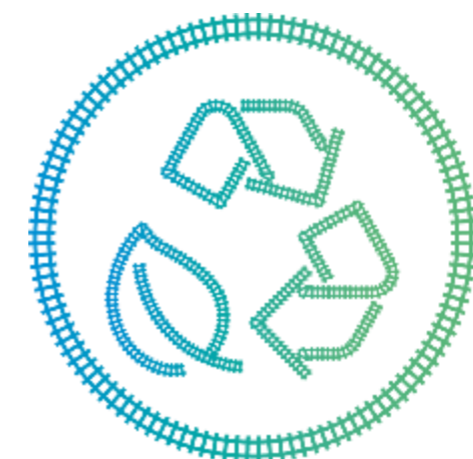


Zero waste Railways

CIRCULARITY BEYOND ZERO: GOING FURTHER
THAN SUSTAINABILITY



**ZERO WASTE
RAILWAYS**

Welcome and introduction



Samuel Jones

CE Sector Chair,
Environmental
Specialist

RSSB



Isabelle De Keyzer

Senior Advisor,
Sustainability

UIC

Workshop timeline – Morning session

08:45-09:00	Arrival
9:00-09:45	Welcome by nora® by Interface with a short presentation on their services to the transport sector
09:45-10:45	Factory tour + inlay center nora® production
10:45-11:00	Coffee Break
11:00-12:00	nora® sustainability presentation + open discussion
12:00-13:00	Lunch at the welcome center

Workshop timeline – Afternoon session

12:00-13:00	Lunch at the welcome center
13:00-13:20	Presentation from ProRail on biobased materials Boundary Values for Station Canopies and Biogenic Carbon Storage
13:20-13:40	Presentation from NS
13:40-14:00	Bane NOR strategies and initiatives for Circular Economy
14:00– 14:20	Pallet control tower - A partnership to improve the global management of EUR pallets Collaboration between ÖBB/RCG/EUR and PCT, status, perspective and potential benefit for other UIC companies and partners
14:20-14:45	Coffee break and networking
14:45-15:15	Technical demonstration “How to install a floor in a train”
15:15 – 15:30	Circularity at scale
15:30 -17:00	Workshop on Circularity Beyond Zero: Advancing Positive Impact in Rail Proposed format: break-out table discussions
17:00-17:30	Wrap up and closing
17:50-18.00	Bus transfer to restaurant For participants staying until 12 February



INTERNATIONAL UNION
OF RAILWAYS

Welcome and presentation by nora® by Interface

09:00 - 09:45 (45')

Introduction presentation nora® by Interface®



Michael Schmidt

Sales Manager
Transportation

nora® by Interface

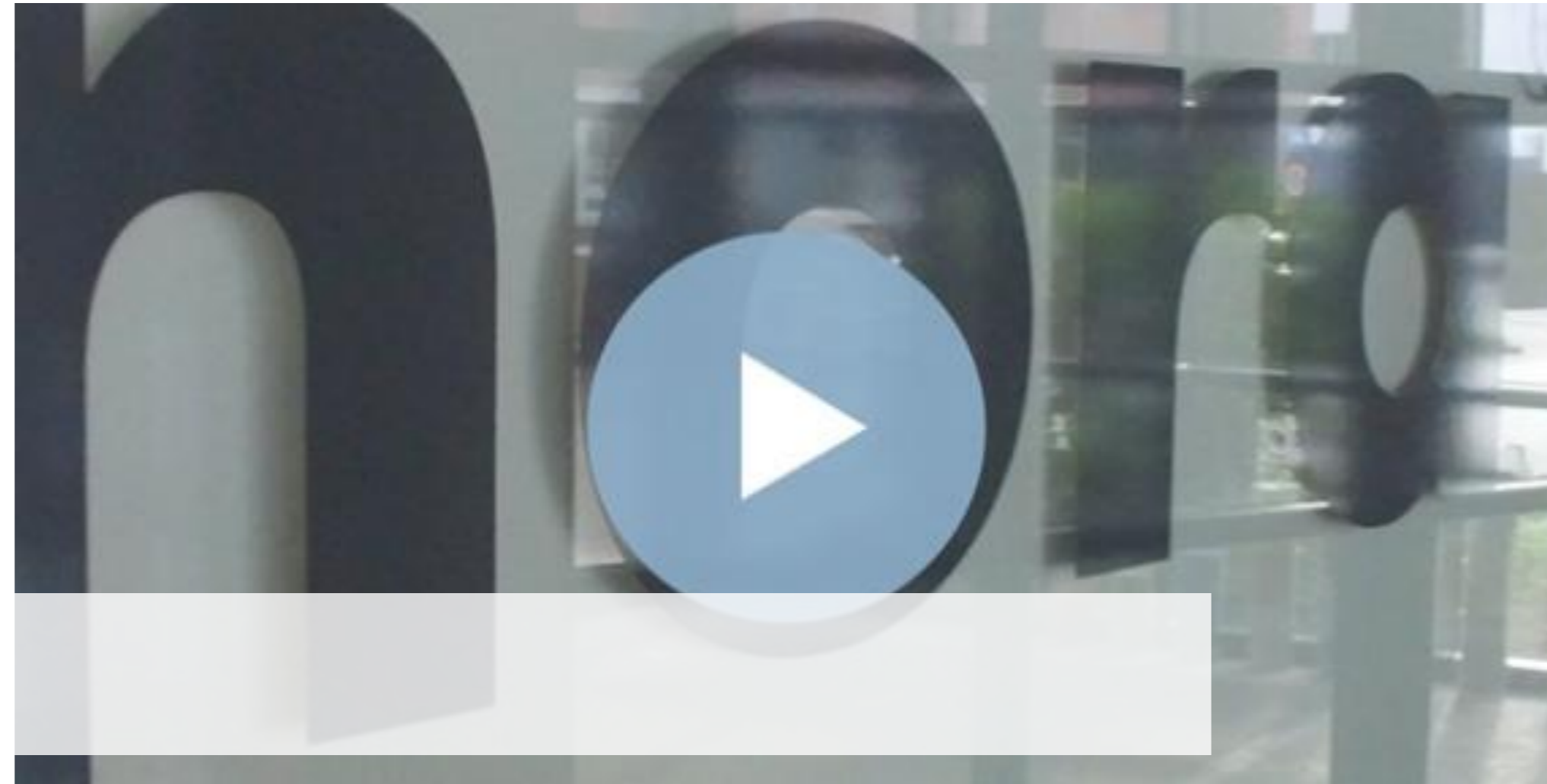


Juergen Karger

Sales Manager
Transportation

nora® by Interface

NORA SYSTEMS AT A GLANCE



**Made in
Germany**

Headquarters, R&D-Center
and production are based
in Weinheim

2007

founded from
Freudenberg Bausysteme KG

2. biggest employer
in Weinheim

71400 m² effective area in the
Industrial Park Weinheim

2018 **Interface**[®]

1144 employees worldwide,
839 in Germany

nora[®]
by **Interface**[®]

OUR MARKET SEGMENTS



Healthcare



Education



Transportation



Public Buildings



Shops & Stores



Industry & Life Science

OUR CUSTOMERS

ALSTOM
BOMBARDIER

 **Kawasaki**

HITACHI
Inspire the Next

CAF

 **中国中车**
CRRC

 **NIPPON SHARYO**

HYUNDAI
Rotem

 **ŠKODA**

SIEMENS

STADLER

nora[®]
by **Interface**[®]

OUR CUSTOMERS

Deutsche Bahn (D)

Nedtrain (NL)

SNCF, RATP (F)

STIB / MIVB (B)

Wiener Linien (A)

RENFE (E)

New York City Transit (USA)

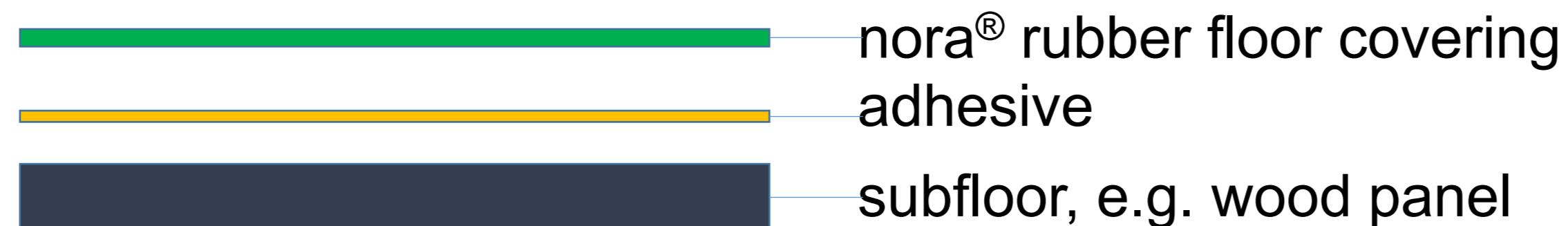
Metro Tokyo (JPN)

SMSC/SMRT (KOR)



THE FLOORING AS A SYSTEM SOLUTION

Subfloor + Adhesive + nora[®] rubber floor covering



As a system these components must fulfill the strictest requirements for functionality and safety (fire protection).

nora systems arranges for full system tests acc. customer requirements, f. ex. surface spread of flame, smoke density and toxicity according to EN 45545



Fire safety requirements acc. EN 45545-2



Critical heat flux [kW/m ²]	HL1	HL2	HL3
R8, R10	≥ 4,5	≥ 6	≥ 8

Set of requiremt.	Reference	kW/m ²	Parameter	HL1	HL2	HL3
R10	T10.03	25	D _s (max)	600	300	150
	T11.02	w.fl	CIT _G *	1,2	0,9	0,75



noraplan (913)
norament 926

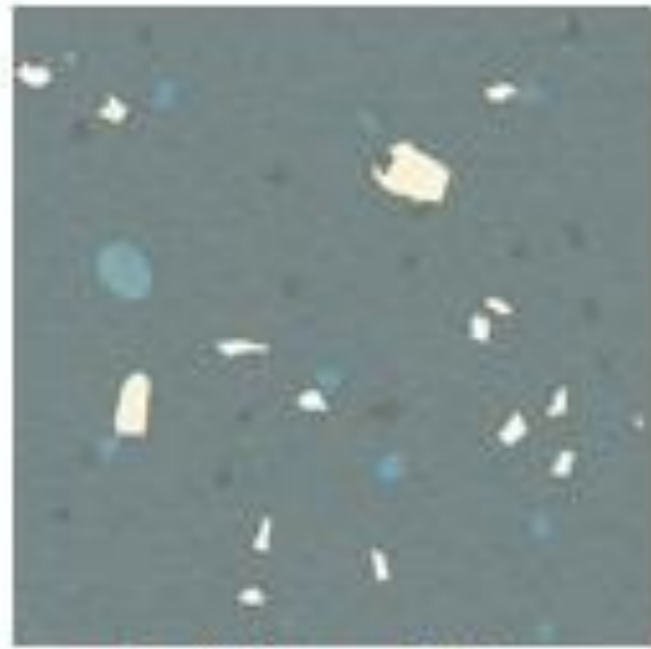


noraplan (931)
noraplan (933)
noraplan (934)

