

Clean Manufacturing at the Forefront

A woman with dark hair pulled back, wearing a white long-sleeved blouse with blue batik patterns on the shoulders and a dark blue batik sarong with a wide striped waistband. She is leaning against a dark, textured stone wall. The background consists of vertical wooden poles. A large, faint, grey number "2024" is overlaid on the left side of the image.

**SUSTAINABILITY
REPORT**



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ABOUT THIS REPORT

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REPORT THEME AND RATIONALE

This report is themed 'Clean Manufacturing at the Forefront'. It showcases Asia Pacific Rayon's (APR) endeavours to align with leading international benchmarks, including the European Union Best Available Techniques (EU-BAT) and Zero Discharge of Hazardous Chemicals (ZDHC) Man-Made Cellulosic Fibres (MMCF) guidelines. Our progress demonstrates our commitment to cleaner, more responsible viscose production in response to evolving industry and consumer demand for sustainable goods. Our achievements in this report demonstrate APR's contribution to advancing sustainability in Indonesia's textile sector.

Welcome to APR's sixth annual sustainability report, covering performance data and progress from January to December 2024, including historical data where relevant.

SCOPE AND BOUNDARIES

The scope of this report encompasses our viscose staple fibre mill (APR) and viscose rayon yarn manufacturing facility (APY)¹ in Pangkalan Kerinci, Riau Province, Indonesia, as well as human resource data from our Jakarta and Singapore offices. Where possible, we have framed our performance within the context of the unique social and environmental conditions in Pangkalan Kerinci.


REPORTING FRAMEWORKS AND BENCHMARKS


This report complements the sustainability-related disclosures published on [our website](#) and social media platforms. It has been prepared in accordance with the Global Reporting Initiative (GRI) Standards, referenced throughout as [GRI XXX-XX]. Performance data is also mapped against the EU-BAT Polymer BREF and the ZDHC MMCF guidelines.²


The full GRI Content Index is available [here](#).


STAKEHOLDER INCLUSIVENESS

To ensure this report addresses themes and topics relevant to all our partners, we consulted external stakeholders, including customers and a representative from an Indonesian textile association. We are guided by the international and sector-wide platforms we belong to and seek feedback for continuous improvement.

 [APR website](#)

 [APR LinkedIn](#)

 [APR Instagram](#)

 [APR YouTube](#)

¹ Asia Pacific Yarn (APY) is a separate entity managed by APR. Unless otherwise stated, every mention of APR includes our APY business.

² Limited assurance was undertaken for APRIL Group's 2024 Sustainability Report (APRIL SR2024), the scope of which also covers APR.

LEADERSHIP MESSAGE

[GRI 2-22]



Dear stakeholders,

I am pleased to present the sixth annual Asia Pacific Rayon (APR) Sustainability Report, themed 'Clean Manufacturing at the Forefront'.

Operating as Indonesia's leading producer of viscose staple fibre (VSF) in a complex global and domestic textile landscape presents its challenges. The early months of 2024 were marked by volatile markets and political uncertainty regarding the rapid increase in the influx of fabrics and clothing from abroad and surrounding imported second-hand clothing that have continuously compromised Indonesia's local textile producers.

Amidst these challenges, APR operated at full capacity and achieved significant milestones in 2024. Most importantly, we demonstrated our capacity to overcome obstacles as a responsible and future-facing manufacturer, thanks to the committed APR team and our APR2030 sustainability agenda. APR2030 is our commitment to achieving measurable and positive impacts on climate, communities, and people through a transparent assessment of progress.

ADVANCING CLEAN MANUFACTURING

In 2024, APR met two of our most ambitious sustainability targets in 2024: 1) the Zero Discharge of Hazardous Chemicals (ZDHC) Man-Made Cellulosic Fibre (MMCF) Aspirational level certification a year ahead of our APR2030 timeline, and 2) full compliance with the European Union Best Available Techniques (EU-BAT) Polymer BREF standards. These come as a result of tireless initiative since 2020, where our technical teams began working with ZDHC and EU-BAT representatives to effect operational improvements, implement advanced emissions controls, and optimise resource use at every stage of production. These accomplishments are both badges of honour and a testament to four years of strategic investment, technical innovation, and cross-functional collaboration in pursuit of APR2030.

APR was also honoured as the first VSF producer in the country to achieve the government-initiated Green Industry (*Industri Hijau*) certification, and was the only company to be assessed under the new standard. I believe this underscores our leadership not just in sustainability performance, but in shaping national standards and policy frameworks.

In terms of performance, we are making steady progress towards our APR2030 climate and clean manufacturing targets. In 2024, we achieved the following cumulative reductions against our 2019 baselines: GHG emission intensity (91.4%), energy usage intensity (17.3%), sulphur emission intensity (60.2%), water consumption intensity (35.2%), and waste intensity (39.3%).

We continue to focus on our decarbonisation efforts towards achieving net-zero emissions from APRIL's land use and halving our product carbon intensity by 2030. In 2024, solar generation capacity increased from 1 MW in 2021 to 26.3 MW for use across the Pangkalan Kerinci complex in our operations in Riau Province. We also obtained ISO 50001 certification for energy management at our VSF facility.

DRIVING INNOVATION AND CIRCULARITY

Innovation is the bedrock of our sustainable growth strategy. In 2024, we continued to trial the use of recycled textile pulp in our pilot plant. We are working out arrangements to secure enough suitable feedstock to further advance our goal of using 20% recycled content in VSF production by 2030. This ongoing effort involves scaling the patented recycling technology developed by our R&D team in Riau Province. Our revolutionary process can produce a 50:50 blend of VSF using a combination of recycled and virgin materials.

We are cautiously optimistic about the challenges ahead. It is difficult to process post-consumer and post-industrial textiles at scale. However, we are confident that our collaborations with initiatives such as the 2024–2026 Circular Fashion Partnership - Indonesia (a collaboration between RTL and the Copenhagen-based Global Fashion Agenda (GFA)) can catalyse systemic change, leading to the infrastructure and regulatory support required for circularity.

ELEVATING LOCAL TEXTILES AND TALENT

One of APR's core pillars revolves around inclusive prosperity, where we implement programmes that go beyond our social license to operate. One of our main streams to inclusivity is cultivating Riau Province's potential to become a vibrant regional textile hub. To this end, we are forging new partnerships and empowering entrepreneurs by promoting and preserving local traditions and crafts.

In 2024, APR's *Rumah Batik* programme supported seven women-led businesses that collectively generated revenues of nearly IDR 251 million. We also trained 25 women entrepreneurs in collaboration with *Akademi Femina* through a bespoke fashion accelerator programme. Finally, we trained 50 local artisans and hosted cultural showcases, such as *Riau Berkain*, in partnership with API Riau, helping participating designers bring local crafts to national fashion runways.

These initiatives — carefully supported by educational scholarships, skills training, and strategic partnerships with designers and retailers — are transforming lives while preserving and promoting Indonesia's rich textile arts and crafts heritage.

2025 marks the halfway point in our decade-long APR2030 sustainability agenda. Although we have made significant progress, we know our journey ahead will not be without hurdles. For some of our more challenging objectives — especially in areas like recycled content, waste reduction, and post-consumer feedstock — we will need to build on multi-stakeholder partnerships, sustained investments, and supportive policy and regulatory frameworks.

However, as we have demonstrated in the first five years of APR2030, we are ready to rise to every occasion. I am proud of what we have accomplished. I am grateful to our dedicated team, our communities in Riau Province, and our partners across the textile value chain for their trust, partnership, and shared commitment to a better future.

Saleel Rajaram Nayak
Head of Operations

2024 HIGHLIGHTS

OUR OPERATIONAL FOOTPRINT



Reduced GHG emission intensity by **91.4%** since 2019



Reduced energy intensity by **17.3%** since 2019



Reduced sulphur emission intensity by **60.2%** since 2019, achieving a **94.6%** sulphur recovery rate



Reduced water consumption intensity by **35.2%** since 2019



Reduced total waste intensity by **39.3%** since 2019



Achieved ZHDC MMCF Aspirational Level (i.e. the highest level of compliance)



Achieved EU-BAT compliance

POLICIES AND PRACTICES



Incorporated safety in our quality, productivity, and cost model initiative



Established dedicated energy and water conservation team

AWARDS AND RECOGNITIONS



Achieved **ISO 50001:2018** energy management system certification



Achieved **Blue PROPER rating** from the Ministry of Environment and Forestry (MOEF) assessment



First VSF manufacturer in Indonesia to obtain a **Green Industry (Industri Hijau)** certificate

INNOVATIONS



Received patent approval for textile recycling technology

PROSPERING WITH COMMUNITIES



Health

- Supported **47 posyandus** and trained **87 cadres**
- Distributed supplementary feeding packages to **1,820 toddlers** and **149 malnourished expectant mothers**



Education

- Awarded inaugural APR Islamic Fashion Institute (IFI) scholarship, allowing **2 women entrepreneurs** to study at IFI in Bandung, West Java
- Sponsored **2 general scholarships**
- Conducted **17 public webinars** coordinated by the Jakarta Fashion Hub (JFH)
- Supported training local fashion SMEs through **2 Kelas Berbagi** workshops with API Riau



Eradicating poverty

Continued to support SMEs through partnership programmes with RTL, API Riau, APSyFI, and the Indonesian Government

SUPPORTING LOCAL SUSTAINABLE FASHION



Continued ongoing programmes to develop **Riau Province as a regional textile hub**



Helped women-owned batik SMEs generate **> IDR 251 million** through the *Rumah Batik* programme



Collaborated with local creatives to showcase fashion pieces featuring traditional designs using **APR's biodegradable viscose** at events such as Jakarta Muslim Fashion Week (JMFV) and *Riau Berkain*

A FOCUS ON OUR EMPLOYEES



Reduced lost-time injury frequency rate by **88.6%** since 2019



Women comprised **29.9%** of our workforce



Continued **scholarship programme** allowing APR employees to pursue post-secondary studies

TARGETS AND PROGRESS

This section summarises our 2024 progress against our commitments and meeting the targets in our APR2030 agenda. Given the unique supply chain integration between APR and APRIL, certain APR2030 targets are aligned with APRIL's commitments. We believe that we can have a greater positive impact on the ground by leveraging our combined resources and efforts.



TARGET	TARGET YEAR	2024 UPDATES
CLIMATE AND NATURE POSITIVE 		
Halve product carbon intensity (against 2019 baseline) using a cradle-to-gate life cycle assessment (LCA) approach	2030	On track
Continue to source 100% renewable energy supply year-on-year	2030	Achieved in 2024
Support the achievement of net-zero emissions from APRIL's land use	2030	On track (See APRIL 2024 Sustainability Report for progress)
Contribute to wildlife habitat protection and conservation in Indonesia	Ongoing	On track Continue contributing to <i>Restorasi Ekosistem Riau</i> (RER) and other APRIL conservation initiatives (See APRIL 2024 Sustainability Report for progress)
CLEAN MANUFACTURING 		
Meet all EU-BAT Polymer BREF criteria	2023	Achieved but delayed; in full compliance in October 2024
Achieve ZDHC MMCF Guidelines Aspirational levels	2025	Achieved ahead of schedule
Increase total sulphur recovery rate to > 95%	2030	On track Achieved 94.6% recovery rate
Reduce process water consumption intensity by 50% against 2019 baseline	2030	On track Achieved 35.2% reduction against 2019 baseline
Reduce solid waste intensity to landfill by 80% against 2019 baseline	2030	On track Achieved 39.3% reduction against 2019 baseline

TARGET	TARGET YEAR	2024 UPDATES
CIRCULARITY 		
Incorporate 20% recycled textile into VSF production	2030	On track Secured suitable feedstock in mid-2024 and are now exploring options to scale up the textile recycling process Successfully completed trials of the APR pilot plant
Determine the feasibility of establishing Indonesia's first industrial-scale recycled textile facility	Ongoing	Progress made Received patent approval for textile recycling technology; exploring research and partnership opportunities
Determine the feasibility of establishing urban textile recycling centres in Singapore and Indonesia	Ongoing	On track RGE-NTU SusTex has completed several trials and completed proof of concept. We are at the stage of building a demonstration unit in the laboratory and on track to explore commercialisation on a pilot scale in future. SusTex is well positioned as a global leader in textile recycling center especially Asia (Singapore), with potential to adopt a whole-of-value-chain approach to textile waste + close loop operations.
INCLUSIVE PROSPERITY 		
Eradicate extreme poverty within a 50-km radius of our operations in partnership with APRIL	Ongoing	Progress made (See APRIL's 2024 sustainability report for progress)
Improve access to primary healthcare services for targeted villages surrounding our operations	Ongoing	Progress made Supported <i>posyandus</i> and pursued ongoing programmes to enhance community access to primary healthcare
Expand programmes that promote traditional crafts	Ongoing	Progress made Pursued outreach through the ongoing <i>Rumah Batik</i> programme; collaborated with local creatives to showcase fashion pieces featuring traditional designs at events such as Jakarta Muslim Fashion Week (JMFV) and <i>Riau Berkain</i>
Establish a regional textile hub in Riau Province	Ongoing	Progress made Pursued ongoing engagement programmes with women, SMEs, and youth to develop Riau Province as a textile hub
Advance gender equality across our value chain	Ongoing	Progress made Increased the number of women in our workforce; supported women-owned businesses; pursued ongoing entrepreneurship programmes for women in Riau Province
OTHER TARGETS		
Obtain ISO 50001 certification for energy management system	2024	Achieved
Achieve zero workplace fatalities	Ongoing	Achieved in 2024

ABOUT APR

[GRI 2-1, 2-6]

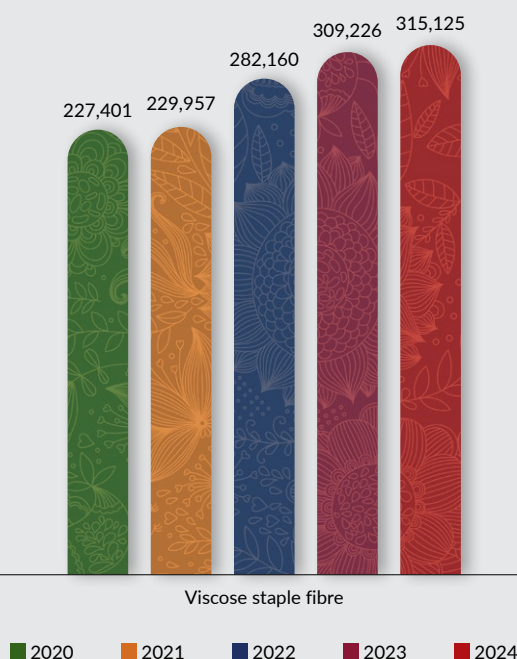
OPERATIONS AND PRODUCTION

Headquartered in Jakarta, PT Asia Pacific Rayon (APR) is a leading producer of biodegradable, bio-based viscose rayon textiles made from renewable wood-based fibre. We are a privately held company and a member of the Royal Golden Eagle (RGE) Group of companies. We play an integral role in the downstream operations of our sister company and primary supplier, APRIL Group (APRIL), leveraging its vertically integrated pulp mill in Pangkalan Kerinci, Riau Province, Indonesia.

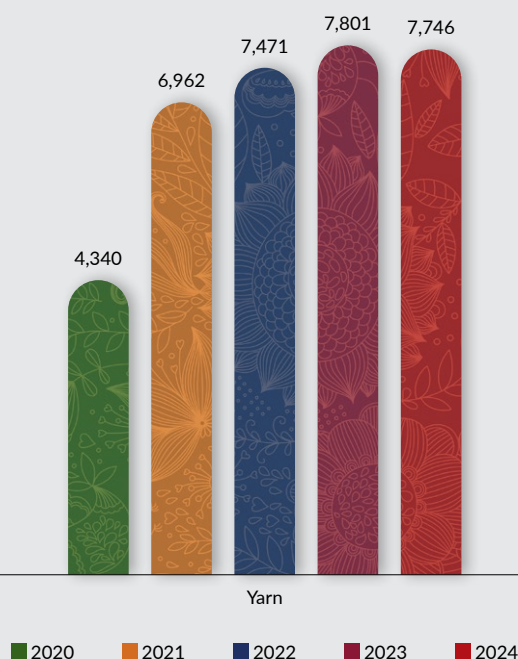
APR operates a 300,000-tonne capacity viscose staple fibre (VSF) mill and a 7,552-tonne capacity yarn spinning facility, Asia Pacific Yarn (APY), which exclusively sources its VSF from APR. Since our inception in 2019, APR's VSF output volume has grown consistently, reaching a record high of 315,125 tonnes in 2024. Yarn production has remained fairly consistent over the years.

Our high-quality VSF and yarn are sold to spinners, fabric manufacturers, and garment producers in Indonesia and 17 other countries, including Turkey, Pakistan, Bangladesh, Sri Lanka, and Vietnam.

VSF production 2020–2024 (t)

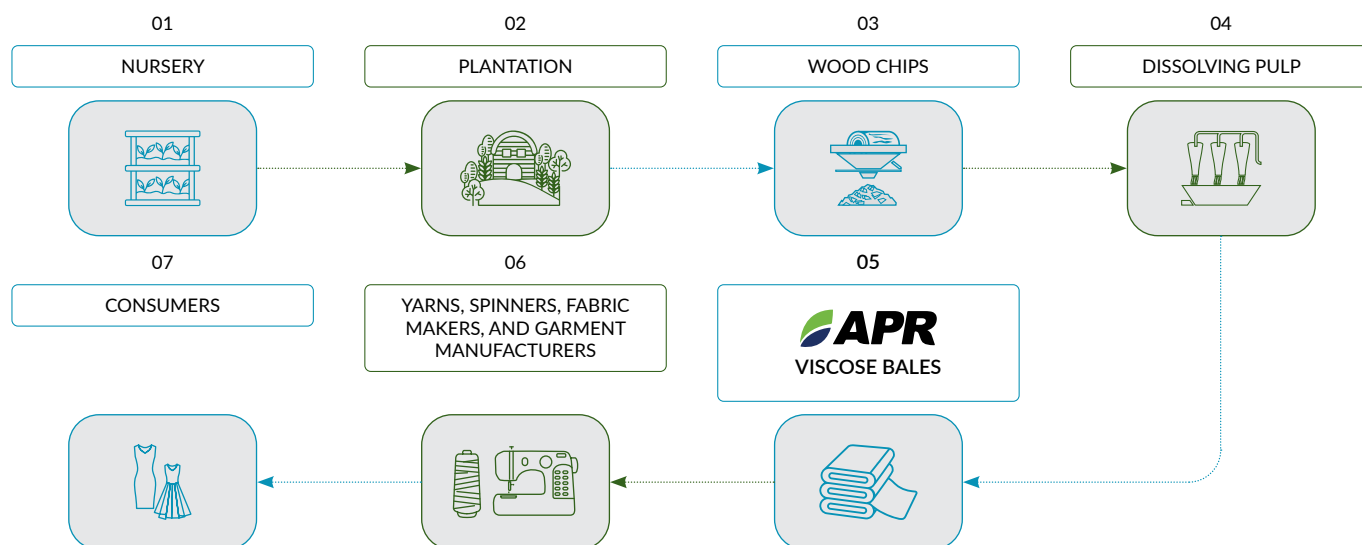


Yarn production 2020–2024 (t)



We complement our manufacturing facilities with a dedicated research and development (R&D) centre equipped with a pilot plant and world-class laboratories. The centre develops innovative products, tests new yarns and fabrics, and enhances production quality to strengthen Indonesia's textile industry. We also operate a sales and coordination office in Singapore.

Viscose value chain



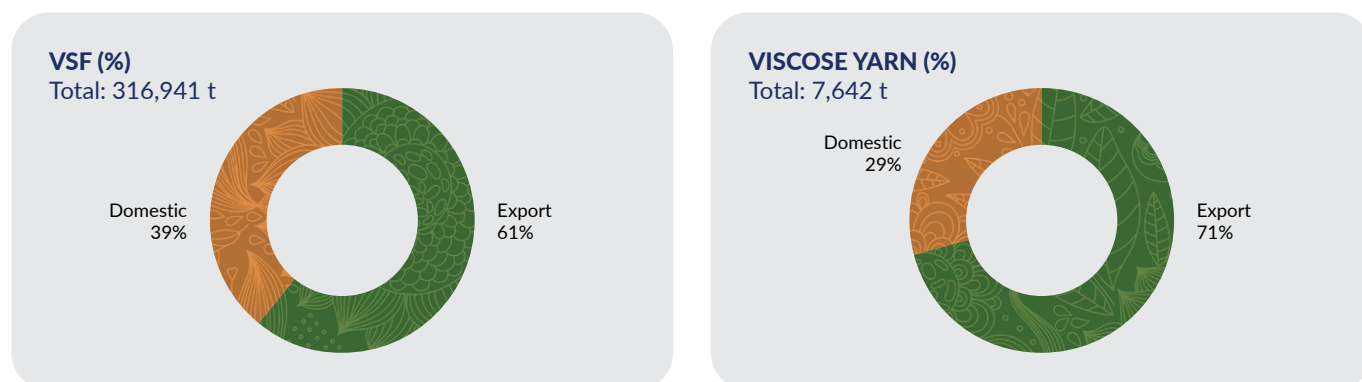
USES AND MARKETS

Viscose rayon, the second most widely used cellulosic fibre group after cotton, is a man-made cellulosic fibre (MMCF) derived from natural wood cellulose from fast-growing trees like acacia and eucalyptus. It is bio-based, renewable, and made from natural sources.

APR continuously innovates to meet evolving market and consumer demand, producing a diverse range of viscose rayon. Our versatile viscose is increasingly favoured in modest fashion markets, particularly in Muslim-majority countries.

In 2024, we sold 39% of our VSF to the domestic Indonesian market while exporting 61% to international markets. The bulk of our yarn production (71%) goes to export markets.

Product sales by market 2024



Note: Total sales include inventory carried forward from the previous year.

APR navigated the challenges facing the global textile industry in 2024, including supply chain disruptions, market fluctuations, rising raw material costs, and falling VSF prices. We enhanced operational efficiency, reduced waste, and optimised resource usage to ensure business continuity, operating at full capacity and achieving an excellence rating³ of 99.3% for viscose production, in alignment with our **SQPC** initiative – Safety, Better Quality, Higher Productivity, and Lower Cost.

Strengthening customer engagement remained a key priority, with a strategic focus on maintaining a strong local presence in key international markets.

About viscose

³ From APR's internal quality control perspective, viscose production is classified into three quality levels: Excellent, First Grade, and Qualified. In 2024, 99.3% of viscose output met the Excellent standard.

ABOUT APR

SUPPORTING LOCAL, SUSTAINABLE FASHION

[GRI 3-3, 203-1, 203-2]

APR is dedicated to advancing Indonesia's sustainable textile industry in line with the National Industry Development Master Plan (RIPIN) 2015–2035. We supply competitively priced raw materials to the domestic market to reduce the nation's reliance on textile imports. As the global demand for eco-friendly apparel continues to rise, APR is well-positioned to drive transformative change in Riau Province, thus fostering economic and cultural development.

