

# INVESTOR DAY

4<sup>TH</sup> APRIL 2023



# Safe Harbor Statement

## Forward-looking statements

Statements made in this presentation which describe the company's intentions, expectations, beliefs or predictions may be forward-looking statements within the meaning of securities laws. Forward-looking statements include statements preceded by, followed by, or including the words "believes," "expects," "anticipates," "plans," "targets," "estimates," "projects," "forecasts," or similar expressions. Forward looking statements generally can be identified by the fact that they do not relate strictly to historical or current facts and are based on our management's beliefs, as well as assumptions made by, and information currently available to our management as well as other factors that we believe are appropriate and reasonable under the circumstances. Examples of forward looking statements in this presentation are statements about our expectations about strengthening and growing the business with expansion projects or achieving synergies associated with the acquisition. The company cautions that, by their nature, forward-looking statements involve risk and uncertainty and the company's actual results could differ materially from those expressed or implied in such statements. We do not intend, and we disclaim any obligation, to update any forward-looking statements, whether as a result of new information, actual performance, future events or otherwise. Factors that could cause actual results or outcomes to differ from the results expressed or implied by forward-looking statements include, among other things: changes in the prices and availability of aluminum (or premiums associated with such prices) or other materials and raw materials we use; the capacity and effectiveness of our hedging activities; relationships with, and financial and operating conditions of, our customers, suppliers and other stakeholders; fluctuations in the supply of, and prices for, energy in the areas in which we maintain production facilities; our ability to access financing including in connection with potential acquisitions and investments; risks relating to, and our ability to consummate, pending and future acquisitions, investments or divestitures; changes in the relative values of various currencies and the effectiveness of our currency hedging activities; factors affecting our operations, such as litigation, environmental remediation and clean-up costs, labor relations and negotiations; breakdown of equipment and other events; economic, regulatory and political factors within the countries in which we operate or sell our products, including changes in duties or tariffs; competition from other aluminum rolled products producers as well as from substitute materials such as steel, glass, plastic and composite materials; changes in general economic conditions including deterioration in the global economy; the risks of pandemics or other public health emergencies, including the continued spread and impact of, and the governmental and third-party responses to risks arising out of our acquisition of Aleris Corporation including risks associated with related divestiture requirements and uncertainties inherent in the acquisition method of accounting; disruption to our global aluminum production and supply chain as a result of COVID-19; changes in government regulations, particularly those affecting taxes, derivative instruments, environmental, health or safety compliance; changes in interest rates that have the effect of increasing the amounts we pay under our credit facilities and other financing agreements; and our ability to generate cash. The above list of factors is not exhaustive. Other important risk factors are included under the caption "Risk Factors" in the Company's Integrated Annual Report of FY2021-22. With respect to other important risk factors applicable to Novelis, you should review the risks factors set forth under the caption "Risk Factors" in Novelis' Annual Report on Form 10-K for the fiscal year ended March 31, 2022, filed with the United States Securities and Exchange Commission ("SEC") on May 11, 2022, as well as contained within Novelis' subsequent SEC filings.

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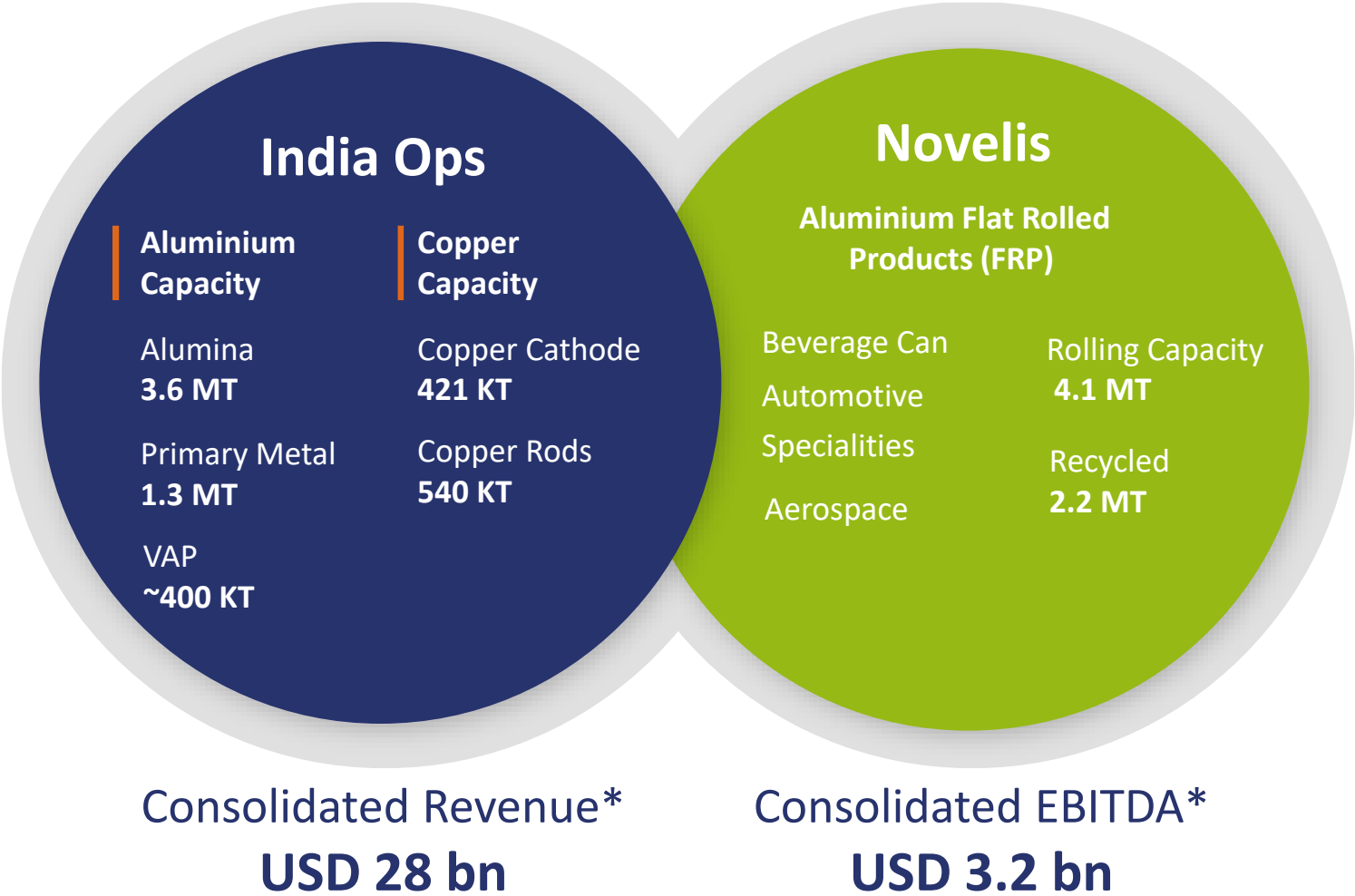
**04** Update on Growth Projects

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# Hindalco is a leading global industry player



**Novelis** | Largest aluminum FRP producer and recycler in the world

**Hindalco** | Largest fully integrated aluminum player in India

**Utkal Alumina** among the lowest cost producers of alumina in the world

One of the **largest custom copper smelters** at a single location in Asia

**Global** operations across **10 countries**

**40,000 employees** worldwide

\* Based on TTM December 2022

# Strategic Priorities

## Way Forward



### Prudent Capital Structure

- ▶ Financial prudence in Capital Allocation
- ▶ Growth Capex supported by robust cashflows and Strong Balance sheet



### Value Enhancing Growth

- ▶ Focus on shareholder value creation through organically expanding downstream businesses
- ▶ Cost optimization and predictability through enhanced resource security



### Strong ESG Commitment

- ▶ Focus on ESG by taking sustainability initiatives across the value chain with clear roadmap for achieving our commitments
- ▶ ESG commitments to become 'The Industry Leader in Sustainability'



### Portfolio Enrichment

- ▶ Advancing from manufacturing company to manufacturing solution provider
- ▶ Enrich product mix through increasing the share of high-end value-added products



An aerial photograph of a dense, vibrant green forest. A light blue river or stream winds through the center of the forest, creating a meandering path. Patches of white mist or low clouds are scattered throughout the canopy, particularly in the upper left and lower left areas, adding a sense of depth and atmosphere. The overall scene is a lush, natural landscape.

# Sustainability

Our ESG initiatives to create  
a sustainable world together



# Sustainability is a virtuous circle that encompasses nature, climate, our employees and communities



## Highlights

- ▶ **2.2 mn tons** of aluminium scrap recycled in FY22 at Novelis
- ▶ **~80%** of waste re-used currently, >2.3mn tons of red mud and >100% fly ash
- ▶ On track to reduce net water intensity **30% by FY'25** vs. '19, which is >18mn m3 of water conserved annually
- ▶ **~190 HA** of greenbelt or >450k trees being added annually
- ▶ **~130 net MW** renewables capacity tied-up or in execution

