ADITYA BIRLA GROUP

ACCELERATING ESG-BILITY

STRENGTHENING SUSTAIN-ABILITY

ESG Performance Report 2021-23

**'Accelerating ESG-bility.
Strengthening Sustain-ability.'** encapsulates our
unwavering embrace of a double-materiality strategy
and emanates from our resolve to be a Force for Good.
It signifies a paradigm shift in the integrated approach
to our ability to sustain.

Taking forward the visual language of our previous
report, this elegant cover design, encompassing the
infinity symbol, emphasises the cascading positive
impact that both ESG-bility and Sustain-ability have.

The burgundy part, through its brand colours, represents
the Group and depicts how we are embedding ESG
principles and practices deep into each of our
businesses to mitigate risks and leverage opportunities,
thereby protecting and creating value for stakeholders.

The green part represents our outward facing sustain-
ability initiatives and depicts how these programmes
are achieving higher environmental goals, propelling
prosperity, and continually enhancing their reach to
encompass more and more people.

The infinity also represents two eyes - ABG on the left and the
environment on the right. It depicts how our vision for business
and sustain-ability are in alignment with our Group Purpose:

To enrich lives, by building dynamic and responsible businesses and institutions, that inspire trust.

This report provides a detailed overview of the ESG
progress made by Aditya Birla Group and its businesses in
FY22 and FY23. This progress is represented as waves
formed by the synergy of ESG-bility and Sustain-ability,
creating a ripple effect that amplifies change and cascades
toward a brighter, more sustainable, and resilient future.
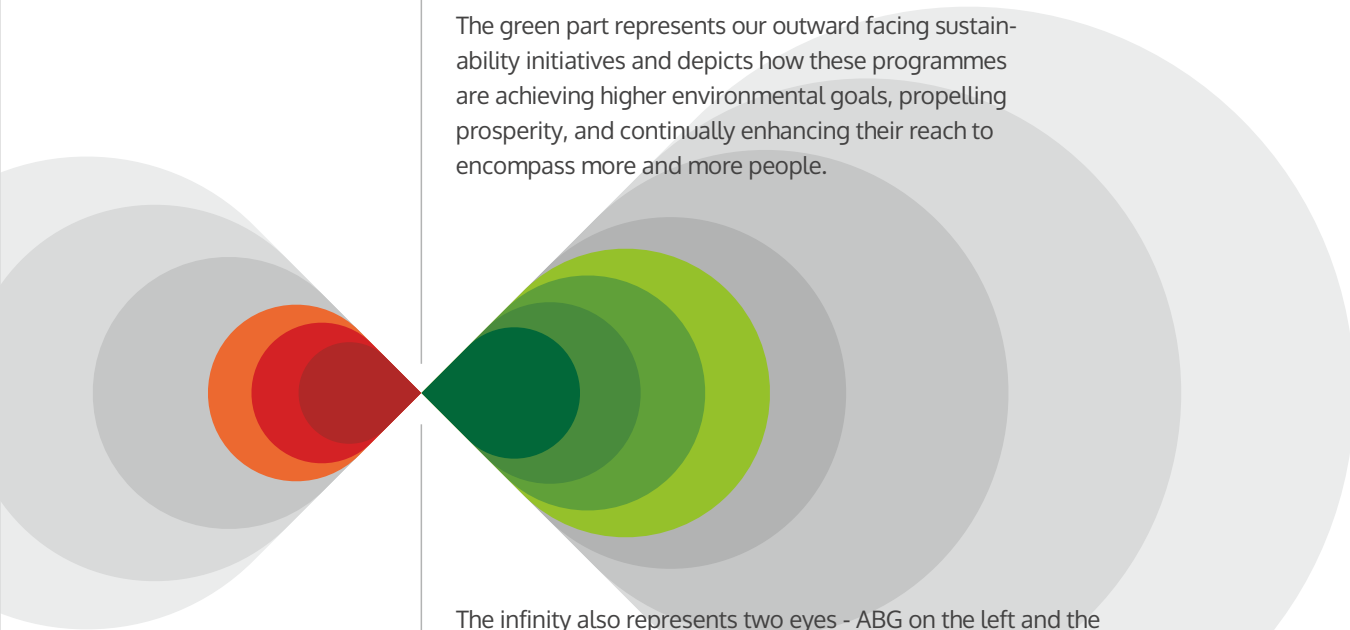
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MESSAGE FROM THE CHAIRMAN

Dear Reader,

In the ever-evolving landscape of modern commerce, complexity is the new norm. From intricate global supply chains to dynamic technological advancements, multifaceted markets to interconnected industries, multi-dimensional regulations to ever-growing customer expectations, businesses have to navigate a labyrinth. The ability to decode complexity is a strategic imperative to thrive.

When addressing complexity, purpose serves as a lens through which one must view the big strategic picture, rather than through silos. Purpose is the glue that brings together a higher level of collaboration. Purpose is motivational, it aligns one and all and amplifies traction.

It was with this goal in mind that we unveiled our Group's purpose statement in FY23. Rooted in the Group's philosophy of trusteeship, our purpose statement, at its core, embodies a commitment **to enrich lives, by building dynamic and responsible businesses and institutions, that inspire trust.**
It's not only a statement, but the reason for our being. It reflects what we continually strive for at ABG.

Our sustain-ability strategy, 'Accelerating ESG-bility. Strengthening Sustain-ability.' is a derivative from our purpose and integrates each of the four facets - Enriching lives; Building dynamic businesses; Creating responsible institutions; and Inspiring trust.

Sustain-ability is an integral part of our strategy across our businesses. Our commitment to integrate sustain-ability into our business manifests through our carefully crafted ESG framework that aims at delivering comprehensive value to all the stakeholders.

Enriching Lives

From cement to carbon black, cellulosic to fashion, financial services to trading, and renewables to real estate - our Group's products and services touch millions of lives daily. We make tyres safer, cater to the copper requirements of the lifeline of our nation i.e., Indian Railways, help build megastructures like the New Parliament Building – Central Vista and the Statue of Unity, enable individuals to express themselves through the plethora of choices offered by our ever-expanding portfolio of apparel brands. Along with the millions of lives we touch through our products, we also bring smiles to over 11 million faces through our CSR initiatives.

Inspiring Trust

Through the Group's products, services, intent and everyday interactions, the Group and each of our businesses aim to earn, nurture and retain the trust of all stakeholders.

Only an organisation founded on strong values and principles will achieve its true potential and purpose. By being driven by purpose, Aditya Birla Group aspires to be Big in Your Life and help create a better world today, tomorrow, and forever.

Building Dynamic Businesses

Businesses must be agile to swiftly navigate unforeseen challenges and capitalise on emerging opportunities. Moreover, the ever-evolving market requires continuous innovation to stay competitive.

A dynamic mindset enables our businesses to stay attuned to changing customer preferences and proactively adjust strategies, ensuring not just survival but sustained success in the complex and fast-paced world of commerce.

As a group, we have been dynamic by scaling our core businesses and also embracing new businesses and business models. FY24 and FY25 will see Aditya Birla Group launch two large scale businesses - paints and jewellery retails. This comes on the back of our foray into two digital businesses in the last few years - B2B ecommerce for building materials and D2C fashion.

Creating Responsible Institutions

We cultivate a deep and purposeful culture, encouraging accountable decision-making which focusses on the smart use of resources, ethical and value-based governance, and achieving sustainable profits while taking care of the planet and promoting a circular economy.

We are investing in green tech, alternative materials, and recycling across some of our key businesses to address climate change. Our renewables business operates at the intersection of being a force for good and a value-creator. Over the next three years, we will augment our renewable energy capacity to 4.6 GW. This is five times our current capacity on ground.

I am confident that attaining global industry leadership and flourishing in the evolving landscape is achievable by seamlessly integrating sustainability, innovation, technology, and customer-centricity across all our endeavours. This report provides insights into the progress achieved thus far in our Group's sustain-ability journey.

Recognising that the path to sustainability can be traversed faster together, I urge each stakeholder to collaborate and synergise competencies. Together we can enrich lives not only of the current generation, but of generations to come.

Kumar Mangalam Birla
Chairman, Aditya Birla Group

MESSAGE FROM THE GROUP CSO

While sustainability is a multi-faceted, multi-variate paradigm, prioritisation is fundamental to enduring transformation.

A 165-year-old enterprise, Aditya Birla Group has emphatically demonstrated its ability to sustain. Over years, as the complexities and dynamics of external changes have increased, we have undergone numerous transformations. These have been through addition of newer business sectors, adding adjacencies in existing sectors of operation, entering newer geographies, developing and following newer business models, and newer ways of working. Latest example being our foray into digital-first businesses like Birla Pivot, expanding our footprint in built environment space through launch of paints business, Birla Opus, among others.

Giving pace to progress has thus, been the focus for Aditya Birla Group during the reporting period. The two aspects elemental to this process are our approach to Sustain-ability and our ability to prioritise over short and long-term.

Approach to Sustain-ability

Our sustainability positioning "Accelerating ESG-bility. Strengthening Sustain-ability." succinctly captures our double materiality approach to Sustain-ability. It is through a balance of addressing both externalities and external factors. We look inside-out at how our operations and decisions impact the environment and community while also, seeing outside-in on how the megatrends and external factors are and can influence our business. This allows us to identify and then work to minimise, mitigate the impacts. In parallel, business also pursue bold targets, proactively unearthing opportunities, innovations and future revenue streams.

Focus for Timely Impact

While sustain-ability is a multi-faceted, multi-variate paradigm, prioritisation is fundamental to enduring transformation. A focused approach lends to taking a phased approach and allows for a right mix of action for immediate impacts and setting place the right building blocks for the longer term. This is what we set in place in FY22, wherein we set about setting goal-wise approach on the 16 material ESG areas. These were defined in our previous ESG report. Through an analysis of materiality of impact, stakeholder expectations, maturity of on-going efforts, and time required for planning, implementation of initiatives to achieve targets, we distilled down to 5 areas for deeper focus. From FY22-FY25, we enhanced the focus on Safety, Decarbonisation, Circularity, Digital for

Sustain-ability and Communication & Reporting. While the businesses have been progressing in their journey on all sustain-ability aspects as identified to be material to their sector, geography of operations, these 5 areas have benefitted from Group-wide synergistic efforts. The Group businesses have progressed systematically in all these five areas by taking steps to either mitigate the identified risks or by adopting ambitious targets to cement their standing as sustain-ability champions in their sectors or geographies.

Safety

Even as the Group businesses have expanded in size (manufacturing capacities, revenues) across geographies, there has been a steady decline in injury rates. This is characterised by a substantial reduction in Lost Time Incidents (LTIs) and a noteworthy increase in Behaviour-Based Safety Observation (BBSO) rounds.

This is in keeping with our long-standing commitment to zero fatalities and reduction in Lost Time Incidents by half, year-on-year. To promote a healthier lifestyle, we have introduced several hundred online courses on the Gyanodaya Virtual Campus, online ergonomic risk assessments and a cloud-based occupational health data tool, PEHEL, adopted by 51 ABG manufacturing locations in India.

Decarbonisation

We aspire to achieve Net-Zero Carbon Emissions by 2050. Most of our businesses have developed short, medium and long-term roadmaps to achieve Net-Zero or reduce carbon emission intensity across their value chain. Through energy efficiency and conservation programmes, the use of renewable and alternative energy sources, low carbon growth and product stewardship, and mitigation and sequestration projects, every Group business is forging a unique path, best suited for their operations, to contribute to the Group's overall mission.

Circularity

We are on track to achieve our target of becoming **Zero Waste to Landfill Organisation by 2030,** in keeping with the location regulatory requirements. Through these endeavours, we aim to mitigate the environmental impact of the specific waste streams through responsible practices as well as foster circularity, enhance resource efficiency.

The challenge has been where industry/process-specific waste needs innovative technological solutioning. To address the wide array of material issues and compliance standards, our businesses have established supplementary public targets that encompass quantitative, qualitative and circular dimensions.

Our businesses reused, recycled, or utilised 12 million+ tonnes of waste during the reporting period, while 20 more sites across the Group achieved Zero Waste to Landfill status.

Digital for Sustain-ability

Digital technologies have emerged as a major sustainability enabler at ABG. Be it compliance reporting, supplier management, implementation of circularity and decarbonisation projects, water conservation or employee safety, digital tools and processes have enhanced every aspect of sustain-ability at our group.

During the reporting period, we have unlocked new strengths and capabilities in ENABLON, our Group-wide digital platform. We also launched the ESG 360 Accelerator Digital Project, that will serve as a single-window access and compass/analytics dashboard of ESG info for all participating Group businesses. This will help businesses monitor and benchmark their ESG performance, enhance their reporting and boost their rating.

Communication & Reporting

Communicating sustain-ability ambition and performance is key to accountability. It is this transparency that helps build stakeholder trust and strengthens the societal licence to operate. Aditya Birla Group has been regularly engaging with the stakeholders externally and internally through integrated and sustainability reports, investor meets, conferences, and at platforms provided by WBCSD, FICCI, CII, TERI etc. This Group Report, voluntarily published, is a testament to our commitment to fair and proactive disclosures.

While we have stated Group-level goals for decarbonisation and circularity, they are part of our larger push towards becoming nature-positive which also encompasses fostering water resilience and integrating the 'No Net Loss to Biodiversity' approach into every business decision. Towards enhanced water resilience, most businesses are on track to achieving our aspirational target of a 50% reduction in freshwater intensity at high water risk locations. In fact, UltraTech, Hindalco's mining locations and ABFRL have reached or are marching towards water positivity.

Biodiversity KPIs have been mapped to our digital data management platform to better assess the efficacy of the Biodiversity Management Plans implemented across myriad sites.

But what good is progress, if not led by purpose? So, while we gave pace to progress, we also added the dimension of purpose. We articulated our Purpose statement in FY23 to clearly emphasise what we do, how we work and why we care. We are committed to staying true to its expressions – 'Enriching Lives' is our calling as well as our call to action.

As we accelerate our ESG-bility and strengthen sustain-ability, I invite you, our valued stakeholders, to engage with us. Your feedback is crucial in further elevating our sustain-ability performance, the standard of our reporting, and advancing our collective journey towards a more sustainable future.

Deeksha Vats
Group Chief Sustainability Officer,
Aditya Birla Group

ABOUT US

A USD 65 billion global conglomerate, Aditya Birla Group, is in the League of Fortune 500. Anchored by an extraordinary force of over 187,000 employees belonging to 100 nationalities, the Group is built on a strong foundation of stakeholder value creation. With over seven decades of responsible business practices, our businesses have grown into global powerhouses in a wide range of sectors - from metals to cement, fashion to financial services and textiles to trading. Today, over 50% of the Group revenues flow from overseas operations that span over 40 countries in North and South America, Africa, Asia and Europe.

Globally Aditya Birla Group is:

#1 in Aluminium Rolling
Every third aluminium can is made from Novelis aluminium.

#2 in Carbon Black*
The second tyre in every car in the world has Birla Carbon in it.

#2 in Viscose Staple Fibre
Our fabrics are used by top fashion brands worldwide.

3rd Largest Cement Producer#
UltraTech is the only cement company globally# to have 100+ MTPA manufacturing capacity in a single country.

*Based on installed production capacity
#Outside of China

For more details, please visit https://www.adityabirla.com/

Adding Colour To Dreams

'Birla Opus', the Group's newly launched decorative paints business, is poised to be the 2nd largest player in India.

- 6 manufacturing facilities
- Distribution across 6,000 towns
- 50,000+ dealers

Crafting Jewellery For All Occasions

Entered the jewellery segment with an investment of ₹ 5,000 Cr. to create an aspirational national retail jewellery brand.

Curating Timeless Experiences

ABNAH (Aditya Birla New Age Hospitality) aims to be the most preferred house of F&B brands.

- Operates 'Jolies', an exclusive luxury club in Mumbai
- Five iconic restaurant brands: ODE, Hakkasan, Yauatcha, Nara Thai, and CinCin

Transforming The Building Solutions Industry

Group's B2B e-commerce platform, 'Birla Pivot', is enabling MSMEs with digital reach and financing solutions.

- Crossed monthly run-rate milestone of ₹100 Cr.

USD 65*
Billion Revenue

USD 90**
Billion Consolidated Market Cap

20+
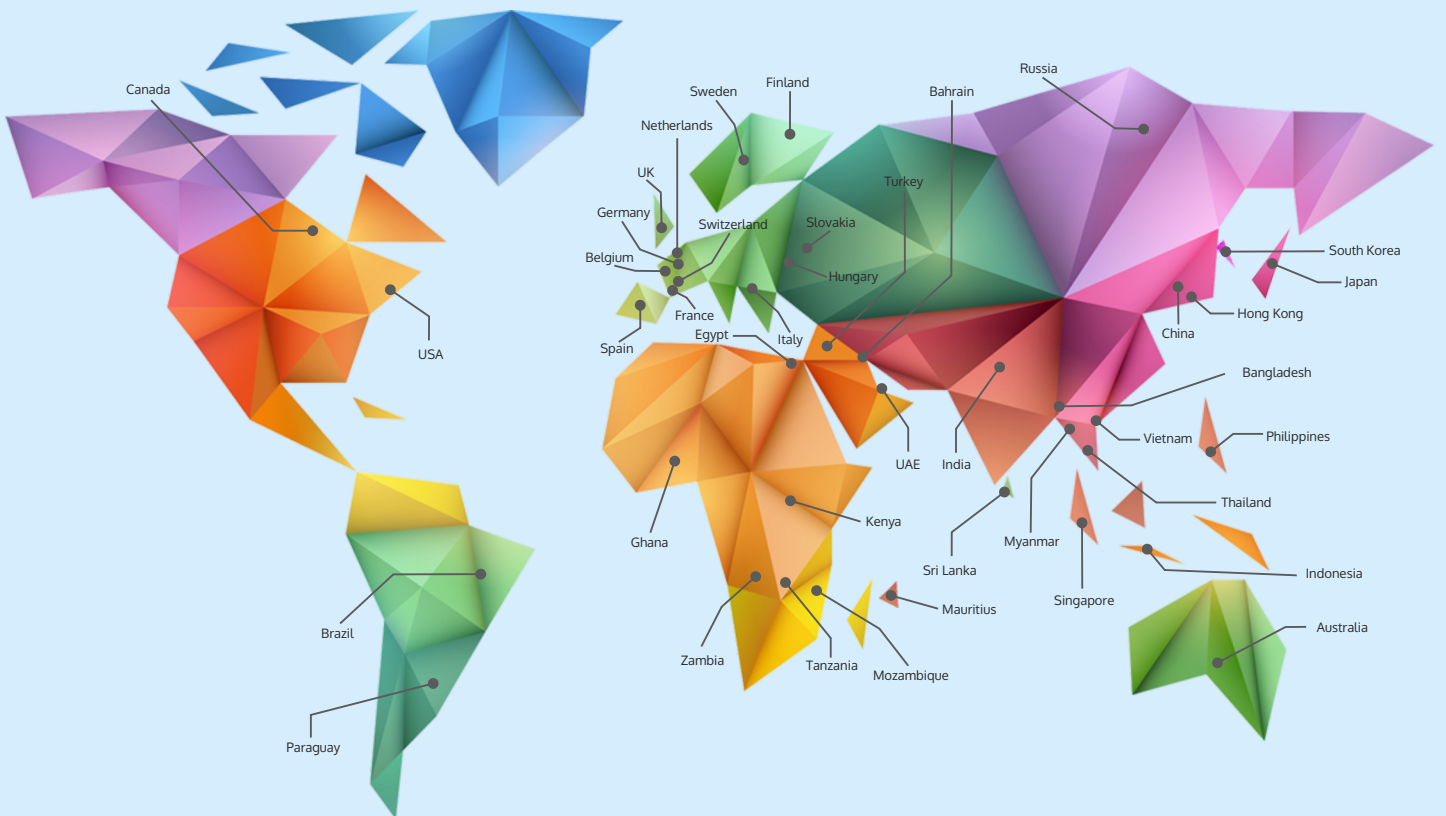Industry Sectors

187,000
Employees

100+
Nationalities

*As of 31 March 2023 | **As of 29 December 2023

Geographical Presence

Aditya Birla Group's pioneering foray into Thailand in 1969 marked the beginning of a remarkable journey that has since transformed it into a diversified global powerhouse spread across 6 continents and over 40 countries. Today, over 50% of the Group's revenues flow from overseas operations in North and South America, Africa, Asia, and Europe.

By embracing diverse markets and cultures, we have fostered strong relationships with customers, partners, and communities worldwide. This global reach has not only enabled us to cater to a broader customer base but has also facilitated the exchange of knowledge and best practices, enriching our operations back home.

Canada

Sweden   Finland

Netherlands

UK

Germany

Belgium

Switzerland

France

Spain   Egypt   Italy

USA

Bahrain   Russia

Turkey

Slovakia

Hungary

South Korea

Japan

Hong Kong

China

Bangladesh

Vietnam   Philippines

UAE   India

Thailand

Myanmar

Kenya

Indonesia

Sri Lanka

Singapore

Australia

Mauritius

Ghana

Brazil

Zambia   Tanzania

Mozambique

Paraguay

Our Purpose, Principles and Values

At Aditya Birla Group, purpose has been the driving force for all our actions since inception.

Our Group Purpose, provides us with a unique lens to measure our every action and its consequent impact on our stakeholders, community, and the world at large. It has been an animating force for all our actions.

Our Guiding Principles

Our principles are how we bring our purpose to life

Enduring Bonds	Grounds Up Entrepreneurship	Value Maximisation	Multiple Forms	Force for Good
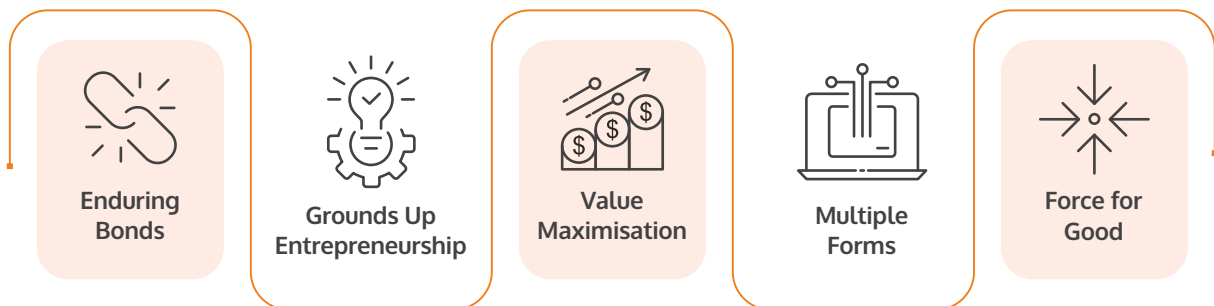
The Group's values are the guiding light for our businesses and people. They are at the core of how we operate as an entity and help us make important decisions.

Our five core values are:

Integrity: Following the highest standards of financial and intellectual professionalism that is fair and honest

Commitment: On the foundation of integrity, doing all that is needed to deliver value to all stakeholders

Passion: A voluntary, spontaneous and relentless pursuit of goals and objectives with the highest level of energy and enthusiasm

Seamlessness: Thinking and working together across functional groups, hierarchies, businesses and geographies

Speed: Delivering on time and choosing the best rhythm to optimise organisational efficiencies

Only an organisation founded on strong values and principles will achieve its true potential and purpose. When the organisational purpose is woven into the fabric of any organisation, it results in fostering resilience, being authentic, responsible, and establishing a formidable and sustainable competitive advantage.

Mr. Kumar Mangalam Birla
Chairman, Aditya Birla Group

SUSTAIN-ABILITY:
THE BUSINESS DRIVER AT ADITYA BIRLA GROUP
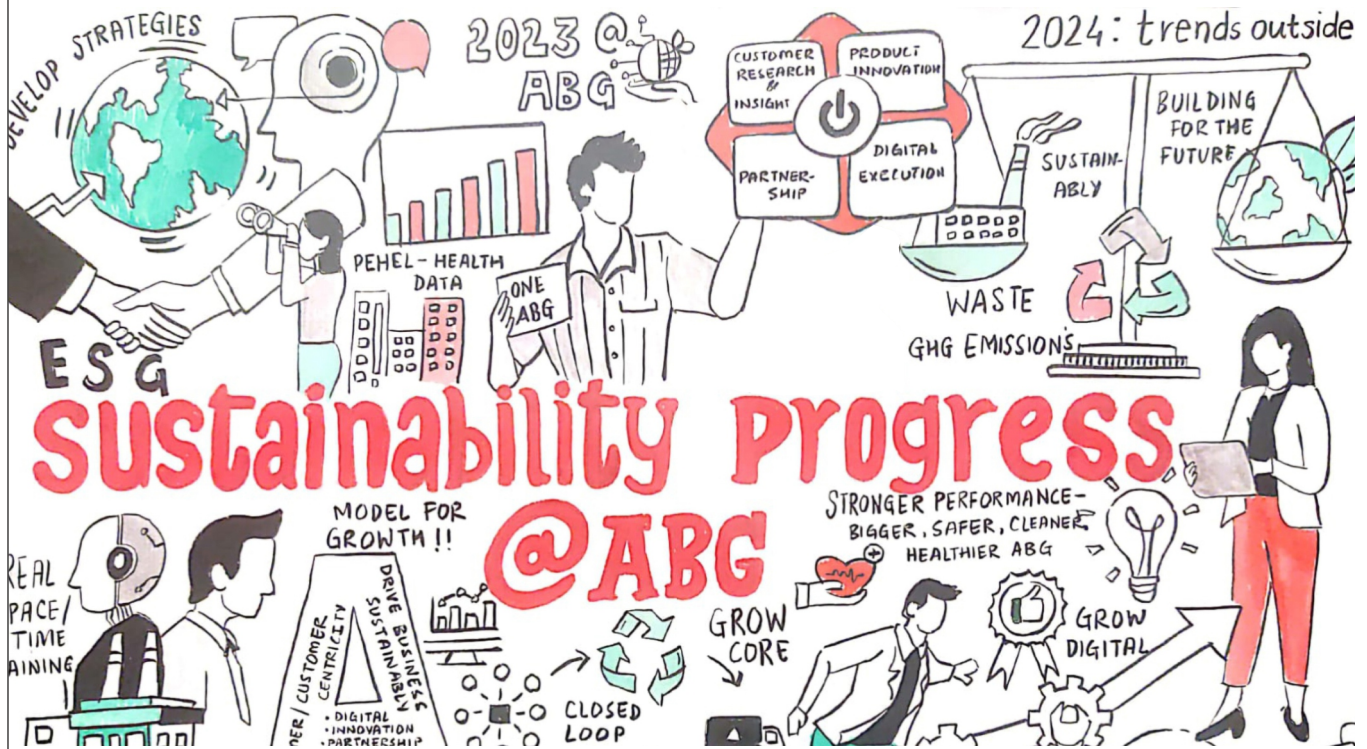
Present times may well become breakthrough years for sustainability across the aspects of environment, societal, and employee health & safety among others. 2023 provided considerable momentum through global embrace of simultaneous action on climate, nature and equity. This was on the backdrop of each year turning to be hotter than the previous, and the associated physical impacts of a changed climate.

The geopolitical and social challenges are pushing the political and business leaders, globally, to manage energy security and supply chain risk beyond the aftermath of the COVID 19 pandemic. There is intense pressure from multiple stakeholders – regulators, lenders, investors, and customers (more than ever before) to move towards sustainable practices. As a multinational conglomerate, being

prepared for the different ways in which our operating environment may change is crucial to shaping our future strategy.

This stimulus to our businesses to proactively adapt to the trends we are seeing, is rooted in our Group's Purpose. The statement, elaborated in the Chairman's Message of this Report, is a distillation of our aspirations and provides us the vision to take in a more expansive horizon. Intrinsically, it also aligns with how we approach Sustain-ability at Aditya Birla Group with a focus on 'Accelerating ESG-bility. Strengthening Sustain-ability.'

In other words, the Double Materiality approach, adopted by the Group, integrates both perspectives of recognising the impacts a business has on natural systems and society, and vice versa. Understanding the risks and opportunities that external factors and externalities could extend to our

businesses is inherent to business sustain-ability. To this effect, we work with our key stakeholders in a more business-critical way.

We rely on their expertise to help us identify the key issues, trends and external factors that will shape our markets and operating environment for planning in the medium and long term.

This evolved approach pushes us to move from thinking and working not just tactically but also strategically. Particularly for businesses operating in developing markets, the implications of resource scarcity, new technology, talent management and climatic changes amongst many others are, and will become, more pronounced. This approach, thus, builds risk mitigation strategies for our businesses and their operations as well as identifying business opportunities.

The Integrated Approach

At this juncture, Aditya Birla Group is eleven years into the journey to becoming the leading Indian conglomerate for sustainable business practices across all our operations, as envisioned by our Chairman, Mr. Kumar Mangalam Birla. Since then, as a Group, we have made strides to equip our businesses with the right tools, provide access to accurate information, and to put the necessary systems and processes in place with comprehensive guidance on how to achieve the vision.

Having covered this ground and in the evolving business landscape, we are now gaining momentum on our Sustain-ability Approach 2.0 initiated in 2021. In accordance, by adopting a strategic and integrated approach to the double materiality assessment process, the Group has identified and defined material ESG areas; established targets and processes for those areas; and is using key enablers to deliver on the set targets and goals; applying a strong governance mechanism to track, monitor and assess.

