



Hindalco Industries Limited



Presentation on Sustainability @Hindalco at Ambit India Access Virtual ESG Conference 2021

Presented by :

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23rd June 2021

Greener, Stronger, Smarter

1. Aditya Birla Group Sustainable Business Model
2. Hindalco's Sustainable Business Strategy, Actions & Performance
3. Hindalco's Approach To Governance
4. Environmental Stewardship: Approach, Examples
5. Hindalco's People Focus: Approach, Examples

Determining Ability to Sustain - ABG Businesses

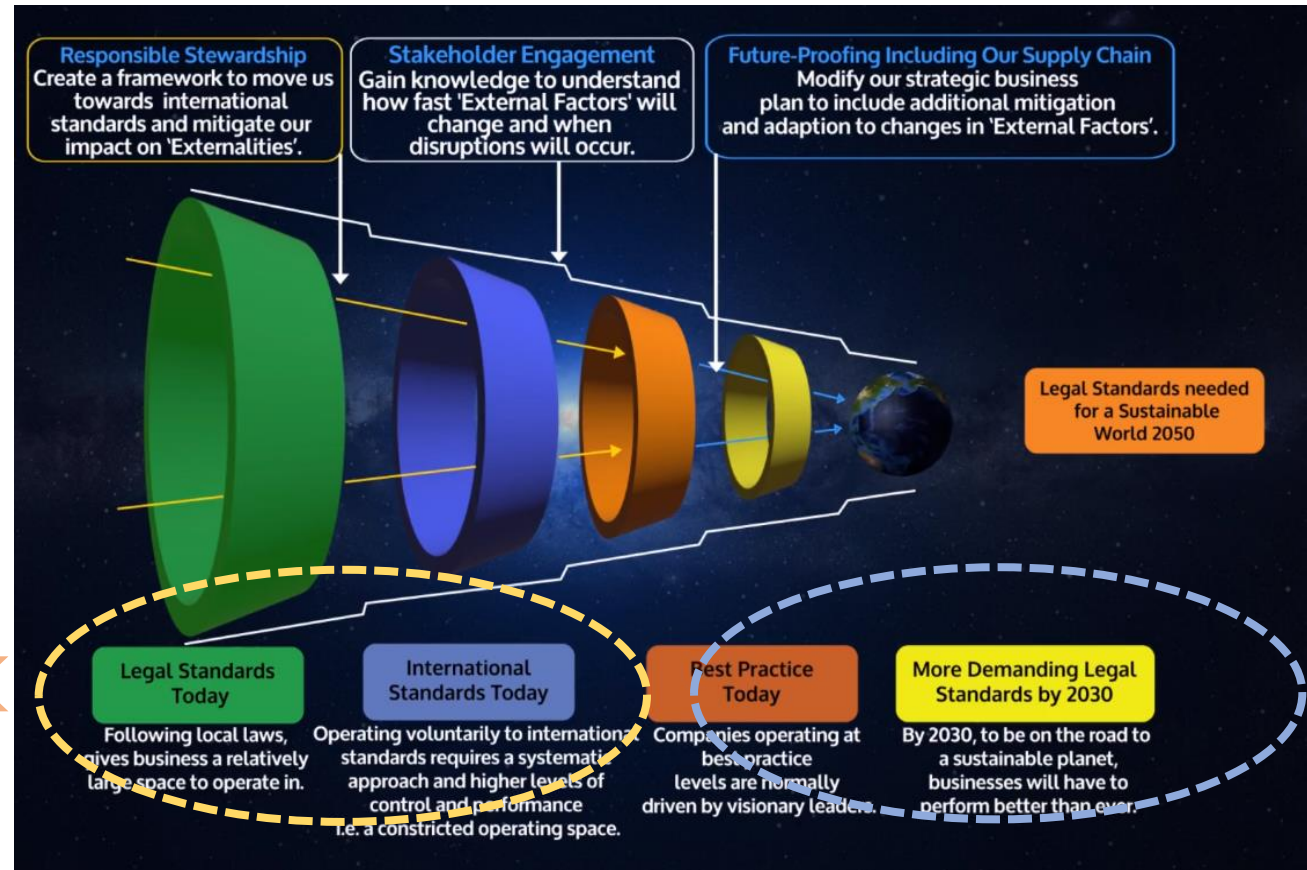
Sustainable Business Model and Framework

Using 4-Dimensional Approach to Navigate ABG Sustainable Business Model

- Dimension 1: Industry sector of operation
- Dimension 2: Geography of operation
- Dimension 3: Value chain approach to include key stakeholders
- Dimension 4: Time horizon

Operational aspects from:

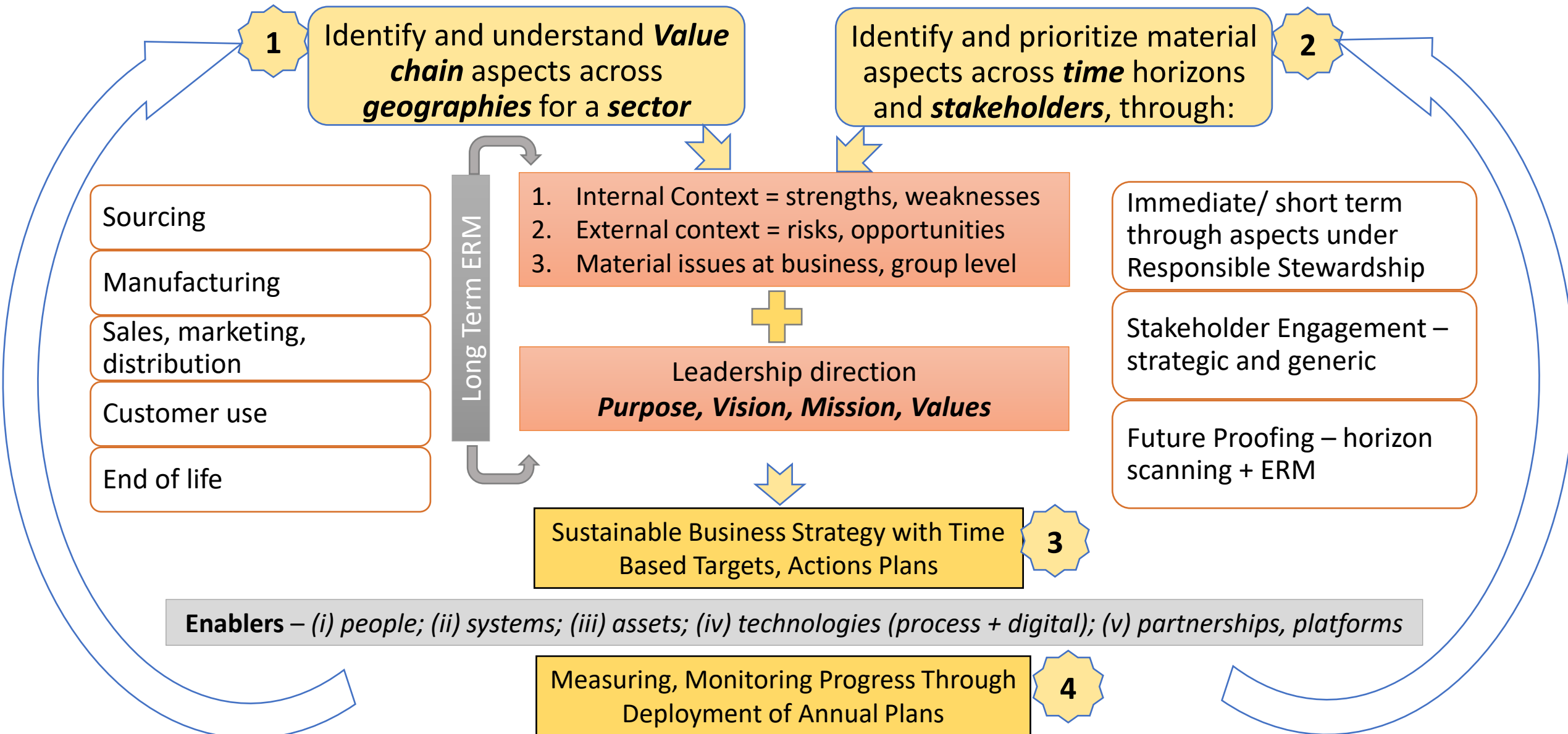
- legal compliance (now/ future),
- best practices
- select stakeholder requirements
- immediate/ short-term
- Linked to “responsible stewardship”



Strategic aspects from:

- Strategic stakeholder engagement
- Future proofing exercises – horizon scanning, risk assessments
- Includes ENABLERS to implementation – Governance, People, Technology