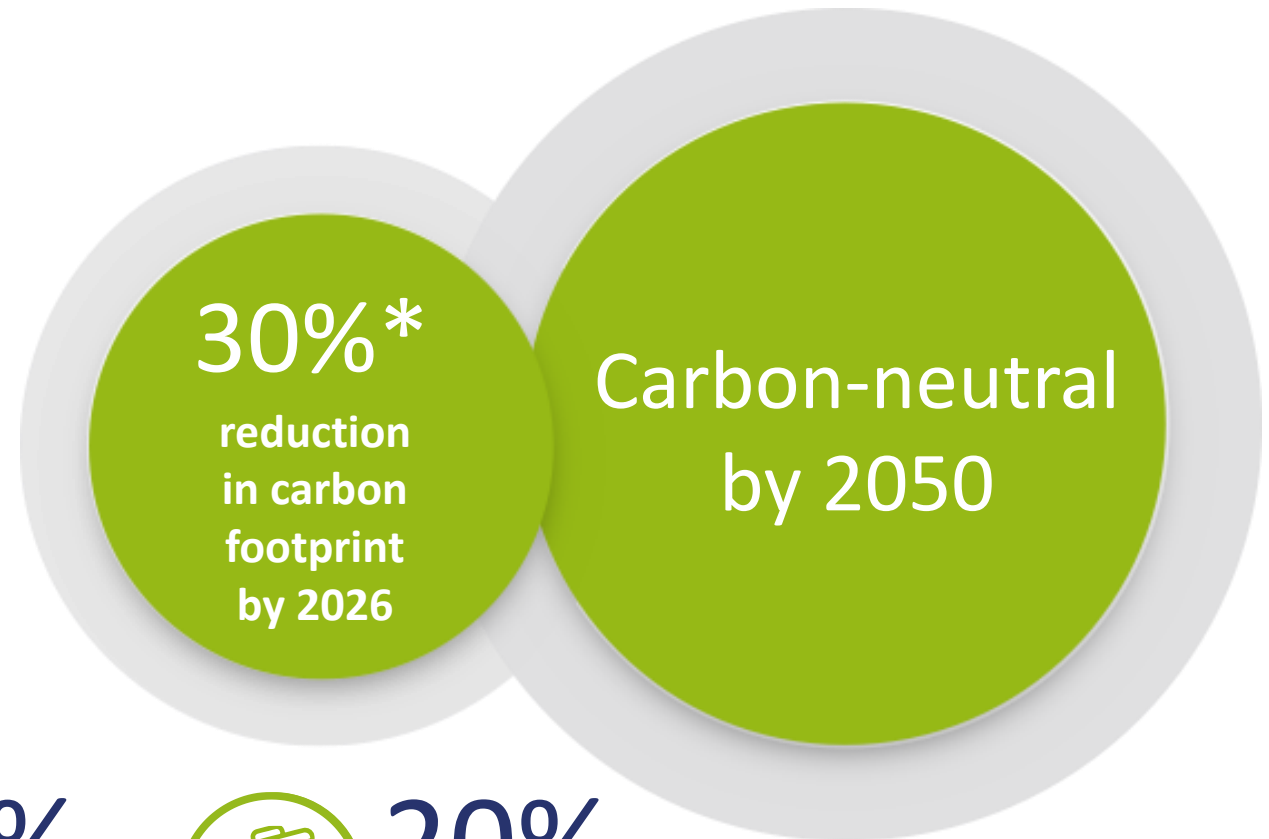
## ESG Targets

- ▶ **Carbon neutral** by 2050
- ▶ **Water positive** by 2050
- ▶ **No net loss** in bio-diversity by 2050
- ▶ **Zero harm** occupational health & safety
- ▶ **Commitments** to community, customers, society
- ▶ **Zero waste** to landfill by 2050

# Novelis'

## ESG Ambitions

To be the world's leading provider of low-carbon, sustainable aluminium solutions that advance our business, industry, and society towards the benefits of a circular economy.



**10%**  
Reduction in  
**Energy Intensity**  
use by 2026<sup>#</sup>



**10%**  
Reduction in  
**Water Intensity**  
use by 2026<sup>#</sup>



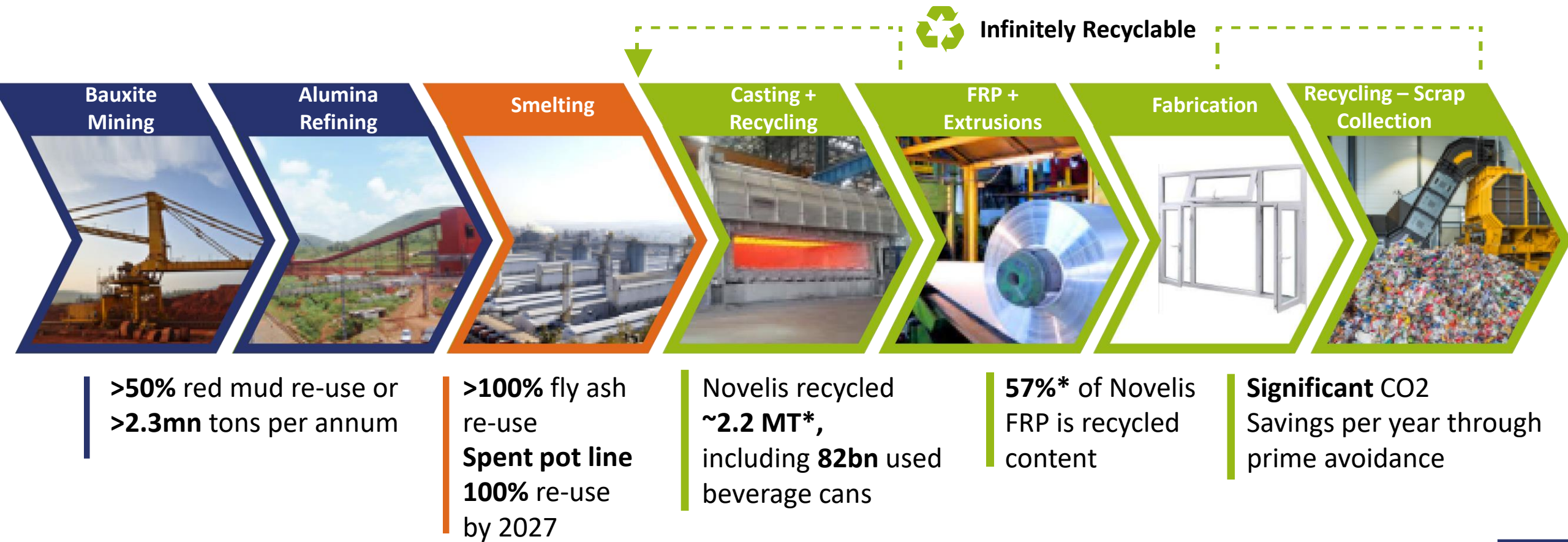
**20%**  
Reduction in  
**Waste to Landfill**  
by 2026<sup>#</sup>

\*Includes Scopes 1-3 Greenhouse Gas Emissions and based on Fiscal Year 2016 Baseline

<sup>#</sup>Year 2020 Baseline

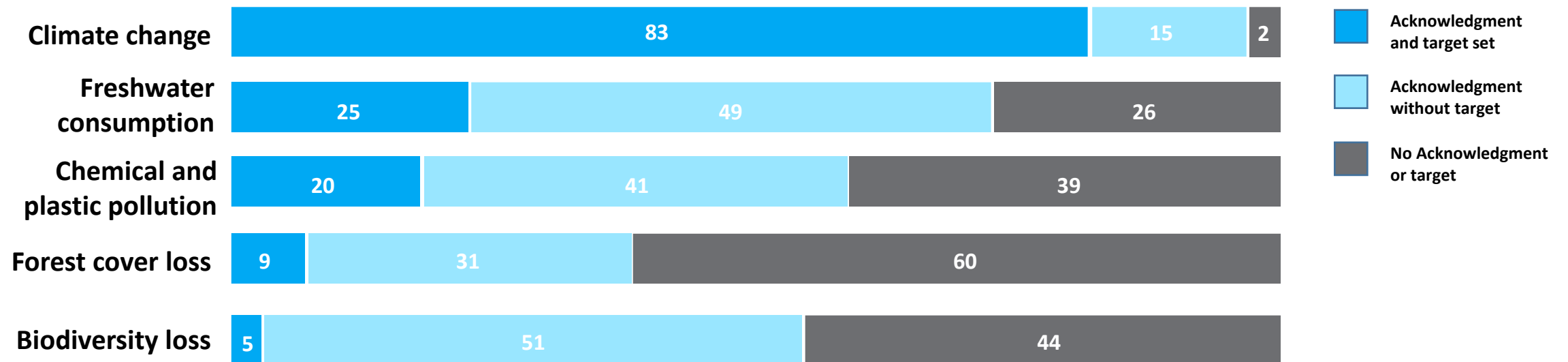


# Circularity is at the core of our strategies



# Corporate targets are mostly common for climate change

Fortune Global 500 companies' nature-related targets and acknowledgments, % share



Source: McKinsey

> **Hindalco is a leader in environmental stewardship of bio-diversity, waste and water** <

# Hindalco's target - No net loss in bio-diversity by 2050

## Achievements



**20% addition in** number of native species from FY'22 to FY'23 in 3 BMP sites



**Seed collection from** local forests to developed indigenous species



**4500 SQM** of Miyawaki Plantation



**Active bird conservation**



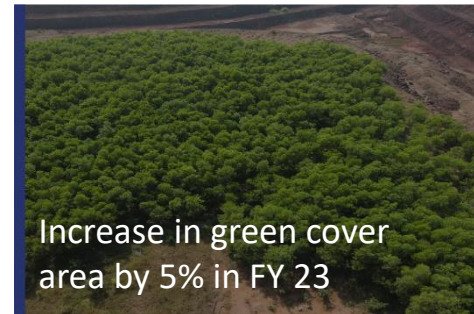
**Introduced BMP** at 4 new mining clusters (total 8 sites completed)