Business and Site/Location Level
EHS/Sustain-ability
Working Group, Committees

Group Level
Working Groups,
Apex Discussions,
ABGSF based
Assurance Mechanism

4

**ABG Sustainable
Business Framework**
define processes
to be followed

2

**Quantitative
Performance Targets**
manufacturing EHS for
enhanced performance

5 **Report**
(Group ESG, Business IR/BRSR)
Media Campaigns

Stakeholder Engagement
WBCSD, GRI, IAI, FICCI, GCCA,
F4G, Canopy

Digital Tools, Platforms
ENABLON, Datalake

3 **Process Technologies**

L&D Initiatives
right people, right skills

Policy Advocacy

Outreach, Engagement

Governance Systems

Enablers

Process & Targets

4D Approach

1 Common but bespoke approach to identify **16 Material ESG Issues** based on sector, geography, value chain position and maturity of practices/ambition

The progress made in each material ESG area, on the goals we set out, since FY21 has been addressed in the subsequent chapters of this Report.

1. 4D Approach

In the heart of the 'Ability to Sustain Approach 2.0' is the 4-D (Dimensional) approach:

D1 Sector of Operations	D2 Geography of Operations	D3 Value Chain Position	D4 Time Horizon/ Maturity of Practices

Through this exercise, rooted in consultation with our Group businesses, 16 material areas were identified that form the common minimum ESG agenda at the Group level (05 Environmental, 07 Social and 04 Governance). These ESG areas are mapped to the expectations from key stakeholders across value chains and geographies.

(Please see Sustain-ability Approach 2.0 section in Aditya Birla Group's ESG Report 2021 for more information.)

Group Material ESG Areas

1. **Decarbonisation**
2. **Climate Change Adaptation**
3. **Biodiversity Management**
4. **Water Resilience**
5. **Circularity**

6. **Employee and Contractor Safety**
7. **Occupational Health**
8. **Human Rights** (i/c Diversity & Inclusion)
9. **Supply Chain Management**
10. **Talent Management**
11. **Empowering Communities**
12. **Products Services**

13. **Transparency and Reporting**
14. **Corporate Governance**
15. **Strategic Stakeholder Engagement**
16. **IT-enabled MIS and Assurance System**

Integrating sustainability and business strategy

2. Process & Targets

The 4D Approach has led to the pragmatic ESG targets we have committed ourselves to at the Group level and the partnerships we are forging towards achieving them. These performance targets were unveiled through the Group's maiden ESG Performance 2021 Report. The identified targets were developed through sustained interactions with all key stakeholders and thorough understanding of the megatrends. In accordance, taking cognizance of ESG perspectives, our businesses have set long-term public targets and commitments around these 16 material ESG areas, in keeping with what is material to their sector, geography and maturity of sustainability practices.

Further, select Group Businesses beyond aligning to the Group-level ESG areas and targets have raised the bar by taking up voluntary international commitments, receiving accolades in global forums, and publicly tracking and disclosing their short-term goals to showcase how we are walking the talk.

Hindalco has consistently been ranked at the top for ESG scores in the global aluminium sector in the S&P Dow Jones Indices since 2020. It has established time-based milestones across different focus areas by translating thoughts into strategy and action. While it has long-term targets on material ESG topics, it has also set out targets for 3–5 year horizon. For example: by 2025, Hindalco aims to reduce specific energy consumption and GHG emissions by 25% on the base year 2011-12. By 2025, it also aims to achieve 300 MW of renewable capacity of which 200 MW will be without storage and 100 MW with storage. Additionally, Hindalco has announced its quest to achieve water positivity across all mines by 2025.

Similarly, Novelis has announced plans that include a 30% reduction in its carbon footprint and a 10% decrease in energy intensity by 2026.

Committed to become a fully circular business, Novelis has also taken up a target of 20% reduction in waste to landfill by 2026. On water use, it has set a 10% reduction target by 2026.

UltraTech Cement Limited, the cement flagship company of the Group, actively supports global campaigns such as RE100, EP100, Carbon Pricing Leadership Coalition and Science Based Targets initiative (SBTi). These are a part of its efforts to accelerate the adoption of low carbon technologies and processes throughout its value chain to effectively reduce its carbon and overall environmental footprint. Under SBTi, the company is committed to reduce its net Scope 1 intensity by 27% by 2032 from base year 2017 and Scope 2 intensity by 69% by 2032 from base year 2017. It is also scaling up the share of green power in the overall power mix to 34% by FY24. Equally bold is its target to complete biodiversity assessment for all integrated plants by 2024. On water, UltraTech is committed to become a 5 times water positive company by 2024.

Birla Carbon has set its vision to be the most sustainable and dynamic global carbon black business. It is the first in its industry to commit to Net-Zero by 2050. In fact, it has publicly reported about the challenges it is facing in reducing its direct CO_2 emissions intensity by more than 22% against the 2005 baseline. At the same time, the company is on track to meet its target of increasing absolute energy conversion efficiency to 80% and repurposing 75% waste, including recycling, reuse and recovery by 2030.

For two years in a row, ABFRL was declared Asia's 'Most Sustainable Company' in the Textile, Apparel & Luxury Goods Industry by S&P Global CSA 2020 and 2021. It has already achieved targets of being water positive, zero waste to land fill, ensuring zero harm and embedding at least one sustainable attribute in over half of its products; and is on track to achieving its emission reduction and renewable energy targets. The company is also

working towards developing a 'Net-Zero' roadmap.

Grasim Industries has evolved into a leading diversified player. Having begun its journey as a textile manufacturer in 1947, today it is the leading global producer of VSF, and the largest Chlor-Alkali, Speciality Chemicals (Epoxy Polymers and Curing Agents), VFY and Linen Textiles player in India. In the overall quest of achieving Net-Zero GHG emissions at Grasim level by 2050 – its CFI Business aims to reduce GHG emission (Scope 1 and Scope 2) of the main product by 30% by FY30 (over the base year of FY17). Chlor-alkali division is striving to increase share of renewable power to 25% by FY25; VSF business is committed to reduce its GHG emission intensity by 50% by FY30 and achieve Net-Zero Emissions by FY40. And finally, the textile business has set a target to increasing renewable energy power share up to 70% by FY30.

Policies and Standards

The main tenet of this integrated approach towards defining stewardship processes and competitive target setting, hinges on the **ABG Sustainable Business Framework (ABG-SBF).** The ABG-SBF comprising 19 policies[1] and their associated 67 technical[2] and management standards[3] and 72 Guidance Notes[4], serves as signposts to the future for our Group businesses.

These set of documents are meant to facilitate our businesses in developing roadmaps, planning actions and setting business and site-level processes/procedures, on a variety of ESG topics. They are aligned to documented international standards and benchmarked global best practices through a comprehensive process of peer review and third-party assurance.

 The range of topics being addressed through these standards encompass all facets of EHS stewardship, as well as associated enablers such as supplier sustainability, due diligence, and impact assessments among others.

They are made available to all Group employees through the internal portal, readily accessible through a chatbot.

Our Group Policies are available in public domain on our Group Sustain-ability website at: https://sustainability.adityabirla.com

Assuring Our Progress

Our compliance and assurance programme is designed to ensure that business management teams can prove to themselves and their governance committees that they meet the requirements of both local law and the ABG-SBF.

The self-assessment mechanism places responsibility on our site managers to engage with our standards and to drive the changes required to place our operations on a sustainable path. This promotes transparency in our systems, and drives sharing of best practices and learnings across the Group. Gaps found by the site management in their own systems are built into an improvement roadmap with appropriate action plans.

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[1] A Policy is a statement of intent that is implemented to guide decisions and achieve specific outcomes for each of the sustainability focus areas. It assesses the current situation, sets objectives to be achieved through implementation of its supporting documents.

[2] A Technical Standard applies to the implementation of a single policy or focus area. It provides common, non-sectoral processes and requirements to be fulfilled by all Aditya Birla Group companies. Implementation of a Technical Standard must ensure that the objectives and actions in the respective Policy and Position Statement are achieved in a consistent manner across the Group

[3] A Management Standard is an overarching document that is applicable to all sustainability policies.

[4] A Guidance Note accompanies either a Management Standard or a Technical Standard. It may be applicable to more than one Standard. A Guidance Note provides recommended detailed support for meeting particular requirements of a Standard.

3. Enablers

Going forward, we are working towards the performance targets in Group businesses across all locations through well-defined action plans. Select key enablers form the backbone of all our action plans are: (i) deploying right technologies including processes in addition to use of digital tools; (ii) having the right people for the right job through enhanced learning and development; (iii) ensuring right systems are in place; (iv) providing and maintaining right assets and equipment; and (v) drawing the right partnerships and platforms that create synergies.

Digitalisation

Given the breadth of sectors and geographies within the Group, we have harnessed the power of Information Technology (IT) to help assess our systems and processes and to embed our Framework across our businesses. Implementation assurance is powered by an IT-enabled evidence-based approach, ensuring rigour and consistency to our business management systems. All businesses are now self-assessing and reporting their progress. Employees worldwide provide online details of the systems that they have in place and the resulting performance through photographs, documents and registers uploaded as part of Self-Assessment Questionnaires (SAQs) auditable in ENABLON.

Further, the larger Data Lake in which we collate Group-wide data is shaping the understanding of our current ESG reporting and rating performance and providing a vehicle through which we can make informed and meaningful decisions.

We have been using various modules of ENABLON for:
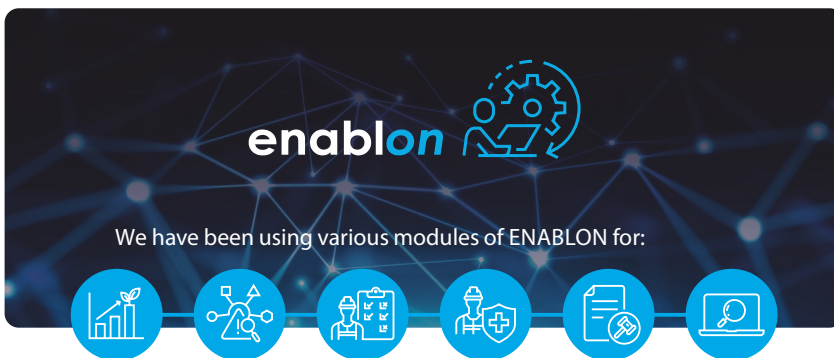
Please refer to the chapter on Digital for Sustain-ability in this report for more details.

Process and Product Innovative Technologies

This is facilitated by partnering with Group Innovation who not only build internal capabilities and craft solutions identifying future business prospects but also leverage outside-in partners in solving environmental and safety challenges. Further, synergy with Aditya Birla Group's corporate Research and Development (R&D) centre, Aditya Birla Science and Technology Company (ABSTC) facilitates our businesses in technological advancements in select areas of interest.

Please refer to Page 73 of ABG ESG Performance 2021 Report for more details.

Enhancing Learning and Development

Central to our approach is education and learning. Train-the-trainer programmes embed the system ensuring that it is integrated into our processes. Further, through 600+ sustainability online courses spread across multiple languages on the Gyanodaya Virtual Campus (GVC), we build capacity and competency of colleagues to meet knowledge gaps. By empowering our employees and giving them the chance to train, learn, understand and apply improvement techniques, we aim for everyone involved in our efforts to reach higher standards of performance.

Policy Advocacy

A multi-pronged approach is crucial to addressing complex and interrelated issues of sustainability. Moving stakeholders from being seen as partners for operational programme delivery to providers of counsel who can influence collective bargaining on issues material to a business sector/geography requires broadening of the lens from which we view our external engagements.

This, we do by consciously building the right relationships with the right multidisciplinary network of individuals, academia and organisations who can understand and raise awareness on the trends and the science behind them, better than we do. We accordingly seek membership of organisations that shape the national and global sustainability agenda.

4. Governance Systems

Good governance is integral to our ability to sustain. Our holistic structure engages senior management as well as those on the ground through Group, Business and Site-level Cross Functional Teams (CFT) explained below. This ensures that all colleagues are driving change in a uniform way. In summary, governance at ABG encompasses (i) ensuring ethical and transparent business conduct, (ii) addressing sustain-ability risks and opportunities, and (iii) aligning with robust disclosure requirements under the aegis of Group leadership.

GROUP LEVEL

Group Sustain-ability Cell

Through ABG-SBF based SAQs and a fool-proof Assurance process, ABG businesses deliver on the committed ESG targets through monitored action plans; explore and leverage advanced technology; take stewardship positions in the kind of products and services they make and deliver through circularity; extend the circle of ESG by bringing in suppliers, customers and consumers, and most importantly, collaborate with all stakeholders for shared prosperity and growth, throughout ABG.

Apex Councils

The internal Councils oversee performance and the day-to-day progress towards international standards and best practice. They review and approve the budgets for investments needed to progress.

BUSINESS LEVEL

Business Sustain-ability Committees

All our major businesses have Sustain-ability Committees led by their Business Leader and CXOs. They integrate the ABG-SBF across their operations and drive business-wide initiatives.

SITE LEVEL

Site Manager-led Sustain-ability & Safety Committees

Site-level committees ensure on-ground implementation of ABG-SBF through SAQs and action plan completion. The Committee also drives training and development needs in collaboration with the Group Sustain-ability Cell.

Please refer to the dedicated chapter on Governance in this report for more details.

5. Outreach and Engagement

Outreach on sustainability is the pivot on which realising the Chairman's sustainability vision rests. We strengthen the Group's competitive advantage through a vigorous and proactive two-way communication on all aspects of sustainability which involves interactions on mega trends; in-depth partnerships with business and sectoral associations, as well as bilateral and multilateral organisations, investors and regulators, ESG rating agencies and importantly with media and civil society organisations. In doing so, we strive to raise the Group's profile and enhance its image.

Alongside, our portfolio of services includes internal communications, internal sustainability portal and external website, publications, supporting investor relations and building up the Group's archives.

Please refer to page 11 of Group ESG 2021 Report and consequent section on C4S of this report for detailed information on this topic.

What's Next?

Going ahead, our focus will extend to better incorporate past experiences and learnings around:

'How We Make' Sharpen our goals and enhance our EHS performance in our manufacturing locations.	**'What We Make'** Designing and delivering sustainable products by understanding customer expectations.	**'What and How We Source'** Augmenting sourcing strategies with climate impacts in mind.	**'Where We Make'** Connecting availability of resources with climate change uncertainties due to natural calamities.	**'How We Finance'** Assessing investment gaps and financing projects with structured approaches.

And to navigate the future transformation effectively, we are developing key **'Ways of Working,'** shaping our sustain-ability journey through the adoption of transformation initiatives, digital innovation, sustain-ability communication and people development.

Transform for Sustain-ability (T4S)

Instilling a mindset for sustainability that is aligned with our core value of integrity, T4S is a strategic approach that propels action on sustainability commitments at every level across the Group. It also aids in proactively identifying and piloting solutions for emerging risks and opportunities that could impact our sustain-ability. Select initiatives illustrate the diverse facets of this approach in action:

Physical Climate Risk Assessment Study For ABG Assets	**A Circularity Framework For Businesses**	**Sustainable Sourcing Transformation**	**Enhancing 'Preventive' Approach and 'Digitalisation' for Occupational Health**
Around 250 site locations and some key suppliers have a top-level understanding of the climate change-related risk exposure to the assets.	To take a circular design approach in our portfolios going forward. In this, first-of-its-kind assessment, we identified circular business opportunities for the textile value chain.	Where a Group-wide framework comprising the Supplier Code of Conduct (SCoC) and processes where sustainability aspects such as EHS, human rights, and anti-corruption & bribery are embedded.	Pioneering integrated health programmes that use data-driven strategies to reduce workplace health risks and reinforce our dedication to employee well-being.

Digital for Sustain-ability (D4S)

Leveraging technology for sustainability, we aim to amplify our efforts and adapt to evolving ESG landscapes through innovative tech-based solutions. Our 'Digital for Sustain-ability' approach integrates the realms of digital and sustainability. In a pioneering initiative, Hindalco, UltraTech, ABFRL, and Grasim are actively participating in the ESG 360 Accelerator Digital Project, utilising an ESG Data Lake and analytics for comprehensive tracking and reporting of performance.

Simultaneously, we embrace digital tools such as drones, digital twins, and visually enhanced analytics to augment the intelligence of our workplaces, making them not only smarter but also safer and more sustainable. Through digital platforms, we are improving our environmental performance by strategically reducing GHG emissions through intelligent logistics and enhancing circularity through efficient waste exchanges.

Details on this project is available in the dedicated chapter on this topic.

Communication for Sustain-ability (C4S)

Over the years, we have been communicating on and for sustainability in various forms and formats with external and internal stakeholders. We aim to further enhance the Group-wide internal communication and stay updated on trends while also deepening our engagement for higher impact.

Through our newly launched quarterly C4S platform, we bring Group leaders together to interact with global thought leaders, share best practices, and discuss solutions and enablers towards embedding sustainability into our business strategies. The interaction serves as a sounding board to enrich leadership knowledge in our ability to sustain. Three unique sessions conducted in April, July and November 2023 were well received including ones done in partnership with the World Business Council for Sustainable Development (WBCSD) and the Global Reporting Initiative (GRI) leadership.

The select events that continue as big-ticket sustainability outreach include:

Launched in September 2015. Group's Flagship Outreach Programme, one of the biggest ways in which we interact with subject matter experts both within and beyond the Group to help our businesses evaluate risks, opportunities, and understand external macro-trends.

Launched in November 2022. A bi-annual sustainability strategy initiative to create a unique platform for an exclusive cohort of Group-wide Sustain-ability and EHS practitioners to lean in, brainstorm and focus on 'the HOW' and 'the WHEN' to co-create a 'One Sustain-ability Strategy' in a collaborative setting.

Launched in June 2020. It is a bouquet of interactive online talks and panel discussions with global experts, thought leaders and sustainability practitioners (internal and external) with learning and sharing opportunities for our colleagues worldwide. As of FY23, 44 captivating sessions were conducted on a range of ESG topics.

People for Sustain-ability (P4S)

Our people are the backbone of our Sustain-ability journey. This is why we are prioritising recruiting and training individuals on sustainability. This is a crucial step to accomplish our goal of instilling a 'sustainability-oriented mindset' in every aspect of our employees' behaviour, thinking, design, operations, and communication. In this endeavour, we have embarked on a Group-wide project towards institutionalising a P4S L&D Framework. This provides guidance to business, leaders and line managers on building the right level of sustainability awareness, knowledge and skills, among teams, based on 'employee archetypes' across the entire ABG management strata.

GOVERNANCE

Our core values - Integrity, Commitment, Passion, Seamlessness and Speed - form the foundation of our corporate governance ethos.

Aditya Birla Group transcends traditional corporate paradigms by seamlessly integrating exemplary ESG performance, legality and profitability for sustained success. Our meticulous strategies navigate short-term uncertainties while consistently enhancing stakeholder value.

Fostering fairness and transparency, Group businesses adhere to a robust Code of Conduct, aligning organisational policies within a cohesive ethical framework. Our core values - Integrity, Commitment, Passion, Seamlessness and Speed - form the foundation of our corporate governance ethos.

Our commitment extends beyond internal structures, encompassing extensive information disclosure for investor benefit. Regular engagement with investors and proxy advisors reflects our dedication, while collaborative efforts with regulators underscore our commitment to fortifying corporate governance practices.

In pursuit of our long-term sustainability vision of becoming the leading Indian conglomerate for sustainable business practices across its global operations, we have institutionalised the robust Aditya Birla Group Sustainable Business Framework (ABG-SBF). This framework, augmented by digitalisation and new-age technologies, operates within a three-tiered governance system[1] – Group, Business, and Unit Level – ensuring accelerated ESG-bility implementation and fortifying our resilience for sustained success.

[1] For more information about the three-tiered governance system, please refer to page 15 of ABG's ESG Performance Report 2021.

Transparency & Disclosures

ABG is guided by an unwavering belief in the power of full and fair disclosure. This not only fortifies governance but also bestows undeniable credibility.

All our listed companies like Grasim Industries Limited, Hindalco Industries Limited, Aditya Birla Capital Limited, UltraTech Cement and Aditya Birla Fashion and Retail Limited, Century Textiles publish detailed annual reports. Select listed Group businesses also report their ESG performance, via Business Responsibility and Sustainability Report (BRSR) as part of their annual financial reporting. All these reports and documents can be readily accessed in the public domain:

https://www.adityabirla.com/investors

https://sustainability.adityabirla.com/

Going a step further, businesses like Grasim Industries and Hindalco have opted for an integrated reporting approach based on the International Integrated Reporting Framework. These reports provide insight into their value-creation efforts through six capitals – Financial, Manufactured, Human, Natural, Intellectual, and Social & Relationship.

Additionally, almost all our listed companies voluntarily release detailed disclosures on their sustain-ability performance via their regular/annual Sustain-ability reports made in accordance with international GRI Standards.

Streamlining Sustain-ability Reporting

While most Group companies are industry leaders in reporting their sustainability ambitions and performance, the Group faced a challenge in standardising sustainability reporting across its various companies. The existing method relied on manual data collection and analysis, leading to time-consuming processes, resource intensiveness, and a potential for errors.

The maturity of digitisation and myriad data sources across the companies posed a daunting challenge to source and prepare data for the Business Responsibility and Sustainability Reports (BRSR).

To address these challenges, the Group Data & Analytics (GDNA) team proposed to leverage modern data management infrastructure that includes a Group Sustain-ability Data Lake (GS-DL) and flexible data processing pattern. The team is setting up this infrastructure within the Group IT environment that is managed, controlled and governed by Birla Management Centre Services Pvt. Ltd. (BMCSPL). The solution will enable the creation of data pipelines from different source systems without requiring immediate changes to existing IT infrastructure.

The implementation of this solution offers several benefits like:

1 Flexibility to evolve with future digitisation initiatives

2 Data confidentiality and security through storing and processing of data within the Group IT environment

3 Compartmentalised data storage and access for each Group company

4 Alignment of the Group with emerging standards, ensuring transparency in the face of evolving regulations

This strategic move towards a more efficient, secure, and flexible sustainability reporting system is being operationalised through the ABG ESG 360 Accelerator Digital Project. For more details about this project, please refer to the 'Digital for Sustain-ability' section of this report.

Investor Relations

The Investor Relations (IR) function plays an important role in upholding governance standards across the Group and its various businesses. Additionally, it is also instrumental in influencing the adoption of sustainability best practices, inculcating the discipline of free and fair reporting, and improving ESG scores and ranking.

Here is a snapshot of how the Group's IR function is promoting governance:

- The Group has established an exclusive 'Investor Relations' section on its corporate website, https://www.adityabirla.com/investors . This serves as a comprehensive resource, furnishing shareholders with essential updates, information, and services to ensure their engagement and informed decision-making.

- Direct interaction with shareholders is a key facet of the IR function, facilitated through dedicated communication. This direct channel not only streamlines the receipt of investor inquiries, concerns, and complaints but also ensures a prompt and efficient response mechanism.

- The Group actively engages with institutional investors through proactive communication, fostering strong relationships beyond routine updates. Regular one-on-one interactions, events like 'ABG Day' and 'Capital Markets Day,' and non-deal roadshows enhance the IR function's role in promoting governance. These initiatives facilitate direct engagement between top management, including the Chairman and CXOs, and investors, reinforcing the Group's commitment to transparency, accountability and strategic communication.

- The Annual General Meeting serves as a crucial forum where key updates, achievements and future strategies are shared with shareholders. Quarterly performance communication, including press release, financial statements, detailed presentations and post-result calls provide timely updates on the Group's financial health and future direction.

Legal and Compliance

We uphold the highest standards of fairness, accountability, ethics and probity in all our actions. The legal and compliance function plays a pivotal role in our adherence to these standards. It encompasses several critical aspects including policy making, digitalisation of systems, ethical compliance and risk management frameworks.

Comprehensive Approach to Business Integrity

Grasim Legal and Compliance Division (GLCD)

The GLCD plays a pivotal role in supporting diverse business functions, particularly in addressing ESG inquiries and offering strategic legal support for sustainability goals:

- Their approach to tracking, discussing, and implementing new regulations through the digital Regulatory Compliance Module (RCM) is noteworthy.

- Demonstrating a commitment to effective risk management, GLCD actively conducts legal audits to monitor compliance. These are meticulously mapped using the COSO (Committee of Sponsoring Organizations) framework for risk management.

- Beyond crafting ethical policies and conducting workshops on data privacy, GLCD focusses on essential ethical compliances such as anti-bribery, anti-corruption, anti-money laundering, anti-trust, and sanctions. Notably, GLCD has introduced certified training courses on various aspects of ethical compliance and is currently developing e-module training sessions scheduled for release in FY24.
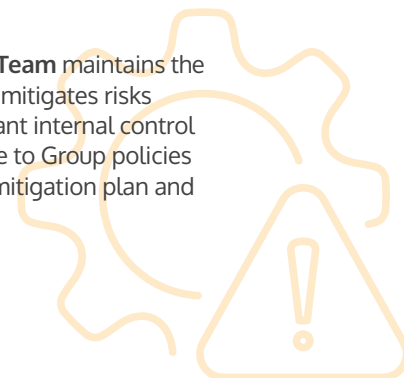
Risk Management

A diversified conglomerate is bound to have a diverse risk portfolio. We are driven by the principle of being 'Predictive, Proactive and Prepared' that entails developing an efficient process to manage risks and crises while ensuring business continuity.

We believe in future-proofing our businesses and be adaptable and agile in using foresight to ensure that our business models, operations, acquisitions and projects are not locked into unsustainable paths. We aim to maintain a focussed balance between the short-term and long-term business success in financial and strategic processes.

To streamline the risk identification and mitigation process, we have institutionalised various Group-level functions and cells:

- The **Corporate Strategy and Business Development Function** continuously tracks the business environment for Aditya Birla Group's existing businesses and recommends new directions through evaluation of deal creation opportunities, analysis of project proposals, etc.

- The **Group Legal and Compliance Team** has initiated the mapping of the COSO risk management framework - an ESG strategy essential. The team has also proactively instituted Privacy by Design (PbD) into our new applications ensuring that we are always compliant with the privacy laws and regulations.

- The **Corporate Economics Cell (CEC)** is a research-based advisory that provides analytical inputs and economic information to different decision-makers at the corporate and business level. It also provides insights on risk management relating to economic variables such as currency and commodity prices.

- The **Consumer Insights and Brand Development Cell's** mandate is to accelerate revenue growth profitably for the Group businesses, and product and service innovation by enhancing their insight into their consumers, and their ability to develop strong brands.

- The **Group Corporate Management Audit Team** maintains the highest levels of corporate governance and mitigates risks across the Group through robust, zero-tolerant internal control systems, cost reduction methods, adherence to Group policies and values, effective MIS, adequacy of risk mitigation plan and statutory compliance.

The Legal and Compliance Synergy
Novelis

The Legal and Compliance teams at Novelis continued to play a pivotal role in supporting various business functions during FY23. The legal support involved addressing ESG inquiries to achieve sustainability goals, and mitigating the risk of greenwashing allegations.

- Compliance efforts focused on implementing new legal requirements, building governance structures, and adhering to acts like the German Supply Chain Due Diligence Act and the U.S. Uyghur Forced Labor Prevention Act.

- The teams ensured transparency in supply chains and addressed non-financial reporting obligations, anticipating the impact of the Corporate Sustainability Reporting Directive.

- In early FY24, a dedicated ESG resource was established to coordinate cross-functional projects, implement governance frameworks, and monitor global ESG developments.

Championing Proactive Risk Management

Aditya Birla Capital Ltd. (ABCL)

ABCL has established a robust risk management framework to proactively identify, anticipate, and address potential risks across its businesses, ensuring good governance, strategic decision-making, and regulatory compliance.

The key elements of ABCL's Risk Management Approach include:

Governance

- A comprehensive governance framework wherein the Board of Directors is supported by Board-level and Management Committees.

- Implementation of a 3-line of defence model for risk oversight.

Enterprise Risk Management

- Definition of risk tolerance as part of risk appetite statements.

- Implementation of Internal Capital Adequacy Assessment Process (ICAAP) and stress testing to ensure capital adequacy.

Underwriting/Credit Risk

- Focus on cash flow analysis and security while underwriting wholesale lending proposals.

- SME, retail and digital lending are underwritten using robust programmes, behavioural scorecards and data analytics.

- Predictive data analytics, fraud bureau alerts, and propensity AI/ML models support insurance underwriting.

Liquidity and Market Risks

- Continuous oversight on assets-liabilities mismatches and liquidity indicators to ensure diversification and adequate liquidity.

- Management of interest rate risks through duration management, spread re-sets and forward rate agreements.

Operational Risk

- Implementation of risk control self-assessments, key risk indicators monitoring, and root cause analysis of risk incidents.

- Pre-launch Products Risk, Vendor Risk and Business Continuity assessments and monitoring processes also in place.

- Machine Learning-based fraud-detection models help manage fraud risk.

Legal & Compliance Risk

- Zero-tolerance approach to non-compliance of legal & regulatory guidelines.

- Active tracking of regulatory changes for compliance.

Information and Cyber Security Risk

- Implementation of strong information security controls/tools.

