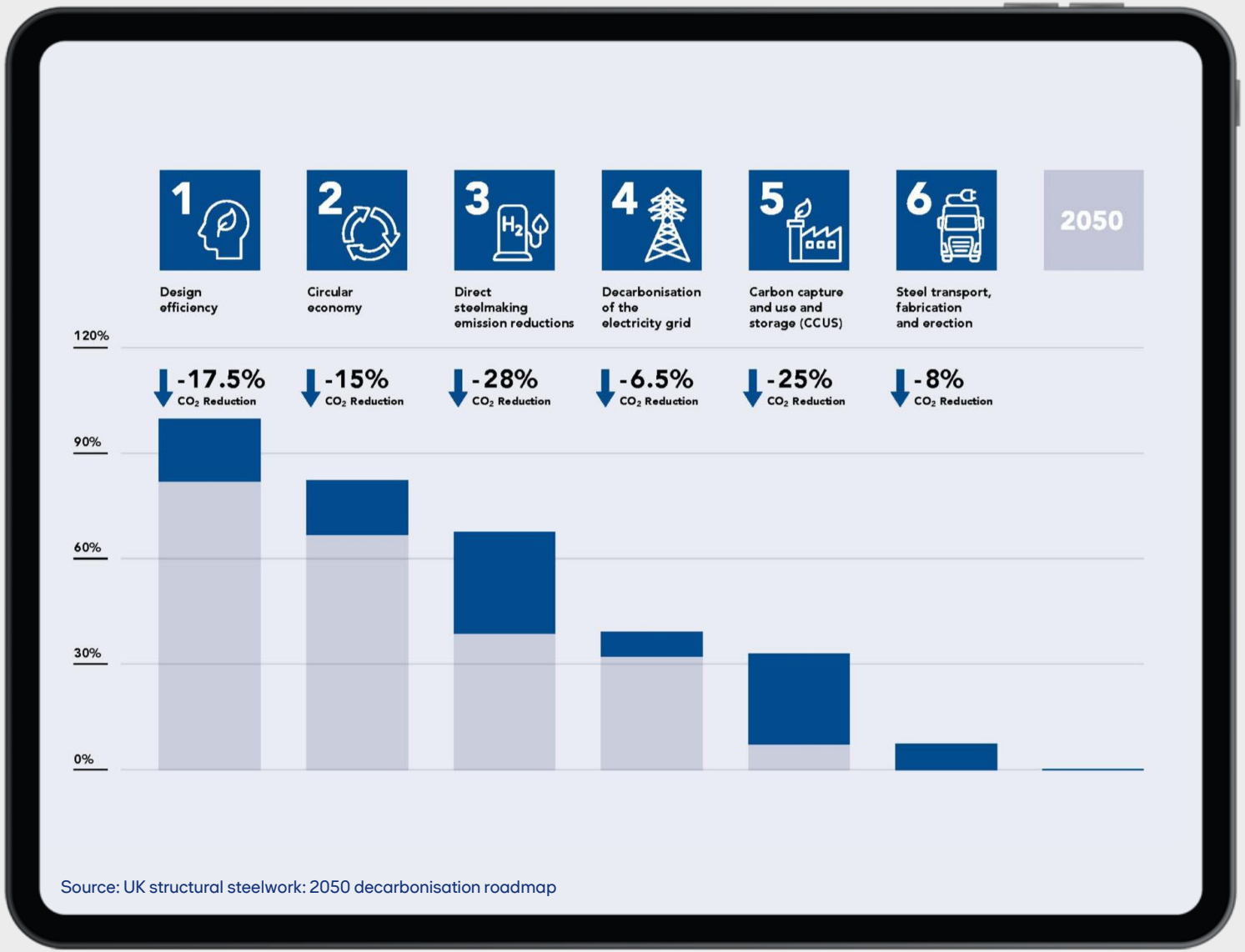


Source: MPA UK Concrete, UK Concrete and Cement Industry Roadmap to Beyond Net Zero

