

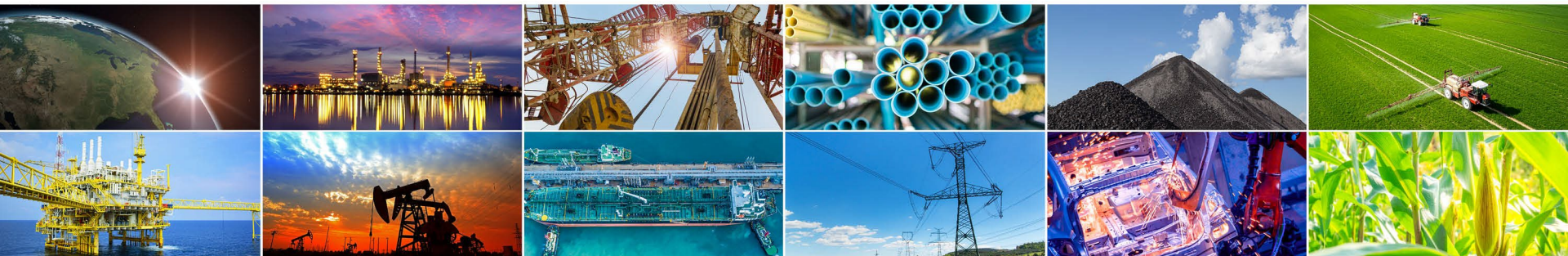


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From trash to treasure

Ferrous scrap as strategic raw material

Hong Kong
Chi Hin Ling
16 May 2023



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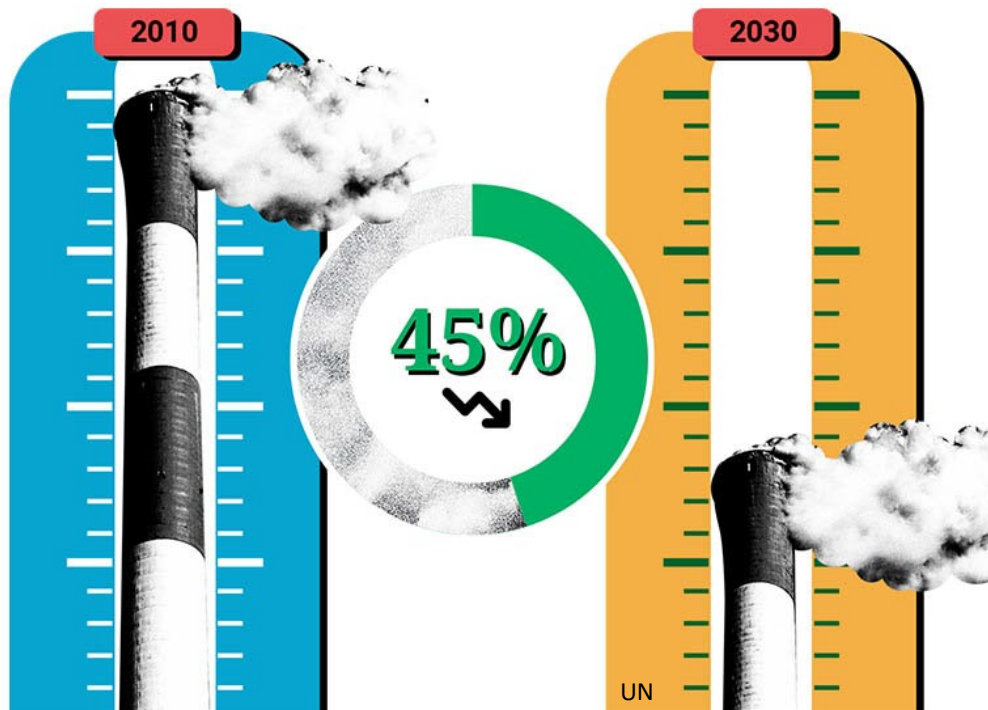
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 - Fertilizers
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 - Asia-Pacific LPG
 - Coal
 - European steel
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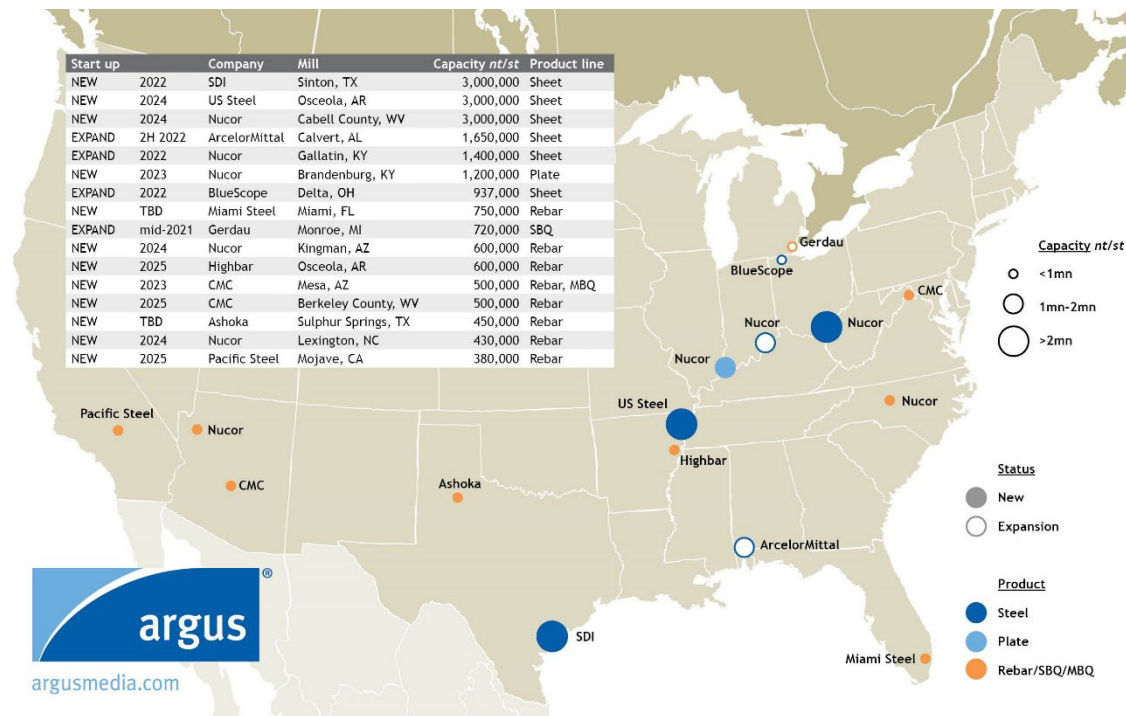
Net zero transition



