



FS Club Events



Accelerating Progress: The Importance Of Finance In Scaling Up Net Zero Steel & Concrete Production To Meet Growing Corporate Demand

Jen Carson | Head of Industry, Climate Group

11:00, Tuesday, 19 March 2024



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FS Club Events

A Word From Our Chairman



Simon Mills

Associate

Z/Yen Group Ltd



FS Club Events

Today's Agenda

- 11:00 - 11:05 Chairman's Introduction
- 11:05 - 11:25 Keynote Presentation - Jen Carson
- 11:25 - 11:45 Question & Answer



FS Club Events

Today's Speaker



Jen Carson

Head of Industry
Climate Group



CLIMATE GROUP

Driving —
— climate action.
— fast

Accelerating progress: The importance of finance in scaling up net zero steel and concrete production to meet growing corporate demand

Jen Carson, Head of Industry, Climate Group

19 March 2024 | FS Club webinar



The logo features a red circle with a white dot inside, followed by the text "CLIMATE GROUP" in white, bold, uppercase letters.

CLIMATE GROUP

Introducing Climate Group

Founded in 2004, Climate Group is an international non-profit with offices in London, Amsterdam, New Delhi, New York and Beijing.

Our mission

To drive climate action. **Fast.**

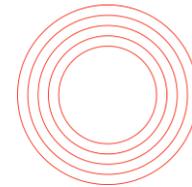
Our goal

A world of net zero carbon emissions by 2050, with greater prosperity for all.

Our core networks

750+ businesses (Energy, Industry, Transport initiatives)
170+ governments (Under2 Coalition)

We leverage and re-enforce:



Scale

We power large networks and hold each organisation accountable.



Speed

We focus on action now – not action tomorrow.



Collaboration

We know who needs to work together to get things done.

CLIMATE GROUP

Our programmes

Together we can drive climate action, fast. Our global network of over 1,000 businesses and governments are working to maximise impact as a collective and deliver a just transition to a net zero future.

CLIMATE GROUP RE100

Committing to 100%
renewable electricity

CLIMATE GROUP EP100

Maximising energy
efficiency

CLIMATE GROUP EV100

Accelerating the transition
to zero emission passenger
and light-duty vehicles

CLIMATE GROUP EV100+

Accelerating the transition to
zero emission medium and
heavy duty vehicles

CLIMATE GROUP CONCRETE ZERO

Creating a market for
net zero concrete

CLIMATE GROUP STEELZERO

Driving the transition to net
zero steel



Secretariat

CLIMATE GROUP

Driving climate action in
states and regions

CLIMATE GROUP

Key global event moments



Climate Week NYC



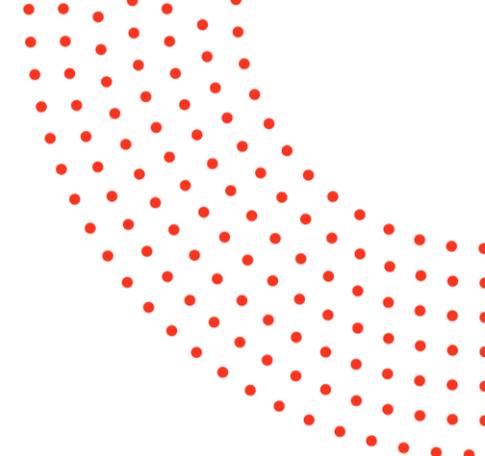
COP



US Climate
Action Summit



Climate Group
Asia Action Summit



Why steel and concrete?

Steel and **Concrete** production are currently some of the biggest emitters of greenhouse gases globally – accounting for **8%** and **7%** of global annual emissions, respectively.

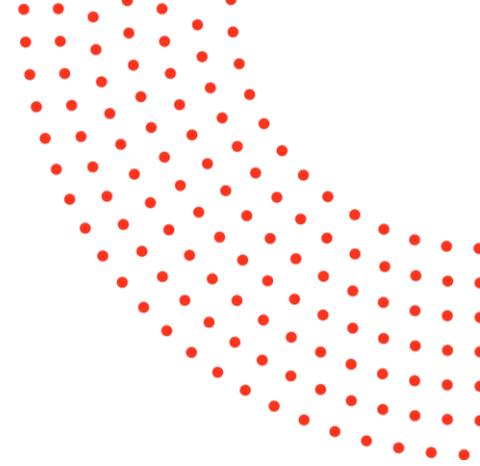
For businesses in construction & infrastructure, steel and concrete can represent up to 80% of scope 3 emissions.

