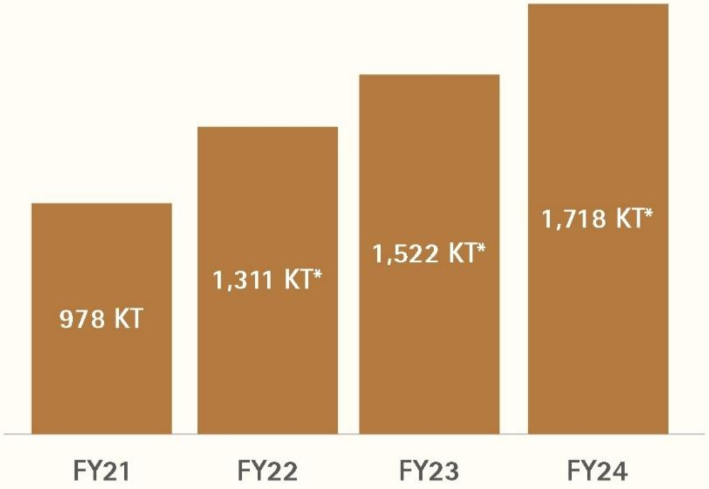
International Copper Association

ANNUAL UPDATE STUDY ON COPPER DEMAND IN INDIA (FY24)

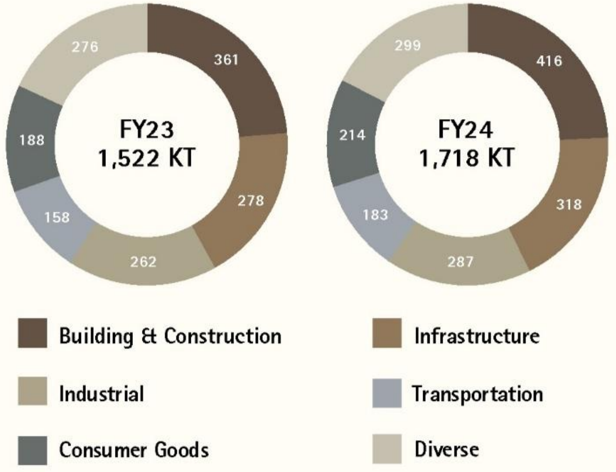
DECEMBER 2024

Post pandemic, the average annual copper demand increased by 21% p.a. between FY2021 and FY2024

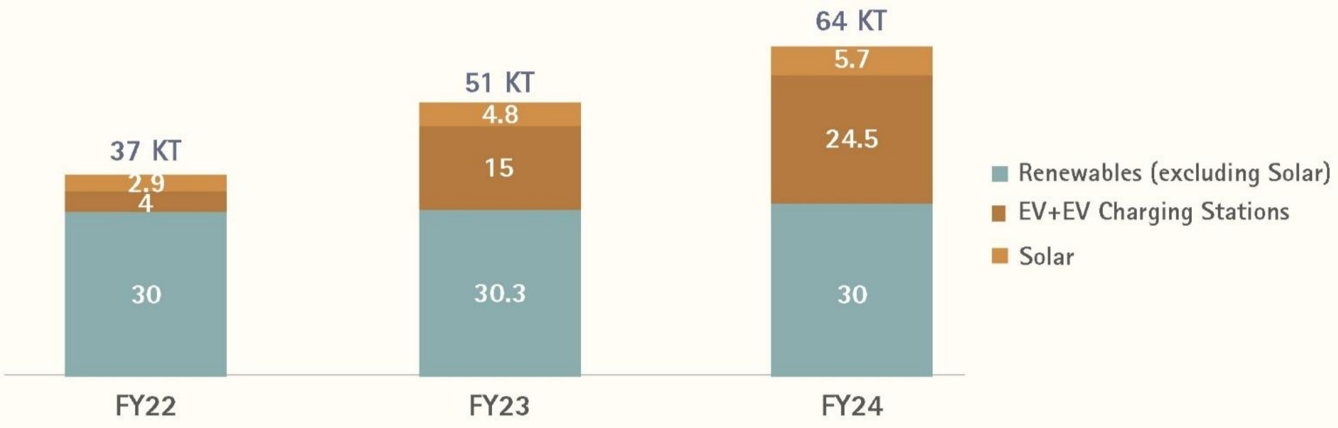
Copper demand grows by 13% y-o-y in FY24



India Copper Demand in FY23 vs FY24



Copper demand in net zero transition (KT)



What's Driving Copper Demand?