One of APR's flagship projects is establishing Riau Province as a fully operational regional textile hub — or centre of excellence — by 2030. This ambitious effort involves industry partners, government agencies, local businesses, artisans, and community organisations, all collaborating to advance Indonesia's textile sector.

Jakarta Fashion Week 2025: APR x Duniatex x EMBA x Matahari collaborate to promote sustainable fashion

For the third consecutive year, APR took part in Jakarta Fashion Week (JFW) 2025, teaming up with some of Indonesia's most renowned fashion names to present stylish yet eco-friendly designs and apparel.

For the first time, APR collaborated with DuniaTex, one of Southeast Asia's largest textile manufacturers, alongside Indonesian labels and retailers such as EMBA Group and Matahari, on a two-day 'Fashion Evolution' showcase during the week-long event. The showcase featured 48 collections over two days, all crafted with DuniaTex fabrics made with APR's renewable and biodegradable viscose-rayon fibres.

APR's participation in the event highlighted the role of upstream-downstream collaborations in developing a sustainable textile industry in Indonesia and further increasing public education about the importance of sustainable fashion. This partnership model underscores how industry players can collaborate across the value chain to drive meaningful change in the fashion ecosystem.

 APR brings sustainable fashion to JFW 2025 with designer, retailer collaborations

 APR, Duniatex & Matahari Promote Sustainable Fashion at JFW 2025



Rantai Tekstil Lestari

As a founding member of the Sustainable Textile Chain, or *Rantai Tekstil Lestari* (RTL), APR remains dedicated to supporting the organisation's efforts to advance sustainability within the Indonesian textile and fashion industries. This cross-commodity, multi-stakeholder association unites Indonesian academics, fashion designers, civil society stakeholders, and private sector entities across the country's fashion and textile industry value chains. In 2024, RTL welcomed seven new members, increasing its membership from 73 to 80.

In October 2024, RTL partnered with the Global Fashion Agenda (GFA) to launch the Circular Fashion Partnership (CFP)

Indonesia. The GFA is a non-profit organisation on a mission to accelerate impact in the fashion industry by inspiring, educating, influencing, and mobilising all stakeholders. This initiative aims to collaboratively build circular supply chains, closing the loop on garment manufacturing cycles by capturing and recycling post-industrial textile waste.

Later that month, RTL signed a memorandum of understanding (MoU) with the Global Reporting Initiative (GRI) to enhance sustainability reporting in Indonesia's textile sector. RTL also launched a new LinkedIn page to share updates on its sustainability initiatives and progress.



2024 activities

RTL commits to net-zero emissions at International Sustainable Forum 2024

On 22 August 2024, RTL and seven other industry associations signed a joint statement titled 'Industry Commitment to Decarbonisation in Supporting Indonesia's Low-Carbon Transition Towards Net Zero Emissions Achievement'. It outlines four key actions: reducing emissions, diversifying renewable energy sources, securing funding for decarbonisation, and advocating for policies that support low-carbon products. Former RTL Chairman and former APR President Director Basrie Kamba represented the textile industry at the signing of this document, facilitated by Kadin Indonesia and the World Resources Institute (WRI) Indonesia as part of the 2024 Indonesia International Sustainability Forum (ISF).

Textile Association Riau (API Riau)

APR is a member of the Indonesia Textile Association (API), both at the national level and of its Riau chapter (API Riau), which is dedicated to positioning the province as a prominent textile hub in Indonesia. The chapter is helping the region's textile and apparel small and medium enterprises (SMEs) scale while preserving and promoting Malay cultural heritage.

Since 2023, APR has hosted *Kelas Berbagi*, a series of knowledge-sharing workshops for API Riau members, targeting micro, small, and medium-sized enterprises (MSMEs) in the local fashion industry. The workshops support batik artisans, tailors, and designers who specialise in traditional Riau fabrics, offering training by industry experts on digital marketing, sustainable materials, motif creation, and contemporary styling.

In 2024, APR organised two workshops, one in Kuantan Singingi for 15 batik artisans and another in Pekanbaru for 30 batik and tenun makers as well as fashion designers, see more in [Textile Hub Initiatives](#). APR also supported the *Riau Berkain Show 2024* to celebrate Batik Day, further promoting local crafts and traditional woven Riau Batik motifs created by 14 local fabric artisans and designers, all made with renewable and biodegradable APR viscose rayon. The event was attended by members of API Riau and the public. Programming included insightful discussions and talks about traditional crafts and sustainable fashion. APR, in collaboration with API Riau and *Akademi Femina* organised a fashion accelerator programme, see more in [Empowering women](#).

ABOUT APR



Commentary by
ARNININGSIH

Acting Chairperson,
API Riau

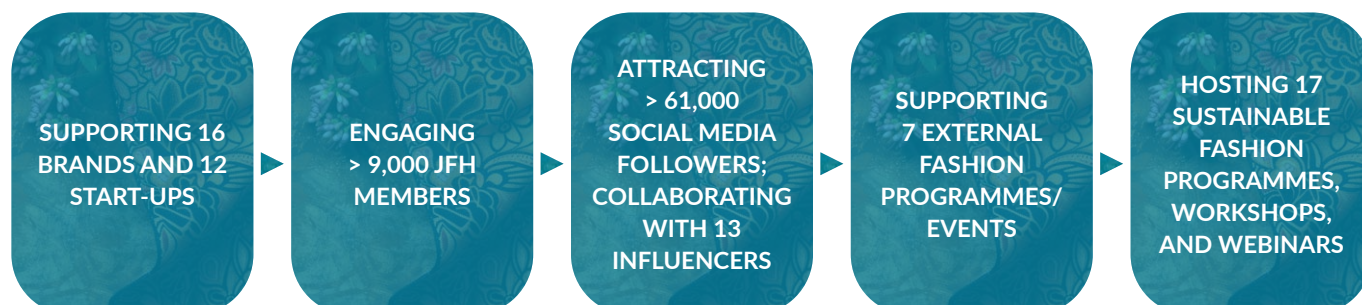
API Riau's primary goal is to elevate the crafts industry in Riau Province, with a specific focus on the textile sector. API Riau is unique among API chapters because it is dominated by MSMEs, which is not the case in other provinces. Our members include batik artisans, weavers, and a range of garment and fashion design businesses. Our collaboration with APR has transformed the capabilities and raised the profile of local craftspeople, designers, and weavers, many of whom previously had limited access to industry expertise, market intelligence, and opportunities in Jakarta, the nation's capital, where sustainable fashion is more advanced.

APR has provided our craftsmen with in-depth knowledge of sustainable textile production and has supplied environmentally friendly materials, such as viscose rayon yarn and natural dyes, for weaving and colouring. Designer members of API Riau also receive training on minimising and repurposing textile waste when creating their collections.

Sustainability is a relatively new concept in Indonesia, especially among MSMEs. Although API Riau is an independent organisation, we must partner with local government authorities and align our activities with government policies to succeed. We are actively seeking collaborative opportunities with government, community, public sector, and private sector stakeholders to position ourselves as a platform to advance Riau Province's local textile industry.

Jakarta Fashion Hub

Established in 2020, APR's Jakarta Fashion Hub (JFH) is a collaborative platform that connects members of the Indonesian fashion design community with sustainable fabric producers, providing them with access to fabric blends that utilise sustainable viscose. JFH runs dedicated campaigns, like the Everything Indonesia programme, that support government initiatives to promote locally made products. APR hosts, sponsors, and participates in fashion events at JFH year-round, including Jakarta Fashion Week, Jakarta Muslim Fashion Week (JMFW), Muslim Fashion Festival (MUFFEST), and Fashion Revolution. Notable 2024 achievements include:



APPROACH TO SUSTAINABILITY

[GRI 2-23, 2-24]

APR has made sustainability a core component of our operations since day one. As an RGE Group company, we have adopted the Group's Sustainability Policy and adhere to its four main pillars – Climate, Nature, and Biodiversity Protection and Conservation, Human Rights, and Sustainable Growth. Consequently, we updated our Sustainability Policy in February 2024 to better align with the Group's direction and further strengthen our sustainability commitments.

In April 2024, we adopted a standalone Wood and Fibre Sourcing and Integrity and Ethics Policies. Both are aligned with RGE standards and set out our commitments to sustainable sourcing and ethical business practices. Our Human Rights Policy, launched in 2022, guides our ongoing efforts to uphold human rights within our value chain.

APR2030

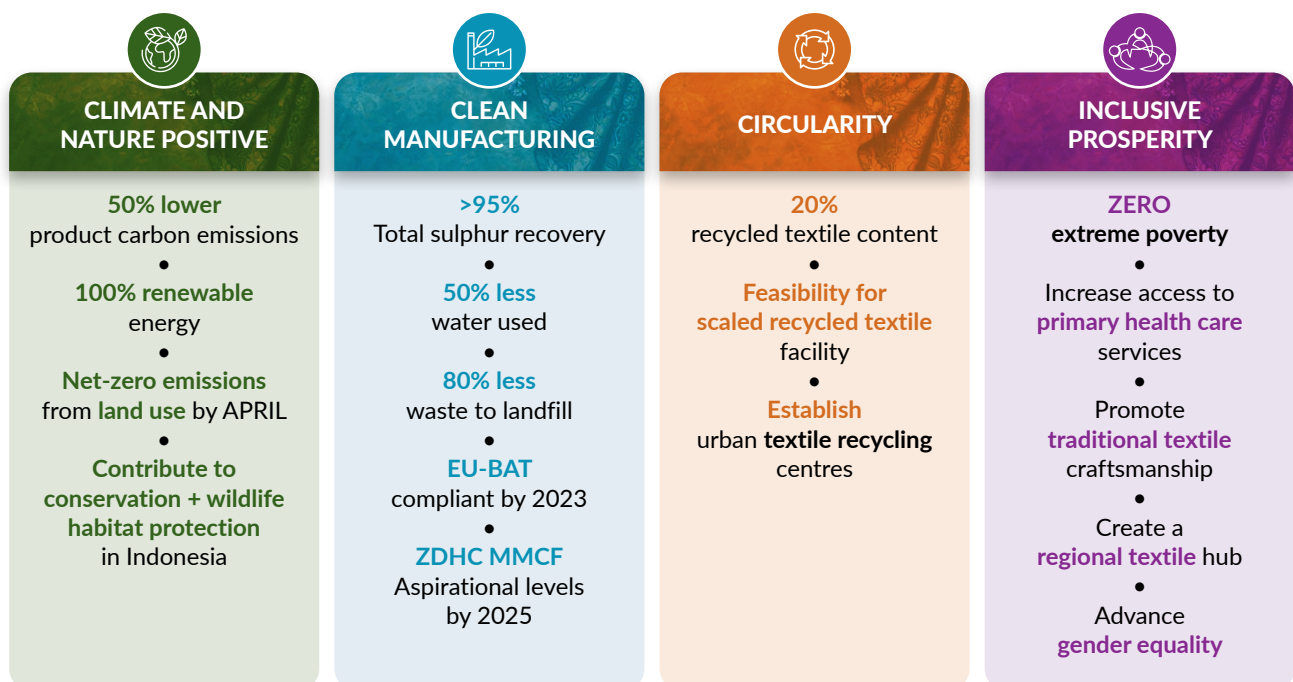
The Asia Pacific Rayon 2030 (APR2030) sustainability agenda, launched in November 2021, outlines our long-term commitment to achieving measurable and positive impact on climate and nature, clean manufacturing, circularity, and inclusive prosperity. It sets targets in these four priority areas for the next ten years.

As reflected in this report, we continued to implement APR2030 measures in 2024, making steady progress towards meeting the associated key performance indicators (KPIs). To strengthen employee alignment and engagement with our APR2030 targets, we regularly run internal campaigns to communicate our sustainability agenda and promote cross-departmental participation.

In February 2025, we shared our 2024 APR2030 achievements and progress with approximately 157 employees during a dedicated information session at the APRIL Learning Institute (ALI).

APR2030

APR2030 is our commitment to achieving a measurable and **positive impact on climate and nature**, promoting **inclusive prosperity and gender equality** across our value chain and improving on clean and closed loop manufacturing processes from fibre-to-fashion while accelerating **circularity** and **innovation**



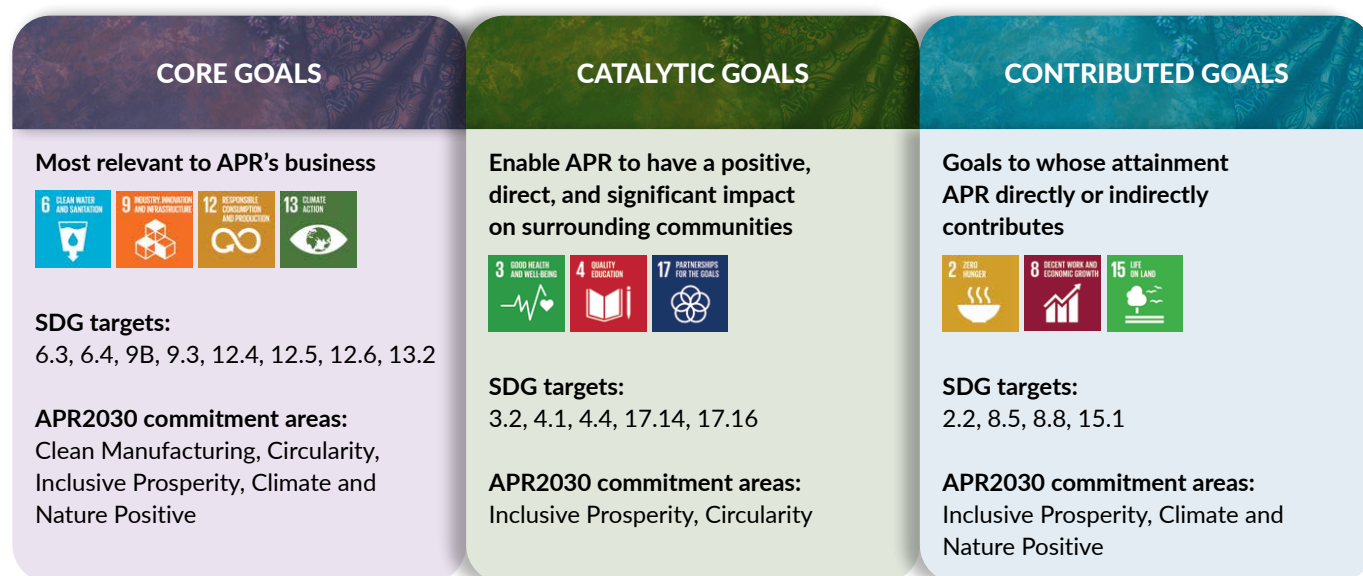
APR2030 Dashboard

APPROACH TO SUSTAINABILITY

[GRI 2-23, 2-24]

CONTRIBUTING TO THE SDGs

APR2030 has identified the ten Core, Catalytic, and Contributed Sustainable Development Goals (SDGs) most relevant to our business, and 17 specific SDG targets that we contribute to. These are mapped to the core pillars of APR2030 and aligned with our material topics.



Material topics and the SDGs

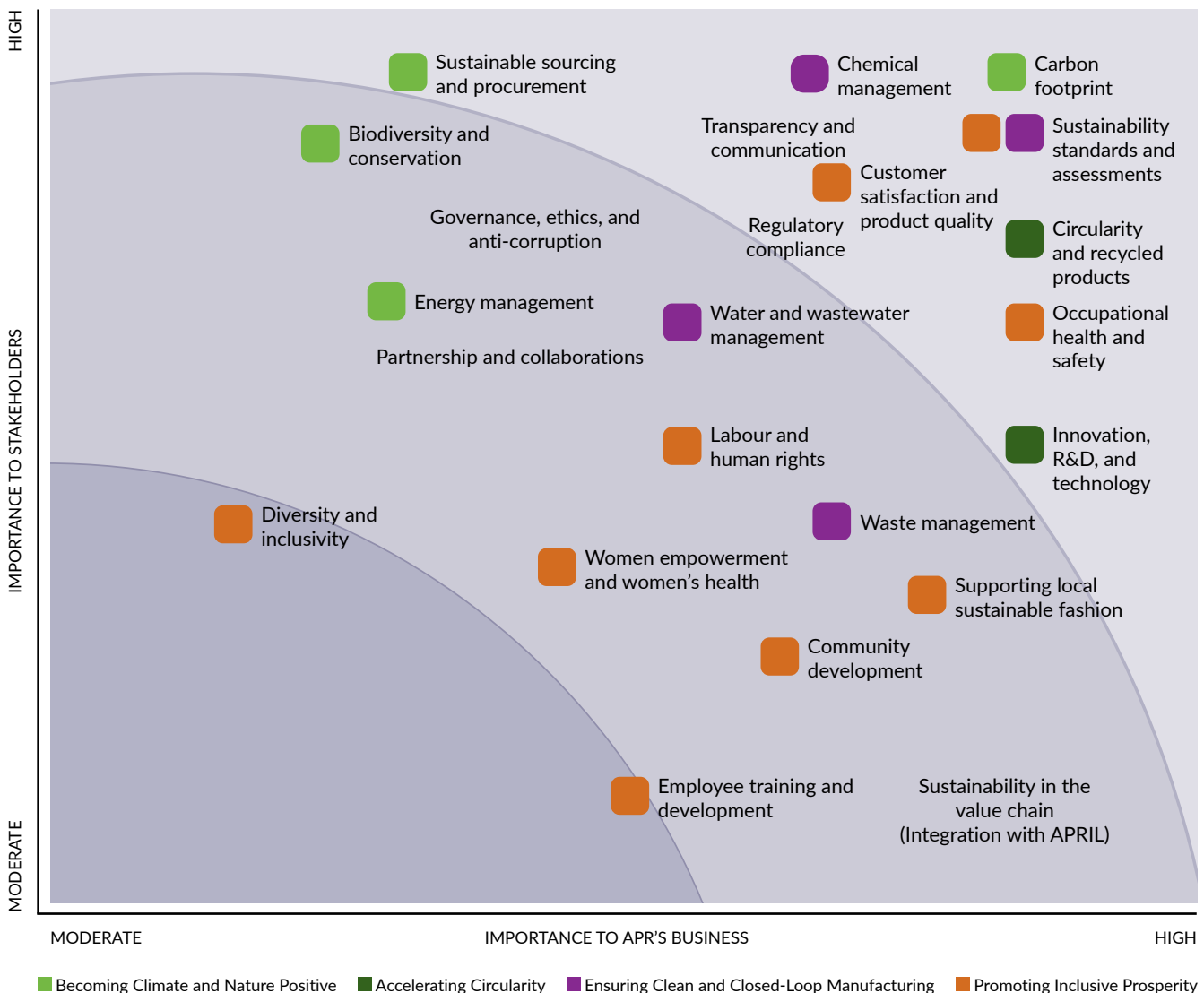
MATERIALITY

[GRI 2-12, 2-14, 3-1, 3-2]

APR conducts materiality assessments to prioritise critical components of our sustainability strategy, address stakeholder concerns, and ensure robust sustainability reporting. We conducted an initial materiality assessment upon launching our operations in 2019, identifying ten material topics. A 2022 reassessment identified 13 additional material topics, raising the total to 23.

We mapped and aligned each materiality topic with our APR2030 commitments and the SDGs. Although our materiality topics are unchanged since the 2022 reassessment, we continue to engage with stakeholders to further align our focus areas and sustainability strategy with emerging issues and industry trends.

Materiality matrix 2024



 See [APR Sustainability Report 2022](#), pp. 22–23 for an overview of the most recent assessment and pp. 72–74 for material topic definitions

APPROACH TO SUSTAINABILITY

LEVERAGING APRIL–APR INTEGRATION

[GRI 2-6, 3-3]

APR and APRIL's integrated facilities streamline and consolidate production at a single site, ensuring a consistent supply of raw materials and facilitating effective operational control. This integration enables us to better weather external disruptions, boost operational efficiencies, and create economies of scale. It also enables us to enforce rigorous sustainable production policies and consistently deliver high-quality products that meet global market demand.

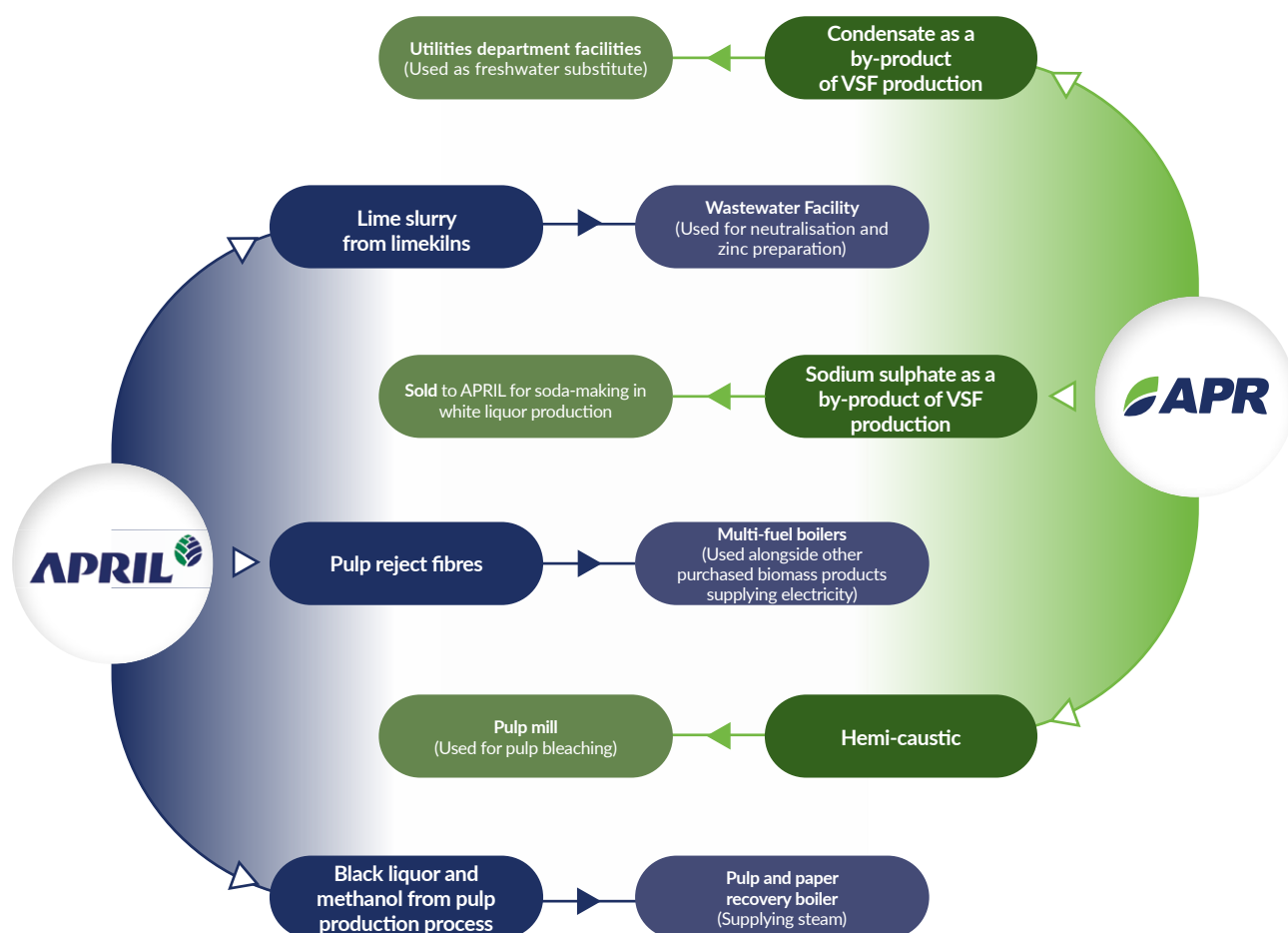
Our shared infrastructure allows us to leverage each other's strengths and achieve common sustainability goals. Our APR2030 strategy aligns with our sister company's APRIL2030 strategy. Both are grounded in shared foundational principles that address industry-wide and sector-specific issues.

