

# De koers van staal in de B&U- en GWW-sector

Mic Barendsz  
Bouwen met Staal

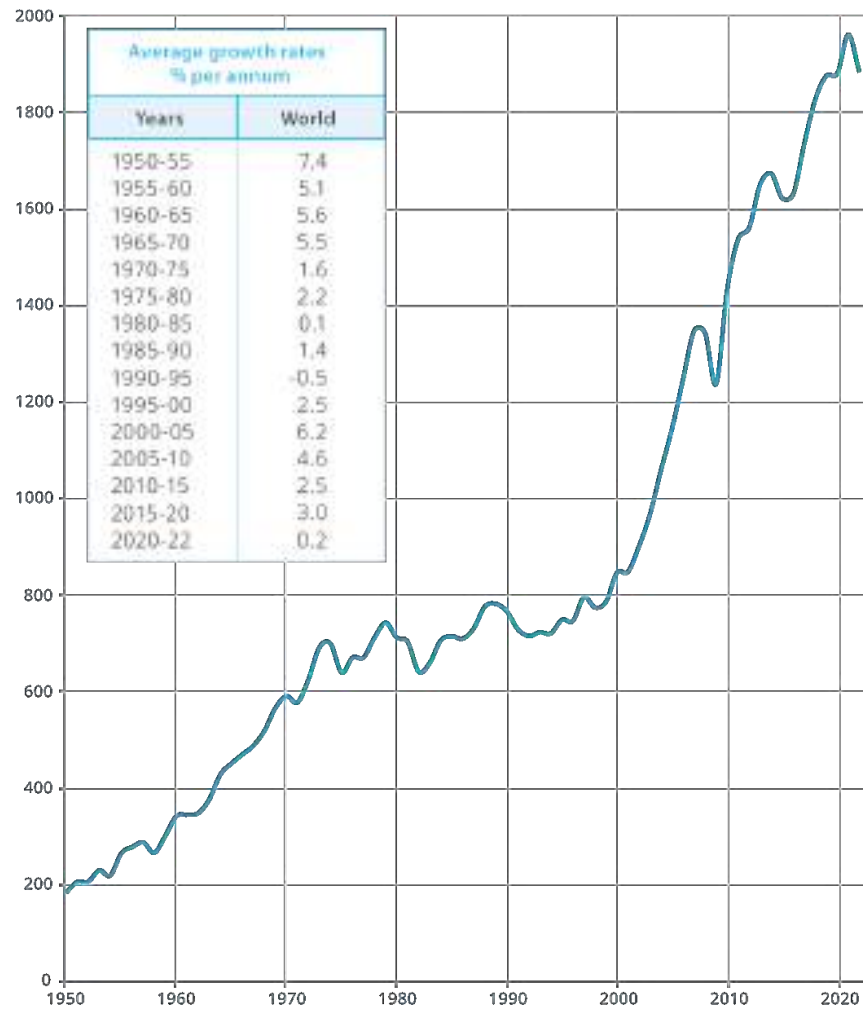




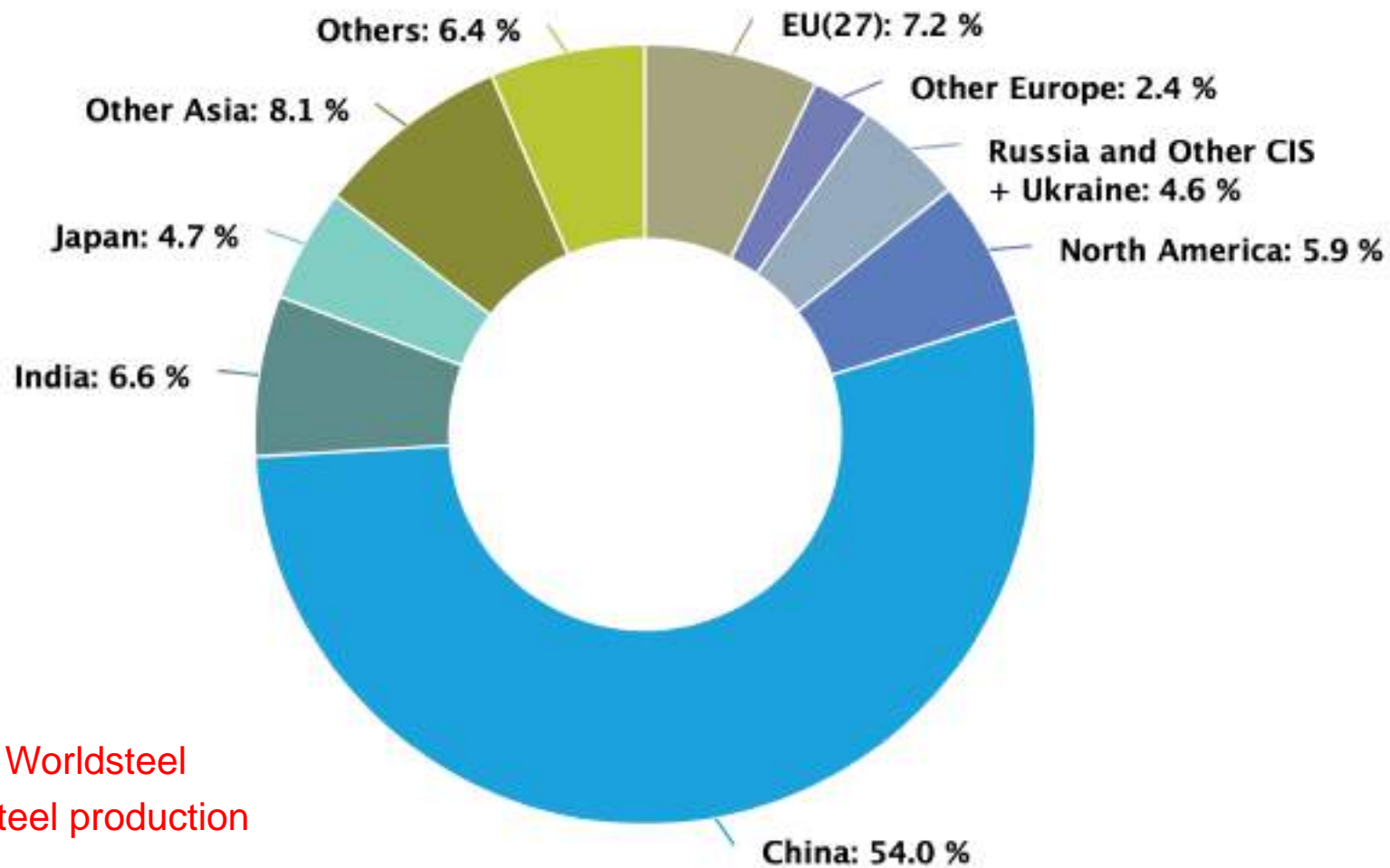
A photograph of a steel mill interior. Several large, cylindrical furnaces are visible, glowing with bright orange and yellow light, indicating high temperatures. The machinery is complex, with various pipes, valves, and structural beams. The lighting is dramatic, with the primary light source being the furnaces themselves, creating a strong contrast with the darker areas of the mill. The overall atmosphere is industrial and intense.