**Butterfly conservation:** 33,500 SQM area developed

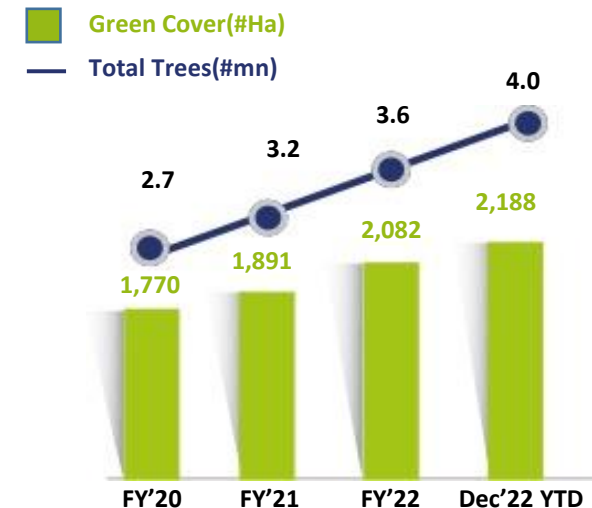


**Multiple offset** efforts underway (e.g. WADI Project)



**Increase in green cover** area by 5% in FY 23

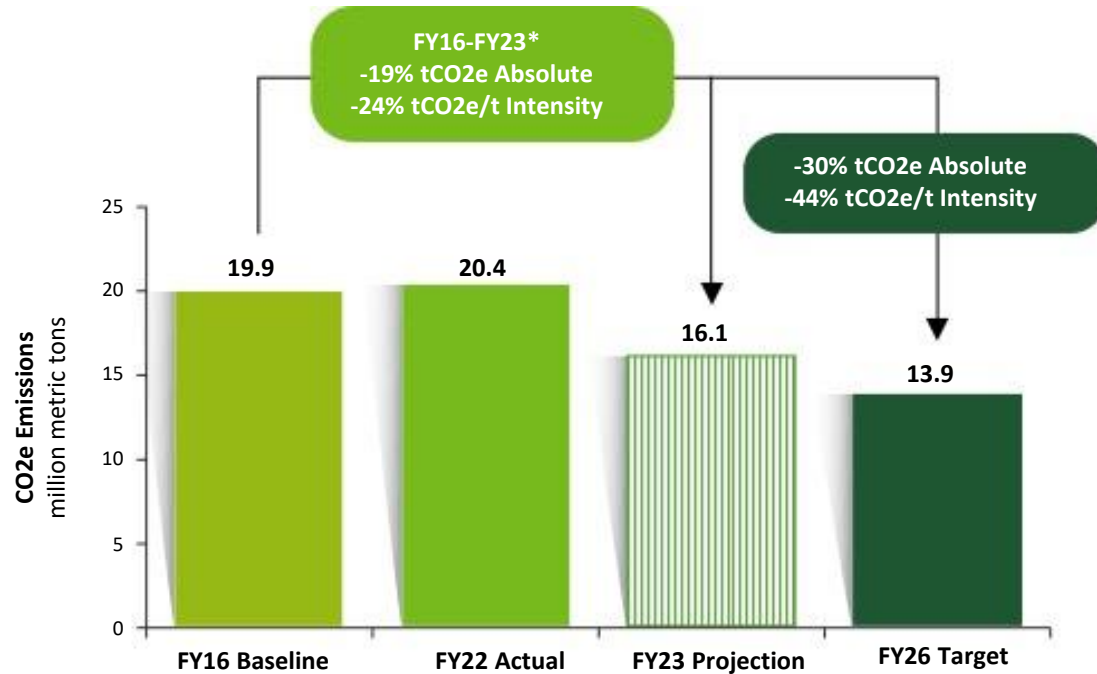
## Cumulative Trend





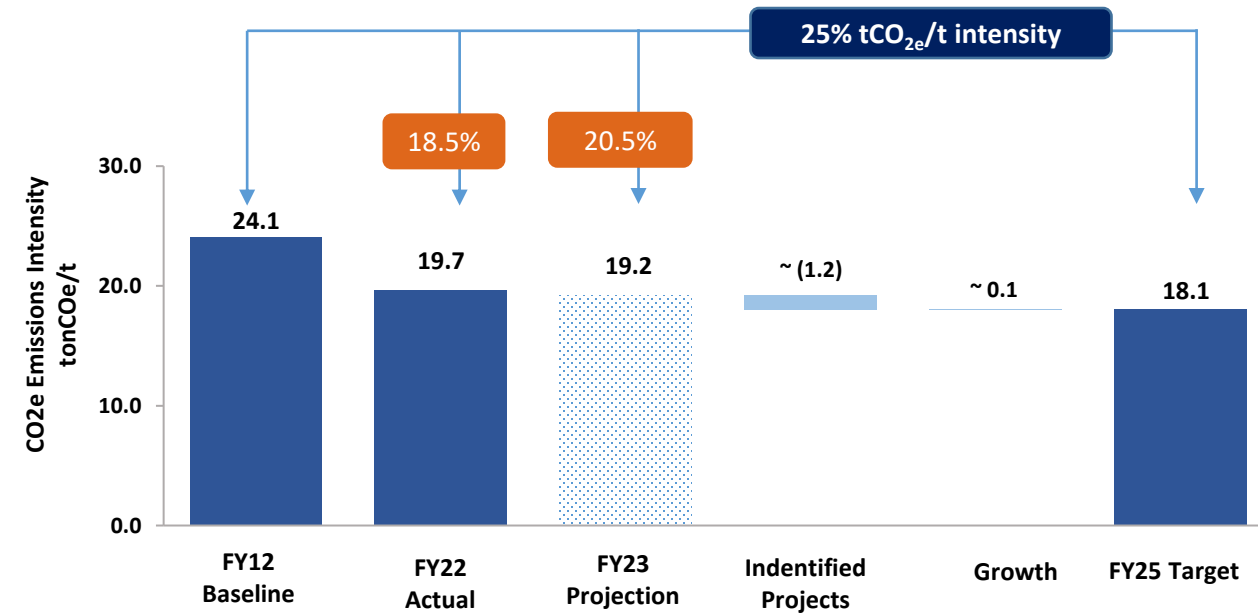
# Hindalco Continues to build out and refine its roadmap to carbon neutral by 2050

## Novelis



## Hindalco

### Primary Aluminum + Downstream



Recycled  
Content

49%

57%

61% \*

\* FY23 Projected

# Key Sustainability Projects



CO2  
Mineralization  
with Red Mud



Significant  
Renewables  
Pipeline



Utkal  
Red  
Mud  
Roads



Novelis  
Net Zero  
Lab Valais,  
Sierre  
Switzerland

Round the  
Clock Renewable  
Energy



Wind -  
Solar  
Hybrid  
project



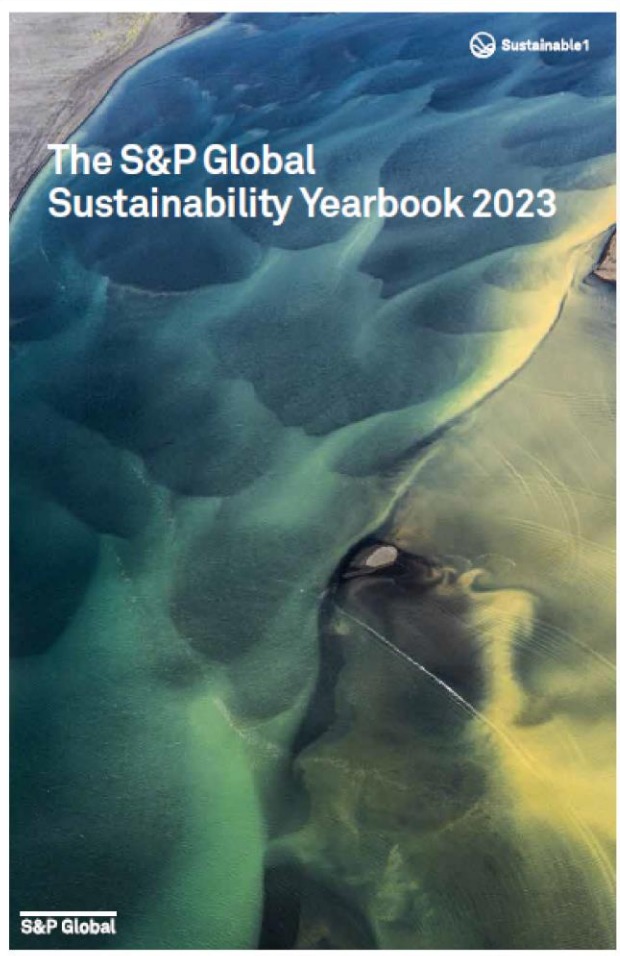
Mahan  
Spent  
Pot Line Crusher



Novelis  
Enhanced  
recycling  
capabilities



# Hindalco is in the top 1% S&P Global ESG score in the aluminium industry



## Industry Distinctions 2023

Top 1% S&P Global ESG Score [\(S&P Global ESG Score \(as of Feb 7, 2023\)\)](#)

Hindalco Industries Limited*	India	83
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Top 10% S&P Global ESG Score

Alcoa Corporation	United States	77
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*\*S&P Global Industry Mover*

## Industry Statistics

▶ Number of companies assessed	17	▶ Market capitalization of assessed companies (in USD billion)	89.5
▶ Number of companies in Yearbook	2	▶ Market capitalization of companies in Yearbook (in USD billion)	20.6







# Novelis

## Near Term Outlook

# Market Leader with Unmatched scale & presence

## Key Facts and Figures

Fiscal Year 2022



**\$17.1Bn**  
Revenue

**\$2.0Bn**  
Adj. EBITDA

**3,858kt**  
FRP Shipments

**\$530**  
Adj. EBITDA  
per tonne



**33**  
Operating  
Facilities

**12,690**  
Employees

**80+**  
Countries Served

**#1** Can & Auto  
Market Position



**2.2mt**  
Recycling Inputs  
Utilized

**57%**  
Recycled  
Content

**82Bn**  
UBCs Recycled

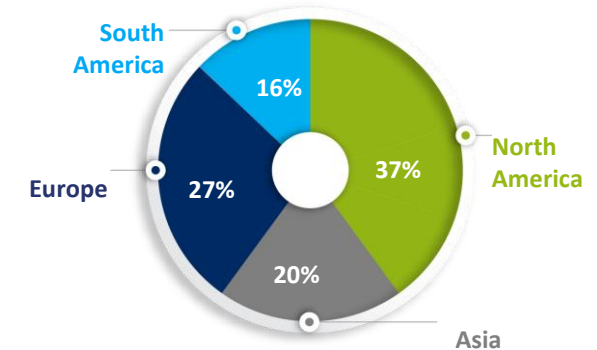
**4%**  
Global FRP Industry  
CAGR 2022-27\*

Novelis is embarking on a transformational organic growth period to further its ambition to be the world's leading provider of low-carbon, sustainable aluminum solutions that advance our business, industry, and society toward the benefits of a circular economy

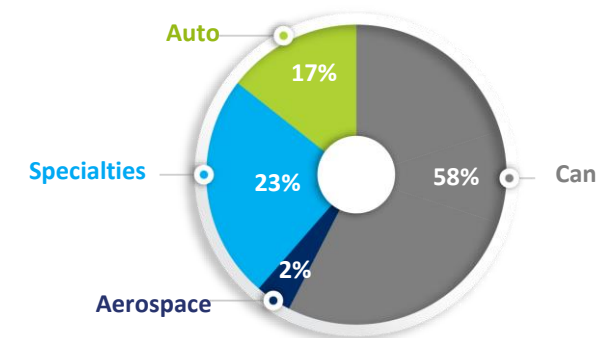
## Unmatched Scale with Global Presence

Fiscal Year 2022 FRP Shipments 3,858kt

### Novelis Shipments by Region



### Novelis Shipments by Product Market



\*Source : CRU Nov 22 Aluminum flat rolled products outlook

# Macro Headwinds muting Near-term performance

Q3FY23 a trough, but expect headwinds to persist into FY24



**Volatile energy & other cost inflation**



**Gradually improving scrap supply in South America**



**Select end-market challenges**

- Strength in automotive & aerospace markets
- B&C /specialty in Europe & North America from inflation & interest rates
- Beverage packaging destocking, weak summer in Brazil