APR and APRIL collaborate on energy management and mill emission strategies, environmental protection and remediation initiatives, and community programmes for inclusive prosperity. This unique collaborative model employs a holistic value chain approach rather than a gate-to-gate mindset, enabling us to maximise our on-the-ground impact while preventing double-accounting of our joint sustainability achievements.

GOVERNANCE AND RESPONSIBLE PRACTICES

[GRI 2-11, 2-12, 2-13, 2-24, 3-3, 205-2, 205-3]

The APR leadership team is responsible for our sustainability plan and strategy with guidance from APR's President Director and the RGE Executive Management Board. Meanwhile, our Operations and Sustainability Manager implements the sustainability plan at the operational level on a day-to-day basis.



APR adheres to the rules of ethical and professional business conduct outlined in the RGE Global Code of Conduct (CoC), including its clauses on our zero tolerance policy for corruption. The code applies to all employees who receive annual refresher training on our policy commitments. We also comply with all legal requirements in our operational areas.

APR suppliers must adhere to our Code of Procurement Ethics, which details our values, principles, and commitments in line with RGE's Sustainability Framework and APR's Sustainability Policy. Our procurement department audits suppliers to ensure they honour these commitments and reports its findings to the APR leadership team.

To raise awareness about these critical issues, 504 of our employees participated in the anti-bribery and corruption training led by APRIL in 2024. There were no legal non-compliances reported during the year.

WHISTLEBLOWING AND GRIEVANCES

[GRI 2-16, 2-25, 2-26]

Employees can report violations of the RGE Global Code of Conduct (CoC) to their immediate manager or human resources representative. A confidential internal audit hotline is also available for reporting misconduct and whistleblowing. We promptly and fairly process reported breaches and impose appropriate penalties or disciplinary actions as warranted. We report all critical grievances to APR's senior management team.

A grievance submission mechanism is available on our website. It allows internal and external stakeholders to report APR policy violations, raise concerns, and file complaints, thus triggering our comprehensive Grievance Procedure. The APR Grievance Committee processes grievances other than human rights violations, which are managed by an Independent Advisory Committee.

These two bodies assess grievances, provide transparent and accountable feedback, and arrive at mutually agreed-upon settlements that satisfy all parties' requirements.

In April 2024, we received an employee grievance submitted through the designated WhatsApp reporting channel. The matter was mediated by the HR team, which arrived at a resolution agreeable to the concerned employee.



APR Grievance Procedure

REGULATORY COMPLIANCE

[GRI 2-27, 3-3]

APR complies with the Ministry of Environment and Forestry (MOEF)⁴ requirements per the conditions of our operating licence. To ensure compliance, we have installed a SPARING wastewater monitoring system and a continuous emissions monitoring system (CEMS) that provide real-time environmental data to the Indonesian government.

In 2024, we achieved the ZDHC (Zero Discharge of Hazardous Chemicals) Aspirational level for man-made cellulosic fibre (MMCF) — a full year ahead of our 2025 target. Additionally, in 2024, we also obtained the ISO 50001:2018 certification, demonstrating our commitment to sustainable and efficient energy management. We also received the Green Industry (*Industri Hijau*) certification from Indonesia's Ministry of Industry, recognising our efforts in environmental improvement and sustainability. There were no regulatory or environmental non-compliances during the reporting period.⁵

PARTNERSHIPS AND ENGAGEMENT

[GRI 2-28, 2-29, 3-3]

APR builds constructive partnerships and engages with stakeholders openly and transparently to realise our APR2030 sustainability commitments.

We collaborate with industry peers and are a member and signatory of various industry associations and agreements. Through these platforms, we engage in discussions and share best practices to achieve collective sustainability goals and maximise our impact within the industry. Our affiliations include:

INTERNATIONAL AFFILIATIONS:

- ZDHC Foundation
- Textile Exchange
- Cascale (formerly the Sustainable Apparel Coalition, or SAC)
- United Nations Convention on Climate Change (UNFCCC) Fashion Industry Charter

NATIONAL AFFILIATIONS:

- Indonesia Business Council for Sustainable Development
- Asosiasi Pertekstilan Indonesia (API)
- Indonesian Fiber and Filament Yarn Producers Association (APSyFI)
- Rantai Tekstil Lestari (RTL)



See [Stakeholder engagement](#) for details on shareholder groups and engagement approaches

⁴ As of 2024, Indonesia's Ministry of Environment and Forestry was restructured into two separate ministries — the Ministry of Forestry and the Ministry of Environment/Environmental Control Agency — following Presidential Regulations No. 175, 182, and 183 signed on 5 November 2024.

⁵ Per thresholds in MOEF regulation No.7/2012 – Annex II (Permen LH No.7 Tahun 2012 Lampiran II) on wastewater quality and MOEF regulation No.5/2014 (Permen LH RI No.5 Tahun 2014) on air emissions.

APPROACH TO SUSTAINABILITY

2024 PROGRAMME PARTICIPATION:



Participated in the 18th Dhaka International Textile and Garment Machinery Exhibition (DTG), 1–4 February 2024.



Participated in the Pelalawan Expo to showcase viscose rayon, featuring displays of accessories, home items, and a runway show, 8–12 October 2024.



Participated in two customer gatherings in Pakistan, held in Karachi and Lahore on 25 and 27 September 2024, to strengthen relationships and exchange market insights.



APR and Sateri co-hosted a booth at the Première Vision Exhibition in Paris, 2–4 July 2024.



Participated in Jakarta Fashion Week (JFW), 21–27 October 2024, showcasing 48 sustainable fashion collections in partnership with Duniatex, EMBA, and Matahari





Participated in the Muslim Fashion Festival (MUFFEST), 8–11 August 2024, showcasing collections from six partners



Participated in the Lancang Kuning Carnival, a local cultural event in Riau Province, showcasing ten fashion collections, 5 May 2024



Participated in the Yarn Expos held in Shanghai, China, 6–8 March 2024 and 27–29 August 2024



Participated in Riau Berkain 2024 in celebration of Batik Day, presenting ready-to-wear fashion collections by API Riau artisans and designers, 2 October 2024



APPROACH TO SUSTAINABILITY


2024 PROGRAMME PARTICIPATION:

Teamed with six industry partners to showcase sustainable viscose rayon at the Indo Intertext 2024 exhibition, 20–23 March 2024



Collaborated with designers based in Riau Province in a workshop showcasing the versatility and biodegradable qualities of viscose in October 2024




 A textile hub in Riau Province



Collaborated on Batik Lasem training with Maranatha Christian University and the Indonesia Ministry of Tourism and Creative Economy in April 2024



 A textile hub in Riau Province

Teamed with a local designer and fashion instructor during Jogja Fashion Week, 22–25 August 2024



Partnered with RGE and the Singapore Fashion Council to provide six fashion designers from Singapore with sustainable fabrics on 8 January 2024



PARTNERSHIPS

API Riau

Organised two *Kelas Berbagi* workshops to upskill fashion SMEs in Riau Province – one in Kuantan Singingi with 15 batik artisans in January 2024 and another in Pekanbaru with 30 makers and designers in September 2024

Collaborated with *Akademi Femina* to support 25 women-led fashion startups in Riau Province through training on business skills, branding, and market access in May 2024



Empowered local fashionpreneurs through the *Wanita Wirausaha Indonesia* programme and scholarships to the Islamic Fashion Institute (IFI)

Rantai Tekstil Lestari (RTL)

Collaborated with Global Fashion Agenda (GFA) to launch Circular Fashion Partnership (CFP) Indonesia in October 2024



Held RTL's third Annual Board Meeting focused on significant achievements driving sustainable textile solutions in February 2024



Participated in panels at TESTEX* Indonesia CEO Gathering in October 2024

* Swiss Textile Testing Institute



TESTEX Indonesia (official representative of OEKO-TEX) joined Sustainable Textile Chain in February 2024



Kadin Indonesia Trading House joined the Sustainable Textile Chain in May 2024



Participated in the Green Economy Expo as a panellist for a round table discussion on 'The Future of Textile Circularity in Indonesia' in July 2024



Secretary General Prama Yudha Amdan delivered keynote address at the ZDHC and TESTEX Indonesia gathering, July 2024



RTL founding members participated in the Taiwan-Indonesia Textile Industry Meeting 2024, 'Emphasizing Sustainability for Long-Term Growth', October 2024



Hosted 'Navigating Sustainable Transformation in Indonesia's Textile Industry in the Era of Industry 5.0' webinar with TextileCloudTM and Frontier.cool, in January 2024



Participated in 'Threads of Innovation: Exploring Sustainable Textiles in Switzerland and Indonesia' webinar, June 2024



Hosted an educational session celebrating National Batik Day for 208 French School Jakarta (FSJ) students in October 2024, featuring workshops on textile recycling, sustainable rayon viscose production, and polyester



The Minister of Creative Economy visited our operations and participated in a workshop for 30 local culinary, crafts, and fashion entrepreneurs, emphasising the importance of collaboration as a way of boosting Indonesia's creative economy on 11 December 2024



For more information please see: Stakeholder engagement

Associations

APPROACH TO SUSTAINABILITY

RGE & APR launch sustainable viscose collection with Singapore Fashion Council

RGE Group, based in Singapore actively supports our circular economy initiatives. It is a member of the Singapore Fashion Council (formerly the Textile and Fashion Federation – TaFF), an important promoter of circular economy practices and waste reduction in the Asian fashion industry.

On 8 January 2024, RGE and APR partnered with the Singapore Fashion Council (SFC) to launch a series of sustainable viscose apparel collections. Themed 'Where Creativity Meets Sustainability', the event was another milestone in RGE's ongoing strategic collaboration with SFC to promote sustainable innovation in the fashion industry.

Held at Design Orchard, the launch showcased exclusive collections by six Singapore-based designers who brought their creative visions to life using sustainable viscose fibre. The launch was the outcome of an open call that invited established and emerging designers to develop sustainable capsule collections, encouraging them to incorporate principles of environmental responsibility into their design processes.

Designers were challenged to use viscose in their fashion creations. The launch celebrated innovative fashions and highlighted the use of responsible materials in shaping a more circular and eco-conscious textile industry.

 **RGE & APR Launch Sustainable Viscose Collection with Singapore Fashion Council**

TRANSPARENCY AND COMMUNICATION

[GRI 2-14, 3-3]

We communicate our sustainability initiatives, targets and progress, and performance to APR stakeholders through our website, quarterly newsletters, and annual reports, which are reviewed and approved by APR leadership and the RGE executive team.

While communicating our sustainable Pulp Sourcing Policy and environmental management practices can be complex, we remain committed to transparency and sustainability to strengthen trust among stakeholders, particularly end-users and consumer brands. Our commitment to transparency includes our engagement with Canopy.⁶

Despite improving our Canopy Hot Button rating, APR is still categorised as 'high risk' due to historical sourcing from regions in Indonesia identified by Canopy as 'ancient and endangered forests'. Over the past five years, we have advocated for a more nuanced assessment, urging Canopy to consider our company's deforestation-free commitment since

2015, as well as the local and historical context to evaluate our fibre-sourcing practices fairly and accurately.

In 2023, an independent consultant assessed the CanopyStyle and Hot Button Report against relevant standards. The findings, which were shared with Canopy, noted deficiencies in the consistency and transparency of the organisation's evaluation and ranking process.

 **See final report on <https://www.aprilasia.com/en/our-media>**

SUSTAINABLE STANDARDS AND ASSESSMENTS

[GRI 3-3, 417-1, 417-2, 417-3]

APR operates a world-class viscose staple fibre (VSF) production facility that meets and exceeds local regulatory requirements and the criteria of the European Union Best Available Techniques (EU-BAT) Polymer BREF and ZDHC MMCF guidelines. We voluntarily subscribe to Cascale's (formerly the Sustainable Apparel Coalition, or SAC) Higg Facility Environmental Module (FEM) and Facility Social & Labor Module (FSLM). We also submit to annual

⁶ Canopy is a non-profit environmental organisation that works with the fashion, publishing, and packaging sectors to protect ancient and endangered forests. Its annual Hot Button ranking evaluates global viscose producers on their wood fibre sourcing practices.

environmental, social, and governance reviews by the Sustainable Apparel Coalition, EcoVadis, and CDP, among others.

Our sustainable production and management practices are independently audited and certified by third parties to ensure they meet international market criteria, especially regarding hazardous chemical management.

To ensure the quality of APR VSF and yarn, we subscribe to internationally recognised standards, including OEKO-TEX®, FKT, and the OK biodegradable label.

In 2024, we assessed all our products, confirming 100% compliance with all applicable voluntary marketing, labelling, and service information codes during the reporting period.

Notable achievements in 2024

STANDARDS

Self-assessed Higg FEM score:
60%⁷

Self-assessed Higg FLSM score:
84.5%

Achieved compliance with EU-BAT environmental standards



APR Meets EU-BAT Standards

Achieved ZDHC Aspirational level for MMCF one year ahead of schedule



APR Achieves ZDHC MMCF Certification at the highest Aspirational Level

AWARDS, CERTIFICATIONS, AND LABELS

Awarded C2C Certified Material Health Certificate (Silver)

Became the first VSF manufacturer to earn a Green Industry (*Industri Hijau*) Certificate 2024



APR Becomes Indonesia's First VSF Manufacturer to earn Green Industry (*Industri Hijau*) Certification

ESG ASSESSMENTS

CDP scores
Climate: **C**
Water: **B**

EcoVadis score:
61

Certification

Indonesia's first VSF Manufacturer to be Green Industry (*Industri Hijau*) certified

APR is Indonesia's first VSF manufacturer to receive the prestigious *Industri Hijau* certificate from the Ministry of Industry. Presented by Andi Rizaldi, Head of the Industrial Services Standardization and Policy Agency (BSKJI) at a ceremony in December 2024, the certificate acknowledges APR's alignment with Indonesia's green standards for viscose production. It certifies APR's compliance with effective water and waste management, responsible energy use, emissions control, high sulphur recovery rates, efficient material usage, and end-to-end traceability standards.



⁷ In 2024, the Higg FEM score was based on the new Higg FEM 4.0 tool, which introduced a revised verification approach, focused solely on foundational questions and quantitative data for energy and water.

CLIMATE AND NATURE

CARBON FOOTPRINT

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ENERGY MANAGEMENT

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SUSTAINABLE SOURCING
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BIODIVERSITY
CONSERVATION

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CLIMATE AND NATURE



Halve product carbon intensity (against 2019 baseline) based on cradle-to-gate life cycle assessment (LCA) approach by 2030

Ensure 100% of energy supply comes from renewable sources

Support the achievement of net-zero emissions from APRIL's land use by 2030

Contribute to APRIL's conservation and wildlife habitat protection initiatives in Indonesia

CORE GOAL:



CONTRIBUTED GOAL:



The fashion industry is a major contributor to greenhouse gas (GHG) emissions and faces growing risks from climate change. Recognising this, APR committed to climate action in 2018 by signing the United Nations Framework Convention on Climate Change (UNFCCC) [Fashion Industry Charter for Climate Action](#), aligning with the 2015 Paris Agreement to help limit global temperature rise to 1.5°C above pre-industrial levels.

We also actively support industry-wide climate initiatives, including the man-made cellulosic fibre (MMCF) 2030 Vision, Textile Exchange 2030 Climate+ Strategy, and the Cascal (formerly the Sustainable Apparel Coalition, SAC) Decarbonization Program.

APR's carbon reduction strategy prioritises operational efficiency and reducing our environmental impact. To ensure transparency, APR discloses our carbon footprint annually by completing the CDP climate change questionnaire, an additional way of ensuring accountability in managing our climate-related risks. As part of APRIL's integrated mill, we completed our Task Force on Climate-Related Financial Disclosures (TCFD) assessment jointly with APRIL in 2022. In 2024, we conducted a deeper analysis of transition risks — such as policy, legal, market, and reputational risks — and integrated into APRIL Group's Enterprise Risk Management (ERM) system as a standalone climate risk category. See [APRIL's 2024 sustainability report](#) for details and updates.

CARBON FOOTPRINT

[GRI 3-3, 305-1, 305-2, 305-4, 305-5]

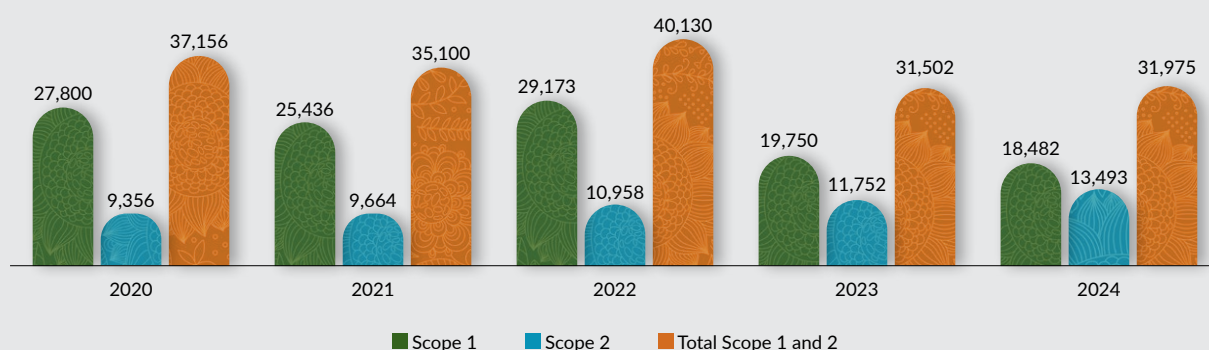
APR emissions

We calculate our GHG emissions using the GHG Protocol, annually measuring our direct (Scope 1) emissions from APR-owned sources, including vehicle emissions and fuel combustion at our chemical plant. We also track indirect (Scope 2) emissions from purchased electricity, steam, heat, and cooling, employing a market and location-based 'dual reporting' approach.

In 2024, our combined Scope 1 and Scope 2 (market-based) emissions totalled 31,975 metric tonnes of carbon dioxide equivalent (t CO₂e), with an emission intensity of 0.10 t CO₂e per tonne of viscose staple fibre produced (t CO₂e/t VSF). While Scope 1 emissions decreased from 2023 to 2024, Scope 2 emissions increased, primarily due to higher utility consumption (steam and electricity) from expanding our viscose production capacity. The increase was driven by the addition of new equipment and a reduction in the energy efficiency of certain processes. To address these inefficiencies, we have initiated an action plan that includes replacing low-efficiency motors with higher-efficiency models, upgrading or replacing underperforming machines and instruments, and improving condensate recovery by increasing the return to PT Riau Prima Energi (RPE). These efforts aim to enhance operational efficiency and reduce Scope 2 emissions over time. However, our overall emissions intensity has remained the same. This stability in emissions reflects the ongoing investments and initiatives comprising our decarbonisation strategy.

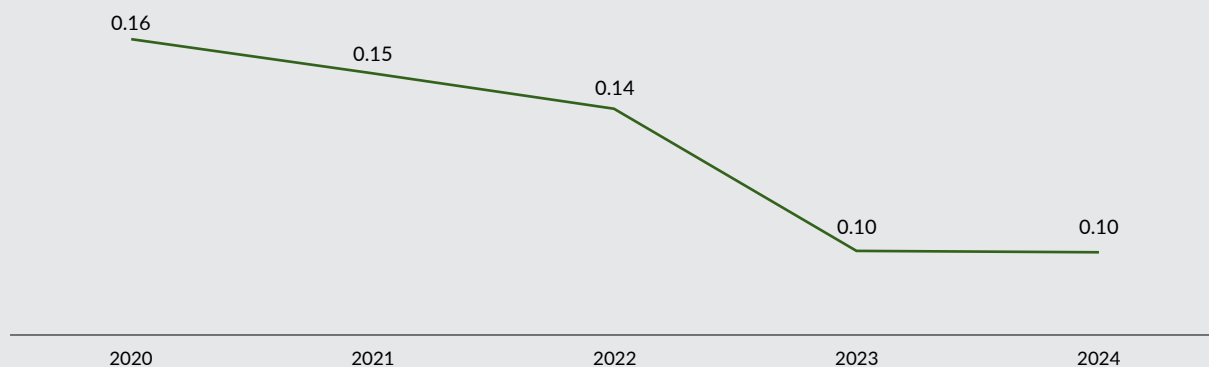
Absolute Scope 1 and 2 GHG emissions 2020–2024 (t CO₂e)

*Market-based emissions



Scope 1 and 2 GHG emissions intensity 2020–2024 (t CO₂e/t VSF)

*Market-based emissions



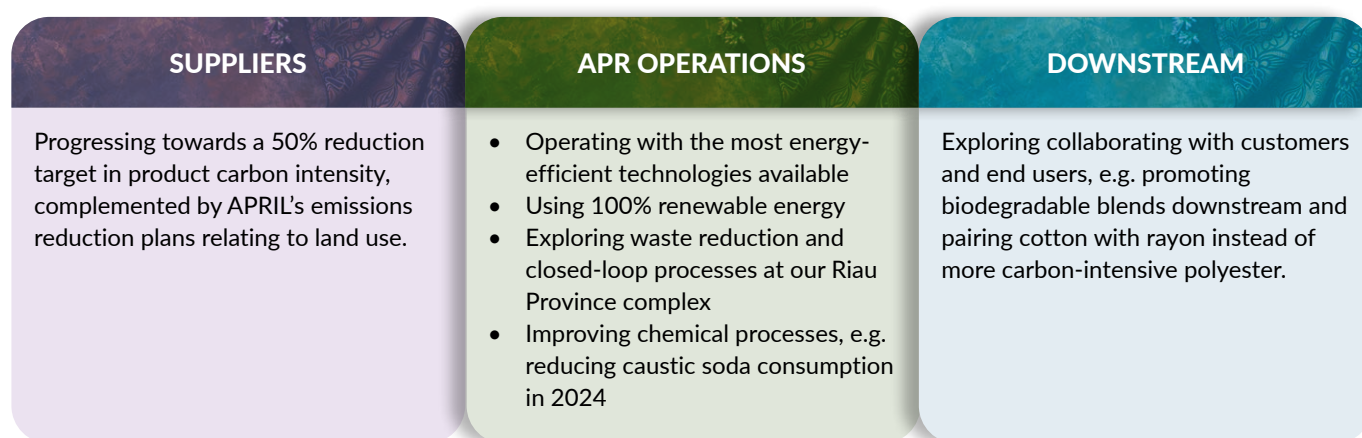
* The market-based method calculates emission based on emission factors that APR has specifically chosen through our power purchase agreement with PT RPE that generates energy from both renewable and non-renewable sources.