Building Construction

- Changing practice of using right size of copper wires and cables for safety in buildings
- Construction GVA grew 9.9% in FY24
- Demand for premium & luxury housing grew by 75%

Infrastructure

- 21% y-o-y growth in renewable energy capacity addition
- Increased demand for copper cables and transformers in T&D sector

Industrial

- Various favourable government initiatives and policy led to 9.9% growth in manufacturing GVA

Transportation

- Changing product mix in 4W cars and preference for top-end models
- EVs sales increased by 41% in FY24, primarily driven by electric 2W and 3W

Consumer Durables

- Acs registered 19% y-o-y growth reaching 11.5 mn units
- Cu density increased in domestic fans driven by mandatory Star Labelling program

Diverse

- Demand for agri-pumps grew by 7% y-o-y with solar agri pumps growing by 18%
- Demand of copper in coins, household accessories, artefacts, utensils etc grew by double digit

Note:
- The classifications have been improvised in FY24 as per global standards. In the previous versions, high -efficiency applications like IE3 & IE4 motors and 5-star-rated appliances were also considered
*- Demand includes copper in finished goods imports based on analysis of more than 300 HS codes and also copper demand from after market rewinding

20% jump in copper rods consumption and a 12% surge in pipes & tubes consumption seen over FY24

Refined Cu

Domestic metal-in-concentrate supplied by Hindustan Copper Ltd: 22.7 KT
+
Cu content in concentrate imports: 307 KT
+
Cu content anode imports: 194 KT
+
Cu content blister imports: 0.5 KT

Domestic Cathode 524 KT + Cathode Imports 363 KT - Cathode Exports 28 KT = Cathode 859 KT

Secondary Cu

Copper Scrap: 422 KT

Local Direct Melt 301 KT | Imported Direct Melt +126 KT | -5.3 KT

Brass Scrap: 237 KT

Local Direct Melt 166 KT | Imported Direct Melt +73.1 KT | -2.2 KT

Production + Import - Export

Segment	Production	Import	Export
Copper Rod: 1109 KT	+1088 KT	+124 KT	-103 KT
Tubes & Pipes: 159 KT	+71 KT	+93.6 KT	-5.3 KT
Rolled Mills: 280 KT (Bar/ Plate/Sheet/ Strips Foils)	+251 KT	+33 KT	-4.4 KT
Other Semis: 109 KT (Castings/Powders/ etc)	+108 KT	+1.5 KT	-0.5 KT
Copper in Finished Goods Imports: 61 KT		+195 KT	-134 KT

FY24: Apparent Usage: 1,718 KT

Supply of secondary copper to total demand grew to 38.4% vs 38% in FY23

Copper alloys catered to 14% of copper demand in FY24

Cu

Note: Product segments updated within Foils (PCB and copper tapes), Cast (Gas stoves, Doors & Knobs, Kitchenware)