This is why we launched SteelZero and ConcreteZero – to drive the innovation of net zero industrial materials by building and showcasing the corporate demand for **immediate action across the entire global supply chain**, and supporting members to embed deeply transformative and climate-compatible business practice into their operations, manage risk and driving international sector transformation.

Poll question

Who will drive heavy industry decarbonisation most effectively, this decade ?

- Policymakers
- Buyers of steel and concrete
- Innovators
- NGOs / civil society
- Financers



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International, national & sub-national policy is driving heavy industry decarbonisation towards the top of the agenda



EU Policy

- Existing: **EU Carbon Border Adjustment Mechanism (CBAM)** adds costs to emissions-intensive imported steel; **€10.6B** under IPCEI for hydrogen projects; **€3B** in subsidies for hydrogen-using steelmakers, **€50B** for carbon contracts for difference; multiple policies for supporting **better use of scrap** in steelmaking.
- Upcoming: **expansion of the EU CBAM to cover steel-containing products.**



US Policy

- Existing: **Inflation Reduction Act** and **Infrastructure Investment and Jobs Act** (combined \$6.3 billion is allocated for industrial decarbonisation and \$1.2 trillion for infrastructure); **federal and subnational Buy Clean policies** (in 13 States)
- Upcoming: **Pilot steel standards** across federal agencies; wider mandating of **EPD requirements** for all steel in state construction and site materials.



China Policy

- Existing: **Preference to EAFs** in the Capacity Replacement Program; **target for EAFs to reach >15% share of production by 2025** and for 30% of crude steel output to be from scrap rather than iron ore by 2025 (14th Five Year Plan). **Higher quality scrap standards** are being applied to scrap imports.
- Upcoming: **ETS system may be expanded to cover steel.**

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Buyers are rapidly changing their expectations and requirements – as well as evaluating core strategic value chain partnerships

ConcreteZero: providing a solid foundation for low carbon construction

Home » News » ConcreteZero: providing a solid foundation for low carbon construction

After water, concrete is the **most consumed material on Earth**, and **around 8%** of global human-produced carbon emissions are a result of the production of cement, a key component of concrete.

With **areas the size of Paris being built globally every single week for the next 40 years**, the demand for concrete is significant, and highlights the need to drastically reduce the carbon emissions of this material if we are to achieve

Written by



Dr Natasha Watson

Date published

23/01/23

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Construction News

NEWS - LONG READS - PODCAST - DATA - TOP UK CONTRACTORS - EVENTS - JOBS - SPONSORED - NEWSLETTER

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TOP UK CONTRACTORS

Major contractors sign pledge to cut concrete carbon emissions

05 JUL 2022 | BY LUKE HAYNES

"We've analysed years of carbon data, but what good is this data unless shared. We need to stop working in silos and start working in collaboration, hence our membership of ConcreteZero. We're issuing the results we found to anyone that wants to see them. We want to be challenged and we want to be pressured!"



lendlease

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Lendlease calls on industry to tackle built environment's biggest carbon challenge

19 Sep 2023

Newsroom

SEARCH NEWSROOM APPLE STORIES

PRESS RELEASE
21 July 2020

Apple commits to be 100 percent carbon neutral for its supply chain and products by 2030

A PART OF WATCH MEDIA

ENERGYWATCH

SUNDAY
17 MARCH 2024

UTILITIES OIL & GAS RENEWABLES CLEANTECH POLICY & TRADING

13/03/2024 | at 14:03 RENEWABLES

Ørsted plans transition to climate friendly steel

"Ørsted has a closer tie to the supply chain than other developers," states the CEO in a letter of intent outlining a deal with a German steelmaker.

Bjorn Anwall, CFO of Volvo Cars (SteelZero member)



"No company can do this in isolation... That is why we are partnering with other companies to eliminate fossil fuels from steel and battery production, among other areas."