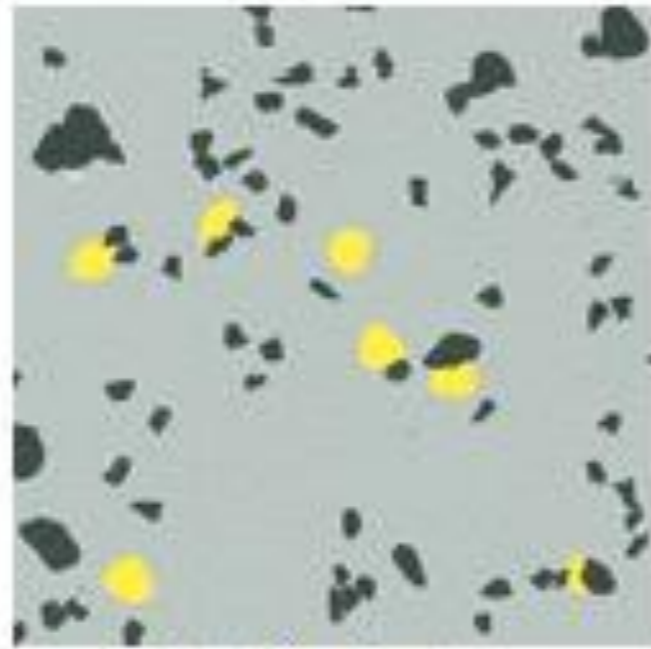


noraplan (931)
noraplan (935)
norament 920

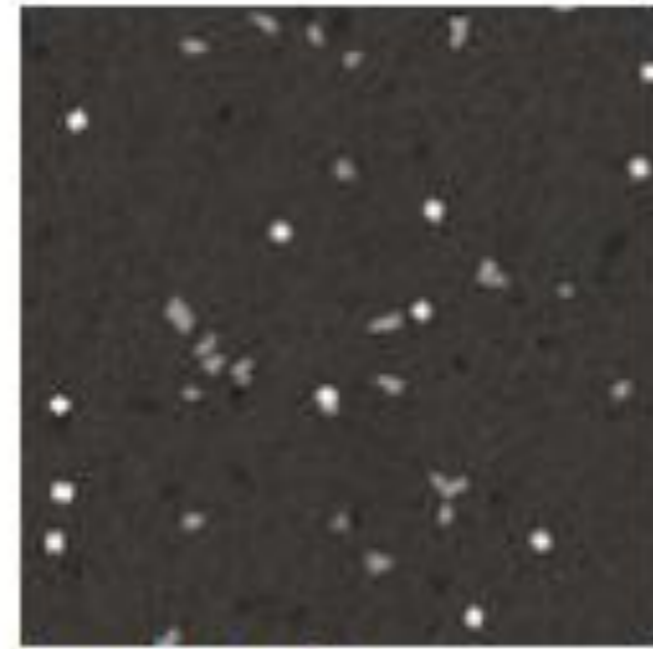
noraplan Designs Transportation



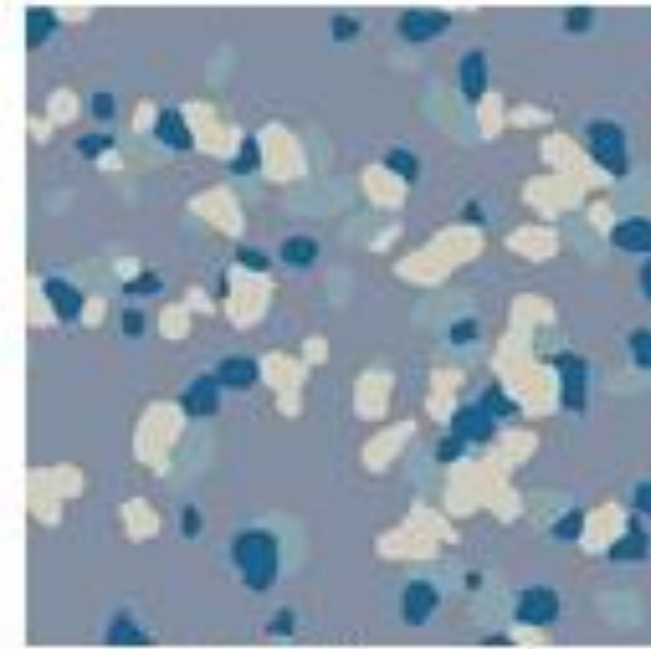
noraplan® stone plus*



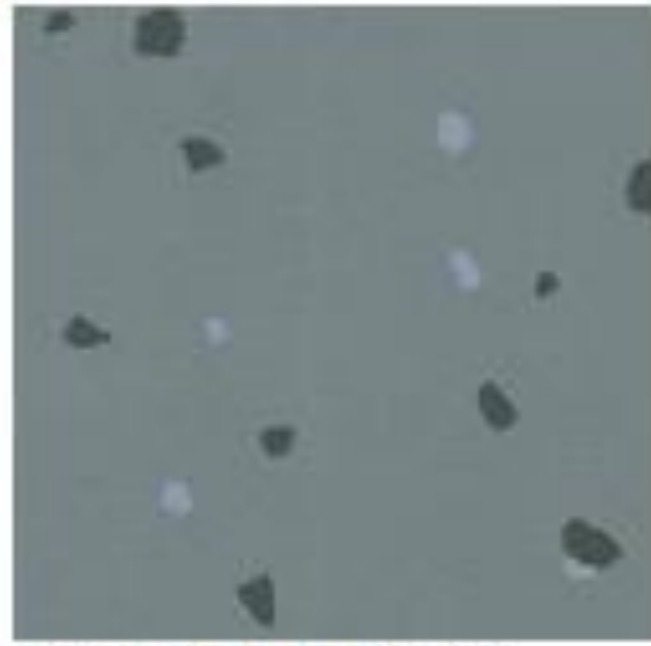
noraplan® grip plus*



noraplan® grip*



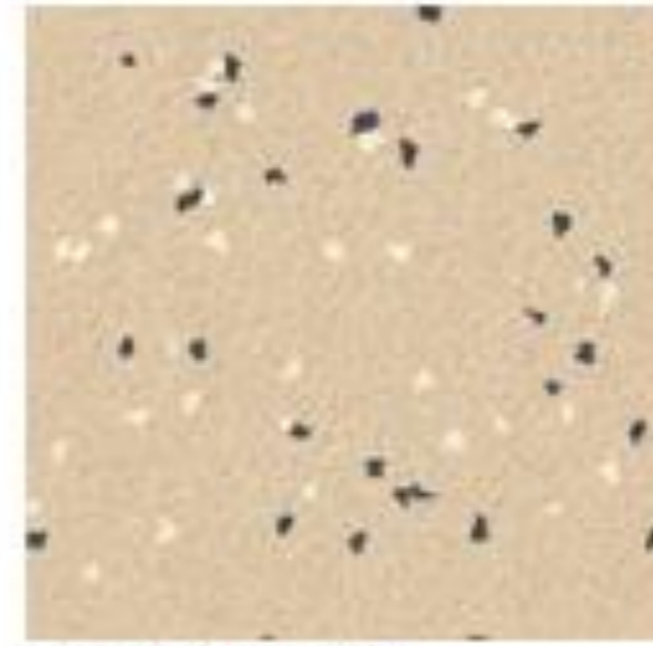
noraplan® plus*



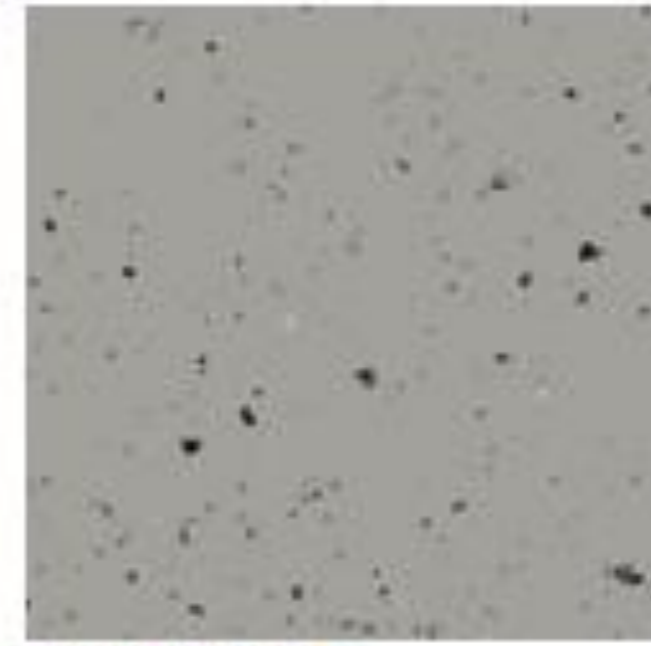
noraplan® effect spez.*



noraplan® sentica



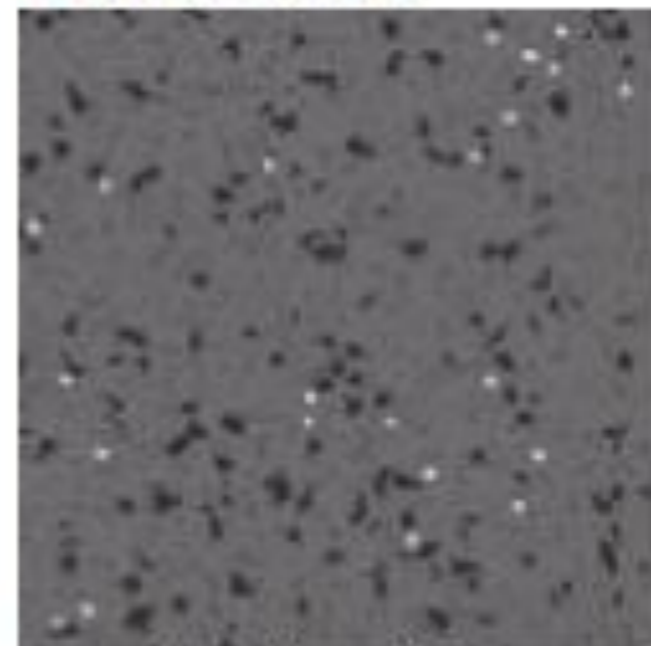
noraplan® stone*



noraplan® unita



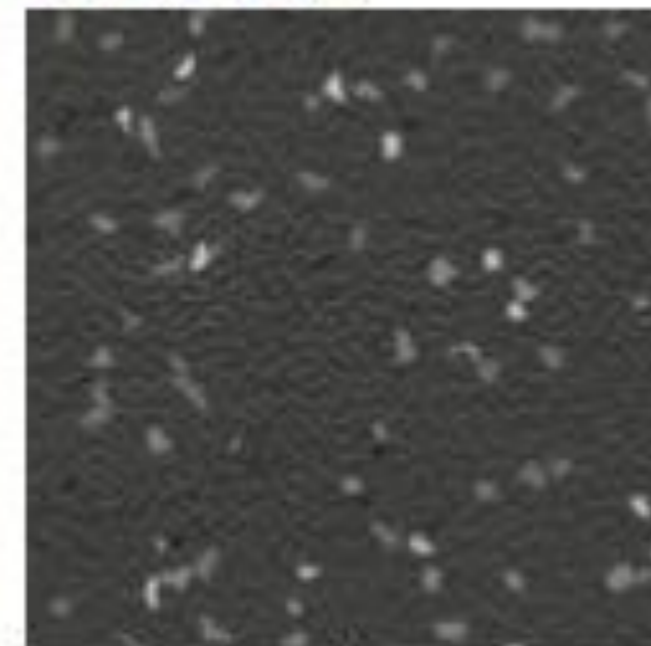
noraplan® signa



noraplan® ultra grip*

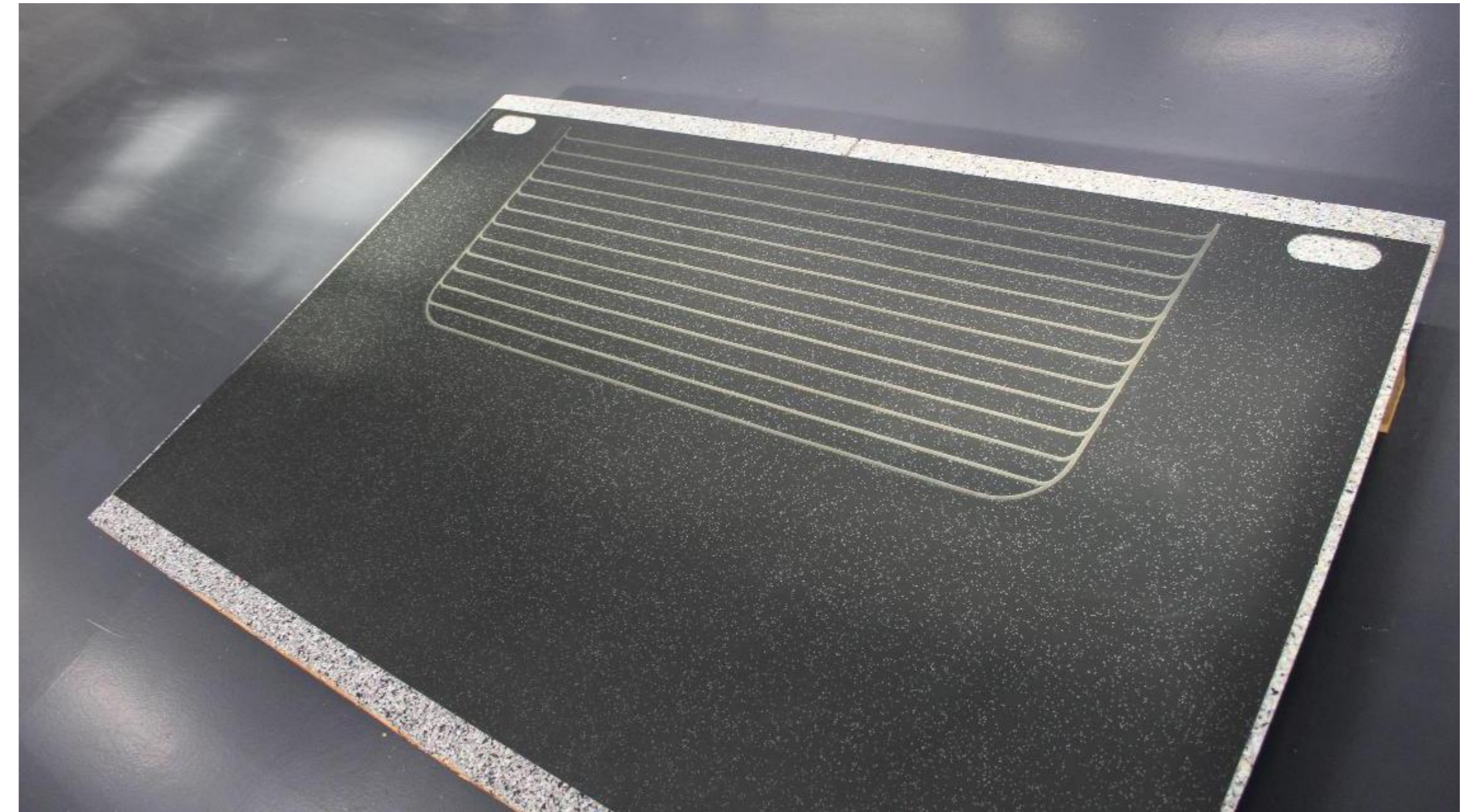


noraplan® valua

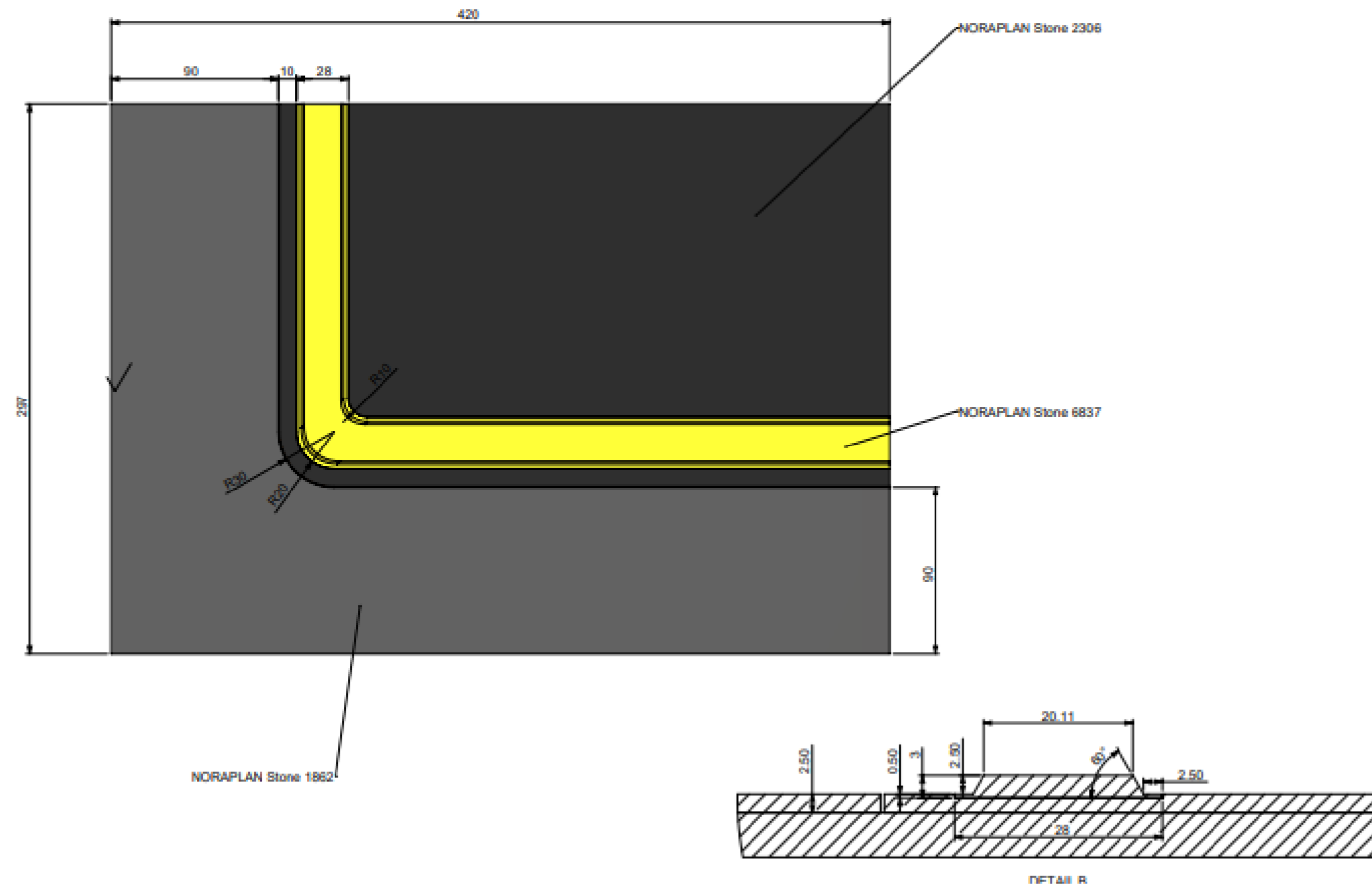


noraplan® voya*

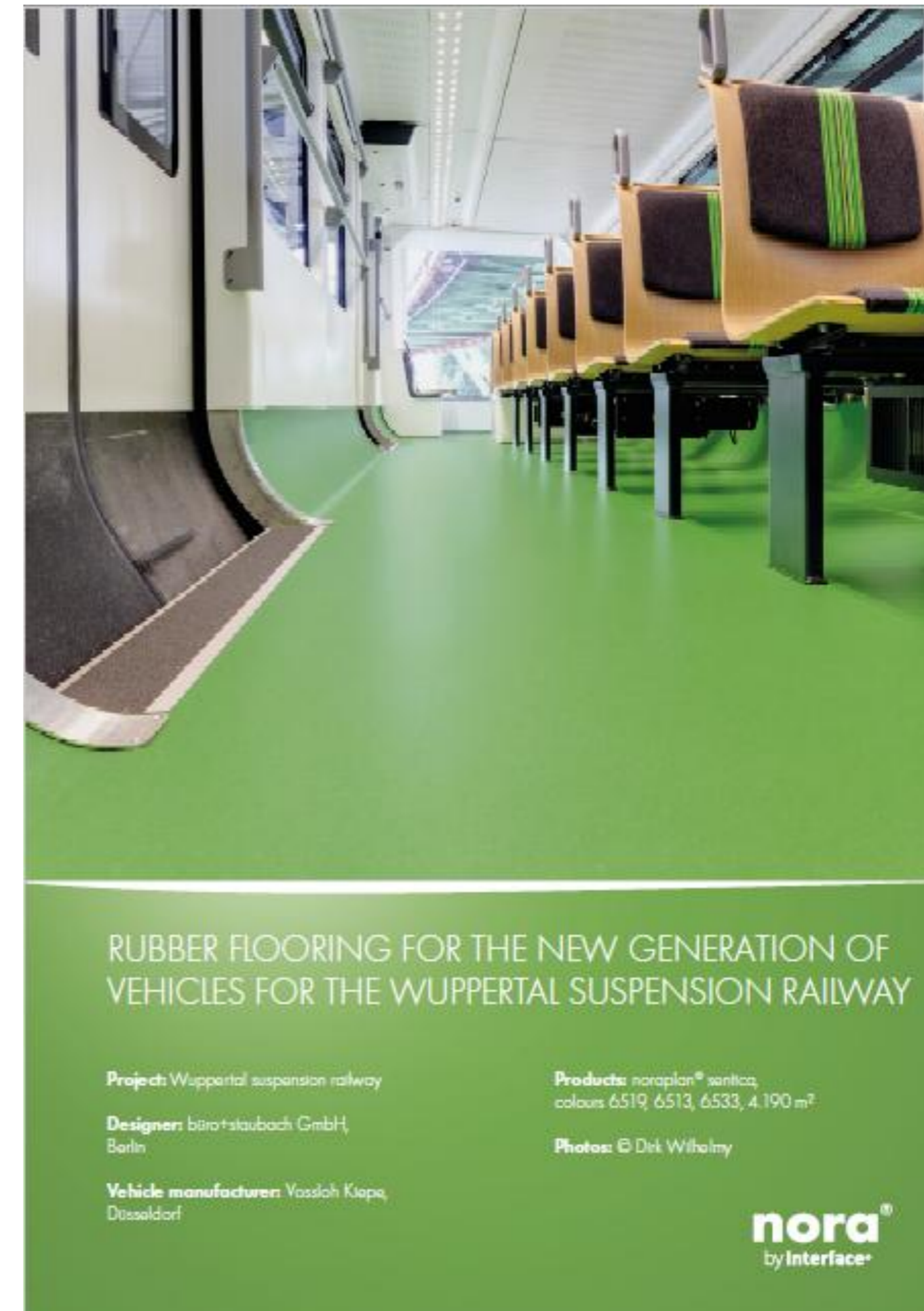
Grooved Inlays



Tactile solution for RENFE Spain



nora® Transportation References



PROJECT METRO RIYADH (Siemens / Metawell)



nora[®]
by **Interface**[®]

References noraplan nTx



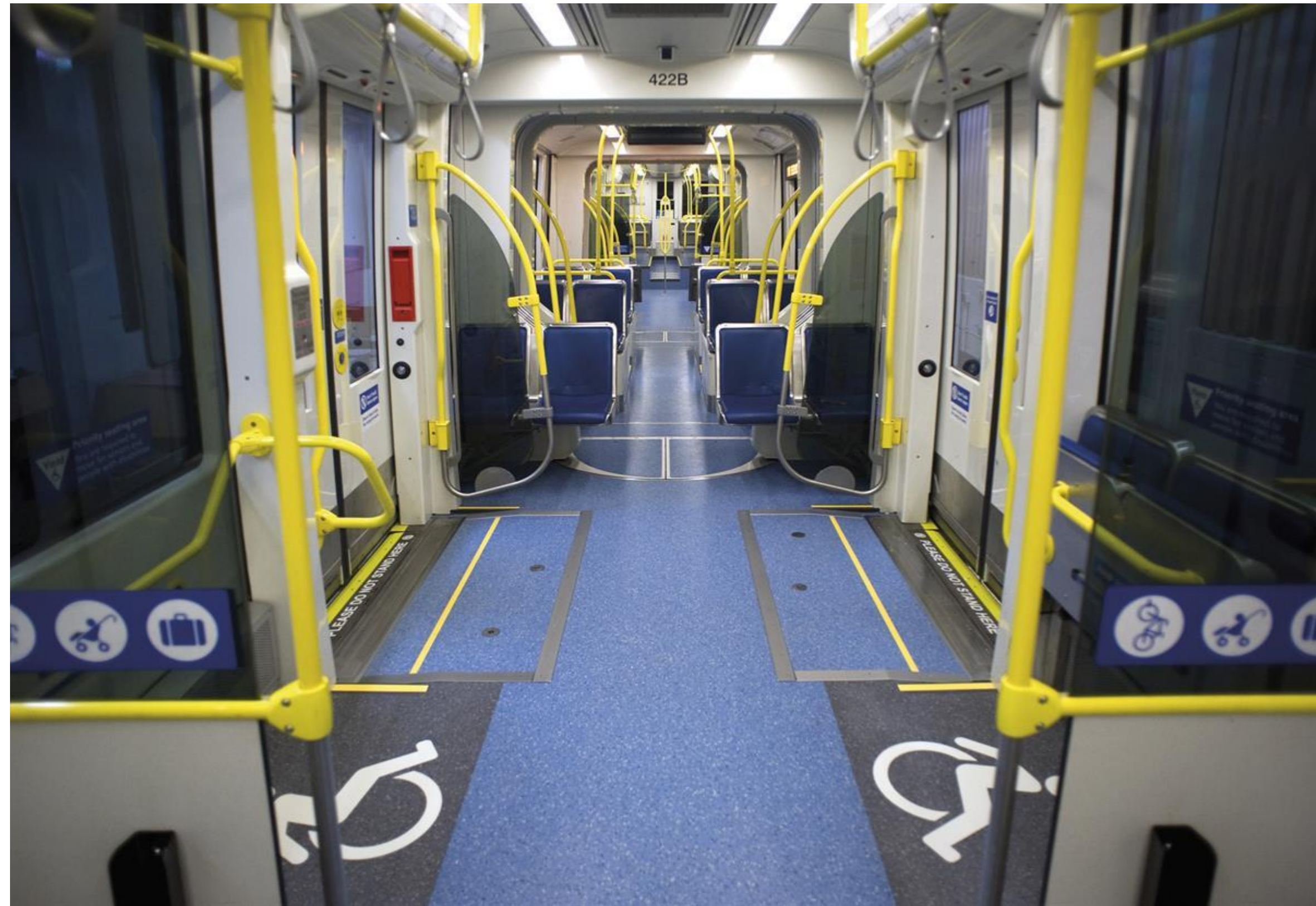
City Trains, Berlin



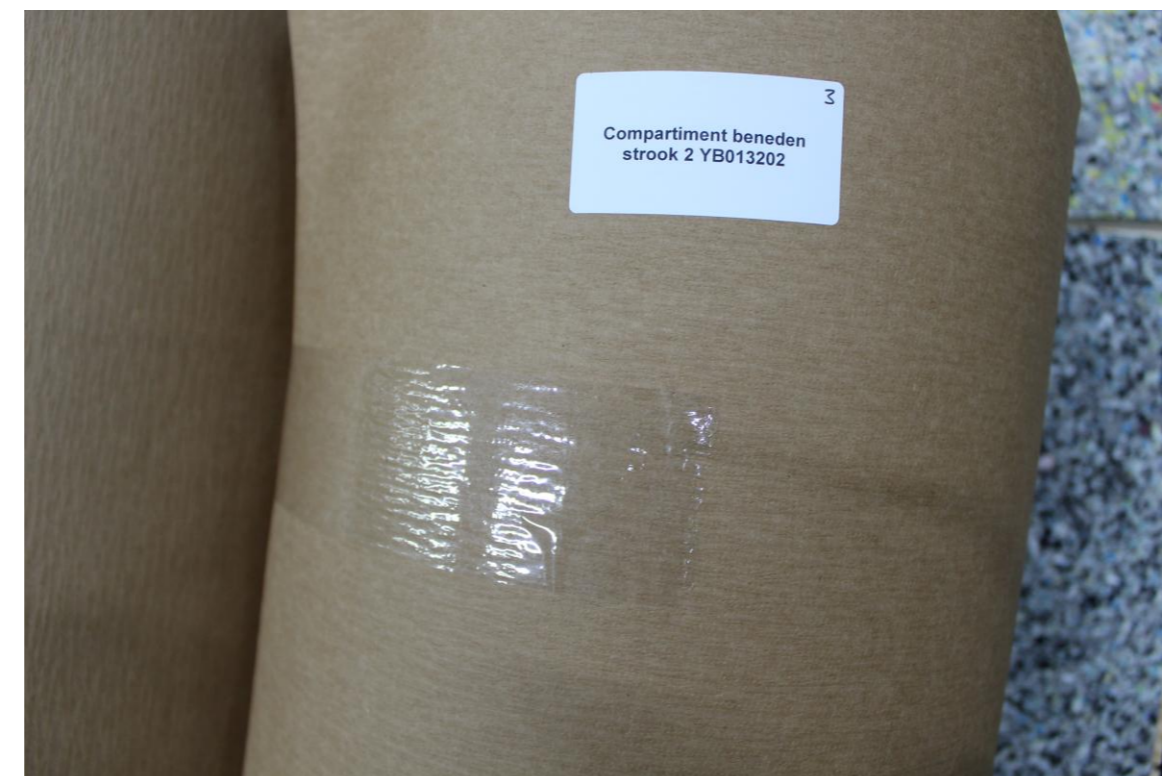
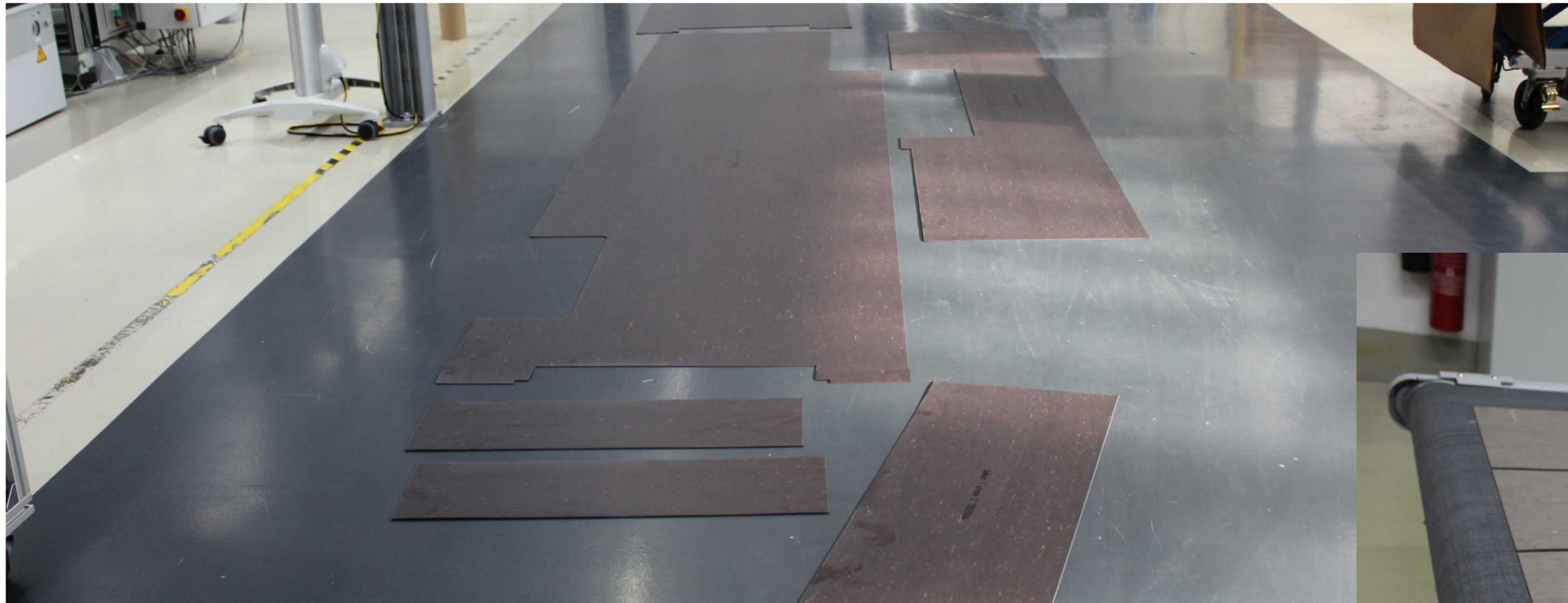
References noraplan® nTx – total order quantities

Project	Builder	Quantity in m ²	Product	Delivery schedule
NS Holanda	CAF Spain	23.100	np grip 931 nTx	2016-2019
NS Holanda - ampliacion	CAF Spain	20.000	np grip 931 nTx	2019-2022
Metro Santiago	CAF Spain	11.000	np stone 931 nTx	2015-2017
X-Wägen Wien	Siemens	10.000	np stone 931 nTx	2018-2030
Metro Riyadh	Siemens	9.000	np stone 931 nTx	2016-2018
Metro Istanbul	CAF Spain	7.900	np stone 931 nTx	2015-2016
Metro Alger	CAF Spain	4.100	np stone 931 nTx	2017-2018
Metro Sofia	Siemens	3.900	np stone 931 nTx	2017-2020
Flytoget	CAF Spain	2.900	np plus 931 nTx	2016-2018
Tram Canberra	CAF Spain	1.300	np signa 913 nTx	2017-2018
Caledonian Sleeper	CAF Spain	700	np stone 931 nTx	2017
Northern Arriva	CAF Spain	800	np stone 931 nTx	2017
ICE3 Deutsche Bahn	DB AG	2.500	np ultra grip 931 nTx	2017-2020
S-Bahn Berlin Renovierung	DB AG	50.000	np effect 931 nTx	2018 - 2025
Transpennine	CAF Spain	1.400	np stone 931 nTx	2017
Metro Mexico	CAF Mexico	3.300	np stone 931 nTx	2017-2018
Metro Quito	CAF Spain	5.500	np stone 931 nTx	2017-2018
U-Bahn Berlin	Stadler	22.000	np ultra grip 931 nTx	2021 - 2025

TRIMET, USA



NEDTRAIN



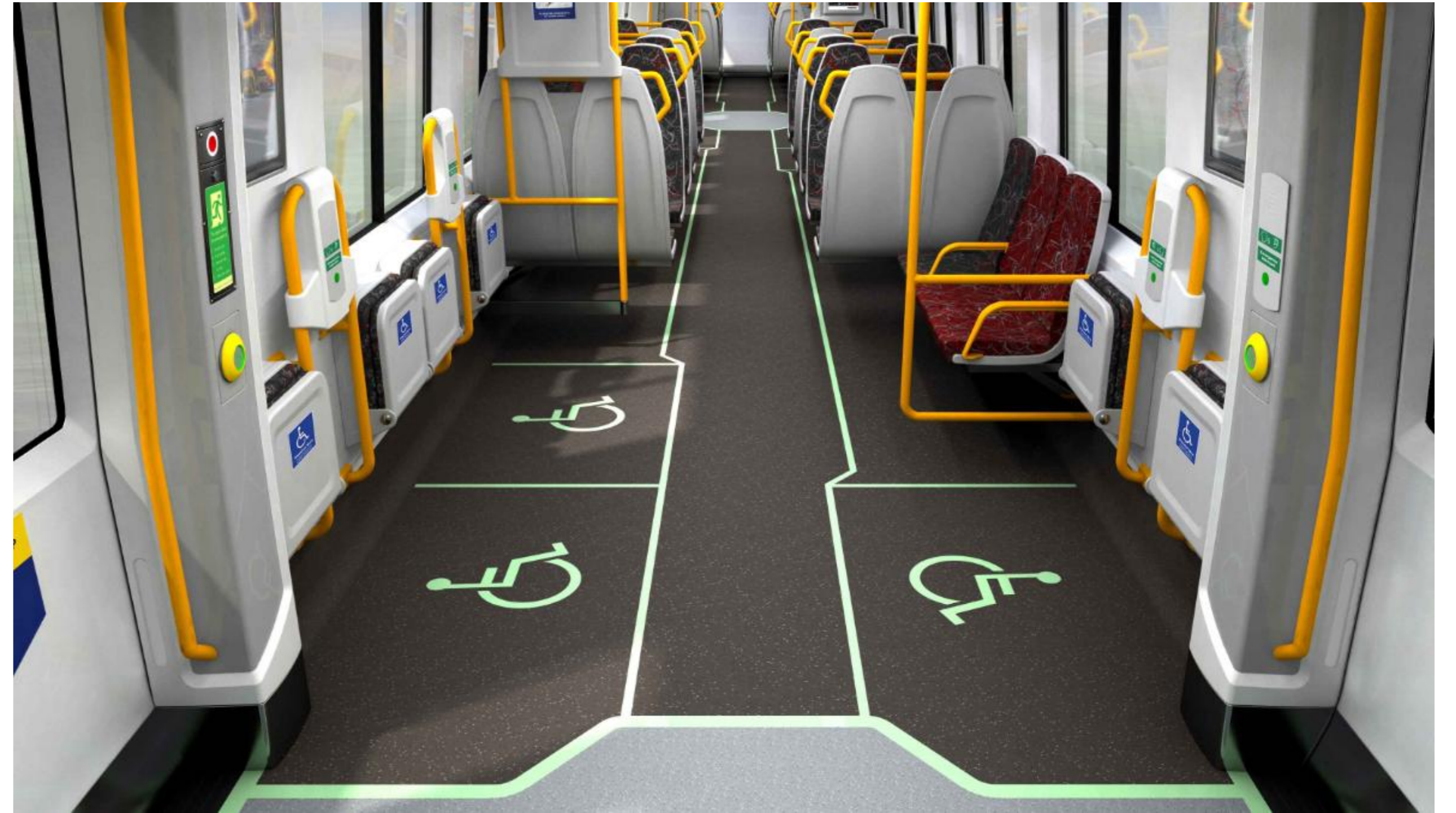
NEDTRAIN



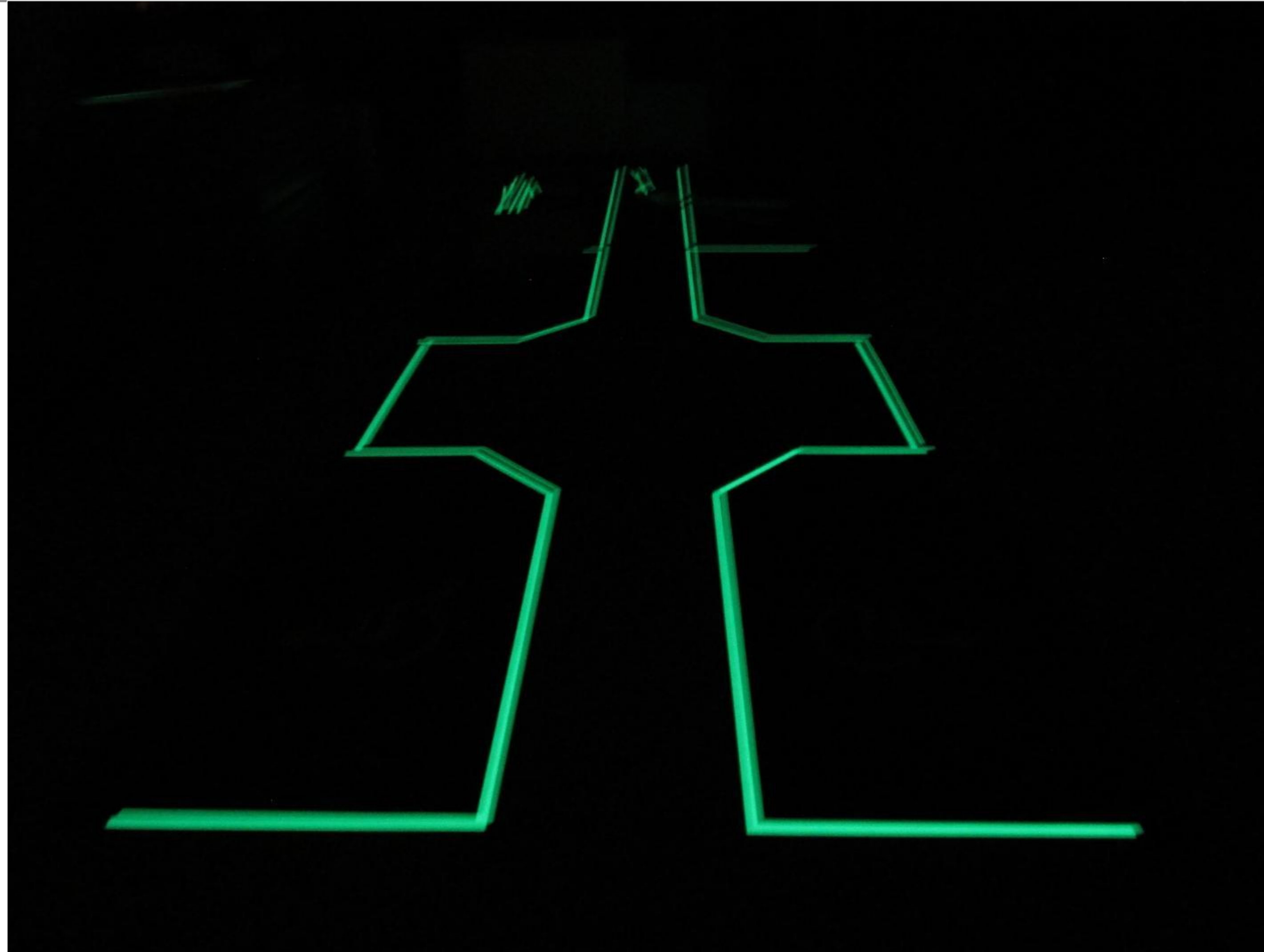
nora[®]
by **Interface**[®]