KEY TAKEAWAY

Supply Side

Constrained domestic copper cathode supply in FY24 resulted in

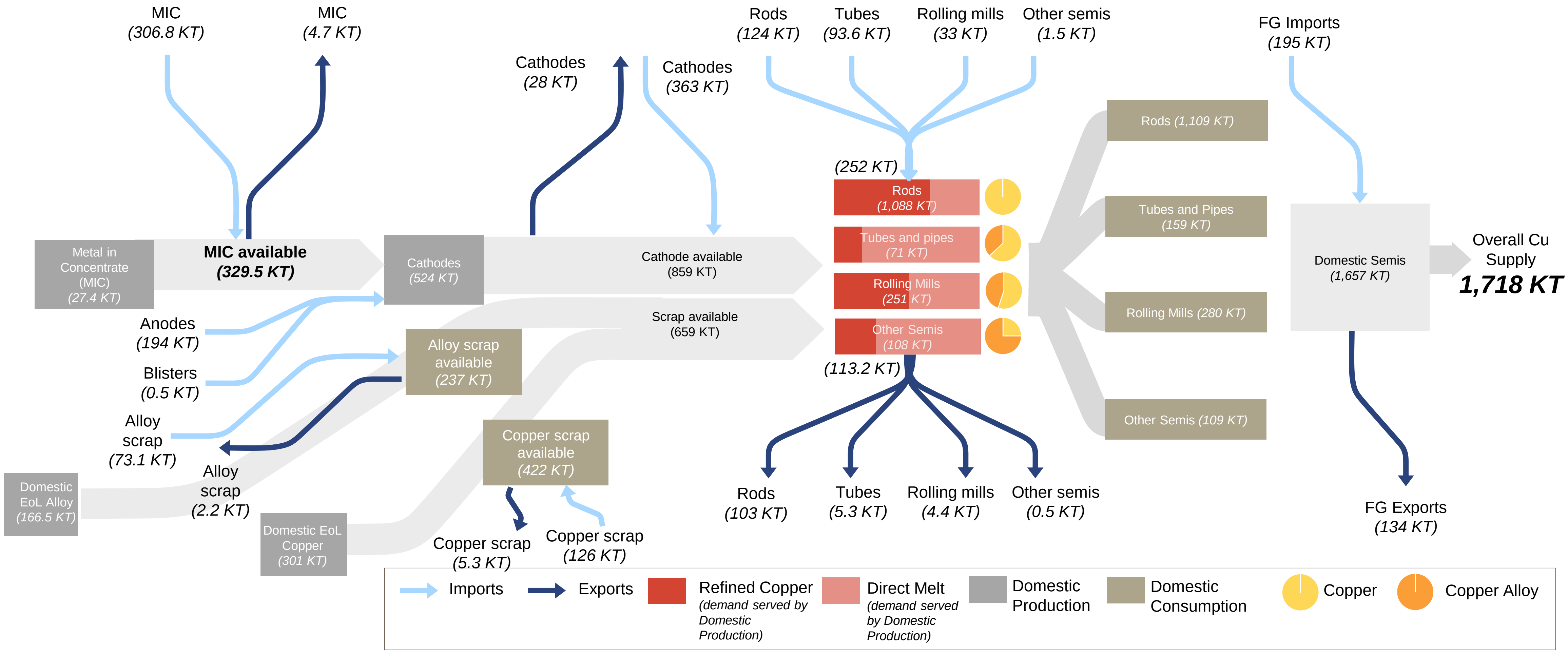
- Net imports of cathode grew by 103%
- Secondary copper (mostly direct melt) grew by 15%

Demand Side

India's copper demand grew by 13% in FY24 driven by :

- Improving standard of living and higher disposable income leading to increased demand in building construction, consumer goods and automobile sector
- Favourable government initiatives and public & private investment fuelling the growth in infrastructure and industrial sector
- Copper demand in net zero transition technology contributes 4% to total copper demand but grew by 27%

Copper Demand & Supply by Semis



Copper Demand includes usage of Primary and Secondary Copper | Includes usage of Copper and Copper alloys | All KT in Cu terms, Note: MIC - Metal in Concentrate, EoL - End-of-Life

Cu

Supply side analysis – Primary feedstock

Copper	FY23 (kT)	FY24 (kT)
Concentrate Supply (MIC)	**332**	**329**
Domestic Concentrate (MIC)	*25*	*27*
Imports	*307*	*306*
Exports	*-*	*5*
Anode imports	**180**	**194**
Blisters imports	**51**	**1**
Cathode Supply	**728**	**859**
Domestic Cathode	*563*	*524*
Imports	*175*	*363*
Exports	*10*	*28*

MIC - Metal in Concentrate

Cu

Supply side analysis – Secondary feedstock

Copper & Alloy scrap	FY23 (kT)	FY24 (kT)
Copper scrap (Copper content)	**352**	**422**
Domestic EoL	*273*	*301*
Imports	*86*	*126*
Exports	*7*	*5*
Alloy scrap (Copper content)	**226**	**237**
Domestic EoL	**141**	**167**
Imports	*87*	*73*
Exports	*2*	*2*
Total scrap supply (Copper content)	**578**	**659**

EoL – End of Life

Cu

Supply side analysis – Semis (1/2)