- Monitoring of triggers and data protection environment.

Reputational Risk

- Protection and enhancement of reputation through active social media monitoring.

- Proactive management of customer complaints and monitoring of sales conduct risks and investor complaints.

Climate & Environmental Risks

- Integration of ESG considerations into the risk management framework as part of the commitment to sustainable practices.

Restoring Data Privacy and Enhancing Cybersecurity

As we emphasise digitalisation to enhance sustainability, we recognise the imperative of securing and fortifying our information ecosystem. Cybersecurity has emerged as a key risk in recent years. Aditya Birla Group prioritises cybersecurity in its digital journey to safeguard business processes, assets, and data from evolving cyber threats

Our defence strategy addresses Inside-Out, Outside-In, and Inside-In attacks. The information security policy empowers businesses to execute a robust cybersecurity plan, focussing on **Monitoring, Detection, Response, Recovery and Prevention** with minimal impact.

The Central Group Information Security function guides businesses in managing their cybersecurity posture effectively.

Some key initiatives within the Group Cybersecurity Strategy include:

Monitor

- The recently launched AI and ML enabled **Cyber Defence and Command Centre (CDCC)** will actively monitor and minimise security incidents and breaches in real-time.

Detect

- **Dark Web Monitoring** detects breaches and data leakages while Groupwide security assessments practices like Red Team Assessment and Penetration Testing help identify vulnerabilities across businesses.

Prevent

- Technologies such as **Web Application Firewalls and Next-gen Endpoint Detection and Response (EDR)** protect data centres and endpoints from threats.

- **Zero-Trust Network Security** ensures secure access to applications from any location.

- The **Groupwide CISO Council** shares security trends and drives a shared agenda.

Respond and Recover

- **Brand Protection Practice** identifies malicious activities for our key brands, and the **Security Risk and Maturity Assessment Platform** holistically measures security maturity of Group businesses.

- **Ransomware Protected Backup Technologies** and a **Backup Snapshot Framework** distribute data to counter cyber-attacks.

- A business-wise **Comprehensive Cyber Insurance** has been institutionalised for all our critical assets to transfer any losses against such attacks.

Good governance practices, coupled with prompt and fair dispute resolution, go a long way in strengthening the 'licence to operate' that we have from the society at large. In the next section, we will be covering in detail our endeavours towards protecting, enhancing and enriching the lives of our community members - including our employees and the supply chain partners.
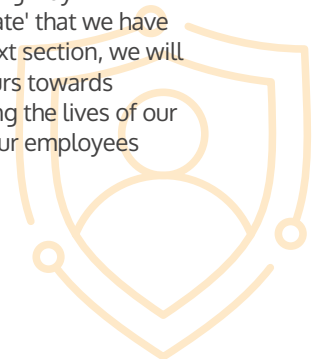
DIGITAL FOR SUSTAIN-ABILITY
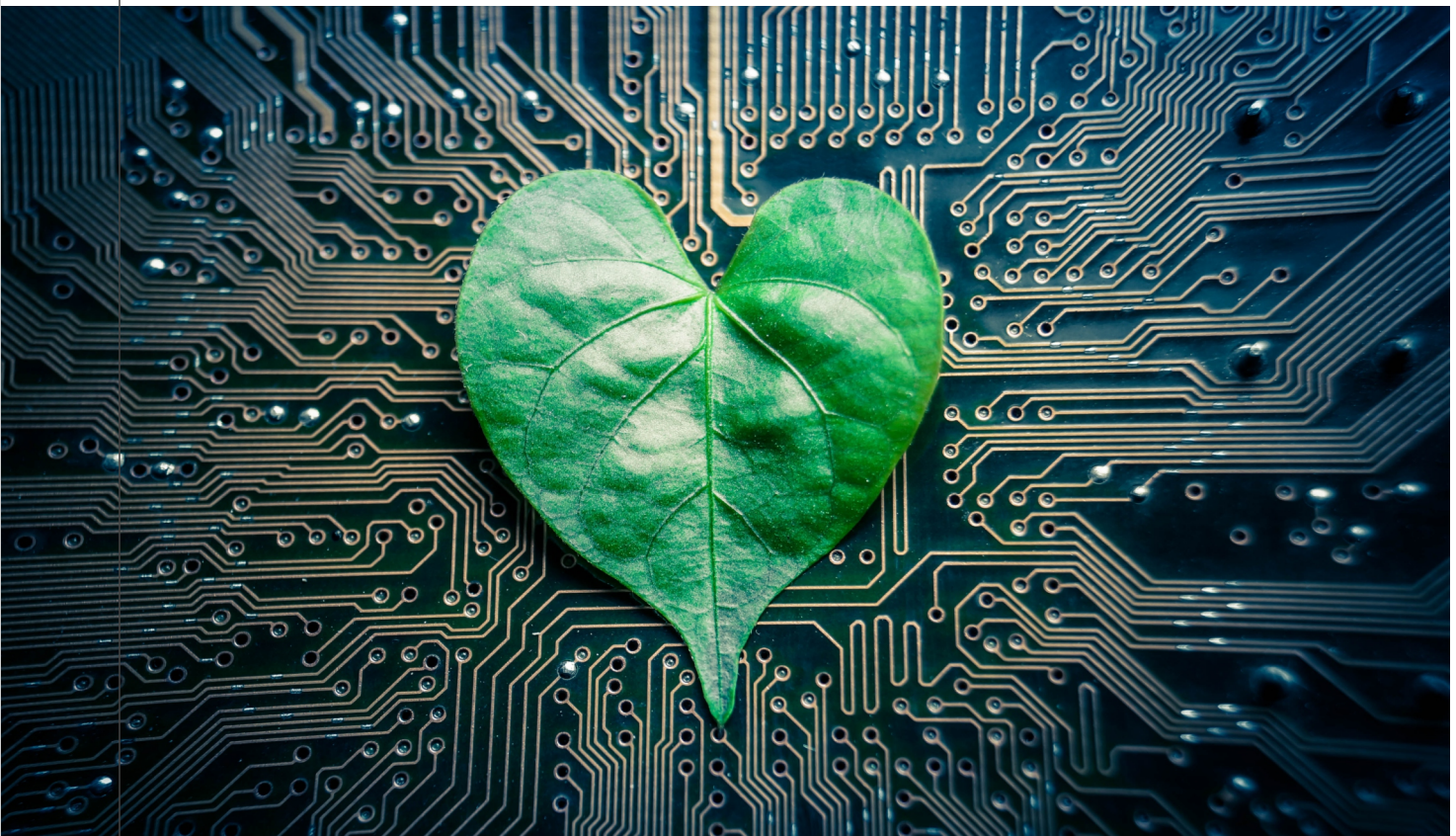
Achieving ambitious sustainability objectives hinges on robust adoption of digitalisation. While the importance of meeting sustain-ability goals is recognised, the vital role played by digital technology in augmenting and accelerating sustain-ability cannot be overstated.

Be it in monitoring progress, optimising resource use, mitigating emissions or fostering a circular economy, as sustainability and digitalisation converge, failure to capitalise on these connections certainly result in missed opportunities.

The intersection of sustainability and digitalisation is an imperative path to navigate for businesses aiming to drive positive impact, aligned with stakeholder expectations, and securing value.

Thus, the strategic use of information technology is pivotal in aligning our diverse sectors and global reach. At Aditya Birla Group, we refer to it as 'Digital for Sustain-ability.' Digital technologies assess and monitor crucial environmental indicators and facilitate in optimising resource use, fostering decarbonisation, and promoting a circular economy. This foundation supports not only overall decision-making but specifically enhances environmental or 'E' aspects.

The 'S' and 'G' in ESG are equally vital, propelling positive social impact and bolstering governance practices within organisations.

Leveraging data-driven insights helps address social issues, foster diversity and inclusion, and contribute to societal well-being. It also facilitates transparent governance practices, ensuring ethical decision-making,

regulatory compliance, and accountability.

Through digitalisation, we maximise the momentum on our ESG-bility by streamlining aspects like monitoring, management and governance.

A key aspect here is establishing a data-powered platform that consolidates ESG data from diverse sources, for effective decision-making. Harnessing real-time dashboards, MIS automation, and trend analysis, it offers hyper control over processes often remotely.

Centralising all sustainability metrics, it enables enhanced data accuracy, accelerates comprehensive analysis and facilitates timely, well-informed decisions for future planning of initiatives. This strengthens our ability to swiftly course correct or amplify success of our initiatives as needed.

ENABLON:
Expanding the Digital Frontier

We seamlessly integrated our framework across the organisation, by adopting the ENABLON data management system. This system ensures compliance with local regulations, adherence to international standards, and benchmarks performance against global best practices. **With over 18,500 licenses across 178 manufacturing sites, 35 retail clusters, and over 700 offices, Aditya Birla Group's deployment of ENABLON over eight years has enabled a transformative shift in the data management approach..** With the inclusion of new features, we shift the needle on our ability to sustain operational excellence by enhancing transparency and autonomy in data extraction, simplifying access to save time and improve security, enhancing integration capabilities for seamless data flow and reducing risks through e-permit tools.

Processing rapidly flowing datasets, culling out key data-based insights, and identifying opportunities for enhanced collaborations, digitalisation amplifies sustainable outcomes.

Tech-Enabled Sustainable Solutions

Aditya Birla Group is dedicated to sustainable business practices and prioritises the use of automation and digital transformations. We follow three fundamental systemic shifts to implement sustainable digital transformation:

Positioning
We aim to align digital technology with sustainability

Minimising Impact
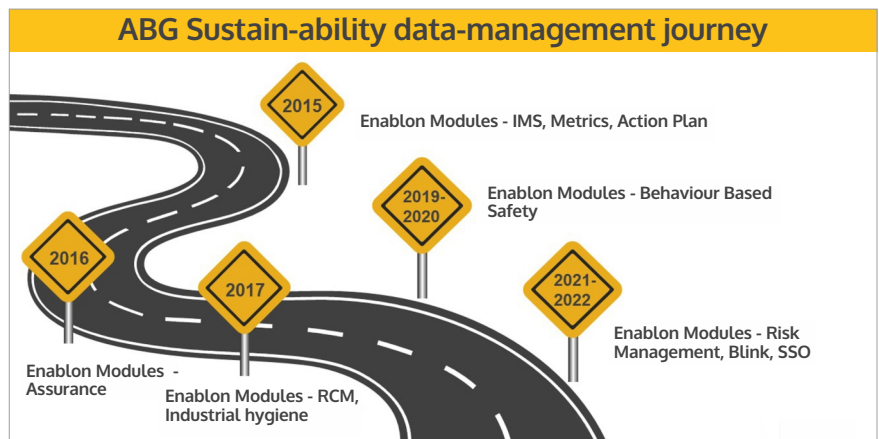We are committed to 'sustainable digitalisation' that mitigates environmental impacts

Stepping Up Innovation
We strive to enhance digital innovation in the areas of Environmental, Social, and Governance (ESG)

ABG Sustain-ability data-management journey

2015 — Enablon Modules - IMS, Metrics, Action Plan
2019-2020 — Enablon Modules - Behaviour Based Safety
2021-2022 — Enablon Modules - Risk Management, Blink, SSO
2016 — Enablon Modules - Assurance
2017 — Enablon Modules - RCM, Industrial hygiene

Strengthening Capabilities Through ENABLON

1 Blink Module

ENABLON Blink, a new data service, facilitates the generation of data from numerous sources while combining it with complete autonomy. Enables multiple applications to access ENABLON data, thus breaking down data silos and raising the shared value of that data. Built on the industry standard OData v4 protocol (Open Data Protocol), it allows access to ENABLON database for extracting insights via modern analytics tools such as Power BI, Tableau etc., transfer it to programmes like Excel. A key advantage lies in providing full autonomy for data extraction to BI tools/data warehouses.

2 Single Sign-On (SSO)

ENABLON's SSO feature seamlessly enables users to access multiple interconnected systems with a single set of credentials, enhancing the overall user experience. This inclusion enhances efficiency significantly by saving time, eliminating the need for repetitive logins, and strengthening security measures. As a result, ENABLON SSO not only streamlines operational efficiency but also enhances access capabilities to essential sustainability data.

3 Integration Capabilities With Other Tools

Seamless information flow within a network environment is essential for efficient business operation. This sharing involves facilitating user access for easier information retrieval and creating unified data entry points. From an information system perspective, leveraging existing data, modifying databases for reporting, and managing data transfers are critical.

There are multiple potential sources, data transfers, and data manipulations in such situations, and there is no one best method of data integration. Streamlining data exchange between application modules and popular third-party systems is feasible through standard connections, but effective integration depends on the ability to adapt to various external systems. The following integration capabilities in ENABLON make it easier for all types of data to be exchanged, transformed, and displayed while also meeting security, performance, consistency, and data integrity criteria.

ENABLON offers versatile integration tools, including:

SAP
SAP Connector
Uses SAP XI/PI integration technology, as well as SAP.NET Connectors to communicate with ERP solutions

ODBC
ODBC Connector
Reads data within any third-party databases with an ODBC driver, facilitates easy database integration using SQL queries

JSON
JSON Services
A communication foundation for mobile devices, it is more scalable

XML RPC
XML RPC
Efficiently exchanges data with third-party databases and software, such as Oracle, BusinessObjects, PeopleSoft, SAP, etc., communicating through custom HTTP requests for remote processes

4 E-Vision - An e-permit tool

An electronic work permitting system significantly improves permitting procedures by eliminating gaps such as incomplete permits, incorrectly completed permits, and inadequate identification of risks and/or controls on the permits etc. that can occur at actual sites. When compared to paper permits, it also speeds up the resolution of deficiencies by necessitating responses in specific permit fields, ensuring no permit is issued until all requirements are met. Advantages of the E-Vision e-permit tool include leveraging an existing platform, improving risk assessment and control, enhancing compliance and accountability, improving efficiency in issuing work permits, improving management of qualified permit issuers, cost savings, and streamlining the record management.

Strengthening Sustain-ability Through ENABLON

We have a range of comprehensive digital modules that empower sustainable practices and risk management at Aditya Birla Group. From tracking performance metrics aligned with global standards to behaviour-based safety observations and incident management with TapRooT®, each module plays a crucial role in driving sustainable practices across the Group.

Performance Metrics Module

Behaviour-based Safety Observation Module

**Incident Management Module**

Industrial Hygiene Module

**Regulatory Compliance Management Module**

Enterprise Risk Management Module

Additionally, the Industrial Hygiene module addresses occupational health risks, while Regulatory Compliance Management ensures adherence to regulations. Our Enterprise Risk Management module fortifies resource allocation and risk governance, connecting risks with regulatory requirements and performance indicators across our operations in India, Thailand, and Indonesia.
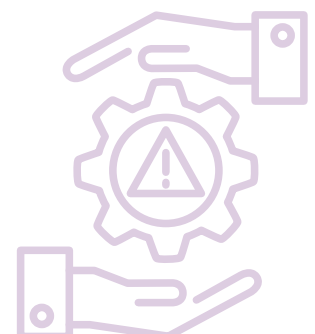
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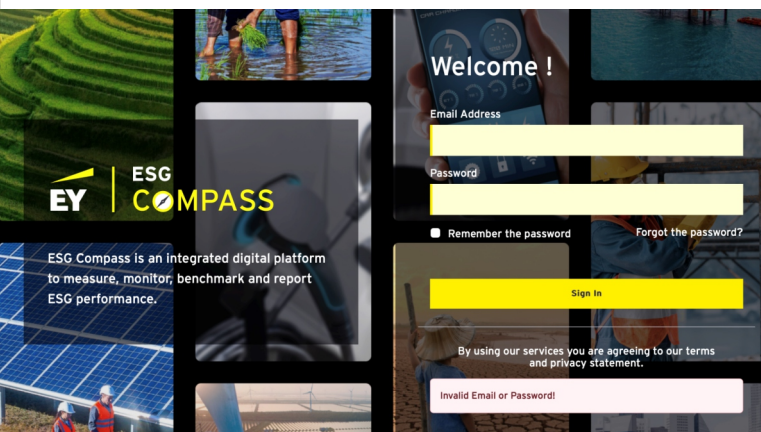
In response to the Chairman's call for accelerating ESG, the Group embarked upon a unique project in FY23. In partnership with EY, we are developing an integrated digital platform that serves as a single-window access and analytics dashboard of ESG information of participating Aditya Birla Group businesses in their ESG performance monitoring, benchmarking, rating improvement and reporting.

The project is built on a unique IT architecture connectivity that bridges each ESG KPI from individual data sources for each business to the Group Sustain-ability Data Lake (GS-DL).

In Phase 1, the platform was rolled out at Hindalco and UltraTech Cement, while in the second phase, it was cascaded to ABFRL and Grasim.

Here is a snapshot of the project outcomes:

Objective	Business Benefits	Outcomes
Streamline ESG data management and enhance data governance	• Single and automated source of key ESG Data (integrated through GS-DL) • Improved processes, data governance and internal controls • Minimised manual time and efforts in data collection and consolidation • Consistent measurement and timeliness • Improved traceability of data for future audit purposes • Near-to-real-time automated dashboards for performance monitoring	Single source of key ESG data with enhanced data governance Minimised manual time and efforts
Support ESG Rating Improvement	• ESG rating report analysis to identify disclosure & performance improvements • Enhanced ESG disclosures aligned with ESG rating parameters - through ESG Factsheet • ESG rating improvement action tracker workflow - with responsibility, timeline & regular notifications • ESG ratings IQ - peer benchmarking • ESG rating simulation model	Improved ESG rating performance Sharper ESG Communication: Internal and External
Automate ESG Reporting	• Digitisation and automation of annual Business Responsibility and Sustainability Reporting (BRSR) (with automated Word and XBRL template) • BRSR maturity assessment tool	Faster and more accurate reporting, and peer insights
Enhance ESG Benchmarking	• Through BRSR, DJSI, MSCI, Governance, SASB	External intelligence

Circularity Through Digital Platform

Aditya Birla Group is actively implementing the concept of the 4Rs of sustain-ability - Reduce, Reuse, Recycle, and Repurpose. To enhance the impactful implementation of these principles, we are developing a digital platform that offers visibility into the availability of waste at various sites. This waste can be repurposed as raw material or fuel by other businesses, aligning with circular economy practices. The initiative also seeks to enhance transparency in waste management and optimise logistics costs.

Enhancing Employee Safety Through VR and Analytics

Employees' Health & Safety are the paramount priority across all our businesses. To further enhance safety, the Group is investing on following digital initiatives:

Training & Capability Building

Employees and contract workers undergo diverse safety training, covering workplace and home safety. To maximise impact and enhance awareness and sensitisation among employees, these trainings are also conducted using Virtual Reality platform. This approach allows trainees to thoroughly understand safe working methodologies and experience the consequences of non-adherence to safety principles and Life Saving Rules (LSR).

Video Analytics

Leveraging existing CCTV infrastructure and portable intelligent cameras, we use video analytics to raise alerts in the event of safety violations or detection of unlikely occurrences like fires etc. This technology aids in implementing governance for employee safety and enhance asset safety with minimised adverse impacts.

Future Forward Through Digitalisation

In continuation of the future-proofing mindset, sustain-ability at Aditya Birla Group is undergoing a profound shift through the integration of digital technologies. Leveraging advanced simulations and real-time data, this future-forward approach enables the incorporation of digital innovations so we can be future-ready as we accelerate action in our priority material areas:

Decarbonisation	Water Conservation	Circularity	Supplier Management	Employee Safety
• Capitalising on new technologies like digital twins - play a vital role in promoting sustainability • Enhances systems through advanced simulations • Utilisation of data analytics to expedite decarbonisation • Identifies opportunities for curtailing emissions within diverse sectors • Facilitates vigilant monitoring and continuous tracking of emissions trends	• Data and analytics vital for managing fresh water consumption • Digital platform for water quality monitoring using sensors • Real-time visibility of water metrics to boost efficiency and effectiveness of water utilities • Pivotal for reducing operating costs and proactively addressing risks of scarcity • Address critical needs like safeguarding environmental quality	• Well-functioning digital platform aids efficient resource use • Helps reduce demand for resource-intensive primary raw materials • Addresses deficiencies in waste and recycling markets • Aids in managing transaction costs, search costs, and information asymmetries	• Digital technologies track and manage environmental implications at every stage of the supply chain • Engages third-party entities for Monitoring scope 3 emissions • Digital connectivity and data sharing enhance visibility • Real-time insights into sustainability impacts	• Digitalising safety management improves safety compliance • Effective safety management through risk assessment • Helps manage data on self-assessed questionnaire audits, incidents, and behaviour-based safety observations • Provides insights on major incidents and trends to prevent reoccurrence • Streamlines processes through informed decision-making

SOCIAL

Safety, dignity, and equity in prosperity are the cornerstones of an enriched life. At Aditya Birla Group, our businesses are safeguarding employee health and well-being, championing human rights, enabling fair access to opportunities, and empowering communities.

Ensuring Zero Harm continued to be a top priority with special emphasis on the institutionalisation of ABG Life Saving Rules, knowledge assimilation through the Compendium of Safety Best Practices, and competency building for integrated health.

Our wide-ranging CSR programmes across focus areas like healthcare, education, sustainable livelihoods and infrastructure development, continued to earn trust and inspire hope.

In this section, we also share the evolution of human rights management across the Group and the progress made in strengthening talent management and creating a sustainable supply chain.

Zero Harm

42.6%

Reduction in Lost Time Incidents
(in comparison to FY22)

1,202,822

Behaviour-Based Safety Observation Rounds - a remarkable 72% increase from FY21

In the dynamic and diverse landscape of Aditya Birla Group's operations, safety management isn't just a priority; it's a deeply ingrained value, encapsulated by the overarching vision of 'Zero Harm.' This commitment extends beyond organisational boundaries, shaping a non-negotiable safety culture across various businesses and geographies. A transformative vision, it permeates every operation by adopting a risk-based approach that focusses on proactive risk assessment, learning from incidents, and strict adherence to management and technical standards.

In the midst of the Group's expansion, a commendable milestone in our safety journey is the significant decrease in injury rates, characterised by a substantial reduction in Lost Time Incidents and a noteworthy increase in Behaviour-Based Safety Observation Rounds.

This continued progress stems from an unwavering emphasis on safety training programmes and strategic investment in cutting-edge initiatives such as the leadership safety development programme, Behaviour-Based Safety initiatives, and Process Safety Management.

In FY23, the two key aspects in our safety journey were the '10 Life Saving Rules' and the 'Compendium of Best Practices.' The Life Saving Rules represent non-negotiable protocols prioritising life and well-being, seamlessly integrated into the safety framework. And the 'Compendium of Best Practices' functions as a dynamic knowledge hub, catalysing collective learning, sharing best practices, and emerging as a reservoir of knowledge and a discussion forum for collaborative problem-solving.

Through these multiple integrated efforts, Aditya Birla Group's commitment to safety is entrenched into its operations. From proactive risk management and ongoing progress to strategic training initiatives, adherence to Life Saving Rules, and the expansive Compendium, the Group's holistic approach to safety extends beyond compliance to become a guiding principle in its journey toward sustained success.

Safety Management

Steadfast in safeguarding all its stakeholders - employees, suppliers, contractors, business partners, service providers, and the communities residing near our facilities, the safety culture at Aditya Birla Group is shaped by its leadership commitment and a robust system and processes. Through meticulous application of management and scientific principles, we systematically mitigate safety risks at every stage of our operations across geographies. Our strategy towards safety embraces a risk-based approach that involves proactive risk assessment, controlled actions to reduce risks and thorough incident analysis to prevent recurrence.

> **As we progress towards achieving Zero Harm, we equip our people with tools to identify, manage and mitigate safety risks. We aim to eradicate fatalities and reduce Lost Time Incidents by half, year-on-year.**

We have established specialised Working Groups to address critical safety risks. These working groups bring together diverse talents from various departments, pooling knowledge and innovative strategies to fortify our defences against potential hazards. This approach maximises our capacity to tackle risks and underscores the strength of collective intelligence in building a safer Group.

In our safety framework, we employ a multi-tiered safety committee approach that operates a three-tier safety organisation, including (i) a Group-Level Apex Safety Council, (ii) a Business-Level Safety Committee, and (iii) a Site-Level Safety Committee. This integrated three-tier safety model ensures the translation of Group-level standards into actionable practices, promoting safety from organisational levels to the shop floor. In addition to the Apex Safety Council, the Group is also spearheading and cascading several safety programmes and safety culture initiatives across our businesses.

Underpinning these efforts are our set of management and technical standards, providing guidance for realising the Group leadership's safety vision. Incorporating a risk-based methodology and derived from prevailing international standards, they encompass aspects such as People (knowledge, skills, abilities, attitudes, personality, and behaviour), Assets (equipment, engineering, tools, physical infrastructure, among others) and Process (policies, principles, standards and procedures).

This framework directs Group businesses in developing, enhancing, and aligning processes toward 'Zero Harm,' with the Group serving as a center of excellence, guiding leadership in strategy execution.

Safety Performance

The Group businesses measure and monitor their safety performance on both leading and lagging indicators. These indicators are contextual to their sector, geography, safety maturity and improvement programmes.

In our ongoing efforts to bolster safety measures and prevent catastrophic disasters, we have tailored Key Performance Indicators (KPIs) that focus on both process safety and occupational safety.

These KPIs shall provide valuable insights, enabling leaders to detect anomalies early, enact necessary action, and, importantly, foster a culture of process safety along with occupational safety.

Please refer to the 'Sustain-ability - the Business Driver at ABG' section of this report to know more about the policies and standards.

The continued focus of the leadership teams on the implementation of safety management standards and improvement learnings from incidents resulted in 42.6% reduction of Lost Time Injuries (in comparison to FY22).

The safety performance is represented using parameters of Lost Time Injuries (LTI), Lost Time Injury Frequency Rate (LTIFR) and Total Recordable Injury Rate (TRIR) Trend across ABG which are represented in the report.

Lost Time Incidents (LTIs)
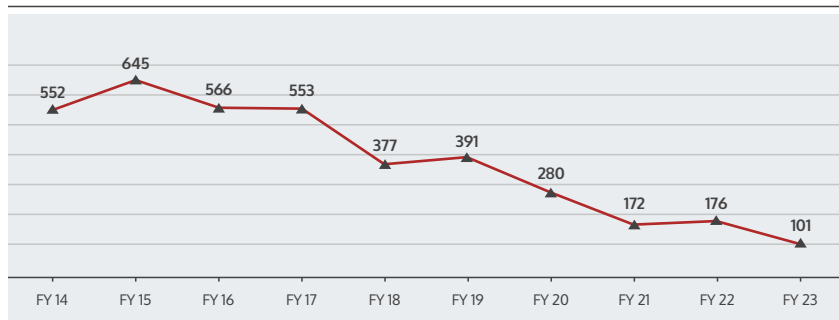
These are absolute numbers of Lost Time Injuries and do not consider the number of people employed and man-hours worked.

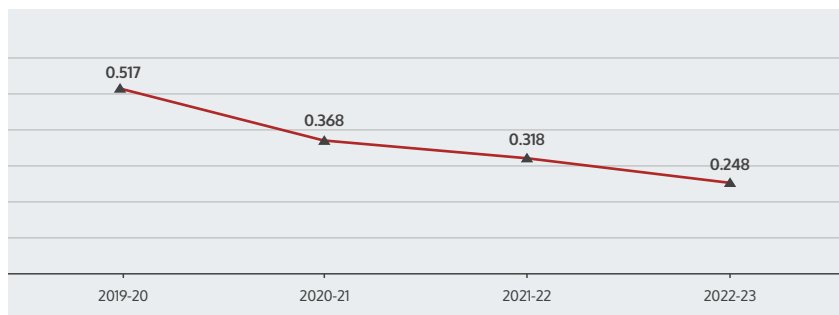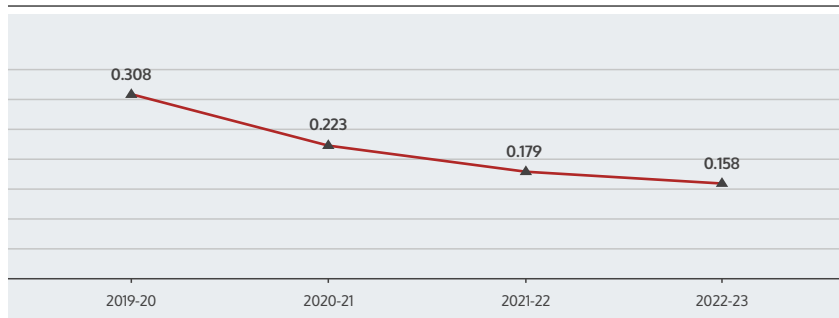## LTIFR (Lost Time Injury Frequency Rate) Trend

TRIR (Total Recordable Injury Rate) Trend

TRIR represents all natures of injuries except first aid. It represents the overall trend of injuries per 200,000 manhours worked.

A Predictive Approach To Injury Prevention

Workplace injuries have shown a consistent decline over the years; however, the trend of fatalities has plateaued. This deviation is due to the fact that the underlying causes of high-severity injuries often differ from those leading to low severity incidents. Simply reducing the frequency of injuries does not necessarily address the issue of severity.