QUEENSLAND AUSTRALIA



In case of emergency..



nora[®]
by **Interface**[®]

DOWNER Australia



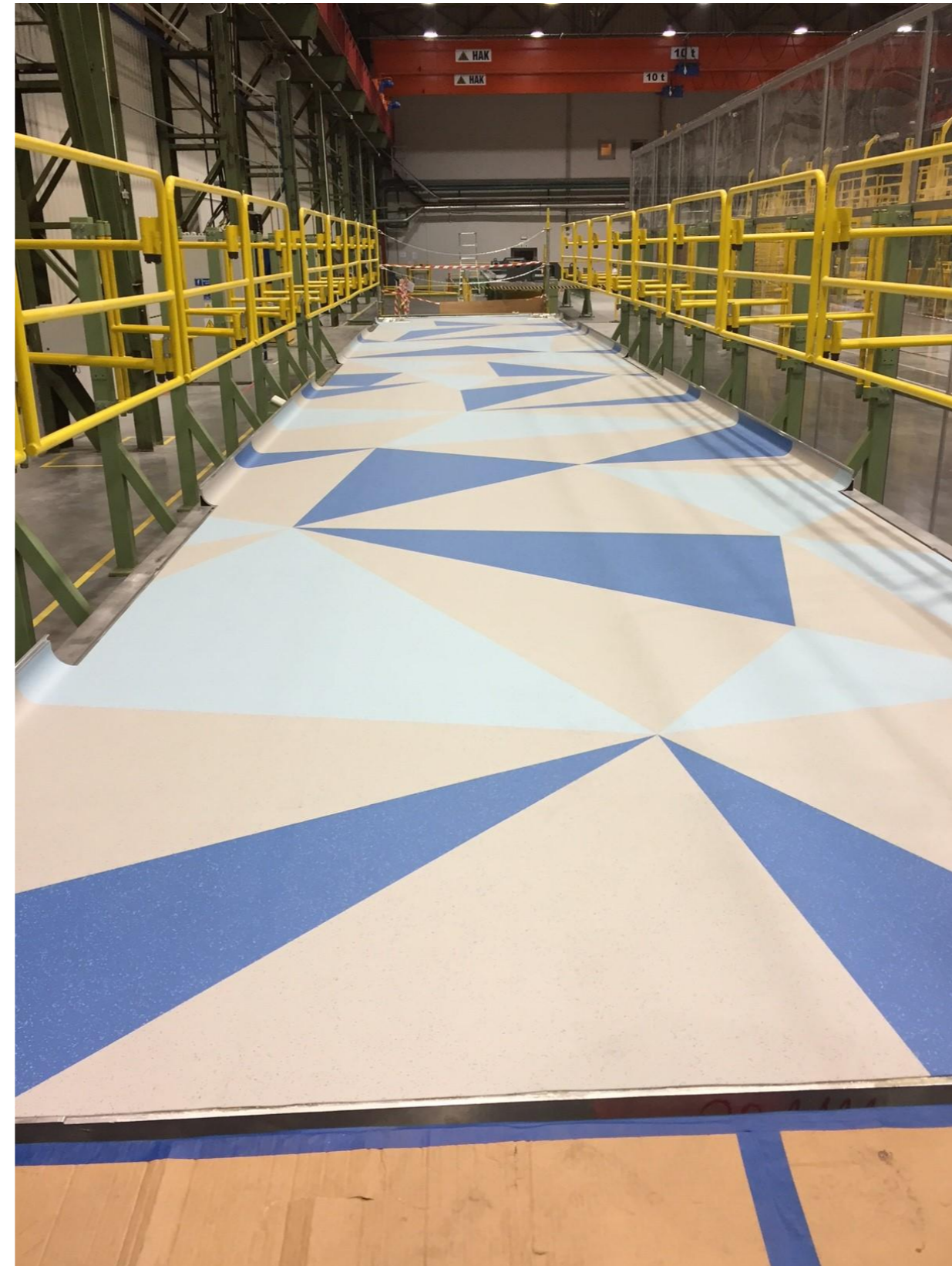
nora[®]
by **Interface**[®]

ALSTOM, REM Montreal



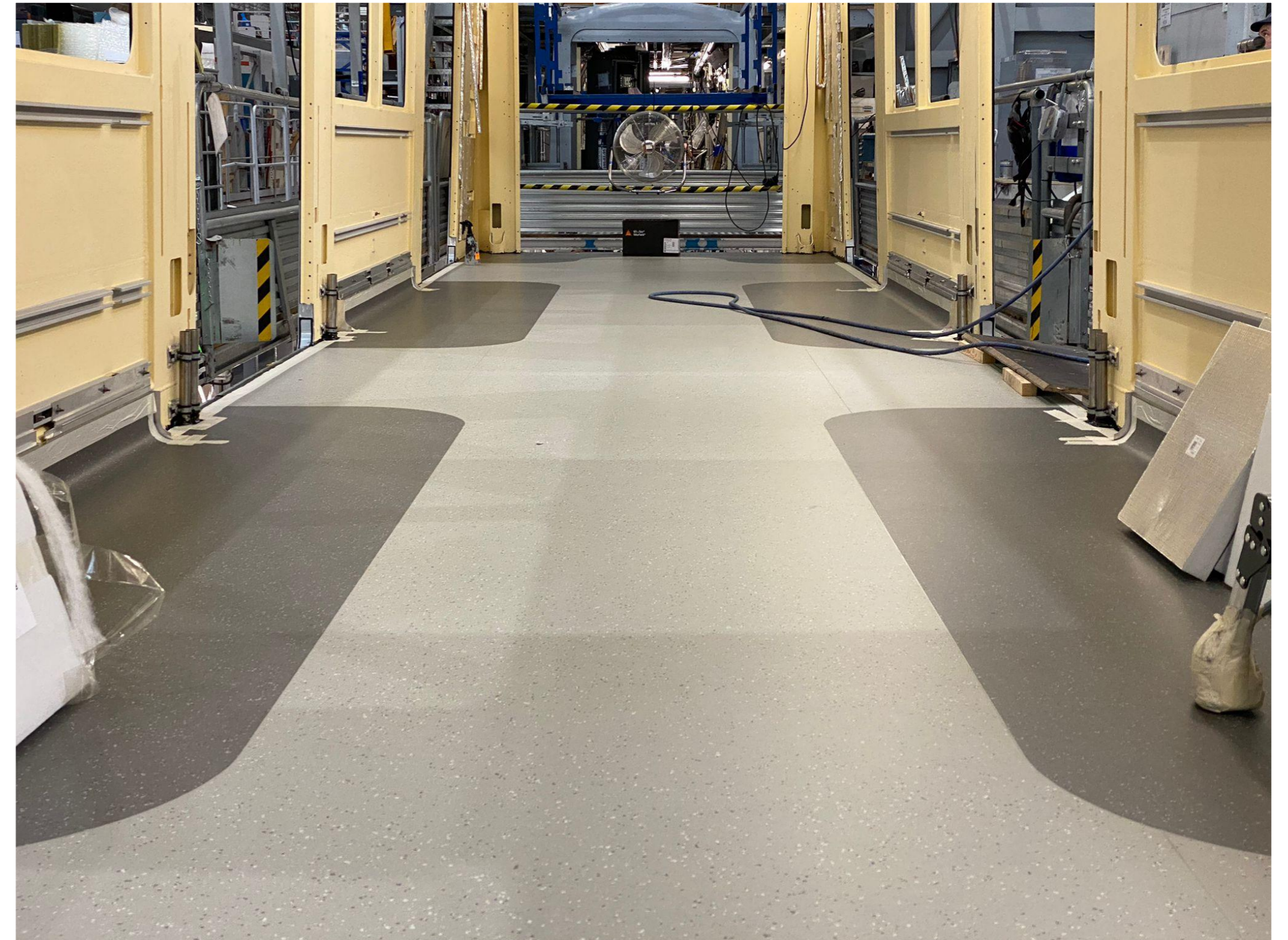
nora[®]
by **Interface**[®]

ALSTOM, METRO DUBAI



nora[®]
by **Interface**[®]

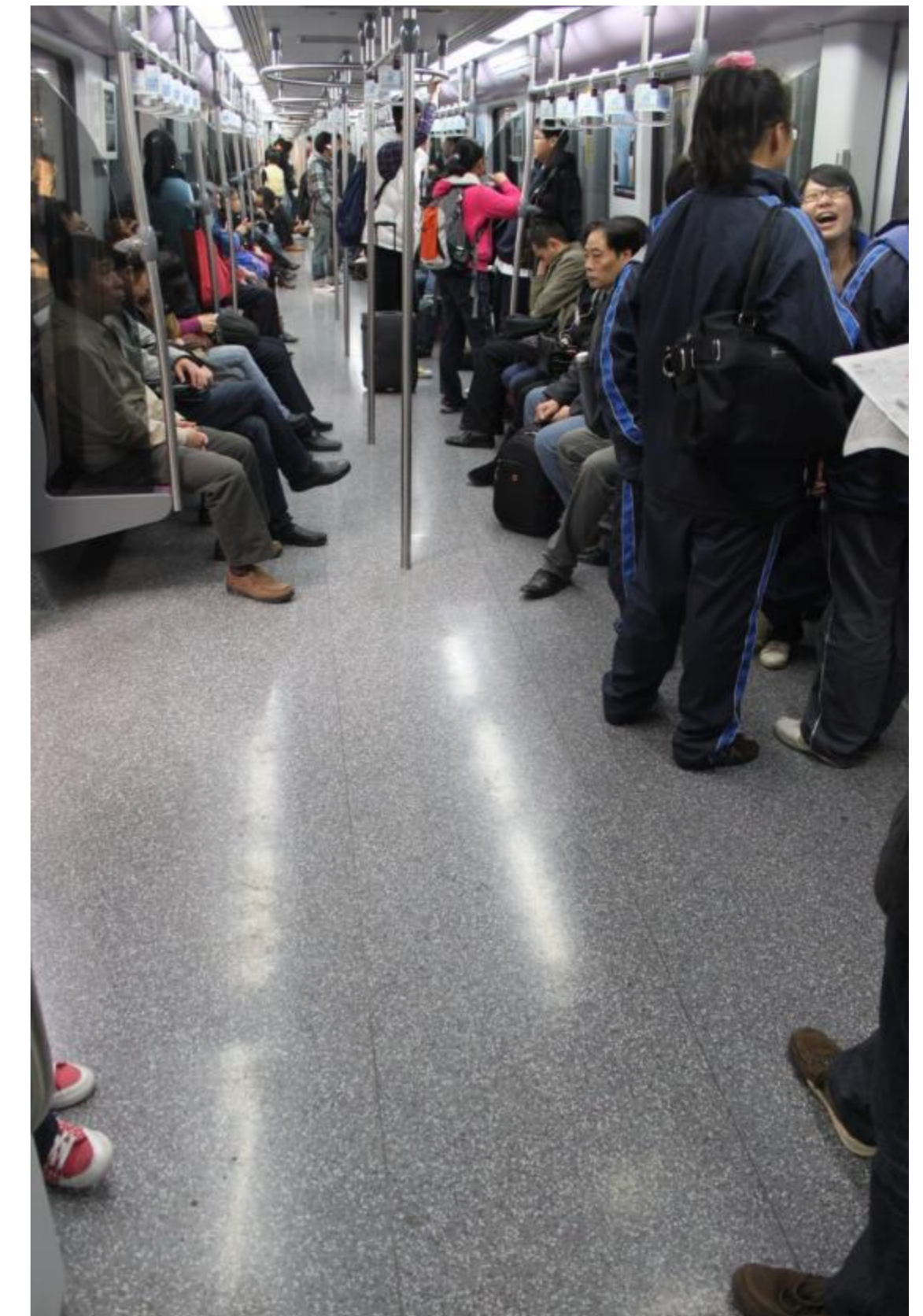
CAF, METRO BRUSSELS



Deutsche Bahn, S-Bahn Munich



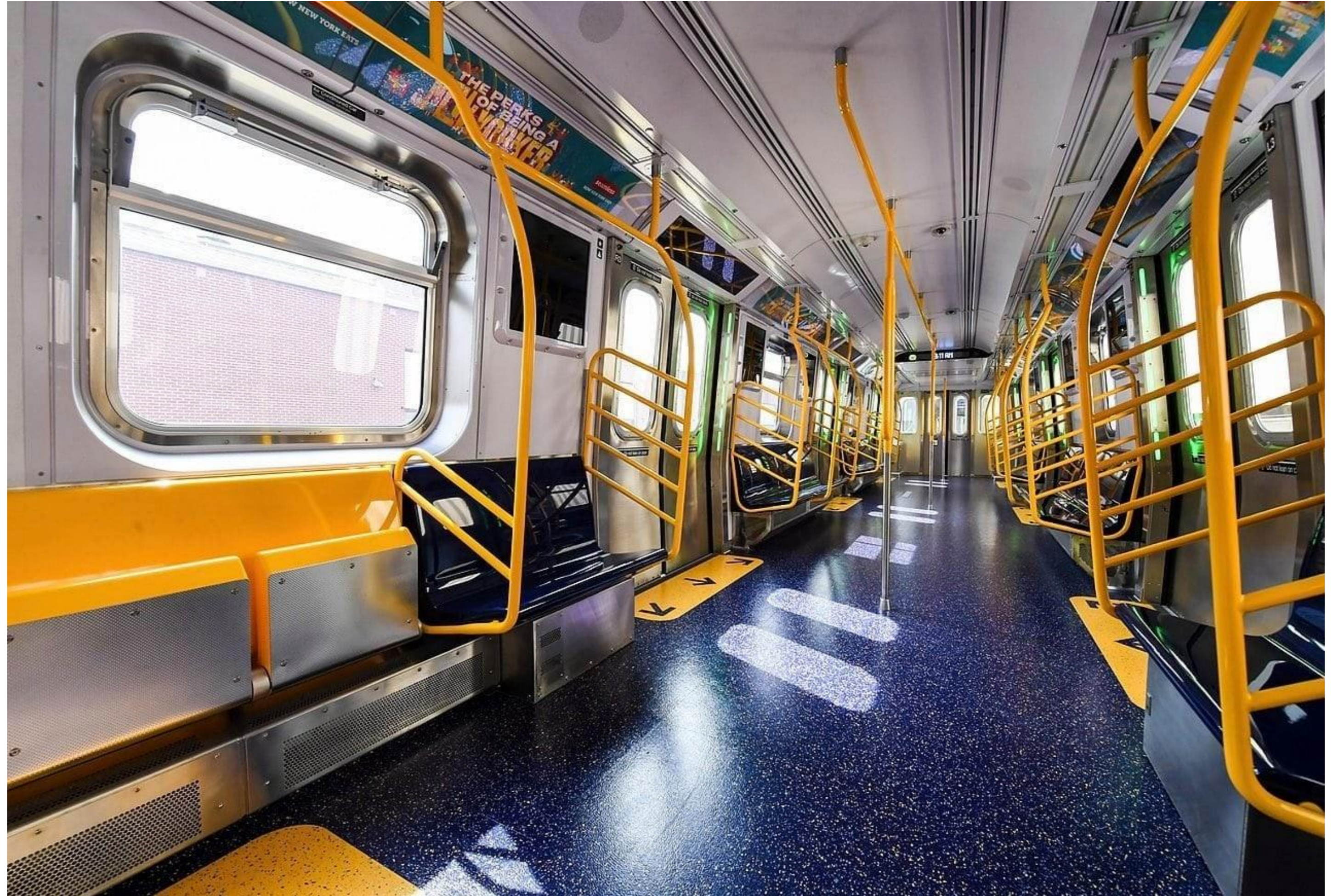
Shanghai Metro ...after 20 years in service...

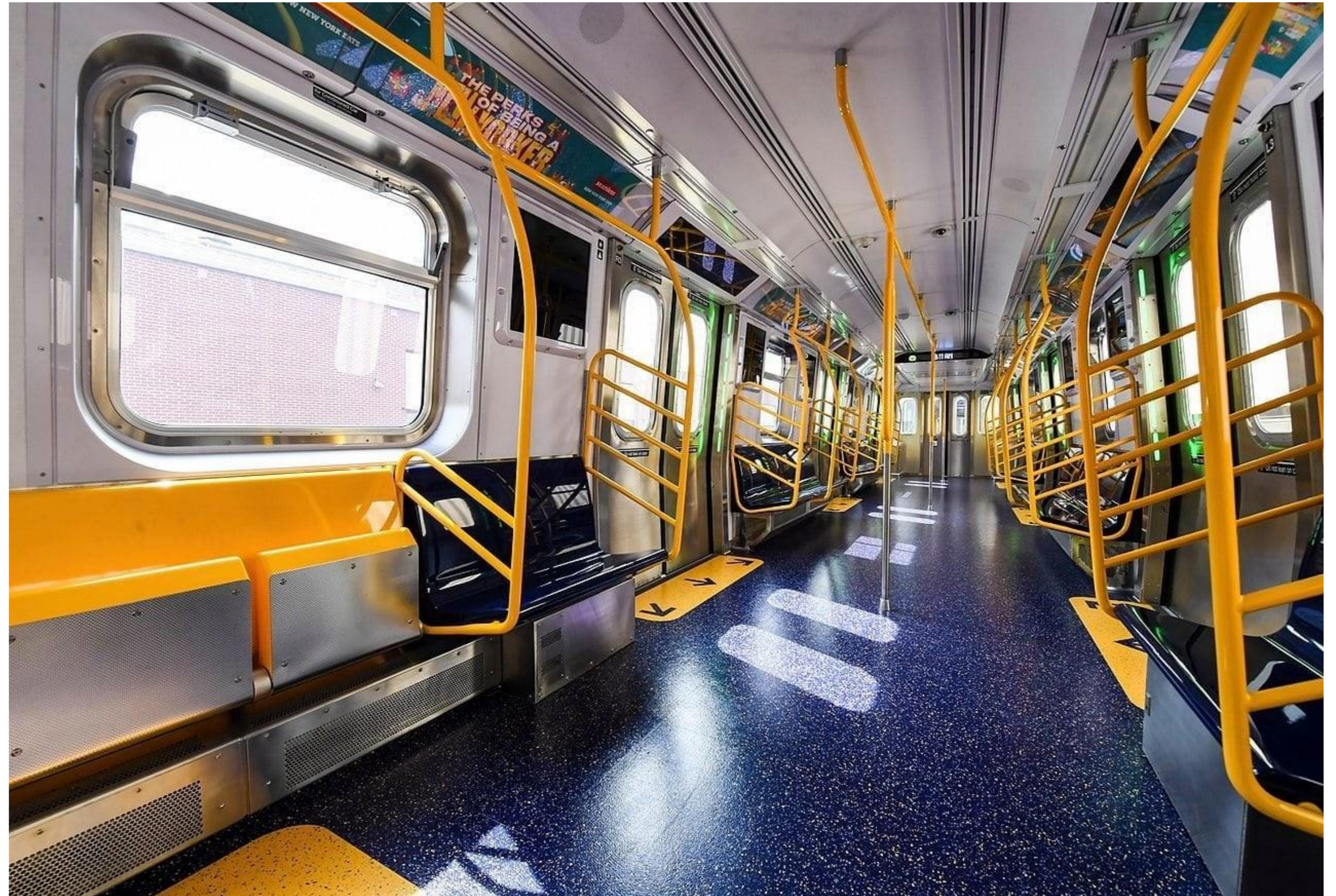


Shanghai Metro Line 4
Product: noraplan® plus, 10,000 m²
Installed: 2004
Photos: © nora

How many passengers can the Shanghai Metro carry per day?

NYCTA, USA





[https://facilityexecutive.com/flooring-stands-up-to-nyc-foot-traffic-video/#:~:text=Safety.,3:59%20run%20time\).&text=Your%20browser%20can%27t%20play%20this%20video.&text=An%20error%20occurred.,is%20disabled%20in%20your%20browser](https://facilityexecutive.com/flooring-stands-up-to-nyc-foot-traffic-video/#:~:text=Safety.,3:59%20run%20time).&text=Your%20browser%20can%27t%20play%20this%20video.&text=An%20error%20occurred.,is%20disabled%20in%20your%20browser)



INTERNATIONAL UNION
OF RAILWAYS

Factory tour + inlay center nora® production

09:45 – 10:45 (60')

Break time



Until: 11:00



INTERNATIONAL UNION
OF RAILWAYS

nora® **sustainability presentation** **+ open discussion**

11:00-12:00 (60')

Janneke Leenaars & Hannah Huesmann

Sustainability Journey

Feb 11 2026

nora® Sustainability Journey



Janneke Leenaars

Sustainability Manager
Northern Europe

Interface®



Hannah Huesmann

Expert chemical analysis
and environmental
protection

nora® by Interface®

Sustainability Journey

Janneke Leenaars & Hannah Huesmann

UIC event, nora Weinheim

February 11, 2026

Interface®

You can find us in offices, schools, hospitals, hospitality and transport

Interfa



Carpet Tiles



Luxury Vinyl Tiles (LVT)



nora® rubber

Interface by the Numbers. Listed at the Nasdaq.



Note: Numbers are based on the 2024 Impact Report

We're *'all in'* on solving the
climate crisis.

Interface[®]

Interface is *'all in'* on carbon
negative by 2040.

Interface[®]

**Interface is 'all in' on carbon
reductions,
*not offsets.***

Interface[®]

We're *'all in'* on storing
more carbon than
we emit.

Interface[®]

OUR PLAN IS SIMPLE

Avoid

Continue material efficiency and waste reduction in the manufacturing process

Reduce

Increase recycled materials in our products

Store

Use bio-based material to store carbon

Inspire

Lead and influence others to help accelerate their own journeys

SCIENCE-BASED TARGETS

emission reductions*

SCOPE 1 EMISSIONS

Direct Emissions From sources
that are owned or controlled

 **30%**

Target 50% Reduction

SCOPE 2 EMISSIONS

Indirect sources from purchased
electricity, heat, or steam

 **28%**

Target 50% Reduction

SCOPE 3 EMISSIONS

BUSINESS TRAVEL

Target 30% Reduction

 **76%**

PURCHASED GOODS & SERVICES

Target 50% Reduction

 **42%**

EMPLOYEE COMMUTING

Target 30% Reduction

 **17%**

*Reductions versus baseline year of 2019. Product carbon footprint in kg CO₂e/m² based on cradle-to-gate sales weighted average.

2024 PRODUCT IMPACTS

CARPET TILE*

3.4kg CO₂e/m²

↓ **35%**

Reduction of Carbon
Footprint

67%

of Materials Used are
Recycled or Bio-based

LVT*

6.7kg CO₂e/m²

↓ **46%**

Reduction of Carbon
Footprint

39%

of Materials Used are
Recycled or Bio-based

RUBBER*

8.5kg CO₂e/m²

↓ **21%**

Reduction of Carbon
Footprint

10%

of Materials Used are
Recycled or Bio-based

48% Recycled Materials **+** **4%** Bio-based Materials **=** **52%** Materials from Recycled or Bio-based Sources

*Reductions versus baseline year of 2019. Product carbon footprint in kg CO₂e/m² based on cradle-to-gate sales weighted average.