Mitigating actions



**Working capital & phasing of capex**



**Inflation mitigation through cost optimization**



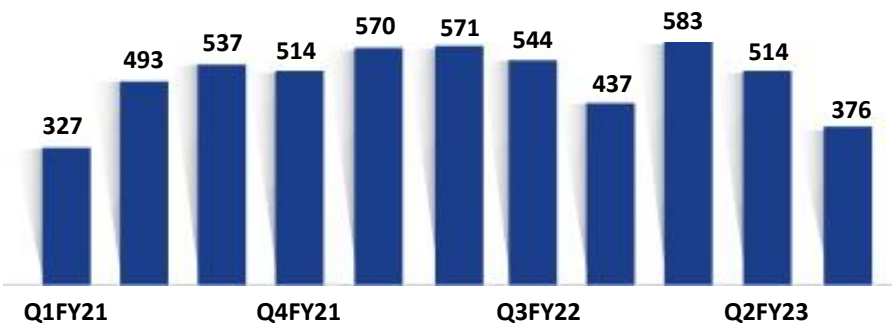
**Operational and commercial excellence**



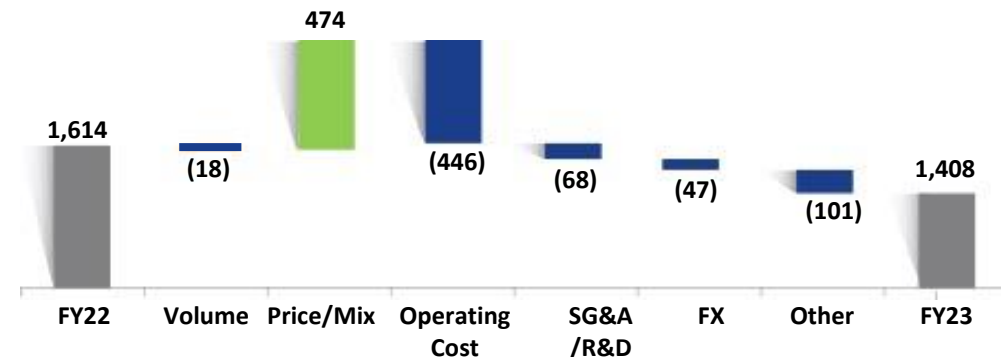
**Hedging programs to mitigate volatility**

**\$525 Adjusted EBITDA/ton achievable when headwinds subside**

Quarterly Adjusted EBITDA \$ per ton trend



Adjusted EBITDA YoY, 9 months ended Dec 31 (\$ Millions)





# Short-term trends impact can Sheet demand in CY2022-2023



## Lack of Promotional Activity

Brand owners' price increases & lower promotion leading to lower volumes



## Normalisation in patterns & channel

Reverting to normal consumption patterns with more on-premise post-pandemic



## Supply chain challenges

2022 supply chain challenges led to over-ordering inventory from multiple suppliers



“

Customers pushing price, pushed it too far, and there was price elasticity that kicked in. Beer was down the most. And I think what we're seeing is a return to more promotional activity here right out of the gate in Q1.

”

- Dan Fisher, CEO, Ball, Q4 2022 Earnings Call

“

... a major CSD player pulled promotional activity out of one of the major retail channels in the US, and we saw an immediate impact on our volumes ... we expect to see [promotional activities] going through 2023 and into 2024 ... so that's why we're hopeful for the back end of 2023 and into 2024 that we'll see another uptick in volumes.

”

- Oliver Graham, CEO of Ardagh Metal Packaging, Q3 2022 Earnings Call

The background of the slide is a photograph of two industrial workers. In the foreground, a Black man is shown in profile, wearing a white hard hat with a clear face shield and a blue work jacket with orange accents. He is looking towards the left. Behind him, a white man is wearing a red hard hat with a clear face shield and safety glasses. He is also looking to the left and has his hand raised, pointing towards something off-camera. The setting is an industrial facility with yellow overhead cranes and various pipes and structures visible in the background.

# Novelis

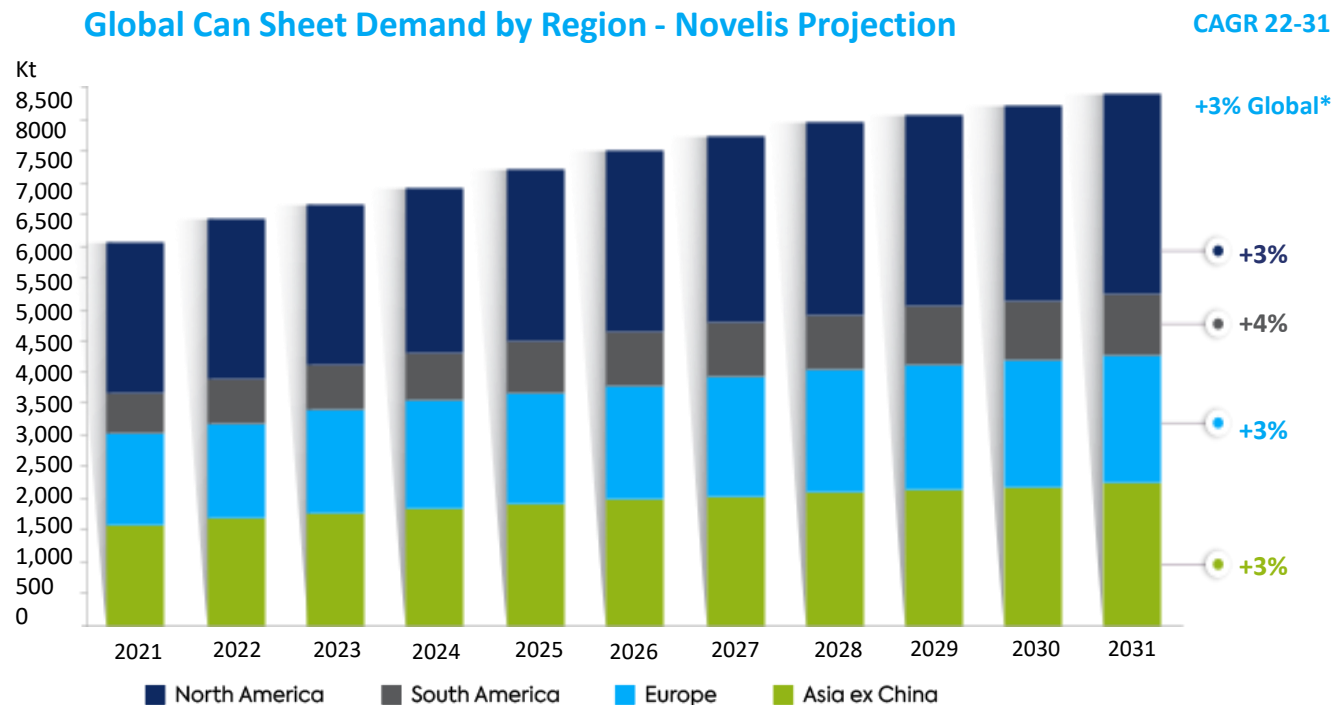
## Market Outlook



# Long-Term Cansheet Demand Remains Robust in All regions

Novelis is the largest supplier of beverage can sheet with **40% global market share** (ex-China), shipping over 2.2Mt of can sheet in FY22

Despite recent disruptions, market demand remains strong with **3-4% CAGR** in all regions



**Key global trends that drive beverage packaging demand**



## Substrate shifts

driven by sustainability and new products will increase metal demand



## Consumption driven demand

primarily within Energy, Alcoholic RTD, and Flavored Water categories



## Form factor (sleek/small cans)

shifts will materially affect metal demand in carbonated soft drinks



# North America Demand Requires Bay Minette Investment

Novelis' new low-carbon, state-of-the-art aluminum recycling and rolling facility in Alabama will serve growing demand for aluminum beverage can sheet and automotive aluminum in North America

Novelis is the **North American market leader** with ~30% share (2022)

**Collaborative customer partnerships** support further growth in the can business through investments and long-term contracts

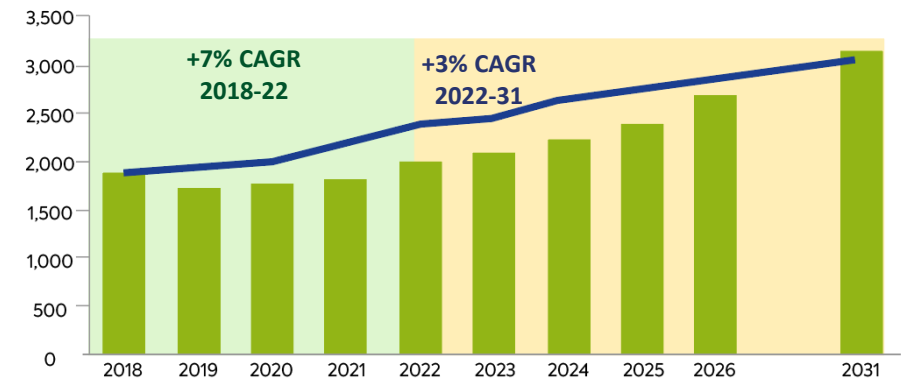
Customer **preference** for domestic supply when available

Novelis differentiates on **product quality, service, and innovation**

Novelis Bay Minette investment a **first mover advantage** and nearly fully contracted through end of decade at significantly improved pricing

## Supply/Demand imbalance supports North America investment

kt North American Can Sheet Market



Sources: Novelis estimates. Supply accounts for estimated announced new Novelis & Industry capacity

■ Supply — Demand



# Electrification will drive robust Long-Term Growth in Automotive Sheet

## Growth Pillars

### Vehicle Build Rate

- Near term (CY23-25) global vehicle volume expected to have a CAGR of 4% due to pent-up demand
- Production Volumes expected to flatten post 2026

### Vehicle Mix

- SUV + Pick up trucks continues to be a key growth driver
- Premium BEV growing due to government subsidies and ICE city bans

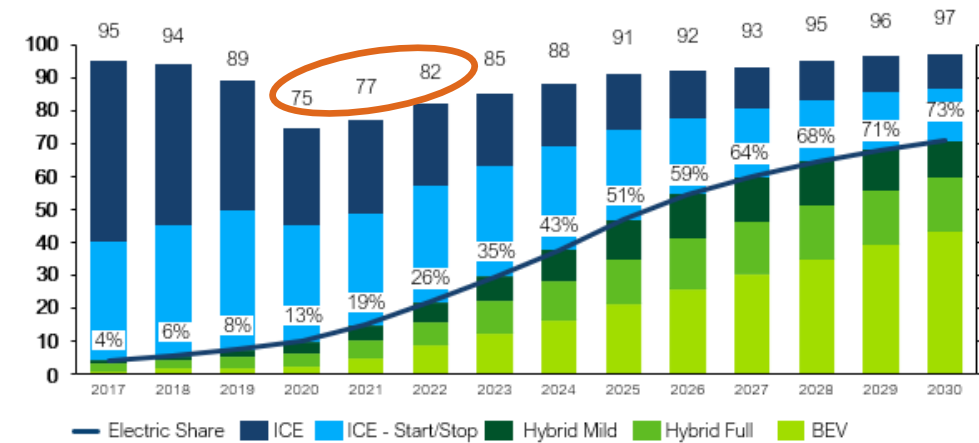
### Aluminum Adoption

- Electrification will increase Aluminium content to 550+ pounds per vehicle by 2030
- Higher Aluminium content in vehicles and new systems including battery enclosures
- Opportunity for roll formed aluminum to replace extruded aluminum