The Group businesses thus, collaborated to undergo a paradigm shift in thinking and managing Serious Injuries and Fatalities[1] (SIF). To achieve this, formal guidelines were developed to analyse potential Serious Injuries & Fatalities (pSIF) through a collaborative programme on Serious Injury & Fatality (SIF) Prevention. The new approach focusses on identifying precursors to serious injuries, which can lead to high-potential events, including near misses and SIFs. The benefits of this shift include a heightened focus on preventing serious injuries, the cultivation of a stronger safety culture, increased engagement of frontline workers in safety, and ultimately, a reduction in potential SIFs.

The New Paradigm

Precursors

Unmitigated High-Risk Situations
High-Risk Event Combinations
High-Risk Activities

High-Potential Events

Near Misses | Accidents
Injuries | Exposures

Outcomes

Serious Injuries and Fatalities

[1]A serious injury or illness is any life-threatening injury or illness that, if not immediately addressed, is likely to lead to fatality or loss of life.

Compendium of Best Practices

In the vast landscape of the Group, the challenges encountered are as varied as the solutions devised. The essence of evolution lies in confronting and overcoming these challenges, a reality reflected across all sectors within Aditya Birla Group.

The 'Compendium of Best Practices' is a dynamic knowledge hub that embodies collaborative learning, capturing the collective wisdom of our organisation, nurturing innovation, and cross-functional insights and learnings.

Aditya Birla Group

ONLINE COMPENDIUM OF BEST SAFETY PRACTICES

Compendium As Enabler

Learning from Shared Best Practices in Safety and Environment

In the complex tapestry of our Group's operations, safety and environmental concerns are paramount. The Compendium serves as a platform for disseminating and imbibing best practices in these critical areas, fostering a collective commitment to excellence in safety protocols and environmental stewardship.

Learning from Internal and External Incident Analysis

The Compendium becomes a reservoir of knowledge derived from both internal and external incidents. By analysing and dissecting these occurrences, the Group leverages collective learning to fortify its resilience against potential challenges, thereby transforming setbacks into opportunities for growth and improvement.

Remaining Updated on Varied Sustainability Frameworks

Given the dynamic landscape of sustainability, it is imperative to stay abreast of evolving frameworks. The Compendium acts as a dynamic repository, ensuring that all business units are well-informed about the latest sustainability standards, facilitating a unified approach towards responsible and sustainable practices.

Discussion Forum for Brainstorming to Beat Challenges

The Compendium's interactive nature extends beyond mere documentation. It serves as a vibrant discussion forum where stakeholders engage in collective brainstorming sessions to strategise and innovate solutions for the diverse challenges faced by the Group's business units. This collaborative exchange not only addresses immediate concerns but also propels the organisation towards continuous improvement and growth.

In embracing the ethos of collective learning, the Compendium is emerging not just as a repository of knowledge but as a catalyst for evolution across the diverse businesses of the conglomerate. **By leveraging shared insights, best practices, and collaborative problem-solving, the Group ensures that it not only meets challenges head-on but transforms them into stepping stones for sustained success on the global stage.**

The initiatives of the Compendium bring together all solutions, initiatives and practices which yielded in positives outcomes, to help others who are facing the similar challenges. This platform serves as a common hub for readily available solutions for similar or near-similar challenges, as well as discussion forum to brainstorm for customised solutions with businesses facing similar issues.

Zero Harm Initiatives

From vision to execution, our commitment to 'Zero Harm' is reflected in transformative initiatives, shaping our organisational ethos where safety isn't just a priority but an intrinsic aspect of our operations.

10 Life Saving Rules

As industries and technologies evolve, so do the risks they bring with them. Our commitment to safety is unwavering, prompting us to revisit and refine our Life Saving Rules. **The '10 Life Saving Rules' exemplify our safety culture, outlining non-negotiable protocols that prioritise life and well-being.** This comprehensive set of 10 rules has been carefully curated, drawing insights from risk assessments, incident analyses, and global safety advancements.

To seamlessly integrate the Life Saving Rules into our safety framework, we have initiated a thorough analysis of low-severity incidents, including Behavioural Based Safety Observations, Near-Misses, First Aid, Medical Treatment, and Restricted Work Cases. Aligned with the Serious Injuries and Fatal Injury Causation Model (SIF), our approach focusses on identifying events with a potential for high consequence.

Contrary to the misconception that all low-severity incidents lead to serious outcomes, the SIF model recognises only a select few with such potential. **The 10 Life Saving Rules serve as foundational pillars,** guiding the analysis for Potential Serious Injuries and Fatalities (pSIF). This strategic direction optimises resource allocation, ensuring proactive safety measures and mitigating potential harm efficiently.

DRIVING

CONFINED SPACE

ENERGY ISOLATION

BYPASSING SAFETY CONTROLS

ELECTRICAL

ONE ABG 10 ZERO HARM

LIFE-SAVING RULES

HOT WORK

WORKING AT HEIGHT

LINE OF FIRE

WORK AUTHORISATION

SAFE MECHANICAL LIFTING

AI-based Analytics – 'Industry 4.0'

In our pursuit of safety excellence, we have harnessed AI-based analytics, gaining insights from real-time operational & workplace data feed, and vast safety incident data to focus on critical risk areas. Real-time CCTV feed analysis through VEDA (Video Enabled Data Analysis) Initiative ensures adherence to safety protocols, including PPE (Personal Protective Equipment) usage, intrusion, and workplace discipline. **This initiative has enabled uninterrupted plant operations, showcasing the effectiveness of our approach.**

Managing Key Risks through Working Groups

During the reporting period, our dedicated Working Groups comprising members from diverse fields, addressed key safety hazard groups such as "Electrical", "Confined Space", "Fall from Height", and "Asset Integrity."

This focus brought together expertise, shared knowledge and strategies, and strengthened our control measures against potential hazards.

The Safety Working Group also formulated three significant programmes, subject to thorough peer review within the same sector. This process aims to align efforts and maximise the impact of the programmes.

Incident Management

The adoption of an advanced root-cause analysis tool has been a game-changer in our incident management efforts. It has effectively addressed and mitigated past vulnerabilities that risked lives, marred our corporate reputation, and drained substantial financial resources. **This superior approach enables us to uncover underlying systemic causes, preventing major accidents such as life-altering injuries, fatalities, explosions, and fires.**

Process Safety Reporting and Metrics

This initiative is making a significant impact across the Group. It quantitatively evaluates process safety measures, enhancing informed decision-making and regulatory compliance. **Ultimately, the goal is to continually improve process safety, mitigate risks, and protect our people, assets, and the environment.**

Training Programmes

The Group invests strategically in comprehensive safety training, utilising cutting-edge technology like Virtual Reality and Augmented Reality. Our commitment is reflected through various training initiatives, educational sponsorships, and informative materials, ensuring a safe and informed workforce.

Flagship Training Programme - 'INSPIRE'

Our flagship leadership safety development programme, 'INSPIRE', offers tailored training modules to ABG employees from diverse managerial levels - spanning from one-day training sessions for senior leadership, to immersive five-day experiential training with hands-on practical exercises for executives and supervisors.

Through leadership coaching and workshops led by technical experts, we ensure that our commitment to safe work practices permeates from our leadership teams down to our site managers and colleagues. The Safety Leadership training programme has brought about significant transformation among leaders within our organisation. This led to increased awareness of safety, enhanced proficiency in risk management, improved communication skills, and the cultivation of crisis response capabilities. **153 members from the senior management, 940 mid-management leaders and 39 executives have been trained through the 'INSPIRE' programme as of March 2023.**

Behaviour-based Safety Programme

Behaviour-Based Safety (BBS) applies behavioural science principles to address real-world safety challenges. This comprehensive initiative includes a detailed methodology, training sessions, and specialised tools to gather intensive data through the dedicated BBS module on ENABLON.

Multiple businesses like Hindalco and Birla Cellulose have implemented BBS. The next phase of implementation would include other businesses such as CFI, Essel Mining and Textiles.

In FY22 and FY23, a total of 820 employees were trained in Behavioural-Based Safety Observations (BBSO) – this includes 333 participants from the Birla Opus and 487 from Grasim's CFI division. The impact of this training is evident in the BBSO observations. Up until FY21, there were 193,505 observations conducted. However, **by FY23, this number had surged to an impressive 1,202,822 observations, marking an increase of 72%.**

The Behaviour-Based Safety Observation programme has not only enhanced safety performance but also

PSM Training Programme - 'REBOOT'

promoted a culture where safety is a shared responsibility.

Process Safety Management (PSM) prevents unexpected loss of hazardous substances, reducing significant incidents. Process Safety Event Reporting and Metrics (PSEM) evaluates PSM, aiding data-driven decisions, compliance, improvement, stakeholder trust, and safety culture. REBOOT workshops enhance Chemicals, Fashion Yarn, and Paints leaders' PSM skills. **In FY22 & FY23, a total of 129 participants trained in PSM through the REBOOT training programme.**

Overall, the positive impact of the Process Safety Management programme extends beyond compliance, contributing to a safer work environment and reinforcing our commitment to the well-being of our employees and the integrity of our processes.

Case Studies

From comprehensive risk assessments to immersive virtual reality experiences, these initiatives aim to transform safety culture, empower employees, and ultimately create workplaces where Zero Harm is not just a goal but a reality.

Making Safety 360°
Novelis, Europe

To address risks like working with heavy loads and mobile equipment, Novelis Europe launched the Think Safe 360° safety initiative – an all-encompassing approach aimed at comprehensive risk assessment considering parameters such as plant layout, processes, machinery, and the people involved.

- **Plant Layout and Conditions**: This includes pedestrian pathways and traffic segregation
- **Production and Maintenance:** Evaluating risks related to coil movement and ingot storage
- **Behaviour and Risk Awareness:** Encouraging active employee engagement in risk identification and mitigation

Through this initiative, Novelis effectively implemented measures such as effective segregation, enhanced employee protection, and redesigned plant layouts. Committed to building a culture of safety, the initiative encourages open communication and doing it right for each other.

By involving shop floor employees, Think Safe 360° promotes shared learning and continuous improvement, resulting in these notable outcomes:

- **Identified 569 metal flow steps**
- **Defined action plans for 174 risk areas**
- **Declared 229 metal flow steps as safe**
- **Ongoing risk assessments for 244 areas**

Raise Safety Awareness with VR
UltraTech

UltraTech has embraced Virtual Reality (VR) modules to guide workers through high-risk activity simulations, promoting Zero Harm by addressing safety challenges proactively. Traditional training methods, though long used, have limitations in risk perception.

The immersive experiences of a VR empower our people to navigate high-risk activities through simulations, enhancing safety awareness and reducing occupational hazards.

Key features include interactive 3D hazard modelling, addressing 'At-Risk Behaviour' concise 4–5-minute modules with task instructions, and automatic assessment reports. Initially, the team launched a Proof of Concept (POC) with two modules, focussing on Cement Truck Loading Safety and Roto-Packer Operation Safety. Following their successful implementation, UltraTech's safety and line teams collaboratively identified 30 high-risk trades and activities for widespread adoption across UltraTech.

With over 29,000 workers trained across 30 modules, UltraTech witnessed a significant decrease in incidents.

- Lost Time Injuries reduced to 13 in FY23 (YTD) in comparison to 26 in FY22
- Fatal Potential Element LTI injuries reduced to 7 in comparison to 11 in FY22
- LTIFR reduced to 0.10 in FY23 (YTD) in comparison to 0.18 in FY22

## Walking The Talk To Strengthen Safety Culture
Grasim, Veraval

Grasim's Viscose Filament Yarn manufacturing plant in Veraval, initiated the 'Chaltaa-Boltaa' safety training campaign, targeting both shop floor workers and employees in offices. This initiative emphasises safety during idle moments on the shop floor targeting asset-facing employees for whom there is no structured training programs.

Safety personnel and standard champions, equipped with portable audio-visual aids, conducted concise 10-15 minute safety sessions, capturing key elements from the Group's technical standard and guidance notes, to align their safety comprehension and behaviour with sustainability standard. These sessions included informative videos and engaging Q&A segments, with instant rewards to acknowledge the effectiveness in the form of knowledge gained through these sessions.

Through the 'Chaltaa-Boltaa' initiative, safety awareness witnessed a significant surge, empowering shop floor workers to identify potential hazards and take proactive risk-mitigation measures. This heightened awareness improved safety compliance, with workers consistently adhering to safety procedures.

The safety training programme resulted in better communication between workers and management, fostering a culture where workers were more inclined to report safety hazards and incidents and enabling the management to respond swiftly with appropriate corrective action plans. Overall, the initiative is making the workplace safer, more resilient, and instinctively focussed on safety.
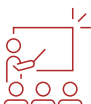
This comprehensive and practical approach towards safety risks resulted in the following outcomes:

• **54 Safety Training Sessions conducted, benefitting 2,900 participants**

• **50% reduction in workplace injuries over the year, with no serious injuries reported during FY23**

Employee Health & Well-being

51

Indian sites of the Group on-boarded with health and medical management software.

91

employees from 7 businesses attended the H.Amplifier occupational health training

ABG Code Red: Aditya Birla Group Emergency Helpline is a 24x7 service that caters to any kind of exigency faced by employees and their families

Aditya Birla Group recognises that a healthy workforce is the bedrock of a productive workforce. More importantly, it is the foundation of sustainable development. Safeguarding occupational health is essential to ensure the social and economic productivity of people, companies, communities and nations. We remain committed to preventing occupational diseases and protecting the health and well-being of our employees, agency staff, visitors, and local communities.

Our objective is to proactively prevent chronic health issues among our team members and minimise their exposure to workplace health risks.

Consistent with our vision of building sustainable businesses, we are committed to providing leadership and practical means to address this issue.

We advocate for greater response from industry in partnership with governments at all levels, trade unions, key national and international agencies,

and other relevant stakeholders. We are focused on embedding a culture of prevention along with mitigation. To achieve this, we are constantly equipping our people with the necessary knowledge.

To raise awareness among our managers and enable them to create a healthy workplace environment, we extend support on topics like industrial hygiene, stress management, first aid, and emergency medical care and conduct workshops to empower our people with crucial insights and develop a clear understanding of the standards that are expected of them.

Our occupational health framework is OSHAS 18001 and ISO 45001 certified. Our Group's occupational health policy, technical standards, guidance documents and training courses are in line with the IFC General EHS Principles, ILO guidelines and recommendations from the World Health Organisation. These have been prepared to guide our businesses on management and prevention of adverse health effects that may result from longer-term exposure to occupational health hazards.

In June 2022, we introduced a Standard for Indoor Air Quality and Ventilation Management to safeguard employees from hazardous atmospheres. It guides sites in assessing IAQ concerns, establishing protective programmes, selecting ventilation systems, testing, and maintenance.

Prioritising Holistic Well-being

Aditya Birla Group prioritises employee well-being and is transitioning from reactive healthcare to integrated health management. This holistic approach covers all aspects of health, ensuring access to all employees, irrespective of their contract status. The aim is to provide healthcare where and when needed through infrastructure upgrades, digital solutions, and strategic partnerships.

Our journey begins with the rollout of an Integrated Personal Health Care Programme across the Group. As an initial step, we are voluntarily assessing our managers based on specific health and wellness parameters. This highlights our commitment to overall well-being and the importance of personal health enhancement, fostering a healthier workforce.

Progress on Occupational Health Commitment

Exposure Assessments

The Qualitative Exposure Assessment (QLEA) programme has been implemented across all our operations, and a majority of our sites have already completed this assessment. The QLEA findings help us identify hazards for Similar Exposure Groups (SEG) and enable our management teams to focus on specific areas for operational improvement, identify potential gaps, develop action plans to manage exposure risks, and ensure periodic check-ups to detect occupational diseases based on potential threats.

Drawing on insights from the QLEA, we conduct a Quantitative Exposure Assessment (QNEA) to evaluate occupational health hazards in the workplace, adhering to established sampling and monitoring protocols. The outcomes of the QNEA play a crucial role in determining exposure levels and ensuring compliance with statutory requirements.

Additionally, the results from QNEA serve as valuable evidence when assessing the necessity of implementing control measures and verifying the sufficiency of existing protective measures.

To support businesses and sites for effective risk assessment and management of different health aspects, the Group has developed specific online tools such as office ergonomic risk assessment, job stress mapping, a vendor directory, training needs identification for nursing staff, etc.

These tools are based on scientific processes, provide detailed analysis and are readily available for the sites to use. **In FY22 and FY23, a total of 63 QLEAs and 38 QNEAs were conducted.**

Competency Building for Integrated Health

Aditya Birla Group is building up flagship programmes to improve the application and demonst-ration of appropriate knowledge, skills, approaches, and behaviour of such personnel in occupational health as well as clinical settings.

Managing Occupational Health Better with H.Amplifier

The 3-day classroom course, designed and delivered by the GSC, provides insights and clarifications to the concerned persons responsible for managing Occupational Health (OH) at the site as per the Group standards. During FY22 and FY23, 91 employees from 7 businesses attended the course.

Training the Trainers for First Aid

The 3-day programme is designed to develop in-house competency in first aid training as per ABG standards. This programme develops and helps in keeping the quality of first aid at par with international standards and provides hands-on experience to conduct training with improved confidence. During the reporting period, 30 employees from 7 businesses attended this training.

Training the Nurses with RADIANCE

This online programme is designed to enhance the subject matter knowledge of the Group's nursing staff. 68 employees from 8 businesses underwent this online training.

Digitalisation For Integrated Health

To attain excellence in Integrated Health management across various aspects, the Group Sustain-ability Cell has proactively pioneered the creation of cloud-based digital applications. Digitalising these applications play a pivotal role in facilitating effortless information exchange, enhancing communication, and streamlining processes.

PEHEL An in-house health and medical management software developed for data management and to digitalise periodic medical examinations, first aid management, and MIS among others. 51 Indian sites of Aditya Birla Group have been on-boarded on the software.

Centralised Vendor Directory
It provides consolidated information about various medical products/services and contact details of vendors within India. The aim is to reduce the efforts and time required for locating the vendors and providing useful information for the selection of products and or services. The directory is updated on a regular basis.

Job Stress Mapping A digital tool for work-related stressors to assess and analyse the stress levels experienced by employees in their work environment. 7 sites have completed the assessment using this tool.

Employee Feedback on Health Support
An internal feedback mechanism for medical services is a crucial component of healthcare organisations to ensure the continuous improvement of patient care, operational efficiency, and overall service quality. 11 sites completed their surveys as of FY23.

Office Ergonomic Risk Assessment
A tool developed to evaluate the ergonomic conditions of workstations and identify potential risks that could lead to discomfort, musculoskeletal issues, or other health concerns for office workers. 32 sites have utilised the tool as of FY23.

Training Needs Identification for Nursing Staff
An online competency assessment test for medical staff. 41 sites have utilised this tool to assess competency of their nursing staff.

Risk Reduction Best Practices

We are committed to reducing health hazards, protecting our employees, and aligning our practices with the highest safety standards. We are embracing and sharing best practices that advance occupational health and safety and ensure the well-being of our workforce and the communities we serve. Here are a few notable examples of how we use risk reduction measures.

Substituting Carcinogens

Hindalco's Aditya Aluminum has replaced carcinogenic Refractory Ceramic Fiber (RCF) insulation blankets with Alkaline-Earth Silicate wools (AES wools), eliminating RCF and Cristobalite health hazards.

Similarly, Indian Rayon's Veraval unit replaced hazardous Potassium Dichromate with safer Hydrogen Peroxide in the spinnerets cleaning process, effectively eliminating the health risks associated with Hexavalent Chromium, a confirmed human carcinogen. These substitutions underscore our dedication to ensuring a safe and healthy workplace for our employees.

Eliminating Carcinogens

In the Aditya Birla Insulators - Halol unit, the surface finishing generated dust which also contains Respirable Crystalline Silica. The company has developed a patentable new tool with advanced wiper geometry to improve the finishing quality and introduced a unique glaze that covered surface roughness, thus eliminating the need for dry finishing.

The Path Ahead

Over the next few years, we intend to significantly enhance our occupational health processes to ensure protection of health and well-being of our workforce. Our approach involves comprehensive measures such as ongoing sampling and micro-audit programmes across our facilities, allowing us to continuously monitor and elevate our standards.

To further improve efficiency and accuracy, we are digitising our occupational health records, centralising data management, and ensuring real-time access to critical information for timely intervention. Additionally, we are focusing on evaluating and strengthening our respiratory protection practices to provide the

best possible safeguards for our employees. Lastly, we are committed to proactive maintenance of our ventilation systems, crucial for ensuring air quality and safety within our workspaces. These initiatives reflect our dedication to creating a healthier and safer work environment while maintaining our leadership in occupational health standards.

Employee Well-being

We believe that a healthy employee is a happy and productive employee. When employees are supported in their personal and professional growth, it has a positive impact on their overall well-being. Therefore, we invest significantly in employee wellness solutions to create a healthier, more vibrant organisation and promote a workplace that exudes happiness and productivity. Employee well-being is well-integrated into the Group's employee development process. We uphold a strong commitment to enriching the lives of ABGites and their families through comprehensive solutions and interventions.

Holistic well-being framework
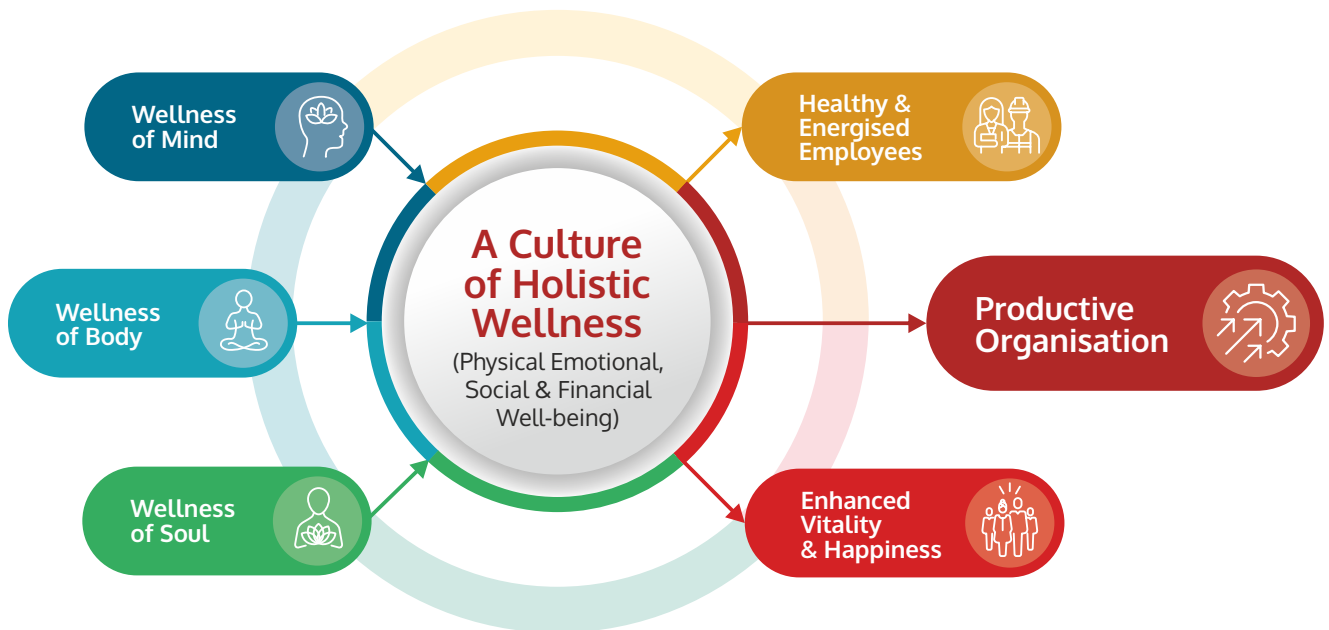
Aditya Birla Group prioritises holistic well-being through multi-faceted initiatives:

Physical Well-being

ABG Code Red
Aditya Birla Group Emergency Helpline is a 24x7 service that caters to any kind of exigency faced by employees and their families.

AB Multiply App
A comprehensive digital health and well-being platform, available to all Group employees based in India. The app ensures seamless connectivity with doctors, counsellors, psychologists, and dietitians through convenient chat or call consultations.

Integrated Personal Healthcare Programme
A comprehensive programme, covering all aspects of healthcare, including prevention, promotion, treatment, and rehabilitation. To ensure effective health management, employees are classified into three categories: Red, Amber, and Green, based on key wellness parameters.

Annual Health Check-Up
Offered to employees at all business locations as part of the Wellness Assurance Policy, it provides a detailed health report and consultation with a partner doctor. The policy covers a comprehensive list of tests prepared by medical experts based on age, gender, and role.

Group Mediclaim Policy
It provides comprehensive coverage for the employee and up to 5 of their family members including spouse/same gender partner + two dependent children or siblings (unmarried, and non-working) + two dependent parents or parents-in-laws under this policy. Additionally, it also covers IVF treatment.

Financial Well-being

Sound finances lead to a sound quality of life and mind. We have a range of policies and programmes to help secure the financial future of our employees.

Pratibha
This ABG Employees' Children's Education Scholarship, initiated in 2004, provides financial support for select graduate and undergraduate courses. Each year, around 30 scholarships are awarded to deserving children.

Nishchint Policy
During the unfortunate event of an employee's demise, this contributory term insurance benefit ensures monetary relief to the family.

Social Well-being

AWOO Scholarship Program
Educational support to underprivileged students through various courses, enhancing their employment prospects. Since 2013, AWOO Foundation has enriched the lives of 3,850 scholars and their families.

Samarth Eldercare Service
ABG has tied up with Samarth Eldercare to provide support for employees whose parents are residing in India. Through this tie-up, ABGites can avail services at negotiated rates across 75+ cities and towns.

Add More To Life (AMTL)
A Quality of Life initiative, AMTL creates an urban and modern life experience for employees and families living in the townships at our manufacturing location. This includes infrastructural support like mini malls, gym, digital theatres, clubs, libraries, multi-generational park.

Emotional Well-being

Life Unlimited
We have partnered with two Life Unlimited partners: Santulan and MPower, who offer 100% confidential counselling services. Employees and their families may connect with Life Unlimited Guides in a language of their choice, either face to face, over the phone or via Live Chat.

The Path Ahead

Our commitment to employee well-being spanning physical, emotional, financial, and social dimensions will continue to remain paramount.

For physical well-being, we will encourage employees to go through health check-ups as per defined timelines and undergo necessary tests. This enables employees to monitor and track their health, categorised at an aggregate level - Red, Amber and Green. Individuals in the Red Zone will be nudged and provided health coaching to improve and move towards amber and green.

Our dedication extends to bolstering financial and social well-being through targeted programmes, ensuring a holistic support system for our employees.

Our commitment to holistic employee well-being will continue to remain paramount.

Human Rights Management

Achieved nearly

100%

compliance in policy formulation during FY22 and FY23, showcasing our commitment to respecting human rights across operations, supply chain, and business relationships.

Businesses depend on humans and exist for humans. There is no business continuity devoid of humanity. Across industries and geographical boundaries, social risks touch on crucial aspects like human rights, education and training, and Diversity, Equity, and Inclusion (DE&I).

In the contemporary landscape of corporate responsibility, the strategic management of human rights has become a pivotal consideration for global conglomerates. The evolution of Human Rights Management (HRM) within corporate frameworks reflects a nuanced shift, with international standards such as the UN Guiding Principles on Business and Human Rights emerging as critical benchmarks. This paradigm shift is tangible in the strategic initiatives of Aditya Birla Group, as we proactively embrace a discerning, risk-based approach to HRM.

Aligned with the United Nations' "Protect, Respect, Remedy" framework, our progress in HRM is noteworthy:

- The newly developed Group-level Supplier Code of Conduct has one pillar of human rights, thus making it mandatory for suppliers to conform to the human rights management requirements, both legally and as required by the Group businesses.

- We witnessed increased adoption of the Human Rights Due Diligence (HRDD) tool and associated measures across multiple Group businesses, signifying a proactive stance in addressing human rights issues.