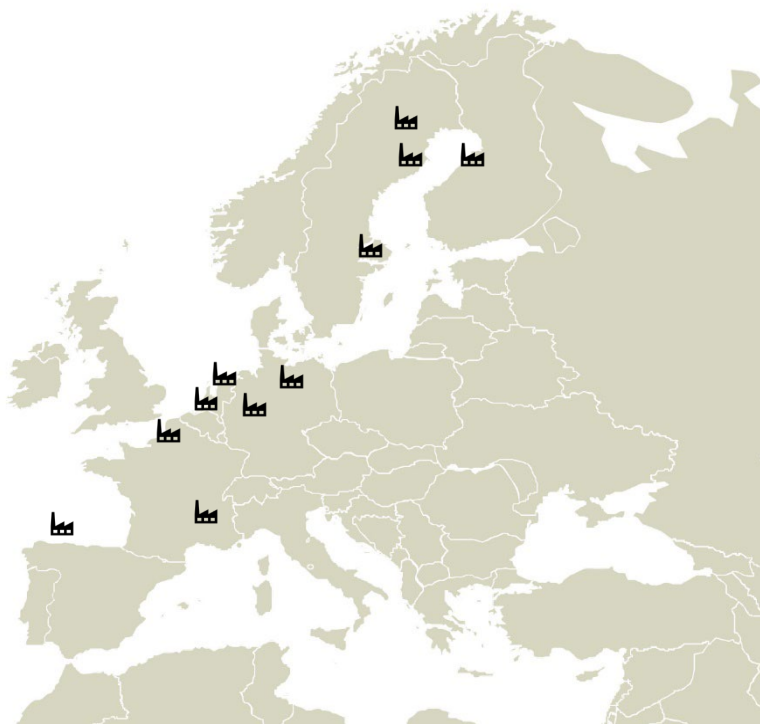
1t of scrap saves 1.5t of CO2 emission, 1.4t of iron ore, 740kg of coking coal and 120kg of limestone

CBAM – Carbon Border Adjustment Mechanism to take effect in 2026, and could reach €100/t by 2030