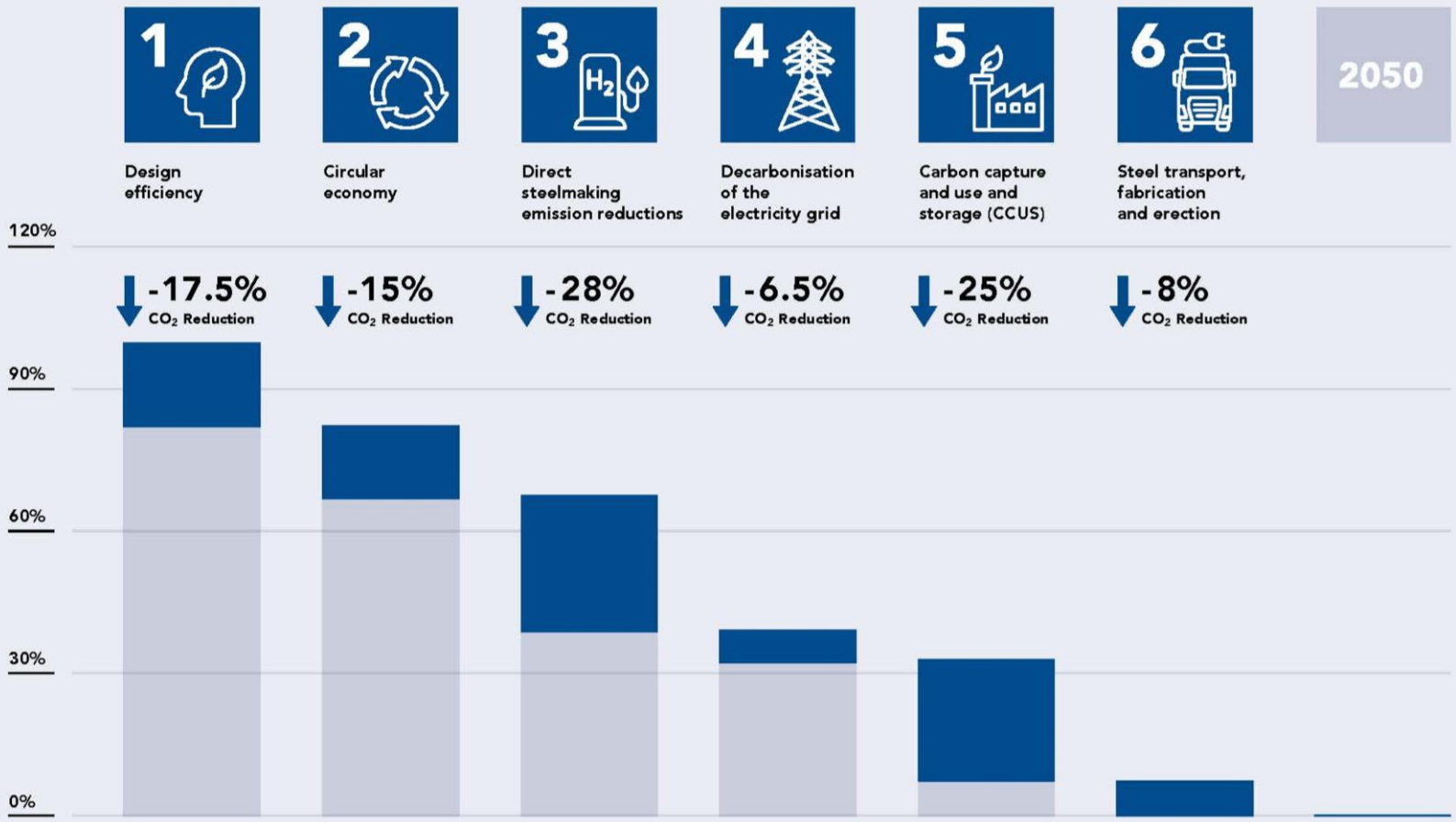


Source: MPA UK Concrete, UK Concrete and Cement Industry Roadmap to Beyond Net Zero

Steel roadmap



Source: UK structural steelwork: 2050 decarbonisation roadmap



Source: UK structural steelwork: 2050 decarbonisation roadmap

Collaboration | Innovation | Action

By 2045

Skanska UK will be net-zero emissions across all scopes