- Sites completing HRDD are developing site-specific Human Rights Management Plans, outlining key rights, risk mitigation plans, roles, responsibilities, authorities, and specific targets.
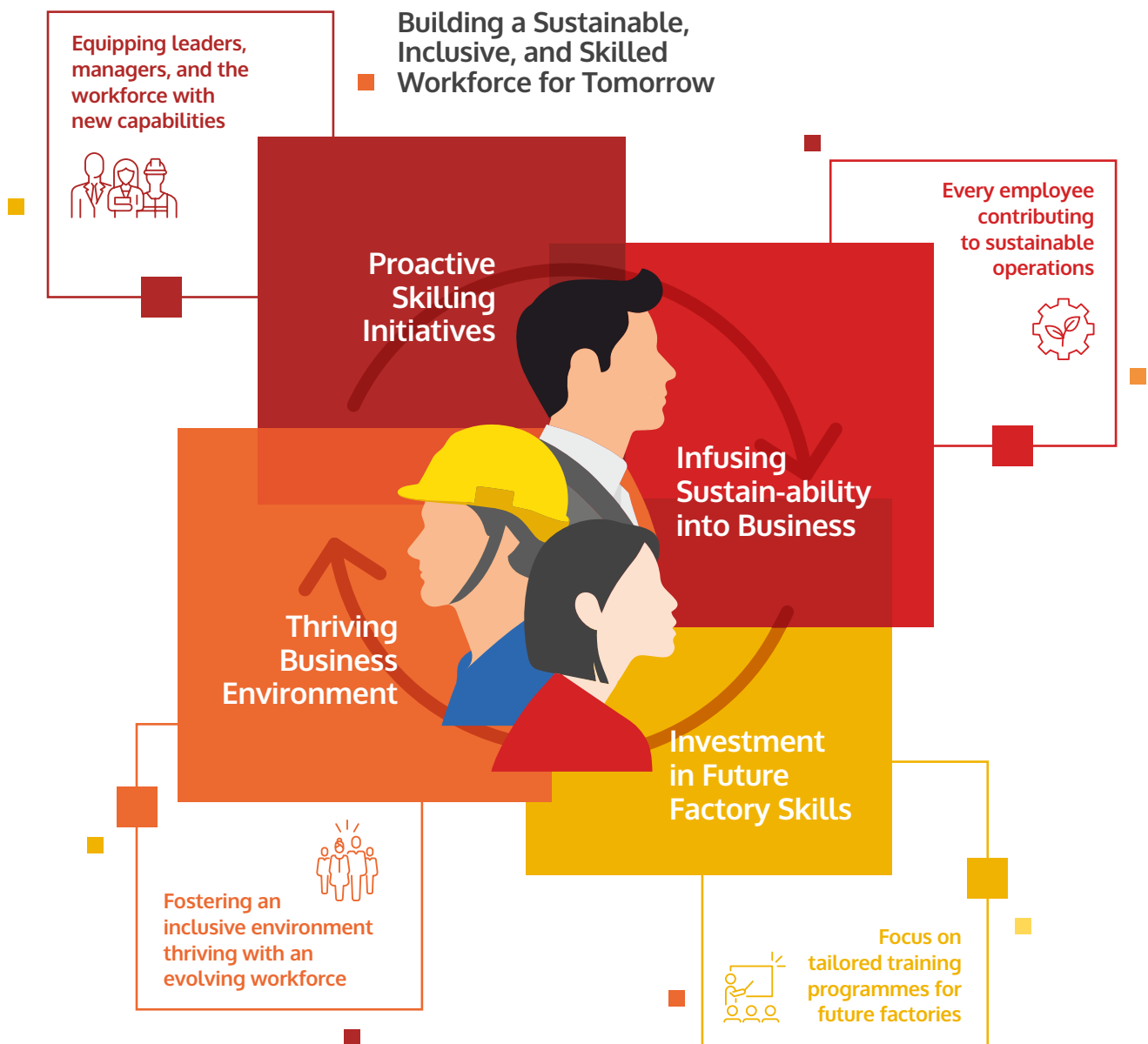
Our ongoing efforts to establish a Group-wide HRM framework, aligned with international standards like Social Accountability 8000, underscore our dedication to making global benchmarks integral to our corporate practices. Key to this is engaging senior management to ensure the practical applicability of the UN Guiding Principles.

Human Rights in the Digital Era

In the dynamic landscape of the digital age, the rapid surge in technological advancements stands out as a paramount human rights concern, impacting individuals across manufacturing and service sectors alike. The looming presence of robotics and the rise of Artificial Intelligence pose profound questions about the future of work. At the heart of this transformative era, Aditya Birla Group has embarked on a journey to forge a sustainability-oriented Learning and Development Framework.

Equipping leaders, managers, and the workforce with new capabilities

Building a Sustainable, Inclusive, and Skilled Workforce for Tomorrow

Every employee contributing to sustainable operations

Proactive Skilling Initiatives

Infusing Sustain-ability into Business

Thriving Business Environment

Investment in Future Factory Skills

Fostering an inclusive environment thriving with an evolving workforce

Focus on tailored training programmes for future factories

Central to our mission is the commitment to providing opportunities for individuals from diverse socio-economic backgrounds, ensuring that they benefit from technological advancements in the workplace. In doing so, we prioritise not only the future of work but also the fundamental human rights that underpin our collective journey towards progress.

Through the promulgation of a Group-wide Human Rights Policy, HRDD, and mechanisms for remedy, we solidify our commitment to embedding human rights considerations at the core of our operations.

HRM Highlights

Birla Carbon: Respect for human rights and the elimination of child and forced labour across the supply chain are enshrined in Birla Carbon's supply chain procurement policy. It ensures that all new vendors are vetted via NAVEX Global's RiskRate® system and will not engage with any new vendor with a RiskRate® red flag.

Novelis: As a United Nations Global Compact Signatory, Novelis endeavours to maintain transparent operations and source its materials responsibly. It is also working to increase transparency upstream in its supply chains. For example, in accordance with the German Supply Chain Due Diligence Act, it is implementing a governance programme for its German Novelis entities and is looking to replicate the practices across its global supply chain.

Hindalco: In FY23, assessed 100% of its plants and offices for various human rights aspects, and no significant risks were identified. It also created a Human Rights Due Diligence Tool that is being piloted at its Utkal unit. Based on the feedback, it will be implemented across other units of the company.

UltraTech Cement In FY23, 19 new plants were assessed on human rights. 'Xpedite' – an online grievances handling tool has been deployed for effectively collecting workmen's grievances from the shop floor.

To support these business-level initiatives, we prioritise elevating our workforce's understanding of human rights management through an integrated approach at the Group level. Our Expert Conversation Series, immersive classroom sessions, and targeted training empower employees with the knowledge to champion human rights. This inclusive strategy ensures compliance with evolving policies and legislation.

For more information about Human Rights Management at Aditya Birla Group businesses, please refer to their respective sustainability reports or integrated annual reports.

Diversity & Inclusion

We are a diverse conglomerate with 187,000 employees, over 100 nationalities and diverse businesses; we are a melting pot of businesses, capabilities, cultures, nationalities, religions, genders, generations and more. Diversity is thus, a daily reality at Aditya Birla Group and we are proud of it.

Gender Inclusion

As of FY23, we have 7,300+ women, i.e., 14.7% representation in the management cadre.

We endeavour to make the Group, an aspirational workplace for women and increasingly weave women into mainstream operations. We have long begun enhancing the representation of women at leadership levels across operations.

Despite our razor-sharp focus in the last decade, we have had to confront some challenges as the milieu keeps evolving. Regardless, these have been systematically addressed. Given the size and geographical spread of the Group, we continue our transformative journey.

We regularly track and report group diversity metrics. Biannual publication of diversity data at both group and individual business levels. Implement interventions for fostering a safe workplace for women. Initiatives include Group POSH policy implementation and employee awareness campaigns.

At the shop floor level, we have more than 16,000 women striving to make the best fashion fabrics in our fashion, retail and textile business. Likewise, in some of our overseas plants, women run the manufacturing operations.

We have implemented numerous Group-wide Initiatives to support women leaders and entrepreneurs in the community. Prominent among these are:

'Strength Inclusive Culture' initiative
Designed to foster gender equity through behavioural and mindset shifts, it has made significant strides.

'BetterTogether' Platform
It promotes inclusion through innovative programmes, including immersive workshops, manager sensitisation sessions, digital learning, and creative employee campaigns.

Additionally, we have put in place several workplace enablers that empower women to continue on their career path with some adjustments.

Maternity Support Programme
Childcare and mother comfort with the arrival of the baby and an extended leave period later form its core.

Career Management Support
This involves travel and stay arrangements for the mother, baby and the caretaker, while on work travel.

Life Unlimited This 24/7, multi-lingual, confidential counselling support provides a helping hand that guides our women colleagues through stressful times.

Structured programmes like **'SpringBoard'** and initiatives like **'Be Unstoppable Rhythmic Connect'** empower women to accelerate their careers and build self-confidence.

With a focus on levelling the playing field, we are consciously increasing women's representation at leadership levels through focussed hiring and developing a connection with hiring partners to onboard them on diversity hiring.

The hiring, progress and attrition performance is reviewed by the senior-most leadership/ management teams at our quarterly business review meetings.

Talent Development

In FY23, Potential Assessment (PA) covered over 10,000 employees, i.e.,

96%

of the eligible population.

At the core of any thriving enterprise lies an assembly of remarkable individuals, each lending their distinct expertise and backgrounds, all bound by a shared dedication to driving progress.

Within Aditya Birla Group, a formidable force of 187,000 such exceptional individuals thrive. Our unwavering commitment extends to fostering and amplifying their abilities. Our vibrant learning environment offers abundant avenues for talent to flourish within the inclusive community of ABGites.

Valuing and caring for our people attracts the best talent in the industry and safeguards long-term success. We are known for our strategically designed learning and development programmes and well-defined career pathways for employees to contribute to their success.

As an equal opportunity employer, we make conscious efforts to drive diversity and inclusion at the workplace in a holistic manner.

Our commitment to diversity is demonstrated by an annual target of a 10% increase in gender diversity.

Our **'One HR'** policy covers aspects like employee engagement, health, wellness, and talent management in line with industry best practices and regional regulations. Our businesses adhere to industry standards, adopting policies such as Anti-Corruption, Prevention of Sexual Harassment, and Parental Leave, regularly reviewing adherence to the Group Human Rights Policy.

Talent Management at ABG

Leadership Development Philosophy | **To deepen and widen the talent bench strength in order to fuel the growth of Aditya Birla Group.**

The Talent Management Framework (TMF) is an integral tool that supports sustainable growth, aligning with our Employee Value Proposition, AWOO - 'A World Of Opportunities', to learn, grow and enhance careers. It is well-established and embraced by leaders, managers, and employees.

Key aspects of the framework include:

- **Talent Segmentation**
- **Talent Development**
- **Talent Engagement**
- **Succession Planning**

Talent Segmentation

The talent segmentation process involves three key steps:

I. Online Potential Assessment by managers and skip managers

ii. Creation of a 9-box grid considering performance and potential

iii. Validation by Business Talent Councils to determine the final talent rating for each employee

In FY23, Potential Assessment (PA) covered over 10,000 employees, i.e., 96% of the eligible population. This is by far, the highest in a single Financial Year. PA was also expanded to Early Careers, encompassing 5,000+ eligible employees.

Additionally, to enhance the quality of assessment 1,800+ managers were trained on conducting impactful PAs, emphasising the difference between performance and potential, potential definition, competency understanding, and effective PA tips.

Talent Development

Aditya Birla Group offers numerous opportunities to employees for professional development. Some key initiatives include:

Development Assessment Centre (DAC)

DAC is a streamlined process for identifying strengths and areas for leadership growth among the talent pool members. Participants receive a personalised report and create a 'My Development Plan,' that includes projects, interaction opportunities with senior leaders, and customised learning interventions. Progress is reviewed by the manager and a development coach over a year. The process is facilitated by external agencies and has transitioned successfully to a virtual format.

- **474 DACs done in FY22 and 1,097 DACs done in FY23.**

- **A customised DAC process will be introduced in FY24 for the participants in Early Careers, whereby they will undergo a 90-day development journey**

Fit For Future – Engage to Manage

This Group-wide, one-day workshop aims to create a development culture within the organisation. It engages managers and equips them to develop and engage talent.

- **450+ Managers were covered in FY23; 130+ Trainers have been trained**

The programme was well-received by participants with a rating of 4.7 on a scale of 5. 95% of participants conducted effective development conversations due to improved clarity on talent processes. Participants also reported a better understanding of talent tools, career building and team ecosystems, increased confidence in talent development, and enhanced self-leadership.

Young Talent Management

Our young talents come from some of India's leading B-Schools and engineering colleges, and are top ranking Chartered Accountants. YTM's post-graduate programmes like the Leadership Associate Programme (LEAP), HR Leadership Programme (HRLP); graduate programmes like the Engineering Leadership Programme (ELP); and professional degree programmes like the Finance Leadership Programme (FLP) build a foundational pool of leaders. Whereas the Group Internship Programme (GIP) provides an opportunity for promising first-year full-time MBA students to enter the ABGLP as full-time participants upon graduation.

Here is how the YTM and ABGLP are structured:

Year 1 - Grooming Ground: ABGLPs experience a year-long structured programme designed to simulate a 2*2*2 journey encompassing stints across manufacturing, services, and new-age businesses.

Structured Review Process: Group Internship participants and the leadership cadre undergo a confirmation process, involving senior leadership to identify the high potential candidates early.

Handpicked Roles: Post Year 1 placements the participants are introduced to the Group's array of opportunities, aligning their aspirations with business-relevant roles.

Career Fast-Tracking: The goal is to accelerate career planning, providing challenging opportunities for advancement into strategic roles within the first 10-12 years. Leadership cadres transition to new roles after completing 2 years in their current role.

Capability Building: Potential is augmented with capability-building initiatives to groom young talent for future skills, increasing talent pool qualifiers and encouraging talent movements.

Young Talent Advocates: An internal network of Young Talent Advocates represents ABG as assessors. Handpicked advocates play a vital role in hiring, mentoring participants during reviews, and providing guidance and support.

Reward and Recognition: Cohort-based development includes mentoring, training, certifications, award nominations, and access to internal and external learning opportunities.

All these initiatives pave the way for future CXOs within the first decade of their careers, with mentorship and diverse roles enriching their professional journey. These efforts make Aditya Birla Group an 'Employer of Choice' with inspirational success stories and homegrown leaders.

Performance Trend

- **Enabled ~31% ABGLP career movements in FY23, resulting in a current 'average time in role' of 2 years.**

- **Need-based Certification Programmes have been introduced to enhance skills and provide role-specific training**

- **Participants of this programme won numerous awards including TA Pai Young HR Leader Awards 2023, World at Work Global Certification, Jombay HR40under40, BW HR 40U40, etc.**

Developing Functional Capability

Functional competency frameworks have been established for five key functions - Manufacturing, S&M, IT, Finance and HR. These frameworks include function-specific competencies, proficiency levels, defined role profiles for critical roles, and role competency mapping for unique jobs within these functions.

- **10,000+ employees, i.e., 32% of the total eligible population, have completed the Functional Competency Assessments.**

A tech-enabled Comprehensive Assessment (or **COMPASS**) tool has been rolled out for eligible employees. It helps self-evaluate and receive manager feedback as well as a customised functional competency report. This tool has revealed career aspirations and aided in crafting focused MDPs for participants.

Talent Engagement

Career Aspirations: Aditya Birla Group upholds each employee's career aspiration as a part of the performance management process. This informs managers about individual aspirations, helping in career planning and necessary development initiatives.

CareerAbility: The first 10 years of an employee's career are pivotal for laying a strong professional foundation. Diverse experiences and exposures at this stage help build well-rounded professionals.

With that objective, CareerAbility has been institutionalised across the Group. It refers to an individual's ability to take charge and chart their career growth. A multi-pronged approach has been taken to familiarise this framework across the organisation:

- Articles and nudges have been released to create awareness among employees and managers
- Employees understand the various CareerAbility pillars through an

immersive gamified simulation that makes learning experiential

- A scientifically validated self-assessment has been designed for employees to reflect on their CareerAbility quotient across the pillars. Employees can download a customised report and plan their development based on the report
- Through a customised CareerAbility workshop, employees enhance their understanding of building careers and taking proactive steps

These initiatives fostered employee career understanding and a growth mindset:

Learning asset: ~40,000 hits & likes (Nudge document, Simulation game, etc.)

1,700+ completed CareerAbility Assessments

700+ attended the CareerAbility Workshop

CareerAbility resulted in a heightened career awareness and empowerment. The HR Stakeholder Satisfaction Survey score on "HR is enabling a mindset shift in employees to own their development & careers" increased from 67 in 2022 to 76 in 2023.

Whereas in the CareerAbility Longitudinal Study conducted to gauge the impact of the initiative, 70% of respondents were able to engage in career conversations and design a career map for themselves.

Careers & Movements

Talent Management aims to nurture internal careers through initiatives enhancing internal talent visibility, making them the preferred choice for opportunities.

- **Tech-Enabled Talent Visibility**
  Customised Talent Visibility dashboards like – Cross Business Talent Visibility (CBVT) and ABG Talent Dashboard have been designed to provide visibility of the internal talent within a limited set of HR leaders.

- **Know Your Talent (KYT)**
  KYT is an exclusive conversation between talent and senior leaders, where the leaders gain insights about the talent and can consider them for future opportunities, while the talent gets an opportunity to interact and learn from leader's experience.

- **Xplore**
  An in-house platform, Xplore provides visibility to Group employees about internal opportunities in line with their experience, skills, and aspirations.

- **HOTO (Handover Takeover)**
  To prevent knowledge loss during transitions, a digitised process, HOTO has been introduced. It ensures structured knowledge transfer between outgoing and incoming individuals, promoting seamless transitions.

- **Make Your Mark (MYM)**
  At Aditya Birla Group, employees seamlessly move across businesses, geographies, leadership levels, and functions to build their careers. These transitions are critical as they can have far-reaching impacts across all the stakeholders including the individual. MYM is a structured process of 6-9 months, whereby an external coach through a designated empanelled agency enables the leaders in the transition journey.

Succession Planning

We have structured succession planning for all critical positions within the Group. The Talent Councils play an active role in the process by reviewing and validating the various succession pools created and undertaking the forward talent planning.

Business Talent Councils

Review talent segmentation from Potential Assessment, finalise ratings, and suggest development areas for talent pools, recommending Bridge and Destination Roles.

Group Functional Talent Councils

Oversee talent pipeline, provide development opportunities, and review succession for functions, ensuring a healthy functional pipeline.

Succession Pools

Created based on Council reviews, focusing on specific critical positions like CXO, Unit Heads, etc. to fill key vacancies due to retirements or exits.

Leading Edge Programme

It identifies and prepares participants for CXO positions, thereby contributing to a healthy succession pipeline. In FY23, 113 employees benefitted from this programme.

Leadership Development Programmes

Nurture and prepare internal talent for leadership positions. These programmes provide opportunities to build versatile next-generation leaders for the Group through structured career pathways.

The Path Ahead

As we move ahead, the Group's Talent Management strategy will continue to focus on building a sustainable leadership pipeline to fuel the growth ambitions of the organisation.

In addition to driving the flagship initiatives and programmes, a specific focus will be built around the following:

- **Early Careers** Offering diverse experiences to Early Career employees. Our initiative aims to create a personalised development charter, including a tailored career path, specialisation rotations, foundational skill-building, and key experiences aligned with their career goals.

- **Integrated Talent Management** Implementing a tech-enabled succession planning process to suggest potential successors for critical positions, helping build a sustainable talent pipeline in FY24.

Empowering Communities

Giving, caring, and empowering communities run in the DNA of Aditya Birla Group. It is a legacy bequeathed upon the family by Mr. G.D. Birla, our Group's patriarch. Based on the trusteeship concept, our Group genuinely believes that business success and societal good are two sides of a coin.

Since its inception, Aditya Birla Group's CSR initiatives have reinforced the 'S' in ESG through intense engagement and projects that enable sustainable and self-reliant communities with a high sense of self-esteem.

INR > 600 crore

total CSR Investments in FY22 and FY23.

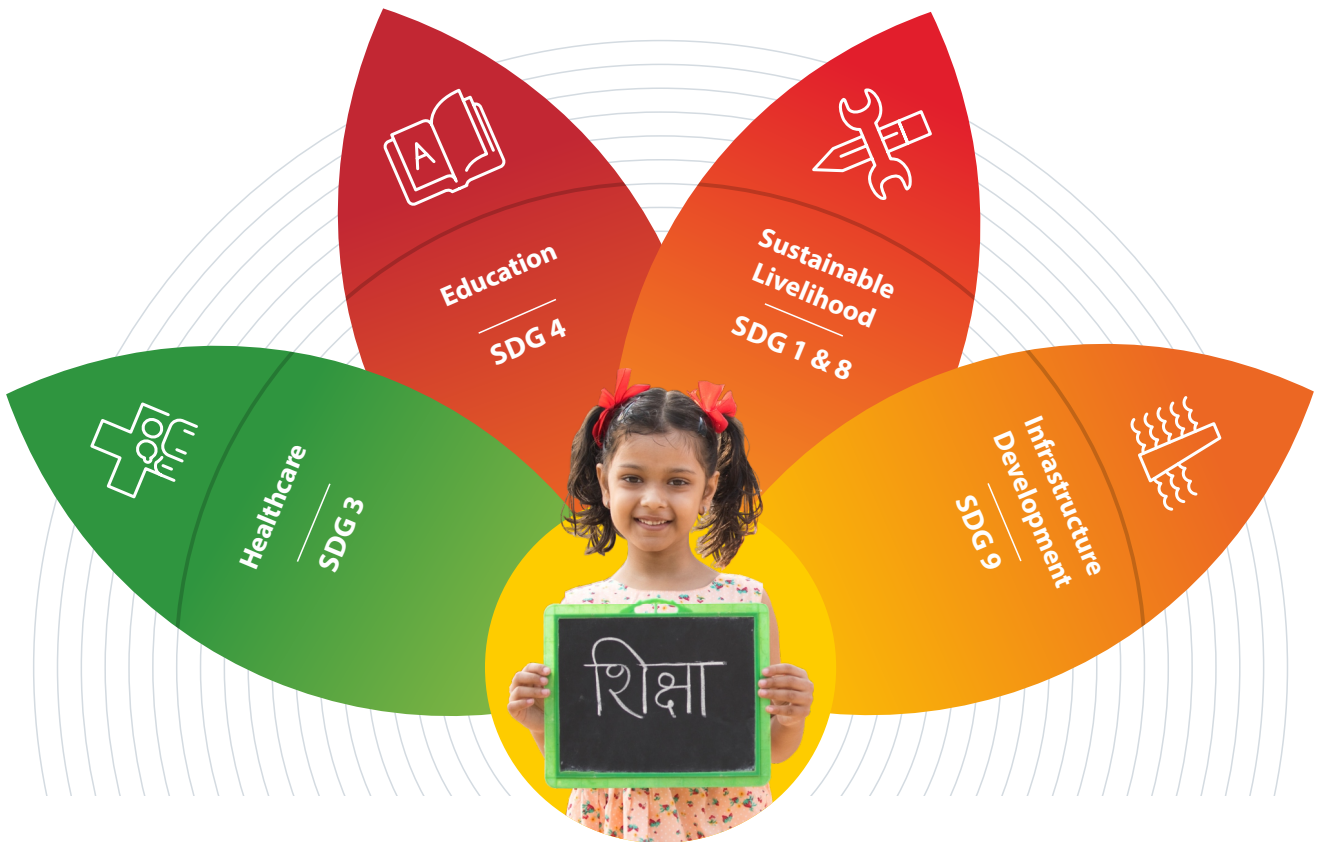Aditya Birla Centre for Community Initiatives and Rural Development reaches out to

11 million

people in 9,000 villages across India and other parts of the world.

Aditya Birla Group's overarching mission is to engage, uplift, and empower communities. Its dynamic and responsible businesses and institutions inspire trust and look upon Aditya Birla Group as a force for good. Aditya Birla Centre for Community Initiatives and Rural Development (ABC-CIRD), with Mrs. Rajashree Birla, as the Chairperson serves as the apex body guiding the social agenda of all Aditya Birla Group companies.

Under the guidance of Mrs. Birla, the Centre charts a strategic course, identifies key focus areas, and ensures effective performance management. The Centre is embedded within the broader framework of the Group's CSR function, led by Dr. Pragnya Ram, Group Executive President, and Group Head - CSR, Legacy Documentation & Archives. It is further bolstered by a dedicated team of 1,200 individuals who share our commitment to social responsibility. In our pursuit of social impact, every Board of an Aditya Birla Group company has a dedicated CSR Committee in which Mrs. Birla and Dr. Ram serve.

Approach and Focus Areas

Aditya Birla Group's CSR vision, articulated by Mrs. Birla, is "to actively contribute to the social and economic development of the communities in which we operate. In sync with the UN SDGs, our endeavour is to lift the burden of poverty weighing down the underserved and foster inclusive growth. In doing so, build a better, sustainable way of life for the weaker and marginalised sections of society."

Education
SDG 4

Sustainable Livelihood
SDG 1 & 8

Healthcare
SDG 3

Infrastructure Development
SDG 9

शिक्षा

OUR FOCUS AREAS

CSR Highlights

Healthcare

3 GOOD HEALTH AND WELL-BEING

Over
100 million
polio vaccinations.

Over **200**
deaf & mute children moved from the world of silence to the sound of music through the cochlear implant.

1 million
patients treated through 6,000 medical camps and 24 hospitals.

Engaged in the prevention of cervical cancer through the administration of the HR-HPV vaccines in Maharashtra. Nearly **30,000** girls have been vaccinated.

Involved with more than **5,000 children** suffering from different ailments such as cancer, tuberculosis, thalassemia, and cardiac issues, among others. Extending financial support for chemotherapy sessions and medical treatment. Encouraging them in a holistic manner to get back quickly on the road to recovery.

Education

4 QUALITY EDUCATION

We reached out to well over **100,000** students through our network of formal and non-formal educational institutes. Of these, girls constitute 50%. Furthermore, we have accorded scholarships that cover the total tuition fees of 1,350 children who lost a parent to COVID-19. These scholarships implemented in 2021-22 are a continued commitment to see that these children carry on their education right through school to graduation.

Solar lamps provided to
4.5 Lakh
children in the hinterland.

Fostered the cause of the girl child through
52
Kasturba Gandhi Balika Vidyalayas.

Sustainable Livelihoods

1 NO POVERTY   **8 DECENT WORK AND ECONOMIC GROWTH**

100,000
people trained in skillsets.

50,000
women empowered through 5,000 SHGs.

200,000
farmers on-boarded for our agro-based training projects.

35 billion
litres of water harvested, crisscrossing 450 villages, and benefitting a 50,000 populace.

Infrastructure Development

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Reimagining and reinventing **300** villages into model villages.
Of these, 128 have already been transformed into model villages.

Healthcare

At Aditya Birla Group, we are committed to enhancing healthcare access in rural communities. Our efforts include setting up hospitals, primary healthcare centres, maternal and childcare projects, immunisation for polio, and quality healthcare for the visually impaired and differently abled and many more.

The Sound of Music

Unbelievable but true, India has the highest number of children born with severe auditory impairment: 4 newborns in 1,000 births cannot hear. And every year, millions of babies add to our demography. Modern biotechnology has come to the rescue in the form of the cochlear implant. An electronic device that bypasses one's ears and stokes the auditory nerve that sends the signal straight to the brain, cochlear implants work as a permanent cure for hearing disability.

From a world of silence with only actions to express themselves, they transit to the sound of music with the ability to share stories of adventures and misadventures - this is our one big humble CSR endeavour, under the aegis of Aditya Birla Centre for Community Initiatives and Rural Development. The unflinching financial support of Essel Mining and Aditya Birla Capital goes a long way. Each cochlear implant has a huge implementation cost coupled with the surgery which the underprivileged can barely afford.

Parents of over **200** children whom we aided with the cochlear implant surgery, feel like their lives have undergone a 180-degree change for good.

It is touching to see the unmistakable whiff of joy as both parents and children witness the glorious moment of transformation.

Education

We firmly believe that nurturing the potential of young minds is key to building a brighter and more equitable future.

Self-Reliant Futures

Project Gyanarjan is an intense education support programme in Rishra (Kolkata). This initiative led by Jayashree Textiles' CSR team and implemented in partnership with Galaxy Welfare Trust, has evolved over time.

To date, it has empowered
3,230
underprivileged students
with a CSR investment of INR 23,340,000.

Project Gyanarjan is a focused preparation that readies underprivileged students to successfully appear for competitive exams, such as CAT, CET and NEET for admission to engineering, management, medical and other professional courses. Beyond individual empowerment, Project Gyanarjan has transformed Rishra's educational ethos, nurturing a culture of learning and academic excellence.

Project Highlights

- Class 10th, 11th, and 12th students enlisted from government schools.
- Assisted 80 students from Class 10 and 50 students from Class 11 and 12 for competitive exams.
- Interactive sessions with successful alumni to inspire and guide students.

Sustainable Livelihoods

For decades, we have been waging an unrelenting battle to enable self-reliance in our communities. Through our Sustainable Livelihood Projects, we foster self-reliance and empower individuals within our communities to take ownership of their growth. Honing their skills and providing the necessary resources in vocational domains to become employable.

In partnership with Bharatiya Agro Industries Foundation (BAIF) and J. K. Trust Gram Vikas Yojana in 13 centres, we have covered more than 100 villages under the project 'Integrated Livestock Development Centres', providing livestock breed improvement services and resulting in increased milk production.

Our vocational training centres and Aditya Birla Rural Technology Park provide training in sustainable livelihood projects benefitting 95,000 people.

Applicators Training Programme in Rajasthan imparts special training to masons and others in the construction sector to increase their income. Over 8,000 people, of which 2,000 are women, have been trained so far.

Our ongoing projects in healthcare, education, and sustainable livelihood in the Philippines, Thailand, Indonesia, Egypt, Korea, and Brazil lift thousands of communities out of poverty.

Feisty Fashion
The Empowered Women at Madura Fashion & Lifestyle

Across Aditya Birla Group companies, we champion initiatives that elevate women, fostering their entrepreneurial spirit and contributing to a more inclusive and resilient future. Empowering women through entrepreneurship is a transformative journey that fuels economic independence and social progress.