CLIMATE AND NATURE

Halving product carbon intensity in our value chain

APR aims to reduce product cradle-to-gate carbon intensity by 50% by 2030 against our 2019 baseline and continues to maintain our Cradle to Cradle (C2C) Certified Material Health Certification.⁸ We conducted our first peer-reviewed life cycle assessment (LCA) in 2020, utilising a comprehensive value chain approach. Our findings concluded that energy and chemical consumption were key contributors to emissions and recommended a 36% reduction in total emissions intensity to achieve the above target.

APR's decarbonisation efforts begin with the areas we can control within our operations and across our entire value chain:



ENERGY MANAGEMENT

[GRI 3-3, 303-1, 302-3]

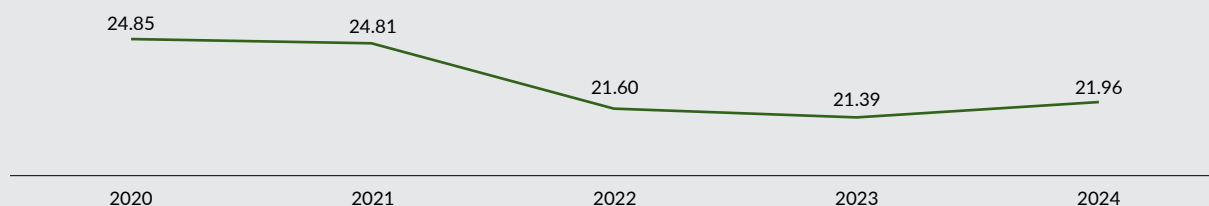
APR has operated on 100% renewable energy sourced from PT RPE at our Riau Province complex since 2020. This subsidiary employs multi-fuel and chemical recovery power boilers to supply electricity to APR and APRIL's integrated operations. In 2024, PT RPE generated over 145.8 million gigajoules (GJ) of energy, with 85% derived from renewable and cleaner sources. Additionally, the integrated complex has steadily expanded its solar power capacity from one megawatt (MW) in 2021 to 26.3 MW in December 2024, in line with APRIL 2030 target to achieve a total solar capacity of 50 MW by 2030.

APR's comprehensive energy monitoring system tracks electricity and steam consumption across all our departments. We review our reduction goals annually to ensure they align with the European Union Best Available Techniques (EU-BAT) Polymer BREF standard.

We measure energy consumption using the mass balance approach to accurately calculate power requirements per tonne of VSF produced. Our total energy consumption in 2024 was 6.74 million GJ, and energy intensity per tonne of VSF produced was 21.96 GJ/t VSF, slight increases of 2.1% and 2.7%, respectively. These increases were primarily driven by higher production volumes, the installation of additional equipment in our viscose production department, and reduced energy efficiency in our evaporator system due to capacity bottlenecks during the reporting period.

⁸ This certification verifies that the chemicals and materials used in our product are selected to prioritise protecting human health and the environment, positively impacting the quality of materials available for future use and cycling.

Energy intensity 2020–2024 (GJ/t VSF)



In May 2024, we achieved ISO 50001:2018 certification for our energy management system. This milestone was made possible by our dedicated energy and water conservation team, comprising government-certified internal auditors, who play a key role in energy conservation, conducting internal audits, analysing data, and identifying reduction opportunities. This cross-departmental team is guided by APR's Integrated Management System (IMS), which standardises our energy identification, consumption tracking, and performance improvement initiatives.

To further develop the energy and water conservation team's expertise, we engaged industry specialists to provide targeted training for our staff. In 2024, we conducted two sessions on ISO energy management system awareness in collaboration with Enviro Piranti Nasional and EnerCoSS, alongside an internal training session led by our Energy Manager. Representatives from key departments attended — including Quality Assurance, Production Planning and Inventory Control (PPIC), Maintenance, Viscose, Spinning, Spinbath, Effluent Treatment Plant (ETP), and Shared Services — enabling interdepartmental dialogue on energy efficiency and management, including ISO 50001 requirements, methods for identifying significant energy use (SEU), and calculation energy performance indicators.

Through PT RPE, we continue to explore ways to reduce our energy footprint through initiatives that include:

Improving waste heat recovery and generating more steam as a byproduct of APR operations

Expanding solar power generation capacity to 50 MW by 2030⁹

Expanding our green fleet by adding seven more electric buses, bringing the total to 18 vehicles

Adopting energy efficiency measures, such as reducing natural gas and power consumption and optimising the mechanical chiller at our production facilities



⁹ Target revised from 2025 to 2030.

CLIMATE AND NATURE

SUSTAINABLE SOURCING AND PROCUREMENT

[GRI 2-6, 2-23, 2-24, 3-3, 204-1, 301-1]

Dissolving wood pulp

APR sources 100% renewable dissolving wood pulp (DWP) to produce VSF. In 2024, we sourced 318,920 tonnes of DWP, a 2.6% increase from 2023, from five direct suppliers, including one new supplier for softwood (Biocell pulp).

Most of our supply (97%) was locally sourced from APRIL and PT Toba Pulp Lestari. The remaining 3% originated outside Indonesia from existing suppliers in Canada, the United States, and Europe.

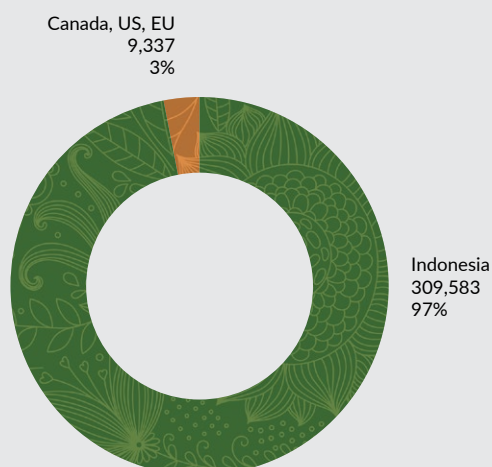
Our sourcing strategy aligns with our [Pulp Sourcing Policy](#) and our brand's commitment to sustainable viscose production.

APR sources 100% from Programme for the Endorsement of Forest Certification (PEFC™) certified suppliers.

We are committed to ensuring full traceability and compliance with regulatory requirements and customers' expectations. Since 2019, we have operated our Follow Our Fibre tracking platform, which enables viscose fibre traceability from nursery to bale, based on supplier-provided data. In 2024, we began refining and strengthening our tracking system to meet the upcoming European Union Deforestation Regulation (EUDR) requirements. As a result, the platform has been put on hold until updates are completed. Sourcing data is available to all customers upon requests to support their traceability requirements.

DWP sourced by region 2024 (t, %)

Total: 318,920 t



Chemicals, oils and packaging

Chemicals, oils, and other VSF and yarn-processing materials account for 22% of our procurement budget. We also source limited amounts of plastic, cardboard, and other packaging materials to wrap viscose bales for customer deliveries.

Supplier assessments and engagement

APR suppliers must comply with our Sustainability Policy and Code of Procurement Ethics (COPE) and complete mandatory risk assessment questionnaires. Our procurement team conducts annual supplier assessments, evaluating factors such as business ethics and integrity, technological capabilities, product and service quality, cost competitiveness, responsiveness, health, safety, and environmental performance. We conduct on-site inspections and review suppliers' internal policies and management systems to verify compliance where necessary. If non-compliances are identified, we work with suppliers to address and resolve any issues through comprehensive time-bound corrective action plans.

Due to our integrated operations with APRIL, DWP sourced from our sister company's mills automatically aligns with our Pulp Sourcing Policy on certified plantations, deforestation prevention, continuous improvement, and transparency. Additionally, all local and international suppliers were assessed against our policy commitments in 2024 and were found to be compliant.

To meet Higg Facility Environmental Module (Higg FEM) and Zero Discharge of Hazardous Chemicals (ZDHC) standards, we encourage all suppliers to conduct self-assessments and specifically require chemical suppliers to submit declarations that materials provided do not contain hazardous or restricted chemicals.¹⁰ APR facilitates the process by offering third-party workshops that train suppliers and contractors on how to complete their self-assessments and declarations, ensuring they meet sustainability criteria.



Pulp sourcing commitments

BIODIVERSITY CONSERVATION

[GRI 3-3]

Our APR2030 strategy commits us to supporting APRIL in landscape restoration and biodiversity conservation, including APRIL's 1-for-1 conservation commitment, and the Restorasi Ekosistem Riau (RER) project. Currently, APRIL conserves a total of 465,886 hectares in Indonesia, excluding external conservation partnerships outside of its concession areas. APR recognises APRIL's positive impact on surrounding landscapes and will continue contributing to RER and other APRIL conservation initiatives. We continue to explore ways where APR can provide tangible support to our suppliers' biodiversity conservation programmes.



[Restorasi Ekosistem Riau website](#)



[Restorasi Ekosistem Riau LinkedIn](#)

¹⁰ Chemicals listed in Annex 3 of the Standard STeP by OEKO-TEX® Manufacturing Restricted Substances List (MRSL), Edition 02.2024 and the ZDHC MRSL Version 3.0.

CLEAN MANUFACTURING

CHEMICAL MANAGEMENT
AND RECOVERY

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WATER AND WASTEWATER
MANAGEMENT

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WASTE MANAGEMENT

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CLEAN MANUFACTURING



>95% sulphur recovery rate by 2025

50% reduction in process water consumption intensity by 2030 (against 2019 baseline)

80% reduction in solid waste to landfill by 2030 (against 2019 baseline)

Meet all criteria set out in the EU-BAT polymer BREF by 2023

Meet ZDHC MMCF Guidelines' Aspirational levels by 2025

CORE GOAL:



Clean and closed-loop manufacturing processes are crucial to minimising our environmental impact and central to our APR2030 strategy. Our approach involves capturing and reusing chemicals and the by-products of our processes, reducing and ultimately eliminating hazardous substances in our production processes, treating and recycling wastewater, ensuring proper waste management, and applying air pollution control methods.

Our production processes comply with local regulations and align with various international and industry standards, guidelines, and best practices, including:

- World Health Organization (WHO) guidelines
- OEKO-TEX® STeP Annex 5
- 2007 European Union Best Available Techniques (EU-BAT) Reference Document on the Production of Polymers
- Zero Discharge of Hazardous Chemicals (ZDHC) Man-Made Cellulosic Fibres (MMCF) guidelines
- ZDHC Manufacturing Restricted Substances List (MRSL) v3.0
- Higg Facility Environmental Module (Higg FEM)

APR achieves ZDHC MMCF certification at the highest Aspirational Level

In October 2024, APR achieved ZDHC MMCF Aspirational level certification, representing the highest degree of compliance. Compliance data on water management, waste reduction, and chemical safety was submitted through the ZDHC Supplier Portal following an independent third-party review. We earned this accolade in our fifth year of operations, one year ahead of our APR2030 target.

APR is proud of our achievement and remains committed to upholding ZDHC standards, advancing clean, closed-loop production, and supporting Indonesia's low-carbon textile economy.

APR meets EU-BAT standards

APR achieved EU-BAT compliance following a two-day independent assessment on 22–23 October 2024. Textile Solutions — a division of BluWin Limited (UK) and a leading textile industry evaluation firm — confirmed that APR meets Best Available Techniques Associated Emission Levels (BAT-AEL) in material usage, water management, wastewater treatment, air emissions, and other key areas. We were also deemed to comply with criteria on solid waste management, noise control, zinc and sulphate levels, and organic matter breakdown.

Our achievement reflects APR's sustainability vision, as outlined in our steadfast commitment to continuous improvement, innovation, and progress towards our APR2030 goals.



Executive summary

Complying with these two standards represents significant milestones for APR. Achieving ZDHC Aspirational status is a notable industry achievement, demonstrating our seriousness to sustainable development. EU-BAT compliance is critical for accessing and remaining competitive in the European market. Our achievements underscore APR's commitment to clean manufacturing, leading to measurable reductions in water and odour pollution.

APR progress against EU-BAT BREF and ZDHC MMCF 2024

CONSUMPTION (t/VSF)	UNIT	2024	EU-BAT	ZDHC		
Energy	GJ	21.96	20–30			
Process water	m ³	30.40	35–70			
Pulp	t	1.011	1.035–1.065	1.010–1.065		
Carbon Disulphide (CS ₂)	kg	61.32	80–100	80–100		
Sulphuric acid (H ₂ SO ₄)	t	0.65	0.6–1.0	0.65–1.03		
Caustic soda (NaOH)	t	0.52	0.4–0.6	0.45–0.6		
Zinc (Zn)	kg	2.35	2–10	2–10		
Spin finish	kg	4.42	3–5	3–5.3		
Sodium hypochlorite (NaOCl)	kg	4.48	0–50	0–70		
EMISSION PER TONNE (t/VSF)						
Sulphur (S) to air	kg	12.33	12–20	F(35)	P(20)	A(12)
Sulphate (SO ₄ ²⁻) to water	kg	106.37	200–300			
Zinc (Zn) to water	g	9.8	10–50	F(150)	P(60)	A(18)
Chemical oxygen demand	g	2,575.20	3000–5000	F(7200)	P(6000)	A(3600)
Total suspended solids	mg/L	7		F(70)	P(50)	A(30)
Hazardous waste	kg	0.11	0.2–2			
Noise at the fence	dBA	56.5	55–70			
RECOVERY RATES						
Total sulphur (S)	%	94.60		F(85%)	P(92%)	A(95%)
Sodium sulphate (Na ₂ SO ₄)	%	76.2		F(50%)	P(60%)	A(70%)

Notes:

1. ZDHC stipulates Foundational (F), Progressive (P), and Aspirational (A) levels for some parameters.
2. TSS range has been revised to reflect the ZDHC MMCF Guidelines. Sodium sulphate recovery rates have been restated to include all ancillary processes.
3. Despite a slight decline in our sulphur recovery rate in 2024, we achieved the ZDHC Aspirational level, as confirmed through ZDHC's evaluation of our operating parameters.
4. Sludge from the viscose process is classified as non-hazardous under the 2007 BAT Polymer BREF. Our 2024 external assurance confirmed that this type of sludge is excluded from EU-BAT criteria. Based on this interpretation, APR has retroactively met the EU-BAT lower limit since 2022.

CLEAN MANUFACTURING

CHEMICAL MANAGEMENT AND RECOVERY

[GRI 3-3, 305-7]

APR thoroughly documents and reports chemical usage and management practices. We adhere to ZDHC chemical recovery guidelines and regularly submit the required reporting data through the ZDHC portal. We also employ a continuous emissions monitoring system (CEMS) that measures and transmits real-time air quality indicators to the Ministry of Environment and Forestry (MOEF) SISPEK emissions monitoring platform.

APR maintains our Blue PROPER certification

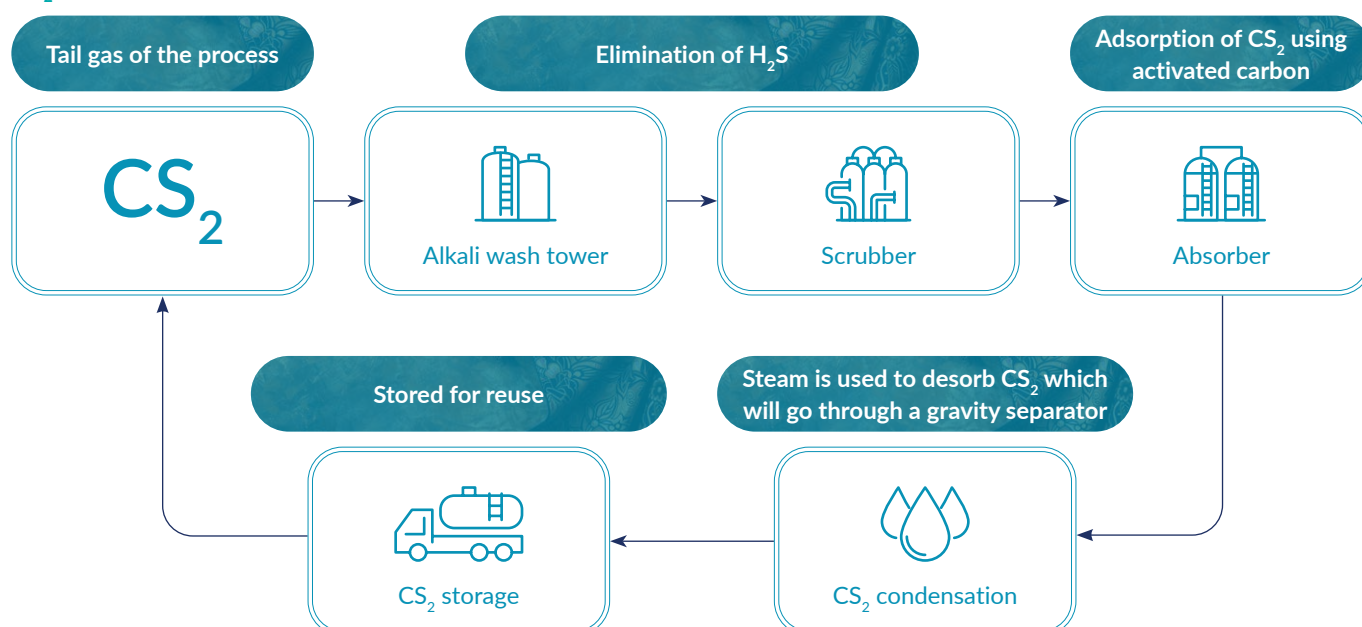
APR maintained our Blue PROPER (Programme for Pollution Control, Evaluation and Rating) certification in 2024, reflecting adequate compliance with environmental regulations. The programme assesses key environmental metrics, including wastewater management, air emissions, and hazardous waste handling.

Sulphur emissions and recovery

Manufacturing viscose staple fibre (VSF) is a multi-step process that involves chemically modifying and transforming dissolving wood pulp (DWP) into viscose fibre. DWP is treated with caustic soda (NaOH) and carbon disulfide (CS₂). It is then reconstituted in a sulphuric acid bath to produce VSF.

To minimise our environmental impact and maximise resource recovery, we use a wet-process CS₂ recovery system that captures sulphur-rich gases before they are emitted into the atmosphere, converting them into reusable CS₂. We have further enhanced this system by refining our operational processes and increasing the use of activated carbon.

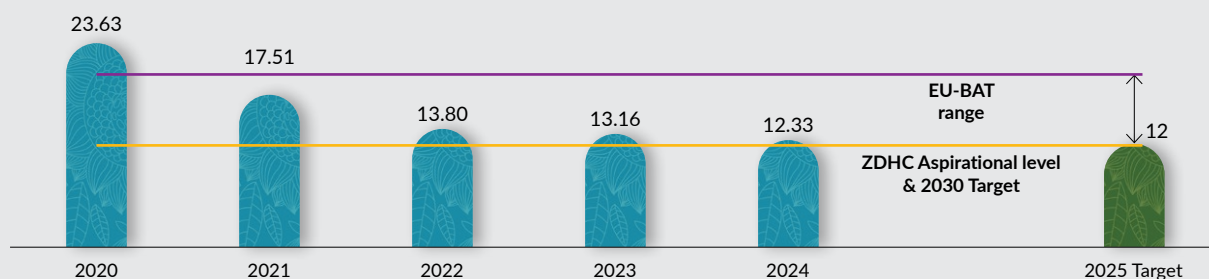
CS₂ recovery system



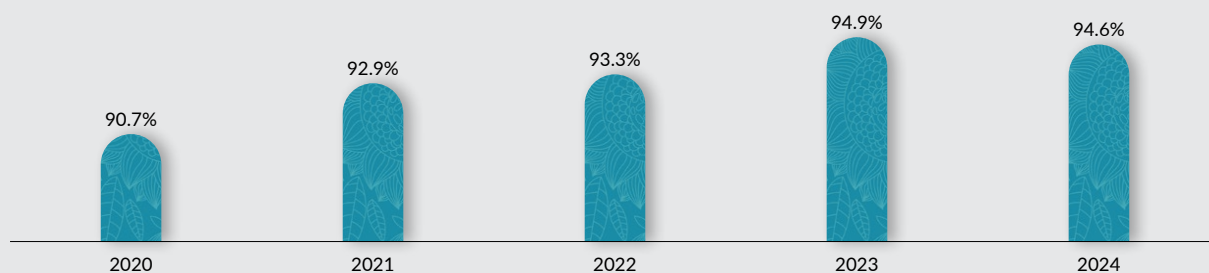
In 2024, our sulphur emission intensity was 12.33 kilograms per tonne of VSF (kg/t VSF), a 6.3% reduction compared to 2023, demonstrating continued progress towards achieving the ZDHC Aspirational target of keeping it below 12 kg/t VSF. We met and exceeded this target in the first five months of 2025, with our average emission intensity further falling to 10.04 kg/t VSF.

For total sulphur recovery, while there was a slight decline in 2024, we still achieved the ZDHC Aspirational level based on their assessment of our operating parameters — successfully meeting our APR2030 target.

Sulphur emission intensity 2020–2024 (kg/t VSF)



Total sulphur recovery rate 2020–2024 (%)

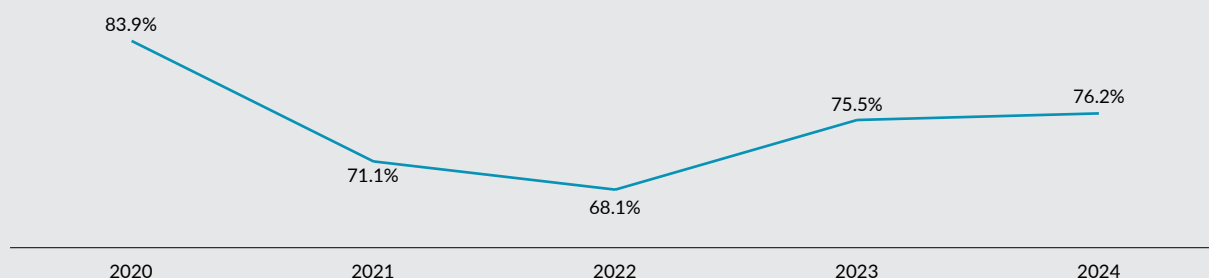


Sulphate recovery

Sodium sulphate is a solid by-product of VSF production and a valuable compound with diverse applications. We recover it using a simple evaporation process. Our recovery rate in 2024 was 76.2%, a slight improvement of 0.9% from 2023. We have surpassed the 70% target in line with ZDHC Aspirational levels in 2023 and 2024.