Copper Semis	FY23 (kT)	FY24 (kT)
Rod Supply	**963**	**1109**
Domestic production	*898*	*1088*
Imports	*96*	*124*
Exports	*31*	*103*
Tube Supply	**142**	**159**
Domestic production	*65*	*71*
Imports	*85*	*94*
Exports	*8*	*5*

Cu

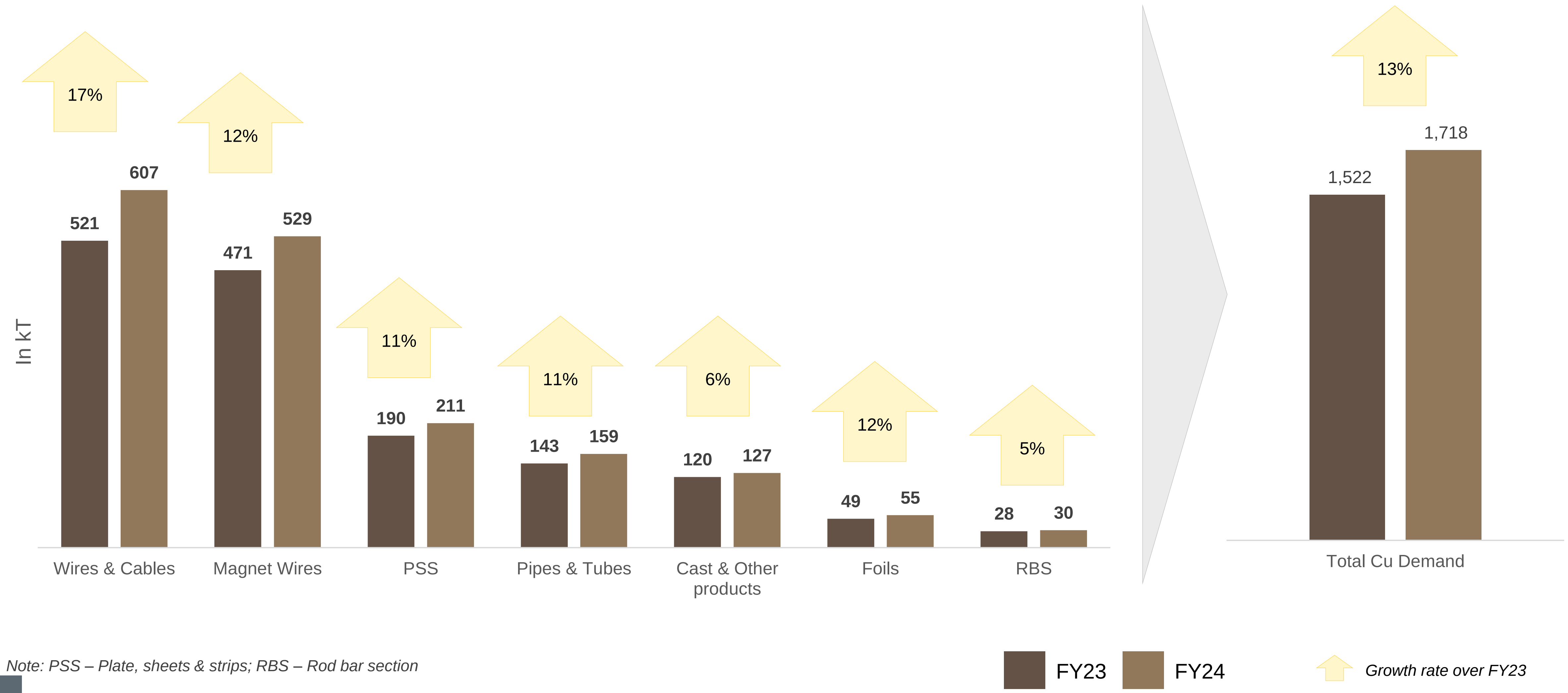
Supply side analysis – Semis (2/2)

Copper Semis	FY23 (kT)	FY24 (kT)
Rolling Mill Supply	**265**	**280**
Domestic production	*241*	*251*
Imports	*28*	*33*
Exports	*4*	*4*
Cast and other semis Supply	**98**	**109**
Domestic production	*98*	*108*
Imports	*0.4*	*1.5*
Exports	*0.2*	*0.5*