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Innovators are challenging the market to accelerate; Incumbents are looking at how to shift their BAU

SSAB Case Study: SSAB

Targets	Activities
<p>2021 (Completed)</p> <ul style="list-style-type: none"> Become the first steel company to delivery fossil-free steel to its customers 	 <p>Fine-tune fossil-free steel</p>
<p>2022 (Completed)</p> <ul style="list-style-type: none"> Launch of SSAB Zero - made from recycled scrap, 0.0 kg Co2e emissions per kg steel 	
<p>2026</p> <ul style="list-style-type: none"> Launch HYBRIT demo plant (DRI) and a brand new EAF for large scale fossil-free steel production Fully transform Nordic system with two brand new state of the art mini-mills 	 <p>Large scale fossil-free production utilizing HYBRIT technology</p>

REUTERS World Business Markets Sustainability Legal More

Climate & Energy | Grid & Infrastructure | Clean Energy | Renewable Fuels | Hydrogen

Sweden's H2 Green Steel raises \$5.2 bln in new funding

Reuters
January 22, 2024 12:02 PM GMT - Updated 2 months ago

Companies

H2 Green Steel AB [Follow](#)

COPENHAGEN, Jan 22 (Reuters) - H2 Green Steel has raised 4.75 billion euros (\$5.17 billion) in new funding for its planned flagship plant in the northern Swedish town of Boden, which will be the world's first large-scale green steel project.

The company, founded in 2020, has signed debt financing of 4.2 billion euros, added equity of close to

businesswire Log In Sign Up

BOSTON METAL

Boston Metal Closes \$262M Series C Funding Round to Decarbonize Steelmaking and Disrupt the Metals Industry

Capital will support commercial deployments for high-value metals production and bring Molten Oxide Electrolysis to market for green steel manufacturing

September 06, 2023 09:00 AM Eastern Daylight Time

BOSTON--(BUSINESS WIRE)--Boston Metal, a global metals technology

HES International ABOUT US TERMINALS RESPONSIBILITY NEW

29 February 2024

BREAKTHROUGH ZERO-CARBON CEMENT PLANT TO BE BUILT AT THE PORT OF AMSTERDAM.

The all-electric zero-emissions plant, of an initial capacity of 1.2 million tonnes, will cut CO2 emissions by 1 million tonnes annually — using less than 10% of the energy of a conventional Portland cement plant.

The project will be jointly developed by EMC Cement ("EMC") and HES International ("HES") to fully exploit industrially-proven EMC Technology, which uses a unique form of 'mechanical activation' — to enable abundant all-natural volcanic ash ("EMC Volcanics") to substitute 70% of the Portland Cement used in concrete. The intended facility ("Plant") will also process end-

29-02-2024 Breakthru be built

29-11-2023 HES Intl Agree Workers accepta termina

29-09-2023 HES International bolsters leadership with two key appointments

[Back to overview](#)

Bridging the gap to net zero concrete: accelerating deployment of innovative solutions

- Abigail Regitsky - Senior Manager, US Policy and Advocacy, Breakthrough Energy
- Dr. Elizabeth Gilligan, CEO/Founder, Material Evolution
- Dr. Fragkoulis Kanavaris, Technical Specialist Services | Materials, Arup
- See less
- Iva Munro, Senior Manager Industry, ConcreteZero Lead, Climate Group
- Joren Verschaeve, Programme Manager, ECOS - Alliance for Low-Carbon Cement and Concrete
- Peter Di Maggio, co-CEO, Thornton Tomasetti
- Ryan Roberts, Group Sustainability, Head of Sustainable Construction - Holcim Technology
- Samuel Draper, CEO/Co-Founder, Seratech
- Simon Brandler, Vice President of Policy and Public Affairs, Brimstone

Source: We Mean Business [Corporate Climate Stocktake: Steel Sector](#) October 2023

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Civil society is stepping up its scrutiny and pressure, particularly on the steel sector

STEELWATCH
Bringing climate urgency to steel

About - Insights - Team - English

A vigilant voice driving climate urgency in steel

The Challenge - The global steel industry has the power to make or break our ability to preserve a liveable climate. This single industry, still reliant on coal, is responsible for 7% of

SIERRA CLUB

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Advocacy Groups Slam New Industry-Led 'Standard' for Low-Emissions Steel as EU-US Trade Deal Looms

Groups Criticize GSCC Certification For Ignoring Social, Environmental Impacts Of Steelmaking

