

Carbon tracking and calculation

16 January 2024

@buildoffsite @CIRIAupdates

Product calculation/environmental product declaration



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CELSA IS ALREADY LOW CARBON



Leading the *circular*
transformation

BOS
BUILDOFFSITE
COLLABORATING FOR IMPACT

ciria

Carbon tracking and calculation

*CELSA Circular Steel
Resource Transformation*

CELSA UK | January 2024

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CELSA IS CIRCULAR

CELSA IS ALREADY LOW CARBON



CELSA | Circular Steel Value

- Who we are
- What we do
- Where we are
- Net Zero
- Circular Vision

CELSA UK | 2024

CELSA IS CIRCULAR



CELSATM GROUP



6
Business groups



120
Work sites



7
Steel mills



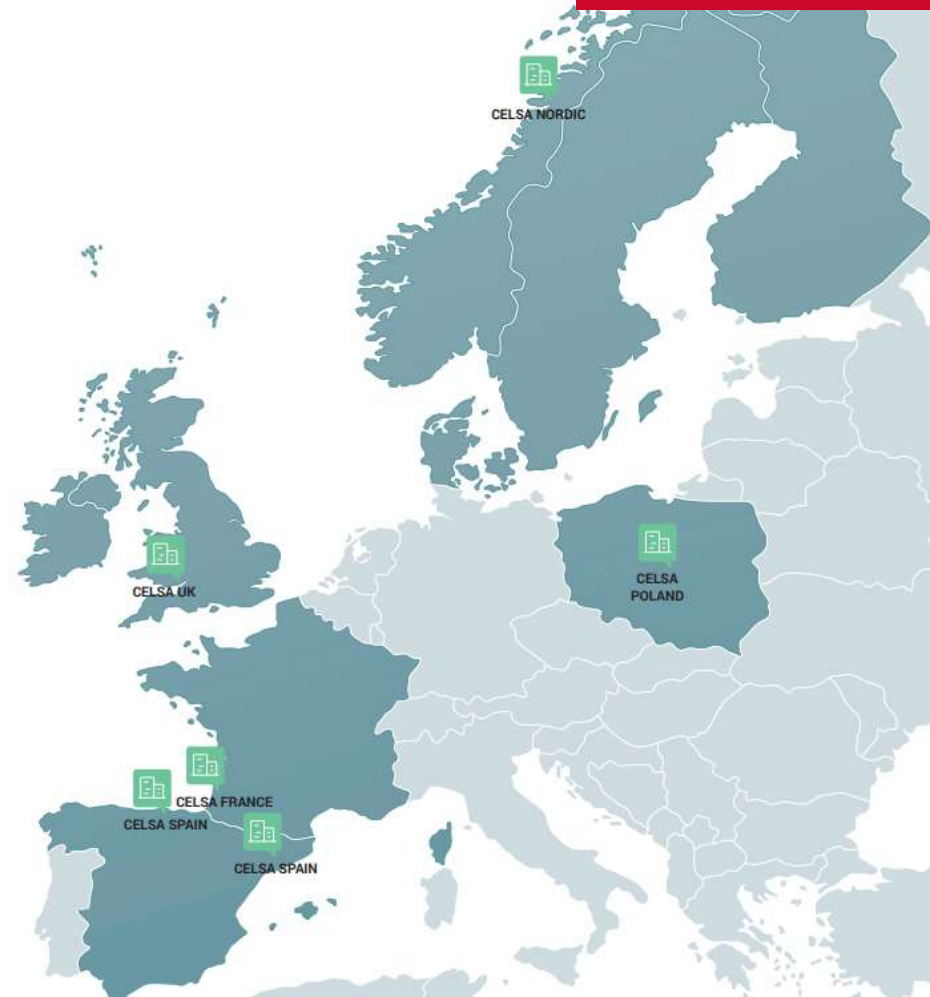
45
Recycling plants



70,000
Professionals



Present in Spain, France, the United Kingdom, Denmark, Finland, Norway, Poland, Sweden and Ireland.