The recovered sodium sulphate is sold globally for industrial applications. Unsold quantities are diverted to our sister company, APRIL, and used as a bleaching agent for its pulp mill at our integrated operations, creating a closed-loop system. In total, we supplied 10,634 tonnes of sodium sulphate to APRIL in 2024.

Sodium sulphate (Na_2SO_4) recovery 2020–2024 (%)



Note: Data for sodium sulphate recovery have been restated to cover all ancillary processes of viscose production.

CLEAN MANUFACTURING

Avoiding hazardous chemicals

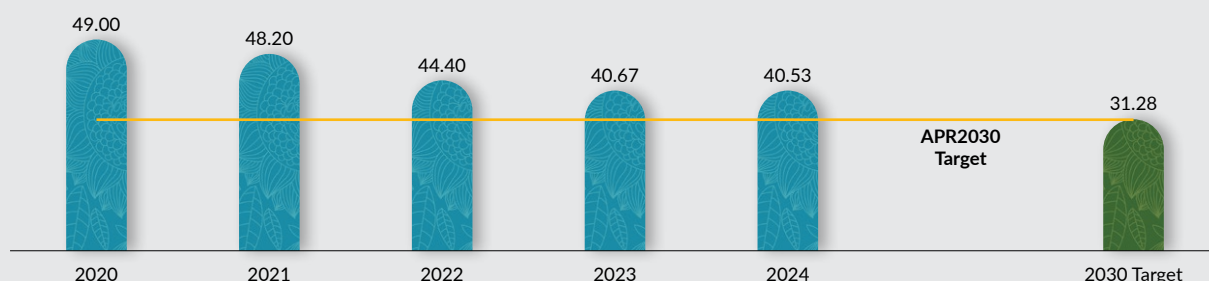
Beyond improving our chemical recovery processes, we are working towards phasing out and replacing hazardous chemicals, such as sodium dichromate ($\text{Na}_2\text{Cr}_2\text{O}_7$), used for equipment cleaning. This compound contains the heavy metal chromium and is listed on the ZDHC Manufacturing Restricted Substances List (MRSL).¹¹ In 2023, we conducted an internal feasibility study exploring potential alternatives to sodium dichromate. Third-party testing in 2024 confirmed that our product complies with regulatory requirements, including the absence of potassium dichromate ($\text{K}_2\text{Cr}_2\text{O}_7$), thereby meeting Substances of Very High Concern (SVHC)¹² standards. APR is committed to continuing to investigate opportunities to phase out and replace hazardous chemicals.

WATER AND WASTEWATER MANAGEMENT

[GRI 3-3, 303-1, 303-2, 303-5]

APR buys treated water from PT Riau Prima Energi (RPE), an APRIL subsidiary licenced to withdraw water from the Kampar River for industrial purposes. Since our first year of operations, we have reduced process water consumption intensity by 35.2%, reaching 40.53 cubic metres per tonne of VSF ($\text{m}^3/\text{t VSF}$) in 2024. We achieved this reduction by optimising our processes and improving efficiency while increasing production, reusing condensate water, and reusing recycled water from our domestic wastewater treatment plant. We remain committed to reaching our APR 2030 target of a 50% reduction in water consumption by 2030 compared to our 2019 baseline.

Process water consumption intensity 2020–2024 ($\text{m}^3/\text{t VSF}$)



Note: Data for process water consumption intensity have been restated to cover all ancillary processes of viscose production.

Our wastewater treatment process comprises primary and secondary treatment, along with an activated sludge system at a dedicated effluent treatment plant (ETP). APR's production wastewater system collects and processes wastewater from our mill. We sample wastewater quality twice daily at strategic locations before discharging it into the Kampar River. We also assess wastewater quality monthly at upstream and downstream discharge points to monitor overall river conditions.

We use the SPARING¹³ online monitoring system to transmit real-time wastewater quality data to the MOEF servers and publish our wastewater data on the voluntary ZDHC Wastewater Gateway biannually. We have met and exceeded ZDHC Aspirational levels for chemical oxygen demand (COD) and zinc-to-water since 2022. Additionally, we met the ZDHC Aspirational level for total suspended solids (TSS) in 2024.



ZDHC Wastewater Gateway

¹¹ Based on the ZDHC MRSL guidance sheet on heavy metals, available [here](#).

¹² SVHC refers to a list of chemicals identified by the European Chemicals Agency (ECHA) under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation as posing serious risks to human health or the environment.

¹³ SPARING stands for Sistem Pemantauan Kualitas Air Limbah secara Terus Menerus dan Dalam Jaringan. Its is mandatory under the Regulation of the Minister of Environment and Forestry Number P.93/Menlhk/Setjen/Kum.1/8/2018 concerning Procedures for Monitoring and Reporting Water Quality.

WASTE MANAGEMENT

[GRI 3-3, 306-1, 306-2, 306-3, 306-4, 306-5]

The 3R Principles — reduce, reuse, and recycle — guide APR's waste management strategy. Our efforts to minimise waste and promote circularity include the following initiatives:

Upgrading VSF spinnerets to reduce clumping and TOW waste by 60–70%

Recycling reusable cellulose retrieved during scheduled filter maintenance

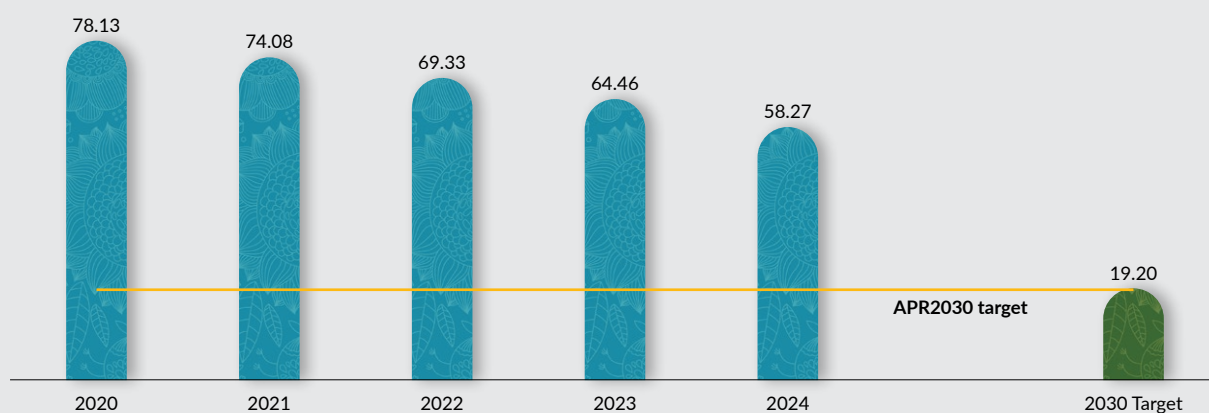
Recycling and processing TOW waste into saleable fibre

Obtained permit for the recovery and reuse of zinc from our waste pipes as fertiliser at our plantations

Our operations primarily generate three categories of waste: sludge, ash, and TOW waste (reject VSF). We produced 18,646 tonnes of waste in 2024. Despite an increase in production since the start of our operations, our total waste generated has only amounted to a 2% increase compared to 2019. Of our total waste generated in 2024, 99.95% was sent to landfill, while the remaining 0.05% was sold to registered waste handlers for disposal or recovery.

In 2024, our solid waste to landfill intensity was 58.3 kg/t VSF. This represents a 39.3% reduction against our 2019 baseline of 95.99 kg/t VSF, putting us on course to achieve an 80% reduction in solid waste intensity compared to our baseline.

Intensity of solid waste directed to landfill 2020–2024 (kg/t VSF)



Meeting our ambitious 80% APR2030 target means we must continue to explore circular production strategies and waste reduction innovations. Waste management and chemical recovery remain key challenges for APR. Our Waste to Value (W2V) initiative aims to reduce landfill waste by converting industrial by-products into fertilisers for plantations. It is aligned with the waste reduction initiatives of our sister company, APRIL. In 2024, we embarked on two key projects. The first is converting zinc sludge and fly ash into fertiliser for acacia plantations, with a successful pilot project underway. The second is producing potassium sulphate fertiliser from mill processes for eucalyptus plantations (in its early stages). We will provide more details about these projects in future reports. Please refer to [APRIL Sustainability Report 2024](#) to learn more about W2V, its current status, and progress. We are also exploring ways to reduce zinc consumption in our production processes.

Additionally, we are collaborating with pulp and paper consulting firms and industry partners in the viscose sector to tackle this and other material challenges while driving sustainable solutions.

CIRCULARITY

ACCELERATING
INNOVATION AND R&D

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R&D CENTRE

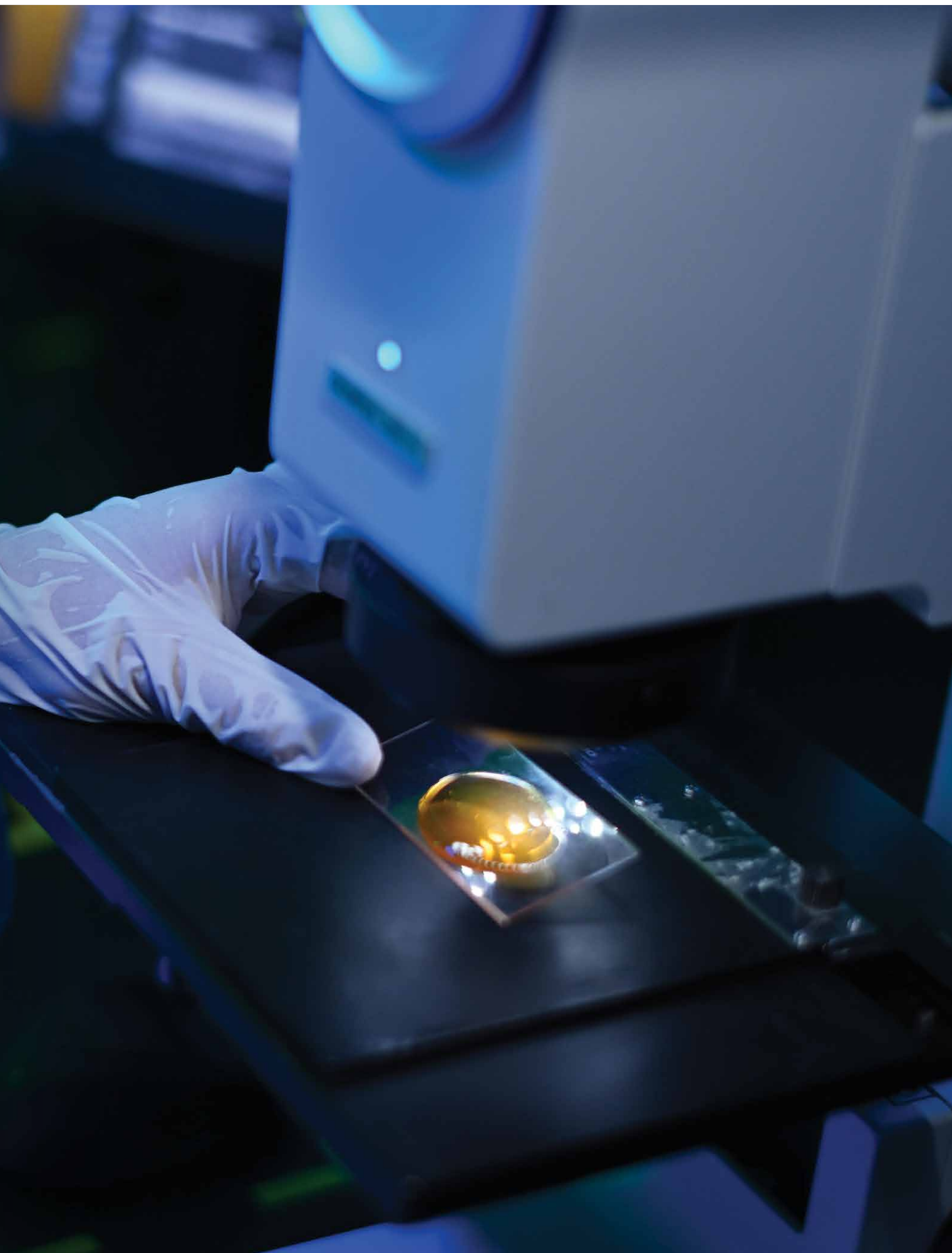
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USING RECYCLED PRODUCT
IN VSF PRODUCTION

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THE RGE-NTU SUSTEX

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CIRCULARITY



20% recycled textile composition in VSF Production by 2030

Determine feasibility of establishing **Indonesia's first commercial-scale recycled textile facility**

Determine feasibility of establishing **urban textile recycling centres** in Singapore and Indonesia

CORE GOAL:



CATALYTIC GOAL:



CONTRIBUTED GOAL:



ACCELERATING INNOVATION AND R&D

[GRI 3-3]

APR is proud of our pivotal role in guiding the textile industry away from the traditional 'take-make-dispose' production and consumption model towards a more sustainable circular economy model. We are a company with a focus of innovation built on our R&D expertise, collaborative mindset, and extensive market network. We invest in next-generation solutions and seek partners to help drive systemic change across our value chain.

The global textile industry faces considerable obstacles on the road to circularity, particularly in securing a consistent supply of sustainable domestic feedstock and scaling recycling programmes. Two notable challenges are the inconsistent quality and complex fibre blends in post-consumer and post-industrial waste streams. Our trials with post-consumer cotton-rich fabrics yielded little usable feedstock, revealing the inadequacy of existing technical solutions to address the complexities of large-scale textile recycling.

Despite these challenges, APR remains committed to reducing waste in the textile sector and contributing to solutions for large-scale circularity, which is an issue that remains unresolved globally due to current technological limitations.

R&D CENTRE

Our Riau complex is home to a world-class R&D facility established by APRIL in 2003, alongside APR's dedicated R&D facility established in 2018. These centres are equipped with cutting-edge technology, including a fully automated pilot plant that replicates our primary viscose production plant in miniature, allowing us to test, refine, and resolve issues on a smaller scale before implementing changes.

Our dedicated R&D team focuses on innovative waste management strategies to minimise waste across all operations, from production to distribution.

USING RECYCLED PRODUCT IN VSF PRODUCTION

[GRI 301-1, 301-2, 301-3, 306-2]

One of our key APR2030 goals is to incorporate 20% recycled textiles into our raw material. Our R&D teams have been testing various in-house technologies and types of textile waste since 2020, addressing key challenges, and developing targeted solutions to increase the recycled content in our production. In early 2023, we were granted a patent for a breakthrough technology that produces viscose fibre with a blend of 50% recycled textile (RT) pulp and 50% regular dissolving wood pulp (DWP). We followed this significant milestone by securing appropriate feedstock in mid-2024 and continue to evaluate ways to scale up this recycling innovation.

While these advancements have allowed us to progress, we acknowledge the complexities of scaling this technology and other obstacles, including prohibitive initial investment costs, manufacturer and brand resistance to recycled fabrics, limited consumer adoption, and the potential disruption of Indonesia's informal recycling economy, which provides livelihoods for many local communities.

We are seeking alternatives to increase recycled content in other areas of operation. For example, we use plastic straps containing 30% recycled material to secure viscose bales for shipping.

THE RGE-NTU SUSTEX

Through its RGE Technology Centre (RTC), our parent company, the RGE Group, partnered with the Nanyang Technological University (NTU) in 2022, establishing the RGE-NTU Sustainable Textile Research Centre (SusTex) to advance recycling technologies in urban environments.

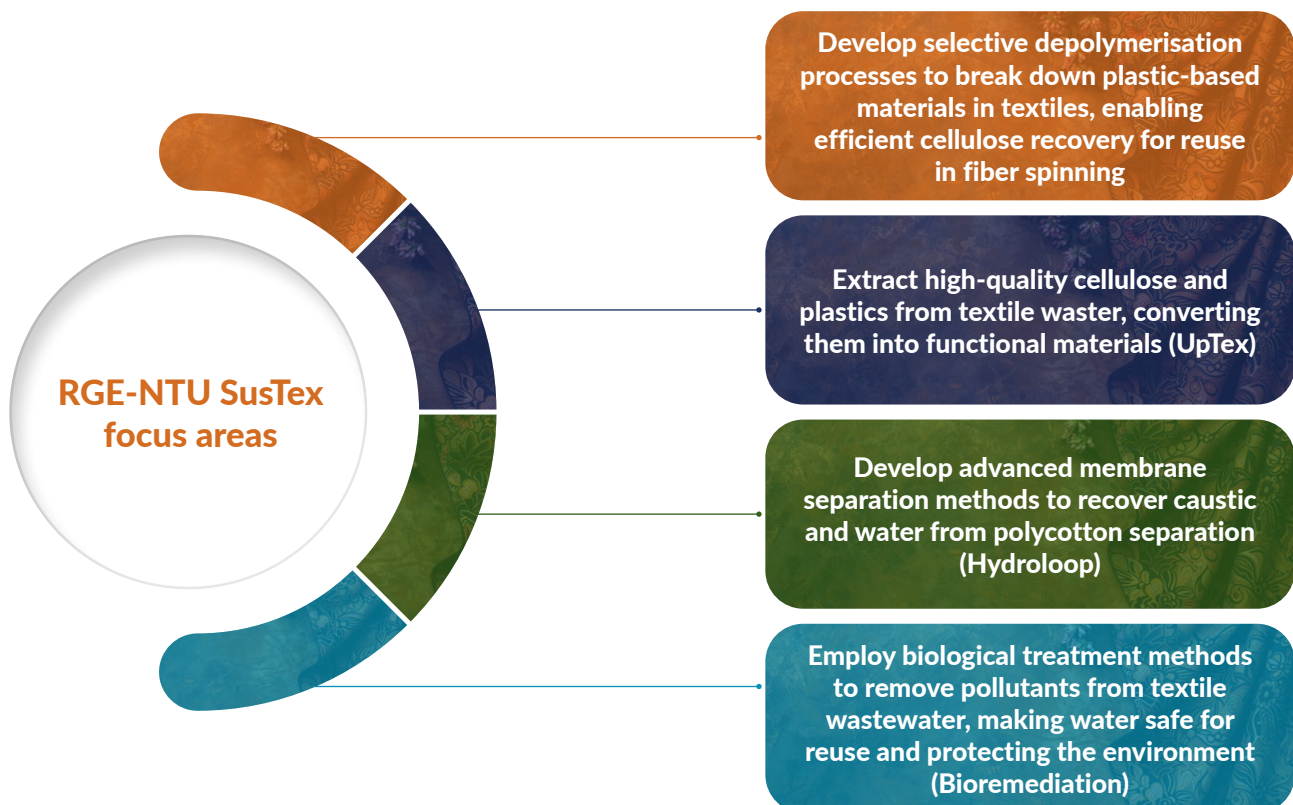
After three years in development, SusTex has grown into an integrated textile recycling initiative that considers all types of used garments, which are sorted based on fibre characteristics. Some fibres are suitable to be recycled into new textiles, while others are transformed into higher-value materials

or niche market products such as microfibrillated cellulose (MFC), microcrystalline cellulose (MCC), non-wovens, and bio-composites. This approach unlocks multiple circular pathways and maximises resource recovery, with a greater impact than conventional textile-to-textile recycling.

In addition to recycling fabrics, SusTex is also working on closed-loop production systems using techniques such as membrane filtration and bioremediation. SusTex has also identified & isolated microbial streams derived from Singapore landfill which are capable of degrading dyes. To reflect and address industry concerns, the APR team participates in monthly technical workshops in Singapore to ensure its scientific research has practical applications.

For broader engagement, a showcase featuring a lab-scale demonstration facility is planned for Q3 2025 in Singapore. While core technologies are functional, ongoing efforts continue to focus on improving process efficiency and preparing for scale-up. Moving forward, strong industry collaboration and continued investment will be key to bridging the gap between research innovation and industry implementation.

 [RGE YouTube on SusTex Research Centre](#)



INCLUSIVE PROSPERITY

OUR COMMUNITY

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OUR WORKFORCE

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OUR CUSTOMERS

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INCLUSIVE PROSPERITY



In partnership with APRIL, eradicate extreme poverty within a 50km radius of our operation

Increase access to primary healthcare services in targeted villages within our operations

Expand programmes that promote traditional craftsmanship

Create a regional textile hub

Advance gender equality across the value chain

CATALYTIC GOAL:



CONTRIBUTED GOAL:



Inclusive prosperity is a central pillar of the APR2030 strategy. APR is committed to advancing the socio-economic development of both our workforce and the communities surrounding our operations.

APR operates a series of community development programmes independently and in partnership with our sister company, APRIL, including joint initiatives in surrounding villages. We actively engage with seven communities in a 10-kilometre radius around our Pelalawan and Siak Regency operations.

APR respects and protects the rights of our employees per the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. We meet and exceed the provisions of EcoVadis, OEKO-TEX®, the Higg Facility Social & Labor Module (FSLM), and other labour standards and schemes we adhere to, ensuring safe, fair, and responsible working conditions across our value chain.



OUR COMMUNITY

[GRI 3-3, 203-1, 203-2, 413-1, 413-2]

Addressing community needs

APR invests in the well-being of local communities directly and indirectly impacted by our operations.

APR and APRIL operate transformative community empowerment programmes as part of our APR2030 and APRIL2030 commitments. We provide training, capacity building, knowledge sharing, access to new income sources, and partnership opportunities. We seek input from the affected communities to develop effective programmes that meet their needs.

2024 community highlights

PUBLIC HEALTH	EDUCATING & ENGAGING YOUTH	SUPPORTING LOCAL SMES	PROMOTING TEXTILE ARTISANS & EMPOWERING WOMEN
Supported 47 <i>posyandus</i>	Awarded two fashion scholarships	Engaged nine batik SMEs and two local fashion designers	Championed traditional artisanship through the Riau Province Regional Textile Hub/Centre of Excellence
Trained 87 women cadres	Sponsored four scholarships for high school students	Supported training local fashion SMEs through two <i>Kelas Berbagi</i> workshops with API Riau	Trained 50 workshop participants in <i>Rumah Batik</i>
Distributed supplementary feeding packages to 1,820 toddlers and 149 malnourished expectant mothers	Conducted 17 public webinars coordinated by the Jakarta Fashion Hub (JFH)	Collaborated with six SME offline partners to present a ready-to-wear collection at Jakarta Muslim Fashion Week (JMFV) 2024	Trained four women in <i>songket</i> weaving
Collaborated with two local fabric artisans and designers to showcase fashion collections made with APR viscose rayon at the <i>Riau Berkain</i> event			

Reducing poverty

In 2019, we set a joint target with APRIL to eradicate extreme poverty in 214 villages within a 50-kilometre radius of our mill in Riau Province. In 2023 and 2024, we conducted a baseline study utilising household field surveys to better define our target beneficiaries and establish an accurate baseline. Building on government data, we surveyed 7,700 of the poorest households and collected detailed economic and demographic information. We used these data to establish a detailed picture of extreme poverty in the area surrounding our operations, thereby maximising the effectiveness of our interventions by confirming and addressing community needs. As a result of this study, we have identified 123 villages and 1,913 households living under extreme poverty surrounding our operational areas, which have become the new focus of our joint target.

