

# Future-Ready Growth - Driven by Sustainability, Culture and Digital

At Hindalco, future-ready growth is about building a business that shapes a better tomorrow for our all the stakeholders including customers, communities, and the planet. Our growth is anchored on three strategic pillars of Sustainability, Culture, and Digitalisation.

We are scaling up our capacities and solutions responsibly through low-carbon, circular solutions across aluminium, copper, and specialty alumina. By investing in next-generation technologies such as AI, automation, and digital twin, we are future-proofing our operations as well. At the same time, we are fostering a strong culture that drives transformation from within. Our sharp focus on high-growth sectors like electricals, electric vehicles, renewables, consumer durables and smart infrastructure is enabling us to deliver advanced, downstream

value-added products for a rapidly evolving world.

Built on our legacy of responsible manufacturing, we have transformed ourselves into a co-creator of solutions across Aluminium, Copper and Specialty Alumina businesses. This transformation was built on enhancing our capabilities, deepening our value chain integration, and expanding into more customer-centric, innovation-led and high-performance solutions.

Our approach blends financial discipline with operational agility and an unwavering commitment to sustainability, enabling us to thrive in a resource conscious economy. In our India operations we intend to double down on upstream capacity by investing in expansions of aluminium and copper smelters, and alumina refinery. We target to quadruple our downstream

EBITDA by FY 2029-30 from the base of FY 2023-24, by boosting our value-added offerings across aluminium, copper, and specialty alumina.

Hindalco's newly unveiled Masterbrand identity is a bold affirmation of these strategic imperatives. Guided by our operating model, we are actively tapping into key megatrends such as electrification, circular economy, low-carbon manufacturing, technology disruptions and infrastructure. To support this, we are investing in advanced technologies, expanding R&D capabilities, and building an innovation pipeline aligned with the increasing demand for lightweight, localised, and premium downstream products. These segments cater to wide range of end markets such as automotive, aerospace and defence, infrastructure, electricals, packaging and consumer products.

At Novelis, the 3x30 vision drives its commitment to circularity, low carbon footprint and returns to strategic investments. Novelis intends to increase recycled content in its products from 63% to 75%, across the product portfolio. They are working on reducing the carbon footprint of their products from 4 tonnes to 3 tonnes per tonne of flat rolled products shipped. Novelis continues to retain its leadership position on Return on Invested Capital (ROIC) with strong emphasis on balance sheet, cash-flows and return to shareholders.

These global megatrends ensure that we are not merely, a catalyst for change but also shaping the next chapter of the metals industry with resilience, responsibility, and foresight.

India's economic trajectory, marked by robust consumption growth and rapid urbanisation, presents an opportunity for the aluminium and copper sector. In the aluminium industry, India's per capita consumption stands at approximately 3.2 kg significantly lower than the global average of 12 kg, indicating substantial room for growth<sup>1</sup>. Copper consumption reflects a similar pattern, with India's per capita consumption at 0.6 kg compared with the global average of 3 kg further highlighting expansion potential in India.<sup>2</sup> We are leveraging this low base by deepening our market presence across key demand segments while also promoting aluminium as a sustainable alternative to traditional materials.

Urbanisation is expected to intensify, with over 600 million people projected to reside in urban areas by 2036.<sup>3</sup> This demographic shift will spur demand for infrastructure, mobility solutions, and consumer goods. As a leading supplier of downstream aluminium and copper products, we are well-positioned to address these evolving needs through our investments in value-added products,

supply chain capabilities, and customer centric platforms.

India's commitment to sustainability and energy transition is another key growth driver. The national target of achieving 500 GW of non-fossil fuel capacity by 2030<sup>4</sup>, with a strong emphasis on solar photovoltaic (PV) systems and wind sector, is expected to significantly increase demand for aluminium and copper, estimated at 21 tonnes<sup>5</sup> and 5.5 tonnes<sup>6</sup> per MW respectively. These trends align directly with our capabilities of being a force for sustainable solutions.

In alignment with national decarbonisation goals, we have already commissioned 190 MW of our targeted 300 MW renewable energy capacity and remain on track to reduce our GHG intensity by 25% by 2030 reinforcing our commitment to net-zero emissions by 2050. We are also embedding circularity and resource efficiency across our operations, investing in energy-efficient technologies, and exploring green hydrogen use across select facilities. We are capitalising on the demand for low-carbon products through our Aluminium Stewardship Initiative (ASI)- certified operations and expanding our offerings in copper busbars, tubes, and conductors tailored for renewable applications.

The automotive sector's shift to electrification is also boosting copper demand, with electric vehicles (EVs) requiring 3 to 4 times more copper than their Internal Combustion Engine (ICE) vehicle counterparts.<sup>7</sup> We are enabling this transition by providing lightweight, high-performance materials that support energy efficiency and emission reduction. We are enabling this transition through our copper products engineered for EV wiring, charging infrastructure, and battery connections, alongside lightweight aluminium solutions that improve vehicle range and efficiency.

Additionally, the aerospace and defence sector is emerging as a strategic growth opportunity. As global demand rises for high-strength, lightweight materials, and aluminium alloys are becoming critical for aircraft, satellites, and defence applications we are scaling our value-added portfolio to cater to this high-specification, premium segment. This is reinforcing our role as a solutions provider in advanced manufacturing.