## Trends and Drivers

## Global Light Vehicle Production & Electric Vehicle Share

Millions of vehicles



Source: IHS Feb 2023, Alternative Propulsion Production Forecast

## Aluminium Evolution in North America

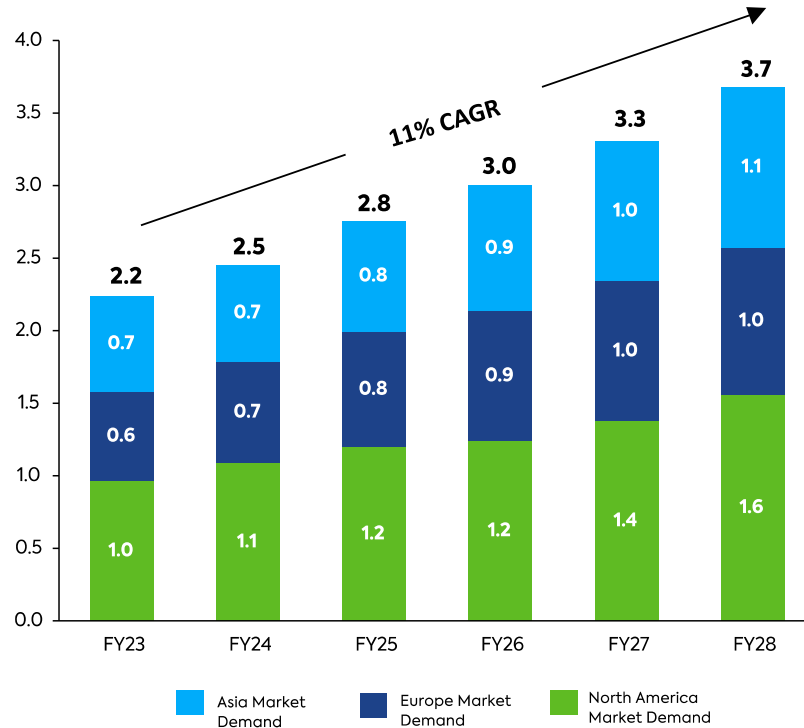
Pounds per vehicle



Source: Ducker 2022 Light Vehicle Aluminum Content and Outlook study - Mar 2023

# Novelis Automotive well Positioned to capture growth

Global Aluminium FRP Demand  
(millions tonnes)



Novelis FY23 Market Share



**40%**  
North America

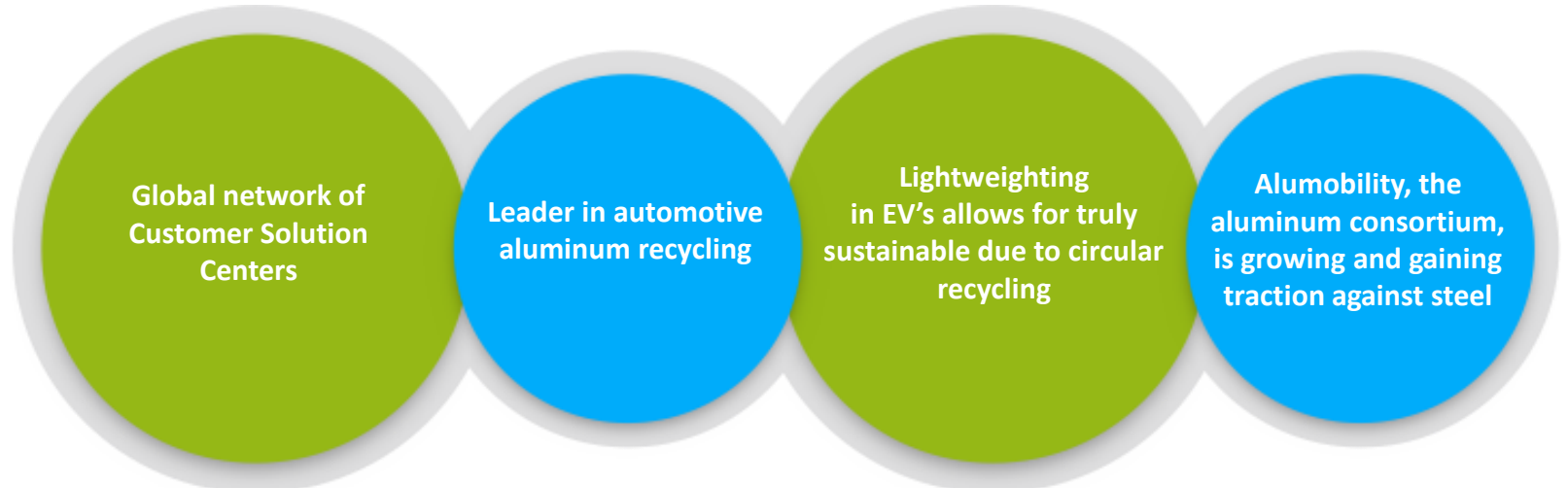


**35%**  
Europe



**20%**  
Asia

Novelis aluminum sheet capacity expansion aligned with market demand projections





# Diverse Specialties Portfolio is High-End & Regionally focused

## North America

Leading supplier of high recycled content continuous cast & direct chill (DC) products

## Europe

Exceptionally diverse customer base  
High end focused

## Asia

Large & diverse market;  
capacity constrained  
Novelis <1% share

## South America

Highly competitive market; opportunistic capacity utilization

Broadly more cyclical markets aligned with economic growth; average **long-term market growth ~3-4%**

**Flexible capabilities** enable optimized capacity utilization and portfolio agility

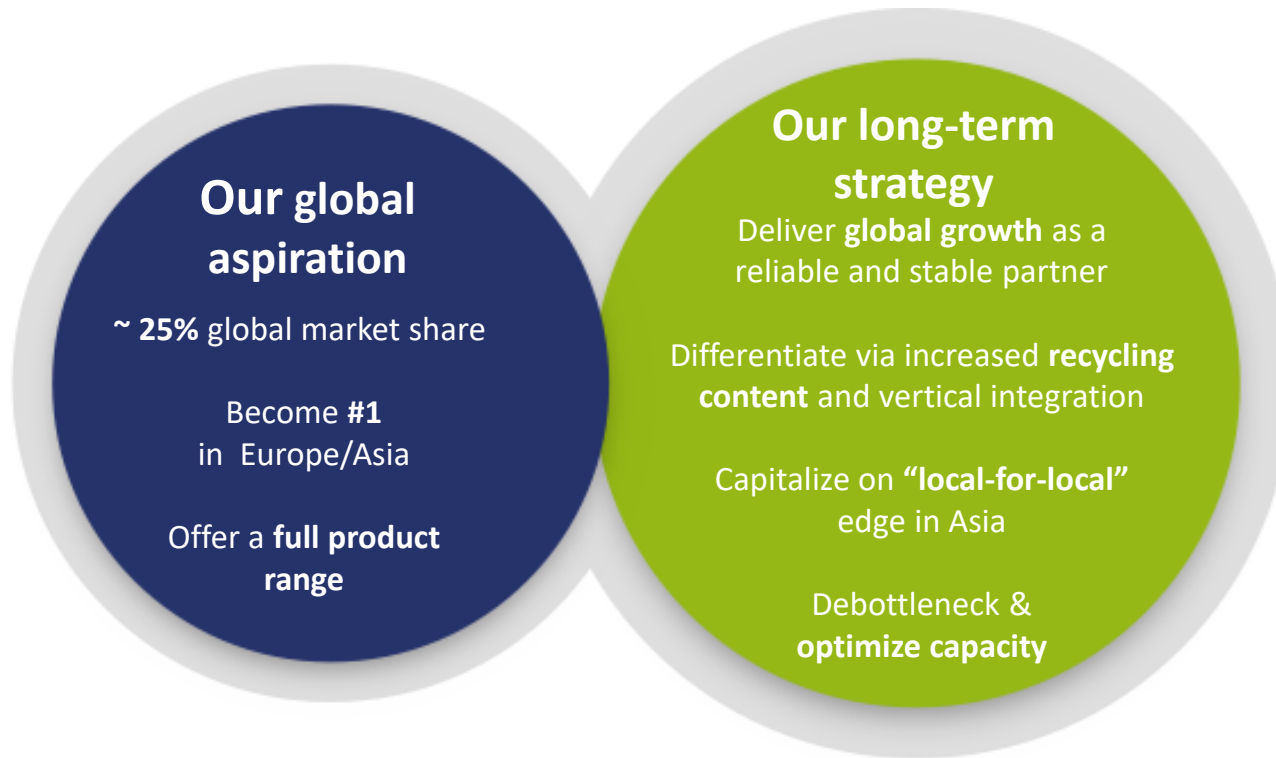
Leveraging our strengths in product quality and innovative **high-recycled-content alloy offerings**