September 11, 2023

企业责任资源中心

S. Korea: Climate CSO files lawsuit against steelmaker POSCO for alleged greenwashing

BANKTRACK

BANKS DODGY DEALS CAMPAIGNS

We're calling on banks to do their part to stop POSCO's coal expansion

Unless POSCO scraps its reining plans, banks should rule out future finance for the Korean steelmaker

Despite calls from civil society, a damning report on public health impacts, and an imminent lawsuit against its coal-based blast furnaces, Korean steelmaker POSCO is not backing down on its plans to extend the lifetime of two of its coal-based blast furnaces by 20 years (1). As a consequence, BankTrack and Solutions for Our Climate are together calling on banks to rule out future finance for the Korean steelmaker unless it scraps its reining plans.

First climate litigation against a Swiss company

The complainants are demanding proportional compensation for climate damages they have suffered and for Holcim to contribute financially to flood-protection measures. In addition, they are demanding that Holcim reduce its CO2 emissions by 43% by 2030

Friends of the Earth International

Who we are What we do News and resources Internationalist solidarity

Press release: Pari Island climate case against Holcim

01 Feb, 2023

swissinfo.ch

Escaping climate change liability just got a bit harder

It's not enough to sell off dirty assets as Holcim learned this week. The Swiss cement maker is the latest target of climate change litigation. And there's some powerful math behind it.

July 14, 2022 - 15:04

Jessica Davis Plüss

If there ever was a David versus Goliath story, this would be it. Four residents of Pari, an Indonesian island threatened by rising sea levels, are suing the largest cement maker in the world over its

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While some investors and financiers are developing best practice, an immediate upturn in action is needed

RECLAIM Finance website article titled "Decarbonizing steel: ING first bank to act". The article is dated Paris, 10 January 2024 and is copublished with BankTrack. The text discusses ING's new commitment to steel, setting a minimum standard for other banks and representing a critical step forward for the steel sector's decarbonization.

GTR Global Trade Review website interface. The page features a navigation menu with categories like NEWS, EVENTS, MULTIMEDIA, PUBLICATIONS, AWARDS, DIRECTORY, SUBSCRIBE, GTR VENTURES, and NEWSLETTERS. A featured article is titled "ING praised for met coal stance as campaigners call for wider bank action", dated January 10, 2024, by John Basquill. There is also a section for "UPCOMING EVENTS" including "GTR Training 2024: Integrating ESG Risk Into Commodity Trade Finance" and "GTR West Africa 2024 Lagos, Nigeria".

Article titled "IFC partnership to boost low-carbon cement production in Senegal" by Nasi Hako, dated February 28, 2023. The article is categorized under Business and markets, Energy Efficiency, Finance and Policy, Climate Change, News, and West Africa. It features social media sharing icons for Facebook, X, LinkedIn, and YouTube.

Article titled "IFC helps promote the decarbonization of the cement sector in Brazil" dated 07/20/2023, which is 8 months old. The article is categorized under NEWS.

Header for Sustainable Steel Principles website, powered by RMI. The header includes the logo for Sustainable Steel Principles and navigation links for ABOUT, RESOURCES, and CONTACT.

Article titled "The Sustainable STEEL Principles: Forging a New Paradigm" by Samuel Kooijmans, dated September 23, 2022. The article discusses the world's biggest financial institutions embracing the goal of limiting warming to 1.5°C (2.7°F) and the launch of the Glasgow Financial Alliance for Net Zero.

Article titled "Steely determination: IIGCC Steel Purchaser Framework aims to increase demand for low emissions steel" from the IIGCC Insights section. The article is dated 07/20/2023 and is 8 months old. It features a "Sign in" button and a search icon.

Section titled "Key asks of the Framework" detailing four key asks for companies purchasing steel to support the demand signals for low emissions product and the drive to net zero by choosing to publicly agree to:

1. Set a 2030 target for % of steel procured with emissions intensity (per tonne of steel purchased) at or below:
 - a) SteelZero's Low(er) Embodied Carbon Steel benchmark.¹
 - b) IEA Near Zero Steel Production emission intensity threshold.² (equivalent to ResponsibleSteel Performance Level 4: Near Zero³)
2. Set a 2030 target for average emissions intensity for total, primary and secondary steel.⁴
3. Set a 2030 target for increasing proportion of suppliers with externally verified 2050 net zero commitments consistent with 1.5C, through engagement and enabling mechanisms for these commitments.
4. Commit to procuring by 2050 100% of steel with net zero emissions intensity.