Cu

Copper Demand by Forms

Wires & cables indicate the highest increase in copper demand (17%) over FY23

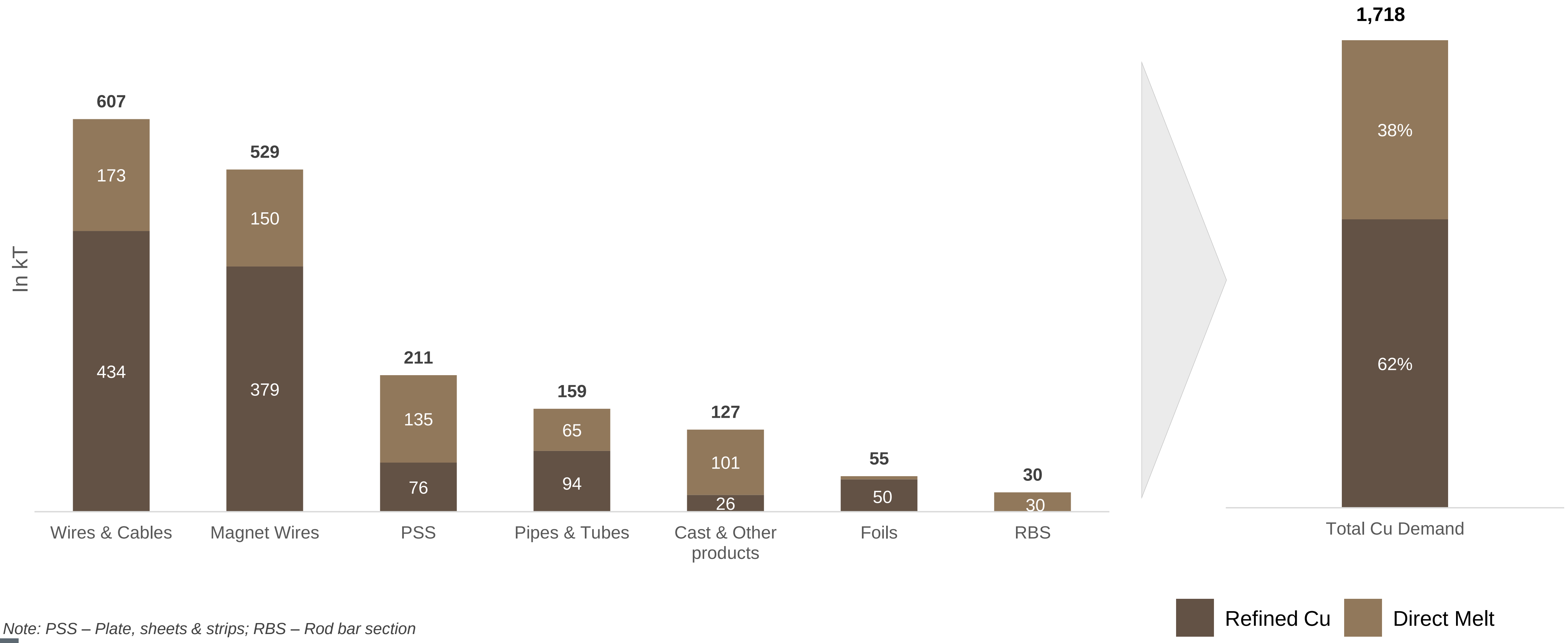


Note: PSS – Plate, sheets & strips; RBS – Rod bar section

Cu

Refined vs Direct Melt

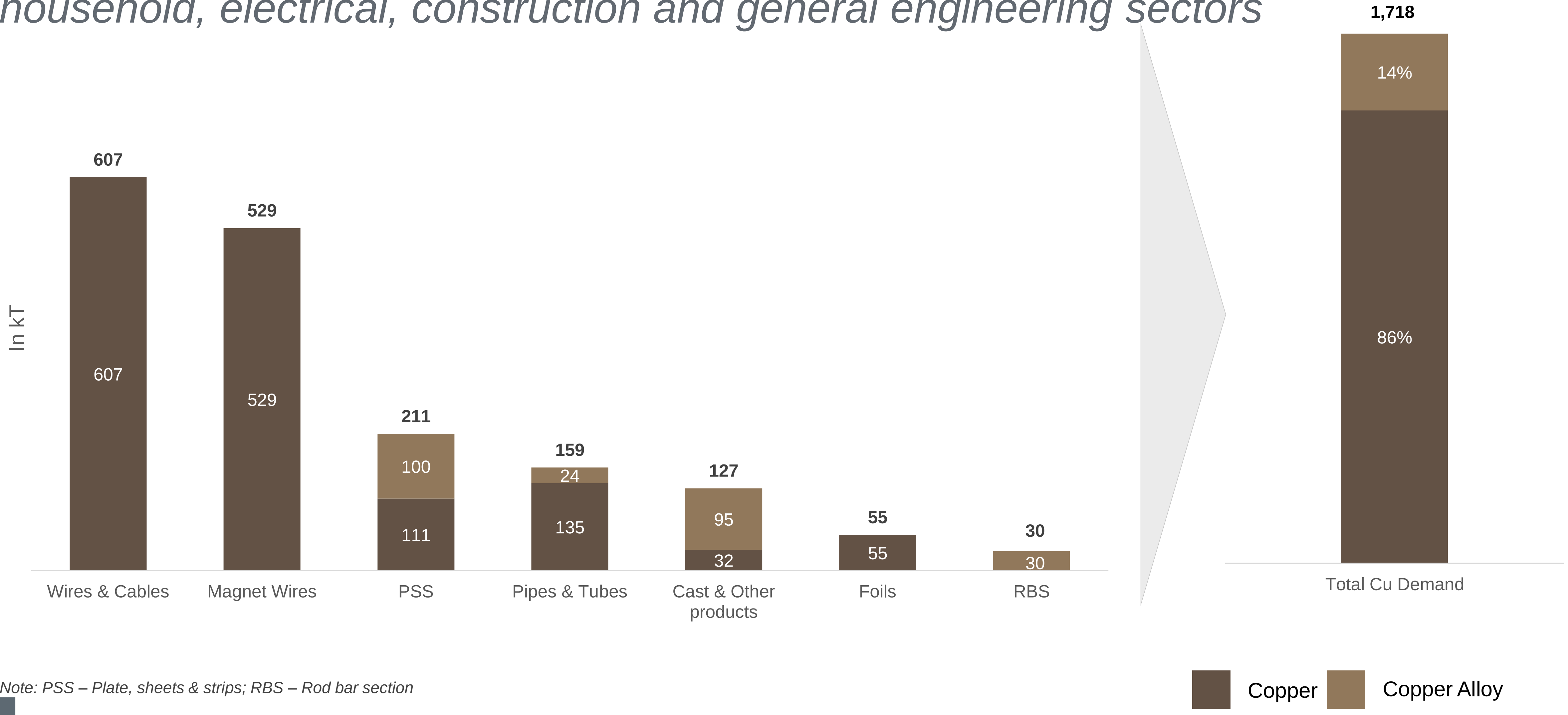
The share of direct melt has marginally increased from 38% to 38.4% in FY24



Note: PSS – Plate, sheets & strips; RBS – Rod bar section

Copper vs Alloy

14% of the consumption takes place using Cu alloys – mainly brass used in household, electrical, construction and general engineering sectors



Note: PSS – Plate, sheets & strips; RBS – Rod bar section

Cu

Key takeaways

1

Direct melt proportion to total Copper demand remains similar in FY2024

- Import of copper scrap has grown by 47% from 86 KT in FY23 to 126 KT in FY24
- The proportion of direct melt increased marginally to 38.4% in FY24, from 38% in FY23
- Cu content in multi-metal scrap amounts to 48 kT

2

Cathode imports have surged by ~107% in FY24

- The rise in demand in FY24 has been accommodated by an increase in cathode imports from 176 KT in FY23 to 363 KT in FY24
- Surge seen in semis imports, such as pipes and tubes (from 85KT in FY23 to 94 KT in FY24) & rods (from 96KT in FY23 to 124 KT in FY24)

3

12.9% growth in Copper demand

- Manufacturing PMI index at an all-time high (59.1), coupled with manufacturing and construction GVA growing at 9.9%, respectively, have fueled growth in the industry
- Renewable energy capacity addition, growing penetration of EVs, and charging infrastructure are among the emerging drivers

Cu