The world-class factories of Aditya Birla Fashion & Retail Ltd. (ABFRL) and Madura Fashion & Lifestyle (MFL) in Karnataka, Tamil Nadu and Odisha are great examples of women empowerment through honing their skills. A splendid group of over 15,000 unschooled women from remote villages work determinedly towards making the company and their future highly productive and prosperous. MFL endeavours to make each one of these women strong enough to overcome the difficulties thrust upon them. Backing these women with the basics of a job, continuing education, a crèche for their young ones, scholarships for their children ensures that freedom is inbuilt.

It is due to these consistent acts of adding more meaning to their lives that workers like Ratnamma choose to walk 10 kilometres to reach work even during a four-day transport strike or production line managers like Amaiamma step up to perform even semi-skilled and unskilled tasks when a large order gets stuck due to last-minute rejections. While, through MFL's support, Jyoti found the courage to fight against her in-laws to get custody of her children, Gowri finds the motivation to leave her difficult home situation every day to not just work productively but also take part in workplace celebrations enthusiastically.

ABFRL's factories are brimming with stories of many such empowered women, who are out on a journey to transform their lives through hard work, commitment, passion, and seamless support for each other. These women find their sense of belonging and appreciation from the work that they put in the factory. So, every time you wear a garment from Louis Philippe, Van Heusen, Allen Solly or Peter England, think about MFL and think of its feisty brave hearts.

The Power of Paper Plate Entrepreneurship

In 2019, Aditya Aluminium adopted a Self-Help Group (SHG) - Maa Ram Chandi from Rengali Block in Odisha's Sambalpur district and later brought it under the umbrella of Project Saksham. Initially, the 12-member group produced paper bags using collected newspapers but faced a setback during the pandemic due to newspaper shortage. With a loan of INR 1.5 lakh, they pivoted to producing paper plates. The ban on 'single-use plastic' in 2022 unlocked new opportunities and the SHG became a vendor for Aditya Aluminium and supplied paper bags for sample collection. Next, they showcased products at government fairs and branched out into paper plates and bowls for local markets and events, doubling their monthly income to INR 10,000. The SHG is now debt-free and plans to expand with new designs.

Infrastructure Development

Rural infrastructure battles systemic poverty through a series of activities like enhanced agricultural productivity, income, and employment generation.

Essential facilities like rural roads, bridges, irrigation systems, schools, health centres, and markets form the backbone of this transformation, meeting basic needs and propelling socio-economic progress.

We address the quality-of-life challenges in remote areas around our manufacturing facilities and advance village development in underserved regions. Our rural infrastructure projects involve numerous small investments across expansive regions, harnessing local resources such as labour and materials.

Annually, across the Group, we directly enhance the lives of over

7.5 lakh people through diverse civil structures and fixtures.

Water: Our lifeline.
Today, tomorrow, and eternally

Water and sanitation are integral to global development, with over 40% of the world's population facing water scarcity, and 2.4 billion people lacking basic sanitation services. Shockingly, 300,000 children succumb to waterborne diseases annually. Recognising water's pivotal role, Goal-6 of the SDG prioritises clean water and sanitation.

Amidst climate change, resource exploitation, and pollution, the strain on water resources intensifies. At Aditya Birla Group, we proactively address this challenge through a comprehensive water resilience strategy. Our Water Stewardship Policy, championed by our Group Chairman and Executives, focuses on resource protection and conservation, operationalised through performance targets across our sites.

In the heartland of India, the once common sight of women trekking miles for water has evolved. In the 9,000 villages we impact, water availability is now assured for households and farmers.

Our aggressive CSR-driven integrated watershed management programme, in collaboration with government and agencies like NABARD MYRADA, ICRISAT and AFPRO, has yielded rich dividends. Its components include:

- Water harvesting structures like check-dams, tube wells, tanks, and water reservoirs

- Rejuvenated stepwells and lakes

- Soil conservation initiatives

- Reverse osmosis plants and water ATMs

Over **35 billion** litres of water are conserved annually, thanks to our efforts. Empowering communities and water user groups to ensure self-reliance. Our impactful journey transforms the narrative, bridging the gap between water scarcity and sustainable solutions.

Building Brighter Futures

Birla Carbon - Gummidipoondi is unwavering in its commitment to community development, particularly in education and healthcare. Collaborating with the Tamil Nadu Government's Self-Sufficiency scheme, the unit addressed the infrastructure gap at Guduvancheri Panchayat Union Middle School and contributed INR 1.4 million for two additional classrooms and a compound wall. To elevate the learning experience, they also sponsored a smartclass, incorporating audio and video teaching methods.

In the realm of healthcare, the unit has been consistently investing for the procurement of ENT and dental surgery equipment for the local government hospital.

In collaboration with the National Health Mission, it established a dialysis centre at the hospital, equipped with four machines, supported by additional medical equipment and a 125KV generator for uninterrupted service.

We reach out to enrich lives through Aditya Birla Centre for Community Initiatives and Rural Development, in these diverse ways - because we care.

Supply Chain Management

In an era where supply chain complexities wield tremendous influence over global progress, Aditya Birla Group businesses are redefining corporate resilience through sustainable supply chain practices.

To further strengthen the supply chain sustainability, our Sustainable Business Framework has been bolstered with the Group Supply Chain and Procurement Policy, and standards for Supply Chain Management, Contractor Management, Chain of Custody, and Sustainable Procurement.

This framework elevates operational efficiency, reduces costs, heightens customer service, optimises cash flows, and fosters a sustainable competitive edge. It articulates our steadfast commitment to a robust, traceable supply chain, endorsing responsible practices spanning resource conservation, alternative materials, renewable energy, water stewardship, safety, human rights, and eradicating child and forced labour.

We recognise the pivotal role of a well-structured supply chain management in not just sustaining business continuity and progress, but also powering innovation, sustainability, and overall societal well-being.

While the Group businesses are demonstrating process maturity and results through multiyear, multi-stakeholder supply chain projects, the overarching goal of our ambitious transformation project is to embed sustainability principles deeply within our procurement decisions, fostering long-term environmental and social benefits across the entire group ecosystem.
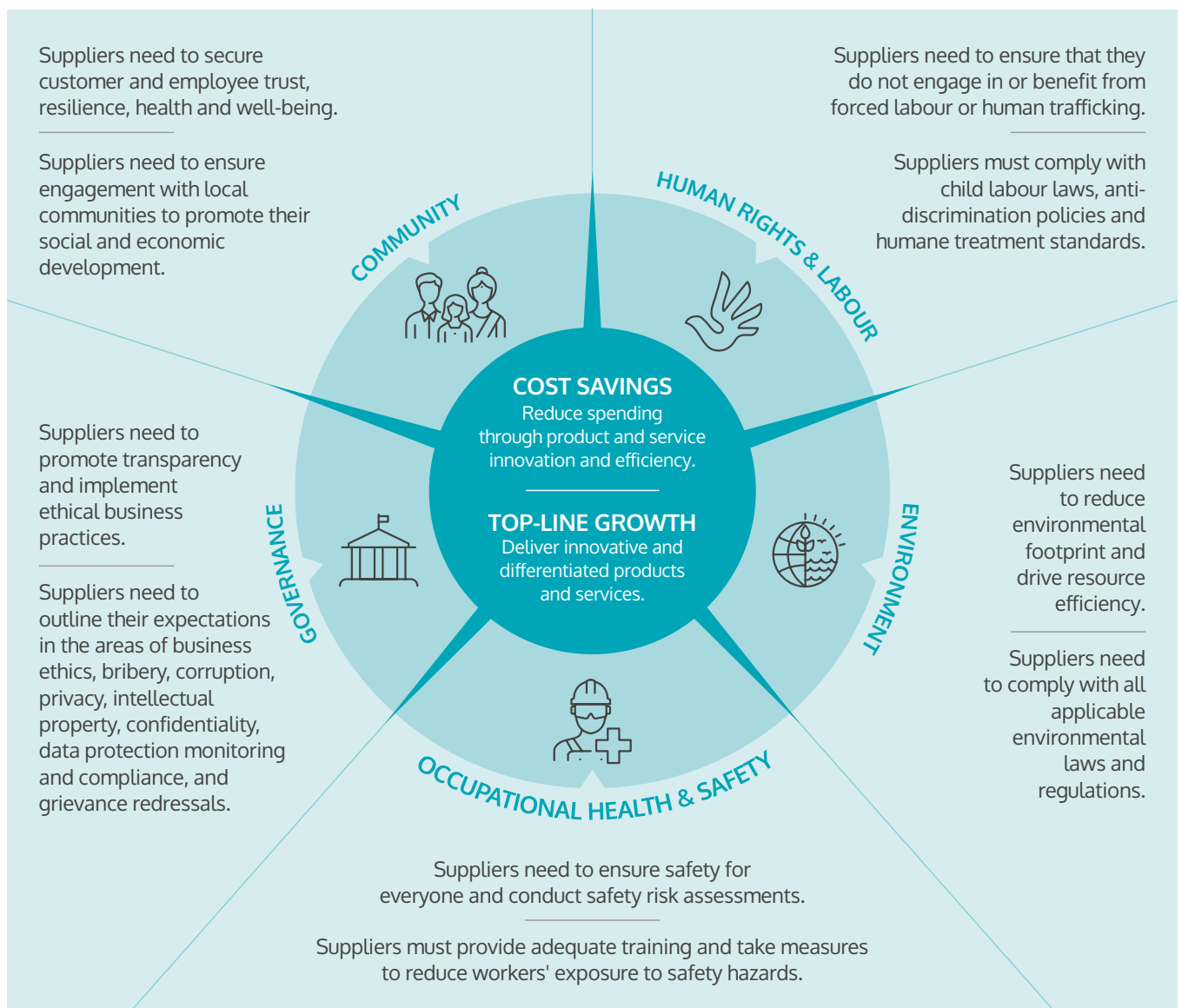
Our Progress in Sustainable Supply Chain Management

Aditya Birla Group's comprehensive approach to sustainable supply chain management includes a thorough evaluation of operational and sourcing practices, with a focus on addressing the social and environmental impacts at all levels. Responsible sourcing continues to be a key facet of our progress. We are collaborating with the procurement and sustainability teams of ABG businesses to proactively implement the Supply Chain Management Standards. Recognising the rising awareness and heightened sensitivity to ESG issues, we are committed to enhancing the transparency of ESG processes, practices, and performance throughout our extended supply chain.

The Sustainable Supply Chain Transformation Project

To streamline supply chain and value chain management processes across businesses, the Working Group on Sustainable Supply Chain, comprising representatives from business procurement and sustainability functions, is spearheading the implementation of Group-level Supplier Code of Conduct (SCoC). The SCoC adds five key sustainability themes to the two existing procurement objectives.

■ Existing procurement objectives   ■ Integrated sustainable sourcing objectives

Suppliers need to secure customer and employee trust, resilience, health and well-being.

Suppliers need to ensure engagement with local communities to promote their social and economic development.

Suppliers need to ensure that they do not engage in or benefit from forced labour or human trafficking.

Suppliers must comply with child labour laws, anti-discrimination policies and humane treatment standards.

Suppliers need to promote transparency and implement ethical business practices.

Suppliers need to outline their expectations in the areas of business ethics, bribery, corruption, privacy, intellectual property, confidentiality, data protection monitoring and compliance, and grievance redressals.

Suppliers need to reduce environmental footprint and drive resource efficiency.

Suppliers need to comply with all applicable environmental laws and regulations.

COMMUNITY

HUMAN RIGHTS & LABOUR

GOVERNANCE

ENVIRONMENT

OCCUPATIONAL HEALTH & SAFETY

COST SAVINGS
Reduce spending through product and service innovation and efficiency.

TOP-LINE GROWTH
Deliver innovative and differentiated products and services.

Suppliers need to ensure safety for everyone and conduct safety risk assessments.

Suppliers must provide adequate training and take measures to reduce workers' exposure to safety hazards.

While the SCoC is being implemented across all businesses, it can be customised in line with their sectoral or business requirements. This SCoC process guide encourages cross-learning, revealing challenges and shaping a strategic roadmap for sustainable progress.

Create Cross Functional Task Force

Create a cross functional task force consisting of representatives from procurement, sustainability, legal and possibly operations stakeholders to update existing sourcing and procurement process to make them more aligned with sustainability.

Task force to **understand the sustainability interventions** in the supplier lifecycle process.

Identify and prioritise material sustainability topics

Identify material sustainability topics as per the business requirements (based on business strategy, industry geography, etc.)

Prioritise sustainability topics based on areas under the influence of procurement.

Adapt processes and tools & templates to business needs

Customise processes and tools & templates (modifications/deletions) as per business needs even having discussions with a few representative suppliers if required.

Update the **Supplier Code of Conduct.**

Internal and External Communication

Communicate the key changes in the supplier lifecycle processes to the **entire procurement team** as well as select business stakeholders.

Create a **standard communication plan** for **suppliers** to inform them of the key changes.

Implement sustainability interventions

Pilot the implementation of sustainability interventions for **existing suppliers** (10-15 suppliers).

Create a **phased approach for implementation** of sustainability interventions across all the **finalised suppliers.**

Explore **tech & tooling and third-party partners** to expand selected sustainability interventions across **entire supply base.**

Supplier Sustain-ability Highlights

Progressive businesses across the Group are shaping the future of responsible business practices. From setting industry standards in risk mitigation and integrating artificial intelligence (AI) for efficiency to driving sustainable practices with supplier assessments and achieving leadership in responsible sourcing, these initiatives redefine corporate responsibility and underscore a commitment to ethical and sustainable operations.

Setting Industry Standards in Risk Mitigation

Hindalco

Our metals business Hindalco has developed an enterprise risk register to identify key supply chain-related risks, including disruption, logistics, infrastructure, financial, strategic, and operational risks. Regular assessments are conducted to ensure adherence to the Supply Chain Code of Conduct and suppliers are encouraged to align their sourcing policies with international standards.

A formal supplier risk identification process assesses critical suppliers during onboarding and biennial evaluations. Suppliers are persuaded to provide risk awareness training to their employees and contractors. For more information about Hindalco's risk mitigation strategies, please refer to its latest Integrated Annual Report.

Integrating AI for Efficiency and Ethics

Novelis

Novelis enforces a Supplier Code of Conduct, ensuring consistent governance and transparency. Suppliers must meet industry-specific standards, emphasising responsible and high-quality operations. Novelis embraces digitalisation and AI to boost efficiency while upholding ethical conduct expectations for both employees and suppliers.

The company is dedicated to sustainable manufacturing and promotes closed-loop recycling systems to reinforce its commitment to environmental responsibility. For more information about the company's digital journey, please refer to Novelis' Sustainability Report 2023.

Driving Sustainable Practices with Supplier Assessments and Vendor Code

ABFRL

In the fashion business, ABFRL has embedded sustainability throughout its supply chain by conducting supplier assessments, implementing a vendor code of conduct, and operationalising sustainable chemical management systems. The collaboration with the ZDHC Foundation aims to promote good chemical management practices across the supply chain, while the "Zero Waste to Landfill" initiative encourages internal and external collaboration among sites, suppliers, and waste management providers to minimise waste. The company harnesses digital solutions to enhance business performance and supply chain management. For more information about ABFRL's supplier sustainability practices, please refer to their Sustainability Report 2023.

Achieving Leadership in Responsible Sourcing and Circularity

Birla Cellulose

Birla Cellulose has a rigorous 'Wood Sourcing Policy' that ensures the preservation of ancient and endangered forests. The company has received recognition for their work by securing top honours in Canopy's Hot Button Report for three consecutive years, showcasing dedication to circular fashion industry practices.

Seven of the fibre manufacturing sites of this business have earned a remarkable Higg Facility Environmental Module score of 94%. For more information about the company's responsible sourcing practices, please refer to their Sustainability Report 2021-22.

An Evolving Journey in Sustainable Supply Chain Excellence

UltraTech Cement, a key player in India's infrastructure development and a strategic growth engine for Aditya Birla Group, achieved a milestone of producing, dispatching, and selling 100 million tons of cement in FY23. Recognising the importance of a sustainable supply chain, the company is committed to a low-carbon growth pathway.

The Sustainable Supply Chain journey at UltraTech commenced in 2019 with Project Sahyog. The project sought to achieve environmental, social and governance sustainability across the supply chain through a collaborative and consultative approach and is aligned with Aditya Birla Group Sustain-ability Framework for future-proofing the business.

UltraTech's goals include screening 100% of new suppliers for ESG criteria and training 25% of Tier 1 suppliers by 2025.

Key Milestones Project Sahyog

STRATEGIC ACTIONS UNVEILED

Identification of 120 critical suppliers, constituting over 60% of CPC's annual spend.

Implementation of a Self-Assessment Questionnaire aligned with global standards.

ADAPTING TO CHALLENGES

Engagement of Third Party Agency to improve awareness and assess the Critical Suppliers.

Virtual engagements and desk-based analysis amid COVID restrictions.

Low scores for OEMs/ large suppliers; identified gaps communicated.

AMPLIFYING AWARENESS

10 ESG awareness programmes for 200 suppliers.

Knowledge building sessions for internal stakeholders to enhance subject understanding.

DEEPENING ESG INTEGRATION

Board-level oversight for a robust Sustainable Supply Chain Framework.

Alignment with global standards: S&P Global CSA, SMETA 4-pillar, GCCA guidelines.

Revision of Supplier Code of Conduct and evaluation criteria.

Vendor On-boarding Form revamped for 100% ESG screening of new suppliers.

Third-party support for critical suppliers: analysis, site visits, action plans.

Improved ESG scores for pilot 10 suppliers; enhanced vendor acceptance.

2020

2021

2022

2023

ADITYA BIRLA
UltraTech
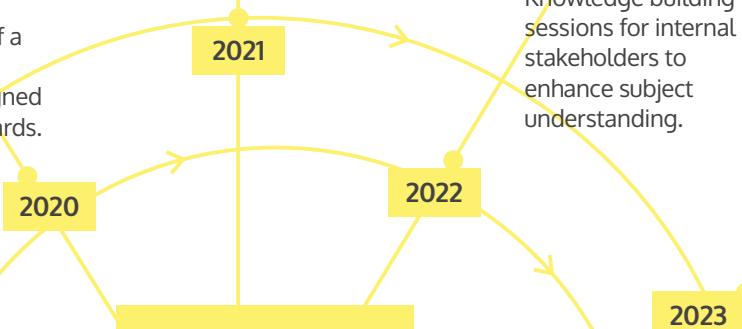
For more information about Sustainable Supply Chain Management at UltraTech Cement, please refer the company's 2023 Integrated and Sustainability Report.

ENVIRONMENT

Responsible resource utilisation and holistic environmental stewardship are the hallmarks of dynamic and responsible businesses. They continue to guide strategy and actions at Aditya Birla Group.

In this section, we expand on the Group and business-level ambition and approaches to key environmental megatrends like Water Resilience, Decarbonisation, Waste to Wealth for Circularity, and Biodiversity Management. We also highlight the progress made across aspirational targets and the road ahead.

Water Resilience

Given the Group's sectors and geographies of operations, our ability to sustain and thrive is closely linked to having reliable access to water. Few of our businesses like Pulp & Fibre and Aluminium rely heavily on water resources for business continuity.

Hence, tackling water stress (too much water-floods or too little water-droughts) is a strategic business priority.

Much like the physical availability of water is critical in our operations and supply chains, we are deeply cognizant of how it is a shared resource amongst all stakeholders in the different watersheds that we operate in.

At Aditya Birla Group, we have been following a risk-based approach to build resilience and secure the water resources. The risk is a combination of regulatory, physical (quality and quantity), stakeholder and financial risk to a location/business as attributable to water. Basis the approach, enshrined in our Water Policy and water risk management standards, we assess the risk profiles at regular intervals. The high-level starting point is through a bespoke geospatial tool. The findings of this desk-based Water Stress Risk Assessment have been used to prioritise the sites located in 'High to Extreme High' Water Stress/Risk[1] areas for the development and implementation of water risk mitigation plans. These plans are a combination of water conservation programmes, strategic collaborations and efficiency improvements.

Over the years, of the prioritised sites, we have achieved a significant reduction in freshwater consumption. In fact, at some of the locations of UltraTech, Hindalco and ABFRL, we have achieved a water-positive status. UltraTech continues to march on the journey, having become overall 4.17 times water positive in FY23.

Climate change is increasingly manifesting itself through water – be it through floods or droughts, storms or other extreme weather events. As global temperatures surge, the Group companies confront direct climate risks—flooding, heat stress, and water scarcity—and indirect risks like supply chain disruptions from severe floods. This necessitates the integration of physical climate risk into risk assessments and long-term investment planning and adaptation.

During the reporting period, there were many global instances of extreme weather events that led to disruptions in operations and supply chains, thereby impacting the businesses. This prompted us to undertake an in-depth physical climate risk assessment across our locations. The study was aimed at identifying the possibility of physical climate risk occurrences such as floods, extreme heat, droughts, water stress etc across two time horizons of 2030 and 2050. The results of this risk assessment are being used to further refine the water risk mitigation plans and climate adaptation plans at select sites. For example, the stormwater management plans are being upgraded to align with the results.

Since water is a shared resource, its conservation and rejuvenation require a multi-stakeholder, multi-modal effort. With an ambitious water stewardship strategy, our businesses are progressing towards a higher value chain resilience against the backdrop of rapidly evolving physical impacts of climate change. The water stewardship approach has been lending itself to improved water security and thereby contributing to accelerate progress on other environmental goals on nature and biodiversity.

Through an in-depth understanding of our water needs and risks, we have been developing and fine-tuning plans and actions to enhance the Group's water resilience. The risk-based approach has allowed for the adoption of innovative strategies at high-risk sites to reduce freshwater withdrawal intensity. This approach supports our operations, benefits the surrounding communities, and aligns with global environmental imperatives.

Note

[1] Here the risk refers to the impact on the availability of water (Too little water)

[2] 2015 baseline refer to data for FY16

Under two global warming scenarios (SSP2-4.5 and SSP5-8.5).

Ambition, Approach & Progress

Aditya Birla Group has aspirational targets on water management - 50% reduction in freshwater consumption per ton of product by 2025 on a 2015[2] baseline and water positive status in mining locations.

Building Resilience through a Risk-based Approach

We are on track for both these goals, which are being guided by our objective of maximising the impact through prioritising the high-water risk locations.

Our approach to mitigating water risk begins with the identification of the type of water used/generated in our processes. The next step is to define and map water management best practices for each water category. This is outlined here:

Process Water 1

Efficient use of freshwater - improve efficiency, cut down on losses, reuse & recycle and product innovation

Development of alternate sources of water

Additional treatment for improving the quality

Exploring collaboration and partnerships, implementing pilots for testing new technology

Water conservation such as rainwater harvesting and artificial aquifer recharge

Sanitary Water 2

WASH - access to clean drinking water and hygienic sanitation facilities for all employees
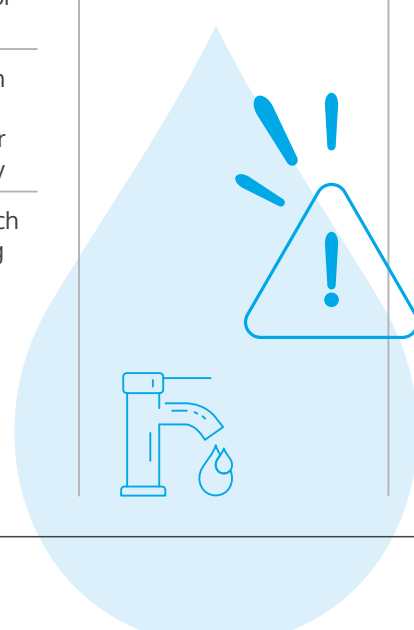
100% compliance to the WASH guidelines of the Group

Storm Water 3

Designing and developing resilient water infrastructure against disasters and for additional storage

Protect local watershed(s), including important water related areas

To understand the local and regional water-related risks that our businesses may face, a comprehensive water risk assessment study was conducted, whereby a total of 28 sites were identified to be in 'High to Extreme High' Water Stress/Risk areas.

Out of the 28 "High to Extreme High Water Stress Risk" sites, 6 sites have achieved a reduction in specific freshwater withdrawal intensity greater than 50% as compared to FY16.

An additional 12 sites under the same category have achieved a reduction in specific freshwater withdrawal intensity of between 10% and 50% when compared to FY16 data.
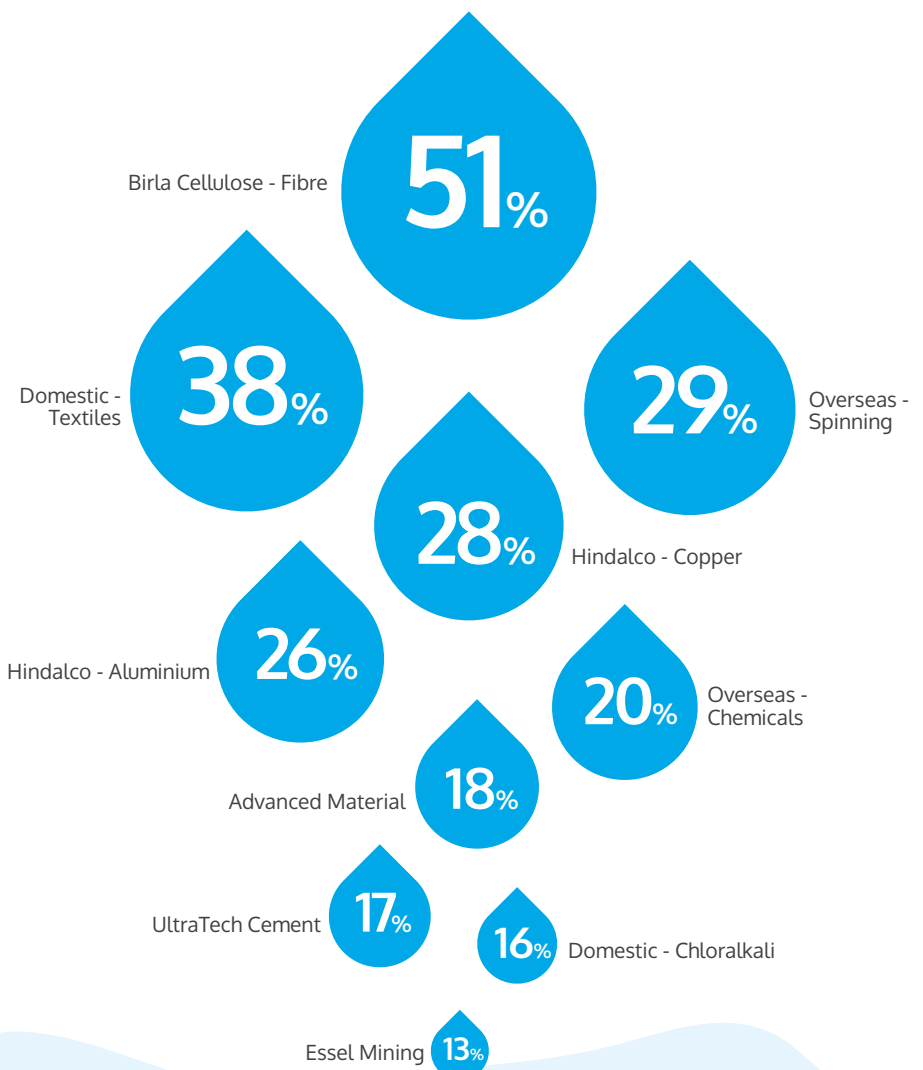
These assessments are supporting the units located in water stressed regions to be more sustainable in their water requirements, while also considering the responsibility of shared resources with the surrounding communities. Other sites that are located in known water stressed (too little water) regions, also continue to work diligently through their Water Stewardship plans to reduce their freshwater withdrawal and consumption intensity.

Water Management Performance
FY22 & FY23

In this section, we provide a brief snapshot of our successes and improvements while also capturing the plans and focus areas that the Group and Businesses will be focussing on till FY25.

% Specific Freshwater Withdrawal Intensity Reduction
per tonne of product over FY2015-16 baseline*

Birla Cellulose - Fibre — 51%

Domestic - Textiles — 38%

Overseas - Spinning — 29%

Hindalco - Copper — 28%

Hindalco - Aluminium — 26%

Overseas - Chemicals — 20%

Advanced Material — 18%

UltraTech Cement — 17%

Domestic - Chloralkali — 16%

Essel Mining — 13%

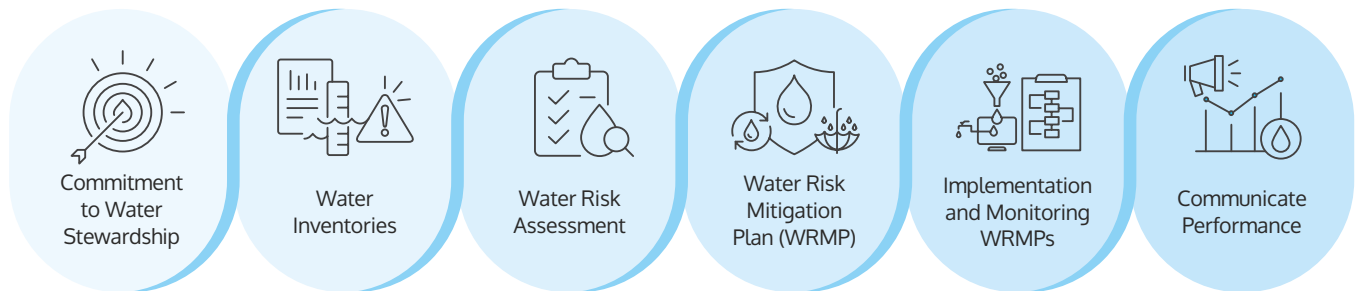Birla Cellulose (Fibre business) has already achieved the Group target while Domestic Textiles, Overseas Spinning and Hindalco are close to achieving the target. In addition to the businesses that have already met the 50% reduction in freshwater intensity targets, several sites from various businesses are on course to meet the target.