**AL:sust**  
by Novelis

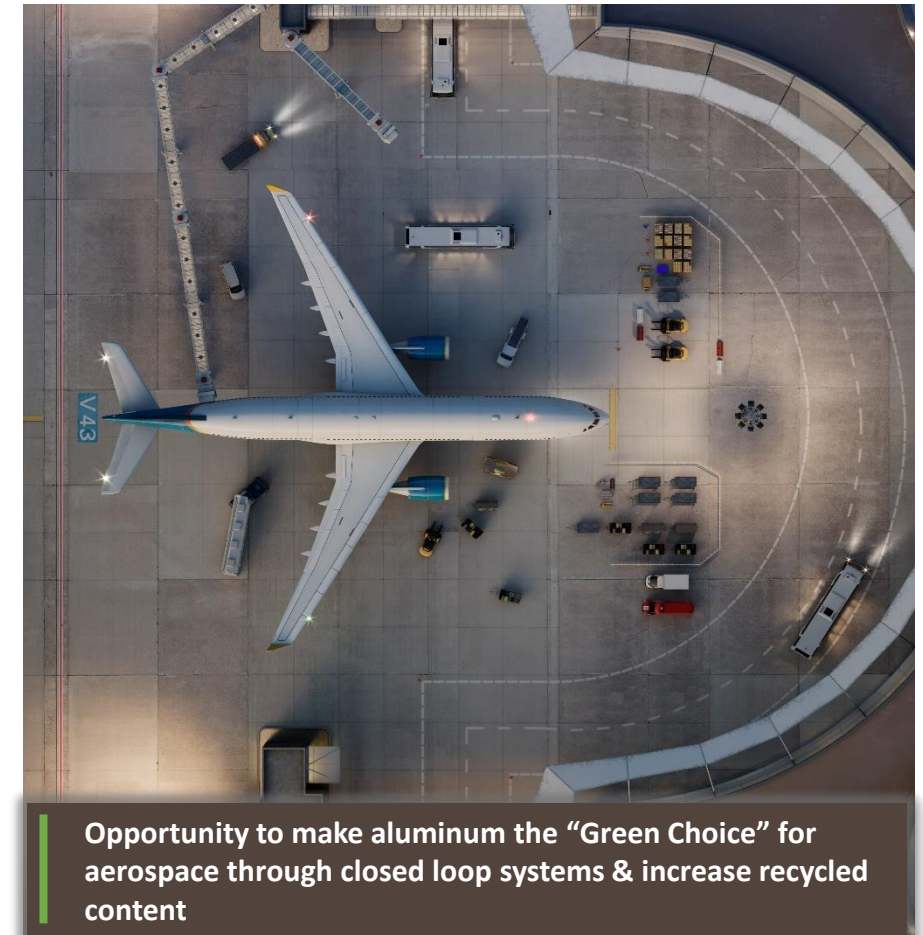


# Leverage our preferred supplier Position to protect market share



Aerospace industry is into a post-pandemic recovery; increased air traffic & a need for fleet modernization driving **growth for aerospace aluminum plate & sheet demand**

- OEMs forecasting air traffic to grow 3.6% annually\*, leading to a need for ~ 40k new aircraft of which ~80% will be single aisle.
- Asian markets accounting for 40% of new demand



\* Source: Airbus 2022-2041 Global Market Forecast





# Novelis

## Updates on Growth Projects



# Transformational strategy intact, Prioritized spending

Committed to our transformational organic growth journey to further strengthen industry leading position

Pacing spend of growth capital expenditures, prioritizing \$3.3 billion of projects already underway

Timing of further potential investment opportunities will be based on cash flow generation and market conditions

## Fully integrated US Facility

### \$2.5 billion in Bay Minette, AL, US

- 600kt plant by FY26, with hot & cold rolling and 400kt recycling and casting capabilities
- Decades of rolling & recycling experience
- Proven manufacturing excellence drives safety, efficiency & quality
- Capacity is largely committed by long-term customer contracts

## Recycling

### \$365 million in Guthrie, KY, US

- Adds 240kt automotive-focused sheet ingot capacity by FY25
- Advanced sorting technology and automotive closed loop recycling
- Reduces Novelis' carbon emissions by one million tons annually

### \$50 million in UAL, S Korea

- Increases annual casting capacity ~100kt by FY25
- Reduces carbon emissions by 420k tons per year

## Debottlenecking/ High-return rolling capacity release

### \$350 million globally for ~265kt finished good capacity FY24-26

#### North America

- \$130 million for 65kt in Oswego
- \$150 million for 80kt in Logan

#### South America

- \$50 million for 70kt in Pinda

#### Asia

- \$20 million for 50kt in Yeongju

# India Business

## Market Overview & Our Initiatives





# Domestic Aluminium Consumption Expected to Double from ~4.5 MT in FY23 to ~9.0 MT in FY33



Building & Construction

**Outlook:** 3rd largest market in the World by FY33

➤ **Demand drivers:** Increase in urban housing demand, premium urban projects and infra

**Applications:** Façade, Formwork, Roofing, hardware etc.

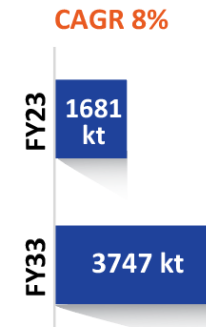


Transport/Automotive

**Outlook:** 3rd largest market in the World by 2030

➤ **Demand drivers:** Focus on light weighting and increasing share of EVs

**Applications:** Engine castings, Auto Fin/Clad, cylinder blocks, alloy wheels, steering wheels, CMS etc.



Packaging

**Outlook:** Pharma sales increase 2.6x by 2030

➤ **Demand drivers:** Growing pharmaceutical, food & beverage and liquor industry  
Ban on plastics; online food delivery

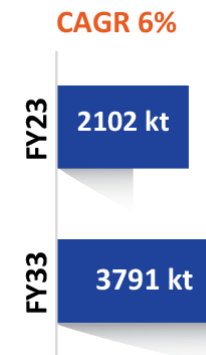
**Applications:** Foils (flexible, pharmaceutical, household foils, Semi Rigid Containers), closures/caps and beverage cans



Other

➤ **Other industries include** Electrical, Consumer durable, Aluminium cookware, machinery and equipment, railways, Printing,

**Applications:** Wire, Frames & mounting structures for solar modules, cables / conductors, lugs, heat sinks, transformers, consumer durable, etc.





# Hindalco Aluminium Downstream

## New value pools with solutions

### EV Applications – Aluminium Battery Enclosures



A solution provider for OEMs and access an extended value pool

Co-design and manufacture Aluminium based battery enclosures for Cars and Two wheelers in India

First dedicated 4-Wheeler Battery enclosure plant to be commissioned by Dec-23 with capacity for 164000 units per annum

### Lightweighting commercial vehicles – Aluminum Trailers



Aim to improve cost and sustainability of logistics

Lightweight load bodies that reduce deadload and help operators increase fuel efficiency per ton-km or extend range for EVs.

Dedicated cargo box for last mile delivery vehicles with capacity for 10,000 containers established in January 2023

### Aluminium Railways freight wagons and Passenger Coaches



Lightweight Aluminium solutions for high speed, efficient and sustainable design for the Indian Railways

Co-design and fabricate Aluminium panels and wagons with rail coach manufacturers.

First Aluminium Rake introduced in India in FY23.

Newer designs being prototyped in FY24

### ‘Eternia’ - Building Solutions for doors and windows



Consumers seeking reliable and efficient solutions for their fenestration needs are willing to pay a premium.

Uniquely designed window solutions customized to the needs of the customers

‘Eternia Fenestration Solutions’ – An emerging brand of choice in a fast-growing real estate market

# Domestic Copper Consumption is Expected to double from ~1.0 MT in FY23 to ~2.0 MT in FY33



Transport

CAGR : 4.32%

FY 23 177 kt

FY 33 270 kt

EV Growth accelerating on the back of GOI push as well as consumer demand. (Copper Intensity in EV 3-4x higher )

**Applications:** Electric motors, batteries, inverters, wiring and in charging stations



Urbanization & Smart Cities

CAGR : 5.6%

FY 23 379 kt

FY 33 654 kt

Rapid urbanization and housing growth accelerating home demand

**Applications:** Wires & Cables, Pipes, tubing, and smart systems



IoT Enabled Industry

CAGR : 5%

FY 23 139 kt

FY 33 217 kt

Make in India and targeted PLIs moving copper demand to India

**Applications:** Electrical motors & sensors, electronics & cables



New Age Lifestyle

CAGR : 4%

FY 23 165 kt

FY 33 251 kt

Digitalization and improved standard of living expanding home white goods consumption

**Applications:** Copper tubes in ACs, Refrigerators, wiring systems, micro processors & copper alloys etc



Reliable Clean Energy Infra

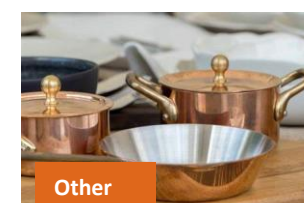
CAGR : 6%

FY 23 103 kt

FY 33 191 kt

Copper intensity 2-8x higher in renewables (India to triple Renewable Power by 2030)

**Applications:** Renewable energy systems, T&D systems, and hydro/thermal power systems



Other

CAGR : 5%

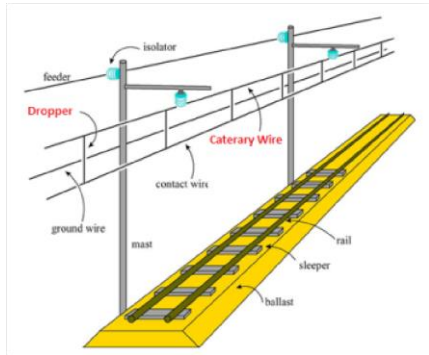
FY 23 130 kt

FY 33 208 kt

Other articles of Copper like kitchen ware, utensils, brass and other copper alloys.

**Applications:** Kitchenware/cookware, copper films/sheets, Copper Alloy articles

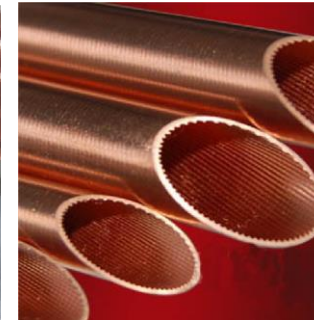
# Hindalco Copper – Moving further Downstream and towards circularity



## Superior Copper Alloy Rods for high-speed railways

Current Capacity: 5 KTPA

➤ Copper Magnesium rod with superior tensile strength and better environmental footprint for railway applications like Catenary wire & dropper wire



## First Inner Grooved Copper Tube facility

Planned Capacity : 25 KTPA

➤ Thin-walled small diameter grooved tubes for Airconditioning and Refrigeration application

- Efficient heat transfer
- Withstand higher pressure required by new generation refrigerants



## First of its kind Recycling facility for Copper and E-waste

Planned Capacity : 50 KTPA

➤ State-of-the-art Recycling facility for copper and E-waste under appraisal



# Global & Domestic Specialty Alumina Consumption – a promising outlook



Increasing demand for high crystalline alumina and activated alumina products.

Driven by growing mobility and petrochemical industry.

**Applications:** Automotive (Brakepad, Sparkplug, etc.), Defense, Chemical, Petrochemical, and Medical

**Domestic CAGR : 12%**  
**Global CAGR : 5%**



Demand for specialty aluminium hydroxide is increasing due to stringent regulatory, fire and safety standards.

**Applications:** Wire & Cables, Electrical & Electronics, Transport and Building & constructions.

**Domestic CAGR : 15%**  
**Global CAGR : 6%**



Increase in global demand for high-quality refractories for cleaner steel manufacturing.