Four Steps Towards Transition to Sustainable Businesses



Aditya Birla Group - Sustainability Policies and Standards

Responsible Stewardship

Stakeholder Engagement

Future Proofing

Technical, Management Standards Focus Area

- Air
- Biodiversity
- Contaminated sites
- Energy and carbon
- Health
- Human rights
- Noise
- Product stewardship
- Resource Conservation
- Safety
- Security
- Supplier and Contractor
- Transport
- Waste
- Water
- Stakeholders
- Acquisition and joint venture
- Project development
- Crisis management
- ESIA

Group Policies

- Environmental policy
- Energy and Carbon Policy
- Water stewardship policy
- Biodiversity policy
- Health policy
- Safety policy
- Security policy
- Product stewardship policy
- Supply chain and procurement policy
- Wood fiber sourcing policy
- Transportation policy
- Human rights policy
- Stakeholder Engagement policy
- Future proofing policy
- Crisis management policy
- Quality policy
- Responsible care policy

Implementation of ABG Policies, Standards

Platform and tools:

ENABLON, SAQs on WASH, ENHESA, TSs

- ENABLON available across at businesses, sites
- SAQs filled at sites, scores then reviewed
- Excellent diagnostic and tracking tools



- Results published as heat maps along with list of findings
- SAQ findings to be action plans for change

Expert help:

SMEs working with business teams

- Appropriate use of framework at a business and its various sites
- Projects, programmes, workshops
- Technologies, tools, networks



- Awareness building
- Expertise development in business
- Support on cross-business and business-specific topics

Aspect specific workshops

e-learnings

GiS Tool

Sustainability Conference

Pilot projects

Working Groups

Sustainability reports

Hindalco's Sustainable Business Strategy, Actions & Performance



Our Purpose ...
Why it exists, why it does what it does ?

WE MANUFACTURE MATERIALS THAT MAKE THE WORLD

GREENER



STRONGER



SMARTER



What Does Sustainability Mean To Hindalco?

It is about Hindalco's ability to sustain in wake of megatrends and stakeholder expectations

RESILIENCE

Resource Security

- Fully integrated aluminium business model providing support in low commodity cycle
- Long term supply contracts with miners assures uninterrupted supply of copper concentrate

Balanced Product Portfolio

(LME v/s Non-LME linked Businesses)

- On a consolidated basis, ~80% EBITDA was non-LME Linked in FY21

Strong Balance Sheet

- Consolidated Net Debt to EBITDA at 2.59x as on 31st Mar 2021, from its peak of 3.83x as on 30th June 2020, post Aleris acquisition.

RELIABILITY

Operations

- Operational excellence based of safety and Quality
- Digitalization to drive productivity

Stakeholder Engagement

- Supplier Engagement
- Customer Centricity
- Employee Stewardship

Product Stewardship

- Focus on downstream Value-Added Products
- Recycled Metal

RESPONSIBILITY

Environment Sustainability

- Environmental Stewardship
- Climate Change

People

- Occupational Safety & Health

Community

- Social Initiatives (CSR)

Strong ESG Commitment

E

ENVIRONMENT

- Continued Emphasis On Recycled Content
- Net Carbon Neutrality By 2050
- Zero Waste To Landfill By 2030
- Water Positive By 2050
- No Net Loss On Biodiversity By 2050



S

SOCIAL

- Zero Harm-occupational Health And Safety
- Diversity And Inclusion
- Commitment To Community And Society Along With Creation Of Sustainable Livelihood
- Affirmation To Human Rights



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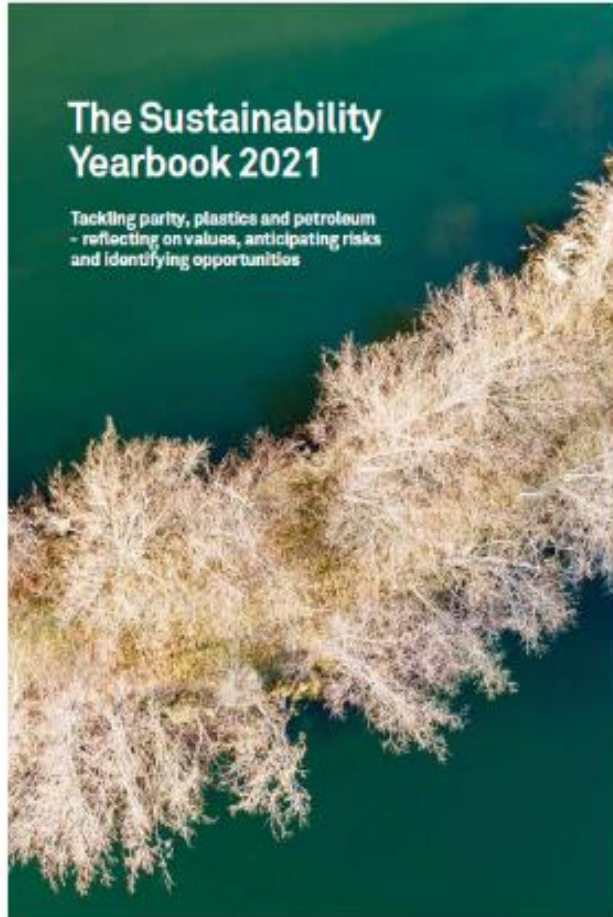
GOVERNANCE

- Highest Level of Values And Transparency
- Strict Adherence of Code Of Conduct
- Best in class in Corporate Governance
- Highest Levels of Information Security/Cybersecurity
- Customer and Supplier centricity



Hindalco in DJSI Year Book 2021

Inclusion in DJSI Sustainability Year Book 2021



Sustainability Leaders 2021	
S&P Global Gold Class	
Hindalco Industries Limited*	India
S&P Global Bronze Class	
Alcoa Corporation	United States
Norsk Hydro ASA	Norway

Industry Statistics	
Number of companies assessed	13
Market capitalization of assessed companies (in USD Billion)	51.4
Number of companies in yearbook	3
Market capitalization of companies in yearbook (in USD Billion)	18.8

* S&P Global Industry Mover

Environmental Stewardship: Approach, Examples

Net Carbon Neutrality By 2050 – 3 Key Decarbonization Levers

PROS

- **Aluminium is infinitely recyclable**
- Life cycle of an aluminium product is a renewable "cradle-to-cradle"
- 95% less energy to recycle aluminium than to produce primary metal
- Light-weighting of transport offering reduction in vehicular GHG emissions
- Replace plastic packaging for food, pharmaceuticals

CONS

- Aluminium smelting is energy intensive (Al₂O₃ bond to be broken)
- Process GHG emissions - PFCs + use of carbon as anode
- Need for continuous, reliable power – traditional use of fossil fuels in India