In partnership with the Indonesian government and other stakeholders, we seek long-term, impact-driven solutions to create self-sufficient communities.

Our shared approaches with APRIL include:

- **Social welfare:** programmes that provide access to essential services (e.g. healthcare and education)
- **Income generation:** programmes that support local businesses and create jobs to generate new income (e.g. APRIL's livelihood programmes, APR's Riau Province textile hub, and women entrepreneur empowerment initiatives)

INCLUSIVE PROSPERITY

Health and nutrition for mothers and toddlers

APR and APRIL collaborate with community-based integrated health posts (*posyandus*), clinics in our vicinity, and local Family Welfare Programmes to improve healthcare access and outcomes in surrounding communities, including providing proper nutrition for expectant mothers and toddlers.

Preventing stunting and malnutrition are APR priorities. We support the Indonesian Government programme to eliminate toddler stunting in rural areas and achieve a 14% nationwide reduction against the 2014 baseline. We offer direct on-the-ground support and consult village heads and officials, *posyandu* cadres (community volunteers who staff *posyandu* community service posts), and other relevant stakeholders, including government representatives, on implementing the national *Rembuk* Stunting prevention and management strategy. Together, we build solutions that improve the health of Indonesian mothers and their children. Our initiatives in 2024 include:



Providing health and nutrition education; running hygiene and sanitation campaigns



Setting up nutrition monitoring posts in Pangkalan Kerinci Kota and Pangkalan Kerinci Timur



Training *posyandu* cadres, especially on stunting reduction and management strategies



Distributing Information-Education-Communication Kits to *posyandus* in Pangkalan Kerinci



Sponsoring counselling and training for expectant and young mothers, particularly on nutrition and childcare



Providing supplementary feeding support, e.g. food packets and nutritional supplements, for mothers and children under the age of five



Providing treatment to pregnant women with chronic energy deficiency and recovery assistance to malnourished children under the age of five



Monitoring health service provision at 47 *posyandus*



Supplying equipment, including infant scales, to *posyandus* and providing women with labour (birthing) support

PROMOTING TRADITIONAL TEXTILE CRAFTSMANSHIP

A textile hub in Riau Province

APR's Riau Province textile hub is the heart of our inclusive prosperity programme. It furthers our goal of establishing a regional centre of excellence that supports the local community and revitalises traditional Indonesian textile crafts.

We collaborate with like-minded stakeholders, including customers, suppliers, artisans, fashion designers, and schools, to launch prosperity-building programmes that support local women, small and medium-sized enterprises (SMEs), and youth. Our partners include *Rantai Tekstil Lestari* (RTL), API Riau, the Indonesian Fiber and Filament Yarn Producers Association (APSyFI), and other regional and national entities working to effect an industry-wide transformation.

Textile hub initiatives



Supporting community initiatives



Providing access to new income sources for community members



Establishing a hub for batik making and songket weaving led by women in the community



Nurturing the talent of young adults by providing scholarships, training, and internships



Supporting small businesses through development programmes and by integrating SMEs into our value chain



Promoting women employees to leadership positions through training and capacity building

Showcasing local talent from Riau Province on the fashion runway

APR partnered with local designers Thiffa Qaisty and Rika Guslail on fashion collections made with our sustainably produced viscose rayon. The collections were launched at Pekanbaru on 21 October 2024, spotlighting the versatility of APR's biodegradable fibre and celebrating the creative potential and talent of Riau Province's emerging fashion designers. Attended by over 30 media outlets, the initiative highlighted APR's dedication to inclusive economic development and its strategic support for local creatives.



[From Riau Province to the Fashion Runway: How Asia Pacific Rayon is Empowering Local Talent | Asia Pacific Rayon](#)



[Discover Sustainable Fashion Collections by Indonesia's Rising Designers from Riau Province - YouTube](#)



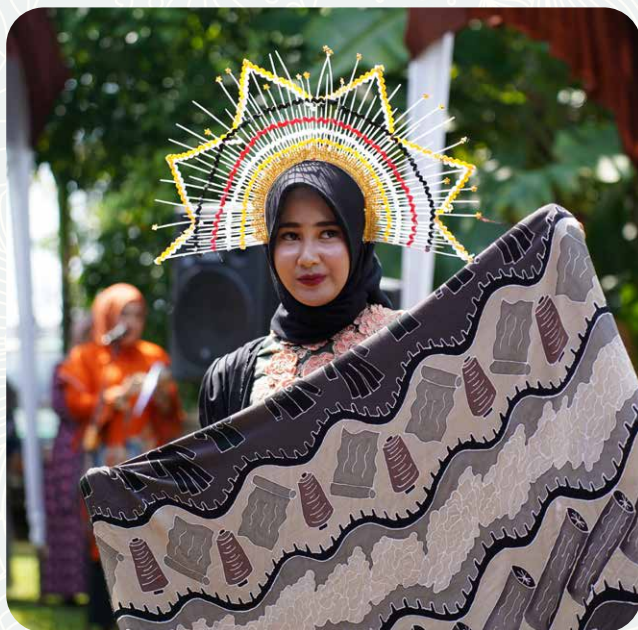
INCLUSIVE PROSPERITY

Rumah Produksi Batik Nagori workshop launch

In March 2024, APR inaugurated the Batik Nagori workshop – *Rumah Produksi Batik Nagori* – in Kuantan Singingi (Kuantan Singingi), with local government officials and APR management in attendance. The event celebrated APR's ongoing commitment to empowering women and youth by supporting traditional textile crafting. Workshop participants unveiled a new batik collection made with biodegradable APR viscose, featuring motifs inspired by Riau Province's natural landscapes, such as *Banan Maghnantia* and *Rantai Alam Lestari*.

Building on these efforts, APR also sponsored a creative workshop that prepared 30 crafters and designers in Pekanbaru for Riau Berkain event in October 2024. This initiative was part of APR's broader efforts to create meaningful social impact through strategic partnerships, including with Asosiasi Pertekstilan Indonesia Riau (API RIAU).

   **Batik Nagori: Unveiling Sustainable Collections from APR's Biodegradable Viscose**



EMPOWERING WOMEN

[GRI 3-3]

In line with our APR2030 objective to promote gender equality throughout our value chain, all of our initiatives are designed to be inclusive, empowering and supporting women within the industry.

Batik making and songket weaving

Our *Rumah Batik* and *songket* weaving programmes promote and preserve the traditions and cultures of local communities. They combine modern materials and traditional crafts, introducing viscose rayon fibre into *songket* weaving and batik making. They also incorporate trendy new patterns and motifs to increase customer appeal and attract younger consumers. These programmes support women by helping them gain financial independence and have garnered significant praise and positive feedback from participants and community leaders. Initially aimed at women only, training is now offered to men.

Promoting women's entrepreneurship through batik

APR supports local SMEs through the *Rumah Batik* programme launched in 2015 by our sister company, APRIL. The programme offers training modules on traditional batik making and educates participants on patenting their designs to increase their market value. Since becoming an equal opportunity programme in 2020, it has trained a total of 56 women and 56 men. In 2024, the programme helped launch batik SMEs (*Rumah Batik*), seven of which are still in operation and have collectively earned over IDR 251 million (cf., 2022 earnings of IDR 259 million).

No	Business Name	Gender of Business Owner	No. of Employees	Average Sales Turnover 2024 (IDR)	Location
1	<i>Rumah Batik Dekranasda Siak</i>	Female	6	1,500,000	Siak
2	<i>Rumah Batik Nagori</i>	Female	50	179,166,667	Pisang Berebus, Kuansing
3	<i>Batik Lebah</i>	Female	6	6,400,000	Kebun Lado, Kuansing
4	<i>Rumah Batik Andalan</i>	Female	7	45,000,000	Pangkalan Kerinci Barat, Pelalawan
5	<i>Batik Yus Pelalawan</i>	Female	5	15,000,000	Pangkalan Kerinci Kota, Pelalawan
6	<i>Rumah Batik Lalang Kabung</i>	Female	3	1,000,000	Lalang Kabung, Pelalawan
7	<i>Rumah Batik Seruni</i>	Female	3	3,587,000	Dayun/Pangkalan Makmur, Siak

APR creates additional revenue opportunities for women and local artisans by introducing them to government offices that purchase batik for employee uniforms. Additionally, APR and APRIL purchase batik pieces from *Rumah Batik* for 'Batik Friday' uniforms at the Riau Province complex, directly generating revenues for these SMEs.

In January 2024, APR collaborated on a women's empowerment initiative with local weavers in Riau Province. The inaugural training sessions were held at *Rumah Tenun Wan Fitri* in Pekanbaru, with five weavers from impoverished families in the Andalan Weaving Group participating in this programme.

The programme introduced participants to the *menghani* technique, instructing them in weaving traditional Riau Malay motifs using wooden looms. In addition to technical skills, participants received financial support, product development guidance, and marketing assistance. This initiative promotes cultural preservation and innovation, encouraging weavers to develop designs that reflect Pelalawan's distinct local heritage.

APR is also partnering with the Ministry of Tourism and Creative Economy (MoTCE) to develop villages surrounding our operations into *Desa Wisata* (tourism villages), aiming to showcase local culture, crafts, and community-based tourism potential.

INCLUSIVE PROSPERITY

Inspired by *Rumah Batik*, APR collaborated with API Riau on our *songket*-making programme. In 2024, the programme uplifted four women by training them in advanced weaving techniques and motifs. Participants partnered with a local designer to create a collection that used innovative rayon and viscose blends as alternatives to traditional fabrics, introducing artisans and consumers to this versatile textile.

Fashion accelerator programme, organised by APR, API Riau, and *Akademi Femina*

On 30–31 May 2024, APR organised a fashion accelerator programme in collaboration with API Riau to help fashion startups based in Riau Province strengthen their business foundations and expand their market reach. Designed by *Akademi Femina* – an initiative affiliated with *Femina*, a prominent Indonesian women's magazine that focuses on empowering women in the creative and fashion industries – the programme provided targeted training to 25 women entrepreneurs. Sessions covered industry insights, financial management, networking, and other practical business skills. Mentors from Sare Studio in Jakarta also led sessions on business planning, branding, and market access.

Riau Province Women Gain Skills and Support Through APR's Fashion Accelerator



Youth engagement

APR is committed to engaging with and uplifting youth through the textile industry. Young people are a core constituency of our regional textile centre, and their participation is central to its mission. Since 2021, we have partnered with a local vocational school in Pangkalan Kerinci to promote employment and post-secondary education in the textile industry to high school graduates.

Additionally, we have partnered with several universities to conduct research projects on sustainable viscose rayon in the fashion industry since 2022.¹⁴ Below are some key projects highlighting these partnerships:

BATIK CRAFTSMANSHIP DEVELOPMENT IN LASEM, CENTRAL JAVA

A collaboration between APR, UK Maranatha, the Ministry of Education, and local craftspersons focused on upskilling batik artisans in the use of viscose fabric for *Batik Tulis*, providing training on natural dyeing techniques for viscose-based batik, and promoting the use of batik in fashion.

LABORATORY RESEARCH WITH POLITEKNIK STTT BANDUNG

Research on incorporating APR viscose yarn into traditional woven textiles.

WOVEN TEXTILE TRIAL IN JOMBANG, EAST JAVA

A project involving female factory workers laid off during the pandemic, exploring the use of viscose yarn in traditional weaving in collaboration with UK Petra.

WEAVING INITIATIVE IN SABU ISLAND, EAST NUSA TENGGARA

Women who are the primary income earners in their households participated in trials of viscose yarn for traditional woven fabric, in collaboration with LaSalle College.

INCORPORATING SUSTAINABLE FABRIC INTO UNIVERSITY CURRICULA

APR partnered with seven universities across Indonesia to introduce sustainable fabrics in student fashion collections and final assignments.

In 2024, APR awarded the IFI Scholarship to two additional young women entrepreneurs, enabling them to pursue studies at the Islamic Fashion Institute (IFI) in Bandung, West Java. The two recipients in the 2023 cohort had completed their twelve-month programme by May 2024. The IFI curriculum covers fashion design and marketing, equipping students with practical skills they can share with peers in their hometowns. In addition to the scholarship, APR also offers regular internship opportunities for aspiring students across various business units, including APY.

¹⁴ The universities involved are Universitas Kristen Maranatha, Universitas Kristen Petra Surabaya, Institut Kesenian Jakarta, Politeknik Negeri Media Kreatif, Sekolah Tinggi Desain LaSalle, Politeknik STTT Bandung, and the Islamic Fashion Institute Bandung. The MoU ended in February 2024. APR continues to engage with three of the seven institutions: the Islamic Fashion Institute Bandung, Universitas Kristen Maranatha, and Politeknik STT Bandung.

INCLUSIVE PROSPERITY

OUR WORKFORCE

[GRI 2-23, 2-24, 3-3]

APR exceeds the requirements of EcoVadis, OEKO-TEX®, Higg FSLM, and other labour standards that promote safe, fair, and socially responsible working conditions across the value chain.

Since 2022, APR has been part of APRIL Group's efforts to build and strengthen a Human Rights Due Diligence (HRDD) process aimed at identifying, addressing, and mitigating potential human rights impacts. We participated in Group-wide training and capacity-building initiatives and were subject to the Human Rights Impact Assessment (HRIA) conducted in 2022, which identified key human rights risks and priority themes across APRIL's operations.

For more information, see the [APRIL Group 2024 Sustainability Report](#).

We also conduct annual Higg Facility Social & Labor Module (FSLM) assessments to evaluate our practices and ensure fair and safe working conditions, adherence to social responsibility standards, and the active participation of workers. In 2024, we achieved a score of 84.5%.

Employee overview

[GRI 2-7, 2-8, 408-1, 409-1]

As of December 2024, APR and APY employ 869 people at our operations and offices in Riau Province, Jakarta, and Singapore.

APR directly employs all permanent hires. All vendors, contractors, and contracted workers are subject to on-site identification checks to ensure they are of the legal working age and legally eligible to work, thereby upholding our strict no-child or forced labour policies.

In 2024, we hired 402 contractors. Some occupy support roles on a long-term basis as vetted third-party service providers, including waste management staff and office cleaners. Other contractors occupy temporary positions, including labourers who provide extra capacity ahead of planned shutdowns and ad hoc maintenance workers who paint and repair

our buildings. Our Contractor Management Department helps ensure that our business partners comply with labour regulations and uphold contractors' rights and welfare.

Health and safety

[GRI 3-3, 403-1, 403-2, 403-3, 403-4, 403-5, 403-7, 403-8, 403-9]

APR maintains stringent workplace safety standards and continues to improve under the auspices of our Zero-Accident and Occupational Health and Safety (OSH) policies, which are aligned with the ISO 45001 standard. A dedicated health and safety committee comprising management and employee representatives oversees, implements, and regularly reviews OSH measures across our operations.

Employees receive job-specific health and safety training, are equipped with personal protective equipment (PPE), and are supported by continuous site monitoring and regular medical assessments, including annual health check-ups and hearing tests for employees working with or around loud machinery.

As part of our preventive efforts, APR runs a comprehensive range of safety training programmes on topics that include first aid, fire brigade drills, safe forklift operation, job safety observation procedures, and Lockout/Tagout (LOTO) protocols. Recognising the elevated fire risk associated with viscose staple fibre (VSF) production, due to flammable chemicals such as carbon disulfide¹⁵ and the accumulation of fibre dust,¹⁶ APR also conducts monthly fire safety awareness sessions led by the OHS team.

APR's OSH system monitors employee accidents and injuries to track our safety performance. We have also implemented a Contractor Safety Management System to address OSH risks for on-site third-party workers.

In 2024, our lost-time injury frequency rate (LTIFR) was 0.67 — the lowest since 2019. However, our severity rate rose from 0.86 to 1.54, a 79% increase from 2023, primarily due to a single incident involving non-routine maintenance, in which an employee sustained hand injuries while cleaning the blower of a chemical recovery system.

15 Acute Exposure Guidelines Levels for Selected Airborne Chemicals, Volume 7, N. R. C. (US) C. on A. E. G., & Toxicology, N. R. C. (US) C. on. (2009). Carbon Disulfide Acute Exposure Guideline Levels. In [www.ncbi.nlm.nih.gov](https://www.ncbi.nlm.nih.gov/books/NBK214898/). National Academies Press (US). <https://www.ncbi.nlm.nih.gov/books/NBK214898/>

16 Safety Data sheet. (2014). <https://www.pinflor.com/PDF/PIN-SafetyDataSheet/englisch/SafetyDataSheet-Viscose-ENG.pdf>

Despite this setback, our ongoing safety efforts have resulted in zero fatalities since we commenced operations in 2019. We credit this progress and ongoing improvements to our OSH Action Plan and targeted initiatives, including:

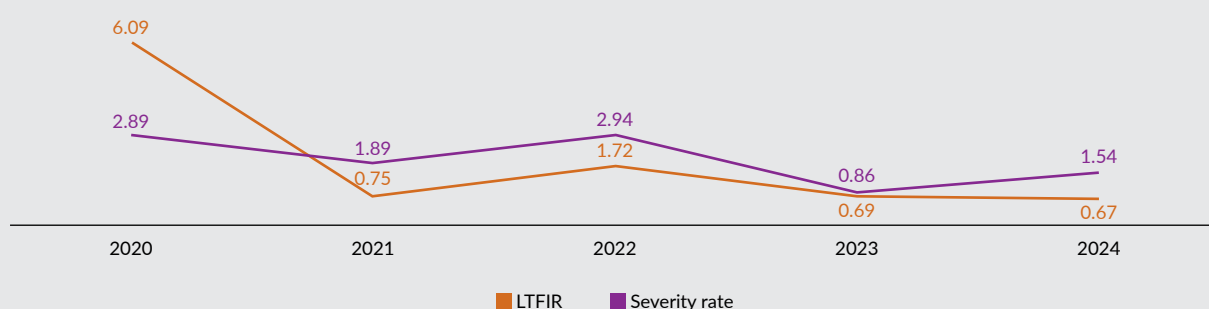
Routine training every three months for all employees and contractors

Risk analyses for non-routine activities before commencing work

Regular inspections and monitoring of all employee and contractor equipment and PPE

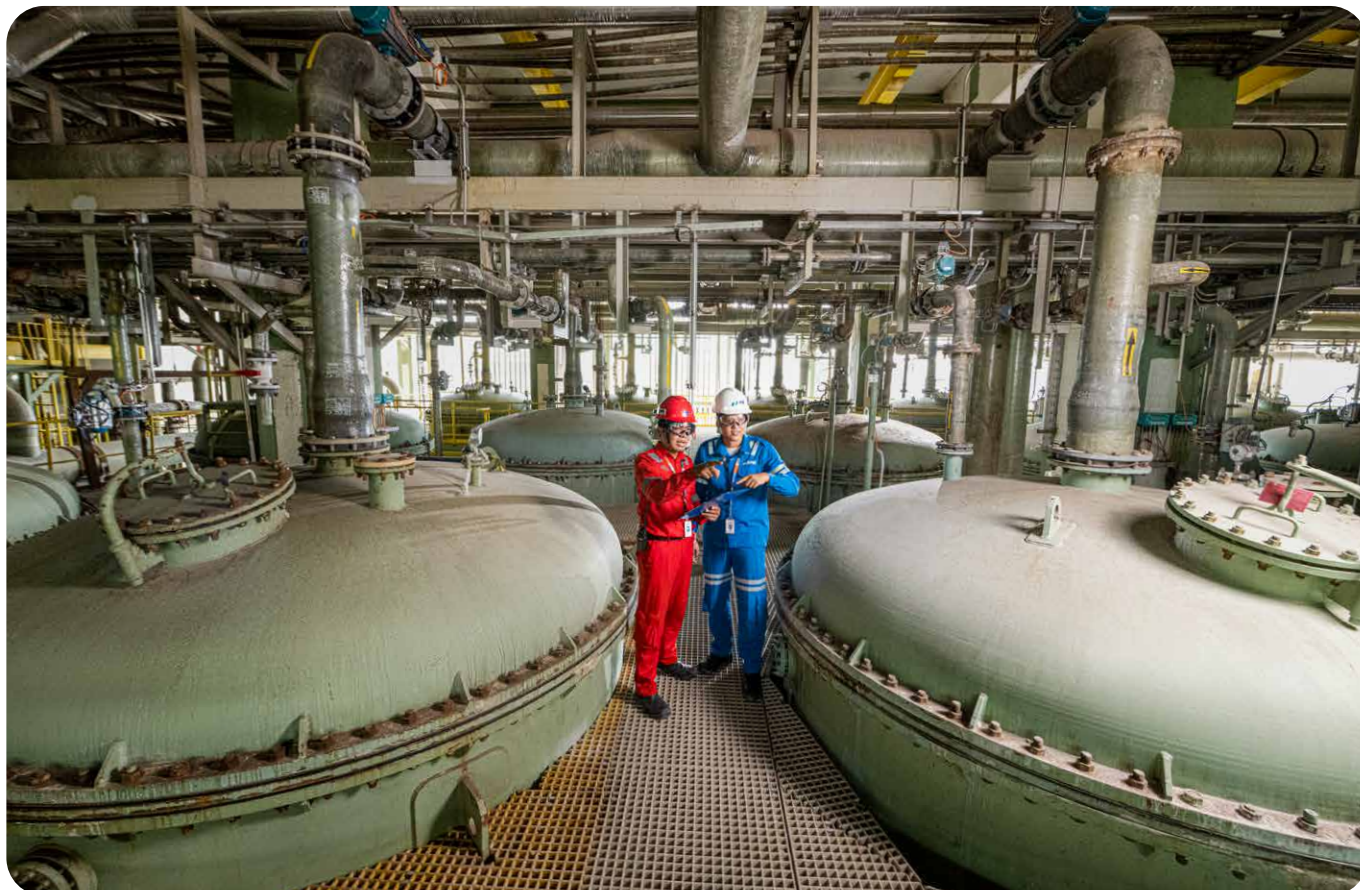
Weekly departmental safety sharing sessions

Lost time injury frequency and severity rates 2020–2024
per 1 million hours worked



Notes:

1. LTFIR measures productivity lost to accidents (including fatalities) and is calculated as the number of lost-time injuries divided by total hours worked, multiplied by 1,000,000.
2. The severity rate measures the average days lost per lost-time incident and is calculated as the number of days lost divided by the number of lost-time injuries.