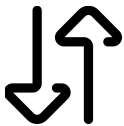
CELSA UK | Zero Carbon Ambitions



Steel Manufactured
1 million/T Steel produced
98% recycled content



Largest UK Recycler
1.2 million/T
100% UK sourced scrap



Vertically Integrated
Upstream & Downstream
Agile Supply Chain capability



Electric Arc Furnace
Only EAF production
Resource efficiency



Group combined capabilities
7 x EAF across CELSA Group
EU wide product and service offering



Energy Efficient production
Renewable Energy Consumption
Low Carbon Emissions



EPD | Low Carbon Option

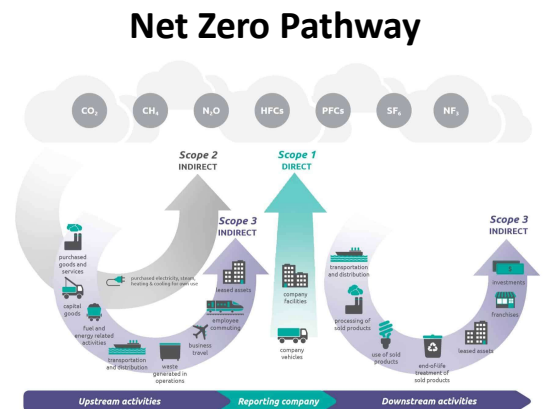


| KG CO ₂ /T | CELSA UK EAF | European avg EAF | China BOS |
|--------------------------|--------------|------------------|-------------|
| Production (inc. energy) | 429* | 785 | 2,200 |
| Transport | +6 | +160 | +550 |
| Total | 435 | 945 | 2750 |

Environmental Product Declaration (EPD)

Lower carbon options are available under REGO (Renewable Energy Guarantees of Origin)

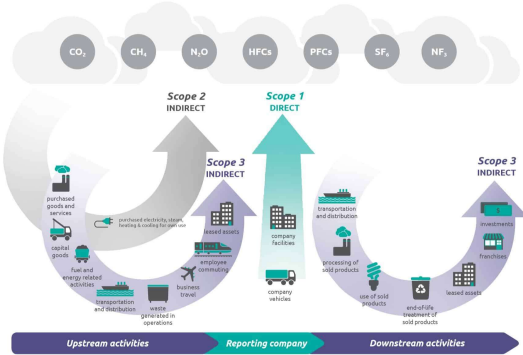
*EPD currently certified – constantly updated



Cluster Collaboration | Shared Benefits

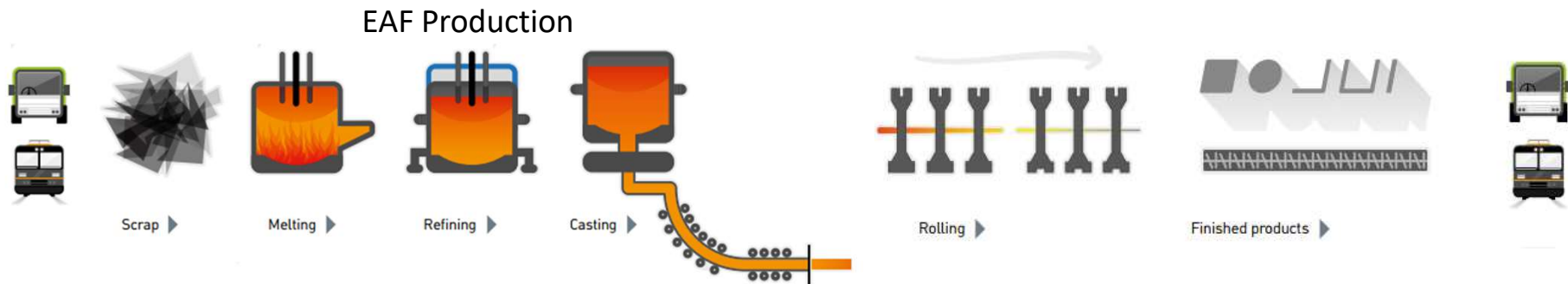


Net Zero Pathway



Material Flow | Products

Material Flow



Finished Products

Rod & Bar Mill



Reinforcing bars
For the reinforcement of concrete (Grade 50C)



High Yield Coils
For the reinforcement of concrete (Grade 50C)



Wire Rod
For the production of reinforcing mesh & other applications including wire drawing.

Section Mill



Channels, Parallel, Tapered Flange & UPN
Typically used in composite steel construction.



Plain round bars
With various applications including construction.



Equal & Unequal Angles
Typically used as a structural steel element in construction.



Flat bars
With various applications including construction, transport and machinery.