Hindalco's 3 decarbonization levers as a Corporate



1. Focus on energy efficiency & clean energy

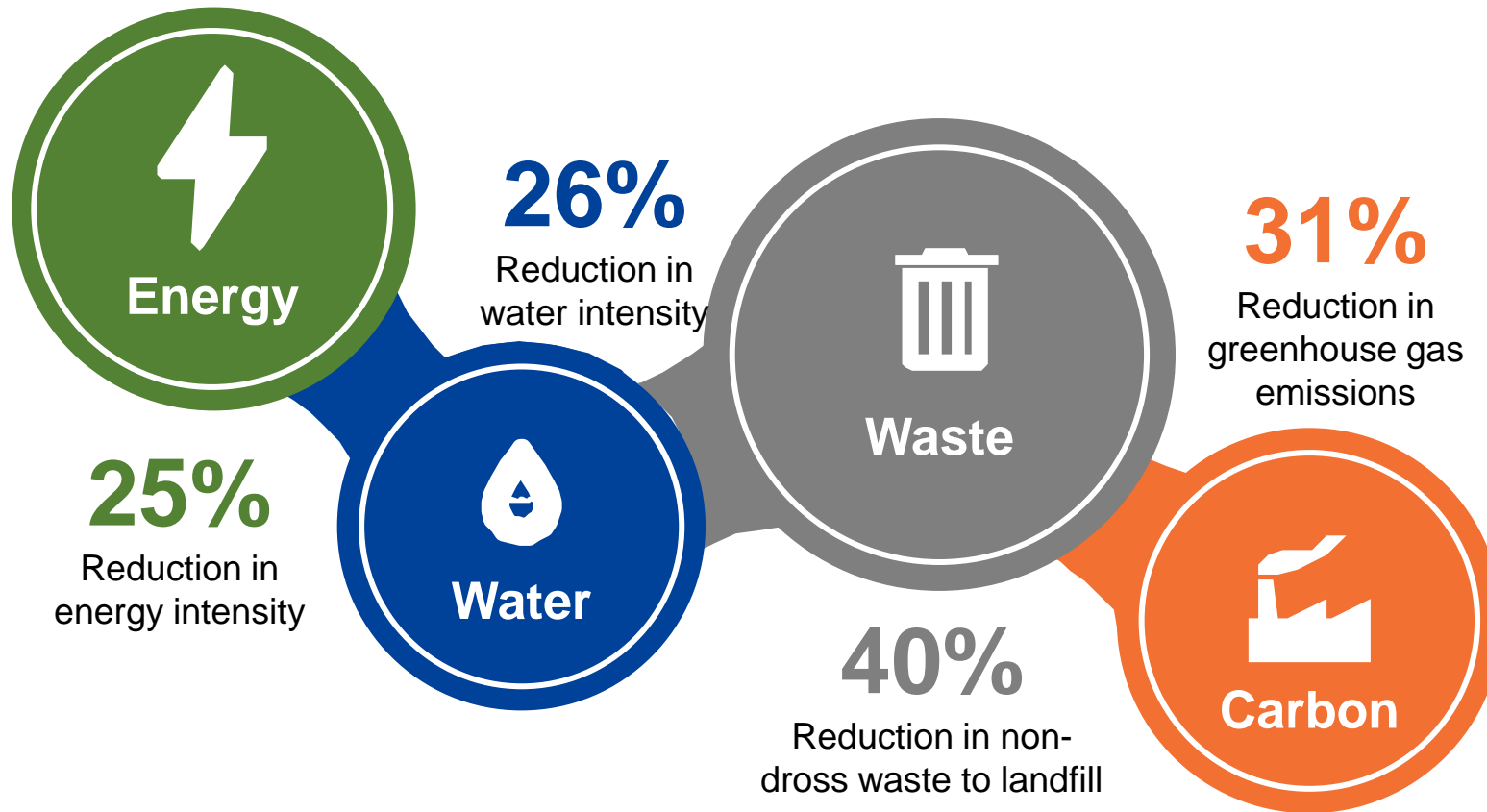


2. Grow in downstream with increase in recycled content

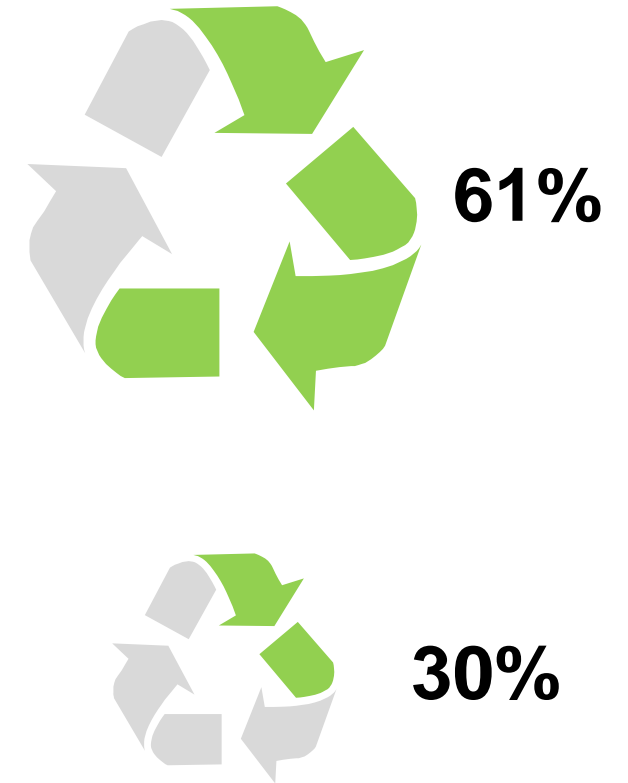


3. Product Stewardship, Supply Chain Action e.g. More use of Aluminium in Automotive

Lever 2: Novelis' Progress Since FY 2007

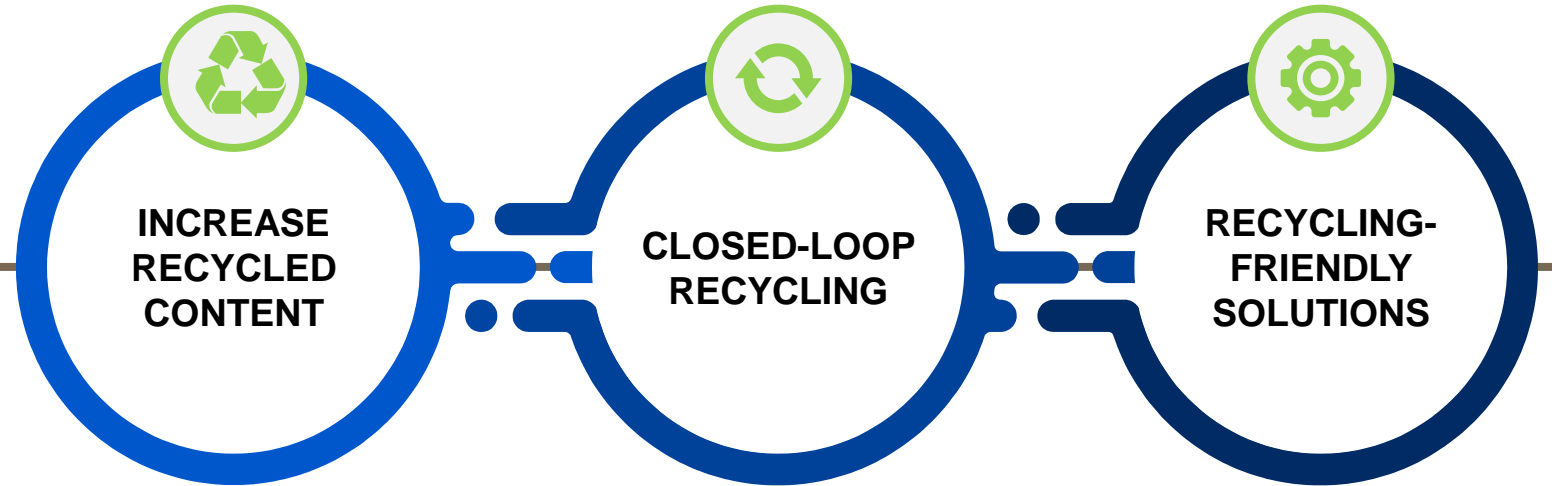
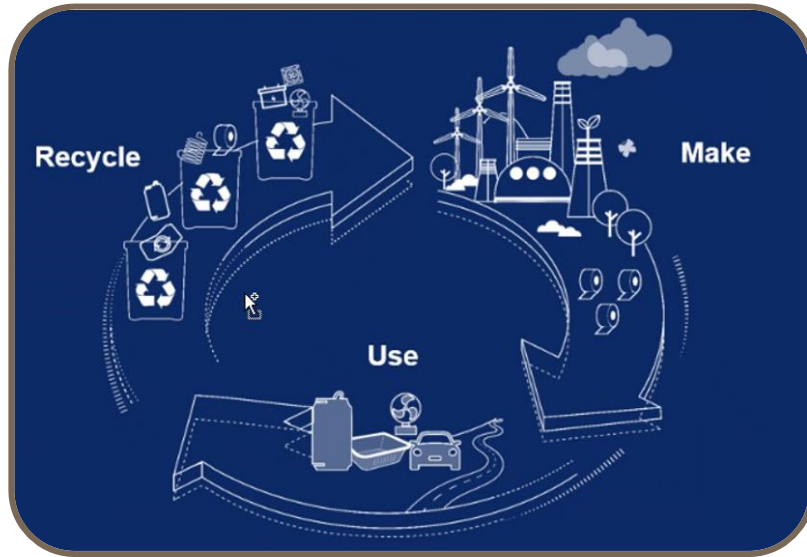


Recycled Content Evolution



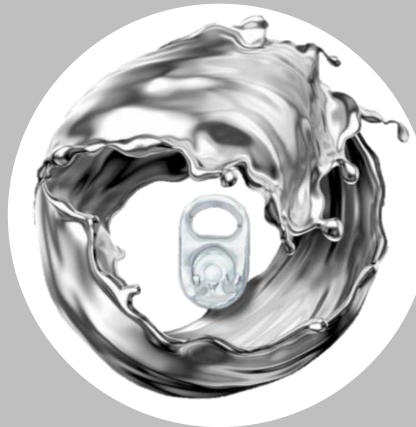
Legacy Novelis plants progress, FY21 (including Aleris) vs baseline (average FY2007-09)

Lever 2: Continued Emphasis On Recycled Content – Novelis' Progress



- 75% of all aluminum ever produced is still in use today
- Invested approximately \$700 million since FY11 to grow total recycling capacity to approximately 2.5 million tonnes
- Identifying additional recycling and casting investments over next five years to improve recycling content and increase casting capacity