¹This framework recommends that companies join SteelZero to signal their ambition and receive support in implementing commitments. However, investors rely on public disclosure and therefore this framework recommends members of SteelZero additionally publish their procurement commitments and supporting disclosures via this framework.

What is beginning to drive change?

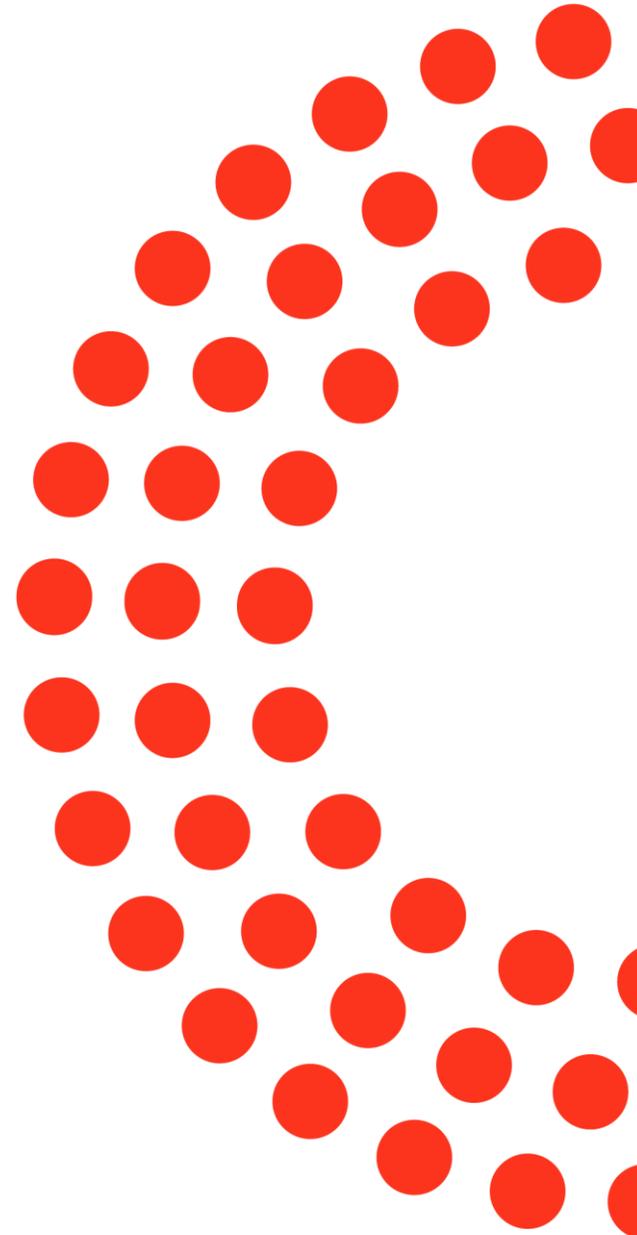
Awareness of embodied carbon

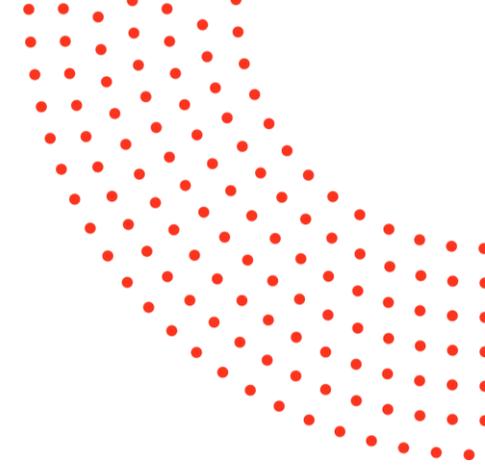
Carbon diplomacy

ESG disclosure rules

The price of inaction is rising

The prize is enormous

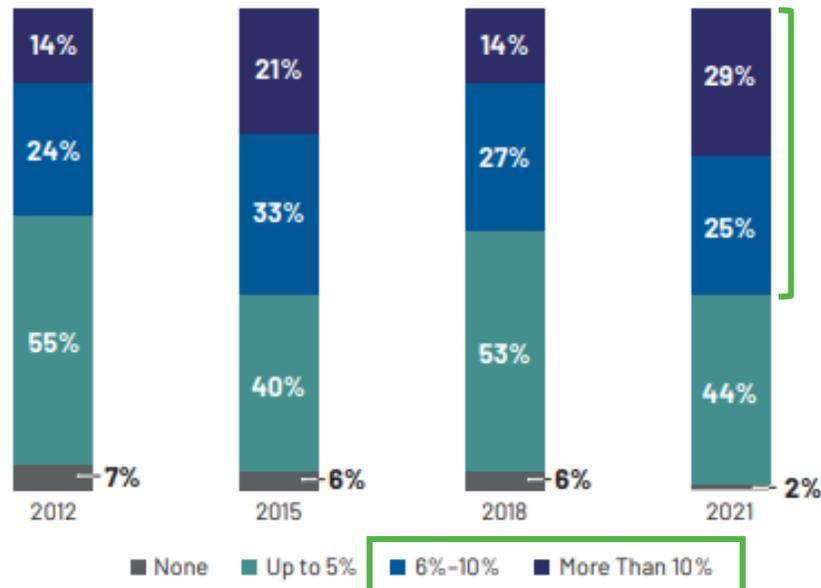




The challenge is not insurmountable – in fact, it is there for the taking

Expected Increase in Asset Value for New Green Buildings (According to Owners and Investors)

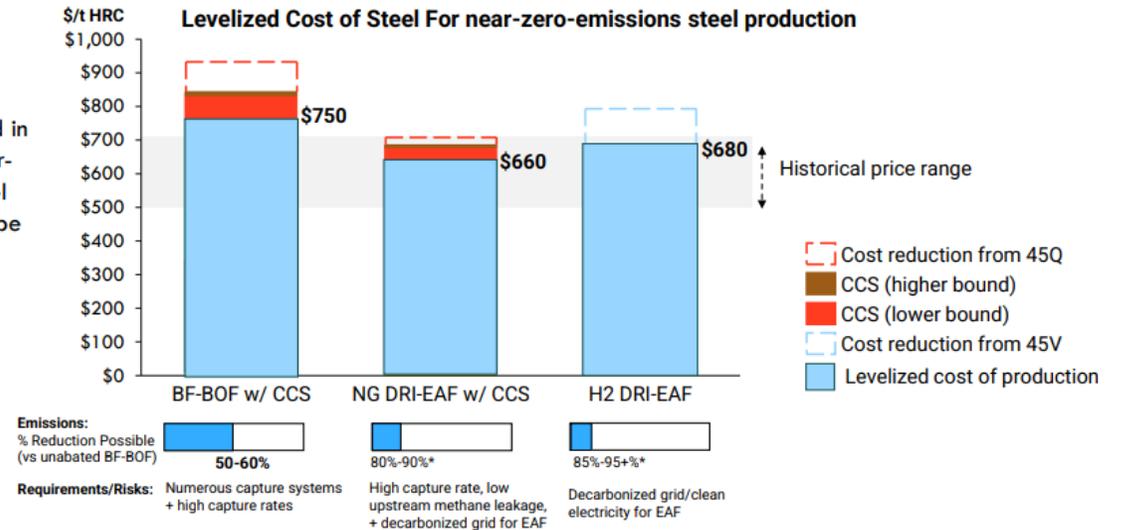
Dodge Data & Analytics, 2021



Source: World Green Building Trends Report 2021

Primary near-zero-emissions steel is cost competitive with the current federal incentives and the existing fossil pricing

Hydrogen and carbon capture incentives provided in the IRA allows near-zero-emissions steel production cost to be competitive with historical steel market pricing (~\$500-700/t hot rolled coil)



Graphic Notes: Based on \$128/t IO, \$324/t coal, \$5/MMBTU natural gas, \$1.51/kg H2 (for btm 100% renewable project with electrolyzer, solar, and wind capex costs of \$300/kW, \$750/kW, and \$1000/kW, respectively). Brownfield reline + CCS cost for BF-BOF pathway, greenfield build cost for DRI-EAF pathways. CCS costs will range depending on concentration of flue gas stream(s). *EAF emissions depend on level of supply chain and grid decarbonization; green H2 DRI-EAF with 100% clean grid has the potential to reach near-zero emissions steel production.