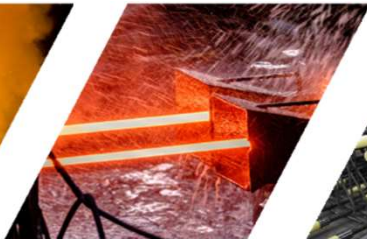
Locations | Capabilities



Scrap



Melt Shop



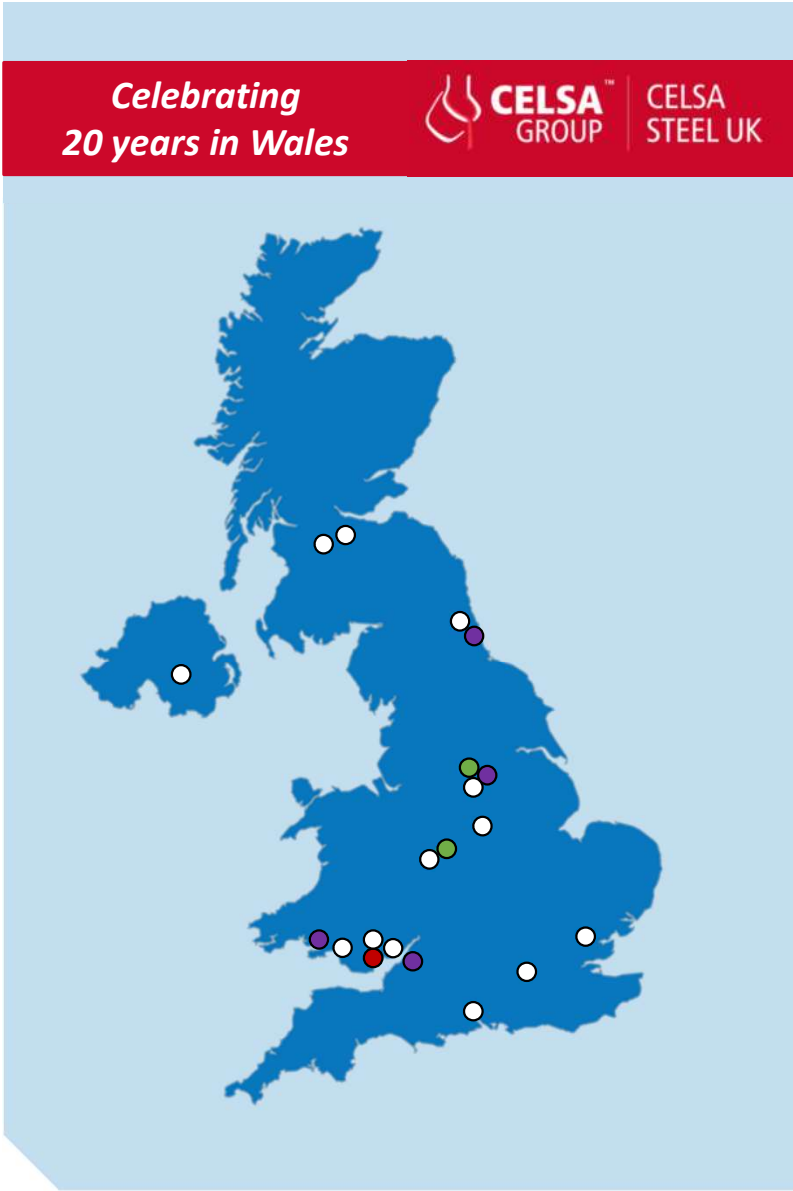
Mill



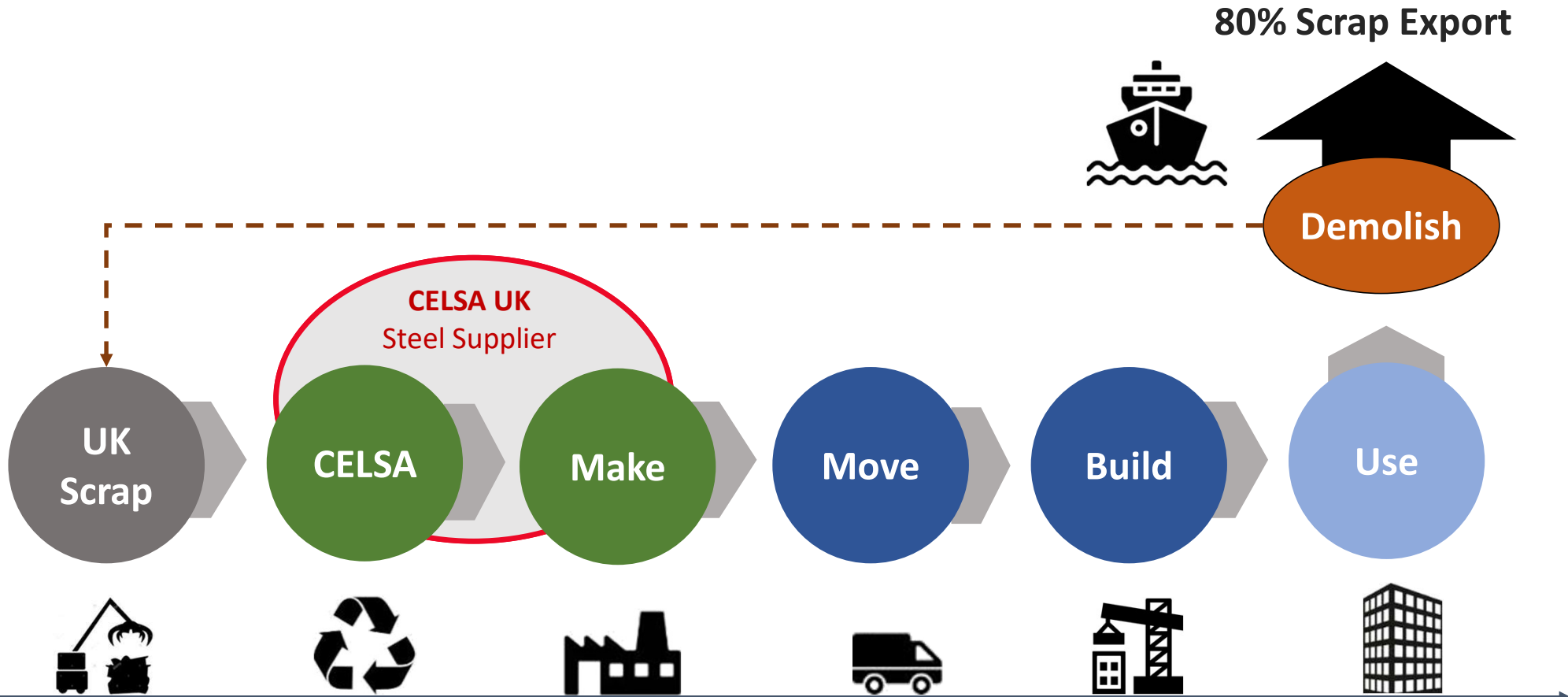
Fabricator



- Scrap Facility
- Head Office, EAF & 2x Mills
- Fabricator
- Mesh Producer



from Commodity Steel Supplier



98% Recycled Content | Low CO2 | within a Linear Economy

to Strategic Collaborative Partner



Construction Scope 3 Reduction

A platform for collaborative circularity that supports resource efficiency, carbon reduction and supply chain resilience across the built environment.



Added Value | Shared Benefit

Plaza Cinema | Potential Benefits



Collaboration to build