**Novelis recycles more than 74 billion cans annually
Back on the shelf in 60 days**



Closed loop recycling produces equivalent of 30,000 F-150 truck bodies entirely from scrap each month

Lever 1: Renewable Energy

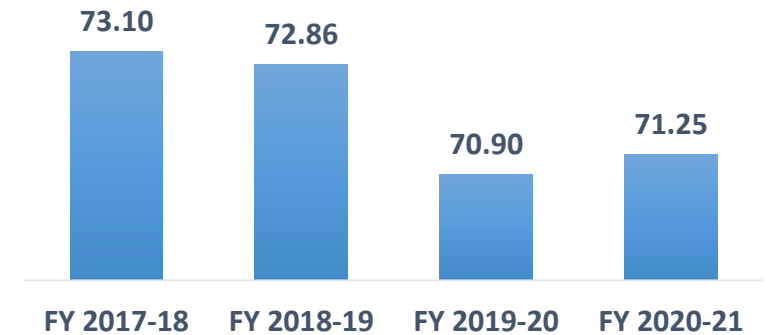
Additional 2.3 MW Solar was commissioned in Alupuram, Kerala unit in Sep'20 taking the total Renewable capacity of Hindalco to 49 MW, in line with our target of 100 MW by FY22

Statutory approval process has been initiated for Solar projects at four location totaling 42 MW

20 MW Renewable Hybrid with storage project with potential of supplying RTC (round the clock) power is under active consideration for Dahej, Gujarat unit

Converting Oil fired furnaces with Natural Gas to reduce Carbon footprint at Dahej, Hirakud, Aditya

Energy Intensity - Aluminium (GJ/MT)



Lever 3: Product Stewardship for Lowering Carbon Footprint



**Aluminium
Railway Wagon**



**Aluminium
Trailer**



**Aluminium
Bulker**



**Aluminium
Bus**



**Aluminium Foil-
Laminated Jute Bags**



**Aluminium LPG
Cylinder**



Sustainable transportation and logistics

India's first lightweight aluminium trailer and bulker which helps transporters to save

- Fuel up to 15,000 litres/ trailer and 12000 litres/ bulker
- CO2 emissions \approx 38 tCO2/ trailer and 30tCO2/ bulker

Aluminium Bus savings:

- Fuel upto 18,000 litres/ AI bus
- CO2 emissions \approx 45 tCO2 / AI bus

Sustainable packaging

A combination of aluminium and jute bags, for food items is a big step towards SUP (Single use Plastic) free INDIA



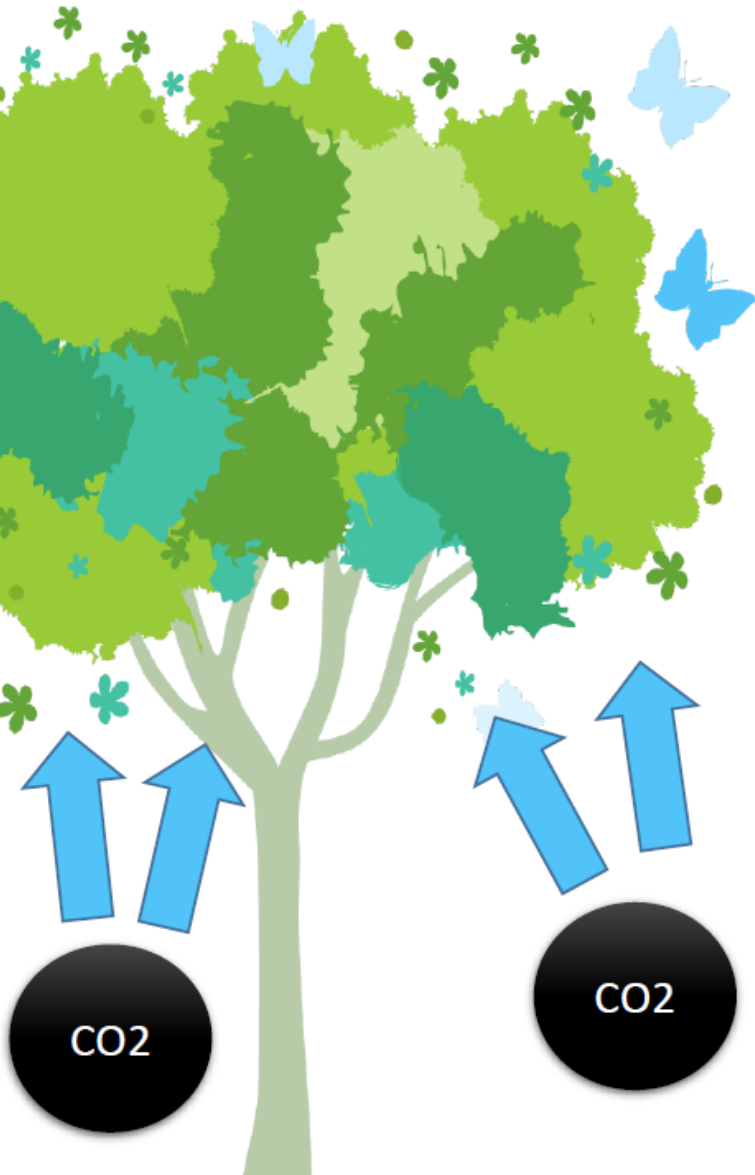
Sustainable Aluminium Packaging / Vehicles / Building & Industrial Materials / EV Battery Boxes

An **aluminum-intensive** vehicle can achieve up to a 20% reduction in total life cycle energy consumption and up to a 17% reduction in CO2 emissions
(Source: Aluminum Transportation Group)

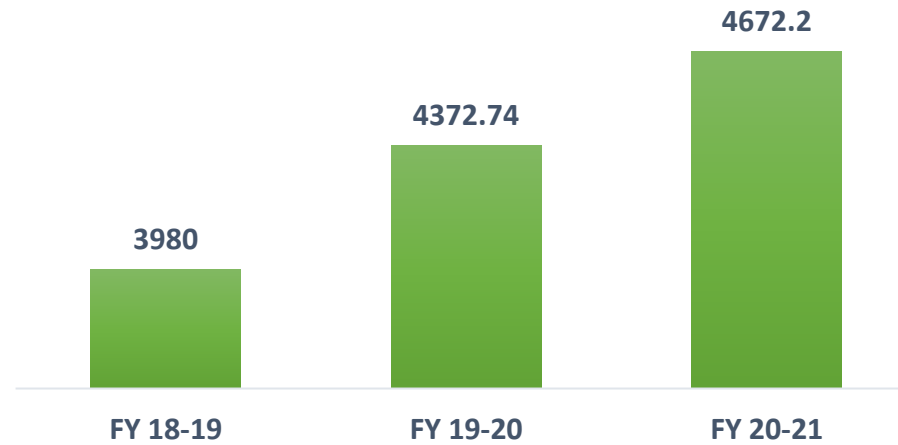
Aluminium battery enclosures are up to 50% lighter than an equivalent steel design and extends vehicle range up to 10% further on a single charge



Biodiversity – NNL by 2050, Green Cover for CO2 sequestration



Green Cover (Acres)



Cumulative Green Cover = Carbon Sequestration

4 Biodiversity Management Plans developed alongside IUCN for scientific rehabilitation of flora and fauna at Utkal, Baphlimali, Aditya & GarePalma sites.

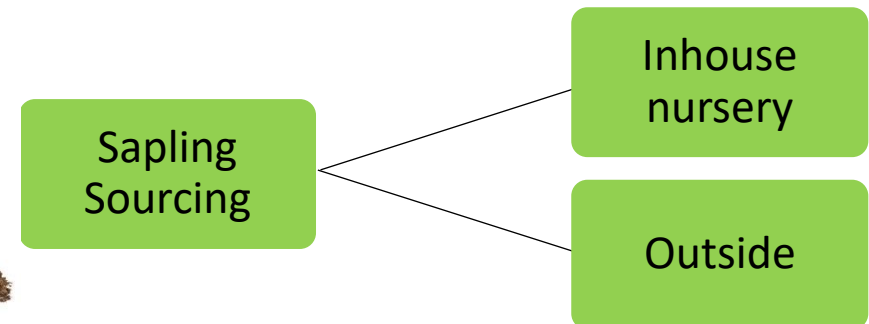
- ~**2855.29 T** of CO2 Sequestration potential per annum from our manufacturing locations.
- Over **6.8% YOY growth** in Green cover from FY20.
- Upwards of **31 lacs trees** within owned area.
- Additional value created by them for the society every year in terms of O2 production and CO2 sequestration.