Worldwide  
1885 million  
Tonnes  
Crude steel

Source: Worldsteel  
Crude steel production  
2022







Source: Worldsteel  
Crude steel production  
2022





Europe (without Russia & Ukraine)

182 million

Tonnes

Crude steel

Source: Worldsteel  
Crude steel production  
2022





1/10



A worker in a blue uniform and a white hard hat is leaning over a railing in a steel mill. The background is filled with industrial machinery, including conveyor belts and large structures, with bright orange and yellow sparks and light emanating from the process. The overall scene is dimly lit, with the primary light source being the intense heat of the steel production.

EU-27

136 million

Tonnes

Crude steel

Source: Worldsteel  
Crude steel production  
2022



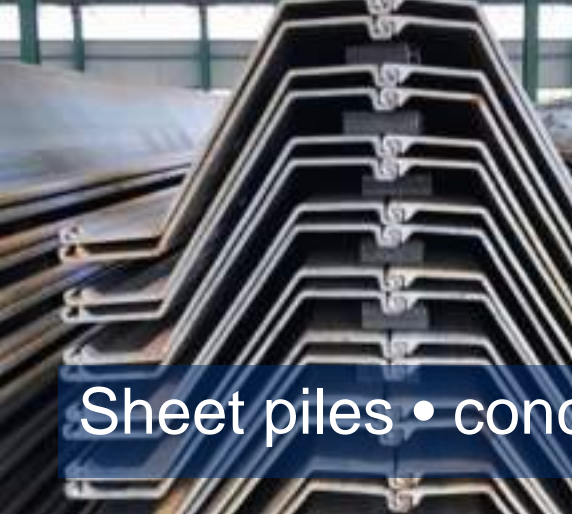


 EXIT

Crude steel • semi-finished products • finished products

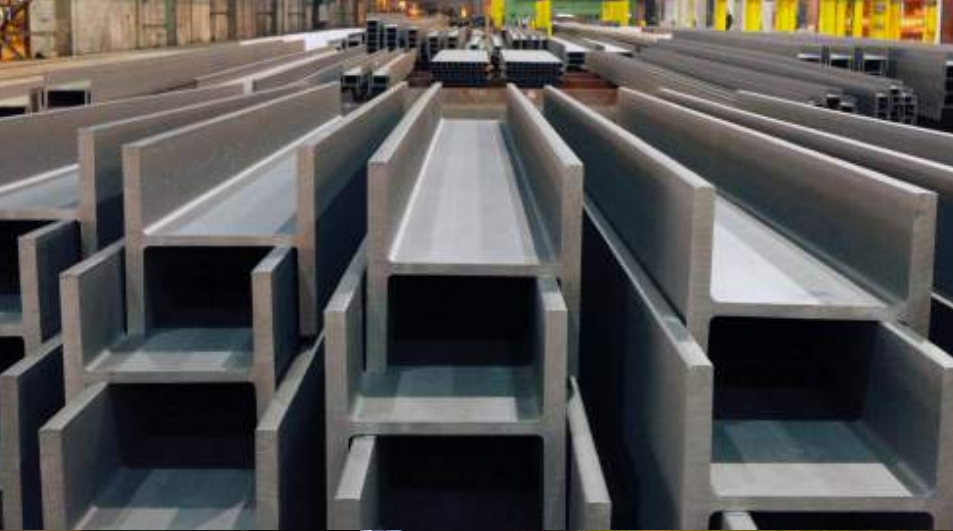


Ingots & semi-finished • bars and rods • rails



Sheet piles • concrete reinforcing bars • pipes and fittings

Tubes • beams • quarto plate • hot rolled flat products



Organic coated sheets • hot dipped metal coated sheets





The background of the slide is a collage of images related to steel production and construction. On the left, there are stacks of steel pipes and beams. On the right, there are large coils of steel sheet metal and a yellow crane lifting a coil. The central text is overlaid on a blue semi-transparent rectangle.