US has nearly 20mn t new capacity coming online



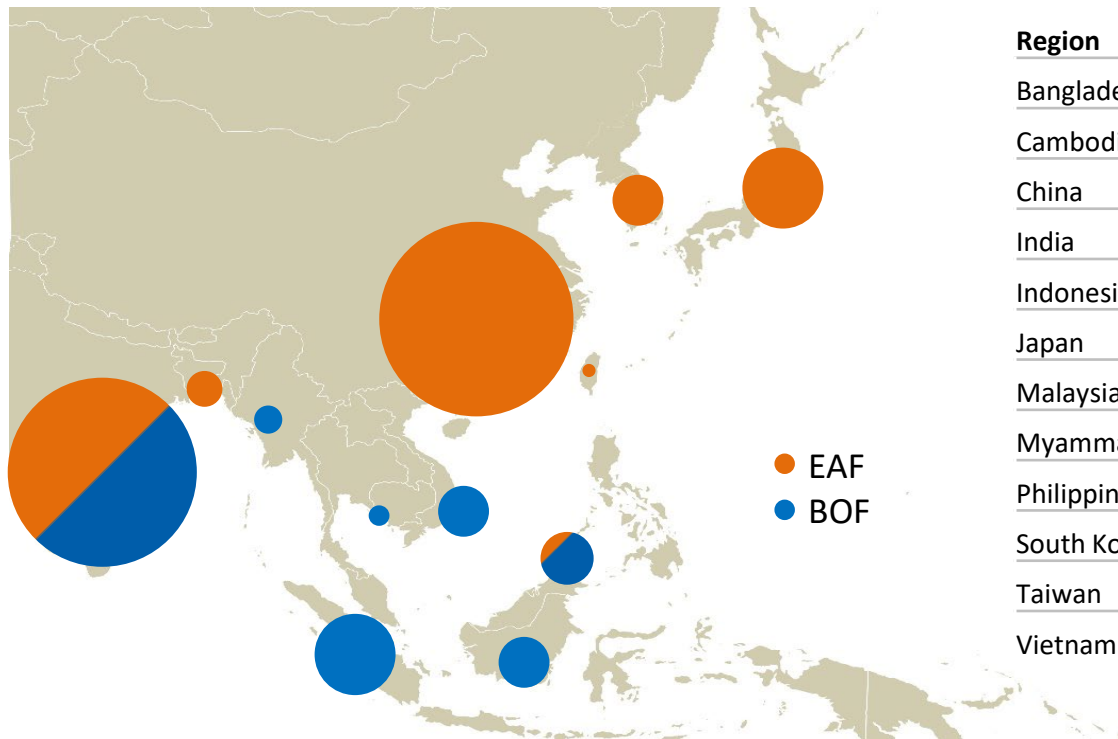
EU to install over 25mn t of new EAF capacity



Project	Country	Type	Cap. (t/yr)*	Start-up*
Salzgitter	Germany	DRI-EAF	4mn	2033
TKS	Germany	DRI-BF	3mn	2030
SSAB (Oxelosund)	Sweden	EAF	1.3mn	2026
SSAB (Lulea)	Sweden	EAF	2.3mn	2030
SSAB (Raahе)	Finland	EAF	1.3mn	2030
H2GS	Sweden	DRI-EAF	2.5/5mn	2024/2030
AM Fos-sur-mer	France	EAF		2030
AM Ghent	Belgium	DRI-EAF	2.5mn	2030
AM Dunkrik	France	DRI-EAF	2.5mn	2030
AM Gijon	Spain	DRI-EAF	2.3mn	2030
Van Merksteijn	Netherlands	EAF	0.9mn	2024

* estimate

Asia process slower?