Biodiversity – NNL by 2050, Green Cover Planning

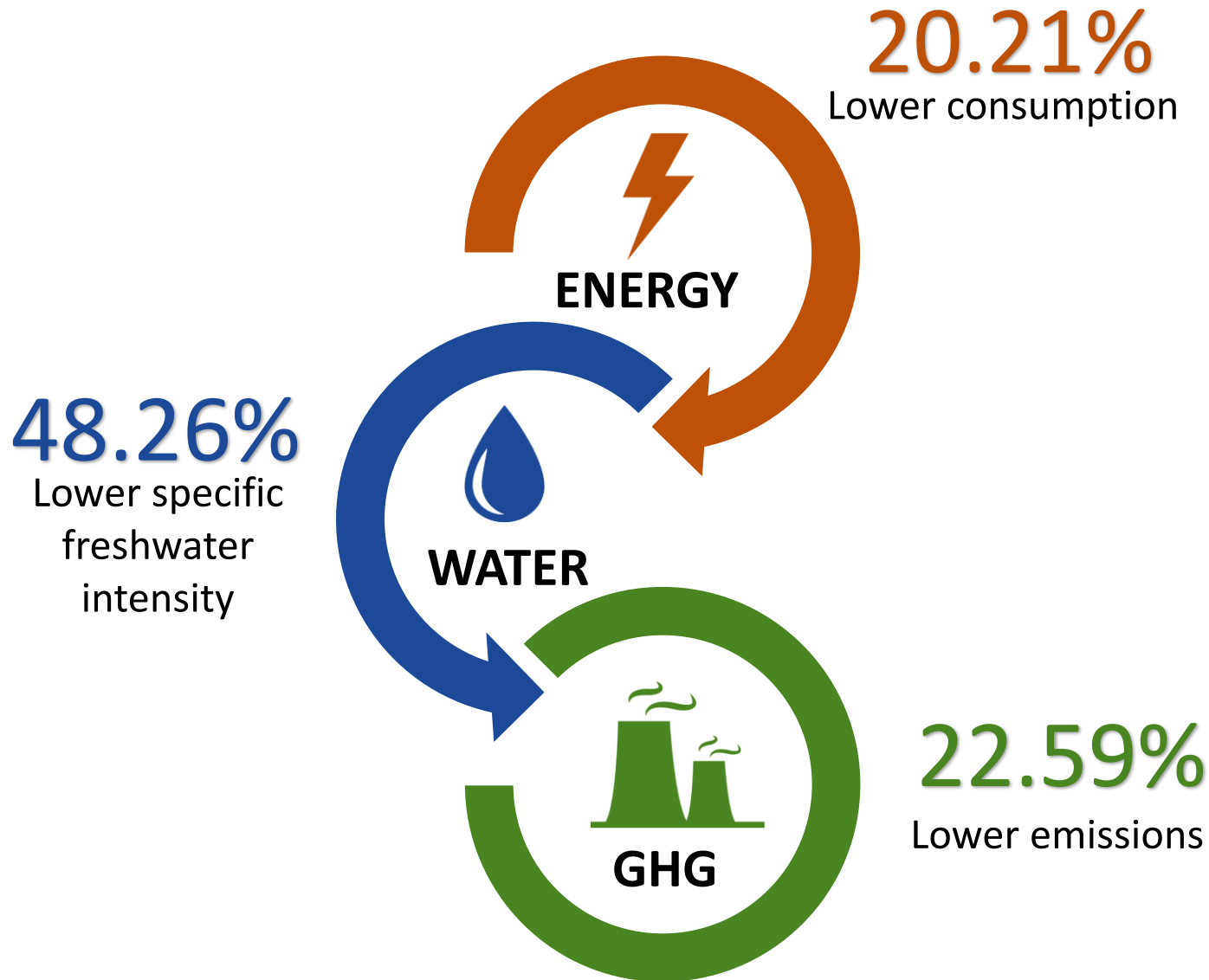
- Undertake the plantation planning for all Hindalco Plants (Non-BMP sites) – engaged experts
- Rolling the SoPs for plantation at all the sites.
- Standardising Green Belt Development
- Upgrading nurseries and sapling sourcing process
- Training and capacity building of staff on the gaps

Key considerations in SOP:

- Species selection under tree, shrub, herbs and grasses for plantation
- Target identified green belt areas and proposed offset locations
- Avoiding Invasive/Exotic Species
- Immediate survival (after winters) and final survival (after 3 years)



Hindalco's Progress from FY 2010-11 till FY 2020-21



Waste Management



Around 80% of our wastes* go for recycling and reusing

**Includes bulk wastes, hazardous and non-hazardous*

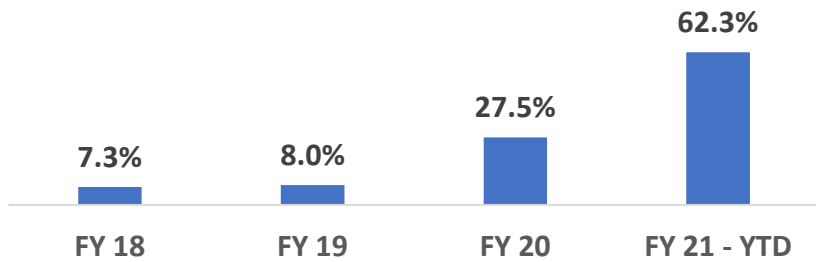
Hindalco: Zero Waste To Landfill by 2050



Bauxite Residue (Red Mud)

Generation – 4.07 MMT – FY21
Utilization – 2.54 MMT – FY21

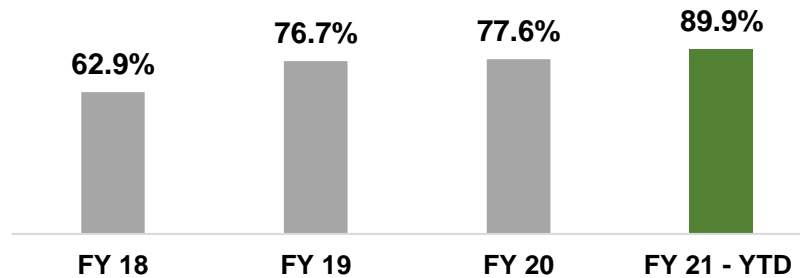
Bauxite Residue (% Recycled)



Fly Ash

Generation – 5.77 MMT - FY21
FA gets Green Berth – Maximising dispatches through Rail

Fly Ash (% Recycled)



Hindalco – 3 sites Single Use Plastic (SUP) free



Currently 80% Of The Waste Generated Is Recycled/ Reused, Balance 20% Goes For Secured Landfill/Storages/Incineration
Targets To Reduce Landfill By 5% YoY

Leading Practices on Water @ Hindalco

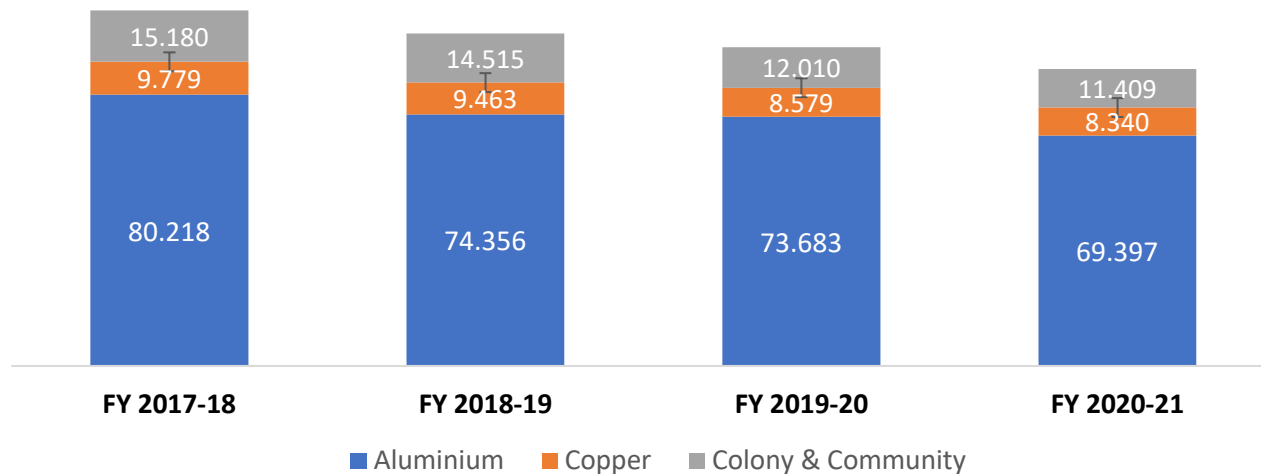
We have an overall 26,89,500 m³ storage capacity near our plants.

Our Aluminium and copper operations have a recycled water share of 22.52% and 15.06% respectively.