Trust | Transparency | Shared Benefits

Carbon Reduction Benefits based on:

- 25 T scrap recycled
- 14 T reinforcement steel purchased

| | Kg CO ₂ / T |
|----------------------------------|------------------------|
| Plaza Scrap Value @1.67 x 25 | - 41,750 |
| CELSA UK EPD @0.429 x 14 | + 6,006 |
| Total Pilot Carbon Saving | - 35,744 |

Scrap Recycling Saves:

1,670 kg CO₂/T

<https://worldsteel.org/climate-action/climate-change-and-the-production-of-iron-and-steel/>

UK GVA based on 14 T steel = **£12,273**

EVERY 1000 TONNES OF UK PRODUCED STEEL DELIVERS:

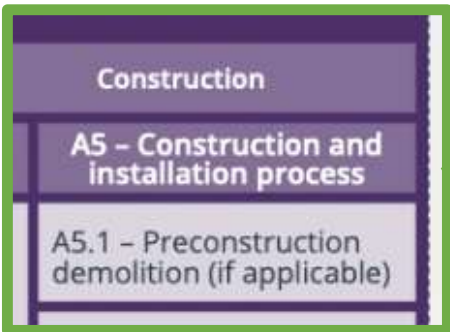
4.5 jobs in the steel industry
10 jobs total supported in the steel industry and our supply chains