RMI – Energy. Transformed.

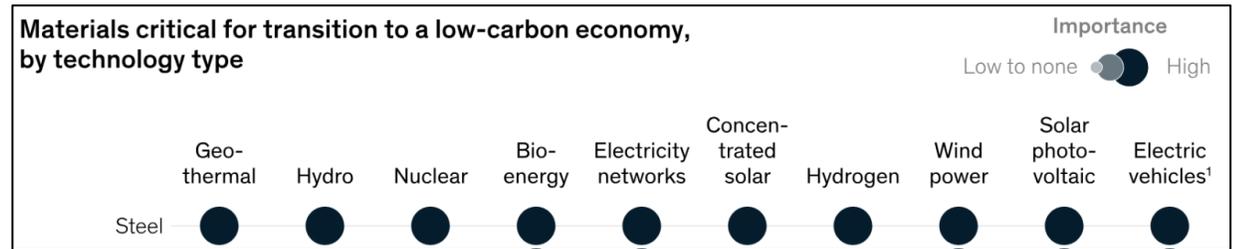
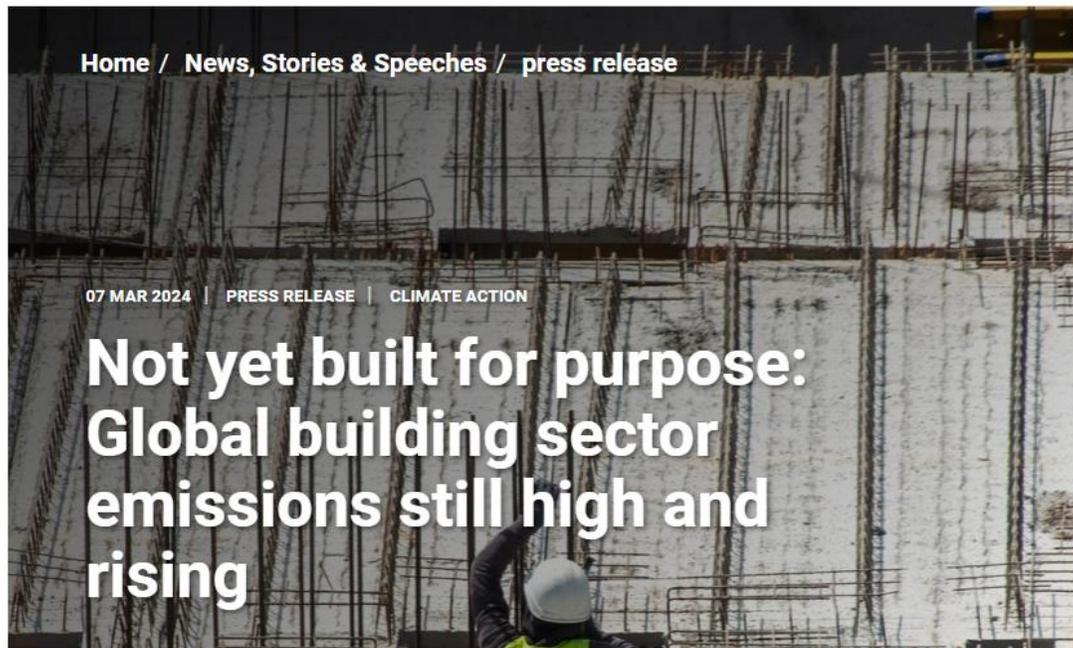
Source: RMI – Energy. Transformed.

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But there is a very concerning lack of urgency



Who we are ▾ Where we work ▾ What we do ▾ Publications & data



Source: [McKinsey, The Raw Materials Challenge](#)

Energy Monitor

Industry |

Decarbonising cement: why the hold-up?

The cement and concrete industry produces 8% of global carbon emissions. The solutions are there to decarbonise but the industry is buckling under the complexity of the task.

Oliver Gordon | July 13, 2023



US Climate Action Summit 22 - 28 April

Catapulting climate action into a new era of implementation.

Back for its fourth year, the US Climate Action Summit in Washington DC, unites key leaders in business, politics and the third-sector to drive US climate momentum.