INCLUSIVE PROSPERITY

Wages and benefits

[GRI 2-30, 401-2, 402-1, 407-1]

APR employees' salaries comply with provincial regulations. Workers in every employment category, including minimum wage earners, receive equal pay, regardless of gender. Because we operate in a remote region, we offer APR employees and their families in-kind benefits, including health insurance, quality housing, nursing rooms for working mothers, daycare facilities, primary and secondary education, and transportation to and from our operations. Our schools offer employees' children the choice of Indonesia's national curriculum or the International Baccalaureate syllabus.

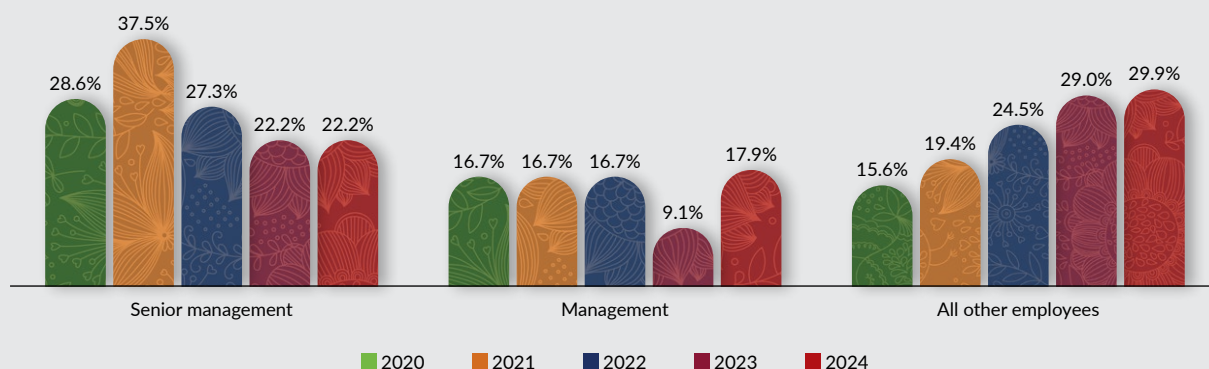
APR employees can form or join a trade union and enter collective employment negotiations without fear of discrimination or retaliation. All are covered by a collective agreement.

Diversity and inclusion

[GRI 2-23, 2-24, 3-3, 405-1, 406-1]

APR embraces diversity and promotes equal opportunity in the workplace. We maintain a zero-tolerance policy against discrimination and harassment. No discrimination cases were reported in 2024.

Women representation in the workforce 2020–2024 (%)



Women comprise 29.9% of APR's workforce and hold 22.2% of senior management positions. While female representation in other managerial roles was relatively low in 2023 at 9.1%, this figure rose significantly to 17.9% in 2024. This increase reflects the Group's continued commitment to advancing gender diversity across all levels of management.

We are committed to advancing gender equality in our value chain, employing women in traditionally male-dominated roles and men in roles typically held by women, such as garment making and sewing.

Championing women at APR

Female representation at APR rose from 15.6% in 2020 to 29.9% in 2024, reflecting our APR2030 goals of expanding women's roles in key areas and encouraging women to break gender stereotypes by occupying traditionally male roles. These successes underscore our broader sustainability vision and our commitment to ensuring women have equal opportunities to lead, contribute, and thrive across all levels of the organisation.

Women are taking on more traditionally male roles across APR's operations, including Business Continuous Improvement and Development (BCID) champions, Production Planning and Inventory Control (PPIC) coordinators, and community engagement specialists. Their achievements and visibility are challenging societal and professional conventions and norms while creating a more inclusive work environment.

Beyond representation, APR continues to strengthen policies and initiatives that support women's professional growth and leadership development. We are fostering a workplace culture that values diversity and provides equal opportunities for career advancement, thus ensuring that women have the support and resources they need to succeed.



Kristi: A Mechanical Supervisor breaking stereotypes in her role



Mariana: A PPIC Coordinator demonstrating unwavering determination



Dian Kartika: Building success through community engagement



What is behind every successful woman? | APR International Women's Day 2024



Employee retention and development

[GRI 3-3, 401-1, 404-2, 404-3]

APR invests in our people — our success relies on attracting, retaining, and developing talented and motivated employees. To support their growth and enhance job performance, we offer workers a range of soft skills, technical, and leadership training through the APRIL Learning Institute (ALI). All mill workers, regardless of gender, also receive mandatory technical training. Employees undergo annual performance reviews and are assigned development goals to guide their progress over the next year.

In 2024, APR hired 59 new employees — 38 men and 21 women — including 38 individuals under the age of 30. Turnover remained low at 4.3% for employees aged 30 and below. However, turnover among employees aged 30 to 50 rose from 4.9% to 7.3%, primarily driven by career moves to new plants in Java and Sulawesi. Meanwhile, turnover for employees over 50 declined from 6.7% in 2023 to 0% in 2024, indicating improved retention and workforce stability in this age group. In recognition of our employees' dedication, 44 employees from APR and APY were honoured for long service milestones.

In 2024, our employee scholarship programme supported six employees in pursuing their education—four at the Bandung Institute of Technology (ITB), one at the Sepuluh Nopember Institute of Technology (ITS), and one at Widya Mandala Catholic University Surabaya (UKWM). We also welcomed 19 university students for internship placements across our various departments.

INCLUSIVE PROSPERITY

OUR CUSTOMERS

[GRI 3-3, 416-1]

APR is constantly improving to meet the evolving needs of our customers. We value their feedback and maintain open communication to understand their concerns. We stay updated on industry news and current and emerging sustainability trends and requirements to develop sustainable solutions collaboratively. APR is certified by OEKO-TEX®, FKT, Cradle to Cradle (C2C) Material Health, and other leading industry groups to assure customers that our products comply with strict health and safety standards.

In addition to fulfilling direct orders, we actively promote sustainable viscose in high-profile markets and make business and production decisions that address consumers' product end-of-life concerns. In 2024, we hosted a customer event in Karachi, Pakistan, to engage with long-time and potential industrial buyers, showcasing our sustainable products and practices. We also invited customers from Peru, the United Arab Emirates (UAE), India, Indonesia, and Bangladesh to visit our operations in Pengkalan Kerinci, Riau Province. They toured our fully integrated viscose production facilities and witnessed our commitment to quality, sustainability, and responsible textile manufacturing firsthand.

In 2023, APR conducted our first annual online customer survey to evaluate customer satisfaction levels and better understand their needs. We conducted a second online survey

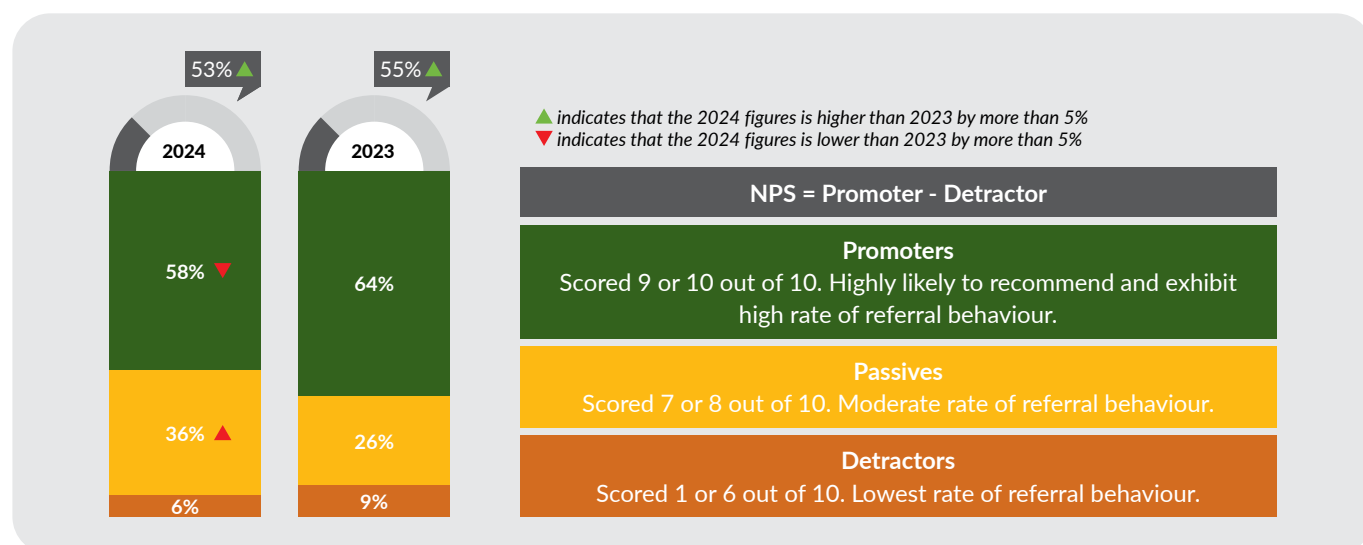
in April and May 2024, achieving an 87% response rate from 61 customers in Argentina, Bangladesh, Brazil, Indonesia, Malaysia, Nepal, Pakistan, Turkey, and the UAE. The survey focused on five key areas: product quality, technical support, logistics, brand reputation, and salesperson service.

The results showed an overall improvement in customer satisfaction, with our score rising from 4.2 in 2023 to 4.3 in 2024. Product quality and salesperson service received the top scores, while technical support and brand reputation were rated as areas needing improvement. Our net promoter score (NPS) slightly decreased from 55% to 53% in 2024. To address these deficiencies, APR will engage with customers in the identified markets to discuss their concerns and ways to improve our performance.

Customer Satisfaction Score

Attributes	2024	2023
Product quality	4.5	4.0
Logistics	4.3	4.3
Salesperson service	4.5	4.6
Technical service	4.0	4.0
Brand reputation	3.9	4.1
Overall score	4.3	4.2

Net Promoter Score





Commentary by
SHAHID HASSAN
Everway Yarn Dyeing
Limited

As manufacturers, we must adapt to evolving market expectations and align our operations with customer demand for sustainability and high-quality products. Our partnership with APR over the past four years has been instrumental in helping us deliver on these commitments. During our visit to APR's facilities in December 2024, we were impressed by the strong collaboration between their production and management teams, which plays a key role in upholding quality standards. We also value APR's commitment to innovation and its openness to collaborating with other industry players.

About: Everway Yarn Dyeing Limited is a Bangladesh-based textile company specialising in high-quality yarn dyeing and finishing solutions for the knitwear and garment industries.

APR is a well-established brand and a top viscose fibre manufacturer with the scale and operational excellence to meet the demand for sustainable products while maintaining the highest quality standards. The company can strengthen its market position by helping its partners navigate sustainability challenges and thrive in an increasingly regulated industry, thus giving them a competitive advantage over companies that fail to adopt sustainable practices and policies.

About: APS Group is a leading end-to-end apparel solution provider based in Bangladesh and an APR customer since 2019.



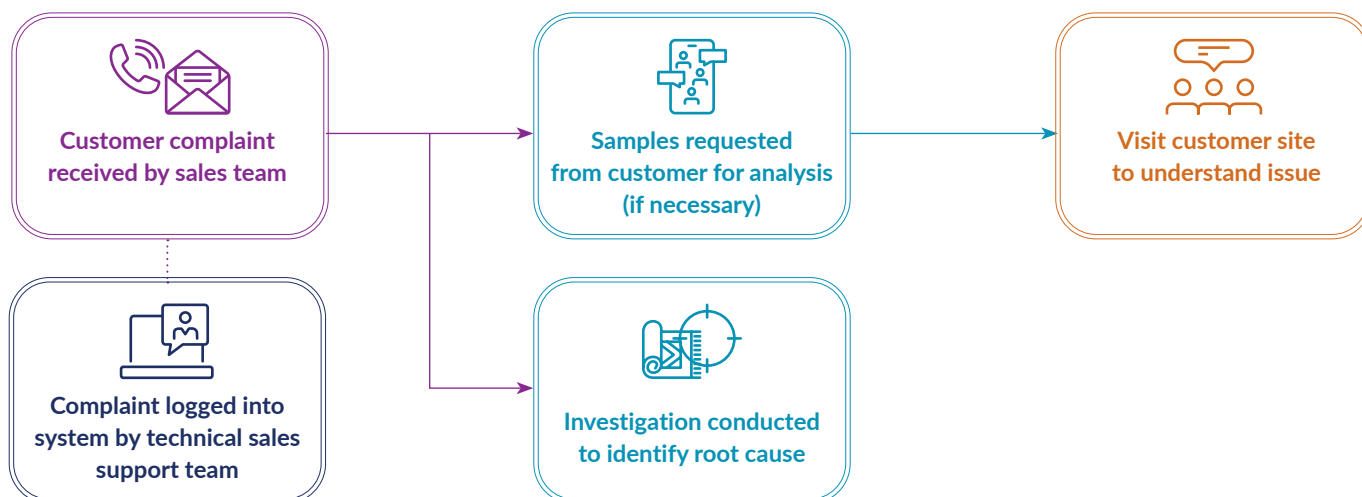
Commentary by
**MUHAMMAD
HASIBUDDIN**
APS Group

Addressing customer complaints

APR uses a computerised system to scan customer orders, ensuring our products meet technical specifications, quality standards, and customer expectations. The system triggers an alarm if a product fails to meet any of these criteria.

Our technical sales support team is our customers' primary contact point, handling complaints by following a carefully considered standard procedure. The team updates customers on the progress of our investigations, fostering transparency and respectful business relationships.

APR and APY are closely integrated. APY oversees APR's quality standards, conducting product trials and tests to identify and resolve issues before product delivery. If any non-conformities are detected, we notify customers promptly, offer solutions, and recall product batches if necessary.



APPENDICES

STAKEHOLDER ENGAGEMENT





[GRI 2-28, 2-29, 403-4, 403-5]
















Stakeholder group	Key engagement topics	Method of engagement	Frequency of engagement
Customers	Quality, service, competitive pricing, sustainability certifications, uptake and adoption of viscose, product innovation	Sales team outreach, networking events, collaborating on product innovation	Regular contact as part of sales management
NGOs	Sourcing risks, zero-harm production, circularity, conservation	Introductory meetings, regular dialogue with supply partners (especially on controversial issues)	As needed or during industry roundtable meetings
Employees	APR policies and practices, fair employment conditions, sustainability training, updates	Onboarding new employees, refresher courses for existing employees, trade union discussions, internal communications, social media engagement showcasing life in Pangkalan Kerinci	Annually
	Performance reviews, ALI leadership training, exchange programmes with Sateri	Internal communications	Ongoing (primarily in Pangkalan Kerinci)
	Occupational health and safety (OHS)	Awareness, education, and training programmes to promote OHS practices to employees	Ongoing
Suppliers	Long-term sourcing partnerships, connecting conservation to sourcing, addressing NGO concerns	Procurement engagement and assessments, ongoing dialogue	Ongoing
Local communities in Pangkalan Kerinci and Riau Province	Community development, ongoing issues of community concern, job creation, youth engagement	Ongoing dialogue and community outreach programmes	Ongoing

Stakeholder group	Key engagement topics	Method of engagement	Frequency of engagement
Industry associations	<p>Member of:</p> <ul style="list-style-type: none"> Textile Exchange Zero Discharge of Hazardous Chemicals (ZDHC) Man-Made Cellulosic Fibres (MMCF) 2030 Vision Sustainable Apparel Coalition Singapore Fashion Council (SFC) Indonesia Fashion Chamber (IFC) (Riau Chapter) International Textile Manufacturer Federation (ITMF) Walarmi (Natural Dye Association) Indonesia Global Compact Network (IGCN) <p>Strategic roles in:</p> <ul style="list-style-type: none"> Indonesia Business Council for Sustainable Development (IBCSD) <i>Rantai Tekstil Lestari</i> (RTL) Indonesia Chambers of Commerce and Industry (KADIN) <i>Asosiasi Pertekstilan Indonesia</i> (API) API Riau <i>Asosiasi Produsen Serat Sintetis dan Filamen Indonesia</i> (APSyFI) 	Regular dialogue, roundtable discussions, advisory group meetings, annual events	Ongoing
Local and national governments	Investing in advancing sustainable textiles and fabrics in Indonesia and Singapore, research and development	Regular dialogue	Ongoing
Media	Press releases, annual media outreach	Media platforms	Annually or as needed
Industry peers	Industry-related topics on recycled waste and circularity	Industry platforms, one-to-one partnerships, collaborative research studies	Ongoing






APPENDICES

MATERIAL TOPICS AND THE SDGS

SDG	Category	SDG target	Material issue	APR2030 pillar
 SDG 2: Zero Hunger	Contributed	2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.	• Community development	
			• Women's empowerment and women's health	
 SDG 3: Good Health and Well-being	Catalytic	3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.	• Community development	
 SDG 4: Quality Education	Catalytic	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.	• Community development	
		4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	• Supporting local sustainable fashion	
			• Employee training and development	
 SDG 6: Clean Water and Sanitation	Core	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.	• Water and wastewater management	
		6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.	• Water and wastewater management	
 SDG 8: Decent Work and Economic Growth	Contributed	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	• Diversity and inclusivity	
		8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.	• Occupational health and safety	
			• Labour and human rights	

SDG	Category	SDG target	Material issue	APR2030 pillar
 SDG 9: Industry, Innovation and Infrastructure	Core	9B Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for inter alia, industrial diversification and value addition to commodities.	• Circularity and recycled products	
			• Innovation, R&D, and technology	
		9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.	• Supporting local sustainable fashion	
			• Women empowerment and women's health	
 SDG 12: Responsible Consumption and Production	Core	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their lifecycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.	• Chemical management	
		12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	• Waste management	
			• Circularity and recycled products	
		12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.	• Sustainability standards and assessments	
				
			• Customer satisfaction and product quality	
			• Transparency and communication	
 SDG 13: Climate Action	Core	13.2 Integrate climate change measures into national policies, strategies and planning.	• Carbon footprint	
			• Energy management	

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SDG	Category	SDG target	Material issue	APR2030 pillar
 SDG 15: Life on Land	Contributed	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.	• Biodiversity and conservation	
			• Sustainable sourcing and procurement	
 SDG 17: Partnerships for the Goals	Catalytic	17.17 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.	• Circularity and recycled products	
			• Sustainability in the value chain (integration with APRIL)	
		17.14 Enhance policy coherence for sustainable development.	• Partnerships and collaboration	
			• Regulatory compliance	
			• Governance, ethics, and anti-corruption	

BASE DATA

Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
General disclosures [GRI 2-6, 2-7, 2-8, 2-27, 2-30]							
Number of countries exported to	VSF exported to	no.	17	18	17	14	16
	Viscose yarn exported to	no.	17	13	15	14	15
Number of operations	VSF mill (no.)	no.	1	1	1	1	1
	Viscose yarn mill (no.)	no.	1	1	1	1	1
Capacity of production facility	Viscose staple fibre	t/year	300,000	300,000	300,000	240,000	240,000
	Viscose yarn	t/year	7,552	7,552	7,552	7,552	7,552
Total production	Viscose staple fibre	t	315,125	309,226	282,160	229,957	227,401
	Viscose Yarn	t	7,746	7,801	7,471	6,962	4,340
Number of employees	Total	no.	863	869	848	749	789
	Male	no.	609	624	635	602	645
	Female	no.	254	245	213	147	144
Permanent employees	Total	no.	863	869	818	749	789
	Male	no.	609	624	606	602	645
	Female	no.	254	245	212	147	144
Temporary employees	Total	no.	0	0	30	0	0
	Male	no.	0	0	29	0	0
	Female	no.	0	0	1	0	0
Employees covered by collective bargaining agreements		no.	863	818	869	818	749
Workers who are not employees/ contractors (total)		no.	402	356	376	356	438
Fines, non-compliances, monetary and non-monetary sanctions		no.	0	0	0	0	0
Governance, ethics, and anti-corruption [GRI 205-2]							
Directors communicated about anti-corruption policies		no.	0	0	0	N/A	N/A
Directors received training on anti-corruption		no.	0	0	2	N/A	N/A
Employees communicated on anti-corruption policies		no.	0	869	848 [†]	N/A	N/A
Sustainable standards and assessments [GRI 417-1]							
Percentage of significant product or service categories covered by and assessed for compliance with requirements for product and service information and labelling		%	100%	100%	100%	N/A	N/A

[†] Restated to include all employee categories.