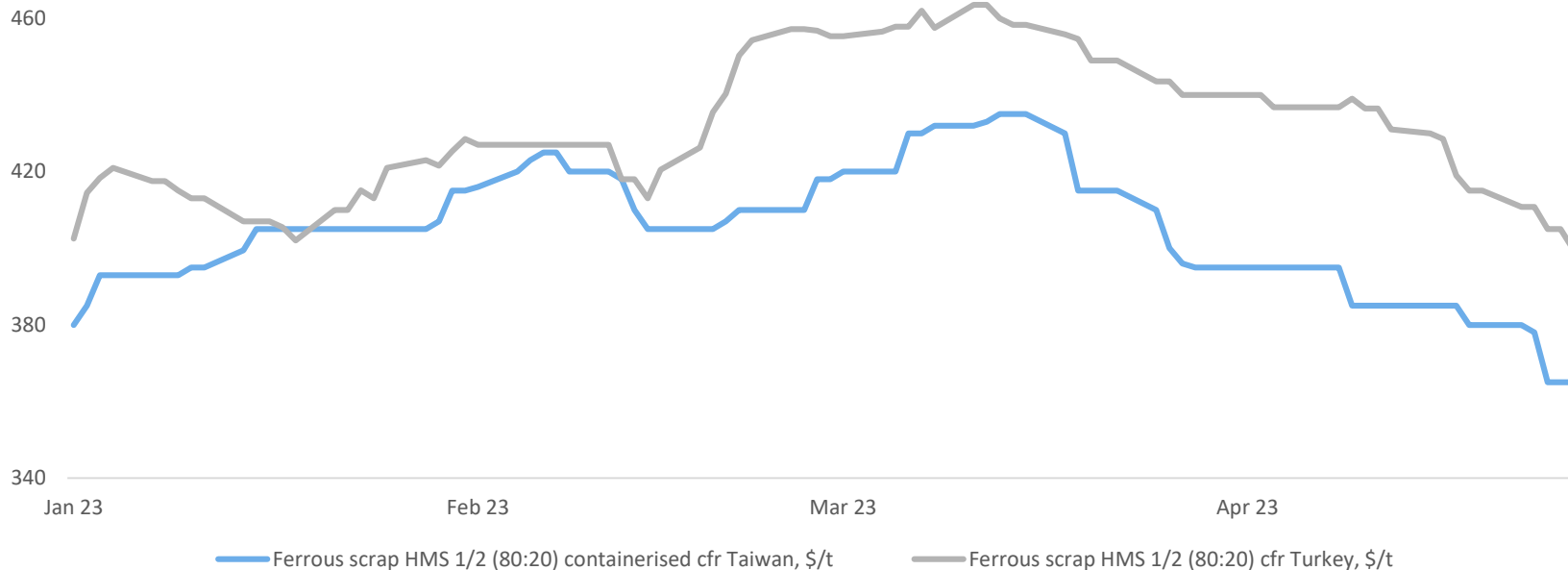


Region	EAF (mn t/yr)	BOF (mn t/yr)
Bangladesh	>4	
Cambodia		3*
China	~100^	
India	~150	
Indonesia		>10
Japan	>15	
Malaysia		18.5
Myanmar		4*
Philippines	2.2	13.5*
South Korea	5.5	
Taiwan	1.5	
Vietnam		>11