Urbanization development leading to the growth of cement consumption.

**Applications:** Steel Industry, Cement, Glass and non-ferrous.

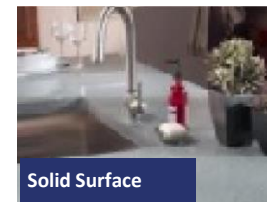
**Domestic CAGR : 11%**  
**Global CAGR : 5%**



Increasing trends in miniaturization of consumer electronics.

Disruptive growth in EV segment will increase demand for Lithium ion batteries

**Applications:** Automotive, Medical, Aerospace  
**Domestic CAGR : 22%**  
**Global CAGR : 7%**



Industry is expected to grow at a faster rate due to rapid urbanization and increasing construction activities globally.

**Applications:** Building, Constructions, Home interiors and Countertops

**Domestic CAGR : 11%**  
**Global CAGR : 6%**

# Hindalco Specialty Alumina - Cutting edge products launched

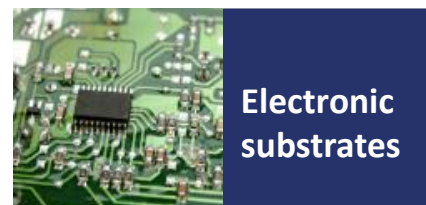
## Precipitated Hydrate with finer particles

Superfine Aluminium Hydrate  
with 1-2 micron particle size  
for better **flame retardancy**



## High Precision SMA Series

**Super reactive** Sub Micron  
Alumina facilitates increased  
density to produce high  
**precision ceramics**



## HCA series with reduced soda content

High Crystalline Alumina has **4  
times lesser soda** than regular  
alumina thereby exhibiting  
high structural stability &  
**superior dielectric strength**



## IC series of Alumina with increased purity

**Industrial Ceramics (IC)**  
series of Alumina exhibits  
high density with minimal  
shrinkage, used for **highly  
engineered products**





A man with a beard and safety glasses, wearing a white hard hat with a logo, is operating a green lathe machine in a factory. He is wearing a light blue button-down shirt and white gloves. The machine is processing a large metal rod. In the background, another worker in a white hard hat is visible, and the factory environment is dimly lit with some overhead lights.

# India Business

Updates on Growth  
Projects



# India Business

## Growth Projects Under Execution (FY24-28)



Sr No.	Projects	Plant/Region	Capacity(Kt)	Estimated Cost(US\$ Mn)	Expected Year of Completion	Status of Projects
I	Aluminium-Upstream					
1	Alumina Expansion (via Debottlenecking)	Utkal	350	\$40	FY24	On Track
2	Can Recycling	Aditya	100	NA	FY25	Project will be executed with a tolling partner; Hindalco will source recycled hot metal from the tolling partner
II	Aluminium-Downstream					
3	Extrusions	Silvassa	34	\$97	FY 24	2 out of 3 Extrusion presses already commissioned
4	FRP –Casting & Cold Rolling	Aditya/Hirakud	170	\$450	FY 25	On Track
5	Coated AC Fins (under PLI)	Taloja	26	\$50	FY 25	On Track
6	Battery Foil Mill	Aditya	24	\$105	FY 26	On Track
7	Battery Enclosures	Pune	6.5	\$33	FY 25	On Track
	Total (Aluminium Upstream + Downstream)			\$775 Mn		
III	Copper Business					
8	Inner Grove Tubes (PLI Scheme) and Alloy Rods	Vadodara	25	\$66	FY 25	On Track
IV	Specialty Alumina					
9	Precipitate Hydrate & White Hydrate	Belagavi	60	\$55	FY 25	On Track
10	Synthetic Aggregates (Fused & Tabular Alumina)	Aditya/TBD	90	\$55	FY 25	On Track
V	Energy					
11	Chakla Coal Mine (For Mahan & Renukoot)	Odisha	4.5 MTPA	\$186	FY 26	On Track
	Grand Total India Business Spends (Projects under execution)			\$1.13 Bn		

# India Business

## Identified future growth opportunities (FY24-28)

Sr No.	Identified Projects	Plant/Region	Capacity(Kt)	Estimated Cost(US\$ Mn)	Expected Year of Completion	Status of Projects
I	Aluminium-Upstream					
1	Alumina Expansion (Greenfield)	Odisha	850	\$590	FY 27	Project is Under Appraisal : Bauxite Mining auctions are in progress
2	Brownfield Smelter Expansion (with 3 <sup>rd</sup> Party renewable power)	Aditya/Mahan	180	\$760	FY 27	Project is being contemplated subject to success of round the clock renewable power pilot project of 100 MW in Aditya
II	Aluminium-Downstream					
3	Large Press Railway Extrusions	TBD	12	\$200	FY 26	Project is Under Appraisal
4	Other Extrusion Expansions	Silvassa & Kuppam	27	\$150	FY 26	Project is Under Appraisal
III	Copper Business					
5	Recycling for copper and E-Waste	TBD	50	\$250	FY 26	Project is Under Appraisal
IV	Specialty Alumina					
6	Other Specialty Alumina Products and Brownfield Expansions	Belagavi/TBD	165	\$94	FY 27	Projects are under Appraisal ; Timelines being ascertained
V	Energy					
7	Meenakshi Coal Mine (For Aditya & Hirakud )	Odisha	10-12 MTPA	\$273	FY 28	Regulatory Approvals pending
Grand Total India Business Spends (as future growth opportunities)				\$2.32 Bn.		

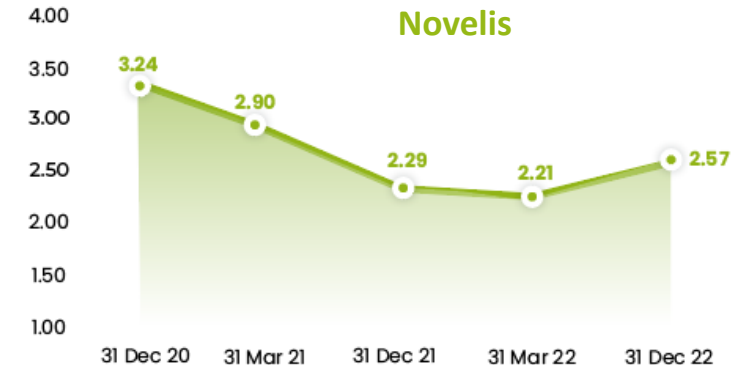
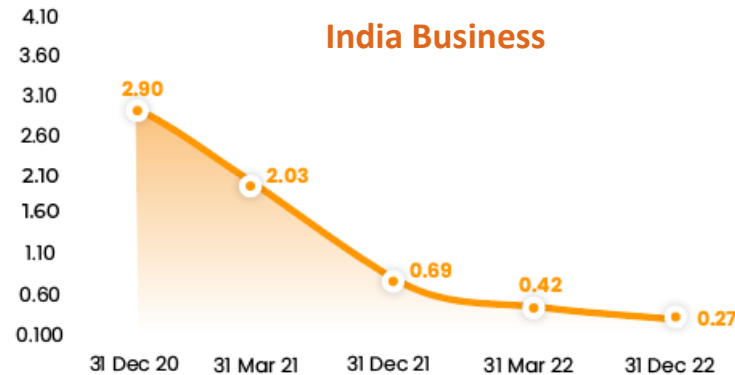
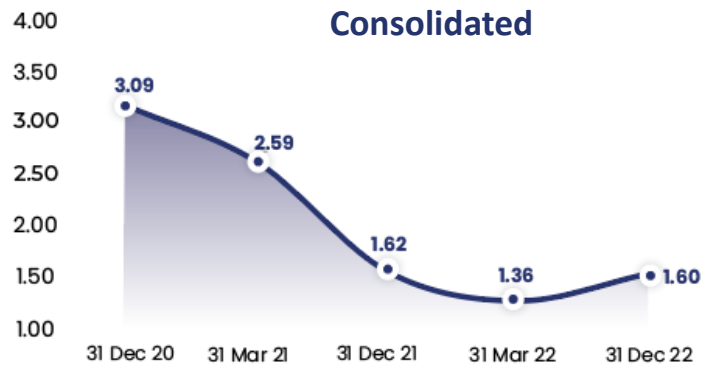
# Financial Strength



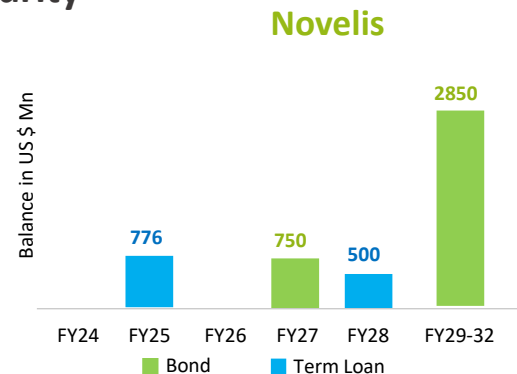
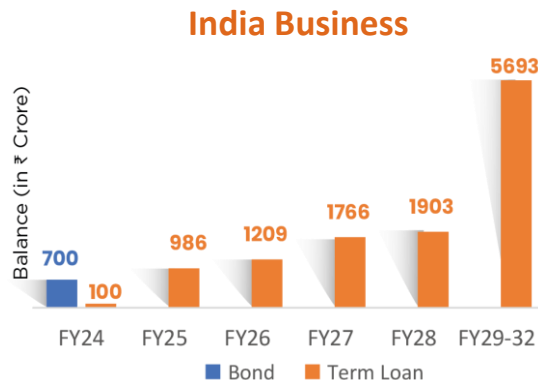


# Financial Strength : Enabler for value enhancing growth

Net Debt to EBITDA (x)



Debt Maturity



- **Comfortable consolidated Net Debt to EBITDA** ratio creating balance sheet flexibility to drive growth
- **Long-dated maturity profile** for both Novelis & Hindalco allowing sufficient cushion for funding growth capex
- Strong Cash balance of **\$1.13 billion** in Novelis and **₹8,540 crore** in Hindalco India at the end of December 2022