Global SteelZero Supply Chain Summit

19 June

Raising sector ambition and global standards for the decarbonised path ahead.

The summit in Brussels, will bring together the whole steel supply chain to firmly plot a 1.5°C aligned path ahead to combat the immediate, mid and long-term inhibitors to action.



Climate Week NYC 22 - 29 September

Back for its sixteenth year, organized by Climate Group and in partnership with the UN General Assembly and the City of New York.

Business leaders, political change makers, and local decision takers, from all over the world, gather to drive the transition, speed up progress, and champion change.



Climate Group Asia Action Summit 21 May

Focusing on driving impactful climate action and Powering Green Growth in Asia.

A key climate event in Seoul, where leaders discuss opportunities for collaboration to unlock green growth, and identify the pathways for bolder climate action in the Industry and Energy systems.



Global ConcreteZero Innovation Forum

20 June

Positioning the global mission of decarbonisation as a key pillar of climate action.

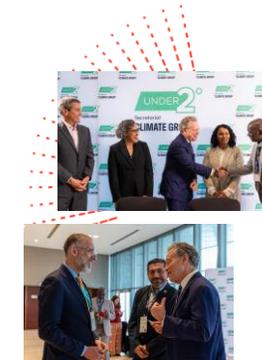
The summit in Brussels will elevate the landscape of innovation urgently required to reduce the carbon intensity of concrete.

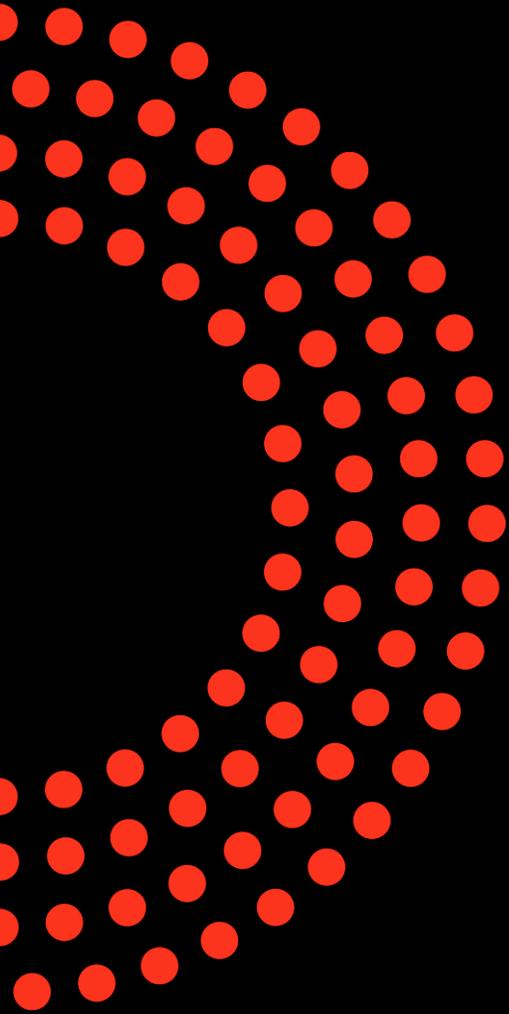


Under2 Coalition General Assembly at COP29 17 November

Back for its ninth year, uniting ambitious leaders in Baku.

Government and business leaders will engage meaningfully on challenges and discuss opportunities for collaboration in accelerating climate action and achieving net zero equitably.





Contact us

Please get in touch with any questions you might have:

Jen Carson, Head of Industry
jcarson@theclimategroup.org

 **CLIMATE GROUP**



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Comments, Questions & Answers



觀光案内所

Question & Answer

问讯处 詢問處 안내소



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FS Club Events

Forthcoming Events

- Thursday, 21 March 2024 (09:00 - 09:45 GMT) Launch Of Global Financial Centres Index 35
- Friday, 22 March 2024 (11:00 - 11:45 GMT) A National Monotechnic in the City: The History of the Leathersellers Technical College
- Tuesday, 26 March 2024 (11:00 - 11:45 GMT) Greenspaces: Cultivating The Mind, Body And Soul

Visit: <https://fsclub.zyen.com/events/forthcoming-events/>

Watch past webinars: <https://www.youtube.com/zyengroup>