Novelis continues to embed sustainability across its operations in alignment with five key global trends. With a clear roadmap towards net-zero, the Company is scaling its closed-loop recycling systems, increasing recycled content, and driving decarbonisation. With the ongoing rise in per capita aluminum and copper consumption and accelerated urbanisation, Novelis is scaling its local manufacturing footprint through strategic capacity expansions, supporting greener infrastructure, mobility, and packaging solutions across its global markets.

To stay ahead of disruptive shifts in technology and changing consumer demand, there is an increase in investment in digitalisation, AI-driven automation, and advanced product development. These efforts are geared towards next-generation applications such as electric vehicles, renewable energy systems, and circular packaging. With a focus on lightweighting, premiumisation, and regional customisation, the Company continues to co-develop sustainable, high-performance aluminum solutions with its partners.

With focused strategic investments, continuous innovation, and a steadfast dedication to sustainability, we are poised to play a significant role in advancing India's shift towards a robust, environmental friendly, and technology-driven economy.

## Driving Innovation by harnessing Global Megatrends in Business Strategy



<sup>1</sup> Development of Aluminium and Copper Industries  
<sup>2</sup> Ministry of Mines, Government of India, Home  
<sup>3</sup> Gearing up for India's Rapid Urban Transformation  
<sup>4</sup> 500GW Non fossil Fuel Target | Government of India | Ministry of Power

<sup>5</sup> How aluminium is supporting historic growth in solar power  
<sup>6</sup> CDA Solar Infographic\_3  
<sup>7</sup> The Road to Sustainable Mobility is Paved with Copper

SP-1

Prudent Capital Structure

- A

+ Financial prudence in capital allocation

+ Growth capex supported by robust cashflows and strong balance sheet
- W

+ Planned investments of over US\$5 billion in India and over US\$5 billion through Novelis, while meeting the target of Consolidated Net Debt to EBITDA below 2.5x
- I

+ Consolidated Net Debt to EBITDA at 1.06x as on March 31, 2025

SP-3

Strong ESG Commitment

- A

+ Focus on ESG implementation across the value chain

+ ESG commitments to strengthen our position as the industry leader in sustainability
- I

+ Ranked as the World's Most Sustainable Aluminium Company 5<sup>th</sup> year in a row, as per 2024 edition of the S&P Global Corporate Sustainability Assessment (CSA) rankings. Hindalco continues to be among the top 1% in the aluminium industry as per CSA 2024 and has also been featured in the CSA's Sustainability Yearbook for the fourth year in a row.

+ 190 MW of installed renewable capacity (without storage) as on March 31, 2025

+ Developing a 100 MW round-the-clock (RTC) renewable energy solution for our Aditya complex in Odisha in H1 of FY 2025-26

+ Zero waste to landfill certifications for 5 plants at Hindalco

+ Chakan plant achieved Zero Liquid Discharge certification in FY 2024-25

+ As a part of reforestation efforts, 5.33 lakh trees were planted during FY 2024-25
- W

+ Additional hybrid renewable energy RTC with storage of 100 MW capacity for Mahan and 200 MW capacity for Aditya smelter expansion

+ A US\$4.1 billion Bay Minette facility is under development in Alabama (commissioning in H2 CY26), with expected 600 KT greenfield expansion in finished goods capacity to scale up its global presence in low carbon aluminium

SP-2

Value-Enhancing Growth/ Double-down on Upstream Capacities

- A

+ Focus on shareholder value creation by organically expanding upstream capacities in aluminium and copper

+ Cost optimisation through resource securitisation
- W

+ Commissioning of a copper and e-waste recycling project of 50 KTPA at Pakhajan, Gujarat

+ Aluminium smelter expansion of 180 KTPA at Aditya, Odisha

+ Phase 1 of Aditya Alumina Refinery- capacity of 850 KTPA, supported by bauxite supply agreement with Odisha Mining Corporation (OMC)

+ Brownfield expansion in copper business by adding 300 KT smelter, increasing refined copper capacity to ~721 KT
- I

+ Strategic resource securitisation through contract with Odisha Mining Corporation for long term supply of bauxite

+ Commissioning of Chakla coal mine in FY 2025-26

+ Allotment of Meenakshi & Meenakshi West coal mines and announced acquisition of Bandha coal mine (subject to regulatory approvals) thereby helping to improve quality and reduce overall power cost

+ Sourcing tie-ups for copper concentrate

SP-4

Value Enhancement through Portfolio Enrichment

- A

+ Advancing from a metal producer to a provider of engineering solutions

+ Enriching product mix by increasing the share of high-end value-added products
- I

+ Commissioning of India's first backward integrated inner groove copper tubes facility in Gujarat for air conditioning and refrigeration applications

+ Started commissioning a precipitated hydrate value-added product project at Belagavi; expect to start operations in FY 2025-26

+ Efficient de-bottlenecking projects and Greenfield Bay Minette Project to take the Novelis total capacity to 5.0 Million tons
- W

+ Aluminium Downstream capacity expansion from 430 KT to 600+ KT, with the commissioning of 170 KT Aditya FRP plant in FY 2025-26

+ Aluminium battery foil plant set to be commissioned at Aditya in FY 2025-26

+ Foraying into copper battery foils for EVs and Battery Energy Storage Systems (BESS) applications

+ Quadruple Downstream EBITDA by FY30 from the base on FY24.

+ Specialty Alumina capacity to increase from 510 KT to 1000 KT by FY30