*includes paused projects

^includes capacity swap

Taiwan ferrous scrap price update



Taiwan scrap correlations to other ferrous markets

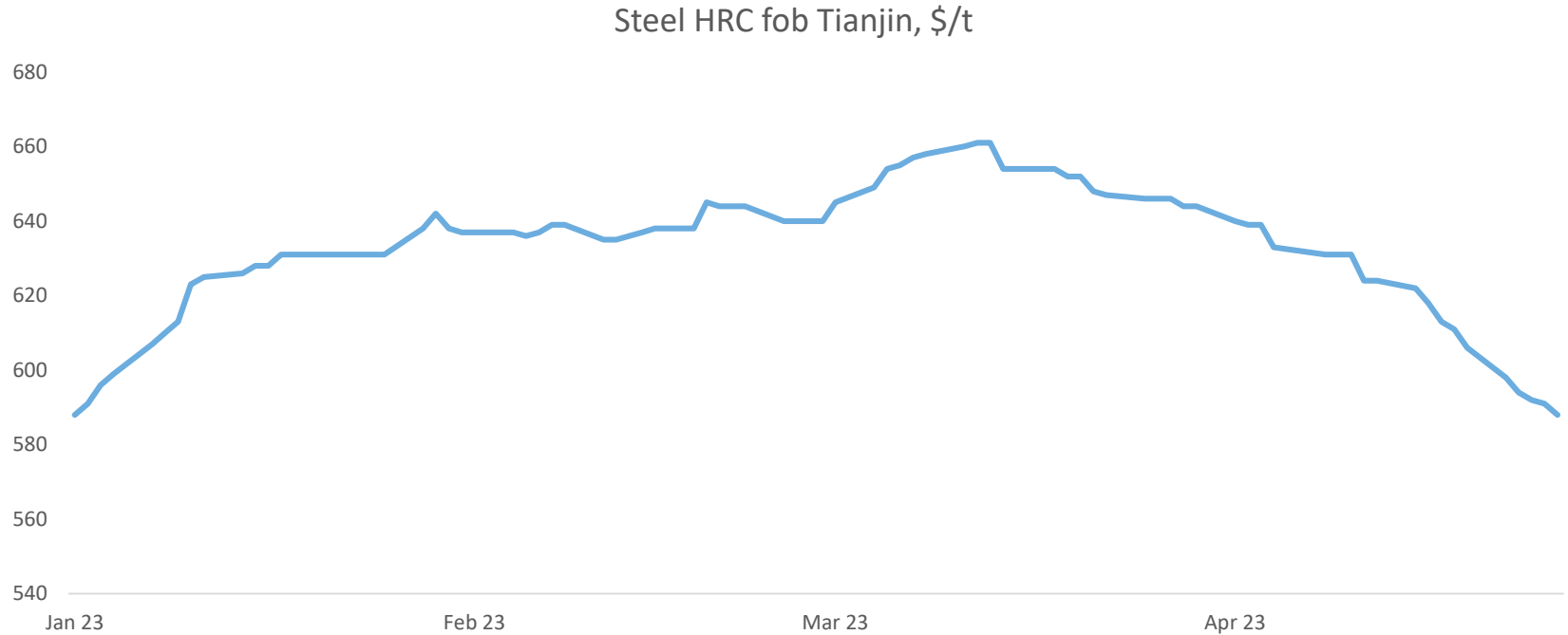
R2: Containerised scrap cfr Taiwan

cfr Taiwan	Taiwan domestic	Turkey import	Vietnam import	USWC export	Bangladesh import	India import	US domestic	Japan domestic	China domestic
100.0%	98.6%	97.9%	97.0%	99.6%	97.1%	97.2%	96.0%	98.1%	93.3%

R2: Containerised scrap cfr Taiwan

cfr Taiwan	Rebar ASEAN import	Rebar China domestic	Rebar China export	Wire rod China export	Rebar domestic Japan	Rebar domestic Taiwan	Rebar Turkey export	HRC Vietnam imports	HRC China export	HRC India domestic
100.0%	98.3%	88.3%	95.0%	94.7%	85.4%	95.8%	94.8%	91.7%	89.8%	72.8%

China HRC price update



China HRC correlations to other ferrous markets

R2: HRC fob China

HRC fob China import	HRC ASEAN export	HRC Taiwan export	HRC South Korea export	HRC Vietnam export	HRC India export	HRC Turkey export	Rebar China export	Rebar China domestic
100.00%	99.34%	99.56%	99.44%	99.38%	98.86%	96.07%	97.67%	97.17%

R2: HRC fob China

HRC fob China	Rebar ASEAN import	Rebar Turkey export	Rebar Japan domestic	Rebar UAE domestic	Rebar Taiwan domestic	Wire rod Turkey export	Wire rod Black Sea export
100.00%	90.26%	72.58%	71.62%	78.31%	91.59%	82.58%	93.11%



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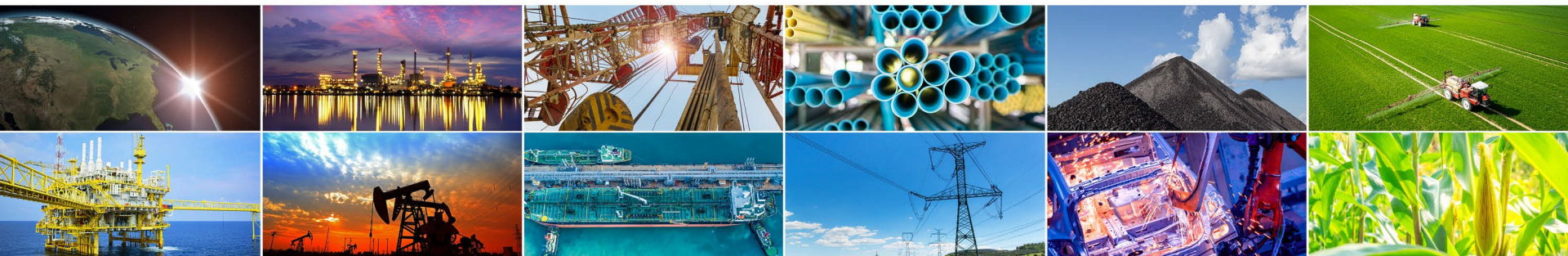
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