

"Hedging strategies for recycled steel" workshop

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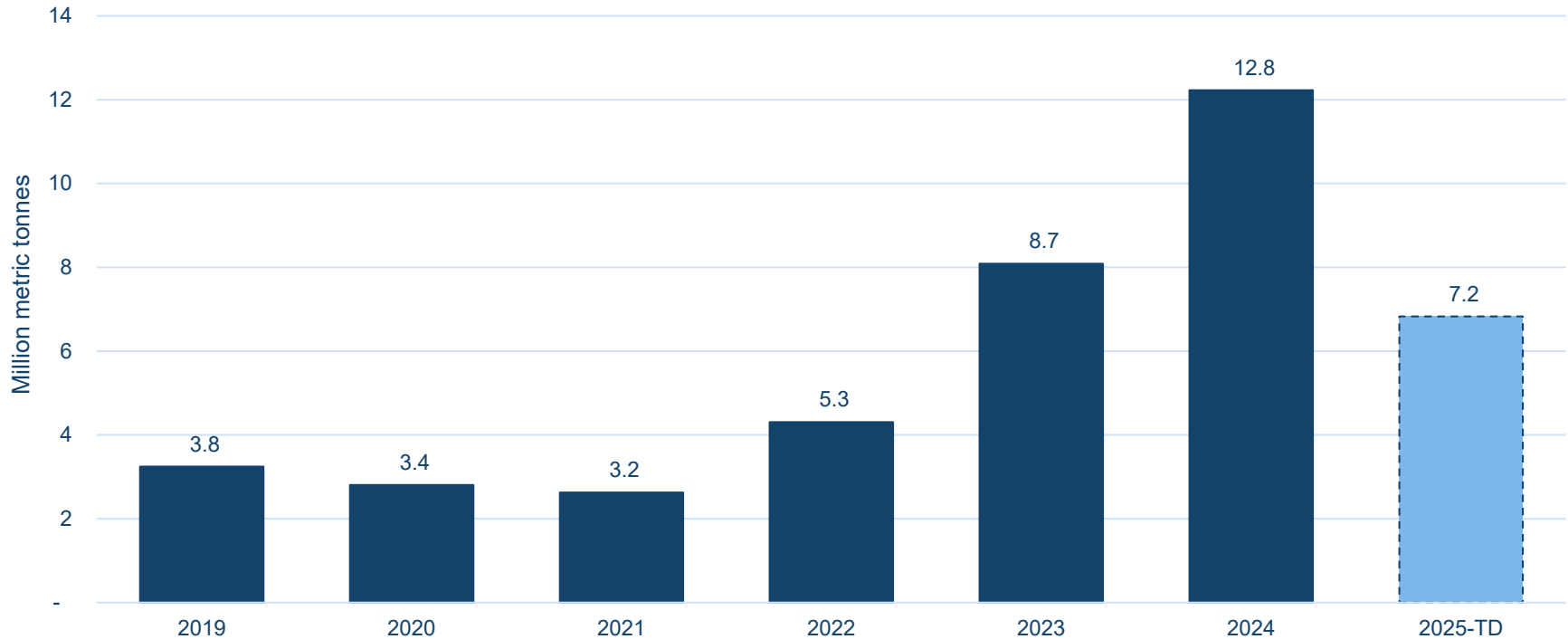


SETTING THE GLOBAL STANDARD

IMPORTANT: This presentation was given at the BIR 2025 World Recycling Convention in Bangkok.

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Steel scrap futures – annual traded volumes



Source: LME



Case study 1: cargo accumulation



Notes: picture courtesy of Ward Recycling

- Short physical position
- Buy forward on the exchange to hedge the risk of prices going up during the accumulation phase
- Gradually sell back on the exchange as steel scrap is accumulated dockside

LONG

SHORT

Case study 2: demolition project / shipbreaking

- Long physical position
- Sell forward on the exchange to hedge the risk of a price decline
- Gradually buy back on the exchange as the project starts generating steel scrap



Notes: picture courtesy of Ward Recycling

Case study 3: fixed price sales (a value-add service)



- Short physical position
- Buy forward on the exchange to hedge the risk of a price increase
- Close positions on the exchange as the material for the contract is collected

Notes: picture courtesy of Ward Recycling

Working capital and trade finance solutions

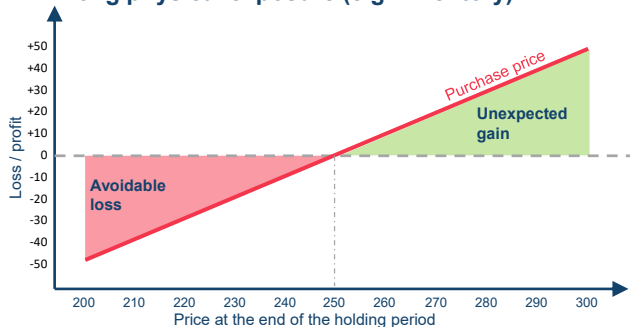
- Advance rates and haircuts
- Unsold inventory
- Tripartite financing