Water task forces from Individual units take up Projects to improve water efficiency.

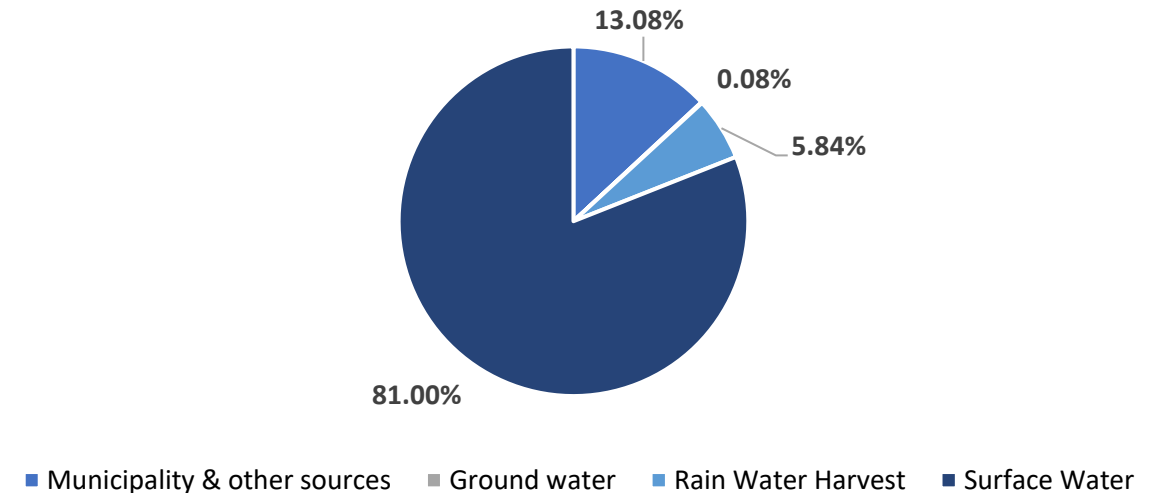
Water Consumption

Water Consumption - Freshwater and Recycled water (Million m³)



Declining share of Ground water

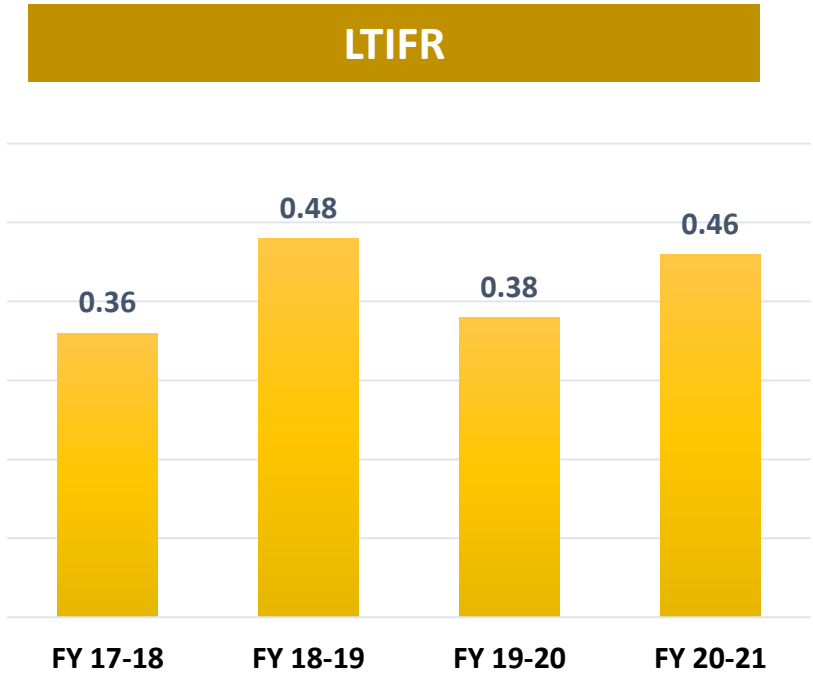
Water Withdrawal from Source (%)



Hindalco's People Focus: Approach, Examples

Occupational Safety & Health

- Serious Injuries and Fatality prevention program implementation
- All Cat 5 & 4 Incident / Near Miss investigation using “TapRoot” Methodology and Software
- Corporate – Cross Entity Safety audit to bring in independent / outside perspectives in safety program.
- Mandatory Behaviour Based Safety Observations by all including senior leadership members.
- Digital Safety initiatives like VEDA, Confined space cleaning all across Hindalco



Digital @ Hindalco Value chain



Sourcing
Mfg Technology

Mining
Coal and Bauxite
Inbound logistics

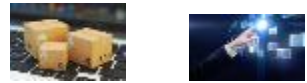
Refining
Smelting

Down Stream
FRP Extrusions Foils/Stocks
Power Plants Chemicals

Outbound Logistics
Multi Modal Transport

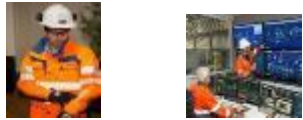
Sales and AS
support

Recycling



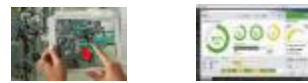
Digital / Smart Sourcing
Tracking System

- Procure to Pay automation (Yellow)
- Spend Analytics (Yellow)
- Integrated planning and Inventory controls (Yellow)
- Real Time process simulators (Red)
- Digital Engineering and KM (Red)



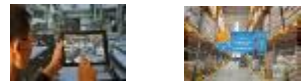
Safe Mines
Digital Operations

- Connected workers (SAFETY) (Yellow)
- Fleet/Asset Management (Yellow)
- Predictive Maintenance (Yellow)
- Mines Operations RTD (Yellow)
- Coal Handling (Yellow)
 - Inside plant (Yellow)
 - From mines to plant (Yellow)



Autonomous Factory
Connected Operations

- Connected Shop floor - RT Perf (Green)
- Connected Process (Green)
- Asset Predictive Maintenance (Green)
- Spares Management (Green)
- Connected workforce (Yellow)
- Digital Twin Smelting ,CPP (Green)
- AI/ AR/VR -Ops (Yellow)



Smart Operations
Digital Warehouse

- Real time MIS, Costing, S&OP and SPC (Yellow)
- Automated material sorting and packaging (Red)
- Real Time Inventory visibility (Yellow)
- Real time RFID tracking of FG (Green)
- AI/ AR/ VR (Yellow)
- Block Chain (Yellow)



Multimode Tracking System

- GPS enabled transport tracking (Green)
- RFID enabled tracking of vehicles within factory (Green)
- App based multimode tracking of Logistics (Green)
- Block Chain and Smart contracting (Yellow)



Metal Ecommerce
Agile NPD

- Mobile enabled end-to-end visibility (Yellow)
- Metal Ecomm (Red)
- Online Commit and Monitoring of OTIF, Quality, and Returns (Yellow)
- Insight based NPD (Yellow)
- Key Account Management (Yellow)
- NPS Management System (Yellow)



Connected Operations

- Connected Shop floor and Managers (Red)
- Connected Processes (Red)
- Asset Predictive Maintenance (Red)

● Early gains and scaling up
 ● In progress
 ● Yet to start

Human Rights Policy

Committed to respect the human rights of workforce and community around operations:

- Maintaining positive legal compliance
- Due diligence process aimed to Identify, assess & manage human right risks
- Diversity & Equal opportunities
- Respect the rights of all workers
- Barring child labour, forced labour, discrimination & harassment
- Grievance resolving in timely and culturally appropriate manner
- Engagement with all stakeholders on human right concerns related to business activities
- Awareness on human rights



HUMAN RIGHTS POLICY

Hindalco recognises the valuable role that our business can play in protection of human rights. We are committed to respect the human rights of our workforce and the communities around our operations.

Our commitment encompasses respecting human rights and seeking to avoid involvement in human rights violations, by identifying, assessing and minimising potential adverse impacts through due diligence and resolving issues & grievances of stakeholders effectively.

We endeavour to achieve our commitment by:

- Maintaining positive legal compliance to applicable regulatory human rights requirements in-line with Hindalco Management Framework (HMF).
- Undertaking an iterative due diligence process, aimed at identifying, assessing and managing potential human rights related risks and impacts in areas of our control.
- Aligning our existing processes and activities with our commitment to respect human rights, as applicable to areas including labour practices, engagement with indigenous peoples, in land acquisitions, supply chain and security management.
- Valuing diversity and equal opportunity.
- Preventing harmful conditions, human trafficking, child labour, forced labour, discrimination and harassment in our operations.
- Prohibiting any contribution to armed conflict or human rights abuses.
- Protecting the data confidentiality of employees and that of customers and suppliers.
- Promoting awareness of human rights among employees through training and communication.
- Providing access to remedy by resolving grievances in a timely and culturally appropriate manner.
- Prohibiting interference in any way with the establishment, functioning or administration of workers' organisations.
- Respect the right of all workers to form and join a trade union of their choice and participate in collective bargaining without fear of intimidation or reprisal, in accordance with national law.
- Engaging with stakeholders in an inclusive, transparent and culturally appropriate manner on human rights concerns related to our business activities.
- Influencing our contractors, suppliers and other organisations with whom Hindalco has a leverage to align with our commitment to human rights protection.

This policy shall be made available to all employees, suppliers, customers, community and other stakeholders, as appropriate.

Dated: 7th June 2021

Satish Pai
Managing Director



Respecting Rights - Actions at Hindalco Sites in COVID



Our Resilience

Pre Operations Planning

- Compliance Management under DMA
- Secure Permissions to run operations
- Establish - Standard Operating Procedures
- Steering, Taskforce Committees
- Securing Frontline staff with PPEs, Thermal Scanners, UV scanning, Sanitizers, Automated Hand wash system

Operations Management

- Daily morning reviews with Senior Leadership Team
- Afternoon meets of Line manager with Leadership team
- Implementation of SOPs – Mock drills, Movement of Men, Material inside Units
- Daily Canteen Operations/ Food management
- Daily Employee Entry Management

<p>Aprx. 1.5 Lakhs masks issued</p>	<p>Thermal scanning across units</p>	<p>Sanitizers Aprx 4000 Litres</p>
<p>100% Compliance with Aarogya Setu App</p>	<p>Taskforce for crisis management</p>	<p>Pedal operated Sanitizers all units</p>
<p>Isolation centers at Unit/ Colony</p>	<p>Social Distancing at Units & Offices</p>	<p>Liaison for permissions</p>

Respecting rights - Actions around our Sites in COVID



Isolation centres = 51



Awareness Camps: 930 in 322 villages



3.8 Lakhs masks distributed in 431 villages . 75% SHG



2466 Litres Handwash in 46 villages



6500 Sanitizers in 69 villages



Health Check up = 1984 people



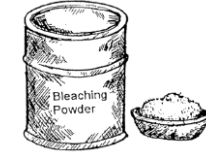
People Quarantined = 3744



Leaflets – 29981 in 212 villages



Soap = 71175 in 254 villages



Bleaching powder = 7182 kgs



Fumigation = 44 villages



People Discharge



Thermal Scanners



PPE Kits



Sodium Hypochlorite = 11084 lit. in 69 villages



Grocery Kits = 29937 in 102 villages

Meals = 7571 in 29 villages

Community Engagement by Hindalco

Key focus areas in CSR activities



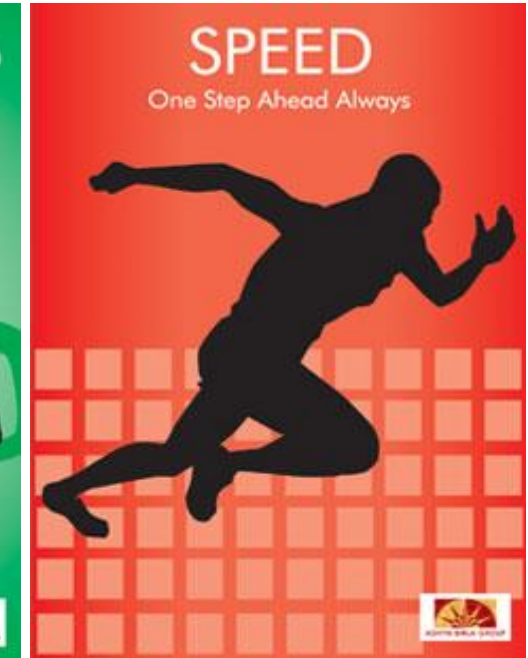
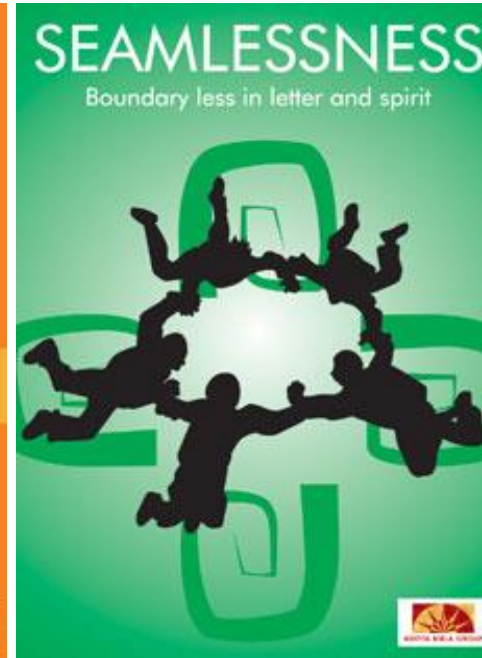
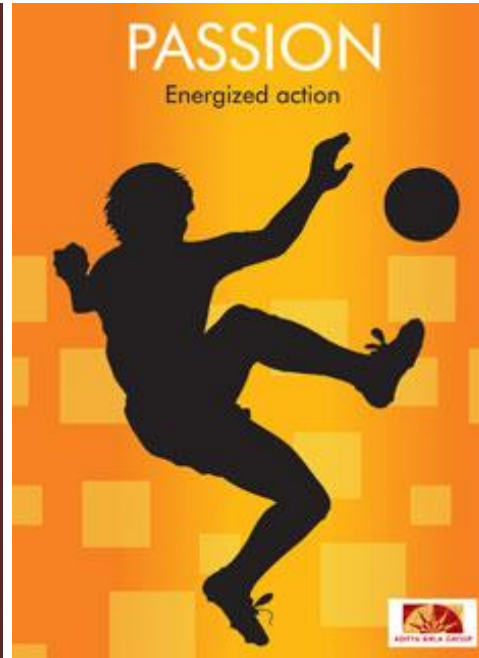
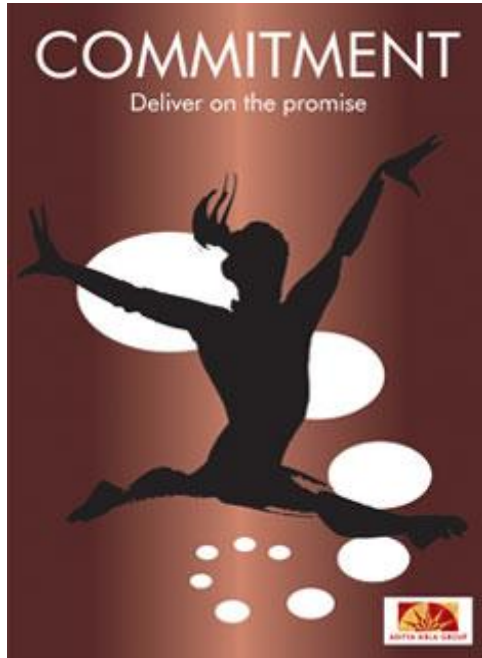
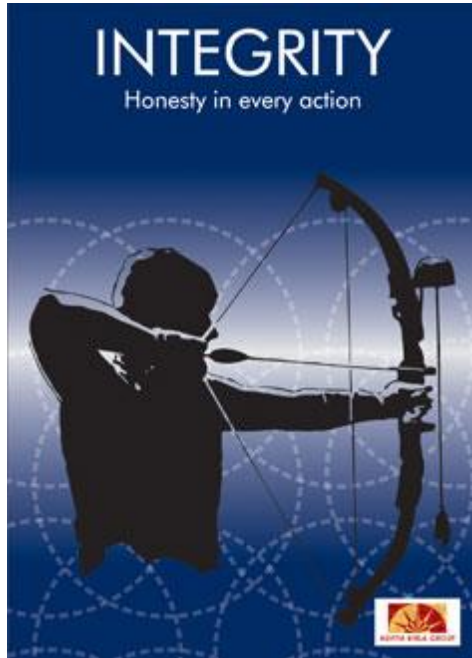
- **Education:** Girl child education, Digital literacy
- **Health and family welfare:** Awareness and prevention camps
- **Sustainable development & livelihood**
- **Water & Sanitation**
- **Rural infrastructure development**
- **Social reform:** Culture & Sports and women empowerment

Social Vision is integrated into Business Vision

- 01 All projects are identified in consultation with the community in a participatory manner. Baseline and other need assessment results are discussed with the community and consensually the projects are prioritized and the Annual plan is prepared accordingly.
- 02 Our focus areas are Education, Health care, Sustainable livelihood, Infrastructure development, and espousing social causes.
- 03 Collaborative partnerships are formed with the Government, the village panchayats & communities, NGOs and other like-minded stakeholders.
- 04 Our Policy is in line with the Schedule VII of the companies Act, 2013

Hindalco's Approach To Governance

ABG and Hindalco Values



Acting and making decisions in a manner that is fair and honest. Following the highest standards of professionalism and being recognized for doing so.

On the foundation of Integrity, doing all that is needed to deliver value to all stakeholders.

An energetic, intuitive zeal that arises from emotional engagement with the organization that makes work joyful and inspires each one to give his or her best.

Thinking and working together across functional groups, hierarchies, businesses and geographies.

Responding to internal and external customers with a sense of urgency.

Hindalco Code of Conduct

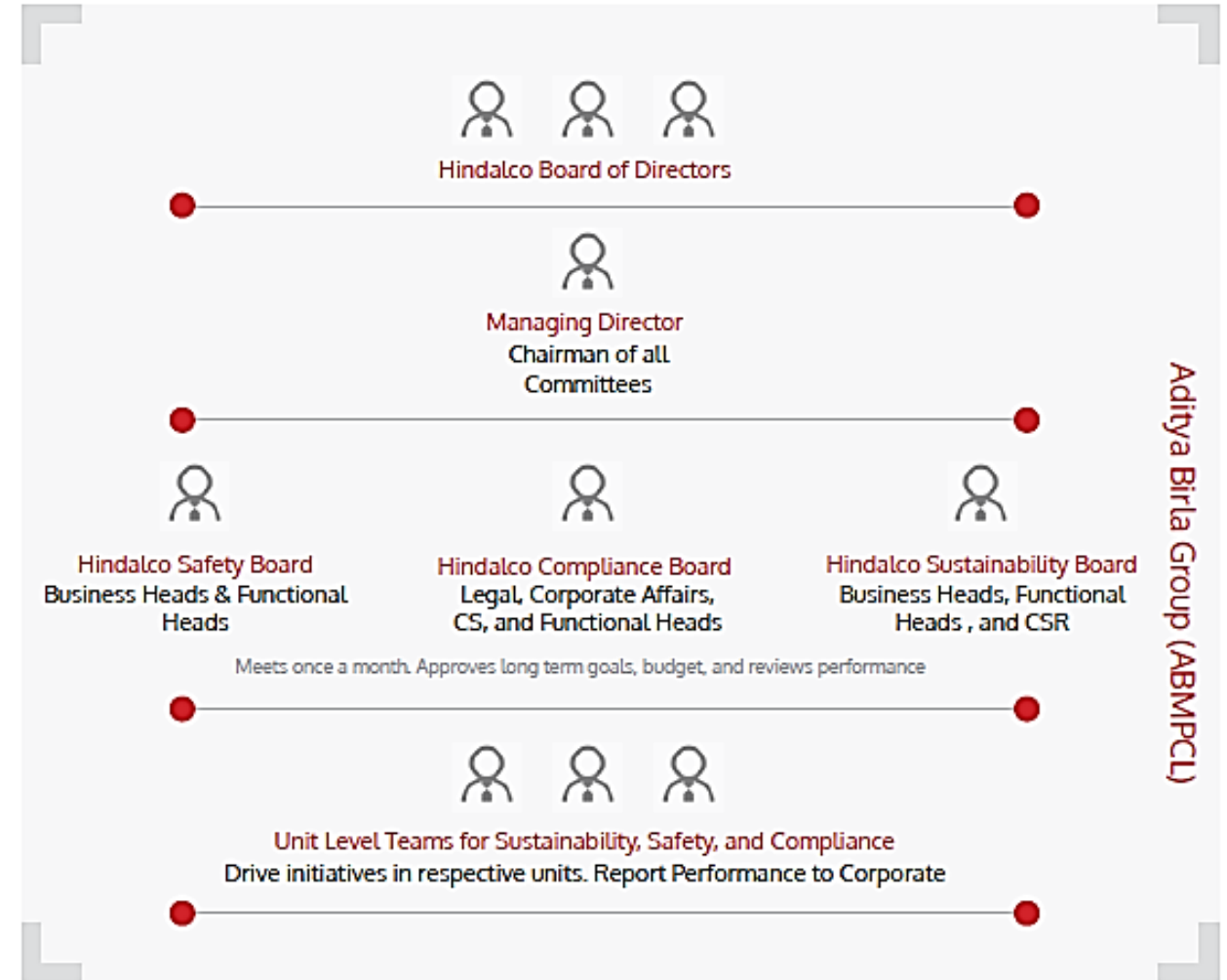
- Available on Hindalco's website: <http://hindalco.com/Investor-centre/Governance/Code-of-conduct>
- Framed and adopted by Hindalco in compliance with the provisions of Clause 49 of the Listing Agreements entered into by the Company with the Stock Exchanges.
- The Code applies to the Members of Board of Directors and Members of the Senior Management Team of the Company one level below the Board Members, viz. Manager & CEO, CFO and all Unit Heads, Presidents, Joint Presidents and all other executives having similar or equivalent rank in the Company and the Company Secretary of the Company
- The Company Secretary is the Compliance Officer for the purpose of this Code.
- The Code is effective from 1st January, 2006. The Board of Directors at its meeting held on 14th August, 2014 amended the Code to include point no.12 in Clause 3 being reference to duties of independent directors as set out in the Companies Act, 2013 read with the Schedules and Rules thereunder.
- Also covers:
 - Code Of Practice And Procedures For Fair Disclosure Of Unpublished Price Sensitive Information
 - Vigil Mechanism: http://hindalco.com/upload/pdf/Vigil_Mechanism.pdf

Governance and Compliance

As per Governance and Compliance Policy of the Company,

Governance and Compliance shall take place at three interlinked levels, namely:

1. *Strategic supervision by the Board of Directors*
2. *Strategic Management by the Corporate Management Committees*
3. *Executive Management by the Units and Functional Heads*

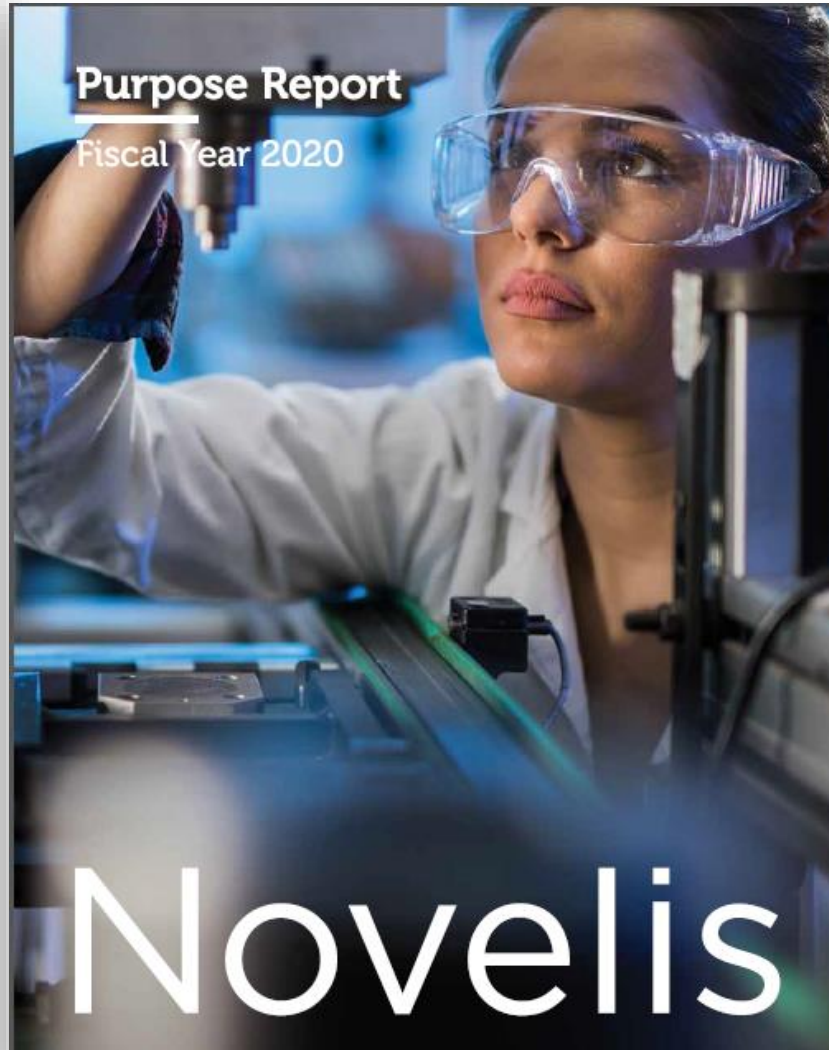




Building a Resilient, Responsible
and Reliable Future



Sustainability Report FY 2019-20



Thank you

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