Carpet Tile EMEA - Impact of FULL SWITCH to CQuest™Bio

33% carbon footprint reduction

On average compared to Graphlex® backing

88% Recycled and bio-based materials

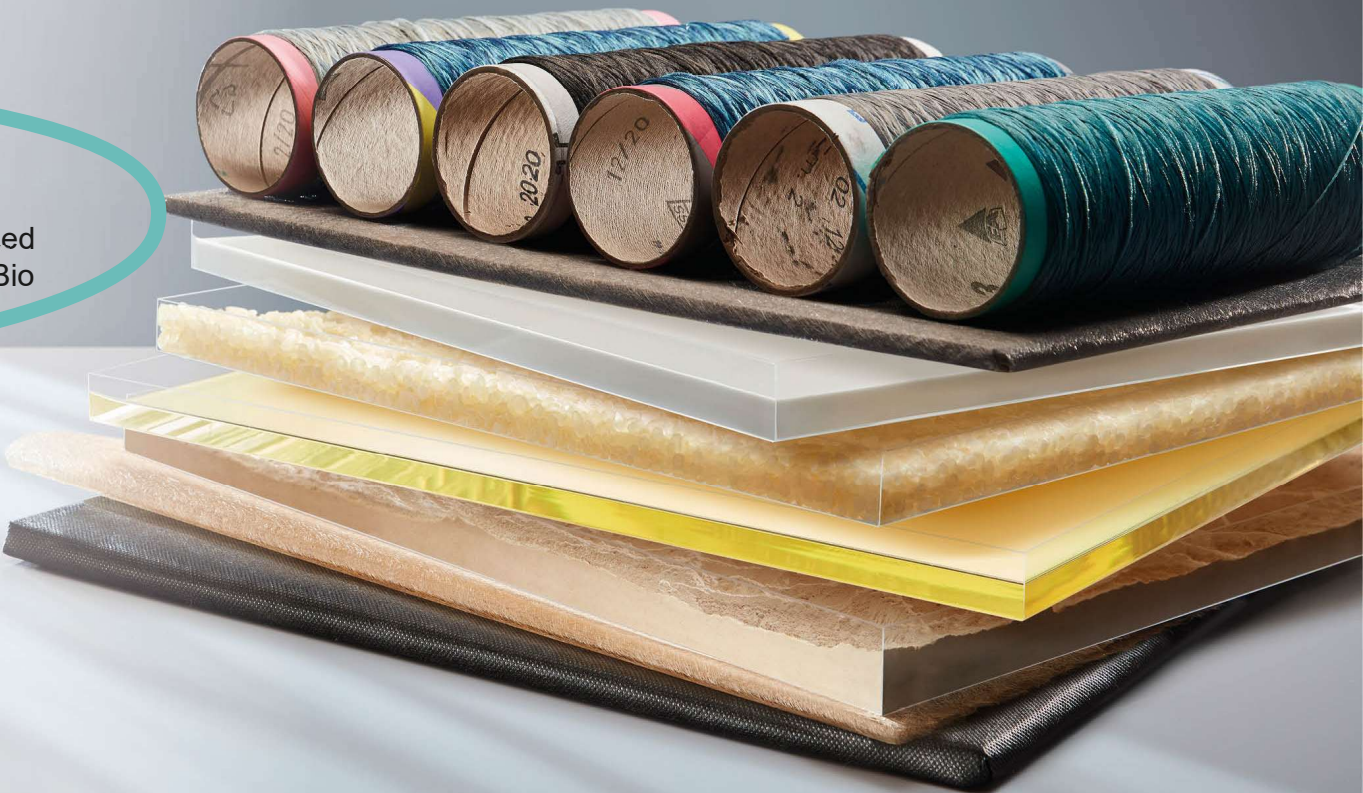
Average amount of total recycled and bio-based content for products with standard CQuest™Bio backing

Designed for reuse and recycling

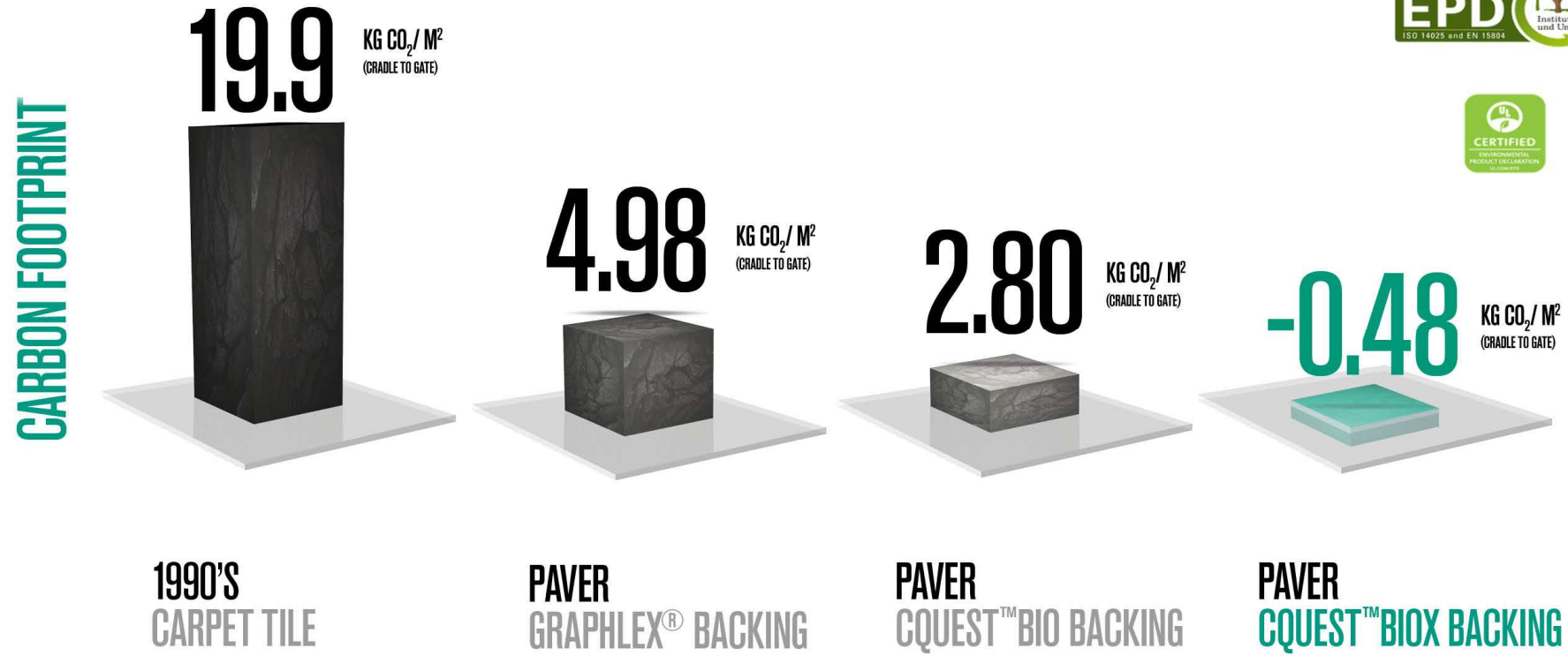
A bio-composite with material choices suited to future reuse and recycling

Impact at scale

We are bringing these low carbon and circular benefits to all our European portfolio of carpet tiles.



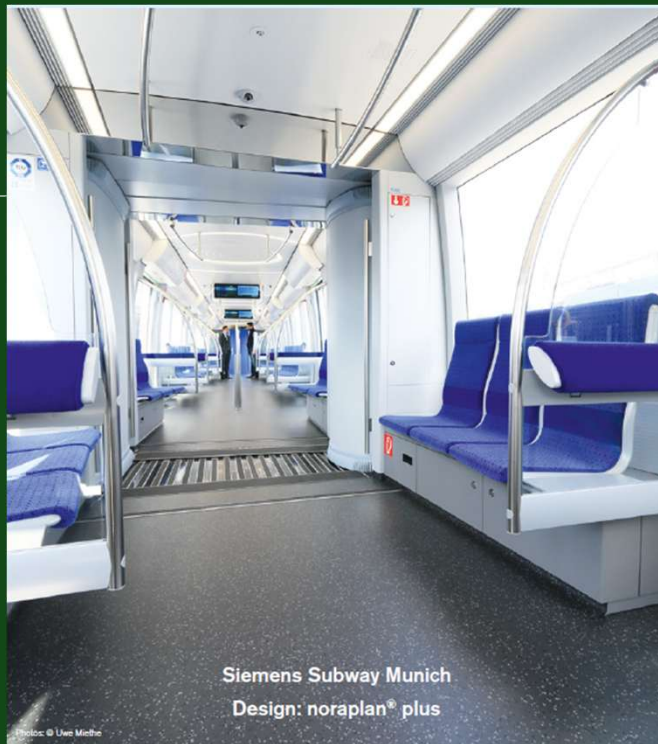
Our journey towards carbon negative - the Effect of a Backing



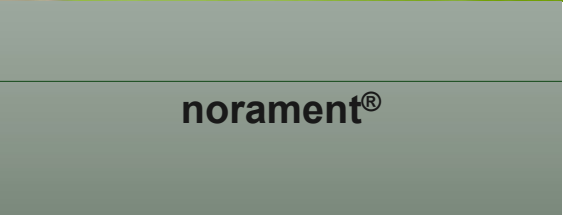
Train Sector Sustainability Awards



nora rubber



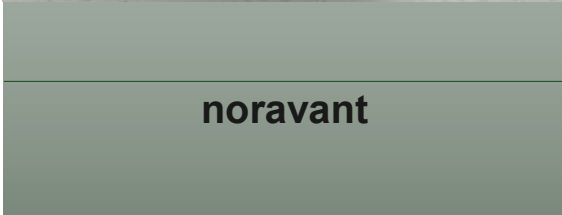
nora[®] flooring portfolio



Assuring highest performance

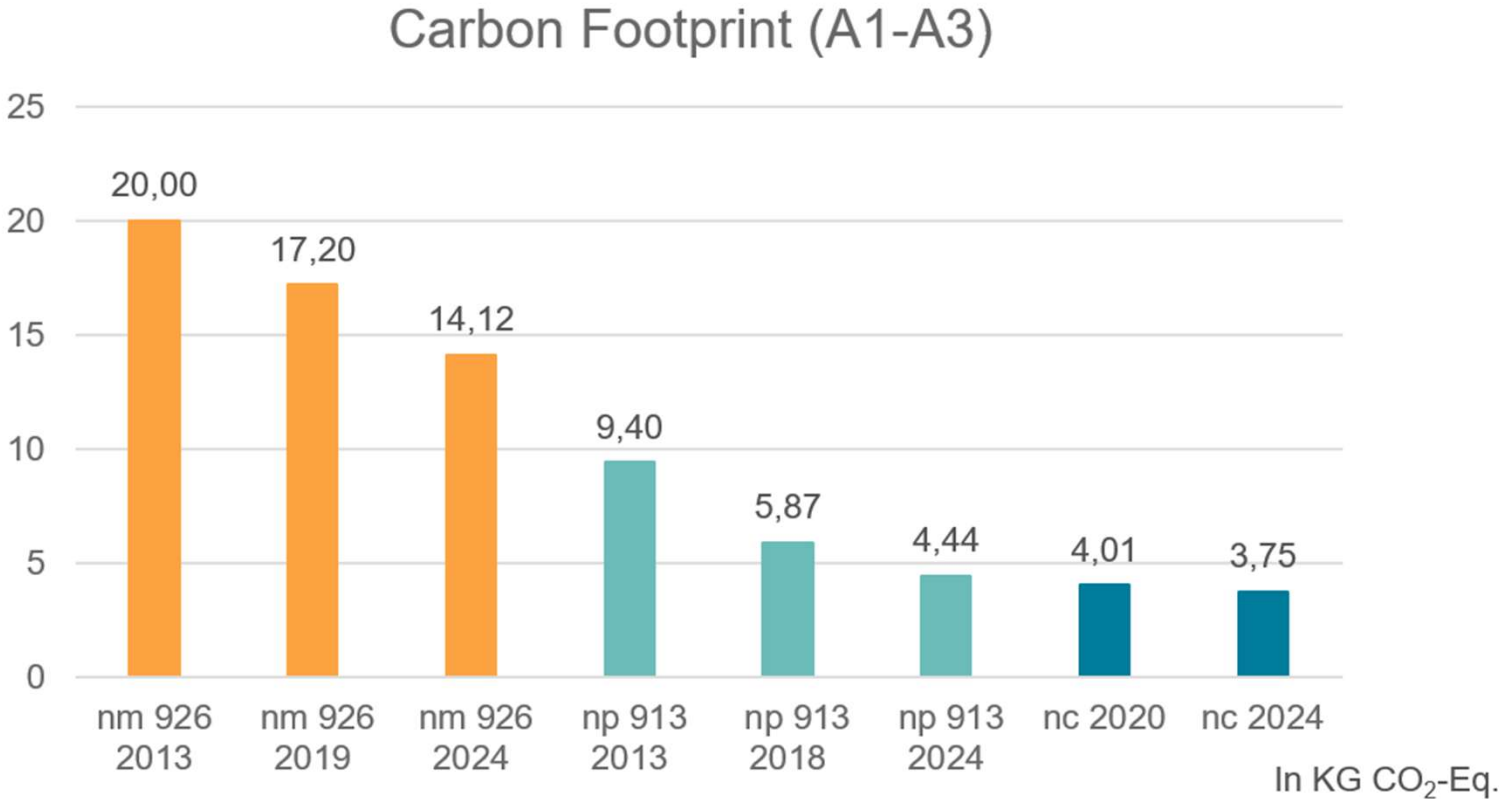


Well-rounded: complete system offer (also for transportation)

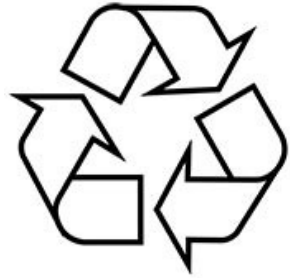


Extra performance, sustainability & design flexibility

Development of the Carbon Footprints of nora[®] Rubber



Increase recycled and biobased content



Recycled material



Biobased material



General recent sustainability highlights



High Speed Train CRH380A, China
Design: noraplan® grip plus

Photos: © nora



Wuppertal Suspension Railway
Design: noraplan® sentica

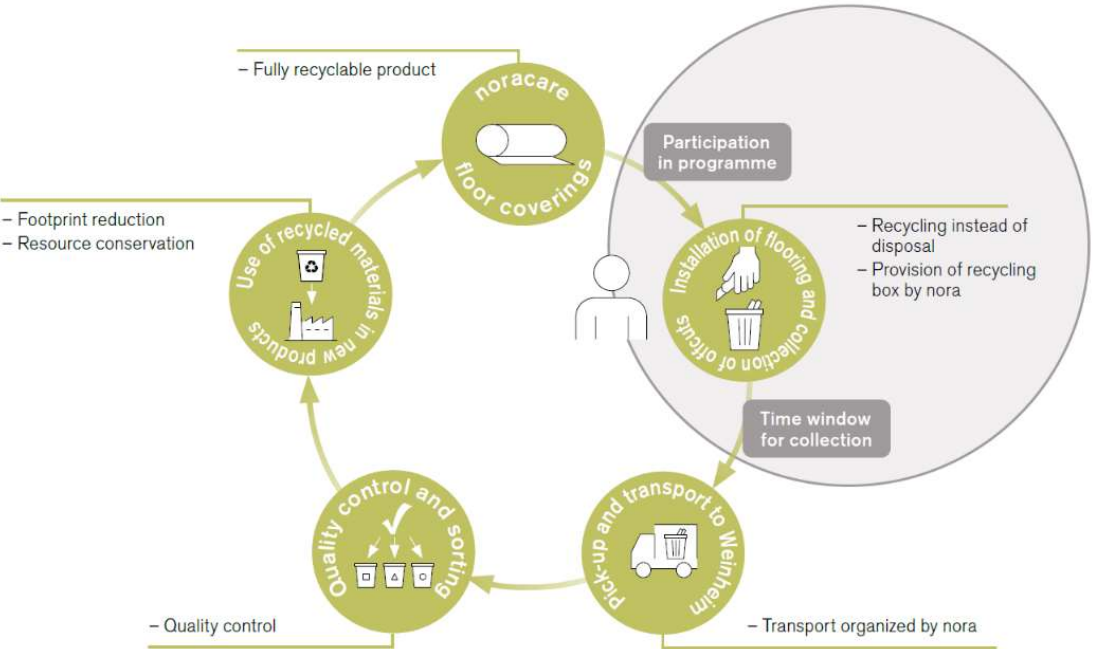
Photos: © Dirk Wilhelmy

**Carbon Negative
Rubber
prototype
presented at Bau
2025**



noravant[®] platform innovation and recycling

Taking back offcuts from noracare installations



Longevity

Interface®



Installation site: Metro São Paulo, Brazil
Client: ViaQuatro consortium
Product: noraplan® stone mobil, 5,356 m²
Installed: 2009
Photos: © Digna Imagem/Clóvis Ferreira



Longevity & High Performance



© nora

Frankfurt Airport

Longevity of nora products – Best Practices

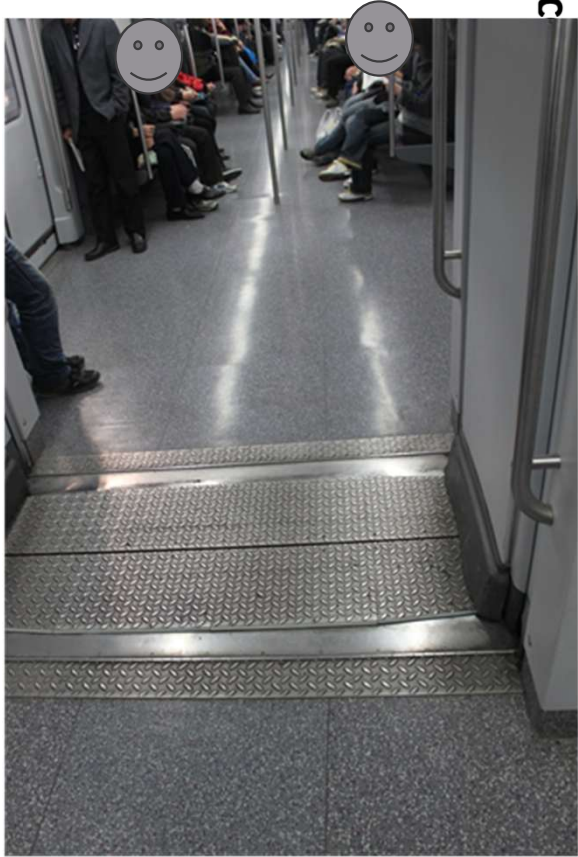


United Monolithic Semiconductors GmbH



Library at Ruhr University Bochum

Shanghai metro – 20 years in service



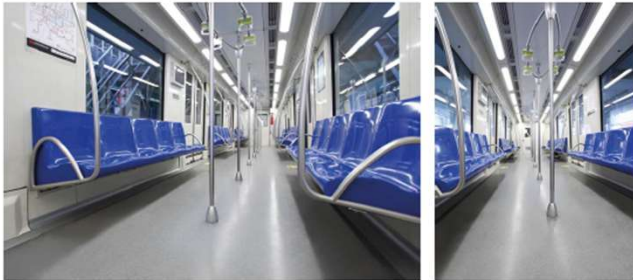
Global reference brochure transportation

Full speed ahead for China's trains

China's extensive railways are essential for the country's intercity and local mobility infrastructure, and it has some top-class rail networks. The excellent properties of nora rubber floors, which include fire protection, ergonomics, and durability, have led them to be installed in several trains in Chinese cities.



Shanghai Metro Line 4
Product: noraplan® plus, 10,000 m²
Installed: 2004
Photos: © nora



Shanghai Metro Line 5
Product: noraplan® plus, 3,000 m²
Installed: 2002
Photos: © nora

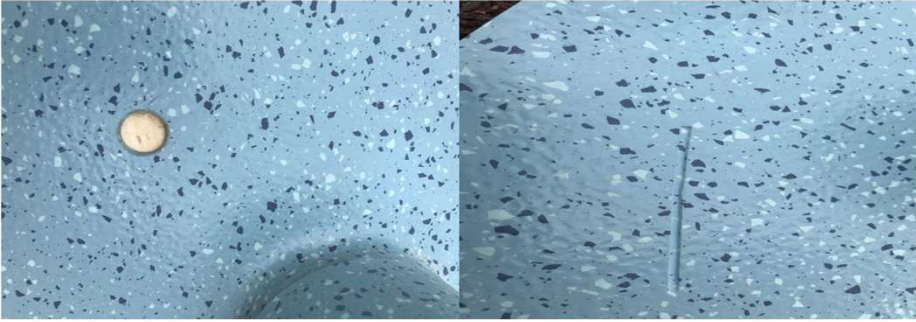
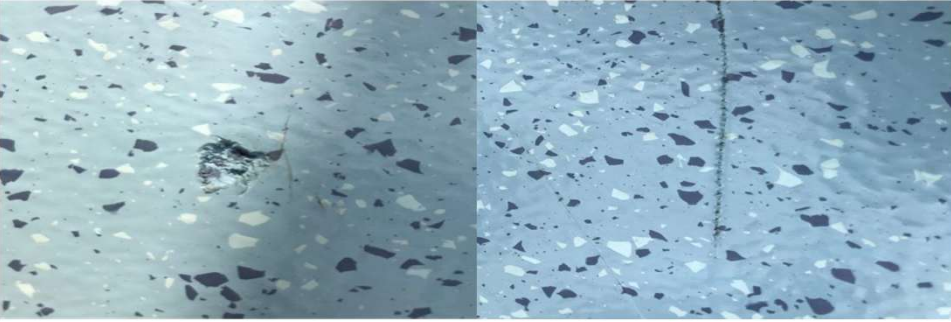


Shanghai Metro Line 12
Product: noraplan® signa mobil, noraplan® signa, 25,547 m²
Installed: 2018
Photos: © nora



Wuhan Metro Line 4
Product: noraplan® signa, 1,723 m²
Installed: 2014
Photos: © nora

Repair



nTx[®] installation method

- Easy handling
- Fast installation, minimised downtime
- Can be used immediately after installation
- Less adhesives used for installation (factory fitted amount)
- Lower risk of installation mistakes
- Recyclable PE protective foil for Adhesive layer protection *vs. dispersion adhesive in bucket and installation tools.*



Certification



www.blauer-engel.de/uz120



Fire Protection & non-PVC composition



Sustainable packaging solution

OUR ONGOING SUSTAINABILITY *journey*



1994

mission®



2019



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

2030

*carbon
negative*

2040



THANK YOU

Interface[®]

**Lunch Break
until 13:00**





INTERNATIONAL UNION
OF RAILWAYS

Presentation from ProRail on biobased materials

13:00 – 13:20 (20')

Quinty Soede, Frank van Schadewijk,

Station Canopies & Circularity

Feb 11 2026

Introduction



Frank van Schadewijk
Strategic lead in Circularity



Quinty Soede
*Sustainability and
circularity advisor*



Station Canopies & Circularity

Feb '26
Quinty Soede and Frank van Schadewijk



ProRail

Verbindt. Verbetert. Verduurzaamt.

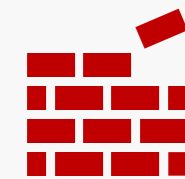
Agenda



Recap: ECI @ProRail



ECI and biobased materials



Station Canopies and boundary values



Results and case studies (Zwolle, Ede-Wageningen)



Benefits & Challenges





Recap: ECI @ProRail

- The **Environmental Cost Indicator (ECI)** translates environmental impact into a single cost-based value.
- It combines effects like emissions, resource use, and pollution into one clear score.

ProRail uses ECI to measure and decrease the environmental impact of her projects in two ways:

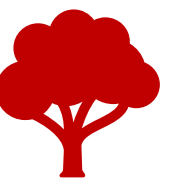
ECI in Engineering

→ For each design, we calculate the **ECI**, and this score is included in the trade-off matrix when selecting the final design.

ECI in Tenders





→ We calculate an ECI-reference value and challenge contractors to reduce this value in their offer



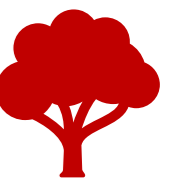


ECI and Biobased Materials

- ECI (Environmental Cost Indicator) for different materials per phase:





				
MKI (= Dutch ECI)	A	B	C	D
Bridge of wood	56	81	2290	-258
Bridge of concrete	3264	595	592	-148
Bridge of steel	3114	509	678	-218



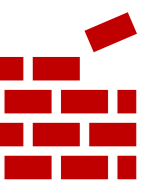


ECI and Biobased Materials

- CO₂-eq emissions for different materials per phase:

				
CO ₂	A	B	C	D
Bridge of wood	-8311	460,9	18300	133,4
Bridge of concrete	16190	3035	3583	-927
Bridge of steel	17170	2782	3961	-1261





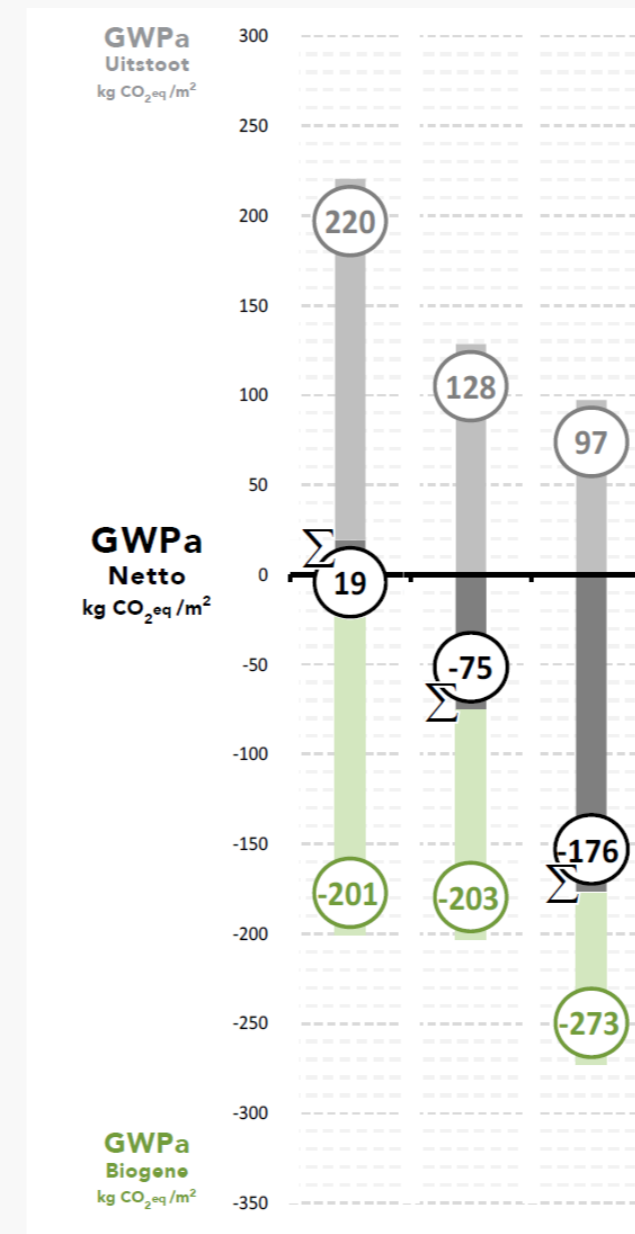
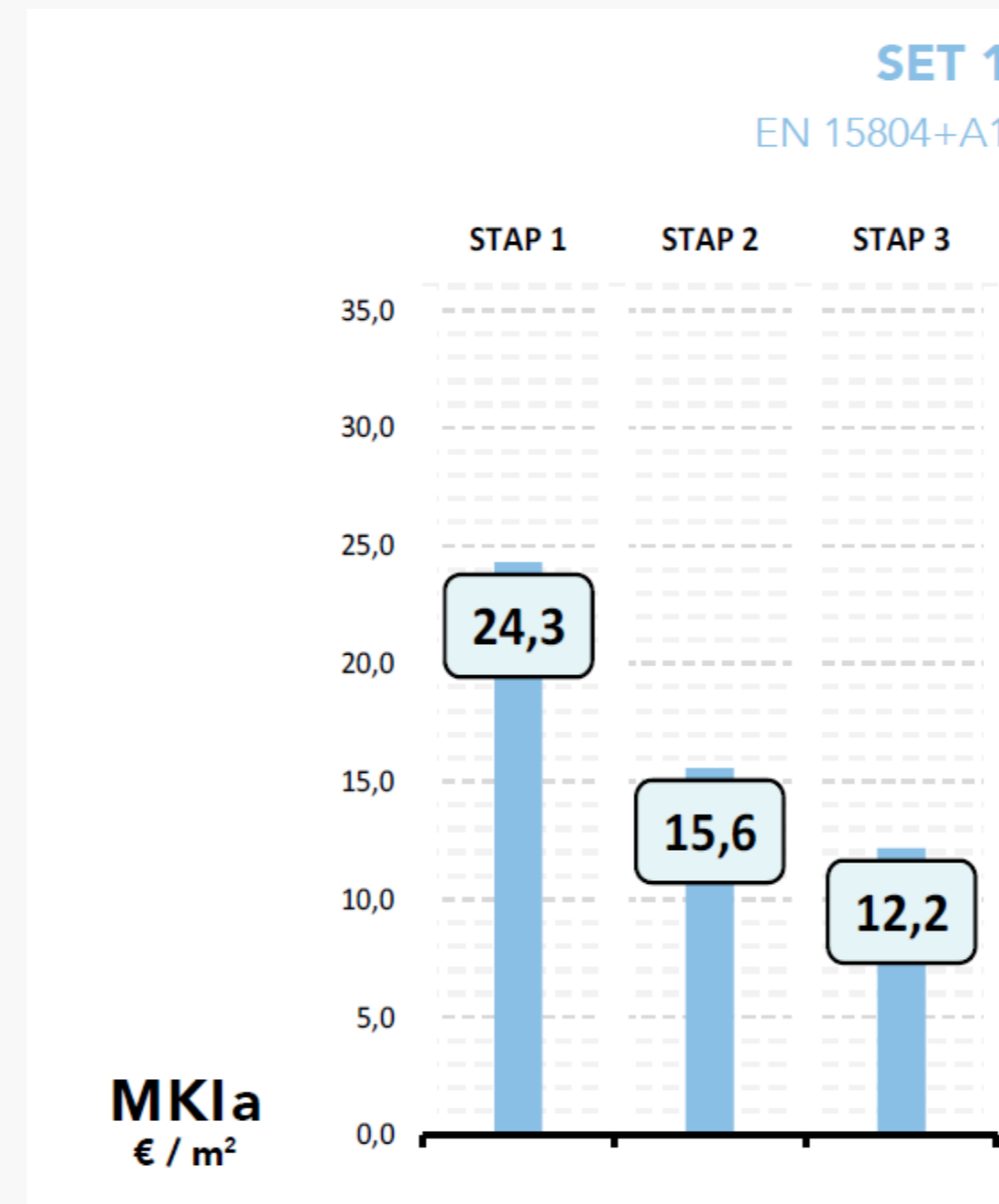
Station Canopies and Boundary Values

→ A way to make the **ECI** less non-committal in the design phase.