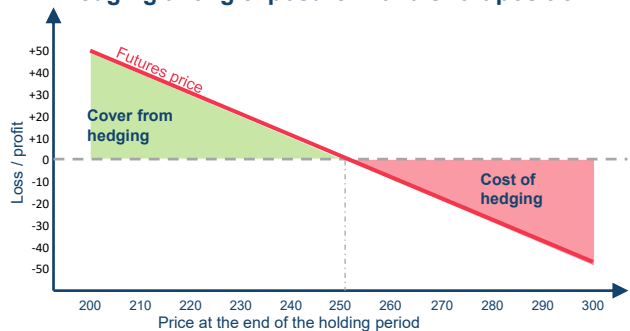
Appendix: hedging examples

Hedging a long physical position (1/2)

• Long physical exposure (e.g. inventory)



• Hedging a long exposure with a short position



	Market price decrease	Market price increase
Long physical exposure		
Physical position		
Value today	250	250
Price in 3 months	200	300
Profit / loss	-50	+50

Hedging a long exposure with a short position

Financial position		
Price locked-in today	250	250
Price in 3 months	200	300
Profit / loss	+50	-50

Actual value at the end of the period

250

250

Actual profit / loss

0

0

- The objective of hedging is to lock-in a future prices, thus reducing exposure to price volatility risk
- Speculators do not hedge, but rather take a view on future price movements by gaining exposure with either a physical or a financial position



Hedging a **long** physical position (2/2)

Fixed price purchases / inventory

Buying at a fixed price generates a **long physical position**, as it is an obligation to **receive** material at a previously agreed price

The financial transaction needed to hedge the price risk is **forward selling** an equivalent quantity (or a fraction of it) to create a **short financial position**

Example

Steel mill ABC agrees to buy 5,000mt of scrap per month for 6 months at the price of \$250 per tonne to ensure production continuity

To hedge this position, steel mill ABC decides to forward sell 5,000mt of scrap per month for 6 months at the price of \$250 per tonne

After 6 months, the price of scrap...

...drops to \$200

- Loss on the physical position -\$50/mt
- Gain on financial hedge is +\$50/mt
- **Final cost of the raw material \$250/mt**

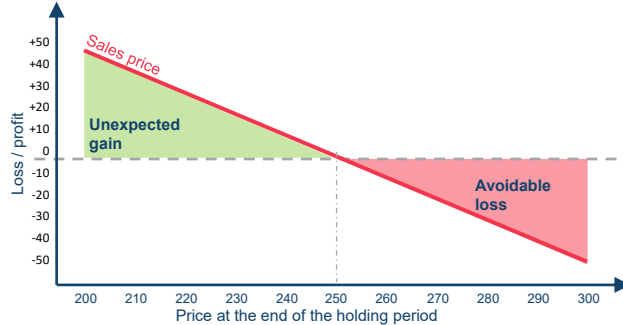
...rises to \$300

- Gain on the physical position +\$50/mt
- Loss on financial hedge is -\$50/mt
- **Final cost of the raw material \$250/mt**

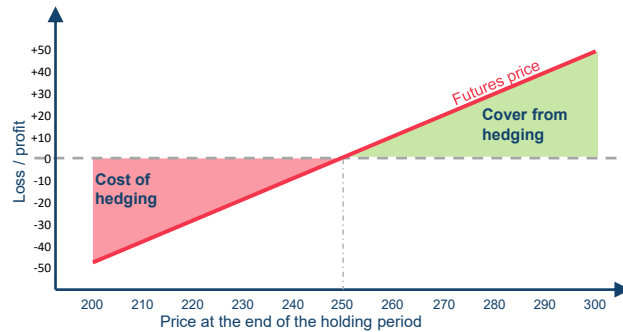


Hedging a short physical position (1/2)

- Short physical exposure (e.g. sale at fixed price)



- Hedging a short exposure with a long position



	Market price decrease	Market price increase
Short physical exposure		
Physical position		
Value today	250	250
Price in 3 months	200	300
Profit / loss	+50	-50

Hedging a short exposure with a long position		
Financial position		
Price locked-in today	250	250
Price in 3 months	200	300
Profit / loss	-50	+50

Actual value at the end of the period	250	250
Actual profit / loss	0	0

- The objective of hedging is to lock-in a future prices, thus reducing exposure to price volatility risk
- Speculators do not hedge, but rather take a view on future price movements by gaining exposure with either a physical or a financial position



Hedging a **short** physical position (2/2)

Fixed price sales

Selling at a fixed price generates a **short physical position**, as it is an obligation to **deliver** material at a previously agreed price

The financial transaction needed to hedge the price risk is **forward buying** an equivalent quantity (or a fraction of it) to create a **long financial position**

Example

Recycler XYZ agrees to sell 5,000mt of scrap per month for 6 months at the price of \$250 per tonne to a steel mill

To hedge this position, Recycler XYZ decides to forward buy 5,000mt of scrap per month for 6 months at the price of \$250 per tonne

In the delivery months, the price of scrap...

...drops to \$200

- Gain on the physical position +\$50/mt
- Loss on financial hedge -\$50/mt
- **Final value of the material \$250/mt**

...rises to \$300

- Loss on the physical position -\$50/mt
- Gain on financial hedge +\$50/mt
- **Final value of the material \$250/mt**

Please note that if Recycler XYZ decides to bear the price risk of the physical contract, may it be able to negotiate a favourable price, or a premium (maybe \$5-\$10?), with its customer?



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