# Key Takeaways

**Financial and operational performance** getting adjusted to macro economic challenges in the post covid environment

**Long Term market** outlook across business segments remain intact, while short term headwinds are transitory

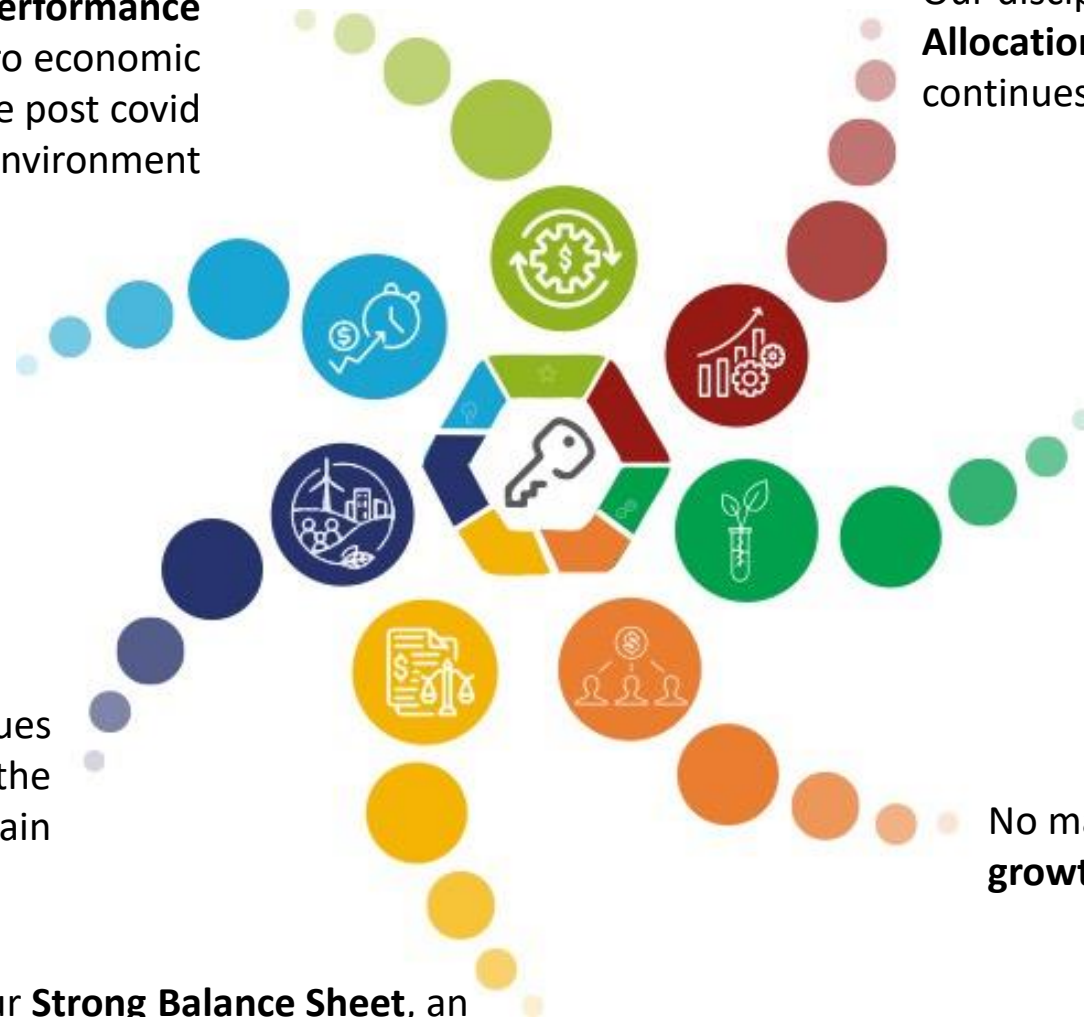
Our approach to **ESG** continues to be comprehensive across the entire value chain

Our **Strong Balance Sheet**, an enabler for organic growth

Our disciplined approach to **Capital Allocation and Shareholder returns** continues

Focus on value **enhancing growth** through downstream expansion and resource securitisation

No major **in-organic growth** initiatives in sight



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THANK YOU





# | Annexures

# Novelis

## Growth Projects Under Execution (FY24-28)

Identified Projects	Location	Primary Product Markets Supported	Capacity(Kt)	Cost(US\$)	Status/Estimated Commissioning
<b>North America</b>					
Hot mill debottlenecking & automotive upgrades	Oswego, US	Specialties, Auto	65	\$130 mn	FY 2024
Recycling expansion & upgrades	Greensboro, US	Auto	30	\$30 mn	Completed FY 2023
State-of-the art Automotive Recycling & Casting Centre	Guthrie, US	Auto	240	\$365 mn	FY 2025
Integrated Greenfield Rolling & Recycling Mill	Bay Minette, US	Can, Auto	600	\$2500 mn	FY 2026
NEW - Rolling debottlenecking	Logan, US	Can, Auto	80	\$150 mn	FY 2026
<b>Asia</b>					
Recycling and Casting Centre at UAL	UAL, S. Korea	All	100	\$50 mn	FY 2026
NEW - Rolling debottlenecking	Yeongju, S. Korea	Can	50	\$20 mn	FY 2024
<b>South America</b>					
Rolling Debottlenecking	Pinda, Brazil	Can	70	\$50 mn	FY 2024
<b>Total projects under execution</b>				<b>\$3.3 bn</b>	

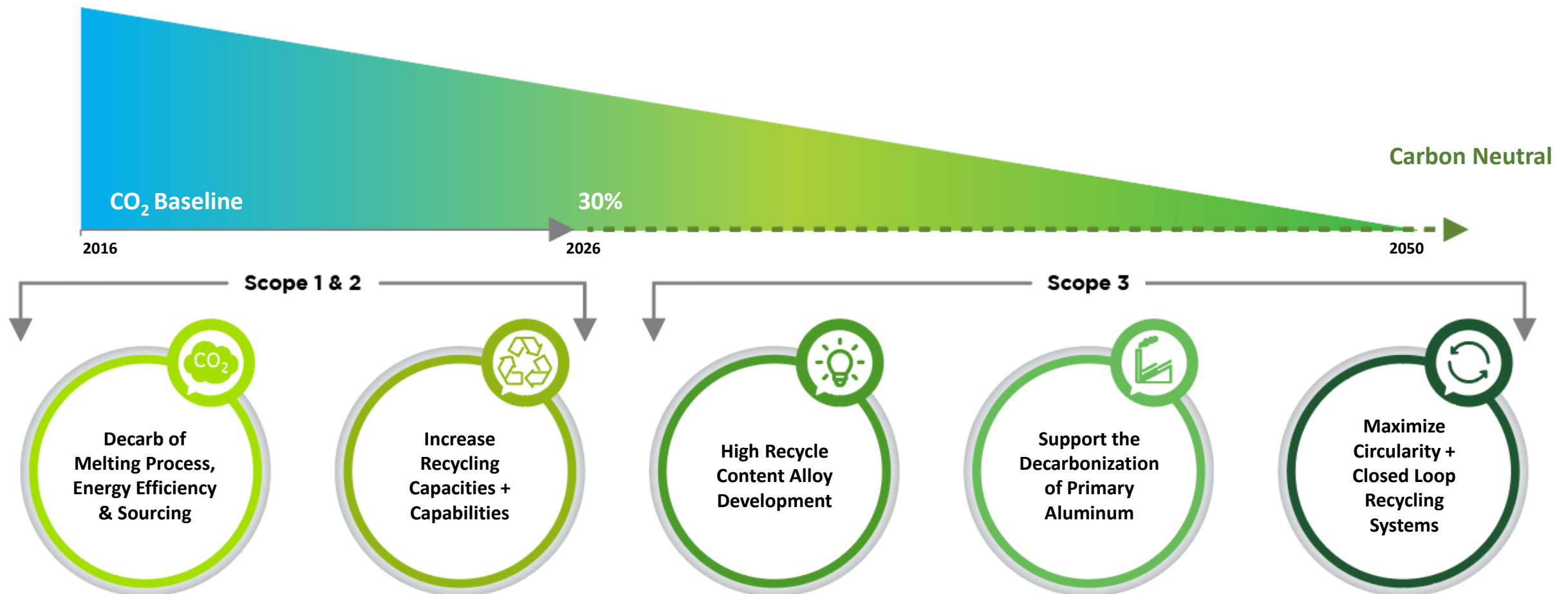
# Novelis

## Identified future growth opportunities (FY24-28)

Identified Projects	Location	Primary Product Markets Supported	Capacity(Kt)	Cost(US\$)	Status/Estimated Commissioning
Asia					
Delayed: Integrated cold mill and closed loop recycling	Zhenjiang, China	Auto	200	\$375 mn	Under Appraisal
Europe					
Under Appraisal: Brownfield rolling capacity	Germany	Can	200	\$200-300mn	Under Appraisal
Under Appraisal: Brownfield recycling capacity	Germany	Automotive	150	\$100-150 mn	Under Appraisal
South America					
Under Appraisal: Brownfield rolling & Recycling capacity	Brazil	Can	450	\$800 mn – 1.0 bn	Under Appraisal
Total projects as future growth opportunities				\$1.5-1.8 bn	



# Novelis decarbonization Strategy



# Disclaimer

## **NON-U.S. GAAP FINANCIAL MEASURES**

With respect to Novelis, this presentation contains certain non-U.S. GAAP financial measures as defined by SEC rules, such as Adjusted EBITDA and Adjusted EBITDA per tonne. We believe these measures are helpful to investors in measuring Novelis' financial performance and liquidity and comparing Novelis' performance to its peers. However, Novelis' non-U.S. GAAP financial measures may not be comparable to similarly titled non-U.S. GAAP financial measures used by other companies. These non-U.S. GAAP financial measures have limitations as an analytical tool and should not be considered in isolation or as a substitute for U.S. GAAP financial measures.

To the extent we use any non-U.S. GAAP financial measures, a reconciliation of each measure to the most directly comparable U.S. GAAP measure is included in the tables at the conclusion of this presentation and in Novelis' earnings release, as applicable, issued on February 6, 2023, which can be found at [novelis.com/investors](https://www.novelis.com/investors).

## **INDUSTRY AND MARKET DATA**

With respect to Novelis, this presentation includes data regarding markets and the industry in which Novelis operates, including the size of certain markets and Novelis' position and the position of Novelis' competitors within these markets, are based on reports of government agencies, independent industry sources such as Ducker Frontier, CRU and Airbus, as well as Novelis' own estimates relying on Novelis' management's knowledge and experience in the markets in which Novelis operates. Novelis' management's knowledge and experience is based on information obtained from its customers, distributors, suppliers, trade and business organizations and other contacts in the markets in which it operates. We believe these estimates to be accurate as of the date of this presentation. However, the information may prove to be inaccurate because of the method by which we obtained some of the data for these estimates or because this information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. As a result, you should be aware that market, ranking and other industry data included in this prospectus, and our estimates and beliefs based on that data, may not be reliable. Neither we nor Novelis can guarantee the accuracy or completeness of any such information contained in this presentation