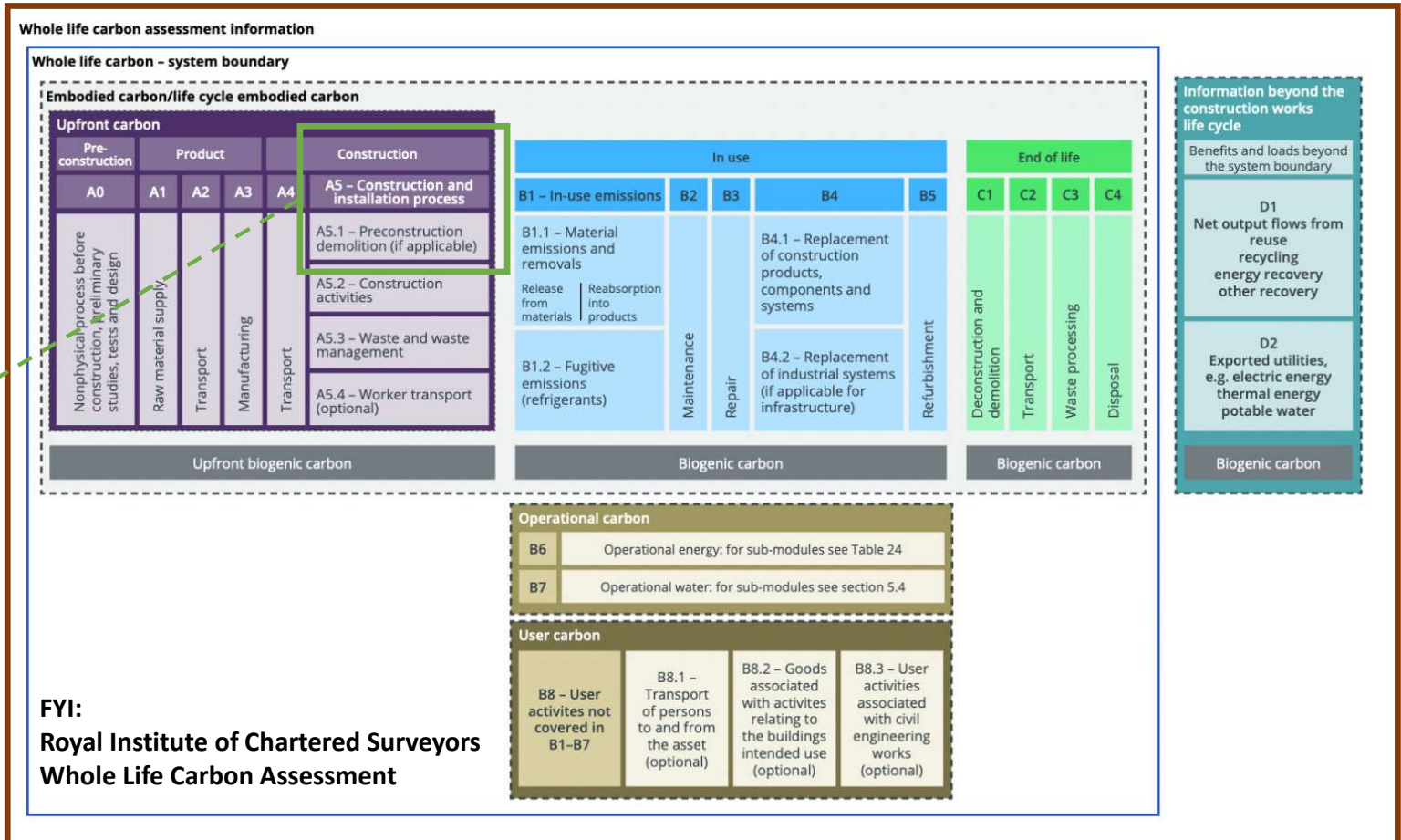
£383,561 direct contribution to the UK economy
£876,712 total contribution to the UK economy, including supply chains

<https://www.makeuk.org/insights/publications/value-of-the-uk-steel-industry>

RICS WLCA | 2nd Edition



An opportunity to capture circular economic value?



CELSA Circular Steel Programme:



- ③ New Product Offerings
- 🔗 Partnerships
- ★ Certifications
- € Investments
- 💡 Innovation



PURPOSE

To give infinite life to finite resources

VISION

To be the leaders of a circular supply chain
To build a net positive future

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 **CELSA**
GROUP

Audience Polls:

1. Do you know where your C&D 'waste' goes?

2. How do you calculate your scope 3 emissions?

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Any questions?

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