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Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
Carbon footprint [GRI 305-1, 305-2, 305-4]							
Gross direct (Scope 1) GHG emissions		t CO ₂ e	18,482	19,750	29,173	25,436	27,800
Gross indirect (Scope 2) GHG emissions (market-based)		t CO ₂ e	13,493	11,752	10,958	9,664	9,356
Gross indirect (Scope 2) GHG emissions (location-based)		t CO ₂ e	246,752	204,159	146,138	215,627	207,407
GHG emissions intensity ratio for the organisation (Scope 1+2 market based)		t CO ₂ e /t VSF	0.1015	0.1019	0.1422	0.1526	0.1634
Energy management [GRI 302-1, 302-3]							
Electricity consumption (multi-fuel boilers)		GJ	956,250	933,556	938,773	878,284	798,804
		MWh	265,625	259,321	260,770	243,968	221,890
Steam consumption (pulp and paper chemical recovery boilers)		GJ	5,786,591	5,672,930	5,230,000	4,800,000	4,840,000
		MWh	1,607,387	1,575,814	1,452,778	1,333,333	1,344,444
		tonnes	2,154,298	2,111,983	1,947,093	1,786,976	2,042,557
Energy intensity		GJ/t VSF	21.96	21.39	21.60	24.81	24.85
Surplus steam exported to RPE		GJ	0	5,791	6,408	4,280	18,200
Sustainable sourcing and procurement [GRI 204-1, 301-1, 308-1, 414-1]							
DWP sourced	Total	t	318,920	310,868	285,596	233,456	231,862
	Indonesia	t	309,583	298,404	272,172	217,261	222,305
	Canada, US, EU	t	9,337	12,464	13,424	16,195	9,556
Suppliers/ Proportion of spending on local suppliers	APRIL (local)	%	52.24%	58.65%	33.26%	31.31%	7.00%
	Toba Pulp Lestari (local)	%	42.84%	37.34%	62.03%	61.76%	88.88%
	Cosmo Specialty Fibers (US)	%	0.00%	0.88%	3.82%	5.26%	1.84%
	Rayonier Advanced Materials (Canada)	%	0.63%	1.30%	0.87%	1.26%	1.13%
	Trader supplier (Hallein, Biocel)	%	2.29%	1.83%	0.00%	0.42%	1.15%
Procurement spent	DWP	%	77%	77%	77%	77%	73%
	Chemicals	%	22%	22%	22%	22%	26%
	Packaging	%	1%	1%	1%	1%	1%
Total production of DWP/VSF		t/t VSF	1.011	1.012	1.008	1.012	1.015
Traceability	VSF traceable to plantations	%	100%	100 %	100%	100%	100%
	VSF traceable to mills	%	100%	100%	100%	100%	100%
	VSF traceable to nurseries	%	0	95.99%	95.30%	93.06%	95.88%

Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
Certification – PEFC	DWP from certified sources	%	99.62%	98.70%	99.83%	100%	98.87%
	DWP from controlled sources	%	0.38%	1.30%	0.18%	N/A	1.13%
New suppliers screened for environmental and social impacts		no.	0	0	0	0	1
Suppliers assessed for environmental and social impacts		no.	0	0	4	5	4
Suppliers identified as having significant actual and potential negative impacts on environment and social		no.	0	0	0	0	0
Chemical management [GRI 301-1, 305-7]							
Consumption intensity							
Carbon Disulphide (CS ₂)		kg/t VSF	61.32	61.65	73.16	70.17	73.76
Sulphuric acid (H ₂ SO ₄)		t/t VSF	0.65	0.65	0.67	0.68	0.69
Caustic Soda (NaOH)		t/t VSF	0.52	0.52	0.54	0.55	0.56
Zinc (Zn)		kg/t VSF	2.35	2.38	2.62	2.31	2.54
Spin Finish		kg/t VSF	4.42	4.40	4.71	4.24	5.06
Sodium hypochlorite (NaOCl)		kg/t VSF	41.2	43.30	41.18	46.43	35.94
Recovery							
Total sulphur recovery		%	94.60%	94.89%	93.35%	92.90%	90.66%
Sodium sulphate (Na ₂ SO ₄) recovery (viscose process only)		%	61.37%	61.71%	56.84%	58.60%	54.81%
Sodium sulphate (Na ₂ SO ₄) recovery (all processes)		%	76.20%	75.50%	68.10%	71.10%	83.90%
Significant emissions							
Total sulphur emission intensity		kg/t VSF	12.33	13.16	13.80	17.51	23.63
CS ₂ emissions		mg/Nm	246.43	307.00	470.58	356.59	520.50
H ₂ S emissions		mg/Nm	23.70	11.00	25.15	21.01	22.20
Water and wastewater management [GRI 303-3, 303-4, 303-5]							
Water withdrawal							
Third-party water		m ³	12,762,909	12,575,800	12,516,533	11,035,383	11,130,520
Water discharge							
Water discharged to Kampar River		m ³	11,223,742	11,542,743	10,802,507	10,963,223	10,559,041
Water consumed		m ³	1,539,167	1,033,057	1,714,026	72,160	571,479
Quality of water discharged							
COD		g/t VSF	2,575.20	3,048.34	2,929.64	3,628.59	3,110.31
		mg/L	68.17	81.83	73.68	73.80	64.26
BOD		mg/L	17.11	20.84	11.26	14.10	13.47
TSS		mg/L	7.00	32.13	41.16	33.70	29.67

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Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
Zn to water		g/kg	0.01	0.01	0.03	0.04	0.03
		mg/L	0.29	0.31	0.69	0.83	0.67
Sulphate (SO ₄) to water		kg/t VSF	106.37	124.62	134.87	165.55	188.10
Process water consumption intensity (viscose process only)		m ³ /t VSF	30.40	30.47	32.31	37.48	39.88
Process water consumption intensity (all processed)		m ³ /t VSF	40.53	40.67	44.40	48.20	49.00
Cooling water consumption intensity		m ³ /t VSF	149.34	102.62	111.97	138.95	138.31
Waste management [GRI 306-3, 306-4, 306-5]							
Total hazardous waste generated		kg	18,646,423	16,633,907	17,931,208	18,162,570	18,261,740
Diverted to registered waste handler (waste energy recovery and reuse)		kg	178	72	669,764	597,970	373,960
Directed to landfill (effluent sludge and tow waste)		kg	18,637,796	16,082,554	17,171,710	17,564,600	17,887,780
Community development, women empowerment, and women's health [413-1, 413-2]							
Percentage of operations that implemented local community engagement, impact assessments, and/or development programs		%	100%	100%	100%	100%	N/A
Labour and human rights [GRI 401-1, 401-3]							
New employee hires and turnover							
New hires by age group	< 30 years	no.	38	57	146	66	49
	30–50 years	no.	19	15	18	13	26
	> 50 years	no.	2	2	3	1	6
Employee turnover by age group	< 30 years	%	4.27%	3.82%	6.30%	3.02%	6.59%
	30–50 years	%	7.30%	4.94%	9.55%	4.64%	2.86%
	> 50 years	%	0.00%	6.67%	2.33%	2.63%	0.00%
New hires by gender	Male	no.	38	31	79	58	69
	Female	no.	21	43	88	22	12
Employee turnover by gender	Male	%	5.37%	4.13%	6.42%	3.58%	5.27%
	Female	%	4.51%	4.78%	9.15%	2.75%	4.90%
Parental leave							
Employees who took parental leave	Total	no.	78	163	61	37	34
	Male	no.	57	142	52	36	24
	Female	no.	21	21	9	1	10
Employees who returned to work after parental leave ended	Total	no.	78	163	61	37	34
	Male	no.	57	142	52	36	24
	Female	no.	21	21	9	1	10

Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
Diversity and inclusivity [405-1] ⁱ							
Management gender diversity							
Senior management	Male	no.	7	7	8	5	5
	Female	no.	2	2	3	3	2
Management	Male	no.	23	30	15	20	20
	Female	no.	5	3	3	4	4
Employee gender diversity	Male	no.	609	624	635	602	645
	Female	no.	254	245	213	147	144
Incidents of discrimination (cases)		no.	0	0	0	0	0
Employee training and development [GRI 404-1] ⁱ							
Employee training hours	Male	total hours	14,959	8,843	6,903	4,790	2,648
	Average per male employee	average hours	7.70	14.17	10.87	7.96	4.11
	Female	total hours	4,008	1,512	2,187	615	382
	Average per female employee	average hours	6.79	6.17	10.27	4.18	2.65
Employees receiving regular performance and career development reviews	Male	no.	609	624	635	602	645
	Female	no.	254	245	213	147	144
Occupational health and safety [GRI 403-8, 403-9]							
Workers covered by OSH management system							
Employees and workers covered by an OSH management system	no.		863	869	848	749	789
	%		100%	100%	100%	100%	100%
Workers covered by a contractor safety management system	no.		402	376	356	438	272
	%		100%	100%	100%	100%	100%
Employee and worker OSH management system							
Fatalities from work-related injuries	no.		0	0	0	0	1
	rate		0.00	0.00	0.00	0.00	0.72
Lost time injuries (fatalities & lost time Injuries)	no.		1	1	4	1	9
	rate		0.52	0.52	1.97	0.61	6.47
Recordable work-related injuries (first-aid cases)	no.		8	11	6	7	17
	rate		4.17	5.73	2.96	4.29	12.22
Total hours worked		hours	1,919,872	1,919,271	2,026,698	1,631,422	1,391,671
Total days lost due to work-related injuries		days	14	10	33	20	71
Total recordable injury rate (TRIFR)		rate	4.69	6.25	4.93	4.90	18.68

† Data from 2020 to 2022 have been restated to include all employee categories..

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Category/ Indicator	Breakdown	UoM	2024	2023	2022	2021	2020
Contractor safety management system							
Fatalities from work-related injuries	no.		0	0	0	0	0
	rate		0.00	0.00	0.00	0.00	0.00
Lost time injuries (fatalities & lost time injuries)	no.		1	1	1	1	2
	rate		0.94	1.04	1.13	0.98	3.54
Recordable work-related injuries (first-aid cases)	no.		3	9	7	9	0
	rate		2.83	9.32	7.93	8.78	0.00
Total hours worked	hours		1,059,309	965,475	882,338	1,025,339	564,365
Total days lost due to work related injury	days		6	9	20	14	10
TRIFR	rate		3.78	10.36	9.07	9.75	3.54
Overall APR employees and contractors							
Lost time injury frequency rate	rate		0.67	0.69	1.72	0.75	6.09
TRIFR	rate		4.36	7.63	6.19	6.78	16.25
Severity rate	rate		1.54	0.86	2.94	1.89	2.89
Noise monitoring level	dB(A)		56.5	66.02	78.93	65.78	61.75
Customer satisfaction and product quality [GRI 417-1]							
Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	%		100%	100%	100%	N/A	N/A

GRI CONTENT INDEX

GRI Standard/ Other source	Disclosure	Location / Reason of omission
1. The organization and its reporting practices		
GRI 2: General Disclosures 2021	2-1 Organisational details	About APR, p.10
	2-2 Entities included in the organization's sustainability reporting	About this report, p.3
	2-3 Reporting period, frequency and contact point	About this report, p.3 Glossary, p.80 Contact, p.81
	2-4 Restatements of information	Available throughout, where relevant
	2-5 External assurance	About this report, p.3
2. Activities and workers		
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	About APR, p.10 Leveraging the APRIL-APR integration, p.18 Sustainable sourcing and procurement, p.32 Base data, p.67
	2-7 Employees	Employee overview, p.56 Base data, p.67
	2-8 Workers who are not employees	Employee overview, p.56 Base data, p.67
3. Governance		
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	APRIL SR2024
	2-10 Nomination and selection of the highest governance body	Information unavailable
	2-11 Chair of the highest governance body	Governance and responsible practices, p.18
	2-12 Role of the highest governance body in overseeing the management of impacts	Materiality, p.17 Governance and responsible practices, p.18
	2-13 Delegation of responsibility for managing impacts	Governance and responsible practices, p.18
	2-14 Role of the highest governance body in sustainability reporting	Materiality, p.17 Transparency and communication, p.24
	2-15 Conflicts of interest	Information unavailable
	2-16 Communication of critical concerns	Whistleblowing and grievances, p.19
	2-17 Collective knowledge of the highest governance body	Information unavailable
	2-18 Evaluation of the performance of the highest governance body	Information unavailable
	2-19 Remuneration policies	Information unavailable
	2-20 Process to determine remuneration	Information unavailable
	2-21 Annual total compensation ratio	Information unavailable

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GRI Standard/ Other source	Disclosure	Location / Reason of omission
4. Strategy, policies and practices		
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	Leadership message, p.4
	2-23 Policy commitments	Approach to sustainability, p.15 Sustainable sourcing and procurement, p.32 Our workforce, p.56 Diversity and inclusion, p.58 <u>Sustainability Policy</u>
	2-24 Embedding policy commitments	Approach to sustainability, p.15 Governance and responsible practices, p.18 Sustainable sourcing and procurement, p.32 Our workforce, p.56 Diversity and inclusion, p.58 <u>Sustainability Policy</u>
	2-25 Processes to remediate negative impacts	Whistleblowing and grievances, p.19 <u>APR Grievance Procedure</u>
	2-26 Mechanisms for seeking advice and raising concerns	Whistleblowing and grievances, p.19 <u>APR Grievance Procedure</u>
	2-27 Compliance with laws and regulations	Regulatory compliance, p.19 Base data, p.67
	2-28 Membership associations	Partnerships and engagement, p.19 Stakeholder engagement, p.62 <u>Associations</u>
5. Stakeholder engagement		
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	Partnerships and engagement, p.19 Stakeholder engagement, p.62
	2-30 Collective bargaining agreements	Wages and benefits, p.58 Base data, p.67
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Materiality, p.17
	3-2 List of material topics	Materiality, p.17

GRI Standard/ Other source	Disclosure	Location / Reason of omission
Carbon Footprint		
GRI 3: Material Topics 2021	3-3 Management of material topics	Carbon footprint, p.29 Chemical management and recovery, p.38
	305-1 Direct (Scope 1) GHG emissions	Carbon footprint, p.29 Base data, p.67
	305-2 Energy indirect (Scope 2) GHG emissions	Carbon footprint, p.29 Base data, p.67
	305-3 Other indirect (Scope 3) GHG emissions	APRIL SR2024
GRI 305: Emissions 2016		APRIL Group accounts its Scope 3 emissions in terms of the whole Riau complex.
	305-4 GHG emissions intensity	Carbon footprint, p.29 Base data, p.67
	305-5 Reduction of GHG emissions	Carbon footprint, p.29
	305-6 Emissions of ozone-depleting substances (ODS)	Not applicable
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Chemical management and recovery, p.38 Base data, p.67
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Information unavailable
	201-2 Financial implications and other risks and opportunities due to climate change	APRIL SR2024
Sustainability standards and assessments		
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainable standards and assessments, p.24
	417-1 Requirements for product and service information and labeling	Sustainable standards and assessments, p.24 Base data, p.67
GRI 417: Marketing and Labeling 2016	417-2 Incidents of non-compliance concerning product and service information and labeling	Sustainable standards and assessments, p.24
	417-3 Incidents of non-compliance concerning marketing communications	Sustainable standards and assessments, p.24
Chemical management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Chemical management and recovery, p.38
Transparency and communication		
GRI 3: Material Topics 2021	3-3 Management of material topics	Transparency and communication, p.24
Customer satisfaction and product quality		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our customers, p.60
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Our customers, p.60
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Information unavailable

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GRI Standard/ Other source	Disclosure	Location / Reason of omission
Regulatory compliance		
GRI 3: Material Topics 2021	3-3 Management of material topics	Regulatory compliance, p.19
Circularity and recycled products		
GRI 3: Material Topics 2021	3-3 Management of material topics	Accelerating innovation and R&D, p.44
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Sustainable sourcing and procurement, p.32 Base data, p.67
		Dissolving wood pulp is 100% renewable
	301-2 Recycled input materials used	Using recycled product in VSF production, p.44
	301-3 Reclaimed products and their packaging materials	Using recycled product in VSF production, p.44
Sustainable sourcing and procurement and Supporting local, sustainable fashion and Sustainability in the value chain		
GRI 3: Material Topics 2021	3-3 Management of material topics	Sustainable sourcing and procurement, p.32
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Sustainable sourcing and procurement, p.32 Base data, p.67
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Base data, p.67
	308-2 Negative environmental impacts in the supply chain and actions taken	Information unavailable
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Base data, p.67
	414-2 Negative social impacts in the supply chain and actions taken	Information unavailable
Biodiversity and conservation		
GRI 3: Material Topics 2021	3-3 Management of material topics	Biodiversity conservation, p.33
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	APRIL SR2024
	304-2 Significant impacts of activities, products and services on biodiversity	APRIL SR2024
	304-3 Habitats protected or restored	Information unavailable
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	APRIL SR2024

GRI Standard/ Other source	Disclosure	Location / Reason of omission
Governance, ethics and anti-corruption		
GRI 3: Material Topics 2021	3-3 Management of material topics	Governance and responsible practices, p.18
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Information unavailable
	205-2 Communication and training about anti-corruption policies and procedures	Governance and responsible practices, p.18 Base data, p.67
	205-3 Confirmed incidents of corruption and actions taken	Governance and responsible practices, p.18
Occupational health and safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Health and safety, p.56
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Health and safety, p.56
	403-2 Hazard identification, risk assessment, and incident investigation	Health and safety, p.56
	403-3 Occupational health services	Health and safety, p.56
	403-4 Worker participation, consultation, and communication on occupational health and safety	Health and safety, p.56
	403-5 Worker training on occupational health and safety	Health and safety, p.56
	403-6 Promotion of worker health	Information unavailable
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health and safety, p.56
	403-8 Workers covered by an occupational health and safety management system	Health and safety, p.56 Base data, p.67
	403-9 Work-related injuries	Health and safety, p.56 Base data, p.67
	403-10 Work-related ill health	Information unavailable
Water and wastewater management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Water and wastewater management, p.40
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water and wastewater management, p.40
	303-2 Management of water discharge related impacts	Water and wastewater management, p.40
	303-3 Water withdrawal	Base data, p.67
	303-4 Water discharge	Base data, p.67
	303-5 Water consumption	Water and wastewater management, p.40 Base data, p.67
Energy Management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Energy management, p.30

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GRI Standard/ Other source	Disclosure	Location / Reason of omission
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Energy management, p.30 Base data, p.67
	302-2 Energy consumption outside of the organization	Information unavailable
	302-3 Energy intensity	Energy management, p.30
	302-4 Reduction of energy consumption	Information unavailable
	302-5 Reductions in energy requirements of products and services	Information unavailable
Partnerships and collaborations		
GRI 3: Material Topics 2021	3-3 Management of material topics	Partnerships and engagement, p.19
Innovation, R&D and Technology		
GRI 3: Material Topics 2021	3-3 Management of material topics	Accelerating innovation and R&D, p.44
Labour and human rights		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our workforce, p.56
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Employee retention and development, p.59 Base data, p.67
	401-2 Benefits provided to full-time employees that are not provided to temporary or parttime employees	Wages and benefits, p.58
	401-3 Parental leave	Base data, p.67
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Diversity and inclusion, p.58
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Wages and benefits, p.58
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Employee overview, p.56
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employee overview, p.56
Waste Management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Waste management, p.41

GRI Standard/ Other source	Disclosure	Location / Reason of omission
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Waste management, p.41
	306-2 Management of significant waste-related impacts	Waste management, p.41 Using recycled product in VCF production, p.44
	306-3 Waste generated	Waste management, p.41 Base data, p.67
	306-4 Waste diverted from disposal	Waste management, p.41 Base data, p.67
	306-5 Waste directed to disposal	Waste management, p.41 Base data, p.67
Diversity and inclusivity		
GRI 3: Material Topics 2021	3-3 Management of material topics	Diversity and inclusion, p.58
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Diversity and inclusion, p.58 Base data, p.67
	405-2 Ratio of basic salary and remuneration of women to men	Information unavailable
Women empowerment and women's health		
GRI 3: Material Topics 2021	3-3 Management of material topics	Our community, p.49
Community development		
GRI 3: Material Topics 2021	3-3 Management of material topics	Supporting local, sustainable fashion, p.12 Our community, p.49
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Wages and benefits, p.58
	202-2 Proportion of senior management hired from the local community	Information unavailable
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Supporting local, sustainable fashion, p.12 Our community, p.49
	203-2 Significant indirect economic impacts	Supporting local, sustainable fashion, p.12 Our community, p.49
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Our community, p.49 Base data, p.67
	413-2 Operations with significant actual and potential negative impacts on local communities	Our community, p.49 Base data, p.67
Employee training and development		
GRI 3: Material Topics 2021	3-3 Management of material topics	Employee retention and development, p.59
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Base data, p.67
	404-2 Programs for upgrading employee skills and transition assistance programs	Employee retention and development, p.59
	404-3 Percentage of employees receiving regular performance and career development reviews	Employee retention and development, p.59

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GLOSSARY

[GRI 2-3]

Biodiversity - The diversity (number and variety of species) of plant and animal life within a region.

Carbon footprint - The sum of greenhouse gas emissions and removals of a product system or an organisation, expressed as a carbon dioxide equivalent.

Cellulose - The primary structural component of all plants, approximately 40% of wood, and the raw material for dissolving wood pulp production.

Chemical Oxygen Demand (COD) - The measurement of the oxygen required to oxidise soluble and particulate organic matter in water. COD testing uses a strong chemical oxidising agent to chemically oxidise the organic material in a wastewater sample under controlled conditions.

Cradle-to-gate - A life cycle assessment model that assesses a product's environmental footprint from raw materials extraction ('cradle') until it leaves the factory ('gate').

Dissolving wood pulp (DWP) - Highly purified chemical pulp derived from wood intended primarily for conversion into chemical cellulose derivatives and used mainly in manufacturing viscose staple fibre.

European Union Best Available Techniques (EU-BAT) Polymer BREF - European Union Best Available Techniques (EU-BAT) Polymer BREF - The standard approved by legislators and regulators for meeting input and output standards for a particular process. The EU-BAT provides information on the best available techniques, including emissions levels, associated monitoring and consumption levels, and relevant site remediation measures. It is the global industry benchmark for preventing and controlling industrial pollution.

Follow Our Fibre - An APR platform that uses blockchain technology to track viscose bales and ensure sustainable sourcing throughout the supply chain.

Global Reporting Initiative (GRI) - A multi-stakeholder standard for sustainability reporting, providing guidance on determining report content and indicators.

Greenhouse gas (GHG) emissions - Gases in the atmosphere that absorb and emit radiation within the thermal infrared range. The primary greenhouse gases in the Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone.

Higg Index - A suite of tools that measures environmental and social impacts across the life cycle of clothing apparel and footwear.

International Organization for Standardization (ISO) - An organisation that publishes several standards impacting APR activities. The ISO 9000 series of standards pertains to quality management systems, ISO 14001 focuses on environmental performance and management, and ISO 45001 covers occupational health and safety management.

Jakarta Fashion Hub (JFH) - A collaborative space inaugurated by APR. It connects brands, fashion designers, and fashion enthusiasts to support the growth of a sustainable fashion industry in Indonesia.

Life Cycle Assessment (LCA) - A systematic analysis of the environmental impact of products throughout their life cycle from cradle-to-gate or cradle-to-grave.

Man-made cellulosic fibre (MMCF) - Materials made from cellulose-based fibres derived from plants, most commonly wood pulp.

Non-governmental organisation (NGO) - A term used in this report to designate grassroots and campaigning organisations focused on environmental and social issues.

OEKO-TEX® - An association of independent textile and leather testing institutes responsible for developing industry standards.

Posyandus - Community-based integrated health posts that support mothers and toddlers, staffed by community volunteers called cadres.

Rembuk stunting - Discussions and consultations on stunting prevention and management.

Small and medium-sized enterprise (SME) - Business whose revenues, assets, or number of employees fall below a certain threshold that varies by industry and country.

Solid waste - Dry organic and inorganic waste materials.

Songket - A traditional handwoven fabric that belongs to the brocade family of textiles of Brunei, Indonesia, and Malaysia.

Stakeholder - Any group or individual affected by or able to affect a company's operations.

Sustainability - A term expressing a long-term balance between social, economic, and environmental objectives. It is often linked to sustainable development, defined as development that meets the needs of current generations without compromising the needs of future generations.

Sustainable Development Goals (SDGs) - A United Nations blueprint to achieve a better, more sustainable, and inclusive future, addressing global challenges, including poverty, inequality, climate change, environmental degradation, peace, and justice.

The Forest Stewardship Council® (FSC) - An international non-profit forest management organisation.

The Program for the Endorsement of Forest Certification™ (PEFC) - An international non-profit organisation that promotes sustainable forest management through independent third-party certification schemes.

Total suspended solids (TSS) - a water quality parameter defined as the quantity of material suspended in a known volume of water trappable in a filter.

TOW - Viscose staple fibre that does not pass internal quality standards (also called 'reject fibre').

Traceability - The ability to track sustainable VSF and DWP across the supply chain.

United Nations Framework Convention on Climate Change (UNFCCC) - An international environmental treaty negotiated at the Rio de Janeiro United Nations Conference on Environment and Development (UNCED) in 1992.

Viscose staple fibre (VSF) - A bio-based fibre made from purified cellulose, primarily DWP twisted to form yarn.

Zero Discharge of Hazardous Chemicals (ZDHC) - A multi-stakeholder collaboration of global brands, chemical suppliers, manufacturers, and other organisations committed to reducing the chemical footprint of the MMCF industry, responsible for industry guidelines such as the ZDHC MMCF Fibre Production Guidelines, ZDHC MMCF Interim Wastewater Guidelines, and ZDHC MMCF Interim Air Emissions Guidelines.

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[GRI 2-3]

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