**EU-27**  
**73 million**  
**Tonnes**  
**(Semi-)finished products**  
**for steel construction work**

Source: Eurofer  
2023



An aerial photograph of a river delta, likely the Rhine-Meuse delta, showing a complex network of waterways and land. A large, semi-transparent blue rectangle is overlaid on the left and center of the image, containing yellow text. The text is arranged in a list-like format, with the largest text at the top and smaller text below it.

Netherlands

3 million

Tonnes

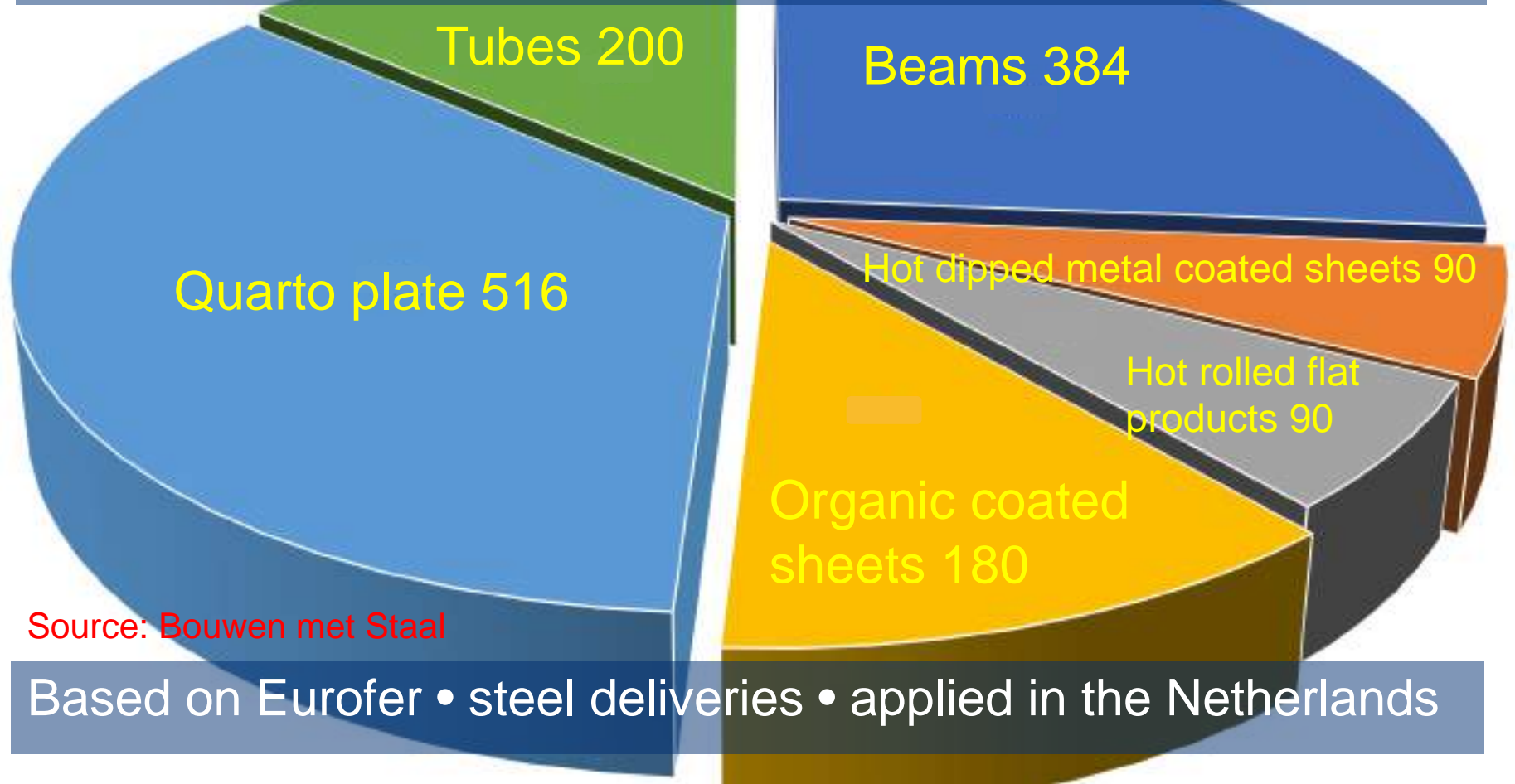
(Semi-)finished products  
for steel construction work