Step 1: Conduct a study to determine a baseline for station canopies.

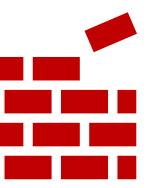
III.1.1 EDE-WAGENINGEN
SPORENKAP

levenduur: 100 jaar
Oppervlakte: 7.787 m²



- STAP 1 | Nulmeting**
- Fundering : Beton palen + poeren (CEM I & III mix, 2% volume wapening, 60% recycled staal)
 - Kolommen : Zwaar constructiestaal (60% recycled)
 - Dakconstructie : Gelamineerd houten liggers + staalprofielplaat
 - Afwerking dak : PIR isolatieplaten + steenwol isolatie+ bitumen + sedum, zinken dakrand, rockpanel houtlook plafond
- STAP 2 | Materiaalinnovatie**
- Fundering : Beton palen + poeren (CEM III mix, 2% volume wapening, 90% recycled staal)
 - Kolommen : Maximaal gerecycled staal (90% recycled)
 - Dakconstructie : Gelamineerd houten liggers + gerecycled staalprofielplaat
 - Afwerking dak : EPS harde isolatieplaten + Glaswol isolatie + Leadax Roov recycled bitumen, zink gerecycled , durable rockpanel hout look
- STAP 3 | Materiaalvervanging**
- Fundering : als stap 2
 - Kolommen : Gelamineerd houten kolommen
 - Dakconstructie : Gelamineerd hout liggers + (CLT) Kruislagerehout vloer
 - Afwerking dak : Gutex Thermofibre isolatieplaten + Isovlas isolatie + Leadax Roov recycled bitumen, Hout dakrand bekleding

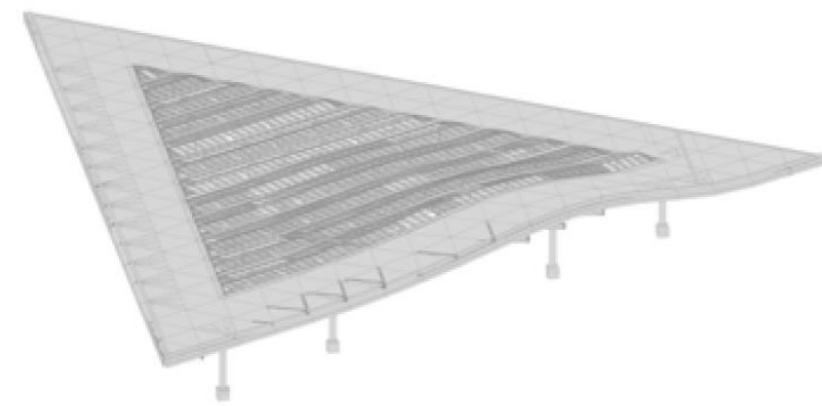




Station Canopies and Boundary Values

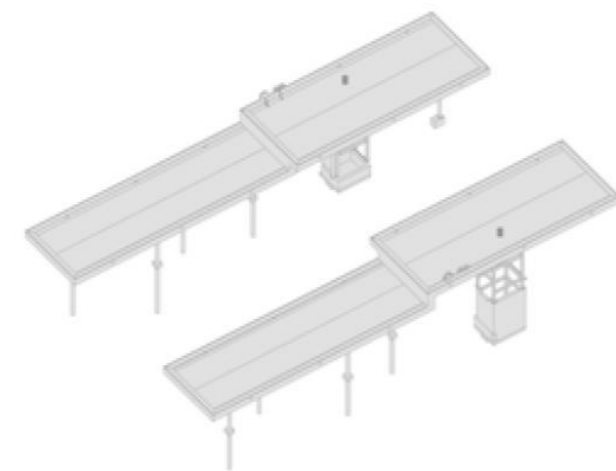
III.1.2 ASSEN SPORENKAP

levenduur: 100 jaar
Oppervlakte: 7.787 m²



III.1.3 ALKMAAR NOORD PERRONKAP

levenduur: 100 jaar
Oppervlakte: 662 m²



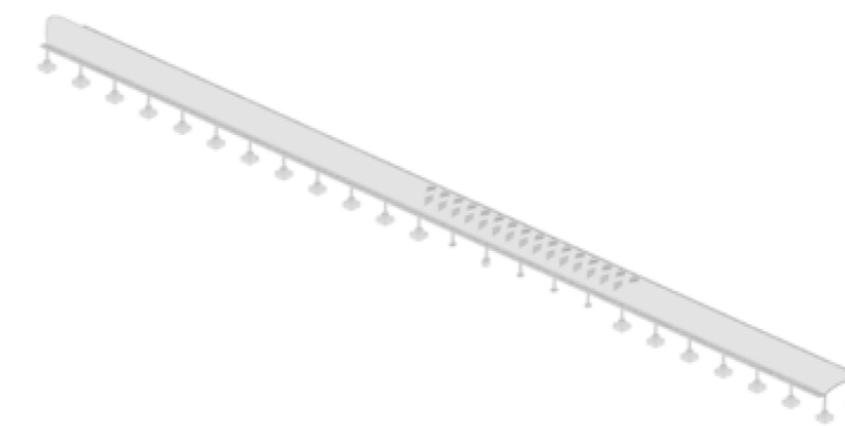
III.1.4 GRONINGEN PERRONKAP

levenduur: 100 jaar
Oppervlakte: 5.864 m²



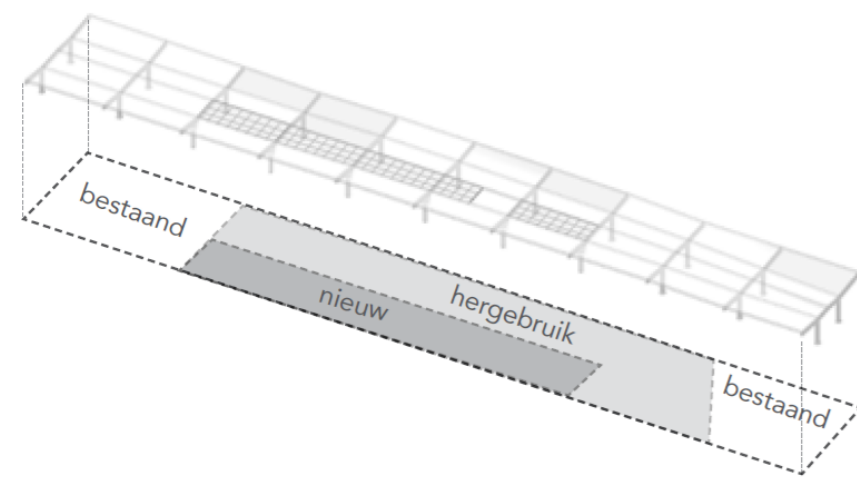
III.1.5 NIJMEGEN PERRONKAP

levenduur: 100 jaar
Oppervlakte: 3.047 m²



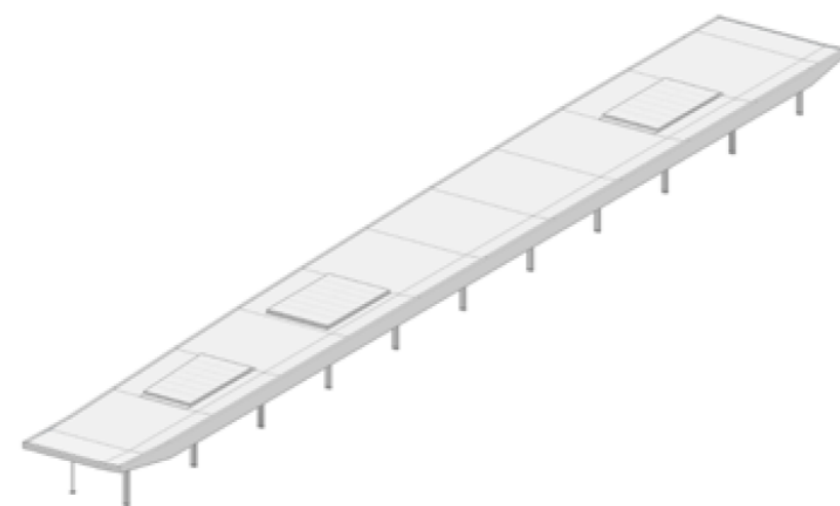
III.2.1 HARDERWIJK PERRONKAP

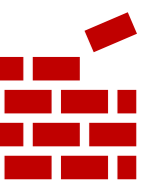
levenduur: 100 jaar
Oppervlakte: 904 m² (totaal: 1.385 m²)



III.2.2 HEILOO PERRONKAP

levenduur: 100 jaar
Oppervlakte: 764 m² (totaal: 764 m²)

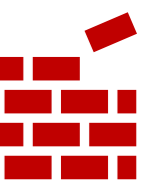




Station Canopies and Boundary Values

		NIEUWBOUW								BESTAANDE BOUW (Renovatie)				
		SPORENKAP			PERRONKAP			PERRONKAP						
		Ede-wageningen	Assen	GEMIDDELD	Alkmaar-Noord	Groningen	Nijmegen	GEMIDDELD	GEMIDDELD	Harderwijk	Heiloo	GEMIDDELD		
2024 > 31-6-2025	Set 1 (EN 15804+A1)	MKIa €/m ²	stap 1	24,3	25,7	25,0	22,9	35,2	18,6	25,6	25,3	5,5	6,1	5,8
			stap 2	15,6	14,2	14,9	11,2	20,0	10,7	14,0	14,4	4,6	4,9	4,7
			stap 3	12,2	10,7	11,5	9,6	11,8	8,8	10,1	10,8	4,1	4,4	4,3
	MPG €/m ² / j	stap 1	0,300	0,397	0,349	0,342	0,508	0,236	0,362	0,355	0,100	0,097	0,099	
		stap 2	0,193	0,247	0,220	0,121	0,359	0,154	0,212	0,216	0,093	0,063	0,078	
		stap 3	0,175	0,209	0,192	0,135	0,211	0,127	0,158	0,175	0,087	0,048	0,068	
	GWPa kg CO ₂ eq / m ²	stap 1	215	202	208	197	287	167	217	213	50	51	51	
		stap 2	126	105	115	89	139	88	105	110	42	38	40	
		stap 3	95	86	90	77	95	76	83	87	38	32	35	
1-7-2025 > 2030	Set 2 (EN 15804+A2)	GWPa-netto kg CO ₂ eq / m ²	stap 1	19	78	49	145	209	-149	69	59	49	10	29
			stap 2	-75	-22	-48	28	57	-232	-49	-49	40	-3	18
			stap 3	-176	-73	-125	-142	-213	-264	-206	-165	35	-22	6
	GWPa-fossil kg CO ₂ eq / m ²	stap 1	219	205	212	202	293	172	222	217	52	52	52	
		stap 2	128	106	117	86	142	91	106	112	43	39	41	
		stap 3	96	87	91	73	96	78	82	87	39	32	35	
	GWPa-luluc kg CO ₂ eq / m ²	stap 1	1	1	1	1	1	1	1	1	0	1	0	
		stap 2	0	1	0	0	0	0	0	0	0	0	0	
		stap 3	1	1	1	0	3	0	1	1	0	0	0	
	GWPa-biogene kg CO ₂ eq / m ²	stap 1	-201	-128	-164	-57	-84	-322	-155	-159	-3	-43	-23	
		stap 2	-203	-129	-166	-59	-86	-323	-156	-161	-3	-43	-23	
		stap 3	-273	-160	-217	-215	-312	-342	-290	-253	-4	-55	-29	





Station Canopies and Boundary Values

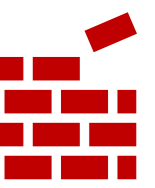
→ A way to make the **ECl** less non-committal in the design phase.

Step 2: Translate this baseline in boundary values and include these values in design requirements.

Year of submission	New Canopies		Alternations / renovations	
	MKla/m2	GWPa/m2	MKla/m2	GWPa/m2
2024	18 (A1)	190 (A1) of 30 (A2)	7(A1)	140 (A1) of 50 (A2)
2025	17 (A1)	180 (A1) of 20 (A2)	6 (A1)	130 (A1) of 50 (A2)
2026	16 (A1)	0 (A2)	5,5 (A1)	50 (A2)
2027	15 (A1)	-25 (A2)	5,5 (A1)	50 (A2)
2028	14 (A1)	-50 (A2)	5 (A1)	50 (A2)
2029	13 (A1)	-100 (A2)	5 (A1)	50 (A2)
Vanaf 2030	12 (A1)	-150 (A2)	4,5 (A1)	50 (A2)

**Dutch version
of ECl**





Station Canopies and Boundary Values

→ *A way to make the **ECI** less non-committal in the design phase.*

Step 3: Put this in practice!





Results and Case Studies: Zwolle

→ Boundary values were used as requirements for the station canopies and entrance hall.

This motivated engineers:

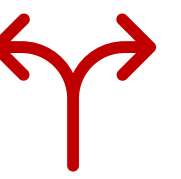
- to reuse materials (foundations, existing canopies, steel beams);
- to use bio-based materials for the structure of one of the platform canopies.

Result? We lowered the environmental impact of the station canopies with 46%

Reference = 59.938

Design = 32.393





Benefits and Challenges

What did we gain?

- Engineering firms are highly motivated and become more inventive to comply with our boundary values.
- Reduce ECI and CO₂ values of our projects with at least 40%
- Using ECI in the engineering phase **is not** optional anymore

Where did/do we struggle

- Boundary values are not always possible to meet
- The ECI / CO₂ values highly fluctuate between different locations.
- Biobased scores better than reused.

How should we deal with this?

- Boundary **percentage** instead of **values**.
- A uniform method to calculate the baseline.





INTERNATIONAL UNION
OF RAILWAYS

Presentation from NS

13:20 – 13:40 (20')

Ilse Van Eekeren

Feb 11 2026

Presentation from NS



Ilse Van Eekeren

Circular Business
Manager

NS

Circularity drives Beyond-Zero

& creates social, environmental and economic value

Dutch Railways (NS)
Ilse de Vos van Eekeren



Circular & Social





UPCYCLE SHOP

am, Dord
B





**A NEW
JOURNEY
BEGINS.**

**WHAT ONCE CARRIED
THOUSANDS OF
TRAVELERS ACROSS
THE NETHERLANDS
NOW CARRIES
SOMETHING
NEW — YOUR STORY.**



**SNEAKERS FIRST
CLASS**

**"THESE SNEAKERS ONCE
TRAVELED FIRST CLASS ACROSS
THE NETHERLANDS. NOW THEY
WALK WITH YOU."**

**(OML FASHION — FROM TRAIN TO
STEP)**



**"FROM THE DUTCH INTERCITY TO YOUR
JOURNEY — SNEAKERS REBORN WITH
PURPOSE."**



600%









32/10t

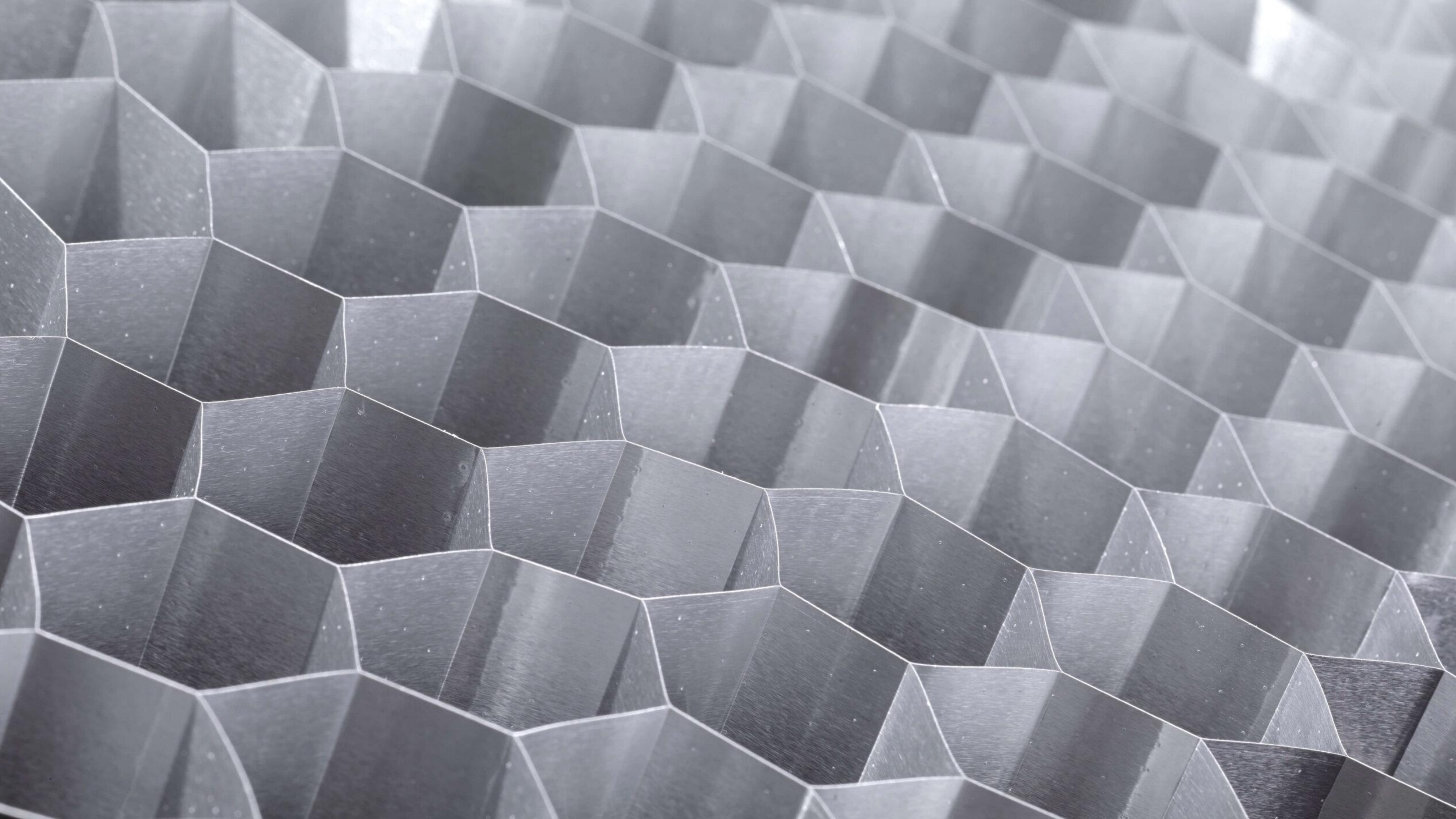
CAF

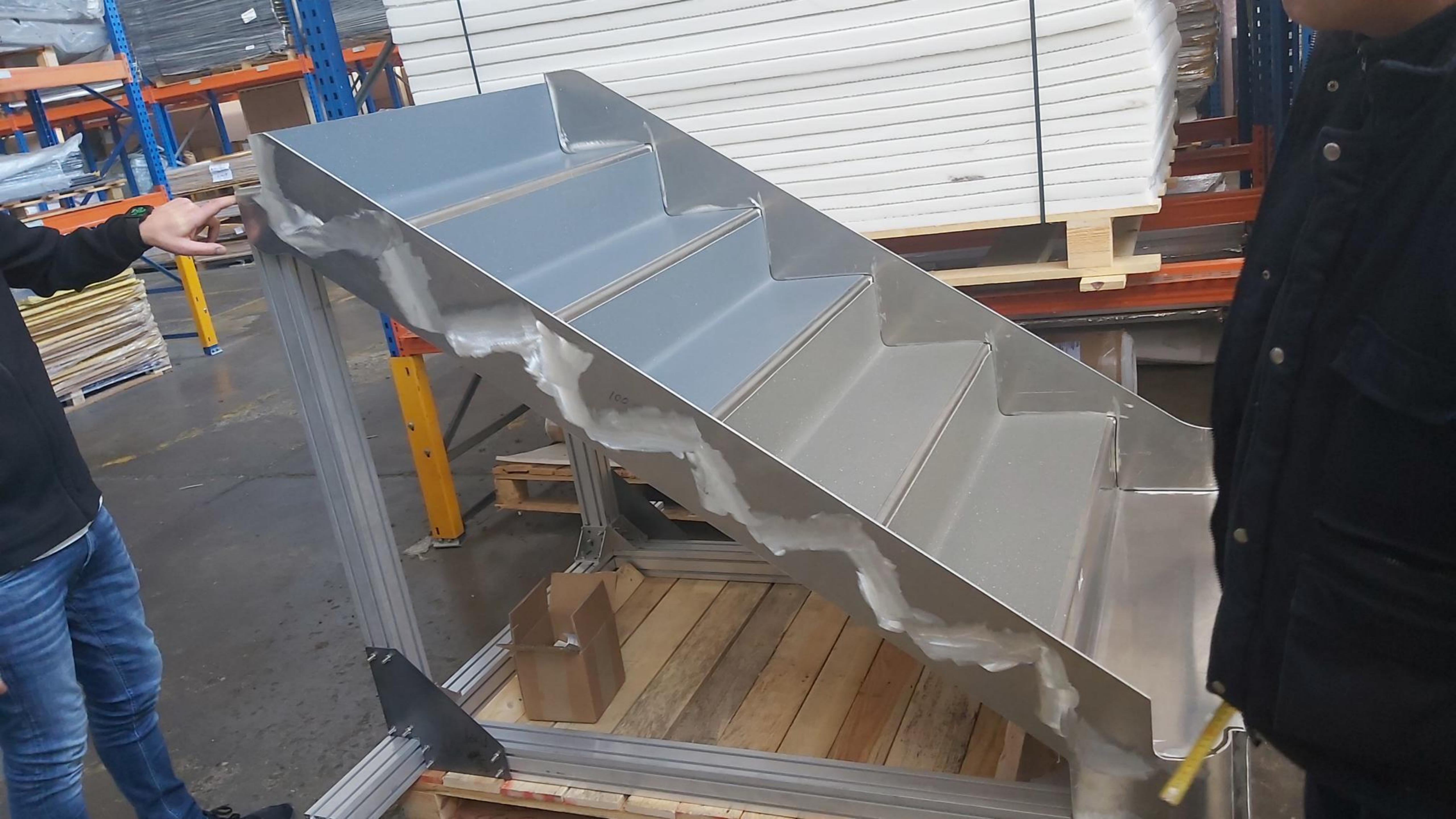
7

CAF

1000%

1000%



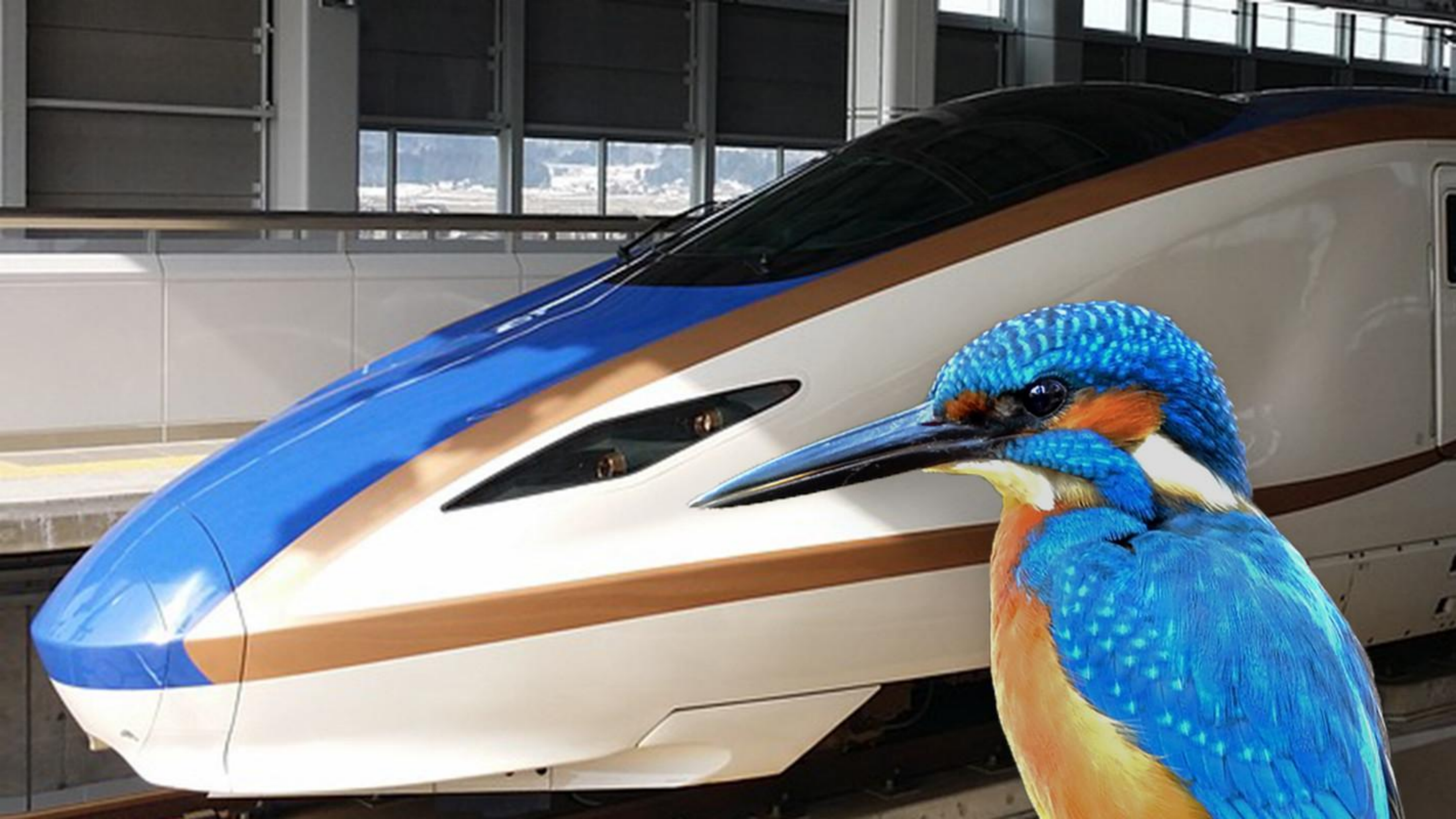




Circular & Biomimicry









22

1e
Klasse

SOCIETE SPOORWIEL

TOTAALLEN. 14.250 KG
GEN. AANDELEN WIELEN 4.000 ST.

ALLAN'S
HISTORICAL
RESTORATION

~10%

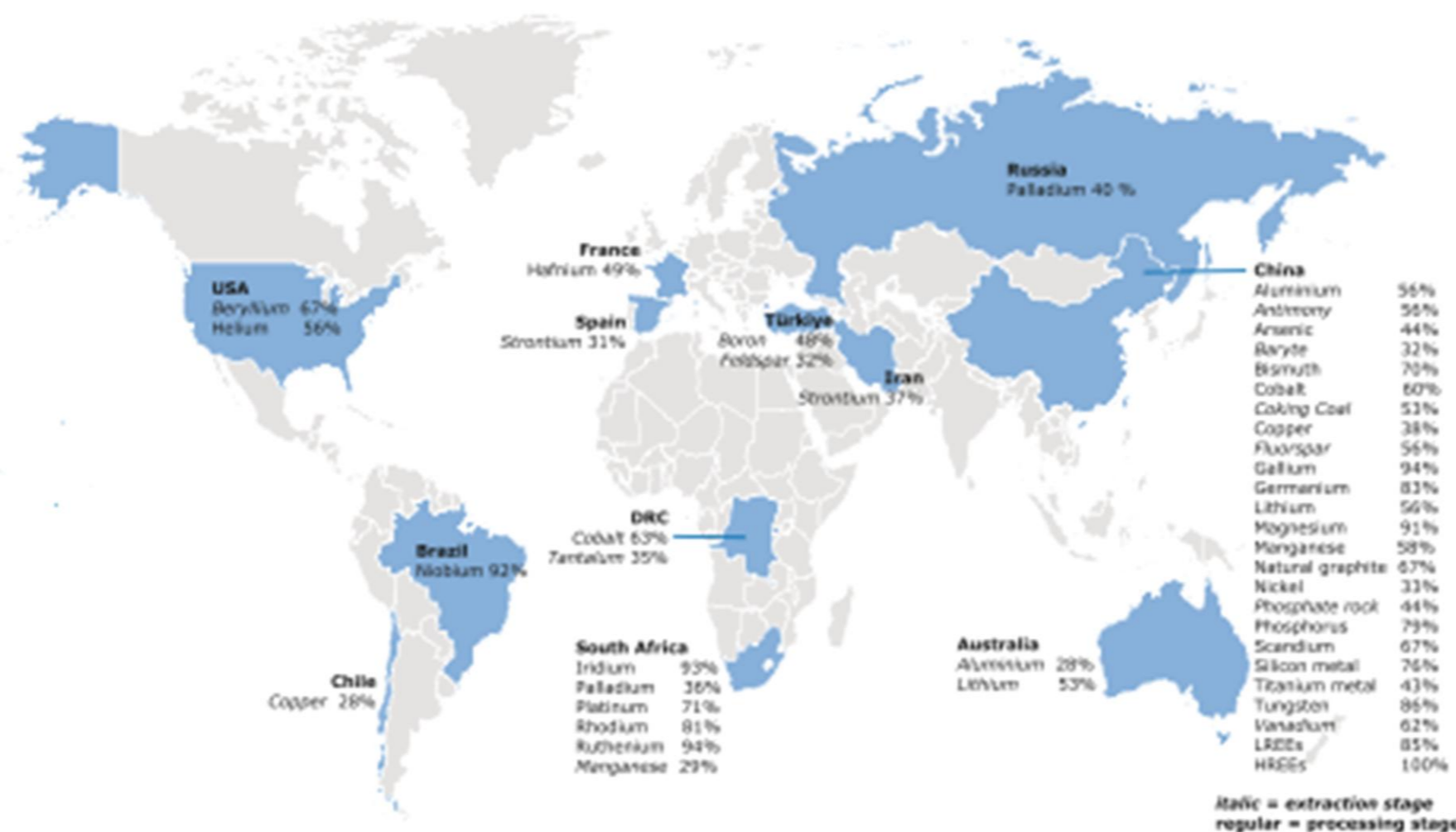




European Commission

Study on the Critical Raw Materials for the EU

2023



Final Report

RAW MATERIALS







[youtube.com/watch?v=casNqN2um24](https://www.youtube.com/watch?v=casNqN2um24)



A robotic hand is shown at the top and bottom of the frame, holding a small, light-colored object. The background is a light-colored wooden panel with a grid of circular recessed lights. The text "50%" is prominently displayed in the center.

50%

weight reduction



Circular Use

Unlocking The Real Potential



A group of approximately ten people, including men and women in business attire, are standing in a large, well-lit industrial space, possibly a museum or workshop. In the background, a white and blue high-speed train is visible. A sign on the wall reads "HET SCHUURTOEK VAN VADER". In the foreground, a blue and yellow machine with a green circular arrow logo and the text "Convenant" is visible. The overall scene suggests a professional gathering or event related to circular economy or sustainable transport.

Higher occupancy leads to greater circular impact

& Social and Ecological Impact

High social inclusion and enhanced livability via public transport
Economic uplift in neighborhoods within 2 km of train stations
Traveling time on trains as productive or valuable time (e.g., working, relaxing)
Contribution to social participation and connectivity in society
Reduced traffic congestion
Lower CO₂ emissions and reduced greenhouse gas emissions
Fewer accidents on roads
Decreased air pollution and less noise pollution
Energy and resource efficiency
Reduced dependency on cars and fossil fuels
Improved public health
Reduced road maintenance costs
Enhanced urban mobility
Improved land use
Better use of existing infrastructure
Etc....

Futureproof Index

The financial, social and ecological value a company creates





Figure 1: The AEX Futureproof Index

Company	Futureproofing Ratio (IV/FV)	Rank
Philips	4.68	1
Ahold Delhaize	2.61	2
Randstad	2.34	3
KPN	1.82	4
Universal Music Group	1.73	5
IMCD	1.58	6
RELX	1.51	7
Wolters Kluwer	1.38	8
Adyen	1.20	9
NN Group	1.11	10
ASR Nederland	1.08	11
Aegon	1.04	12
ING Groep	1.02	13
ABN AMRO Bank	1.01	14
ASML Holding	1.00	15
AkzoNobel	0.98	16
BE Semiconductor	0.95	17
ASM International	0.92	18
DSM Firmenich	0.88	19
Unilever	0.34	20
Heineken	-0.94	21
Shell	-2.07	22
ArcelorMittal	-12.01	23

■ Leader >2
 ■ Upper Middle 1-2
 ■ Lower Middle 0-1
 ■ Laggard <0



NS Futureproof Index Report

- Social inclusion (access to work, school and travel for people with disabilities);
- Increase in property values near stations;
- Welfare of employees and consumers;
- Productive use of travel time.

Key Findings

1. NS has an integrated value (financial + social + ecological) of €72.8 bn, much larger than its financial value of €6.4 bn. This means that NS has a futureproofing ratio of 11.3. Comparing it to the AEX Futureproof Index², for which the same methodology was used, NS scores considerably higher than Philips (Futureproofing Ratio: 4.7), meaning it significantly exceeds all of the 23 AEX companies analysed³.

rsm.nl/fileadmin/About_RSM/Discovery/Documents/NS_FutureproofIndexReport_2025_English.pdf

Circularity drives Beyond-Zero

**& creates social, environmental, and
economic value**

Thank you!

Ilse de Vos van Eekeren





INTERNATIONAL UNION
OF RAILWAYS

Bane NOR strategies and initiatives for Circular Economy

13:40 – 14:00 (20')

Dereje Asefa

Circular Economy in Bane NOR

Feb 11 2026

Circular Economy in Bane NOR



Dereje T. Asefa

Project Leader for climate,
nature and circular
economy initiatives

Bane NOR

➔ **Circular Economy in Bane NOR**

For the 7th Zero Waste railways workshop, 10-11 February 2026

Dereje T. Asefa, Project Manager
Department of sustainability

Mission

→ Delivering a reliable and sustainable railway service to Norway



Effective mobility and promote competitiveness

Punctuality Reliability

- Planned and effective maintenance and upgrading activities that promotes safe and predictive railway operation

Contribute to Norway's **Climate and environmental targets**

Green transition

- Reduction of climate gas emission (CO2-equiv.) and ecosystem disturbance
- Optimized use of affected land areas

Zero death and critical incidences related with our activities

Safety

- Safe work environment and safe railway operation

Effective use of **new technologies**

Digitalization

- Factual and effective decision making and implementation processes

More value for the money

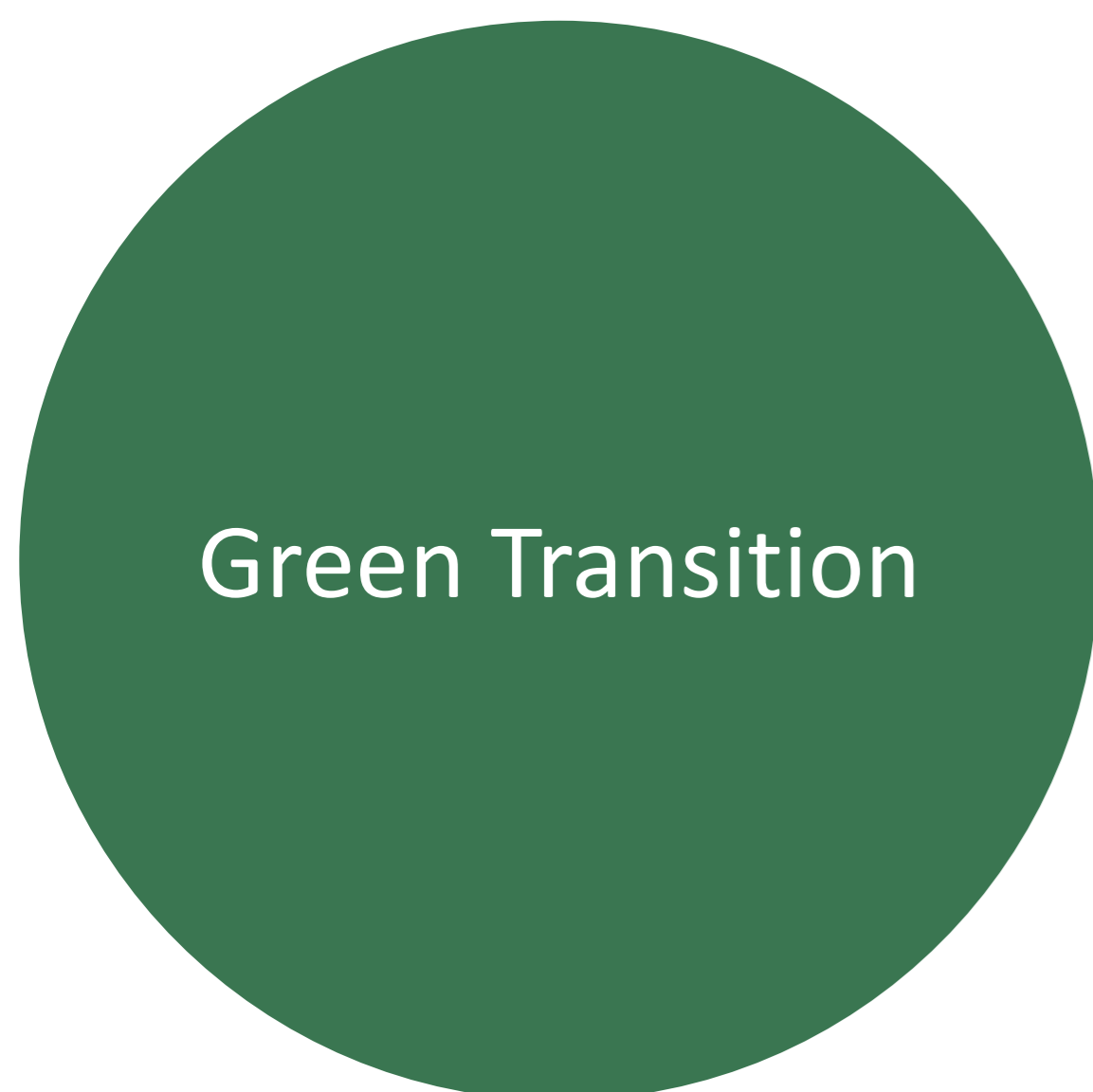
Optimization

- Productivity via standardized and professionalized procurement processes

Together towards the Goals

Open, Responsible, Cooperative

Bane NORs Double Materiality Analysis



Environment

Climate

Reduce emission by 50 % by 2030

E2
Forurensing

E3
Vann og marine ressurser

Biodiversity and ecosystems

Reduce biodiversity and ecosystem disturbance

Resource use and circular economy

Social

Egne ansatte

Øke kvinneandel til 30 % innen 2026.

Employees in the supply chain

S3
Berørte lokalsamfunn

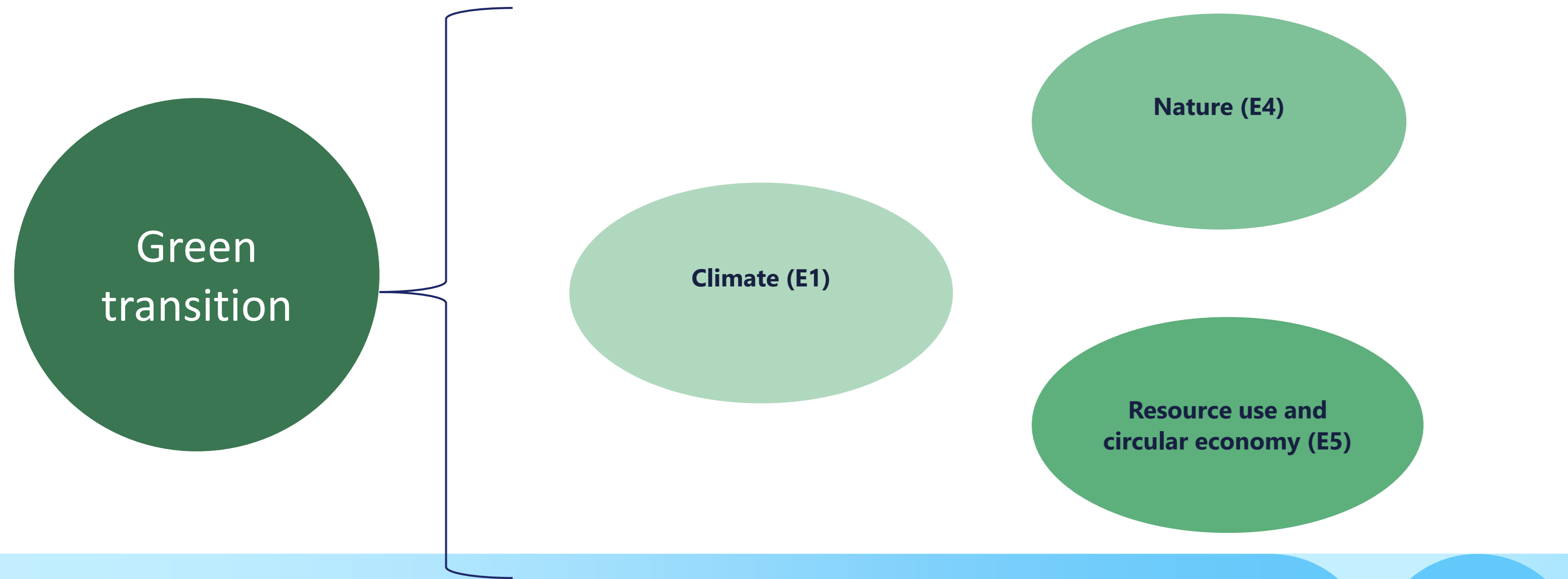
S4
Kunder og sluttbrukere

Governance

Business ethics

Andel ansatte som er kjent med våre prinsipper for etikk, samfunnsansvar og habilitet skal være 100 %.

Bane NORs fokus areas -2025



Climate (E1)

50 % reduction of climate gas emissions by 2030

Related with

- Construction activities
- Changes in land use
- Changes in traffic activities /mobilities
- Operation and maintenance activities of railway infrastructure
- Transport and Logistic activities

Anleggksområde



BANE NOR

Nature (Biodiversity and Ecosystems) - E4



- Reduce ecosystem disturbance of national and regional importance
- Important for carbon storage

Resource use and Circular economy - E5

Optimized resource use via

- Procurement that secures green materials with longer life cycle
- Reuse of disassembled and excess construction materials
- Standardization that stimulate the use of excess materials and reduce waste generation
- Optimized design
- Good sorting that promotes recycling (90%)
- Reuse of soil mass
- **Contributes for reduction of emission and to protects nature**

Why Circular Economy matters for Bane NOR?

- Procures massive railway materials (Rail, Sleepers...)
- Generates waste that could have been used /reused
- Has impact both on climate , nature as well as expenditure
- Identified as the 5 focus areas of sustainability based on DMA
- Some sporadic initiatives - Not well integrated in the whole organization-
- A need for strategy and operational measures
- A note for decision developed and approved by the leadership

INTERN

Notat

Til: Strategi og bærekraft

Fra: Bærekraft

Dato: 25.08.25

Saksref.:

Kopi til:

Beslutningsnotat for mål og tiltak tilknyttet effektiv ressursbruk og sirkulærøkonomi

Hensikt

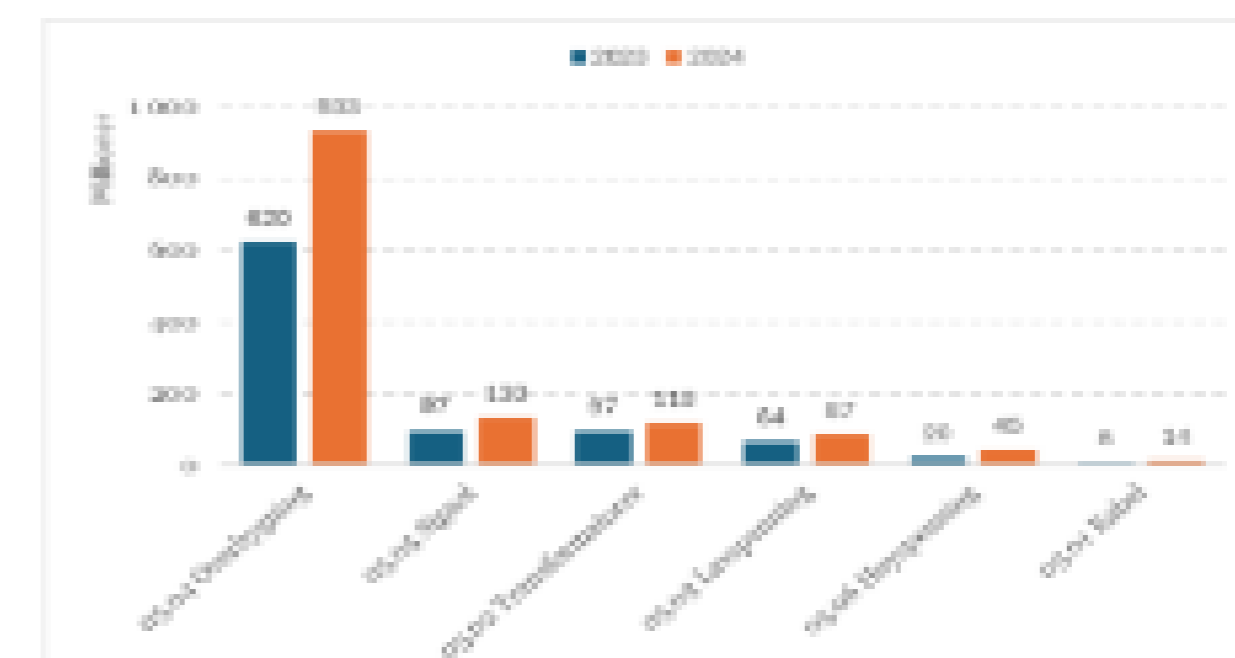
Formålet med dette notatet er å legge frem forslag til mål og tiltak for det vesentlige bærekraftstemaet E5 ressursbruk og sirkulærøkonomi. For Bane NOR dreier dette seg om effektiv ressursbruk, implementering av prinsipper for sirkulær økonomi i anskaffelser samt stimulere til økt ombruk. Samlet vil dette også redusere klima- og miljøfotavtrykket i Bane NOR.

Bakgrunn og behov - Bane NORs ressursbruk

Gjennom drift, vedlikehold og bygging av jernbane har Bane NOR en stor påvirkning på markedet for jernbaneteknisk materiell som leveres i hele landet. Temaet ressursbruk og sirkulær økonomi (E5) havnet over terskelverdi for vesentlighet i den doble vesentlighetsanalysen som ble vedtatt november 2024, noe som krever at Bane NOR setter mål og identifiserer tiltak for å adressere denne miljøpåvirkningen.

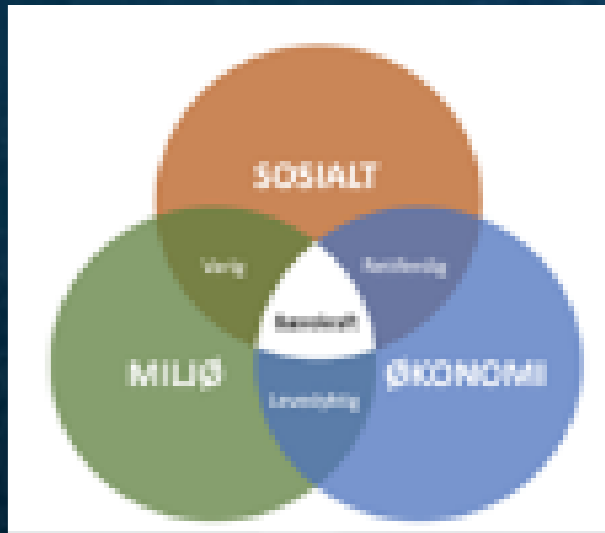
Inngående ressurser er vesentlige på grunn av Bane NORs omfattende innkjøp av jernbaneteknisk materiell fra nasjonale og internasjonale leverandører, med tilsvarende høyt ressurstotavtrykk i verdikjeden både oppstrøms og nedstrøms.

Nasjonal transportplan 2025-2036 legges det opp til økt satsning på drift og vedlikehold av jernbanen, noe som vil kreve store mengder av jernbanemateriell. I 2024 brukte Bane NOR ca. 1,36 milliarder kroner på anskaffelse av jernbanetekniske materiell, en økning på 48,2% sammenlignet med 2023 (Figur 1).



1- Procurement – Minimum Requirements

- Operate according to the environmental laws, rules and regulations in Norway
- Have a functioning internal control and management systems
 - Such as ISO- 9001, 14001
- Use systematic Risk management
 - For emergency preparedness, monitoring and control mechanisms for risk reduction
 - Capitalizing on opportunities that promote sustainability
- Engage actively stakeholders
 - Bane NOR, Authorities, Communities, Neighbours and other interest groups
- Demonstrate commitment to sustainability with evidences
 - BREEAM Infrastructure in all large and complex infrastructure projects



Circular Procurement

- Norwegian rule- Climate and environmental considerations shall be weighed with a **minimum of 30%** in the award criteria for procurements since **januar 2024**.

Sustainability and environment

The supplier must document the measures that the manufacturer(s) have implemented in both the production process and the supply chain to reduce the carbon footprint and promote circular economy practices related to the product(s) offered in this tender.

In addition, the Supplier shall work towards reducing the environmental impact of the production and delivery of the delivered product throughout the Contract period.

Acceptable documentation may include:

Certifications, awards, independent audit reports, climate, environmental, or sustainability reports, and other relevant supporting materials from the supplier and/or manufacturer(s).

Environmental Product Declaration (EPD)

The Supplier shall submit a third-party verified EPD in accordance with ISO 14025 and EN 15804:2012+A2:2019+AC:2021. The EPD shall be issued by an authorised programme operator, preferably one recognized by eco-platform.org, or an equivalent organisation that meets the same verification and independence standards.

A separate third-party verified EPD (A1–A3) must also be submitted for the fastening system, meeting the same standards and verification requirements.

The Contracting Authority reserves the right to verify the submitted EPDs and request access to the underlying data and documentation used in their preparation.

EPDs for both the sleepers and the fastening system must be submitted no later than one (1) year after the contract start date, unless otherwise agreed.

Betongsviller blir mer klimavennlige

Ullve NOR har inngått en ny rammeavtale med Sabotz Norway om levering av betongsviller. Den nye avtalen er både konkurransestykt og involverer et vesentlig kutt i utslipp av klimagasser.

Publisert av: Ullve NOR

Publisert: 1. des. 2023 kl. 11:07



7250 CO₂ ton Eqi./yr
> 40 % reduction

2- Optimized use of materials and reuse/refurbishment



Collabrative Circular projects

- Isolation materials – Beform
- Sleepers- Sateba



3- Digital system for optimized material use and reuse



Disenå st. - før



Galterud st. - før



Eidanger - før



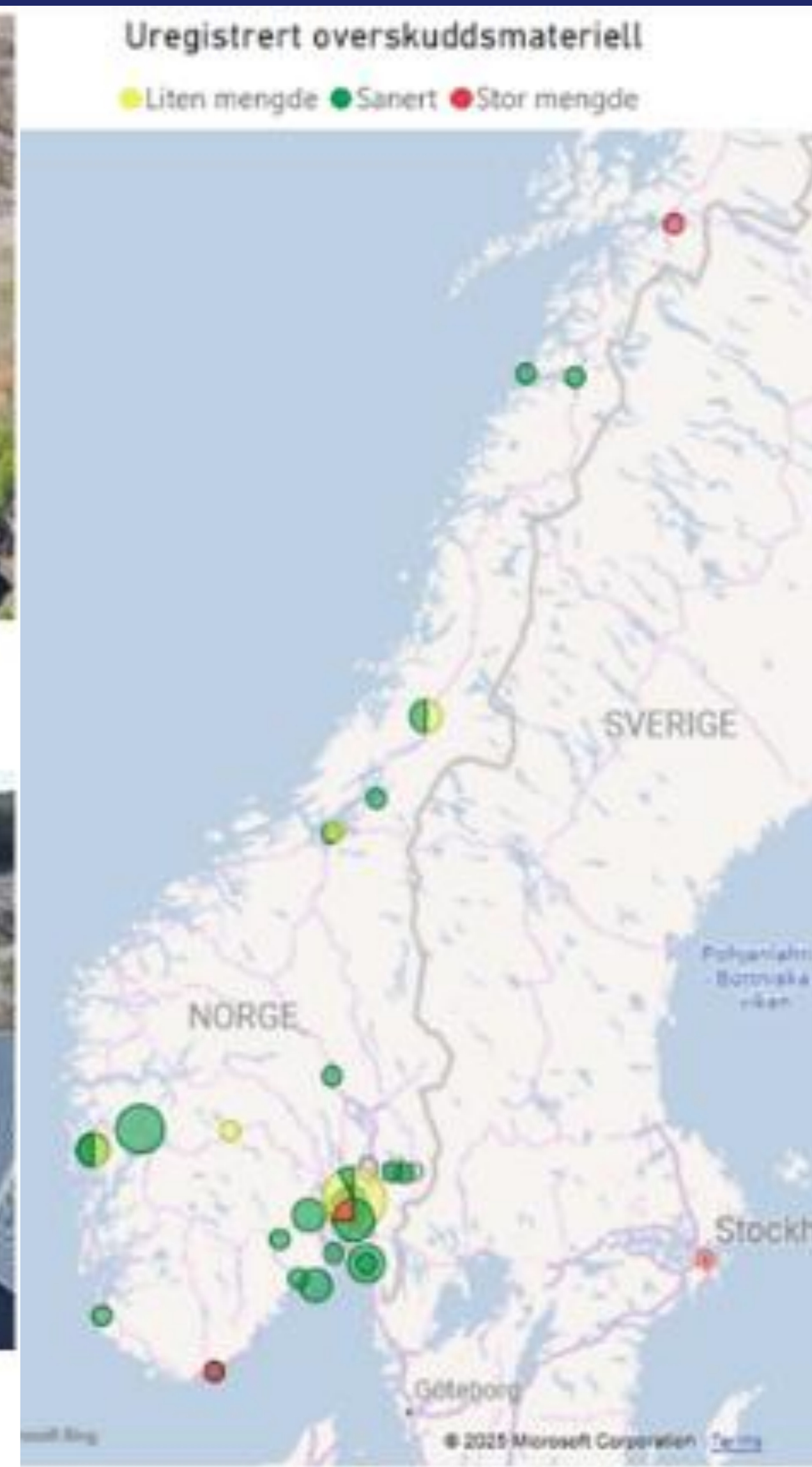
Disenå st. - etter



Galterud st. - etter



Eidanger - etter



4- Pilot and improvement projects for Circular solutions

- Standardization project



Artikkel	Antall	Enhetspris	Vekt (kg)	Verdi totalt	Vekt totalt (kg)	Utslipp per kg	Totalt CO2 utslipp
Kanal 240x200x6000mm, armert	400	kr 3 250	795	kr 1 300 000	318 000	0,113348946	36 045
Lokk til 6m kanal, 370x1000x50, armert	2400	kr 130	42	kr 312 000	100 800	0,12159126	12 256
				kr 1 612 000	418 800		
						Totalt utslipp	48 301
						"Turer til CPH"	345

Example - 2.4 km cable canal

- Reuse of mass



Gains

For Bane NOR

- Optimization of resources use
- Minimization of waste generation
- Economic benefit/cost reduction
- Reduce dependency on c\olatile material market
- Compliance to regulation
- Contributes to reduce Bane NORs impact on nature
- Supports Bane NORs commitment for emission reduction

Beyond Bane NOR

- Contributes to national and regional target for climate neutrality
- Biodiversity and ecosystem conservation
- Cost effectiveness- reduction of expenditure
- Stimulates innovation for climate neutrality in the supply chain
- Sharable knowledge and experience on innovative use of resources



BANENOR

Vi forbedrer og moderniserer
for at flere kan ta mer tog



INTERNATIONAL UNION
OF RAILWAYS

Presentation Pallet Control Tower

14:00 – 14:20 (20')

Bart Menen

A partnership to improve the global management of EUR pallets

Feb 11 2026



Martin Leibrandt RCG/EUR

Bart Meijnen Pallet Control Tower

THE HISTORY OF THE EUR BRAND

The European pallet standard in logistics for 65 years

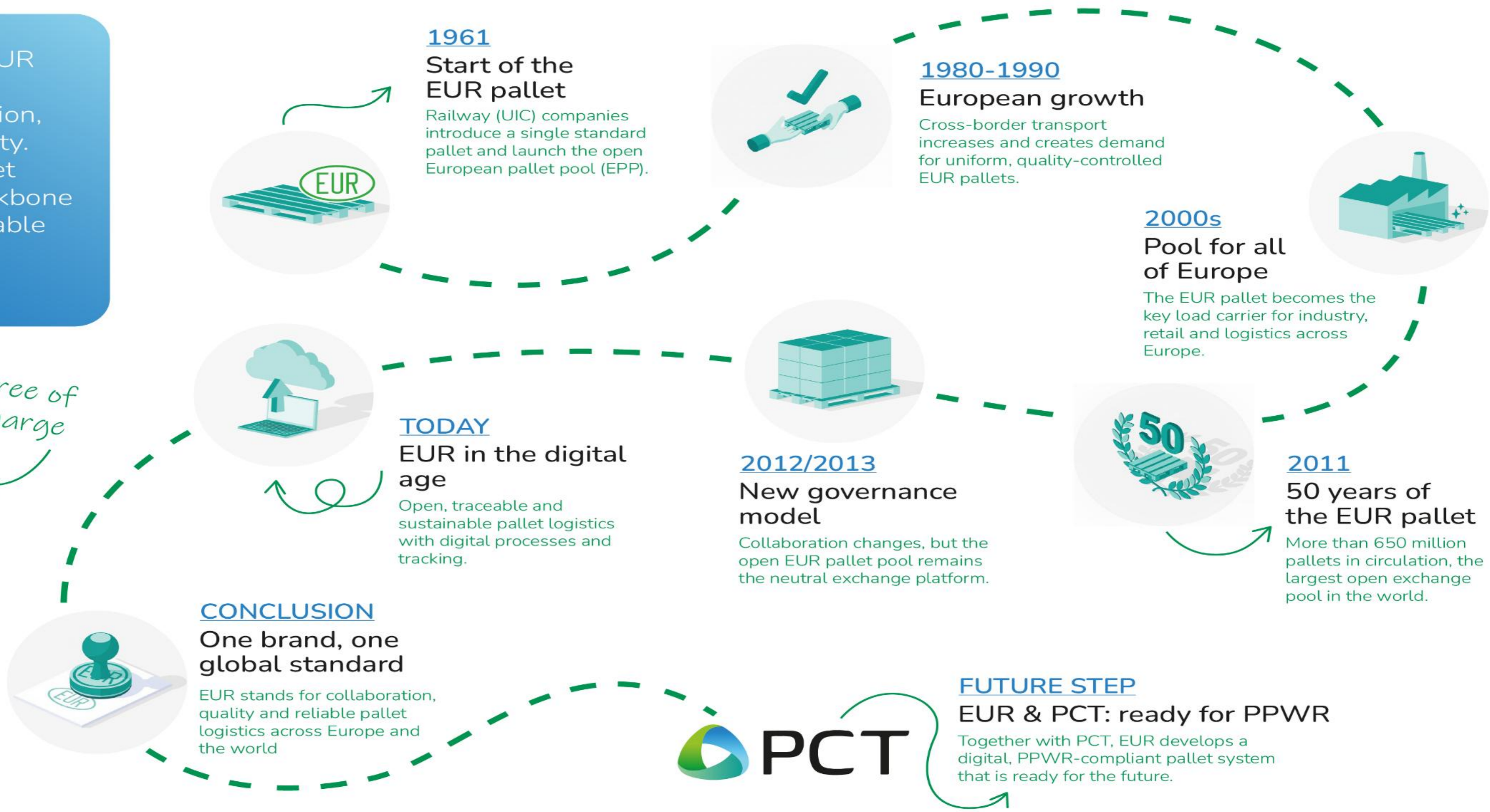


For 65 years, the EUR brand stands for European cooperation, quality and reliability. The European pallet pool forms the backbone of a smart, sustainable and cross-border logistics network.



Scan and setup your account

Free of charge

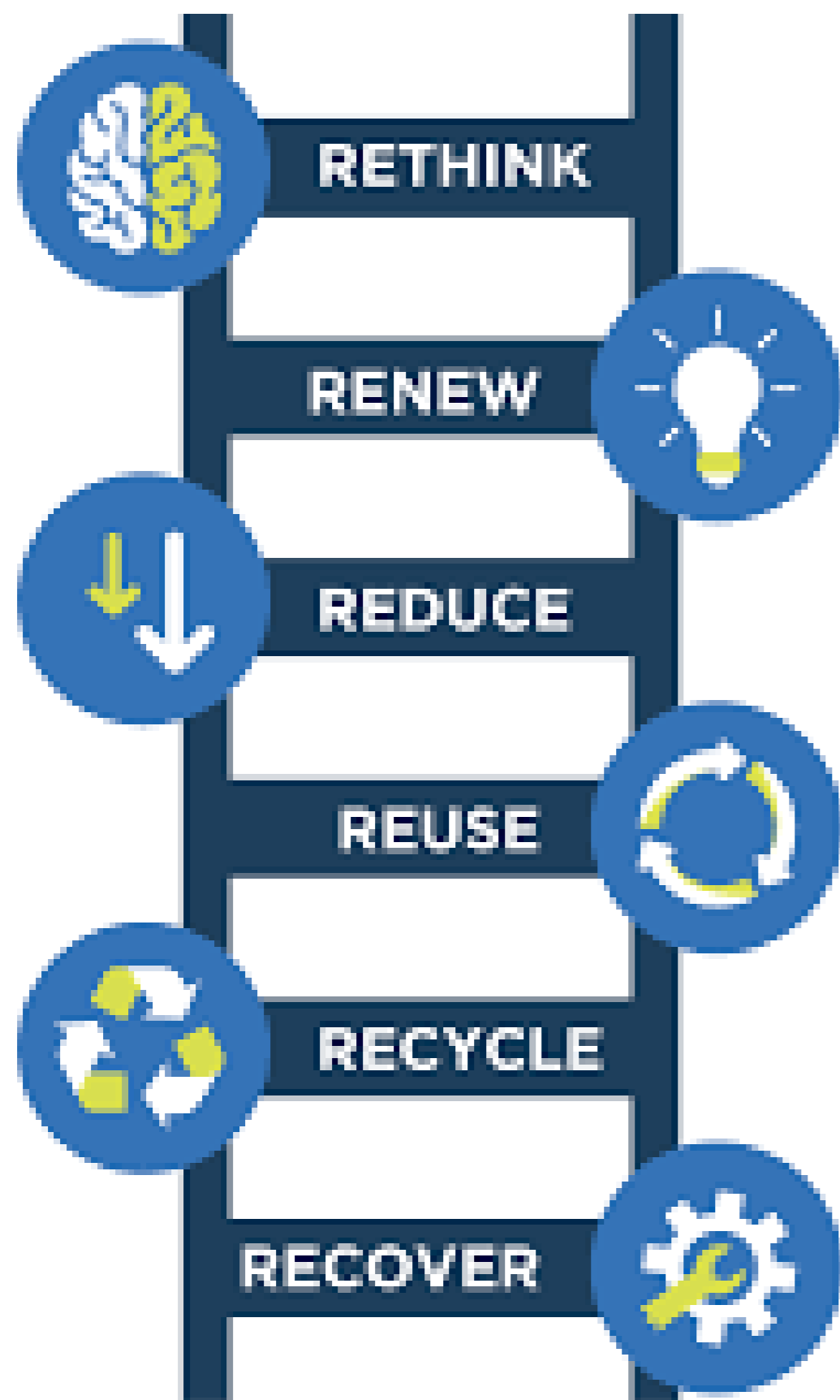




FUTURE STEP

EUR & PCT: ready for PPWR

Together with PCT, EUR develops a digital, PPWR-compliant pallet system that is ready for the future.



Mandatory Recyclability

By 2030, virtually all packaging on the market must be fully recyclable or reusable.

Recycled Content

*Minimum requirements will be introduced for the use of recycled plastic (post-consumer recyclate), ranging from **30% to 35%** by 2030.*

Reduction Targets

*The EU aims for a reduction in packaging waste per capita of **5% by 2030**, increasing to **15% by 2040**.*

New Standards

Packaging must feature standardized labels with sorting instructions and QR codes for reuse information.

Kick-off for global pallet partnership

ÖBB Rail Cargo Group (RCG) and Pallet Control Tower (PCT) have signed a cooperation agreement aimed at optimising the management of pallets on a global scale. The exchange and trade of EUR pallets and other reusable transport items (RTIs) are becoming increasingly important and efficient.



virtual exchange of pallets as
new PMC



The ÖBB / RCG is taking the initiative here to develop a standard that the UIC can adopt.

PPWR compliant and ready for future developments in administrative automation.



Introduction of the Lashing Straps Pool in 2026

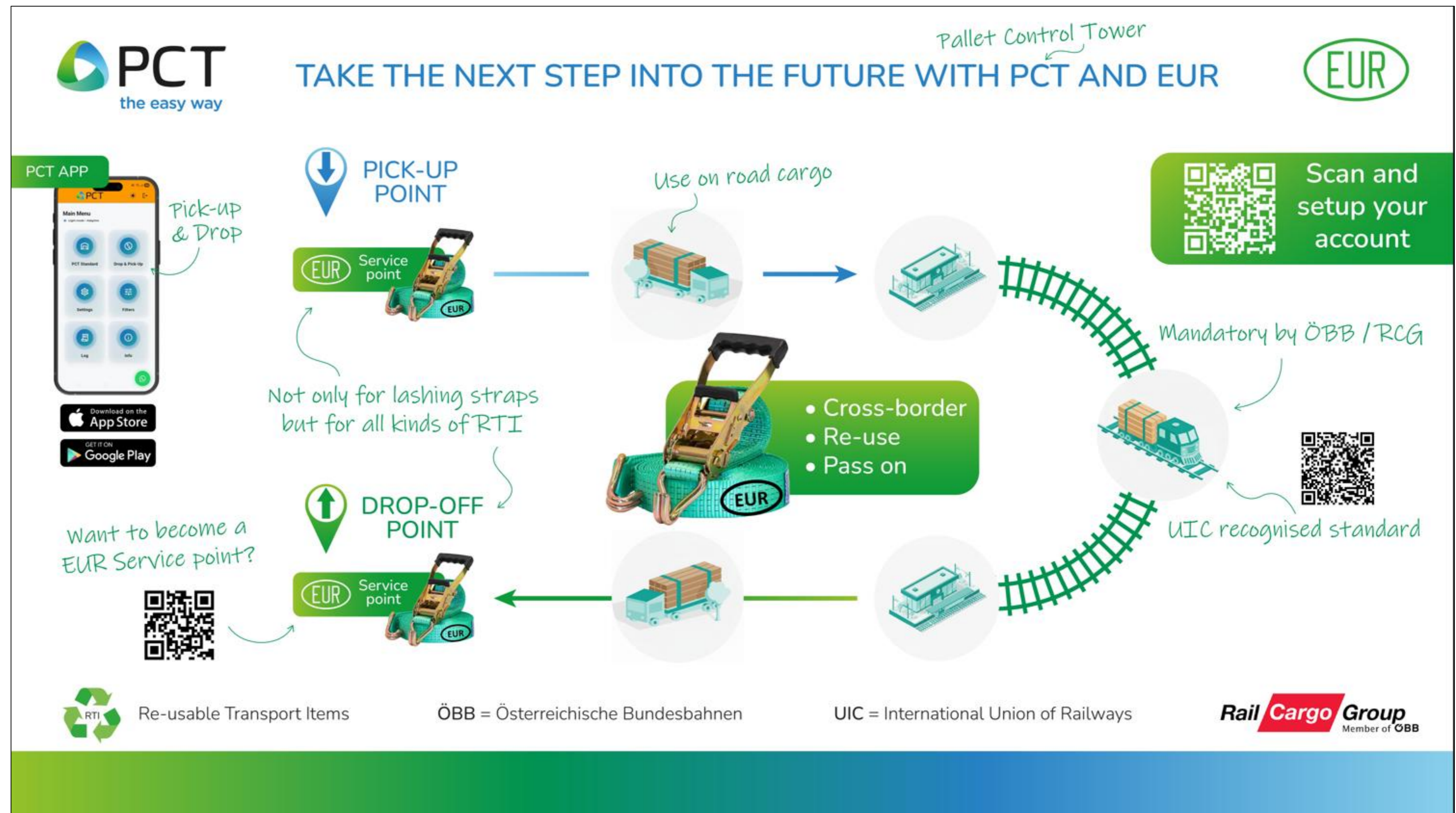


From CAPEX to OPEX (pay per use)

Network wide at all major hubs (Europe coverage)

Minimal administration (api) and PCT-Online Drop & Pick Up app

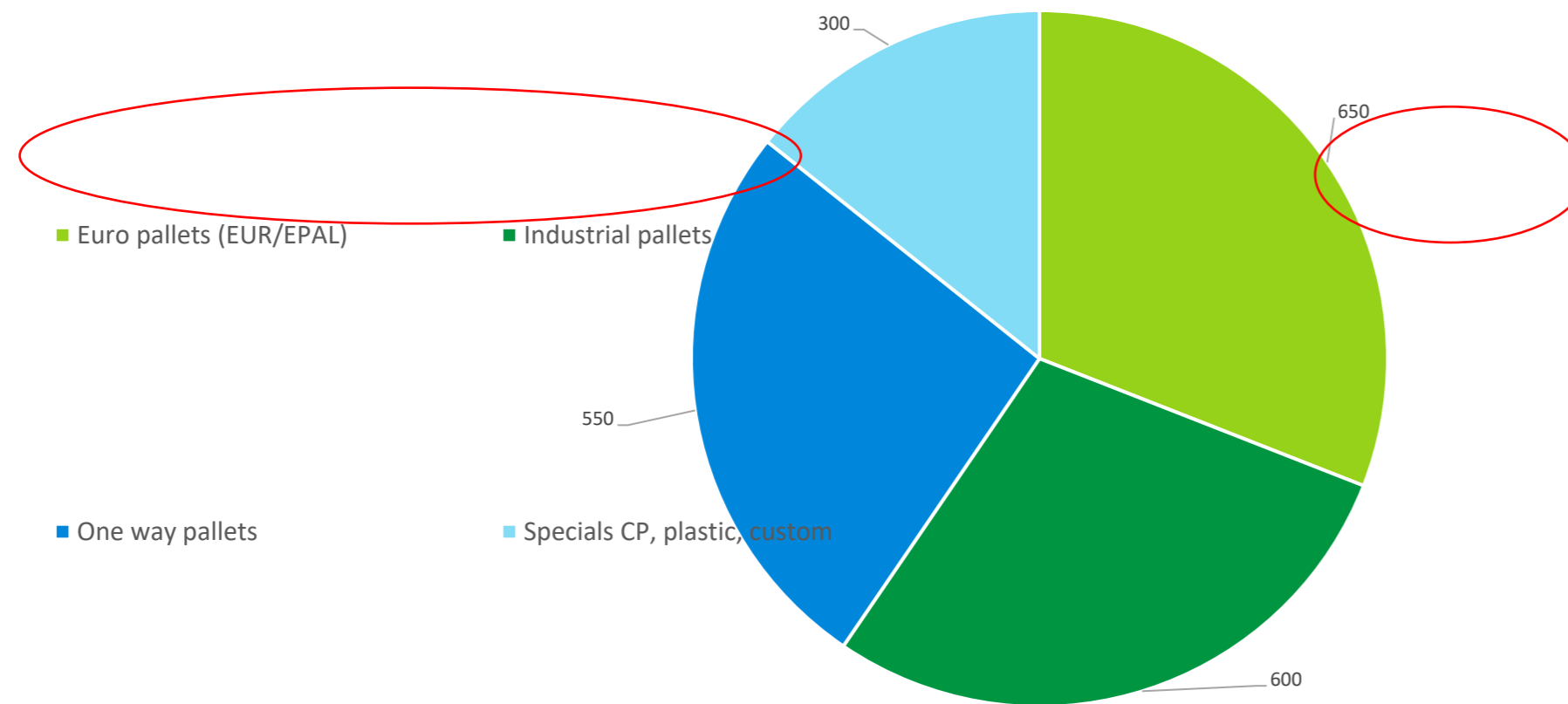
Outsource, maximise flexibility, less risk



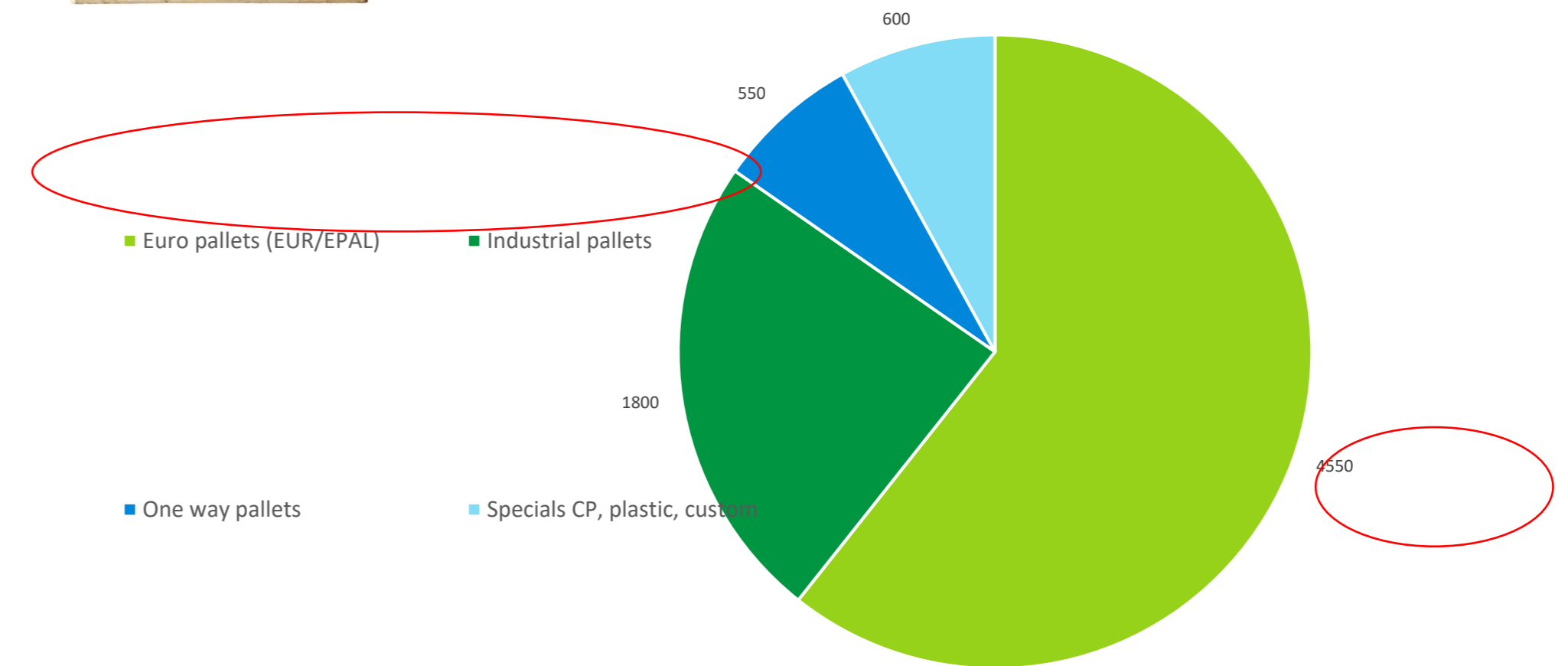
Market in # UIC/EUR 435-2 the euro pallet



EUROPEAN MARKET # PALLETS x 1.000.000



TRIPS PER ANNUAL x 1.000.000

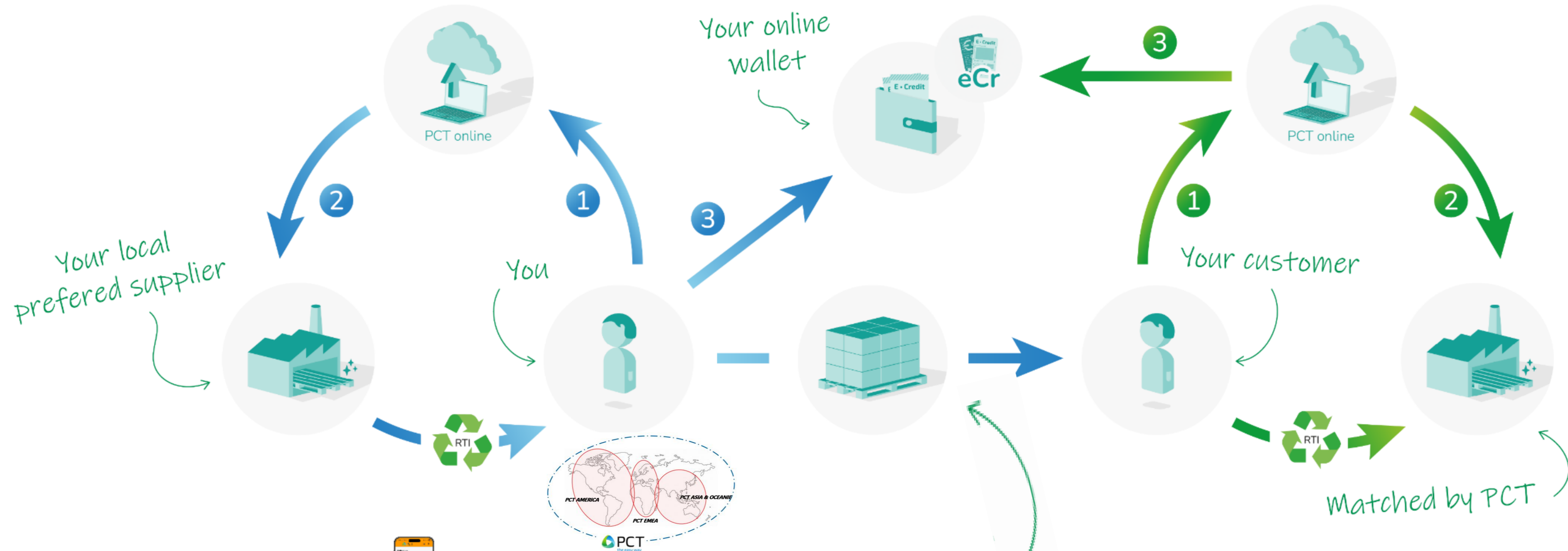


Actual situation > minimum of pallet exchange

What is the impact for the total pallet market.....