*For Overseas Business (Chemicals) and Advanced Material data from FY17 has been considered.

Progress on the Ambition and Approach

Here are the key highlights of the progress made during the reporting period towards achieving our water management ambition and furthering the risk-based approach:

| Commitment to Water Stewardship | Water Inventories | Water Risk Assessment | Water Risk Mitigation Plan (WRMP) | Implementation and Monitoring WRMPs | Communicate Performance |

Commitment to Water Stewardship

All our businesses have taken internal targets of reducing their water consumption/withdrawal per tonne of product. Businesses that are water intensive have also adopted Zero Liquid Discharge/Minimal Liquid Discharge status and water positive/neutrality targets.

- Inside the plants, Group companies employ various water management initiatives like monitoring, reducing, reusing, harvesting, recycling, usage of municipal sewage water and emergency planning.

- Outside their fence line, plants collaborate with communities on projects for water quality monitoring, groundwater replenishment, and watershed-level efforts.

Water Inventories

Having an accurate water balance is key to determining the priority actions for water consumption reduction/efficiency improvements which are available across all our sites.

Water Risk Assessment

All sites across the Group businesses have been assessed for their water-related risk. Risk can be related to availability of water (Too much/Too little water), regulatory risk, cost of water, quality of water etc. We have now also started the process of understanding and integrating physical climate risk in long-term water management strategies.

Water Risk Mitigation Plan (WRMP)

Based on the identified risk, Water Risk Mitigation Plans are developed for sites located in High water-stressed regions. Overall, most sites have developed their WRMPs. The plans consider different sources of water like process water, sanitary wastewater and storm water.

Implementation and Monitoring WRMPs

For implementation of WRMP, the businesses are following internal water governance structure, clear instructions, standard operating process and procedure, robust training and awareness programmes, and regular monitoring and review.

Most of the businesses have implemented site specific water management taskforces with assigned roles and responsibilities as part of their governance structure.

Aditya Birla Group businesses are progressing from conventional to innovative water conservation measures by adopting best practices like water regeneration, digitalisation and through capacity and capability building creating a reserve of water champions to ensure water security in the years ahead.

Implementation of the WRMPs has been supported through the use of Self-Assessment Questionnaires (SAQs) and Group Assurance.

Communicate Performance

Most Group businesses are communicating their performance internally during the quarterly Business Review Council (BRC) meetings and externally through Integrated Sustainability Report/ESG Performance Report/CDP Water Disclosures/DJSI etc.

The Pivot to Water Positivity

Water, when managed well, has the potential to go from risk to opportunity, from scarcity to positivity. Some of Aditya Birla Group companies are already on their path to Water Positivity.

UltraTech Cements became

4.17 times

water positive in FY23 from 2.18 times in FY15. Targets to become 5.0 times water positive in 2024

ABFRL has achieved water positive status and currently recycles/reuses

68%

of its water

Hindalco Samri mines have achieved water positivity in the reporting period and other mines are also approaching similar landmarks.

As they mature in their water journey, we expect more Group companies to join this list in the years to come.

Harvesting Rainwater for Water Positivity
Hindalco, Mouda

Hindalco's Mouda unit, identified through the Desk based Water Stress Risk Assessment and located in water-scarce Nagpur, Maharashtra, overcame a critical challenge by constructing two substantial rainwater harvesting ponds on-site. With Pond 1 holding 75,000 KL and Pond 2 holding 35,000 KL, the unit achieved a cumulative storage capacity of 1.1 million KL. **This not only ensured self-reliance but also earned the distinction of being water positive, making it the first Hindalco unit in India to attain Water Positive certification.**

By effectively harnessing rainwater, the unit achieved a remarkable reduction in its freshwater consumption. From a significant 55,164 KL per annum in FY22, water consumption plummeted to 21,587 KL in FY23, translating to an impressive 61% reduction. Looking ahead, the unit plans to augment the capacity of Pond 2 by an additional 20,000 KL.

Achieved an impressive reduction of 61% from a 55,164 KL per annum in FY22 to 21,587 KL in FY23.

We harvested a total of 98.93 million m³ of rainwater in FY22 & FY23. This includes 47.45 million m³ in FY22 and 51.48 million m³ in FY23 – showing a strong upward trend.

Upgrading Technology to Reduce Consumption and Discharge
Novelis Asia

Novelis Yeongju, South Korea facility recently installed a Dissolved Air Flotation (DAF) treatment system on the cooling tower used for the aluminium casting operations. The DAF continuously treats the recirculated cooling water to remove solid materials in the water. This allows the facility to increase the water recirculation rates and reduce the water discharged offsite.

The facility has reduced water makeup by

170 m³/day

and it has decreased water discharge by 100 m³/day.

Effluent Recycled/Reused Indicator

Our businesses recognise their impact on water resources not only within their operating boundary, but also around the community. Therefore, over the years, our businesses have implemented various initiatives in line with their overall Water Stewardship Plans. One of the key levers that sites have implemented is investing and increasing the share of treated effluent being recycled and reused within the plant boundaries.

For example, UltraTech, Hindalco and Birla Cellulose harvest rainwater and build reservoirs and dams in catchment areas to conserve water. Another best practice involves reinserting sewage water into the production process, thus, reducing reliance on surface and groundwater sources. Below is a snapshot of effluent being recycled/reused ratio as a function of total freshwater withdrawn by businesses.

Across Aditya Birla Group portfolio, effluent recycled/reused since FY21 has increased from 12.3% to 16.0% in FY23, representing a 30.1% increase in the quantum of effluent recycled/reused as a function of total freshwater withdrawn.

The table below provides a summary snapshot of businesses that are leading this initiative.

Quantum of Wastewater Recycled   as % of water withdrawn

Group Business	FY21	FY22	FY23	% Change compared to FY21	
Textiles/Acrylic Fibre/Overseas Spinning	6.73	13.3	17.47	159	↑
Birla Cellulose	9.7	13.9	17.1	76.2	↑
Chemicals	7.4	12.4	10.9	47.2	↑
Novelis	1.8	1	2.4	33.3	↑
Hindalco	19.4	20.65	22.4	15.4	↑

Advanced Reclaim and Reuse Strategies to Meet and Exceed EU-BAT Standards
Grasim - Birla Cellulose, Vilayat

In the past five years, Grasim Cellulose Division (GCD) at Vilayat has invested in improvements to meet rigorous European Union Best Available Technology (EU-BAT) standards. Key initiatives include deployment of advanced RO systems to reclaim and reuse up to 70% of process water from diverse effluent sources; implementation of innovative strategies such as influent and effluent characterisation, closed-loop backwashing, and optimal utilisation of RO reject for one-time quenching. Additionally, efforts include expanding and upgrading the Effluent Treatment Plant (ETP) while refining manufacturing processes.

GCD Vilayat earned recognitions, including the 'Excellence in Environment Management' award at the CII-ITC Sustainability Awards 2022 and the 'ET-Promising Plant Award 2022.'

These efforts led to a remarkable

70% 💧

reduction in water intensity from the FY2016 baseline

Crystallising Water Savings
Grasim Chemicals Division, Karwar

Grasim Chemicals in Karwar operates a 250 TPD plant which involves purging 100 m^3 of brine daily, resulting in 20 MT of salt and wastewater.

To mitigate effluent generation and preserve the purged saline water, an innovative Sulphate Removal System (SRS) and Chemical Dosing Tank (CDT) was implemented, focussing on reducing water wastage and effluent output.

The SRS & CDT system achieved an 80% reduction in brine purging, equating to a substantial conservation of 80 m^3 of water and 16 MT of salt per day. This marked a considerable step forward in reducing both effluent discharge and salt consumption.

Equating to a substantial conservation of

80m³ 💧

water and 16 MT of salt per day.

Managing Water through Shared Learning

Aditya Birla Group is a treasure trove of excellent water management practices as highlighted in the previous section. At the Group level, we harness collective learning, collaborative solutioning and tech-exploration platforms to introduce, enhance and cascade best practices across the Group.

Championing Water Stewardship

To achieve our water stewardship goals, we launched the Water Champions Programme in 2022. This programme aims to develop Business-wide and site-specific Water Champions responsible for overall water management, including improving water footprints, achieving water positivity, and improving water treatment. It involves technology, expert partnerships, and skilled employees, serving as a platform for sharing best practices and technologies.

In March 2022, Phase 1 of the training programme was completed, and in February 2023, Phase 2 of the training programme took place at Hindalco's Dahej unit in collaboration with DuPont. This phase provided technical training on Ultrafiltration (UF) and Reverse Osmosis (RO) technologies, covering fundamentals and advanced topics. It also addressed common challenges, troubleshooting, and best operating practices to enhance plant efficiency and sustainability.

As of FY23, the Water Champions Programme has covered 200+ employees across businesses such as Birla Cellulose, Hindalco, Birla Century, Domestic Textiles, CFI and Essel Mining and has covered topics such as cooling water treatment, water & wastewater treatment systems, cost optimisations, and Zero Liquid Discharge systems.

Collaborative Problem-solving and Technology Exploration

A Water Working Group has been constituted at the Group level with representation from all Group businesses that have a high water footprint. Through these meetings, water challenges are identified, and cross-business collaborations are fostered where solutions are identified in-house, or where not feasible through the association with various technology providers and external subject matter experts. Best practices are routinely shared during the Water Working Group Meetings, and future risk proofing concepts are discussed and deliberated upon.

A key activity of the regular meetings is to invite Innovative Water Treatment startups/ vendors to present their technologies. Through these engagements, some of our businesses are working with global startups in implementing cutting-edge water treatment technologies.

These technologies and recycling processes, which are implemented at the source, helps in recovery of specific elements from water which can be recycled back into process, reduce the overall cost of effluent treatment, and reduce the sludge to landfill.

Decarbonisation

Aditya Birla Group aspires to achieve

Net-Zero

Carbon Emissions by 2050.

The call to action on climate change has advanced over recent years with decarbonisation taking centre stage for mitigating risk and building resilience. As the global focus on climate change has intensified over years, we recognise that decarbonisation is not just an environmental responsibility but also a strategic imperative for long-term success.

Our decarbonisation approach balances the risk mitigation efforts with climate change related opportunities by opening doors to new markets and fostering innovation in manufacturing, products and services.

Decarbonisation necessitates a dual strategy, combining technological innovations with societal shifts away from fossil fuel-dependent technologies. Understanding the intrinsic interconnection of these two factors underscores the need for a holistic approach. We also understand the complexity of the sectors in which we operate and hence a one-size fits all solution will not be suitable.

Thus, we contextualise the decarbonisation levers in our long-term roadmaps, to the sector and the geography of operation. It necessitates having a clear-cut understanding of our current emissions while assessing the requirements that need to be adhered to, what needs to be achieved, and how well various solutions can help us achieve our Net-Zero goals. This serves as the basis for developing our short, medium and long- term roadmap.

Our Ambition

A pivotal part of our commitment to decarbonisation is setting public targets to reduce greenhouse gas (GHG) emissions and energy consumption. Most of our businesses have developed short, medium and long-term roadmaps to achieve Net-Zero or reduce carbon emission intensity across their value chain.

These roadmaps incorporate current footprint, future projections, and emission hotspots. They identify inhibitors and accelerators, evaluate different decarbonisation scenarios and help develop time-based implementation plans. During the reporting period, these businesses continued to push the envelope by building on their momentum. For instance, Hindalco, in our previous report, aimed to reduce emission intensity by 25% by 2025 (baseline: FY12). During this reporting period, the company expanded its commitment, targeting Net Carbon Neutrality by 2050, in addition to the existing emission intensity reduction goal.
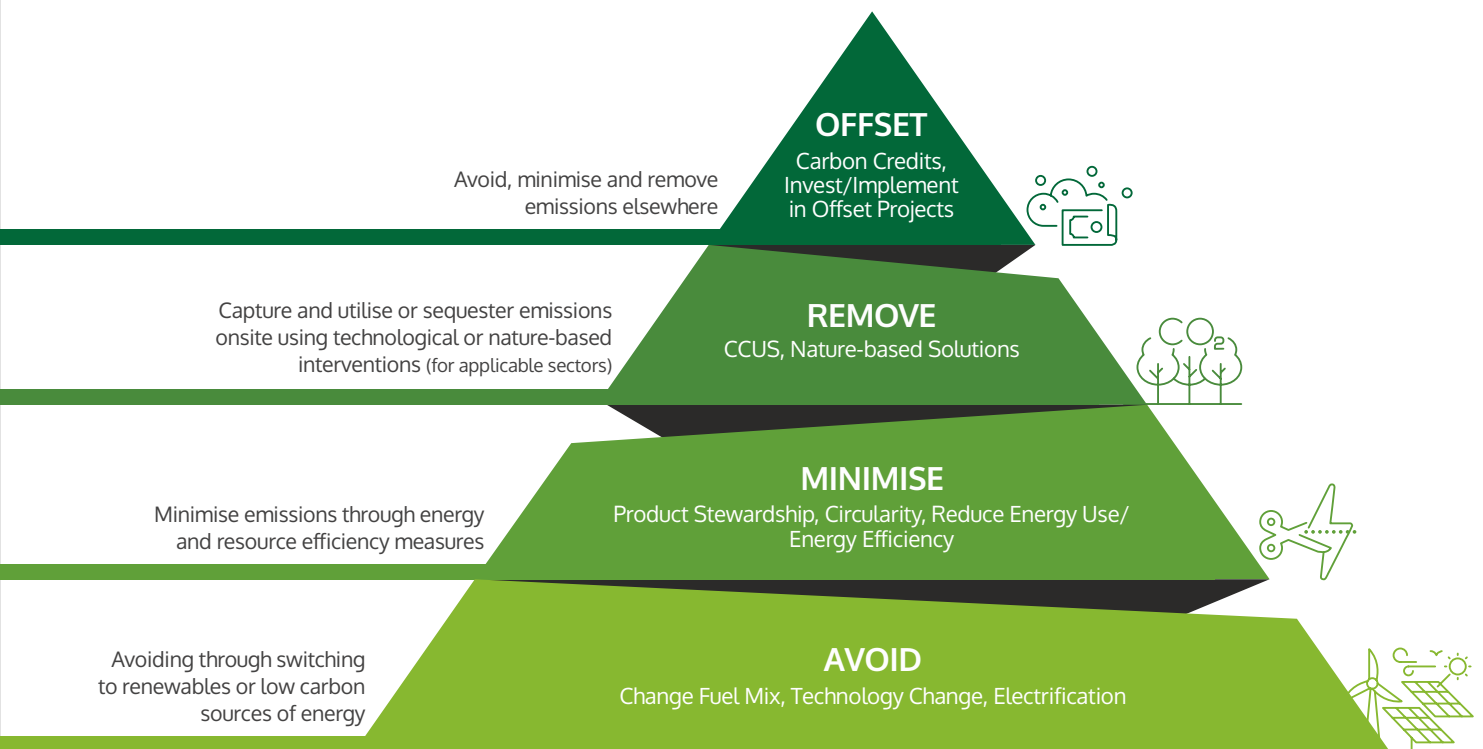
Similarly, UltraTech Cement is actively working towards substituting 34% of its electricity with green energy by 2024. This complements its overarching objectives, including producing carbon-neutral concrete by 2050, reducing CO_2 emissions by an additional 25% by 2030, and achieving a 27% reduction in Scope 1 and a 69% reduction in Scope 2 GHG intensity by 2032 (baseline: FY17).

Please refer to our previous report for more information on the business-level targets.

Our Approach

Our approach is streamlined through a Decarbonisation Hierarchy – a structured framework built upon four core principles: Avoid, Minimise, Remove, and Offset. It prioritises avoidance as the primary lever and progresses through minimisation, removal, and ultimately offsetting.

The implementation of technical solutions is being done through short and long-term approach. In the short-term, we are focussing on options that are techno-commercially feasible. This includes increasing the RE share through Open access, third party Power Purchase Agreements and exploring RE + storage solutions for round-the-clock energy. Then there are measures like adoption of electric vehicles, alternate non-fossil-based sources of fuel and optimising energy use through use of digital and process technologies. In the long-term, we are gaining insights on next-gen options that provide sector or process-specific solutions. This includes Carbon Capture, Utilisation and Storage (CCUS) and Green Hydrogen.

Avoid, minimise and remove emissions elsewhere

OFFSET
Carbon Credits, Invest/Implement in Offset Projects

Capture and utilise or sequester emissions onsite using technological or nature-based interventions (for applicable sectors)

REMOVE
CCUS, Nature-based Solutions

Minimise emissions through energy and resource efficiency measures

MINIMISE
Product Stewardship, Circularity, Reduce Energy Use/ Energy Efficiency

Avoiding through switching to renewables or low carbon sources of energy

AVOID
Change Fuel Mix, Technology Change, Electrification

Decarbonisation Hierarchy

Performance

Aditya Birla Group businesses have demonstrated commendable progress in reducing GHG emissions.

Birla Cellulose
successfully lowered its Scope 2 emissions by an impressive

52%

compared to FY21

....

Novelis
achieved a substantial

14%

reduction in absolute CO_2e emissions in FY23

....

Birla Carbon
made significant strides, achieving a 4% reduction in Scope 1 emissions and a 5% reduction in Scope 2 emissions in FY23 compared to FY22

GHG Emission Performance

The top four businesses contributing to the Group's overall GHG emissions are UltraTech, Hindalco, Birla Carbon and Chemicals. These businesses have been able to substantially reduce their specific emission intensity due to the various initiatives adopted across their operations.

Specific GHG Emissions

Group Businesses	FY21	FY22	FY23	Reduction achieved compared to FY21
Hindalco - Aluminium (tCO_2/MT)	19.74	19.66	**19.26**	-2%
Hindalco - Copper (tCO_2/MT)	3.33	2.62	**2.41**	-28%
UTCL (kg CO_2 per tonne of cementitious material produced)	596.5	582.0	**557.0**	-7%
Grasim (tCO_2/Turnover)	424.67	285.8	**236.2**	-44%

Total GHG Emissions (Scope 1 + Scope 2)   *in tCO_2*

Group Businesses	FY21	FY22	FY23
ABFRL	27,308	41,226	**69,606**
Birla Carbon	3,432,770	3,894,249	**3,741,052**
Birla Cellulose	3,219,339	3,637,328	**3,651,986**
Chemicals	3,270,701	3,827,278	**4,010,322**
Essel Mining	199,894	192,489	**200,712**
Hindalco	25,587,964	27,140,000	**27,561,563**
Aditya Birla Insulators	39,369	36,457	**42,464**
Novelis	2,606,581	2,334,137	**2,255,000**
Textiles/Acrylic Fibre/ Overseas Spinning	616,801	725,454	**769,348**
UltraTech Cement	57,991,835	62,804,149	**64,225,491**

Note: For ABFRL, the increase in Scope 1 & 2 emissions is due to addition of new facilities and retail stores in the reporting boundary. For Hindalco, the increase in emissions is due to the expansion of operations and an increase in production. For UltraTech, there has been an increase in production capacity. Novelis has been able to reduce its carbon emission by scaling circularity across its value chain.

Scope 3 Emissions

Aditya Birla Group businesses have been able to map emissions across their value chain. Addressing Scope 3 emissions is important for us to advance in our decarbonisation journey and prioritise our reduction strategies. Majority of our businesses have now started mapping and reporting their Scope 3 emissions. Some have matured in this journey and are integrating this on a digital platform for better data management and analysis.

Scope 3 Emissions   *in tCO$_2$*

Group Businesses	FY22	FY23
ABFRL	476,608	1,297,038
Birla Carbon	2,025,020	2,074,032
Grasim (Viscose, Chemicals, Textiles and Insulators)	4,810,000	5,570,000
Novelis	17,795,560	15,017,000
UltraTech Cement	4,547,816	4,204,918
Total Tonnes of CO$_2$	**29,655,004**	**28,162,988**

Key Levers to the Net-zero Target

The GHG mitigation hierarchy developed hinges on four key strategies of:

1 Energy Efficiency and Conservation	**3 Low Carbon Growth and Product Stewardship**
2 Use of Renewable and Alternative Energy Sources	**4 Mitigation & Sequestration**

All our businesses, depending on the extent to which they rely on each of these levers have progressed on each of these aspects.

1. Energy Efficiency and Conservation

This involves reducing the quantity of energy used in our operations and conserve/recover energy through activities like recovering waste heat and waste gases with calorific value, among others. Some snippets from our leading businesses:

- Hindalco has developed detailed plans for its plants while incorporating digitalisation to improve energy efficiency through initiatives like smelter digital twin, power plant digital twin and energy management platform. It achieved a 19% reduction in specific energy consumption for aluminium in FY23.

- UltraTech has been able to commission an additional 43 MW of Waste Heat Recovery System (WHRS) in FY23, taking its total WHRS capacity to 210 MW.

Redesigning to Enhance Efficiencies | Hindalco

The Hirakud unit of Hindalco has undertaken several energy efficiency and productivity improvement initiatives during the reporting period.

- A redesigned steel shell for existing pots, operating at 235 kA, lowered temperatures by 15°C, preventing failures. The modification ensures uniform heat loss distribution.

- Additionally, a new busbar configuration is being developed to further reduce energy consumption.

- In parallel, a 3-riser busbar design with enhanced magnetic compensation was successfully tested in line-4 and is now being horizontally deployed in line-3 for increased safety and efficiency.

For more information, please refer to Hindalco's Integrated Annual Report 2022-23.

Energy Management | GHG Reduction

Through renewable energy adoption, energy efficiency enhancements, carbon mitigation, and circularity initiatives, every Group business is forging a unique path to contribute to the Group's overall mission of achieving net-zero emissions by 2050. Performance tracking is a key component of the overall approach. The performance gaps are being used to develop and drive action plans to better manage and reduce specific energy consumption and GHG emissions.

Energy Consumption by Business

(Total Energy Consumption in Tonne of Oil Equivalent)

Group Businesses	FY21	FY22	FY23
ABFRL	4,895	7,165	10,740
Birla Carbon	612,497	504,999	466,765
Birla Cellulose	1,432,840	1,690,879	1,954,722
Aditya Birla Chemicals	634,580	829,971	855,136
Essel Mining	59,666	58,309	51,505
Hindalco	6,086,017	7,415,926	6,565,469
Aditya Birla Insulators	10,103	11,197	12,414
Novelis	748,924	925,100	909,654
Textiles/Acrylic Fibre/ Overseas Spinning	131,364	156,328	167,848
UltraTech Cement	6,194,492	6,358,078	6,892,709
Total Energy Consumption (TOE)	**9,720,886***	**17,957,951**	**17,886,962**

*Change in number over previous report is because Fertiliser Business is no longer a part of the Group.

2. Use of Renewable and Alternative Energy Sources

In addition to using renewable energy sources like solar and wind along with energy storage, this step involves adopting low-carbon fuels like natural gas and hydrogen, leveraging of biomass-based fuels like agricultural residues and utilising waste materials with calorific value like municipal waste, organic industrial solid wastes, among others.

Aditya Birla Renewables Energy Ltd. has a cumulative installed capacity of 744 MWp, with 193 MWp being commissioned during FY23.

Increasing the RE Share

Businesses are increasing their RE share through various ways ranging from installing capacity at their own locations, third-party power purchases and long-term collaboration with energy transition companies, to signing agreements for supply of round-the-clock renewable energy.

Our Group companies and businesses increased the use of renewable and alternative energy sources in following ways:

- Hindalco has a total RE capacity of 108 MW, but it needed access to uninterrupted power to reduce its reliance on fossil fuel-based energy. In FY23, it entered into a commercial agreement with Greenko Group, which entails the provision of round-the-clock, carbon-free electricity for 25 years at its Odisha smelter – a global first for the aluminium sector. This agreement will help Hindalco reduce 680,000 MT of CO_2 annually through 100 MW of captive power, which will be enhanced to 350 MW in the future.

- Birla Carbon is focussing on adding more renewable energy solutions and shifting a portion of the production to alternative feedstocks derived from biomass.

- Similarly, Grasim is using biogas reactors to reduce the consumption of furnace oil and has introduced large-scale emission reduction technologies like the Asian textile industry's first Steam Accumulator. It uses biomass fuel for steam and heat generation, and solar and wind power for electricity.

Share of RE as % of Total Consumption

Group Businesses	FY22	FY23	Y-o-Y change
Hindalco	0.22%	0.33%	**50.00%**
Birla Carbon	1.20%	1.60%	**33.33%**
Aditya Birla Chemicals	3.10%	3.70%	**19.35%**
Birla Cellulose	44.18%	50.76%	**14.89%**
UltraTech Cement	17.64%	19.27%	**9.24%**
Novelis	35%	35%[1]	**0%**

[1] % of total electrical energy usage

Electrifying the Kilns to Accelerate Decarbonisation
UltraTech Cement

UltraTech Cement, with installed 555 MW of green power capacity (Waste Heat Recovery System + Renewable Energy), continues to be one of the leaders when it comes to RE adoption within the Group. As part of its RE100 commitment, the company aims to meet 100 per cent of its electricity requirement through renewables sources by 2050.

Towards this endeavour, in FY22, the company signed an MoU with Coolbrook to jointly explore the use of Coolbrook's Roto Dynamic Heater (RDH) to replace fossil fuels with electricity in the cement kiln heating process. The RDH technology can achieve process temperatures of up to around 1700 °C with high energy efficiency and can thereby be used in processes that have been considered impossible to electrify. It is the only electric process heating technology in the world with the capability to cut more than 25% of industrial CO_2 emissions and over 7% of global CO_2 emissions annually. The companies expect this ground-breaking technology to be ready for commercial use at an industrial scale in 2024.

3. Low Carbon Growth and Product Stewardship

There are multiple routes that lead to a sustainable, low-carbon growth. This includes moving towards low carbon products offerings, achieving circularity through use of waste materials post-consumer use e.g., scrap as source of aluminium; construction & demolition waste as aggregate in concrete; fibre created from used garments; and development of products that lead to a reduction in the carbon footprint of users, e.g., aluminium bulkers and wagons for the transportation sector.

Our Group companies and businesses are moving towards Low Carbon Growth and Product Stewardship in the following ways:

- Novelis's decarbonisation journey includes exploring new technologies, forming productive partnerships, and enhancing aluminium recycling to decarbonise operations. The company has identified five key levers, ranging from decarbonising the melting process and energy sources to maximising circularity and increasing recycling capacities. It is also innovating new alloys with high recycled content and supporting the decarbonisation of primary aluminium.

- UltraTech Cement has also adopted lowering GHG Emissions across the life cycle of its products through environmental product declarations, developing low-carbon products, promoting concrete recycling and utilisation of C&D waste.

- 18% of Grasim's total R&D expenditure was invested in FY23 towards developing low-carbon products, lifecycle analysis and use of recycled waste.

Fast-tracking Sustain-ability | Hindalco

Supporting India's ambitious plan to modernise freight transportation and enable large carbon savings for the Indian railways, Hindalco developed India's first all-aluminium freight rail rakes in FY23. The aluminium rakes are 180 MT lighter than existing steel rakes, can carry 5 to 10% more payload, consume less energy and are 100% recyclable with relatively negligible wear and tear to rolling stock and rails.

For every 100 kg weight reduction in the wagon, the lifetime CO_2 saving for a single rake is estimated to be more than 14,500 MT of CO_2.

With the railways planning to deploy more than one lakh wagons in the coming years, we expect that there will be a 15 to 20% shift to aluminium wagons. A potential annual CO_2 reduction of over 25 lakh MT can be expected, thus making a notable contribution to the country's sustainability goals.

4. Mitigation & Sequestration

This involves Carbon Capture, Utilisation, and Storage (CCUS) projects within the operational boundaries of the business and nature-based solutions like reforestation opportunities. Various businesses have been leading the way on this front.

Birla Carbon, for example, is making strategic investments in advanced technologies to achieve key objectives such as carbon capture and conversion, greater utilisation of bio-based feedstocks, and the advancement of circular product production. At the same time, to mitigate net emissions, Birla Cellulose is involved in carbon sequestration within its directly managed forests.

ERASE to Create New, Sustainably | Novelis

The Energy Reduction and Sustainable Engineering (ERASE), a programme by Novelis' R&D team, aims to facilitate the evaluation, development and piloting of new technologies and methodologies to provide technologically sound and field-proven solutions for global implementation in Novelis operations.

It is also exploring collaboration opportunities with technology start-ups and established innovators where it will pilot small-scale demonstrators for feasibility analysis and scale them to commercial impact. The key focus areas of the collaborations are CCUS, waste heat recovery and energy reduction.

ERASE has been instrumental in laying the blueprint for the long-term decarbonisation strategy by providing a technical lens to Novelis operations. It has supported business case development for CCUS strategy for decarbonisation in their new plant being installed and energy reduction analysis for the North America facility.