Source: Eurofer  
2023



**Bouwakkoord Staal**

2021 • steel use / year • construction • 1460 thousand tonnes



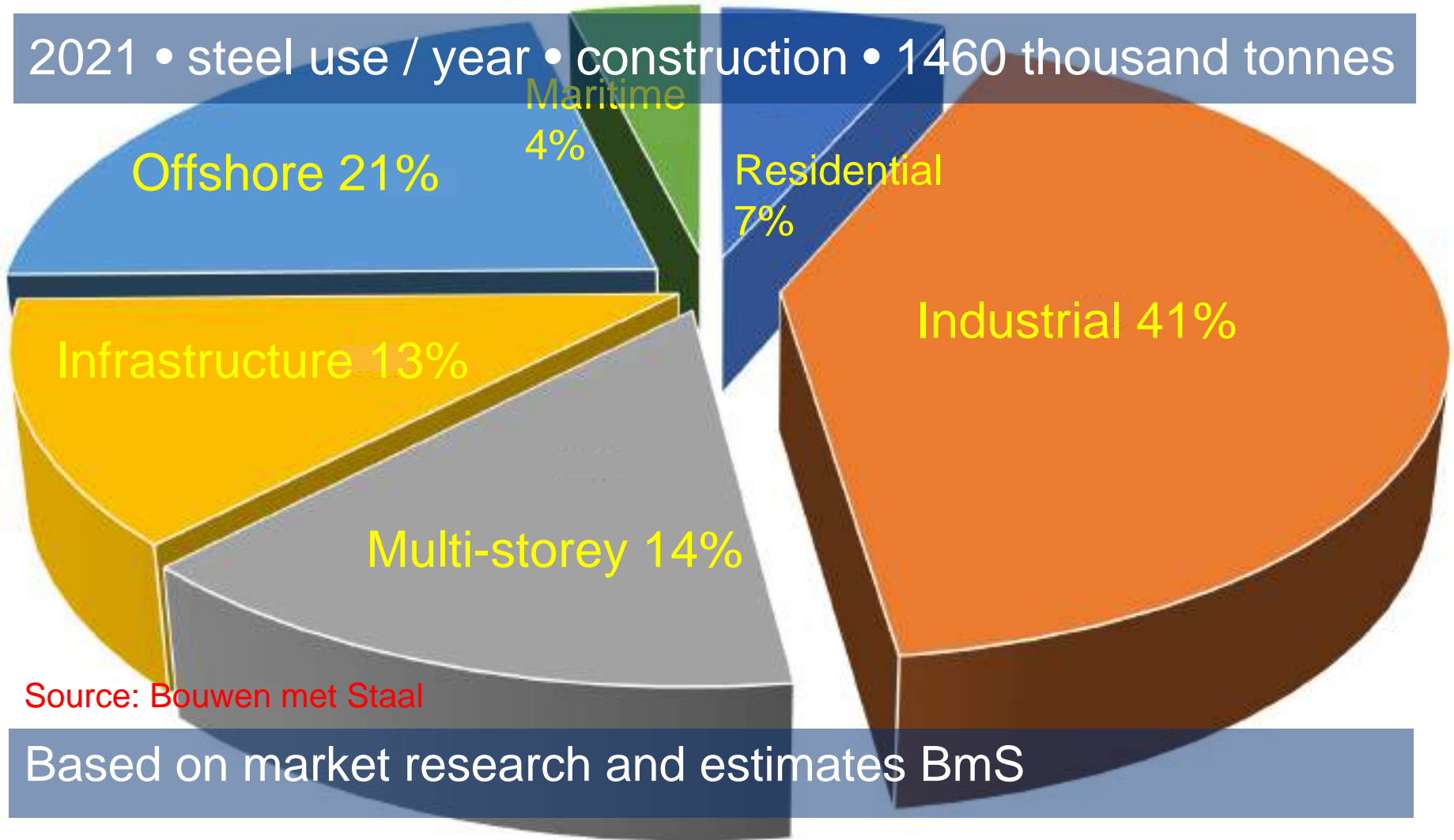
Source: Bouwen met Staal

Based on Eurofer • steel deliveries • applied in the Netherlands

# Market research • by BmS and external bureaus



2021 • steel use / year • construction • 1460 thousand tonnes



Source: Bouwen met Staal

Based on market research and estimates BmS

(Semi-finished) products • profiles & 'thick' plate

Tubes 200

Beams 384

Quarto plate 516





Tubes 200



Beams 384 ↑ (12%)



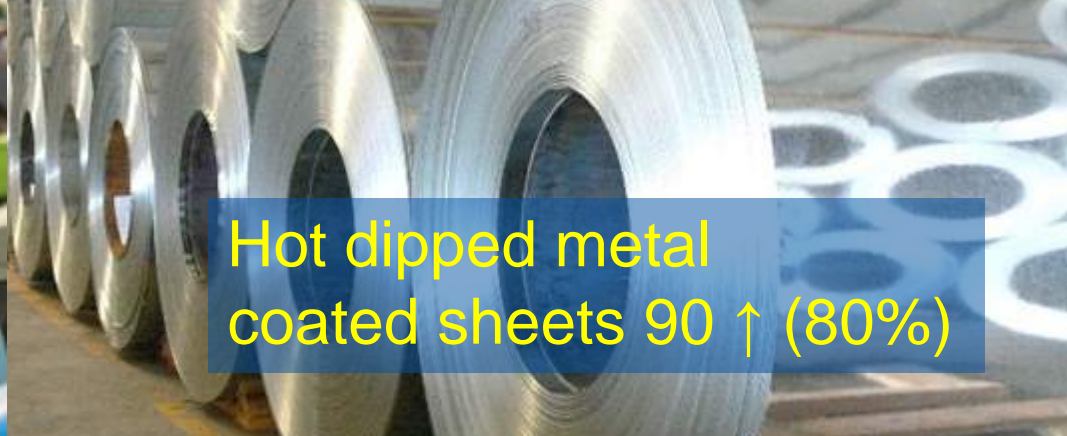
Quarto plate 516

Source: Eurofer  
2023



Organic coated  
sheets 180

Source: Eurofer  
2023



Hot dipped metal  
coated sheets 90 ↑ (80%)



Hot rolled flat  
products 90



# Infrastructure?

SUBLIME

SUstainaBle and reliable  
stEel infrastructures

# Infrastructure

Cable-stayed bridges:  
pylons and cables  
(composed)

Arch bridges:  
Arches (composed)

Bridge decks

Quarto plate • thick steel plate • 166 kton infra

# Infrastructure



Troughs  
Crossbeams

Plate girders

End plates  
Fin plates  
Stiffener plates

Hot rolled flat products • thick steel plate • 30 kton infra

# Infrastructure

Truss bridge  
Vertical, horizontal and  
diagonal elements of truss

Arches

Verticals and hangers

Tubes • CHS & RHS • partly in infra • 30 kton (? ask Van Leeuwen)

# Steel use in infrastructure per year

2021	Total	Construction	Infra	
Beams	384	384	0	Not in NL
Hot rolled flat	1140	80	30	
Quarto	516	516	166	BAS
Tubes *	400	200	30	Ask Van Leeuwen
Hot dip galv.	336	90	0	Ask BAS
Organic coated	144	180	0	Ask BAS
<b>Total</b>	<b>2772</b>	<b>1450</b>	<b>226</b>	<b>13% = 189</b>

Sources: Eurofer • BAS • PBL • EIB Metabolic • in kilotonnes steel

# Verwachting EIB?

Bouwproductie per sector



# Verwachtingen bouwproductie per sector 2022 - 2028

<b>bouwsector</b>	<b>2023</b>
Utiliteitsbouw	Miljoen euro
- Nieuwbouw	14.300
- Herstel en verbouw	8.550
- Onderhoud	6.350
GWW	
- Nieuwbouw en herstel	13.825
- Onderhoud	7.550

# Verwachtingen bouwproductie per sector 2022 - 2028

<b>bouwsector</b>	<b>2023</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2028</b>
Utiliteitsbouw	Miljoen euro	%	%	%	%
- Nieuwbouw	14.300	2	-10	-7	1
- Herstel en verbouw	8.550	2	2	3	2,5
- Onderhoud	6.350	3	1,5	2,5	2,5
GWW					
- Nieuwbouw en herstel	13.825	4	-1,5	0	3
- Onderhoud	7.550	3	0	3	3

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EIB: meevaller • verwachting nieuwbouw ubouw -5%

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EIB: hogere rente en lagere economische groei drukt vraag

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EIB: afname dagproductie industrie; geen capaciteitsuitbreiding

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EIB: stabiel op niveau 2025 • bbp-groei 1,1% • veel productiecap.

# Verwachting EIB?

Bouwproductie per deelsector

# Verwachtingen bouwproductie per deelsector 2022 - 2028

deelsector van utiliteitsbouw	2022	2023	2024	2025	2028
- Bedrijfsruimten	38,5	13	-19	-17,5	0
- Logistieke gebouwen	1	1,5	-22,5	-20,5	-1,5
- Kantoren	-13,5	-4	0	18	5
- Winkels	18	-24,5	-12,5	0	0
- Agrarische gebouwen	-0,5	-22	-10	11	6,5
- Onderwijsgebouwen	-8	10	0	6,5	-4
- Zorggebouwen	0,5	-6	-5,5	-5,5	9



# Verwachtingen bouwproductie per deelsector 2022 - 2028

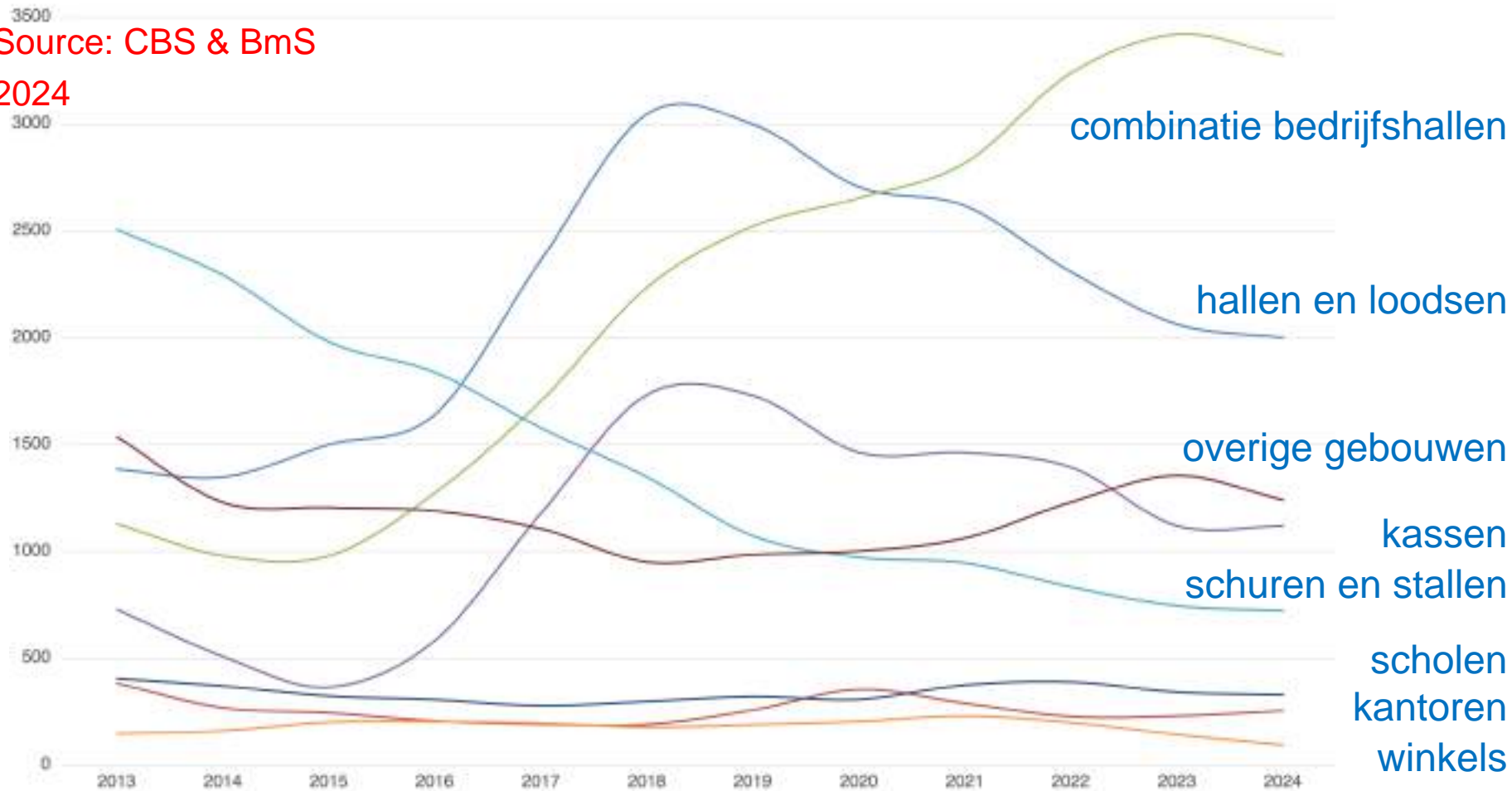
deelsector van utiliteitsbouw	2022	2023	2024	2025	2028
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# Bouwvergunningen (x 1000 m<sup>2</sup>)

Source: CBS & BmS

2024



Asset owners • ProRail, 12 provinces • 342 municipalities

# Vernieuwingsopgave infrastructuur

Landelijk  
prognoserapport  
2023

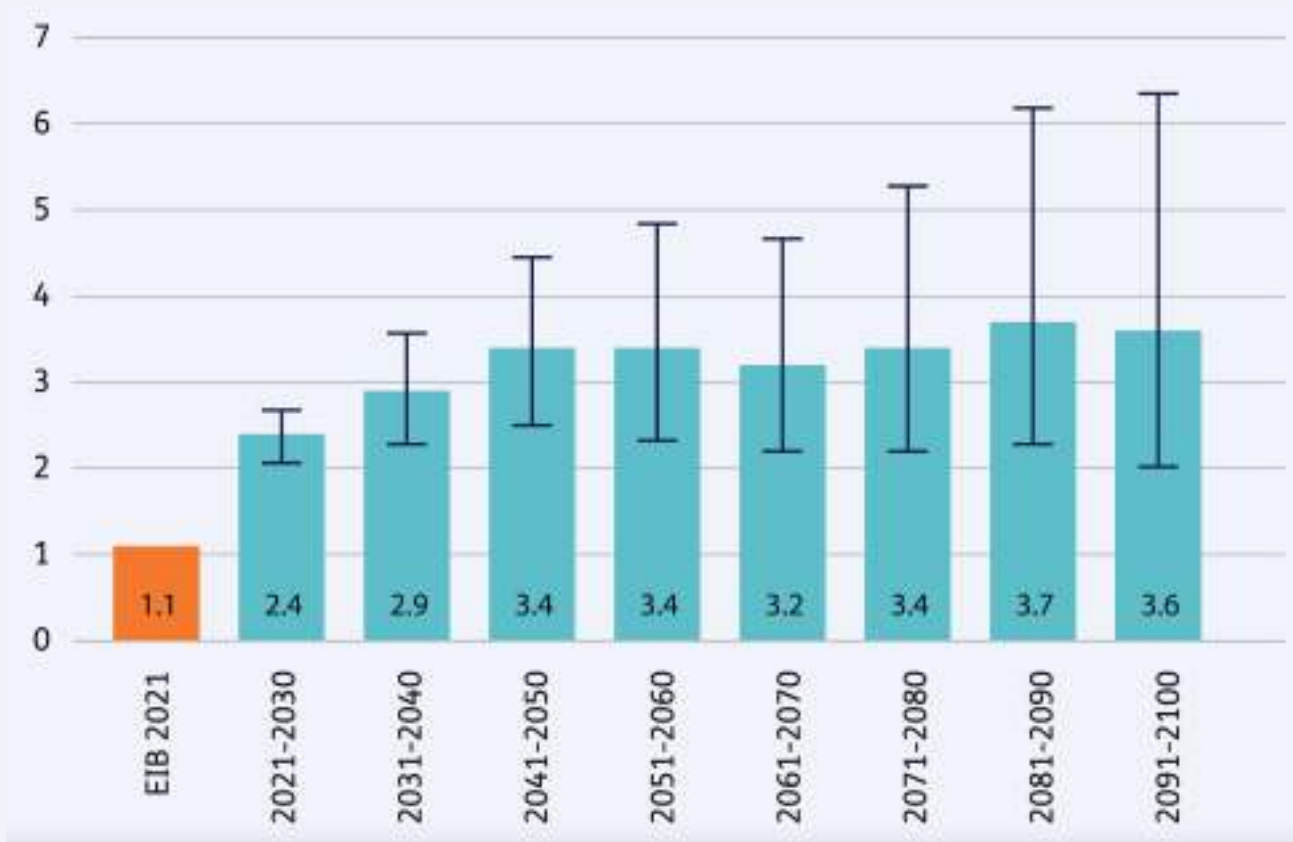
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**Oktober 2023**

**TNO** innovation  
for life

TNO research • October 2023 • overview & prognoses



TNO: total value  $347 \times 10^9$  • renewal increasing (billions euro)



**Bouwakkoord Staal**

A close-up photograph of two business professionals shaking hands. The person on the left is wearing a grey suit jacket, a light pink shirt, and a purple and white striped tie. The person on the right is wearing a dark blue suit jacket and a white shirt. The background is a blurred office setting with windows.

2022 • Construction agreement steel • covenant steel industry for construction

**Ambition 60%** less CO<sub>2</sub>-emissions in 2030 than in 1990 (in absolute figures)

# Steel use in construction per year

	1990	2021	2030	1990	2021	2030
Beams	400	384				
Hot rolled flat	79	90				
Quarto	350	516				
Tubes	200	200				
Hot dip galv.	90	90				
Organic coated	175	180				
<b>Total</b>	<b>1294</b>	<b>1450</b>	<b>518</b>	<b>3959</b>	<b>3491</b>	<b>1584</b>

Source: BAS • in kilotonnes steel and kilotonnes carbondioxide



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How?

# ‘Waterval’ • handelingsperspectieven



## Doelen CO2-reductie • per handelingsperspectief

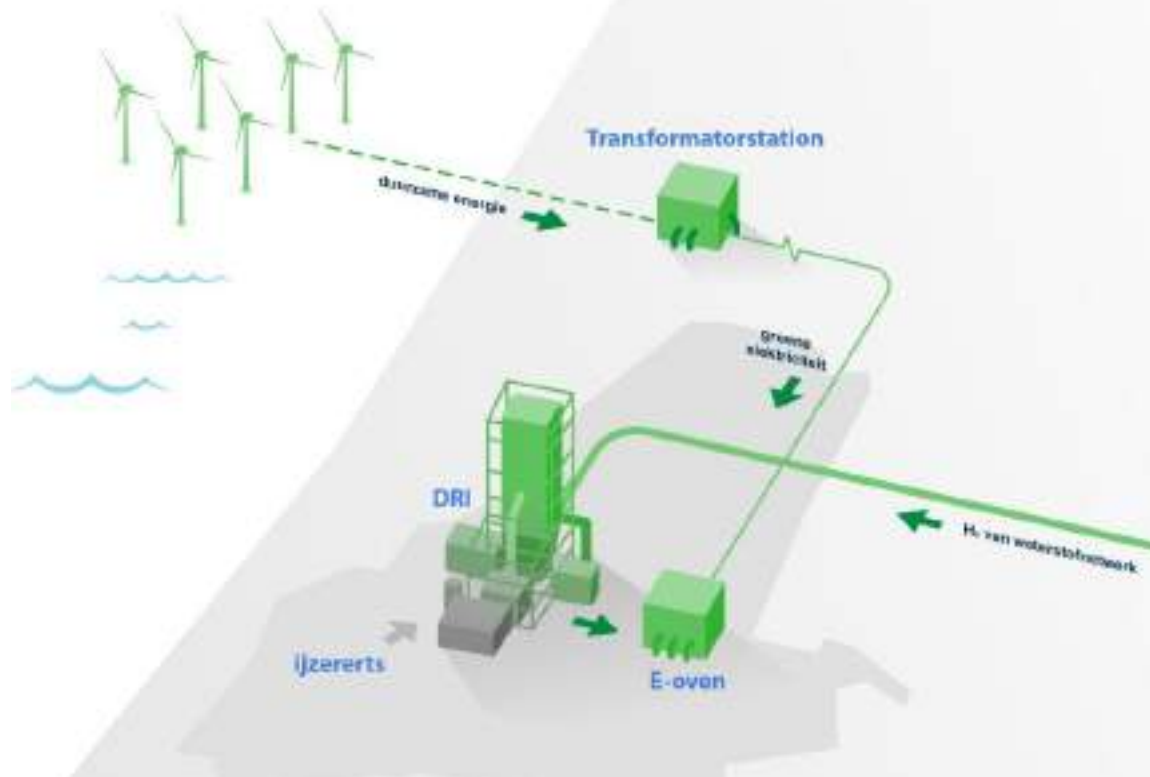
Figuur 3- Roadmap met handelingsperspectieven en totale CO<sub>2</sub>-emissiereductie richting 2030.







# Tata • duurzame energie • windmolenpark • groene stroom



dri-technologie • direct reduced iron • H<sub>2</sub> • zonder cokes (C)

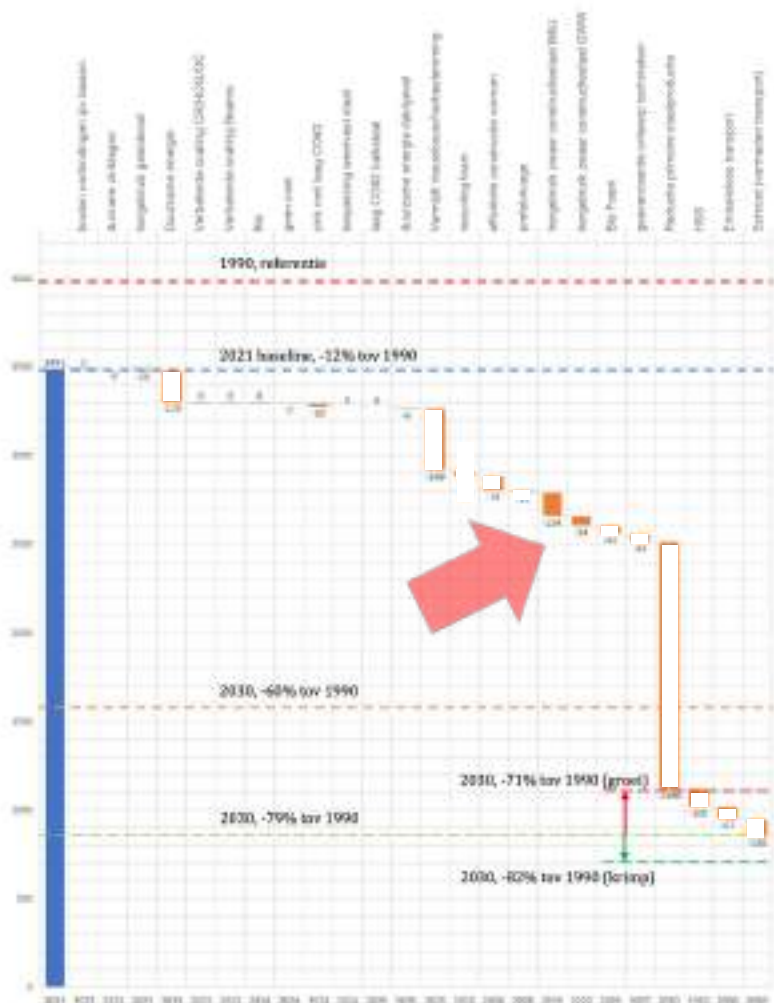






Loch

BBELS

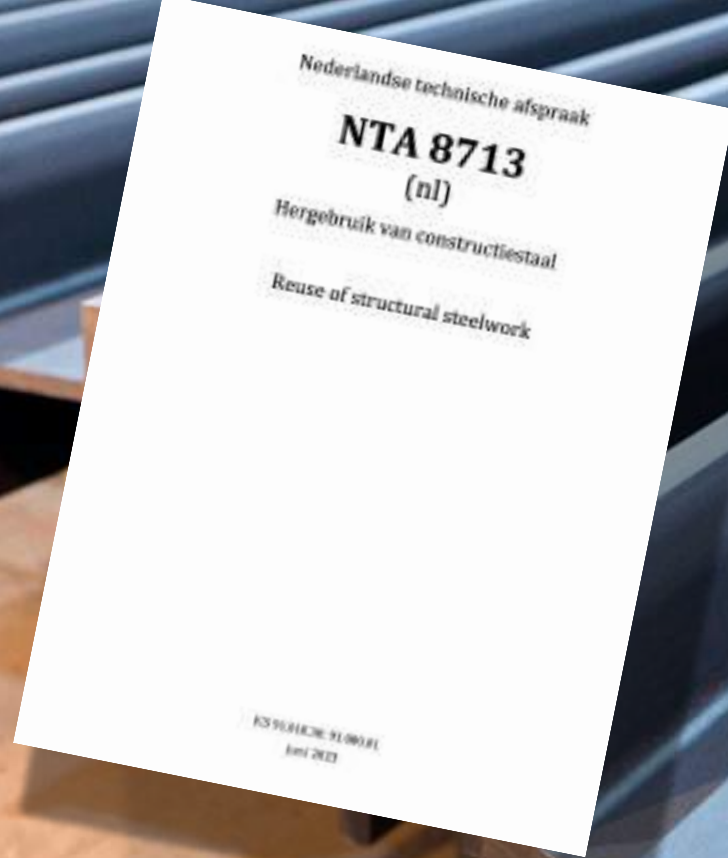


Figuur 3: Roadmap met handelingsperspectieven en totale CO<sub>2</sub>-emissiereductie richting 2030.









**Hergebruik van constructiestaal** • richtlijn • NTA 8713 • 2023 •  
na aanmelding gratis downloaden bij [NEN.nl](https://www.nen.nl)



**Groeien  
met Groen Staal**

# Groeien met groen staal • officially approved 12-2-2024



Proj 176 million • contribution 53 million • govt 124 million

Groeien met groen staal • working packages in chapter Use

Together with technical committees and company members





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