- *Market potential if pallets are virtual exchanged?*
- *What does it mean when balances no longer need to be tracked?*
- *What if a current account position on PCT-Online is sufficient?*
- *What does this mean for international customers who export to Europe?*





- 1 Place RFQ* for delivery on pc or app
- 2 Match and receive your delivery
- 3 Pay conveniently with eCredits from your PCT wallet



- 1 Place RFQ* for collection on pc or app
- 2 Match and prepare for collection
- 3 Receive eCredits in your PCT wallet



Scan and setup your account



*RFQ = Request For Quotation



Based on EUWID INDEX



eCredits are not crypto or vouchers. One eCr equals the value of an average B-grade EUR pallet in Europe. eCredit = VAT free and currency friendly. PCT-online = free of charge!

Join us !



Industry Leadership

*Join forces with **Rail Cargo Group** and **ÖBB** to establish the new global standard within the **UIC**.*

The Future of RTI

*As the exchange of **Returnable Transport Items (RTI)** accelerates, seamless collaboration and a unified standard are essential.*

Seamless Cross-Border Trade

*The **PCT Online platform** and the use of **eCredits** make international business simple and efficient.*

Effortless Integratio

*Customer systems can be fully integrated via a high-performance **API**.*

Hybrid Flexibility

*Easily implement **hybrid systems** that bridge the gap between closed and open pooling networks.*





TXS for your
attention

Further information needed!
info@palletcontroltower.eu

Break time



Until: 14:45



INTERNATIONAL UNION
OF RAILWAYS

Technical demonstration “How to install a floor in a train”

14:45 – 15:15 (30’)

nora® by Interface®

Feb 11 2026



INTERNATIONAL UNION
OF RAILWAYS

Circularity at Scale - Gen Phoenix Ltd.

15:15 – 15:30 (15')

Katie Pallatt-Taylor, Niels Kleusberg

Feb 11 2026

Circularity at Scale - Gen Phoenix Ltd.



Katie Pallatt-Taylor

Sales Manager

Gen Phoenix Ltd.



Niels Kleusberg

Sales Director

Gen Phoenix Ltd.



Circularity at Scale

Supporting the rail sector transition to net-zero.

FEBRUARY
2026



GEN PHOENIX FACTORY • PETERBOROUGH, UK

OUR MISSION

Making material circularity possible at an epic scale.

We apply technology to the traditional practice of leathermaking *the result is a true marriage of science and innovation, inspired by nature.* Our leather-based material offers an enhanced, verified sustainability profile that considers total impact, from water and carbon requirements and roll-to-roll utilisation, to end-of-life possibilities.

Where others see waste, we see an authentic and valuable resource.



Our Holistic Approach:

Taking nature's rule:

Every fibre has a function:

Like mammalian skin or wool, strength comes from entangled fibres – no resin, no glue, no chemicals.

SOFT LEATHER FIBRES

Innovative from every angle.

ENERGY



100% RENEWABLE ENERGY

WASTE



10,000 TONNES SAVED
FROM LANDFILL

WATER



RECYCLED WATER FUELS
THE PROCESS

Waste - to - Value

STAGE 1

Wet Blue Leather Waste

- Saved over 10,000 tonnes of leather waste from landfill
- Mechanically entangled using recycled water & 100% renewable electricity
- Achieved carbon footprint 80%+ lower than traditional leather
- 100% Traceability from Gold & Silver LWG tanneries



STAGE 2

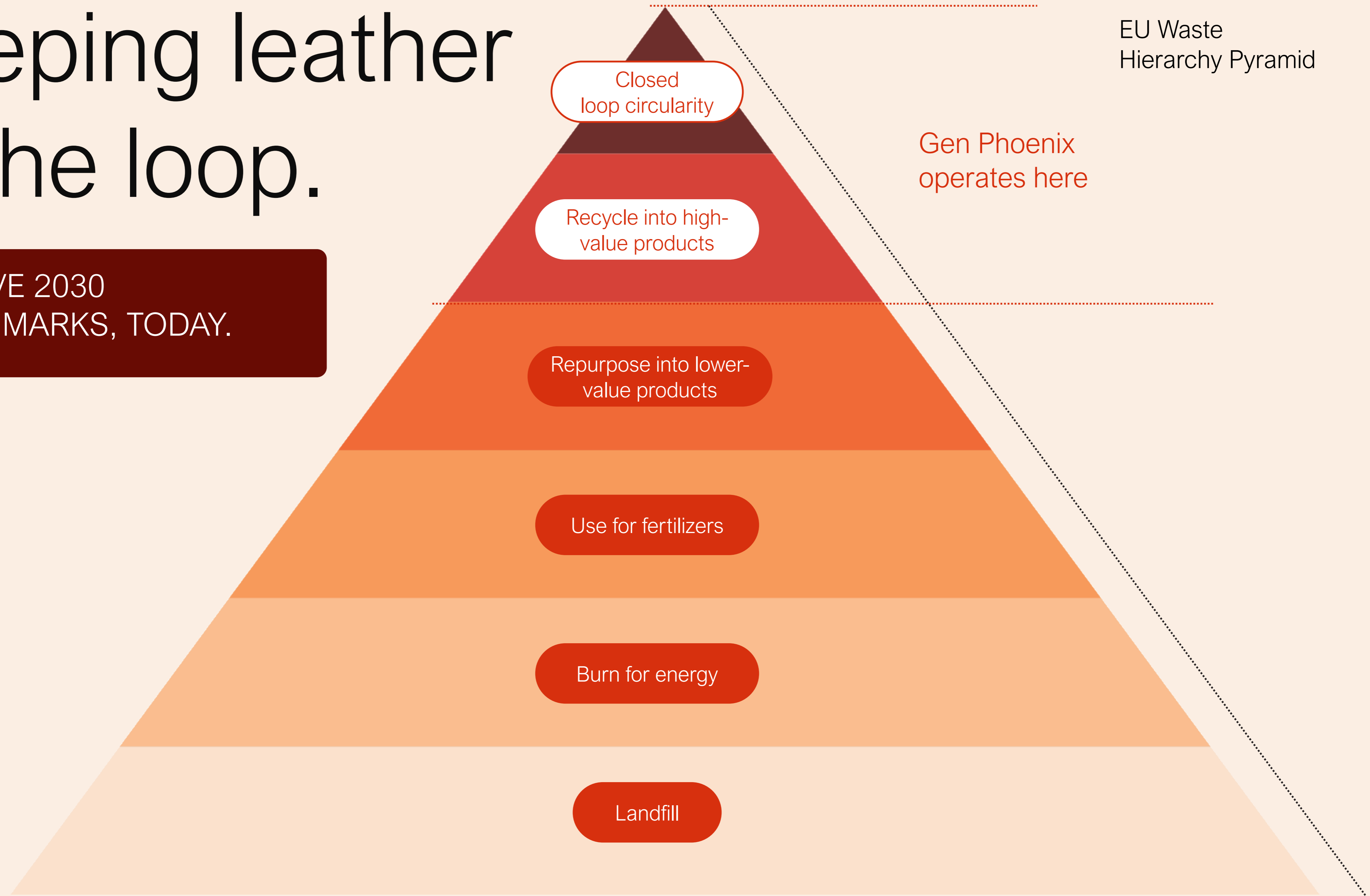
Cutting Waste

STAGE 3

End-of-life Waste

Keeping leather In the loop.

ACHIEVE 2030
BENCHMARKS, TODAY.







INTERNATIONAL UNION
OF RAILWAYS

Workshop on Circularity Beyond Zero: Advancing Positive Impact in Rail

15:30 – 17:00 (90')

Samuel Jones, RSSB

Feb 11 2026

UIC Zero Waste Workshop

Advancing Positive Impact in Rail

Agenda

1. Intro and context to the RSSB Sustainability Maturity Tool (10 mins)
2. Overview of the Circular Economy Content (5 mins)
3. Overview of the CE Maturity questions (10 mins)
4. Workshop activity (50 mins)

What does RSSB do?

The Rail Safety and Standards Board is the independent safety, standards and research body for Great Britain's rail network. We work across an evolving railway to improve safety, efficiency, customer satisfaction and sustainability.



The Sustainable Rail Blueprint

- Rail's first comprehensive sustainability framework, developed collaboratively with industry, for industry
- Sets out industry-wide ambitions and action plans across Emissions, Natural Environment and Social Sustainability



WHAT

11 sustainability topics, across emissions, natural environment and social sustainability, underpinned by a flagship goal, strategic aims and a route map, to fully define what the industry needs to achieve

HOW

6 common solutions, identified as the primary enablers of sustainable rail:

- Zero Emissions Traction
- Seamless Journeys
- Nature-based Solutions
- Social Value
- Data Framework
- Culture for Sustainability

WHO

Roles and responsibilities to deliver the sustainability goals for everyone across industry:

- Infrastructure Managers
- Passenger Train Operators
- Freight Train Operators
- ROSCOs
- Supply Chain
- Governments & Rail Regulator





Sustainability Maturity Tool

A self-assessment tool to help rail Organisation's assess their progress against the Sustainable Rail Blueprint.

Used by over 50 organisations since its launch in April 2024!



● At A Glance

- Free to use for all RSSB member companies and affiliates
- Launched in April 2024, still in beta version
- For: railway operators, infrastructure managers, freight and passenger train operators, rolling stock leasing companies, and supply chain partners

● How It Works

Answer a series of multiple-choice questions that explore your commitment to emissions reduction, environmental conservation, and social responsibility—key pillars of the Sustainable Rail Blueprint.

Rate your initiatives from 1 (just starting) to 5 (leading the way), and let the tool do the rest! It'll reveal your organisation's average maturity score across each topic.

● Use Cases

- Track your progress across emissions, natural environment, and social sustainability.
- Identify strengths and areas for improvement.
- Align your organisation's sustainability programme to the Blueprint.

What it looks like in practice...

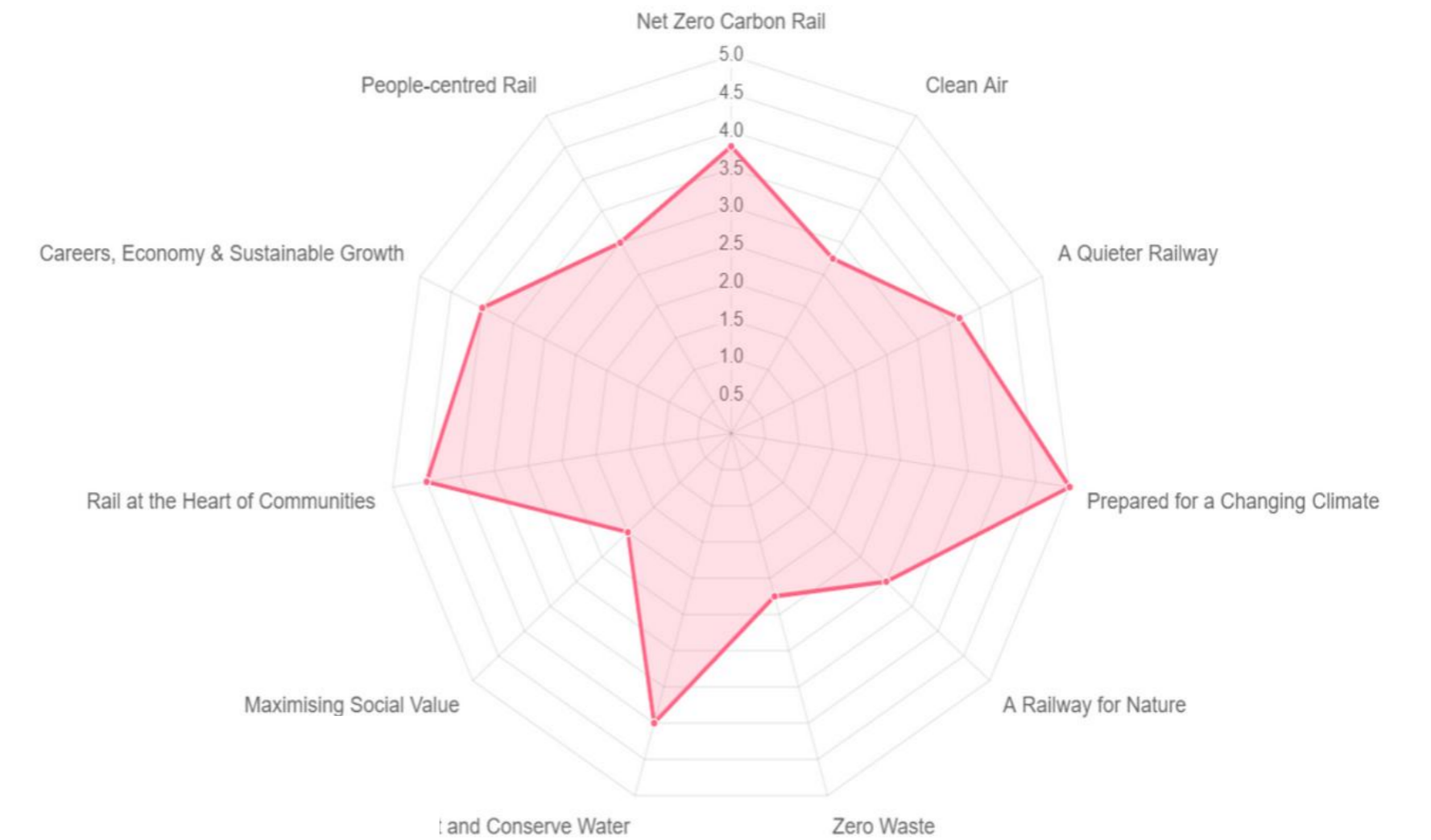
Sustainability Maturity Tool

1/30/2025 3:23:34 PM

Emissions	Natural Environment	Social Sustainability
<p>NET ZERO CARBON RAIL</p> <p>N/A Not Completed</p>	<p>PREPARED FOR A CHANGING CLIMATE</p> <p>N/A Not Completed</p>	<p>MAXIMISING SOCIAL VALUE</p> <p>N/A In Progress</p>
<p>CLEAN AIR</p> <p>5 Completed on 4/25/2025 12:51:34 PM</p>	<p>A RAILWAY FOR NATURE</p> <p>N/A In Progress</p>	<p>RAIL AT THE HEART OF COMMUNITIES</p> <p>N/A Not Completed</p>
<p>A QUIETER RAILWAY</p> <p>N/A Not Completed</p>	<p>ZERO WASTE</p> <p>N/A In Progress</p>	<p>CAREERS, ECONOMY & SUSTAINABLE GROWTH</p> <p>3 Completed on 4/25/2025 12:51:56 PM</p>
	<p>PROTECT AND CONSERVE WATER</p> <p>1 Completed on 4/25/2025 12:52:30 PM</p>	<p>PEOPLE-CENTRED RAIL</p> <p>N/A Not Completed</p>

Sustainability Maturity Tool

Net Zero Carbon Rail



Net Zero Transport System

To what extent is your organisation contributing to shifting transport from air or road to an optimised rail network?

This question relates to modal shift and the role of rail in delivering a net zero transport system and economy.

Rate this question:

<input type="radio"/> Rate as 1	Our organisation has not implemented any measures to support modal shift.
<input checked="" type="radio"/> Rate as 2	Our organisation has implemented some limited measures to support modal shift.
<input type="radio"/> Rate as 3	Our organisation has a plan to deliver modal shift. Evidence may include establishing growth targets and a programme to deliver them.
<input type="radio"/> Rate as 4	Our organisation is delivering modal shift. Evidence may include achieving or being on track to achieve growth targets.
<input type="radio"/> Rate as 5	Our organisation is leading the industry in delivering modal shift. Evidence may include achievement of industry-leading growth targets and/or coordinating an industry-wide approach to modal shift.
<input type="radio"/> N/A	Not Applicable

Sustainability Maturity Tool Version 2

We are currently working on version 2 of the SMT.

Version 2 will include:

Action plans and recommendations

Tracking of previous scores

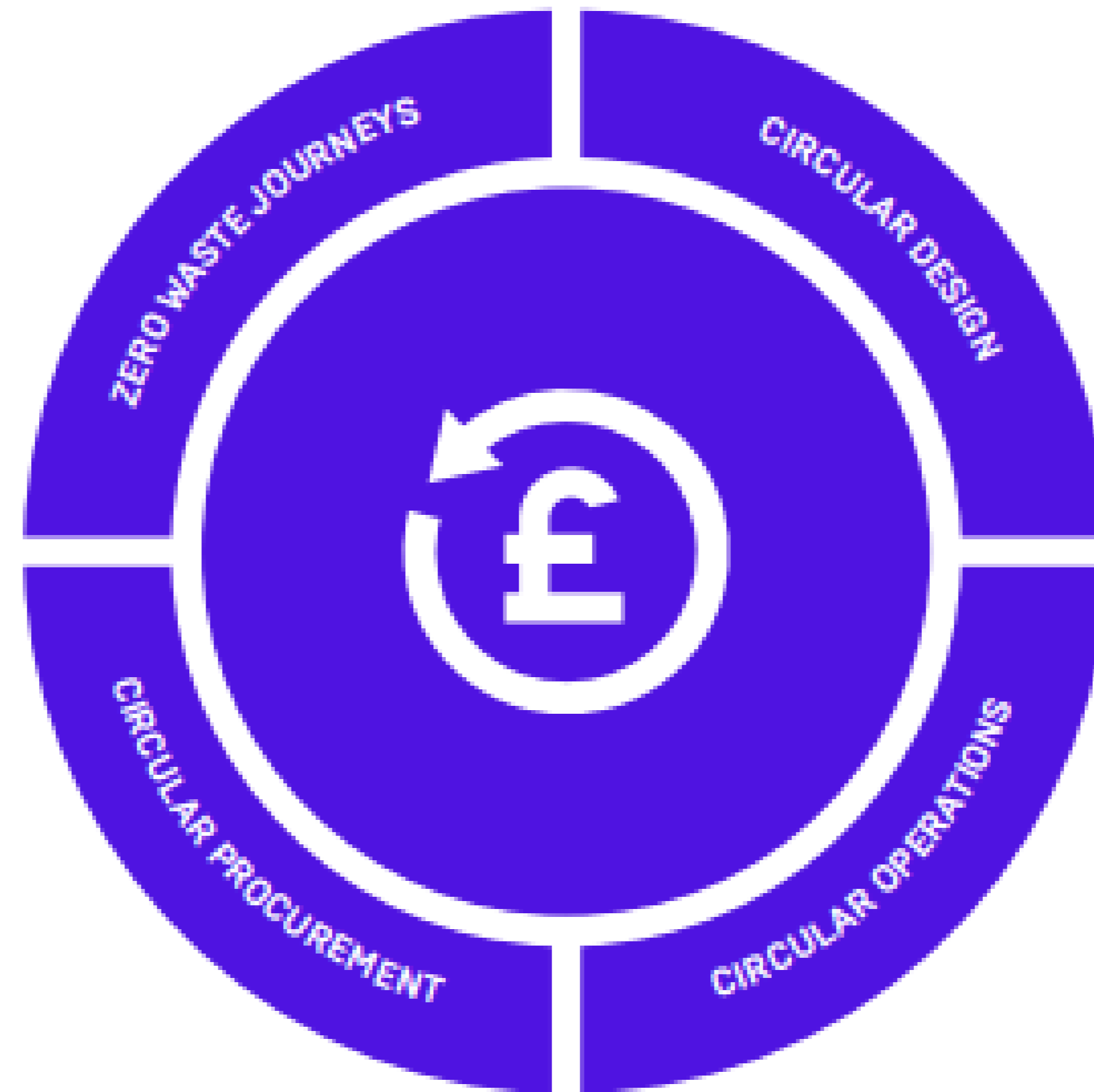
Better visualisation and usability

Structure and Scoring

The value is in the discussion and learning, not the score!

5 – Leading the industry
4 – Delivering the plan
3 – Has a plan
2 – Some limited activity
1 – Not doing
NA – Not applicable

SRB- Circular Economy: A railway that uses resources efficiently and supports a collaborative economy



Zero Waste Journeys

To what extent does your organisation engage customers and communities in creating zero waste journeys?

This question relates to the customer-facing aspects of rail, including eliminating single-use items from catering, providing recycling facilities and station initiatives such as zero-waste shops.

Rate this question:

<input type="radio"/> Rate as 1	Our organisation has not undertaken any activities to create zero waste journeys.
<input type="radio"/> Rate as 2	Our organisation has undertaken some limited activities to create zero waste journeys. Evidence may include provision of recycling facilities and water refill stations.
<input type="radio"/> Rate as 3	Our organisation has a plan to create zero waste journeys. Evidence may include recognising waste within customer experience plans and/or engaging passengers on waste management.
<input type="radio"/> Rate as 4	Our organisation is creating zero waste journeys. Evidence may include significant delivery of waste elimination throughout the customer experience and/or showcasing locally led initiatives that support a circular economy.
<input type="radio"/> Rate as 5	Our organisation is leading the industry in creating zero waste journeys. Evidence may include an industry-leading programme to eliminate waste from the customer experience and/or delivery of innovative customer-facing circular economy initiatives.
<input type="radio"/> N/A	Not Applicable

Tell us your reasons:

Please describe the reasons for your selection.

Circular Design

To what extent does your organisation incorporate circular design specifications as standard for all assets, products, and projects?

This question relates to ensuring rail assets, including infrastructure and rolling stock, are designed with consideration of durability, efficient use of materials and future reuse or recycling.

Rate this question:

<input type="radio"/> Rate as 1	Our organisation does not incorporate circular design specifications for assets, products, or projects.
<input type="radio"/> Rate as 2	Our organisation has some limited examples of incorporating circular design specifications for assets, products, or projects.
<input type="radio"/> Rate as 3	Our organisation has a plan to incorporate circular design specifications as standard for all assets, products, and projects. Evidence may include a documented review of design specifications to identify opportunities to incorporate circular design principles and design out waste.
<input type="radio"/> Rate as 4	Our organisation is incorporating circular design specifications as standard for all assets, products, and projects. Evidence may include significant implementation of circular design principles within design specifications.
<input type="radio"/> Rate as 5	Our organisation is leading the industry in incorporating circular design specifications as standard for assets, products, and projects. Evidence may include an industry-leading and innovative circular design programme.
<input type="radio"/> N/A	Not Applicable

Tell us your reasons:

Please describe the reasons for your selection.

Circular Operations

To what extent does your organisation incorporate circularity into all operational rail decisions?

This question relates to avoiding waste creation and retaining and reusing resources for as long as possible, including through asset maintenance and repurposing.

Rate this question:

<input type="radio"/> Rate as 1	Our organisation does not incorporate circularity into operational rail decisions.
<input type="radio"/> Rate as 2	Our organisation has some limited examples of incorporating circularity into operational rail decisions. Evidence may include progress in diverting waste from landfill.
<input type="radio"/> Rate as 3	Our organisation has a plan to incorporate circularity into all operational rail decisions. Evidence may include a documented review of asset management strategies and resource management plans to identify opportunities to incorporate circular principles.
<input type="radio"/> Rate as 4	Our organisation is working to incorporate circularity into all operational rail decisions. Evidence may include significant implementation of circular principles within asset management strategies and resource management plans, which may be aligned to BS 8001.
<input type="radio"/> Rate as 5	Our organisation is leading the industry in incorporating circularity into all operational rail decisions. Evidence may include an industry-leading and innovative approach to circular operations.
<input type="radio"/> N/A	Not Applicable

Tell us your reasons:

Please describe the reasons for your selection.

Sustainable Procurement

To what extent has your organisation embedded sustainability performance requirements within procurement practices?

This question relates to incorporating sustainability specifications within rail procurement contracts.

Rate this question:

<input type="radio"/> Rate as 1	Our organisation has not embedded sustainability performance requirements within procurement practices.
<input type="radio"/> Rate as 2	Our organisation has some limited examples of embedding sustainability performance requirements within procurement practices.
<input type="radio"/> Rate as 3	Our organisation has a plan to embed sustainability performance requirements within procurement practices. Evidence may include a documented review of procurement processes to identify opportunities to embed sustainability.
<input type="radio"/> Rate as 4	Our organisation has embedded sustainability performance requirements within procurement practices. Evidence may include a well-established and/or accredited sustainable procurement policy aligned to ISO 20400.
<input type="radio"/> Rate as 5	Our organisation is leading the industry in embedding sustainability performance requirements within procurement practices. Evidence may include an industry-leading and innovative sustainable procurement programme and/or coordinating an industry-wide approach.
<input type="radio"/> N/A	Not Applicable

Tell us your reasons:

Please describe the reasons for your selection.

What a lower vs higher maturity example looks like



Zero waste journey's

1. The organisation has an executive-approved zero-waste strategy with clear targets, leadership ownership and consistent waste segregation across all sites. Over 75% of waste is recycled, nothing goes to landfill, and passenger behaviour is actively shaped through clear facilities, incentives and contamination checks. Circular economy innovations are embedded and scaled, with performance and learning regularly shared through industry forums.
2. The organisation encourages employees to reduce waste and is trialling a small number of initiatives, such as virtual tickets and station waste pilots, but lacks a formal zero-waste or circular economy strategy. Waste practices are inconsistent across sites, recycling performance is not systematically measured, and activities are largely led by individual teams rather than embedded organisation-wide.



Workshop Agenda

1. Individually go through and score yourself based upon your understanding of your organisation's activities (10 mins)
2. Compare notes with the people on your table (10 mins)
3. Discuss in your tables 2-3 high level actions that you could take individually/sector actions to increase your/sector score and the difficulty in doing this (10 mins)
4. General feedback and discussion as a whole group- we will be asking those who scored highly why they did so (20 mins)

Individually go through and score yourself (10 mins)

Please scored based on current reality within your organisation not planned activity.

Compare notes with people on your table (10 mins)

- Which questions were hardest to answer?
- Where did your scores differ most?

Table discussion: 2-3 actions to increase a score (10 mins) use one question for this example

- What would help you move up one maturity level, not to best practice?
- Are there any common enablers or barriers that you have identified

Feedback and whole group discussion (20 mins)

- Who scored highest on your table for each question
- What enabled it (policy, leadership, procurement, data, suppliers)

Special Notices

Platform numbers will be displayed as soon as confirmed.

Please wait on the main concourse until platforms are displayed. Thank you.

15/11/24

Wrap up and close



INTERNATIONAL UNION
OF RAILWAYS

Thank you for your attention



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