For more information about ERASE, please refer to Hindalco's Integrated Annual Report 2022-23.

Decarbonisation Enablers

At the Group level, we are enabling the businesses' decarbonisation missions by creating platforms for advocacy, forging strategic partnership and devising avenues for continuous learning and knowledge sharing.

- Engagement in sectoral advocacy underscores our commitment to transformative decarbonisation. Active participation in influential bodies such as the International Aluminium Institute (IAI), Global Concrete and Cement Association (GCCA), and Confederation of Indian Industries (CII) amplifies our impact.

- Collaborative efforts extend through partnerships with esteemed entities like the World Business Council for Sustainable Development (WBCSD) and World Economic Forum (WEF), fostering cross-sector collaborations for low-carbon and circular solutions. Exploring the forefront of innovation, we also seek partnerships with academia, start-ups, and research institutes to delve into next-gen technologies like carbon capture and storage.

- Complementing these endeavours, our learning and development initiatives propel ESG-bility across businesses. Through platforms like ABG Sustain-Ability conferences, online training modules, and expert talks, we share energy efficiency and decarbonisation best practices. Our cross-functional working groups facilitate insights into global trends, evolving stakeholder expectations, and cutting-edge technologies.

Waste To Wealth For Circularity

During the reporting period, 20 Sites across the Group achieved Zero Waste to Landfill status and

12 million+

tonnes of waste was reused, recycled, or utilised by our businesses.

UltraTech became

2.44 times

plastic negative.

In FY23, 12 plants of Hindalco received Single-Use Plastic Free (SUP-Free) certification.

The infinite aspirations and potentials of mankind are today constrained by finite natural resources. The rampant use of virgin material depletes its reserves while the waste generated poses serious implications to environmental health and human well-being.

At Aditya Birla Group, waste is looked at through the lens of "Waste to Wealth" and Circularity is a key lever in this process. With a host of our businesses relying on natural resources as their raw materials, we have a compelling imperative to champion Circularity and Zero Waste to Landfill practices.

Not only do these practices drive our decarbonisation strategy by minimising resource depletion, reducing environmental impact and optimising material and energy efficiency, but they also enhance cost-competitiveness, strengthen our social license to operate across geographies and solidify our resilience in the face of resource scarcity.

Our Group companies are diligently working on multiple fronts to manage waste and propel circularity. This includes enhancing operational efficiency to reduce waste creation, recycling and repurposing waste as alternate materials to divert them from landfills, and leveraging technologies, innovations and collaborations to increase the circularity quotient of our products across sectors.

During the reporting period, UltraTech Cement used 29.29 million MT of alternative fuels, raw materials and recycled materials for cement production, and Novelis achieved an average recycled content of 61% in its products. Plastic waste, which is one of the biggest environmental concerns, is also on focus across ABG businesses. UltraTech recorded a 43% reduction in the use of virgin plastic bags by innovative packaging materials. ABFRL achieved 91.5% sustainable packing by FY23 in their effort to replace non-biodegradable materials such as plastic.

Our Ambition, Approach and Progress

Aditya Birla Group has set an ambitious target of becoming Zero Waste to Landfill by 2030[1].

Our continued focus on circular business models and products is key to our businesses achieving this target.

We are on track to achieve our 2030 target. The waste management options for all wastes, basis the detailed site-based inventories, are in keeping with the waste management hierarchy. The current challenges are multi-fold:

- Regulatory requirements that vary across geographies on waste management especially on categorisation as hazardous/non-hazardous

- Transportation costs for moving the waste materials for recycle, reuse, upcycling, etc.

- Treatability, recyclability of industry/process specific wastes

To address such challenges, we are collaborating with technology companies, academic institutions, and start-ups to find long-term solutions.

Our aim is to not only mitigate the environmental impact of waste, but also foster circularity, resource efficiency, and responsible waste management practices.

To address the wide array of material issues and compliance standards, our businesses have established supplementary public targets that encompass quantitative, qualitative and circularity dimensions. These targets are customised to suit the unique characteristics of each business and geographical location, with corresponding plans in place to help achieve them.

Progress on Waste Management

The quantum of hazardous waste that has been recycled/reused across ABG businesses has increased from 59.3% in FY21 to 69.2% in FY23.

Hazardous Waste Recycled/Reused *(In Tonnes)*

Group Businesses	FY21	FY22	FY23
Total Quantity of Hazardous Waste	610,764	735,432	903,842
Hazardous Waste Reused/Recycled	362,401	530,419	625,635
% Hazardous Waste Reused/Recycled	59.3	72.1	69.2

The quantum of non-hazardous waste that has been recycled/reused across our businesses has increased from 77.6% in FY21 to 88.3% in FY23

Non-Hazardous Waste Recycled/Reused

Total Quantity of Non-Hazardous Waste	13,259,629	12,622,742	13,318,754
Non-Hazardous Waste Reused/Recycled	10,292,640	10,750,963	11,759,013
% Non-Hazardous Waste Reused/Recycled	77.6	85.1	88.3

[1] Subject to local regulations for businesses operating across geographies. Hindalco has set a target to achieve Zero Waste to Landfill by 2050.

Business Targets on Waste Management & Circularity

Hindalco, Birla Cellulose (Pulp & Fibre division), Novelis, and Chemicals business are making concerted efforts towards their Zero Waste to Landfill status and their actions over the last two years are presented here.

Group Businesses	Target(s) on Waste Management & Circularity	Progress made by Businesses
UltraTech Cement	**Increase the use of municipal solid waste and industrial waste as alternative fuel for co-processing.** **Increase the use of alternate materials like fly ash, gypsum, slag, and red mud to replace natural limestone.**	• Achieved substitution of 20.6% conventional raw material through recycled and alternative raw materials in cement production. • 630,000 tonnes of waste diverted from landfills through successful collaborations with other businesses and the application of circularity principles. • 8,512 MT of Construction & Demolition (C&D) aggregates being utilised in Ready-Mix Concrete (RMC) plants. • The Reddipalayam plant received the 'National Award for Achieving Circular Economy in Indian Cement Industry' from National Council for Cement and Building Materials (NCCBM).
Birla Cellulose	**Development of alternative applications to reduce solid waste by 25% by 2030.** **Grow circular products to 100,000 tonnes per year by 2024 using pre- and post-consumer and alternate feedstock.**	• Achieved 36% reduction in the waste going to landfill & incineration. • Initially started with 20% recycled content and now offering commercial product with 30% recycled content. • Working with various innovators such as Renewcell, Evrnu, SaXcell, Nanollose for recycled fibre production to accelerate circularity.
Birla Carbon	**Repurpose 75% of waste including recycling, reuse, and recovery by 2030.**	• Has repurposed 72% of the waste by FY23 and is on track to meet its target.

Group Businesses	Target(s) on Waste Management & Circularity	Progress made by Businesses
Grasim (Viscose Filament Yarn)	**100% utilisation of ETP sludge (Gypsum) and cellulosic waste in co-processing for cement industries rather than total disposal in landfill to be done by FY25.**	• 43% of ETP sludge and 53% of cellulosic waste is sent for co-processing in cement plants.
Hindalco	**The company has a year-on-year target of 5% for recycling and reusing generated waste to achieve the Zero Waste to Landfill goal by 2050.**	• Approximately 88.2% of hazardous and non-hazardous waste generated recycled and reused in FY23. • Three sites in India achieved the Zero Waste to Landfill status in 2023, while 12 plants received Single-Use Plastic Free (SUP-Free) certification. • Achieved 100% utilisation of flyash and bauxite residue in three out of four alumina refineries in India. • Currently setting up a first-of-its-kind 50KT copper and e-waste recycling facility in India.
Novelis	**20% reduction in waste to landfill by 2026.**	• Significant progress towards the goal with a 10% waste reduction. • Waste intensity across Novelis reduced from 25.6 kg/T FRP in FY20 to 23.1 kg/T FRP in FY23. • In FY23, 2.3 million MT of aluminium scrap was recycled, including more than 82 billion used beverage cans - amounting to 61% of the material used in production. • Two Novelis sites in Germany achieved Zero Waste to Landfill status in 2023.

Embracing Circularity

Over the years, businesses across the Group have adopted circular practices to reuse and recycle waste materials and use alternative materials and fuels to the extent possible. Towards this, they have developed circular products and business models. To further augment the impact, Aditya Birla Group has formed Group-level strategic partnerships with government and non-government organisations.

Circular business models include Novelis working with both pre- and post-consumer collection and use of recycled aluminium and UltraTech Cement using alternative fuels and materials in cement and concrete making. To assist our businesses in systematically implementing circularity across their operations, the Group hosts regular cross-business/cross-functional Waste2Wealth for Circularity working group (W2WFC) meetings and is currently developing a comprehensive Group-wide Circularity Framework.

The Waste to Wealth for Circularity working group serves as one of the driving forces behind circularity at ABG.

It helps businesses realign their waste management and resource procurement approach and ensures a systematic shift from linear to circular economy to the extent possible. To aid this transition, W2WFC uncovers alternative applications for waste materials, finds substitutes for natural, resource-intensive raw materials, identifies enabling processes, digital technologies and platforms, and facilitates linkages among Group businesses.

Scaling Up Recyclamine | Advanced Material Business

Recyclamine® provides lasting solution to the non-recyclability of epoxy thermoset by making them recyclable using a patented technology owned by Advanced Materials Business of Aditya Birla Chemicals.

In the last two years, Recyclamine production has moved exponentially from lab-scale to ton-scale in their dedicated pilot plants. Experiments involving optimisation and solvent recovery strategies have allowed them to produce Recyclamine more efficiently. A new state-of-the-art commercial scale plant is under construction and is expected to be commissioned in early 2025.

At the same time, new molecules from the Recyclamine family are being developed by the synthesis R&D team and application development team to cater to high-end applications such as aerospace and mobility beyond the developed formulations in the wind and sports composites sector.

Cementing Circularity through Waste | UltraTech Cement

UltraTech Cement is committed to promoting circular economy principles by continuously exploring new waste streams and investing in infrastructure.

Raw Material Security

- Prioritises the use of industrial waste such as slag, fly ash and gypsum to produce its blended products.
- 28.4 million tonnes of alternative raw material and recycled materials utilised in FY23.

Co-processing of Industrial Waste

- Focus on increasing the utilisation of industrial and Municipal Solid Waste (MSW) by co-processing them as Alternative Fuels.
- 4.1 lakh tonnes of industrial waste and 1.59 lakh tonnes of segregated MSW co-processed in FY23.

Plastic Waste Processing

- Support the Extended Producer Responsibility (EPR) compliances of various brands.
- 19 UltraTech manufacturing units have registered as Plastic Waste Processing Facilities (PWPF).

Packaging Innovation

- Developed innovative cement bags made from 50% recycled polypropylene.
- 43% reduction in usage of virgin plastic.

NextGen Circularity Solutions | Birla Cellulose

Investing in textile waste recycling technology has been a key part of Birla Cellulose's commitment to contributing to a circular economy. Its R&D efforts have led to several NextGen Solutions that have shown promising results and are in various stages of development.

Birla Cellulose's NextGen Solutions offer a radical reduction in the use of materials that negatively impact the climate and biodiversity, and optimise the efficiency of material use (e.g. agricultural waste) and product reuse (e.g. used textiles). They include:

- **Liva Reviva Fibre** made using 30% pre-consumer textile waste

- **Nanollose based Lyocell Fibres** manufactured from an agro-industrial waste stream
- **Birla Excel™** lyocell fibre are ethically derived and manufactured using environment-friendly, closed-loop solvent recovery process
- **Agri-waste Project** use the unutilised agri-waste to make pulp
- **Livaeco Fibres** use blockchain technology for traceability along the upward and downward value chain

In FY23, Birla Cellulose signed an MoU with SaXcell to produce recycled man-made cellulosic fibre (MMCF) in an effort to accelerate circularity. SaXcell's textile waste pulping technology will be combined with Birla Cellulose's advanced wet spinning expertise to create high quality sustainable recycled fibres.

Circularity Framework

At Aditya Birla Group, we believe that realising our circularity goals necessitates a holistic understanding, incorporating perspective, approach, framework, and a stepwise methodology. Achieving circular business practices and a circular business model/ product thus, requires a comprehensive approach that spans the entire value chain, both upstream and downstream.

This philosophy forming the foundation of our Circularity Framework and the approach involves:

1 Defining Circularity
A clear understanding between recycling and circularity and how to achieve circularity.

2 Identifying and Establishing the Value Chain
Starting from the design stage and moving on to sourcing raw materials, manufacturing, marketing, and finally selling to the consumer.

3 Selecting an Impact Dimension
Exploring the areas that are relevant to individual businesses and could be affected through circularity – e.g. material, energy, water, GHG, land, or air.

4 Understanding the 5Rs of Circularity
Recycle, Refurbish, Reuse, Repair, and Reduce - This will help build the sustainability levers that will make the business circular.

5 Defining Levers Across Value Chain
Identify levers across the value chain related to the selected impact dimension based on the 5Rs.

6 Identify Challenges and Opportunities through External Landscape Research
To identify the challenges and opportunities across levers that exist to implement or scale up circularity with respect to changing regulation, technology upgrades, stakeholder expectations, and funds available.

7 Finalising Key Performance Indicators Across Levers
Establish Key Performance Indicators (KPIs) across these levers to measure impact.

We are now running pilots across businesses to identify circular business opportunities across the value chain of specific products, comprising demand drivers, price premiums, emission intensity reduction, securing raw materials to reduce cost, technology interventions, and traceability. The findings will feed into the framework to structure to the concept of circularity and help businesses assess their baseline/current position in relation to their circularity aspirations, identify crucial risks and opportunities, and plan initiatives to mitigate risks and leverage opportunities to implement/scale up circularity across their value chain.

Collaborations and Engagements Driving Circular Innovations

Active engagement with diverse stakeholders and expertise-sharing are pivotal elements propelling our journey towards circularity. Aditya Birla Group businesses proactively collaborate with academia, start-ups, recyclers, institutions, technology providers, and esteemed peer organisations to jointly develop innovative solutions for waste utilisation challenges.

These strategic partnerships accelerate progress in circularity across various industries, fostering innovation, sustainability, and responsible practices.

Accelerating the Transition to Circular Economy

Aditya Birla Group is a founding member of G20's Resource Efficiency and Circular Economy Industry Coalition (RECEIC), a first-of-its-kind initiative aimed at promoting resource efficiency and circular economy practices with participation from 39 global companies. The RECEIC, conceptualised during India's G20 Presidency is envisaged to be an industry-driven and a self-sustaining initiative continuing to function even beyond India's G20 Presidency.

The mission of this coalition is to facilitate and foster greater company-to-company collaboration, build advanced capabilities across sectors and value chains, bring learnings from diverse and global experiences of the coalition members, and unlock on-ground private sector action to enhance resource efficiency and accelerate circular economy transition.

Since 2013, ABG has been an active member of the World Business Council for Sustainable Development (WBCSD). Our involvement in the Fashion Initiative within WBCSD has been substantial. Notably, the launch of Circular Transition Indicators v4.0 – Metrics for business, by business at the World Circular Economy Forum 2023 in Helsinki marked a significant milestone.

Our Group companies prioritise developing strategic collaborations to create a positive ripple effect that influences the broader industry landscape contributing to a sustainable future. For example, Novelis is actively working with its ecosystem partners in implementing strategic initiatives to reduce waste, increase recycled content, and promote circularity in the aluminum industry.

Within the textile sector, our businesses actively engage with industry associations such as the Sustainable Apparel Coalition (SAC) and Textile Exchange. Notably, ABFRL, Birla Cellulose, and Domestic Textiles play pivotal roles in SAC, utilising platforms like the Higg Index to shape industry insights.

ABFRL is also collaborating with circular economy experts like Ellen MacArthur Foundation and Circular Apparel Innovation Factory (CAIF) for the 'Make Fashion Circular' initiative. These collaborations underscore our dedication to driving circular innovation and sustainable practices.
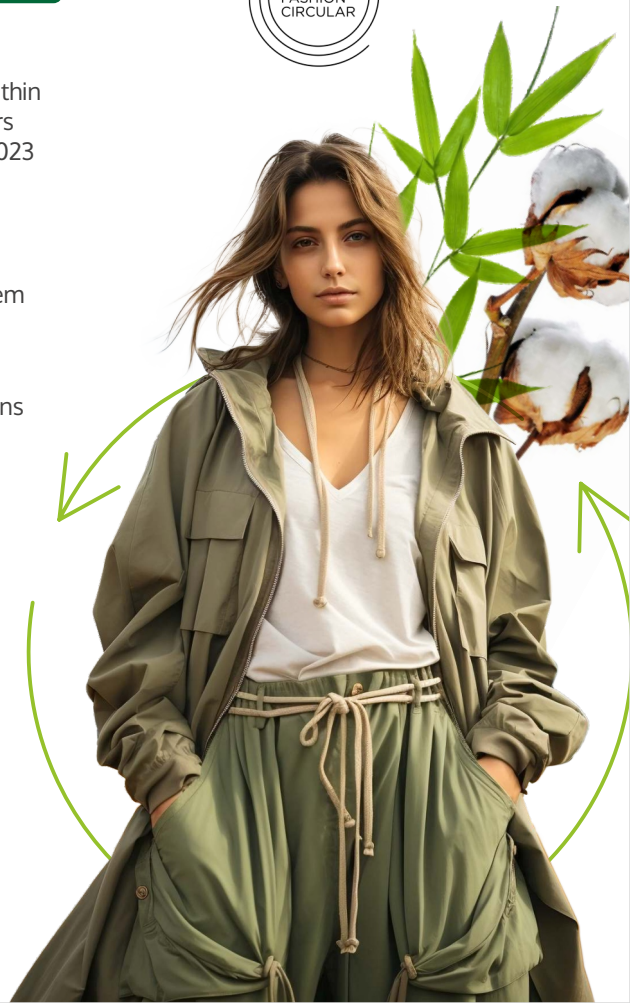
Collaborating to Boost the Circular Economy in India
ABFRL

India's textile and apparel industry is the 6th largest in the world and is the 2nd largest employment provider in the country after agriculture. However, a large part of the textile waste generated is sent to the landfill and incinerated instead of being recycled or reprocessed.

In 2022, Aditya Birla Fashion and Retail Limited (ABFRL) began a collaboration with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH for implementing an India-specific project to strengthen the textile and apparel industry for sustainable clothing. This unique initiative is part of the 'DeveloPPP Programme' and is being implemented by ABFRL and GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

As a part of this project, ABFRL and GIZ launched the 'Circularity Innovation Challenge' in April 2023. This initiative aims to create a platform for innovators, to introduce sustainable and impactful solutions and raise awareness about textile circularity.

The challenge will feature eight categories - from raw material, dyeing processing, and finishing to end-of-use, packaging, and overarching areas like transparency and traceability. Shortlisted innovators will have an opportunity to pilot their innovations with ABFRL. This project not only underscores ABFRL's commitment to sustainability but also positions India's textile sector as a leader in circular practices. Through education, innovation, and collaboration, this initiative is steering the industry towards a more sustainable and prosperous future, aligning with global sustainability goals.

Scaling Strategies to Maximise Circularity
Novelis

Collaborating closely with key OEMs, Novelis drives the industrialisation of aluminum sheet supply, targeting an impressive 75% recycled content. This aligns seamlessly with automakers' goals for increased use of secondary materials in vehicle production. The collaboration extends further, supporting BMW Group's Car2Car research project that aims to craft outer skin panels exclusively from 100% recycled aluminum.

In a pioneering move, Novelis partnered with Sortera Alloys, utilising data analytics and advanced sensors to sort mixed auto production scrap. This innovation safeguards the quality of aluminum alloys, facilitating their seamless remanufacture into identical products. This groundbreaking process is already in action at Novelis' cutting-edge facility in Markle, Indiana.

Novelis also expanded its circularity impact through a closed-loop recycling partnership with Smart Press Shop (SPS) in Europe. In this, Novelis supplies aluminum flat rolled products from its German plant to SPS in Halle (Saale), Germany, and collects and recycles the scrap generated during SPS's manufacturing process.

Biodiversity Management

At Aditya Birla Group, we recognise and respect the interdependence of businesses and the ecosystem services that the natural world provides. A number of our businesses use natural resources like pulp and mined ores as raw materials and all businesses depend on ecosystem services like air, water and other abiotic parts of nature's ecosystem services.

We used the understanding of our dependence and impact on nature to develop our biodiversity approach, the Group's policy and standard on biodiversity and their implementation plan.

Aditya Birla Group has adopted a 'No Net Loss to Biodiversity' approach that integrates biodiversity considerations into every facet of our decision-making.

Recognising and integrating biodiversity concerns in business decisions is essential for minimising the impact and contributing to responsible development.

Ambition and Approach

At the core of this ambitious 'No Net Loss to Biodiversity' commitment is a robust framework encompassing Biodiversity Screening, Inventory Assessments, Ecosystem Services Reviews, Risk Analyses, and comprehensive Mitigation/ Management Plans. Through these steps at our key locations, we actively engage in the preservation, conservation, restoration, and rejuvenation of biodiversity.

Our Biodiversity Management approach is to avoid any conversion or degradation of critical habitats and ecologically sensitive area and to strive for 'No Net Loss' (NNL)[1] of biodiversity in situations where it converts or degrades natural habitats. The endeavour is to strike a balance between unavoidable negative impacts on ecosystems/biodiversity and effective mitigation through a recognised mitigation hierarchy.

Our mitigation hierarchy involves proactive measures for impact prevention in new developments (Avoidance), efforts to reduce unavoidable impacts (Minimisation), actions for ecosystem improvement or restoration (Rehabilitation/ Restoration), and compensatory measures to achieve No Net Loss (Offset).

One of the key steps of our risk-based approach is to conduct biodiversity screening of sites to understand the risk associated with biodiversity for a given location. This involves the following steps:

Collection of secondary biodiversity information in and around our areas of operation

We analyse key information sources such as EIA, Wildlife conservation plans etc. using screening tools such as IBAT and desktop study.

Determine the Biodiversity Importance Category (BIC) of the site

Based on the information collected in Step 1, we categorise the site's biodiversity importance as:

HIGH

if there is presence of Vulnerable, Threatened or Endangered species

MEDIUM

if the area lacks the criteria identified in Step 1, but is dominated by native vegetation and/or is relatively undisturbed natural habitat

LOW

if the site in heavily modified, intensely managed landscape

Identify the category of ABG business

Based on the sector in which our businesses operate, they will be categorised under three impact categories: Red, Grey or Blue[2]. This classification is used to highlight the scope of biodiversity management likely required to achieve No Net Loss.

Decision on next course of action

This will be based on the Biodiversity Importance Category and the business category. Business under Red category is required to develop comprehensive Biodiversity Assessment and Ecosystem Service Review including potential extensive collection of primary data and Grey category will be needed to do assessment based on secondary information.

Blue category would not require biodiversity and ecosystems services inventories and would thereby not require further actions, unless required by local regulations.

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[1] For more information on the No Net Loss Approach, please refer page 71 of ABG's ESG Report 2021.

[2] **Red Category**
- Businesses that are directly involved in natural resource extraction or processing– mining.
- Require/required conversion of natural habitats to industrial or intensive agricultural land use

Blue Category- Business/site where operations which exhibit no significant dependencies or impacts on biodiversity.

Grey Category- Business/site where operations are indirectly dependent on and or indirectly impacting biodiversity.

Progress on the 'No Net Loss'

When it comes to biodiversity, we are focussed on both actions and their outcomes. The progress on steps towards biodiversity management and the impacts thereof are now being tracked in our data management platform.

In FY23, we strategically began mapping biodiversity Key Performance Indicators (KPIs) to assess the efficacy of the BMPs implemented across our sites. These KPIs span the observation of IUCN Threatened species, conservation initiatives, coverage of conservation areas, community-level projects, and employee/community awareness programmes—ensuring a comprehensive evaluation for effective biodiversity preservation.

Here is how few of the Group companies demonstrated their commitment to the 'No Net Loss' goal during the reporting period.

1. Almost all our businesses with Biodiversity as a material risk have developed/aligned their policies to the Group Biodiversity Policy.

Depending on their business or sectoral requirements, some businesses have also added unique contours to their policy and targets.

🖋 Hindalco is committed to achieve 'No Net Deforestation[3], by 2030.

🖋 Grasim's policies reflect its commitment to the conservation of ancient and endangered forests, high-conservation forests, boreal forests, and biodiversity. During the reporting period, the company focussed on afforestation and reforestation programmes (it planted 1.2 lakh trees in FY23; taking the total to over 7 lakh trees) and conserving wildlife habitats like the one in Odisha for the Olive Ridley Turtles.

🖋 Birla Cellulose continued to hold space for solutions in critical ancient and endangered forests in their non-dissolving pulp mill's sourcing region, setting the stage for conserving more than 70% of a 1.1-million-hectare area of largely intact boreal forest.

[3] No Net Deforestation means and includes commitment to reforestation to compensate against forest loss caused due to operational activity as well any permissible pre-emptive clearing, in accordance with the applicable local laws

2. Businesses are using the IBAT tool to do the preliminary assessment of all their sites to identify key biodiversity risks based on proximity analysis.

This is then used to determine the priority/high risk sites where a detailed Biodiversity assessment and ecosystem service reviews are conducted. This involves field work to collect primary biodiversity data (priority species and habitats, ecosystem components) over three or more seasons, depending on the species of concern and nature of the project. Hindalco and UltraTech Cement have implemented this process commendably.

🖋 In the reporting period, Hindalco conducted comprehensive Biodiversity Impact Assessments at 44 of its 51 sites. Based on the assessments, it implemented 10 Biodiversity Management Plans (BMPs) for high and medium-priority sites (i.e., sites in close proximity to critical biodiversity areas) and 4 BMPs for low and medium-priority sites. Some of the actions implemented include habitat restoration, initiatives for increasing the species count by planting native floral species, increasing bird diversity by installing nest boxes, waste site reclamation and restoration.

🖋 UltraTech Cement assessed the impacts of mining operations on biodiversity at 12 of its units and reviewed the potential dependency and management of ecosystem services using the internationally recognised Ecosystem Services Review (ESR) tool. It is committed to evaluating all its units by 2024.

Setting New Benchmarks in Biodiversity Assessment
UltraTech Cement

The Sewagram Cement Works earned the distinction of being the first unit of UltraTech Cement to conduct a detailed biodiversity assessment and create a multi-year biodiversity management plan for a 5-hectare grassland habitat. The unit removed infestation, reintroduced, and nurtured indigenous floral and grass species, and collaborated with local stakeholders to create a positive impact on the community.

3. **Some businesses have gone a step ahead and set new precedents in Biodiversity management.**

- Hindalco incorporated sustainability parameters into Annual Incentive Payout (AIP). One of the parameters is improving the biodiversity cover by 2% year-on-year.

- Hindalco has assessed the performance of business operations on biodiversity and ecosystem services and carbon sequestration using the IBBI (Indian Business & Biodiversity Initiative) Biodiversity Index for six of its sites.

4. **Biodiversity Management and its enhancement is an ever-evolving topic. It calls for active collaborations, sharing of best practices and in-depth knowledge assimilation activities.**

- To understand the nuances of implementing a BMP, Hindalco conducted a two-day workshop for its four mine sites. The objective of this workshop was to understand the BMP in detail to align its requirement with the mine workplan, defining the interventions, identification of partner and budget allocation.

- UltraTech Cement is collaborating with various agencies for implementing the BMPs across sites. This includes implementing measures related to progressive restoration, development of indoor nursey to cater to native species plantation, natural resource development, and improvement of the habitat quality.

- At the Group level, three editions of Expert Conversation Series were held in the reporting period.

  - First edition focussed on the biodiversity-business link, impact/risk mitigation, and the Group's role in ecosystem protection with experts from the IUCN and IBAT.

  - The second edition aimed at building a business case for accelerating towards being nature positive.

  - The third edition centred on sustainable mining and had experts from Responsible Mining Foundation, Federation of Indian Mineral Industries, and ERF.

Rebuilding the diversity through ecological restoration

Grasim, Rehla

Sodium hypochlorite, a widely used disinfectant, bleach, and cleaning agent, is a powerful oxidizing agent and can have detrimental effects on the ecosystems - ranging from altered water chemistry to habitat degradation. The damaged ecosystem needs to be repaired through a systematically executed ecological restoration process.

The chemical division of Grasim achieved ecological restoration of the Sodium Hypochlorite lagoon at Rehla, Jharkand through landscape design and environmental rehabilitation efforts. This not only eliminated the negative social impression associated with the area but also utilised the land by developing biological diversity in the area.

Path to Nature Positivity

While the No Net Loss approach aims to ensure that any negative impacts on biodiversity are avoided, minimised, restored or, if needed, compensated; some Group companies have ambitions to go beyond compensation and contribute to the enhancement and restoration of biodiversity by being Nature Positive. This entails taking nature-oriented targets by combining our work across water, biodiversity, and emissions, and fostering a harmonious relationship with both biotic and abiotic elements.

Through conservation and enhancement of biodiversity (biotic factors) and sustainable management of resources (abiotic factors), we seek not only to mitigate negative impacts but actively contribute to the flourishing health of ecosystems, ensuring a thriving coexistence.

Notes: