“Good business is about what is good for the community, country, climate, customer and company - only then will it be sustainable”

Sukanto Tanoto, founder of APRIL Group

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The year 2018 was one of rapidly evolving global dynamics. Rising consumer demand in our key markets went hand in hand with growing consciousness of the impact of climate change and of the urgency for collective action. The expectation that business must play an important role in helping the global community reach the 17 United Nations Sustainable Development Goals (SDGs) and global climate targets is at the forefront of this consciousness.

In this context, companies, including APRIL, are being encouraged to stretch beyond current commitments and gear for longer-term sustainable business and community development, underpinned by a holistic landscape model.

We have embraced this challenge, building on the solid foundations provided by our Sustainable Forest Management Policy (SFMP) 2.0, while also looking ahead to how we can be an enduring part of the solution for community, climate, customers, country and our company in a way that is true to our founder's 5Cs vision.

While the implementation of our SFMP 2.0 and its independent oversight remains critical to us, the transformative opportunity is to extend further our commitments.

An important step has been to increasingly embed our approach to sustainable forest management across our supply chain. Our sustainability team, which works cross-functionally across our operations, includes sustainability professionals, forestry experts, scientists and research personnel.

The new addition of our Sustainability Professional Development Program for graduates and young professionals pursuing careers in sustainability is another gauge of our commitment to ensuring we have the professional capability required to complement our business decision-making in the longer term.

At a higher strategic level, we have completed the first phase of a pivotal project with PwC involving an in-depth assessment of our baseline impact in Riau Province, using the SDGs as a framework. The value of this process lies in the identification of the Goals and targets where we have the most potential to have a catalytic impact, based on the assessed needs of the province and its communities where we operate and where it counts most.

Another milestone during the year was the five-year anniversary of our ecosystem restoration efforts through Restorasi Ekosistem Riau (RER) - we believe to be one of the best examples of collaboration in our ecosystem restoration efforts through Restorasi Ekosistem Riau (RER). We continued to invest in science internally and in association with our independent advisors during the year, particularly through the Independent Peat Expert Working Group (IPEWG).

Through our joint research with the IPEWG on peatland subsidence, tree growth in response to water tables using the Lysimeter method, and greenhouse gas emissions measurement across different land-use types, APRIL is helping to address critical knowledge gaps in the science on tropical peatland that will inform responsible peatland management.

This year’s Sustainability Report also gives attention to APRIL’s continued improvement in operational efficiency, particularly on mill’s energy and water use, and increasing the use of renewable fuel sources. The thirst for continuous improvement is key to maintaining our production facilities as among the most efficient and self-sufficient in the world.

More than 80% of the fuel we use in the Kerinci mill complex is now renewable, made up of by-product biomass and black liquor. At the same time, we have reduced electricity consumption over the past two years by optimising processes and finding innovative ways to improve efficiency. I am further pleased to note that we have increased our fiber productivity by approximately 24 percent over the past three years.

We remain committed to the implementation of our SFMP 2.0 and will continue to improve on the independent verification and transparency of our progress. We are also cognizant of the need to respond to the increasingly critical global mandate to meet the 2030 Sustainable Development Goals within science-determined climate targets. We also heed the strong signals from the global community on the need to look into nature-based solutions including the important role that forest restoration plays as a part of this.

It is this context that will inform how we evolve our approach to sustainability and aim beyond current commitments consistent with the global imperative. We are excited about this opportunity and we look forward to working with our stakeholders to continue to evolve our sustainability vision.

Praveen Singhavi
APRIL President
APRIL’s 2018 Sustainability Report is the tenth that the company has published since 2002 and its second yearly report since 2017. The change from bi-annual to yearly reporting reflects the company’s commitment to the continued improvement in monitoring, reporting and verification of its sustainability progress. All Sustainability Reports are published at www.aprilasia.com.

SCOPE

This report covers the sustainability performance of the 11 entities that comprise APRIL Group as well as fibre supply partners who hold long-term agreements with APRIL.

APRIL Group Companies
- PT. Riau Andalan Pulp & Paper (RAPP)
- PT. Simar Mutiara Nusantara
- PT. The Best One Unitimber
- PT. Gembleng Cipta Nusantara
- PT. APRIL Management Indonesia
- PT. Arugarah Kertas Utama
- PT. Riau Andalan Kertas
- PT. Riau Prima Energi
- PT. Indokarya Bangun Bersama
- PT. Intiguna Primatama
- PT. Asia Prima Kimiaraya

In certain cases, and indicated throughout the report, reported data also includes its fiber suppliers’ operations in Indonesia and Malaysia. ‘Supply Partners’ are fiber suppliers who are long term partners of APRIL and contribute to its 1-for-1 commitment, where the company aspires to conserve or restore one hectare of forest for every hectare of plantation. ‘Open Market Suppliers’ are fiber suppliers that do not contribute to this commitment and are contracted for open-market supply purchases. The report covers the company, where indicated, its fiber suppliers’ operations and practices between 1 January 2018 and 31 December 2018, with focus on areas of material interest to stakeholders, particularly its performance against its sustainability commitments.

REPORTING FRAMEWORK

This report has been prepared in accordance with the GRI Standards: Core option and focuses on topics defined by a materiality assessment carried out in consultation with stakeholder groups.

ASSURANCE

APRIL engaged KPMG PRI to provide limited assurance over selected information contained in this report, denoted by the symbol . The information to be assured was selected based on a materiality assessment carried out by APRIL. KPMG’s 2018 external assurance report is presented on page 86.

CONTACT

For questions regarding this report, please contact: sustainability@aprilasia.com.
This report is informed by a materiality assessment that asked various stakeholders to identify and prioritise an array of topics according to their impact and influence. The GRI Standard defines impact as the effect an organization has on the economy, the environment and society, which in turn indicates its overall contribution to sustainable development. Influence is defined as the effect in shaping stakeholders’ assessment and decisions.

The materiality assessment was completed in three stages:

STAGE 1: IDENTIFICATION
We identified an initial list of topics for assessment through established stakeholder engagement platforms, including local stakeholder forums, regular customer meetings and inputs from NGOs.

STAGE 2: PRIORITIZATION
We invited internal and external stakeholders to participate in an online survey that asked respondents to prioritize the initial list of topics according to their impact and influence.

STAGE 3: VALIDATION
This resulting shortlist of material topics was then assessed by APRIL management against global sustainability trends and the company’s sustainability and business objectives.

The outcome of this process was to identify a priority list of the most material topics as well as a secondary list of topics.

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### APRIL’S MATERIAL TOPICS

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 Disclosure 102-46
Defining report content and topic boundaries.
ABOUT APRIL

OUR SUSTAINABILITY COMMITMENT

APRIL is committed to sustainable forest management as part of a production-protection model that integrates economic and social development with environmental protection in line with the priorities of the Government of Indonesia and the United Nations Sustainable Development Goals (SDGs).

APRIL’s Sustainable Forest Management Policy (SFMP 2.0) is central to the company’s sustainability focus and guides our approach to achieving optimal community, environmental and economic outcomes.

All fiber supply to APRIL Kerinci mill is bound by SFMP 2.0, which as well as committing to no deforestation and no new development on peatland states: ‘APRIL and its suppliers will only develop areas that are not forested, as identified through independent peer-reviewed High Conservation Value (HCV) and High Carbon Stock (HCS) assessments.’

Our sustainability strategy is embedded in its business in several ways, from the company founder's 5C's principles to individual performance metrics. The 5C principles pledge that what is good for the company, must first be good for the country, community, climate and customer. At an operational level, the implementation of the company's SFMP contributes to a balanced scorecard, integrated alongside traditional business metrics. APRIL's future business growth will be informed by this strategy, as we transition our business focus from volume to value, incorporating diversification and downstream product innovation.

Conducted by KPMG PRI, these reports highlight opportunities of improvement and have consistently demonstrated that APRIL continues to uphold its commitments. The 2019 SFMP 2.0 Assurance Report is scheduled to be published in the third quarter of 2019.

INTEGRATING SUSTAINABILITY AND OPERATIONS

APRIL's sustainability strategy is embedded in its business in several ways, from the company founder's 5C's principles to individual performance metrics. The 5C principles pledge that what is good for the company, must first be good for the country, community, climate and customer. At an operational level, the implementation of the company's SFMP contributes to a balanced scorecard, integrated alongside traditional business metrics. APRIL's future business growth will be informed by this strategy, as we transition our business focus from volume to value, incorporating diversification and downstream product innovation.
2018 HIGHLIGHTS

1-for-1 goal – Conservation and Restoration vs. Plantation area: 83%

- 445,660 ha plantation area
- 370,070 ha conservation and ecosystem restoration area
- 80% Peatland area under conservation and ecosystem restoration (297,720 ha)
- 54% Plantation on peatland (242,465 ha)
- 8,352 ha Community fiber plantation
- 25,992 ha Livelihood plantation

Location of Operations

Employment at APRIL and suppliers

- 7,756 people employees
- 19,301 people contractors

2018 Production

- 2,595,866 tonnes of pulp
- 1,034,466 tonnes of paper

Markets served

Our products are produced in Indonesia and exported to more than 70 countries worldwide
LEADERSHIP

APRIL Group’s leadership team shapes strategy and drives policy implementation consistent with the company’s values and direction. The development, execution and compliance monitoring of APRIL’s sustainability strategy is the responsibility of the Sustainability and External Affairs Director, who leads an integrated team comprising representatives from the company’s Jakarta offices and its operations based in Pangkalan Kerinci, in Riau Province, Sumatra.

The sustainability team connects directly to the executive leadership function and includes sustainability professionals, forestry experts, scientists and research personnel.

INDEPENDENT ADVISORY BOARDS

Stakeholder Advisory Committee

Established in February 2014 and then updated in June 2015, APRIL’s SFMP is the cornerstone of its commitment to sustainable business. The policy’s implementation is overseen by a Stakeholder Advisory Committee (SAC) that regularly reviews the policy’s implementation, as well as commissioning regular independent published audits of APRIL’s performance against its policy commitments.

The SAC advises on elements of APRIL’s operations, helping to stretch the company’s commitments and ambitions. As part of its verifcation and monitoring role, the SAC selects an independent assurance provider to monitor APRIL Group’s progress towards the achievement of its commitments. The current assurance provider is KPMG PRI. This forms part of APRIL’s commitment to maintaining transparency.

The SAC holds regular meetings and periodically hosts stakeholder forums to receive inputs for the independent assurance of the SFMP. At the end of 2018, the SAC had made 153 recommendations relating to SFMP 2.0 implementation, including 35 items of guidance. To date, 70 recommendations have been implemented, 13 are in progress, 5 are in development, 23 have been consolidated and 7 are no longer applicable.
Independent Peat Expert Working Group

An important inclusion in SFMP 2.0 was establishment of an Independent Peat Expert Working Group (IPEWG) to provide science-based recommendations on the development of our responsible peatland management strategy.

The IPEWG first met in 2016 and consists of six peatland scientists from the United Kingdom, Finland and Indonesia. To guide its work, the IPEWG developed a Peatland Roadmap that has three components.

Recommendations made by the IPEWG have been included in the Roadmap, which in turn have been incorporated into the company’s annual work plan.

Science-based understanding and minimising impacts: building a robust scientific understanding to underpin the further development of the APRIL approach to responsible peatland management.

Responsible peatland operations: implementing the evolving APRIL approach to responsible peatland operations, designed to minimise fires, optimise yields, improve community livelihoods and minimise subsidence and APRIL’s carbon footprint for existing production on peat.

Developing a long-term peatland vision based on a combination of responsibly-managed production, restoration and rehabilitation, and protection of all remaining forest in collaboration with other stakeholders, to deliver a balance between production, protection and social development.

Among its activities during 2018, the IPEWG supported APRIL in the development of an overarching strategy and plan for growing trees in wetter peatlands to support the Restorasi Ekosistem Riau ecosystem restoration project. The IPEWG also provided guidance on plantation management and landscape modeling as a way to predict implications of different plantation management strategies on peatland emission reduction. Further information on the IPEWG’s activity during 2018 is included from page 42.

Restorasi Ekosistem Riau Advisory Board

Established by APRIL in 2013, Restorasi Ekosistem Riau (RER) is a collaborative project that brings together private and public sector groups to restore and conserve ecologically important peat forest areas on Indonesia’s Kampar Peninsula and neighboring Padang Island. The RER Advisory Board was established in 2015 and includes Indonesian and international third-party experts who provide guidance to the operational team. RER’s progress in 2018 is covered in depth on page 40-41.

The RER Advisory Board held its sixth meeting in Jakarta on December 2018 receiving progress reports on operational works and community engagement and collaboration. RER partners including Fauna & Flora International and BIDARA also provided updates on species conservation and community development, respectively. Advisory Board recommendations included maintaining a focus on mitigating social impact and to strengthening engagement to overcome the on-the-ground challenges presented by illegal logging and bird poaching by third parties.
APRIL Group upholds the RGE Code of Conduct (the Code) which sets standards of corporate governance and business ethics across its group of companies.

These guidelines include provisions for fair and non-discriminatory engagement with stakeholders, avoidance of conflicts of interest and intolerance of corrupt practices, and mechanisms for employees to raise grievances. The Code is based on RGE’s Core Values (known as T.O.P.I.C.C.) and reflects our commitment to be ethical and professional in our business practices and to meet or exceed applicable legal requirements.

The Code was established in 2017. The Code is applicable to all APRIL employees and contractors who are all required to sign a statement of compliance. The development, review and improvement of the Code falls under the responsibility of the Head of Human Capital at RGE with inputs and support from the APRIL Human Resources team. APRIL Human Resources team conducted 117 Core Value trainings attended by a total of 6,893 APRIL employees in 2018.

APRIL’s SFMP 2.0 references the company’s compliance with the Universal Declaration of Human Rights, national laws and ratified international treaties on the rights of indigenous peoples.

The policy also states APRIL’s commitment to ensure responsible practices at workplace by respecting diversity and freedom of association, applying best practice of recruitment, zero tolerance to forced labour or child labour, and discrimination, harassment and abuse in any form (SFMP 2.0 Section VI: Respect the Rights of Indigenous Peoples and Communities).

As a member of United Nations Global Compact, APRIL is also committed to and supports its Ten Principles regarding human rights, labour, environment and anti-corruption.
Effective and consistent stakeholder engagement is essential to the implementation of APRIL’s SFMP and the evolution of its sustainability vision, as well as building and maintaining trust with a diverse community of stakeholders.

APRIL actively pursues a range of stakeholder engagement activities, from bilateral meetings and visits to the company’s operations in Kerinci to scheduled meetings with its independent advisory boards. The company frequently participates in a range of international multi-stakeholder events, such as the World Economic Forum, Responsible Business Forum, Innovation Forum, and Global Landscapes Forum and the World Business Council for Sustainable Development, to participate in the global sustainable development dialogue.

In June 2018, RGE Director, Anderson Tanoto, participated in the Oslo Tropical Forest Forum in Norway, contributing to a discussion about what it will take to achieve the ‘no deforestation targets in the 2020 New York Declaration on Forests and 2030 Sustainable Development Goals (SDGs).’ The debate looked closely at the progress made by private sector companies as well as the actions taken by governments where resources continue to come under pressure due to population growth and development needs. He was supported by APRIL Director of Sustainability and External Affairs, Lucita Jasmin, who participated in a fishbowl session alongside global sustainability experts from the UNDP, Rainforest Alliance, Consumer Goods Forum and Tropical Forest Alliance, to debate the acceleration of the No-Deforestation, No Peat, No Exploitation (NDPE) commodity commitments, and their contribution to the achievement of 2020 targets. The solution-focused session includes a range of perspectives, with a focus on the need for greater partnership and collaboration to ensure landscape actors achieve time-bound targets.

During 2018, APRIL engaged with a considerable number of stakeholders in Indonesia and in other locations. The different groups, and the channels through which company personnel engaged with them, are summarised in the following infographic.
APRIL'S SDG IMPACT ANALYSIS

Throughout 2018, and in cooperation with PwC and United Nations Development Programme (UNDP) Indonesia, APRIL carried out an in-depth assessment of its current social and economic contribution in Riau Province.

Using the United Nations Sustainable Development Goals (SDGs) as a framework, the assessment process identified the areas where APRIL has the potential to make the greatest impact based on the assessed needs in the province. PwC reported its analysis in March 2019.

The report notes that following the completion of the assessment phase, APRIL has prioritised seven of the SDGs in two tiers. Three Core goals - Responsible Production and Consumption (Goal 12), Climate Action (Goal 13) and Life on Land (Goal 15) were determined to be the goals with the strongest alignment to the company’s operations and its sustainability commitments, and where it can continue to have the greatest impact at a local, national and International levels.

These were supported by a second group of four Catalytic goals, where APRIL can have an exponential impact on surrounding communities, in areas such as health and education. These goals are: Good Health and Wellbeing (Goal 3), Quality of Education (Goal 4), Clean Water and Sanitation (Goal 6), and Partnerships for the Goals (Goal 17).

The PwC assessment involved an in-depth analysis of APRIL’s current community programs, operations and investments, supported by engagement with a broad group of stakeholders including community representatives.

Driven by data, the methodology looked at SDG targets through several different dimensions, including: government expenditure, provincial level data analysis, peer review study, a comprehensive review of APRIL’s activities, a national level data and literature review, and PwC’s own SDG Navigator analysis.

The publication of PwC’s report outlining the assessment process and its results marked the completion of the first phase of the project. The next phase of the project involves developing a framework to measure APRIL’s baseline impact on selected SDG targets at the village level.

The final stage in the project, to be completed in 2019, will be a report on the measurement of the impact of APRIL’s operations, which will help to guide future investments and strategies.

UNDP Indonesia is involved as a member of the steering committee which oversees the progress to ensure alignment with the priorities of the local and national government.

The project also complements the company’s collaboration with UNDP Indonesia and Riau provincial government, to localise the implementation of SDGs in three districts in Riau in partnership with the Tanoto Foundation, an independent philanthropic organization set up by the founder of RGE, Sukanto Tanoto.

ASSOCIATIONS

APRIL Group’s memberships of international, regional and national associations between 1 January 2018 – 31 December 2018 include:

**International**
- UN Global Compact (UNGC)
- World Economic Forum
- World Business Council for Sustainable Development (WBCSD)
- Tropical Forest Alliance 2020 (TFA 2020)
- Programme for the Endorsement of Forest Certification (PEFC)

**Regional & National**
- UN Global Compact Network (Singapore)
- Indonesia Forestry Certification Cooperation (FCCI)
- Indonesia Peatland Society
- Indonesia Global Compact Network (IGCN)
- Indonesia Business Council for Sustainable Development (IBCSD)
- International Peatland Research Alliance
- Fire Free Alliance (FFA)
- Kamar Dagang Indonesia (KADIN)
- Asosiasi Penguasa Hutan Indonesia (APHI)
- Asosiasi Pulp dan Kertas Indonesia (APKI)

HIGHLIGHT

Sustainable Business Awards

In July 2018, APRIL’s work with Riau communities to eliminate fire and its ecosystem restoration efforts were recognised at the Sustainable Business Awards in Singapore with two awards.

The Best Sustainability in the Community Award recognised the success of the company’s Fire Free Village Program in promoting a fire free landscape through education, capability building and infrastructure awards among communities.

The second award called out the RER ecosystem restoration project as a Special Recognition Best Flagship Initiative. The awards acknowledged the progress achieved by the project to restore and protect peatland forest on the Kampar Peninsula and Padang Island, in partnership with Fauna & Flora International and BIDARA.
Restorasi Ekosistem Riau’s (RER) fifth anniversary was recognised at the annual meeting of the World Business Council on Sustainable Development (WBCSD) held in Singapore in October 2018. RER’s achievements during this time - from zero fire, zero encroachment and zero illegal logging to identifying and measuring a wide range of biodiversity, including rare and endangered species - were recognised at the event. Speaking at a reception attended by more than 200 WBCSD delegates, APRIL Group Chairman and RER Advisory Board member, Bey Soo Khiang, said: “We support this program because it is in line with our business philosophy that whatever we do must be good for the community, the country, the climate and our customers and only then will it be good for company.”

PT. Riau Andalan Pulp and Paper (PT. RAPP) signed up to become a member of the Indonesia Global Compact Network (IGCN) in Jakarta, Indonesia, in November 2018. APRIL Group has been a signatory to the UN Global Compact since 2006, and a member of Global Compact Network Singapore. As a participant, PT. RAPP is committed to continuing to incorporate the Ten Principles of the UN Global Compact - on Human Rights, Labour Standards, the Environment and Anti-corruption - into the company’s strategies, policies and procedures in Indonesia.
APRIL and its supply partners manage 445,660 hectares of plantation and 370,070 hectares of conservation and ecosystem restoration forest area. APRIL continued to uphold its commitments to no deforestation and no new peatland development, and is progressing towards the conservation or restoration of one hectare of forest for every hectare of plantation, with the current ratio standing at 83%.

In line with SFMP commitments, APRIL and its suppliers will only undertake development in areas that have independent peer-reviewed High Conservation Value (HCV) and High Carbon Stock (HCS) assessments, working with HCV Resource Network (HCVRN) licensed assessor and following the HCS approach as prescribed by the HCS Approach Steering Group.

Information about concessions managed by APRIL and its suppliers as well as the related HCV or HCS Assessment are available to the public on the APRIL Sustainability Dashboard.

These commitments are supported at an operational level through the scrutiny of its own and supplier planting records. This is combined with a bi-weekly land cover change (LCC) analysis using satellite imagery and supported by site inspection.

On the APRIL Dashboard, the company publishes the HCV reports of PT. RAPP (11 HCV reports), Supply Partners (16 HCV reports) and Open Market Suppliers (5 HCV reports). Some HCV reports are not published on the Dashboard, as they can be accessed from the suppliers’ websites or because the concessions were established historically prior to any HCV commitments.

FACTS & FIGURES

| PLANTATION AREA | 445,660 ha |
| CONSERVATION AREA | 219,218 ha |
| COMMUNITY FIBER PLANTATION | 8,352 ha |
| RESTORATION AREA | 150,852 ha |

## CASE STUDY:

### HOW MONITORING LAND COVER CHANGE HELPS APRIL MEET ITS SFMP 2.0 COMMITMENTS

APRIL uses Geographic Information Systems (GIS) and remote sensing technology to monitor changes in land cover. Specifically, the company is able to access images with a spatial resolution of up to 30 meters x 30 meters provided by the Operational Land Imager remote sensing instruments on the U.S. Landsat 8 satellite. These images are updated every 16 days and available to download within 24 hours of acquisition, allowing APRIL to closely monitor all activities related to land cover and land use. In case of land cover change, the company’s Monitoring and Analysis teams will create investigation reports for management review, followed by field investigation and verification of the identified land cover change. For each issue identified, the team will report the matter to the authorities and discuss the issue with local community stakeholders as appropriate. They will also request the operational manager of the affected area to assess rehabilitation needs and confirm that boundary markings are visible. This program is implemented across APRIL and Supply Partner concessions. APRIL continues to work to implement key elements of the program, particularly the follow-up verification portion of the program, across all Open Market Supplier concessions.

LAND DEVELOPMENT

No new development was carried out by APRIL or Supply Partners in 2018, in line with the company’s SFMP commitments. In 2018, areas planted for the first time were restricted to land that took place on areas previously deforested through fire or encroachment and that were not identified as HCV or HCS areas.

However, during the year, one Open Market Supplier undertook new development, covering an estimated 1,326 ha, in the absence of an High Conservation Value (HCV) and High Carbon Stock (HCS) assessment. No mixed hardwood was received from the supplier and acacia deliveries were stopped prior to the end of the year. There is no longer an active supply contract with this company.

Also in 2018, 14 ha of development of non-forested peatland was identified at one Supply Partner, which is considered non-compliant development in accordance with APRIL’s policies. In this case, the actual development took place in 2017. As the area was non-forested at the time of development, the maintenance of the area rather than rehabilitation was deemed appropriate.

This table shows areas identified as non-compliant development and corrective action taken.

<table>
<thead>
<tr>
<th>PT. RAPP</th>
<th>Community Fiber</th>
<th>Supply Partners</th>
<th>Open Market Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral Soil</td>
<td>6%</td>
<td>0%</td>
<td>88%</td>
</tr>
<tr>
<td>Peatland</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

This table shows areas identified as non-compliant development and corrective action taken.

<table>
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<tr>
<th>PT. RAPP</th>
<th>Community Fiber</th>
<th>Supply Partners</th>
<th>Open Market Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ha of non-compliant new development detected by APRIL</td>
<td>0%</td>
<td>0%</td>
<td>138%</td>
</tr>
<tr>
<td>% of non-compliances resulting in corrective action (e.g., rehabilitation, implementation of agreed corrective actions, removal of supplier)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

1 New development for Open Market Suppliers is limited to areas for which APRIL has been able to verify land cover change to date. An additional 1,407 ha remains in the process of verification.
COMMUNITY FIBER PLANTATION

Through its Community Fiber Plantation program, APRIL fosters collaboration with communities near and around its operations, while assisting the local communities to achieve economic betterment. This scheme was established in 1997. In 2018, APRIL provided 27,249 Acacia seedlings for communities to plant on their land, which will then be harvested and purchased in its entirety by APRIL. Group after five years under agreed terms.

While the process will continue to deliver greater clarity as it proceeds, it is evident that the total area subject to disputes is stabilizing, with the majority of historic disputes having now been recorded following significant efforts during 2017 to capture outstanding data.

LIVELIHOOD PLANTATION

As stipulated in Ministry of Environment and Forestry regulation, livelihood plantation is a partnership scheme with the communities where the company allocates areas within its concession for communities to cultivate for timber forest products, non-timber forest products, or other crops for food security and community welfare.

LAND DISPUTES

Incorporating historic encroachment and land dispute data into APRIL’s concession monitoring system is an ongoing process that commenced in 2017 and continued in 2018. Overall, it has led to a significant increase in the area recorded as subject to claim as historic data has been added. Resolving land dispute and reducing encroachment are important focus areas woven into the implementation of the company’s sustainability policy. Formal resolution processes are applied to land dispute and their settlement is reflected in Memoranda of Understanding (MOUs) with individuals and villages upon resolution. Instances of encroachment are reported to authorities and passed onto the police if negotiations fail.

In 2018, the 55 historic disputes resolved across company and supply chain. All current and future suppliers are required to comply with the policy and its related Standard Operating Procedure (SOP). The supplier compliance mechanisms in the SFMP SOP are as follows:

- Compliance monitoring during the contract period including but not limited to annual self-assessment by suppliers, annual internal audits by APRIL, bi-weekly land cover change (LCC) monitoring and regular analysis of the LCC monitoring of concessions using satellite imagery, and annual external audit.

APRIL has continued to engage with these suppliers to ensure an understanding of the commitments in its SFMP and implementation of the SOP. This includes hosted visits to APRIL’s operations in Pangkal Kerinci as well as visits to supplier’s operational areas.

During 2018, five open market suppliers - PT Fajar Surya Swadaya, PT Wanakasta Nusantara, PT Wahana Lestari Makmur Sukses, PT Adindo Hutani Lestari, and PT ITCI Hutani Muanggul - were hosted in Kerinci, while APRIL teams visited four suppliers.

In 2018, there were three new open market suppliers and two new community forest suppliers that provided fiber supply. All of these new suppliers completed due diligence ahead of their first wood delivery.

RESPONSIBLE WOOD SOURCING

Spread across a total area of 445,660 hectares, plantations operated by APRIL and its supply partners delivered 71% of total fiber supply to the Kerinci mill in 2018. The remaining 29% was sourced from open market suppliers based in Sumatera and Kalimantan, Indonesia, and Malaysia. No new land licenses were acquired in 2018.

FIBER SUPPLY SOURCES

In 2018, all of APRIL’s fiber supply that was sourced from Indonesia held the mandatory Pengelolaan Hutan Produksi Lestari (PHPL/ Sustainable Forest Production Management) and Sistem Verifikasi dan Legalitas Kayu (SVLK/Wood verification and legality system) issued by the Indonesian Ministry of Environment and Forestry for sustainable production forest and legal wood, respectively.

COMMUNITY FIBER PLANTATION

<table>
<thead>
<tr>
<th></th>
<th>RAPP</th>
<th>Supply Partners</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area inactive due to unresolved land disputes as of Dec 31 2017</td>
<td>31,915</td>
<td>593</td>
<td>72,163</td>
</tr>
<tr>
<td>Area inactive due to unresolved land disputes as of Dec 31 2017</td>
<td>(177)</td>
<td>(22)</td>
<td>(3,306)</td>
</tr>
<tr>
<td>New land disputes in 2018</td>
<td>48</td>
<td>12</td>
<td>2,097</td>
</tr>
<tr>
<td>Historic land disputes measured in 2018</td>
<td>829</td>
<td>73</td>
<td>3,875</td>
</tr>
<tr>
<td>Adjustments in 2018</td>
<td>(836)</td>
<td>(45)</td>
<td>(1,606)</td>
</tr>
<tr>
<td>Inactive area due to unresolved land disputes as of Dec 31 2016</td>
<td>31,979</td>
<td>611</td>
<td>73,223</td>
</tr>
</tbody>
</table>

Fiber Supply Sources | % of Kerinci mill fiber inputs between Jan 1 and Dec 31, 2018 | Types of certification
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>RAPP</td>
<td>35.99%</td>
<td>PHPL, SVLK, IFCC</td>
</tr>
<tr>
<td>Supply Partners</td>
<td>34.82%</td>
<td>PHPL, SVLK, IFCC</td>
</tr>
<tr>
<td>Open Market Suppliers</td>
<td>28.72%</td>
<td>PHPL, SVLK, IFCC, FSC, Controlled Wood</td>
</tr>
<tr>
<td>Community Fiber Plantation</td>
<td>0.47%</td>
<td>DKP</td>
</tr>
</tbody>
</table>
STRATEGIC FIRE MANAGEMENT

APRIL continues to enforce a strict no-burn policy, as well as supporting programs to heighten awareness of the risks posed by fire during the fire danger periods. This involves working with communities to signal when fire restrictions are in place and to raise awareness in support of government fire prevention messages.

Our strategic approach to fire management and response concentrates on prevention, detection and suppression. Piloted in 2014 before its establishment in 2015, APRIL’s pioneering Fire Free Village Program is its core fire prevention strategy, supported by a world-class detection and fire suppression capability. During 2018, PT. RAPP reported four fire incidents inside its concession area, down from 25 in 2017 due to improved monitoring and continued community engagement. The company’s supply partners reported a further 33 incidents, up from 11 in 2017.

CERTIFICATION

NATIONAL CERTIFICATIONS

1. Sustainable Plantation Forest Management (SPFM): Since 2006, Riau Andalan Pulp & Paper (RAPP), the operations unit of APRIL Group, has been certified for SPFM, under the Indonesian Ecolabel Institute (LEI) standards.

2. Sustainable Production Forest Management (PHPL) certified by Ministry of Forestry: RAPP holds PHPL certification, a mandatory certification for all Indonesian forestry companies. This certification ensures RAPP’s compliance with production, ecological, and social requirements set by the Government of Indonesia.

3. Timber Legality Verification (SVLK): The SVLK system was jointly developed by the Indonesian Ministry of Forestry and the European Union (EU) to meet the anti illegal logging laws and requirements. The company’s products are accompanied by V-Legal document to certify the legality of the fiber from which the pulp and paper was produced. The V-Legal document has functioned as FLEGT license since 15th November 2016.

INTERNATIONAL CERTIFICATIONS

1. OHSAS & ISO: APRIL Group’s operations in Riau Province, Indonesia are certified under OHSAS 18001 (Safety Management Systems), ISO 9001 (Quality Management Systems), and ISO 14001 (Environment Management Systems).

2. PEFC-CoC: Since 2010, APRIL Group’s production facilities have been certified under the Programme for the Endorsement of Forest Certification (PEFC) Chain of Custody (CoC) standards, ensuring that all raw materials coming into the mill are from non-controversial sources.

3. PEFC-Sustainable Forest Management (SFM): In 2015, more than 300,000 hectares of concession are certified under PEFC-SFM. This certification recognizes forestry operations that maintain forest’s ecological, social and economic values.

4. ISEGA Germany, Certificate of Compliance: For paper that is safe for food packaging use.

5. Singapore Green Label – for paper products: PaperOne product has maintained this certifications since 2013, issued by the Singapore Environmental Council (SEC).

APRIL’s supplier due diligence requires all fiber to be covered by legality certification, including Pengelolaan Hutan Produksi Lestari (PHPL/Sustainable Forest Production Management) and Sistem Verifikasi dan Legalitas Kayu (SVLK/Wood verification and legality system) that are required by the Government of Indonesia.

- Compliance to Pengelolaan Hutan Produksi Lestari (PHPL/Sustainable Forest Production Management) means that the plantation is managed according to sustainable production, ecology and social requirements set by the Government of Indonesia. Implementation of PHPL includes the following operational activities: spatial planning, forest management, forest protection, environmental management, human resources development, corporate social responsibility, and Free, Prior, Informed, and Consent (FPIC) process for conflict resolution.

- Compliance to Sistem Verifikasi dan Legalitas Kayu (SVLK/Wood verification and legality system) means that we only use legal timber, where the origin of wood, logging permits, logging systems and procedures, administration and transportation, circumcision, and trade or transfer practices meet all requirements as stipulated in applicable Indonesia’s laws and regulations.
The Fire Free Village Program (FFVP) is a fire prevention initiative through community engagement in Riau, Indonesia. It works in close collaboration with local communities to address the underlying causes of fires through a process of socialization, education and increased awareness of the impacts of unmanaged burning and smoke haze. The FFVP also works in partnership with local NGOs, district, provincial and national government, and local agencies like the police, military and the Disaster Management Agency.

The program has three components, centered on the comprehensive two-year long Fire Free Village process, which is supported by the entry level and graduate components:

- **FIRE AWARE COMMUNITY (FAC):** a preliminary socialization and engagement process that can lead onto later program stages. It is focused on building relationships and trust with local communities as well as delivering on initiatives such as Fire Free goes to School and engagement with local religious leaders. In 2018 there were 80 Riau villages involved in the FAC component with 104 schools taking part in the Fire Free Goes to School program.

- **FIRE FREE VILLAGE (FFV):** a comprehensive two year program of initiatives targeting ‘High’ and ‘Extreme’ fire risk areas in Riau Province, that includes awareness and logistic support to villages as well as rewards and other assistance. In 2018 there were nine villages involved in the full FFV component. All nine villages were fire free and received an award of IDR100 million to be used for community infrastructure.

- **FIRE RESILIENT COMMUNITY (FRC):** targets communities who have graduated from the FFV but continue to have ongoing engagement with APRIL and are looking to explore new and more sophisticated programs to support their commitment to remain fire free. As of December 31, 2018, there were 18 villages involved in the FRC component.

The five core program elements of FFV have remained consistent since the inception of the program. However, the specific delivery and engagement have developed with inputs from independent reviews including through academic papers in press. The program elements are:

- **NO BURN VILLAGE REWARDS:** This program is designed to engage the interest of communities to incentivize a shift from traditional agricultural methods that use fire as a land preparation tool. Villages that do not burn during the program period are rewarded with funds for an agreed community infrastructure project. Agreements are signed with individual communities to not burn during the annual July to September fire season.

- **VILLAGE CREW LEADER:** Recruiting individuals from local communities who act as advocates for fire prevention has been an outstanding success in the FFV process. Crew Leaders have proven to be critical to the ongoing success of the program in reinforcing key messages and providing a link to the program managers as well as developing a network of fire prevention specialists across the region.

- **AGRICULTURAL ASSISTANCE:** Recognizing that fire is used as a land preparation tool, it is a priority to provide the skills and capability to local communities to shift to alternative agricultural methods. This includes supporting cultivation with mechanical ‘no burn’ methods, as well as providing training and support for a range of tools to ensure that there is long term change in land preparation methods.

- **COMMUNITY FIRE AWARENESS:** Raising awareness of the dangers of smoke haze from forest and land fires, particularly on vulnerable members of the community is important in driving long term change. Young children, pregnant woman and the elderly are particularly impacted by smoke haze. A range of communication tools have been developed to assist in delivering key messages.

- **AIR QUALITY MONITORING:** PM 10 monitors have been installed across the region to regularly monitor air quality.
In 2018, the nine villages added to the FFV program in 2017 moved into their second year. 18 graduate villages continued to be engaged through the FRC program.

Total land area covered by the FFV and FRC components remained relatively stable at 622,112 ha (Figure 1).

The area of burnt land saw a decrease from 159 ha in 2017 to 131 ha in 2018 representing a reduction of 18%.

There were no fires in 23 of the 27 FFV and FRC villages. All 9 FFV participants had no burnt area and received the full reward (Table 2).

Despite the three villages with fires in 2018, there continues to be significant improvements since the 2014 commencement of the FFVP (Figure 1). The average burnt area continues to decline with only 4.8 ha in 2018 (see Table 1).

30,000 editions of the ‘Bunga and Alam’ Fire Free Village comic were distributed as part of a national voluntary reading initiative. The comics have found their way to Kalimantan, Java and were even distributed to children in welfare centers as part of the response to the Lombok earthquake.

FFV AND FRC BURN AREA

OFFERS COLLABORATION

APRIL’s community-based fire prevention strategy continues to attract interest from a range of stakeholders including local, provincial and national governments, national and international non-government organizations; academic institutions as well as other commodity companies managing land in Indonesia. Highlights include:

• FIRE FREE ALLIANCE: APRIL established the Fire Free Alliance in 2015 to assist other commodity companies to develop their own fire prevention through community engagement strategies. In 2018 the FFA had two separate Steering Group meetings as well as finalizing an Alliance Charter and scoping out the role of an independent Secretariat. It is anticipated that the membership of the FFA will continue to grow in 2019. Other members of the FFA currently include Asian Agri, Wilmar International Limited, Musim Mas, IDH, PMHaze, Sime Darby, and IOI.

• RESEARCH COLLABORATION: Two collaborative research projects were completed in 2018 with another in progress. These independent papers provide a robust review of specific FFVP elements and will be available for peer review.

• ‘Incentivising compliance: evaluating the effectiveness of targeted village incentives for reducing forest and peat fires’, John Watts, Luca Tacconi et. al., Inovasi Bumi and the Australian National University. Research was completed in 2018 and the final paper is with reviewers, with final publication expected towards the end of 2019.

• ‘Reducing burning behavior by communities in Riau – a review’, Daniel Mendham and Murni Greenhill, CSIRO). Research was completed in 2018 and the final paper is under internal review by Temasek Holdings.

• ‘Causes and controls on fires in the tropical peatlands of Southeast Asia’, Sue Page and Sara Thornton. Research commenced during 2018 and the literature review is expected to be finalised during Q3 2019.

• FIELD VISITS: APRIL hosted approximately 30 separate stakeholder visits to Kerinci and participating communities during 2018 to provide information about FFVP. Visitors included government and non-government organizations and allowed for detailed discussions on the causes of fires, effective responses and the chance to discuss outcomes with individual community members.
FIRE DETECTION AND SUPPRESSION CAPABILITY

All APRIL estates and supply partners operate their own trained fire teams equipped with fire suppression equipment. During fire danger periods, regular land, air and water patrols are carried out to detect and respond to fire risk analyze hotspots, and report the findings.

We also use advance satellite hotspot monitoring from two NASA-based systems – NOAA and MODIS satellites that indicate a thermal anomaly within a 1.1km² area – as well as fire monitoring towers and CCTV. APRIL closely coordinates its fire suppression activities with local police, the provincial disaster management agency, and government fire teams.

FIRE SUPPRESSION CAPABILITY

- To date, APRIL has invested more than US$9 million in fire suppression resources, including two helicopters, two airboats, 39 lookout towers, 482 water pumps, and firefighting training for 724 volunteers across 39 Riau villages.

- In 2018, APRIL finalised the development of a new Fire Coordination Centre, located near the company’s production operations, to support the management of fire monitoring and suppression activities across all APRIL and supplier concessions.

- The company has 920 Rapid Response Team members, including 260 professional fire fighters. A Fire Emergency Response Team (FERT), made up of 30 dedicated fire fighters, is on standby 24/7 at the company’s operations in Kerinci during the dry season.

- APRIL Group also provides its concession maps to the World Resources Institute, where Global Forest Watch track and report on incidents of fire and hotspots.

CASE STUDY:
FIGHTING FOREST FIRES FOR A LIVING

In 2014, when a land area of 300 hectares in Rupat Island, Bengkalis Regency in Indonesia’s Riau province was burning, 42-year-old Sulaiman was among those deployed to help suppress the forest fire.

Sulaiman is a member of the Fast Emergency Response Team (FERT) at PT Riau Andalan Pulp and Paper (RAPPP), which is responsible for handling any forest fires that affect RAPP’s concessions.

Although the fire in Rupat Island was not a part of RAPP’s concessions, Sulaiman and his team decided to join the fight, alongside other firefighters from local government agencies.

“For two weeks, we were there to help. We had to go deep into the forest to reach the source of the fire,” said Sulaiman. There was no direct access to the fire source, so the team had to walk five kilometres to the site while lugging their firefighting equipment and water sources with them, he said.

Due to this, Sulaiman and the rest of the team also had to stay in the forest with limited food throughout the two weeks, as it would be unfeasible for them to leave the forest in the midst of their firefighting efforts.

“There were various challenges in the field, but we finally succeeded in overcoming the fire,” said Sulaiman.
APRIL’s SFMP 2.0 commits the company and its suppliers to support the conservation and ecosystem restoration of natural forests and forested peatlands, and other ecologically, hydrologically and culturally important areas where APRIL operates.

This commitment includes the application of landscape scale assessments to optimize forest conservation and other land use, as well as APRIL’s target to establish conservation areas equal in size to its plantation areas, otherwise known as its 1-for-1 commitment.

CONSERVATION FOREST MANAGEMENT FRAMEWORK

APRIL has made a number of commitments to the identification, protection and restoration of natural forests in its operations areas as part of its SFMP. These sit alongside the implementation of its production protection model and its goal to conserve and protect one hectare of forest for every hectare of plantation. APRIL actively protects and manages 370,070 ha of conservation forest – 219,218 ha of which is inside concessions of PT RAPP and supply partners and forms part of our integrated forest management commitment.

The application of the framework results in a comprehensive review of the status of APRIL’s forest conservation areas within and immediately adjacent to its plantation areas, as well as broader linkages across the Riau landscape. It will enable more effective and efficient landscape management, increasing the ability to protect areas from fire and encroachment and allow for the movement of wildlife across the landscape.

The framework has a number of key elements, specifically adaptive management, stakeholder engagement and collaboration, threat identification, identifying rights and responsibilities, information sharing and capacity building.

The community is a valuable partner in this process. Natural forest areas continue to be an important resource to local communities, particularly for access to fishing areas, wild honey and other timber and non-timber forest products. The framework acknowledges this and proactively guides forest protection teams in a community engagement process to ensure that their views are incorporated into the sustainable management and protection of these areas.

In 2019, APRIL’s forest protection teams are actively managing the identified threats and ensuring the ongoing protection of identified values. They are also committed to working to increase the participation and collaboration with local communities who are key stakeholders in the management process.

FOREST PROTECTION:
RING PLANTATION CONCEPT

APRIL’s landscape approach includes the use of plantation buffer zones on the periphery of conservation forest areas to make illegal logging and human encroachment less likely. These ‘ring plantations’ are an essential part of APRIL’s approach to integrated plantation management, protecting conservation forest from degradation, while effectively generating economic return, resources and employment opportunities to support conservation and restoration.

CONSERVATION AND RESTORATION

As of December 2018, APRIL and its Supply Partners has a total area of 219,218 ha for conservation.
RESTORASI EKOSISTEM RIAU (RER)

Established in 2013 by APRIL, the RER landscape comprises five concessions operating under 60-year ecosystem restoration licenses granted by the Indonesian Ministry of Environment and Forestry.

Totaling 190,852 ha, it includes 130,334 ha on the Kampar Peninsula and another 20,518 ha on Padang Island. The restoration area on the Kampar Peninsula is approximately twice the size of Singapore and represents one of the last and largest remaining Sundaic lowland tropical peat forests in Sumatra.

The forest provides a habitat for 55 globally threatened species, while also storing vast amounts of carbon. As at 31 December, 2018, The forest provides a habitat for 55 globally threatened species, while also storing vast amounts of carbon. As at 31 December, 2018, the RER 2018 Progress Report noted a net increase of 42 plants and animals in its biodiversity list from 717 species in 2017 to 759 species in 2018. This included 36 plants, one mammal, and five bird species. Over 6,700 trees were planted to restore 58 hectares of degraded forest during the year.

Meanwhile the completion of a BirdLife International monitoring assessment on management and conservation activities on the Kampar Peninsula revealed that 304 bird species are now present in the area, up from the 128 species previously identified.

Biodiversity gains

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Meanwhile the completion of a BirdLife International monitoring assessment on management and conservation activities on the Kampar Peninsula revealed that 304 bird species are now present in the area, up from the 128 species previously identified.

Years of experience have shown that this is a reliable, consistent and effective model for restoration in Indonesia given the extent of the financial and technical resources required for long-term and active landscape management.

Restoration plans that can practically be developed is still subject to further studies. A critical element of the RER initiative is operationalizing an integrated production-protection landscape model. The protection element of this model involves Acacia fiber plantations on the perimeter of the restoration area that not only provide protection, but also actively fund ecosystem restoration, forest protection and operational capability.

Landscape level plans for the REF continue to be in progress, covering the following specific areas on the Kampar Peninsula and Pulau Padang:

- Five PT. RAPP sectors on the Kampar Peninsula, which are part of one large concession (142,000 ha) and 10 Supply Partner concessions (104,000 ha), as well as four ecosystem restoration licenses (190,000 ha).
- One PT. RAPP sector on Pulau Padang (approximately 34,000 ha) and one ecosystem restoration license (approximately 21,000 ha).

CASE STUDY:

BIRD OBSERVATION AND MONITORING AT RER

RER conducted the Asian Waterbird Census and semi-annual monitoring of migratory raptors that pass through the Kampar Peninsula in 2018. The Asian Waterbird Census was conducted for five days in January, resulting in observation of over 580 individual birds from 21 different species. The most predominant species were the Purple Heron (Ardea purpurea), Lesser Whistling Duck (Dendrocygna javanica) and Black-crowned Night Heron (Nycticorax nycticorax). In March and October, monitoring of migratory raptors flying between the northern temperate forests of China and Russia and their wintering grounds in Indonesia and the Philippines was conducted. Over 300 raptors were observed during the spring migration and 1,100 raptors during the fall migration. The majority of the birds observed were Chinese Sparrowhawk (Accipiter soloensis) or Oriental Honey Buzzards (Pernis poliocephalus).
APRIL’s long term vision for peatland is to realise responsibly managed peatland landscapes, contributing towards Indonesia’s climate goals and sustainable development. Working with the Indonesian Government and other stakeholders, the company aims to achieve biodiverse, flourishing and resilient peatland landscapes which provide livelihoods and support the well-being of local communities, as well as a secure fibre supply for APRIL. This is in line with APRIL’s production-protection model where conservation, restoration and social inclusion are integral.

To achieve this, APRIL has been working to develop a long-term, science-based peatland management approach for its business and our supplier concessions. The company is committed to continually improving and evolving our approach and practices in line with the latest scientific data and thinking. APRIL recognizes the impact of drainage-based production models and we support the accelerated development and implementation of new approaches that address these. Progress in 2018 includes:

• PEATLAND SUBSIDENCE STUDY

Over the course of 2018, a scientific team led by Professor Chris Evans of the UK’s Centre for Ecology and Hydrology, supported by the other IPEWG members, the University of Indonesia and by APRIL’s own research team, carried out an analysis of ten years of peatland subsidence data measurements. The dataset which was analysed contained over 2000 site-years of measurements, and provides new insights into the effects of plantation forestry management on tropical peat subsidence. The data was also compared to previous measurements from Southeast Asia, including industrial oil palm and smallholder plantations, as well as data from Europe and North America. The study, which was published in March 2019 in the international journal Geoderma - https://doi.org/10.1016/j.geoderma.2018.12.028 - contributes a science-based analysis to the ongoing discussion surrounding the economic-environment-social pillars of sustainability for managing plantations on tropical peatlands.

• LYSIMETER TRIAL

In October 2018, APRIL began conducting a detailed study of tree growth in response to water tables, using the Lysimeter method - an apparatus for measuring changes of water from a body of soil under controlled conditions. This trial will provide a science-based understanding of hydrological processes, water balance, and the effect of water table on tree water use and growth response. The trial comprises two treatments of different water table depths and will measure major components of the peat soil hydrologic cycle, plant growth, and weather parameters. Measurements are scheduled to begin during the second quarter of 2019.
APRIL is researching the exchange of greenhouse gases between managed and unmanaged peatland forests on the Kampar Peninsula, Sumatra, Indonesia. The experiment involves multi-year observations of greenhouse gas fluxes in three sites. Using state-of-the-art eddy covariance flux towers, this work fills critical knowledge gaps in tropical peatland carbon cycling and will guide peatland management practices for reducing greenhouse gas emissions. APRIL presented the sampling strategy and the initial data at the European Geophysical Union conference hosted in Vienna, April 2018 and at the American Geophysical Union (AGU) Fall Meeting in December 2018.

In July 2018, IPEWG published a report summarising the work of the Group over the previous two years, as it developed and began to implement its Peatland Roadmap and Workplan for APRIL. Published on APRIL Dialog, the report covered both the progress and challenges of the Group’s first phase and set out priorities to be implemented as part of Phase 2. The priorities for IPEWG during its second phase will include further analysis of subsidence and greenhouse gas data and preparation of publications, modeling relationships between water table and other factors influencing plantation production and supporting the establishment of high water table trials.

SUPPORTING LOCAL LIVELIHOODS & RESPECTING THE RIGHTS OF COMMUNITIES

• MEASURING GREENHOUSE GAS EMISSIONS

• HIGH WATER TABLE TRIAL

As part of the initiative to grow Acacia at high water tables, APRIL invested in the installation of a high water table trial in 2018, with the final set-up completed during the first quarter of 2019. This experiment comprises plots representing three water table targets, a detailed network of instruments comprising subsistence poles, CO₂ chambers, groundwater level and soil moisture equipment, and permanent sample plots used to monitor tree growth throughout the rotation. This trial aims to provide a science-based understanding on the impact of different water tables on plantation growth (MAI) and peat soil subsidence. Both the IPEWG and the Institut Pertanian Bogor (through a UK-based research grant) are participating in the project.

• IPEWG PROGRESS REPORT

In July 2018, IPEWG published a report summarising the work of the Group over the previous two years, as it developed and began to implement its Peatland Roadmap and Workplan for APRIL. Published on APRIL Dialog, the report covered both the progress and challenges of the Group’s first phase and set out priorities to be implemented as part of Phase 2. The priorities for IPEWG during its second phase will include further analysis of subsidence and greenhouse gas data and preparation of publications, modeling relationships between water table and other factors influencing plantation production and supporting the establishment of high water table trials.
CREATING SOCIAL VALUES

As a major employer in Riau Province, APRIL contributes to the sustainable social and economic development of the communities where it operates. Respect for the rights of communities and proactive support is embedded in our SFMP 2.0 in two key sections: Section V: Proactive Support of Local Communities and Section VI: Respect the Rights of Indigenous Peoples and Communities.

APRIL continues to work towards building skilled and economically resilient communities in the rural areas of Riau Province to alleviate poverty. Performance by APRIL on its commitments to local communities continues to be measured annually by the Community Development team, which employs up to 60 dedicated personnel.

The company makes a significant contribution to the local and regional economy. A 2015 study by the Economic and Social Research Unit of the University of Indonesia showed that APRIL – which employed 7,756 personnel, as of December 2018 – provides consequential employment opportunities for up to 90,000 people.

SOCIAL INFRASTRUCTURE

A major focus of APRIL's community development program is support for social infrastructure. Projects include the building of schools, mosques, village centres, sports arena, community halls, roads and related facilities and materials to support social, cultural, religious and other activities. In 2018, APRIL and its supply partners increased spending on social infrastructure projects to USD288,450, from USD141,769 the year before.

The number of social infrastructure projects for which materials and/or equipment were provided by APRIL and its supply partners rose to 616 in 2018, up from 374 the previous year. PT. RAPP Community Development team consults with the communities on the type of assistance needed. These projects are supported by signed contracts acknowledging completion with the heads of village where the projects were completed. Materials provided include items to complete the construction of a project such as cement, computer equipment, school furniture and sports equipment.

EDUCATION

Along with its supply partners, APRIL provides scholarship programs covering primary to university levels, teacher training, and facilities and equipment. Under the company's Talent Pool scholarship program, students receive financial assistance to obtain university degrees and a job with APRIL upon graduation. The company also provides scholarships for high school students. In 2018, the company and its supply partners provided 417 scholarships.

HEALTHCARE

APRIL Group is committed to improving access to healthcare for communities in rural areas, particularly those which are beyond the reach of government health services. More than 20 health campaigns are organized each year to engage and educate communities on health, hygiene and nutrition. The company estimates that 182,967 individuals have been treated by the Group’s healthcare programmes over the period 1999-2017. During the same period, 43 major health, water and sanitation projects were completed during this time.

SMALL AND MEDIUM Sized ENTERPRISES

APRIL supports the creation and prosperity of small and medium sized enterprises (SMEs). The goal of the program is to foster entrepreneurship in the communities where we operate by providing technical skills, mentorship in obtaining financing from local banks, and opportunities to market their product and services. The number of small and medium sized enterprises contracted by APRIL and its supply partners rose to 333 in 2018, up from 242 the previous year.

SUPPORT FOR FARMERS

The APRIL Integrated Farming System (IFS) programme, set up in 1999, equips local farmers with sustainable farming skills and agricultural assistance that lead to economically viable farming activities. The program now covers more than 2,300 hectares of community agricultural land. The number of farmer groups supported with agricultural materials by APRIL and its supply partners increased to 79 in 2018, up from 66 in 2017. The number of farmers trained by the company to cultivate farmland rose to 202 in 2018, from 167 in 2017.

Infrastructure Development by APRIL and Supply Partners

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total USD spent on social infrastructure projects</td>
<td>USD141,769</td>
<td>USD288,540</td>
</tr>
<tr>
<td>Number of social infrastructure projects completed</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Number of social infrastructure projects for which materials/equipment were provided</td>
<td>374</td>
<td>616</td>
</tr>
</tbody>
</table>

Support for Community Empowerment by APRIL and Supply Partners

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of SMEs contracted by APRIL and suppliers</td>
<td>242</td>
<td>333</td>
</tr>
<tr>
<td>Number of farmers trained to cultivate farmland</td>
<td>167</td>
<td>202</td>
</tr>
<tr>
<td>Number of farmer groups supported with agricultural materials</td>
<td>66</td>
<td>79</td>
</tr>
<tr>
<td>Number of education scholarships provided</td>
<td>431</td>
<td>417</td>
</tr>
</tbody>
</table>
Juanda, said, “I decided to try keeping the bees myself too, even though I had to start. Inspired by a friend in 2014 who had imported the stingless bees to Java, Juanda wanted to start producing his own honey to support his family.”

It may seem unlikely, but Juanda was able to do so through the help of PT Robi Bersaudara, a company in Malaysia that produces honey from the Kelulut bees. PT Robi Bersaudara received regular assistance from RAPP, including a number of vehicles used in the monitoring of RAPP border areas. Over time, PT Robi Bersaudara has been able to produce 200 hives, and the company is now working on scaling up its operations.

Robi Cahyadi was away studying at an Islamic boarding school when he received the devastating news – his father had died and he was now to be the breadwinner of his family. Robi had to forgo his dream of continuing his studies at university, choosing instead to help his mother run the family’s convenience store as soon as he graduated from boarding school.

However, things changed in 2004 when a tempting offer came from RAPP, who asked Robi to become a labour and transportation supplier for the company. In response, Robi immediately found a handful of employees and formed a company in Buatan Baru, Kerinci Kanan in Indonesia. The business grew, and Robi decided to formalize the company in 2010, renaming it from ‘PT Robi Cahyadi’ to ‘PT Robi Bersaudara’ as a testament to his parents’ hard work with their own business over the years. Today, PT Robi Bersaudara boasts over 100 employees – a far cry from the three employees the company had when it began 14 years ago.

At the beginning, the company only provided labour and transportation services to RAPP employees. However, as time went on, PT Robi Bersaudara was trusted to carry out land clearing duties in RAPP’s Logas, Palaiawan and Meranti estate areas.

Gading Sayoga, RAPP’s Community Development Coordinator, said that PT Robi Bersaudara receives regular assistance from RAPP. “We have discussions with Robi if there are any problems or obstacles faced by his company.”

“We provide salaries which are above the average minimum wage to our employees. They are given full work equipment on the job, health insurance and allowances – their rights are our obligations,” Robi said.

For Ridwan, an employee who has been with PT Robi Bersaudara for one year, Robi is a humble leader who is concerned about the welfare of his employees. “He applies the principle of kinship at work – he is a leader who is always willing to receive employee input,” Ridwan said.

It may seem unlikely, but Juanda decided to become a bee keeper in a rural part of Indonesia thanks to social media. Inspired by a friend in 2014 who had imported the stingless Kelulut bees to Java, Juanda wanted to start producing his own honey in Indonesia’s Siak Regency but didn’t know where to start.

“I decided to try keeping the bees myself too, even though I had no knowledge whatsoever about honey bee cultivation at first,” said Juanda. An oil palm farmer by trade, Juanda looked online for information and discovered a Facebook post from a user about how to cultivate the bees. He started chatting with his new friend online until, armed with his new knowledge, he started building hives for his future bee colonies. But it proved to be more challenging than he had expected.

“I prepared 200 hives, but they were a massive failure. These bees had remained empty,” said Juanda. Eventually he solved the problem by searching the forest for naturally-occurring hives, then transferring pieces to his own hives.

Juanda’s struggle in developing honey production caught the attention of Syamsuar, the District Head of Siak. After visiting Juanda’s honey farm, Syamsuar referred him to PT. RAPP, the operating arm of APRIL Group, which helps entrepreneurs and small businesses as part of its Community Development program.

PT. RAPP sent Juanda for five days of training in Selangor, Malaysia - known for its honey production - where he visited established farms and learned about the industry. “In Selangor, they have a community which cultivates Kelulut honey. When the honey is processed, it can be transformed into herbal medicines, drinks, or other products. The product is packaged nicely and marketed as a local product or souvenir from that country,” said Syamsuar.

Mahmud Hasyim, of PT. RAPP’s Community Development team, said educating entrepreneurs is an important way to help boost the local economy and spread knowledge. “Training and comparative studies are expected to enrich the knowledge of participants, who can then disseminate it to others,” he said.

According to Mahmud, the Kelulut honey produced by farmers like Juanda has been valued at IDR 500,000 per litre, and one harvest can fetch up to 20 litres of honey. So far, Juanda’s honey has been distributed to places in Indonesia including Surabaya and Tangerang. By partnering with RAPP, he hopes to be able to further improve his honey business in the future, and also for honey to be a beneficial source of livelihood for his community.
As a major employer in the pulp and paper industry, and in Riau province, APRIL invests considerable resources in the professional development and wellbeing of its employees and contractors. Upgrading local talent skillsets continues to be a priority for the company, ensuring it attracts, trains and retains high calibre employees, as evidenced by the fact that 63% of strategic management positions are held by local personnel.

All APRIL employees receive annual performance and career development reviews with their respective supervisors. Employees are compensated in a fair and transparent manner, based on merit and performance.
EMPLOYEE TRAINING AND DEVELOPMENT

Training courses include leadership and people management and business ethics and planning, mainly delivered at the APRIL Learning Institute (ALI) at Kerinci. Average training hours per employee in 2018 were 15, with 6,182 employees receiving some form of training, up from 12.3 the previous year. Other training and development activities include:

- APRIL Management Development Program
- Sustainability Professional Development Program
- External training, including the WBCSD’s Sustainability Leadership Program, and supporting employees to undertake post-graduate study in sustainability as part of their employment.

At APRIL’s operations in Pangkalan Kerinci, it provides housing, health, sports and recreation facilities for employees and schools which offer the International Baccalaureate syllabus for their children. We do not employ child labour, in compliance with International Labor Organization (ILO) and Indonesian labour laws. We strictly implement a no forced or compulsory labour policy as well as prohibiting discrimination in respect of employment and occupation. Grievance resolution mechanisms for employees are in place to address concerns related to work conditions.

HEALTH AND SAFETY

APRIL is committed to increased frequency and availability of courses and training sessions on safety, and ensuring the implementation of health and safety standards for manual workers, including contractors, in forest, plantation and mill operations.

PT. RAPP plantation and mill operations are mostly certified under the Health & Safety Management System OHSAS 18001 and are audited annually. The company is also subject to review under Indonesia’s principle of Occupational Health and Safety Management System, or Sistem Manajemen Keselamatan Kerja (SMK3). The company’s Occupational Health and Safety (OHS) Program is made up of the following four key elements:

1. Management commitment and employee involvement: Management safety committee and KAIZEN initiatives.
2. Workplace analysis: General safety inspections, non-conformity reports, Job Safety Analysis (JSA), emergency drill and safety audits.
3. Hazard prevention and control: OHS promotion and campaigns, safe work procedures and five Behavioral Based Safety (BBS) implementation (think through task, evaluate exposure, risk assessment, precautionary action, executing job in a safe manner).

Occupational Safety Improvement Measures continue to include the following:

- Ensure proper training and briefing to all employees, new hires and contract workers on OHS principles and work procedures for their specific tasks.
- Strengthen inspection programs, such as safety observation programs, non-conformance reports and violation tickets, to prevent and correct unsafe behavior.
- Conduct regular meetings on OHS issues with top management and department heads.
WORKPLACE FATALITIES

We regret to report that seven fatalities occurred across APRIL’s forestry operations in 2018. Three of these happened on PT. RAPP estates, while a further four occurred on Supply Partner concessions. All incidents were investigated by the company’s Occupational Health and Safety unit and reported to the relevant provincial and government authorities. A number of specific measures, including enhanced safety and training initiatives for estate managers and personnel, were put in place following these incidents.

<table>
<thead>
<tr>
<th>Year</th>
<th>Mill Fiber Supply Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0 5 Not available</td>
</tr>
<tr>
<td>2016</td>
<td>1 6 Not available</td>
</tr>
<tr>
<td>2017</td>
<td>0 1 0</td>
</tr>
<tr>
<td>2018</td>
<td>0</td>
</tr>
</tbody>
</table>

WORKPLACE INJURIES

Fiber Operations

<table>
<thead>
<tr>
<th>PT. RAPP + Fiber Suppliers (Total)</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Frequency Rate (FR)</td>
<td>1.7</td>
<td>1.92</td>
<td>0.49</td>
</tr>
<tr>
<td>Severity Rate (SR)</td>
<td>1116.34</td>
<td>169.45</td>
<td>0</td>
</tr>
<tr>
<td>Injury Rate (IR)</td>
<td>0.34</td>
<td>0.38</td>
<td>0.10</td>
</tr>
<tr>
<td>Lost Day Rate (LDR)</td>
<td>7.034</td>
<td>1.55</td>
<td>0</td>
</tr>
</tbody>
</table>
APRIL works to continually improve its material efficiency across its supply chain, applying lean manufacturing principles to drive energy and water efficiency as well as emission minimization.

### RESOURCE EFFICIENCY

APRIL’s pulp mill has an installed capacity of 2.8 million tonnes annually and the paper mill is capable of producing 1.15 million tonnes per year. In 2018, there was no change in Kerinci mill fiber consumption capacity. There were zero MHW deliveries to the Kerinci mill between 1 January 2018 to 31 December 2018 that were identified as coming from HCV, HCS or forested peatlands logged after June 3, 2015.

Supported by the adoption of best practice manufacturing technology across mill operations, the company’s aim was to advance our materials, energy, and water efficiency through the increased utilization of biomass, enhancing the responsible and efficient use of raw water and utilizing biodegradable chemicals.

APRIL’s mill in Pangkalan Kerinci produced 2,995,866 Air Dried Tonnes (adt) of pulp in 2018, utilizing 74.11 million tonnes of renewable and 351,648 tonnes of non-renewable materials in doing so. Renewable materials include wood and water, and non-renewable materials include salt, sodium sulphate, limestone, lime, and caustic soda.

APRIL sought to increase its material efficiency across its mill operations year-on-year, reflected in the quantity of materials used per total pulp produced. The efficiency ratio of renewable material use in our integrated pulp and paper mill has gradually improved, from 33.56 tonnes/adt in 2015 to 28.55 tonnes/adt in 2018 for renewable materials.

A total of 1,034,466 tonnes of paper was produced in 2018. As with pulp production, a combination of renewable and non-renewable materials are used in the production of paper with renewable materials consisting of pulp that is supplied from the mill, precipitated calcium carbonate (PCC), starch, carbon dioxide and water, while the non-renewable materials comprised mostly of ground calcium carbonate (GCC).

### MATERIALS USED FOR PULP PRODUCTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total renewable materials tonnes</td>
<td>64.43</td>
<td>67.45</td>
<td>63.93</td>
<td>73.90</td>
<td>74.11</td>
</tr>
<tr>
<td>Total non-renewable materials tonnes</td>
<td>33.56</td>
<td>33.71</td>
<td>31.43</td>
<td>28.55</td>
<td></td>
</tr>
<tr>
<td>Total non-renewable materials kg/ adt</td>
<td>190,506</td>
<td>227,565</td>
<td>308,482</td>
<td>210,095</td>
<td>351,648</td>
</tr>
</tbody>
</table>

### MATERIALS USED FOR PAPER PRODUCTION

<table>
<thead>
<tr>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total renewable materials tonnes</td>
<td>871,351.49</td>
<td>848,480.72</td>
<td>868,301.71</td>
<td>1,048,863.94</td>
<td>9,551,129</td>
</tr>
<tr>
<td>Total non-renewable materials tonnes</td>
<td>8,993.86</td>
<td>8,615.31</td>
<td>8,467.36</td>
<td>8,758.89</td>
<td>9,232.91</td>
</tr>
<tr>
<td>Total non-renewable materials kg/ tonnes</td>
<td>61,869</td>
<td>60,431</td>
<td>66,815</td>
<td>95,727</td>
<td>80,728</td>
</tr>
<tr>
<td>Total non-renewable materials kg/ adt</td>
<td>73.30</td>
<td>73.96</td>
<td>80.20</td>
<td>92.43</td>
<td>78.04</td>
</tr>
</tbody>
</table>
MATERIAL RECYCLING AND RECOVERY

APRIL applies a reduction, reuse and recovery approach across our mill operations to ensure we make use of materials that would otherwise end up as waste. This improves the company’s resource efficiency while minimizing waste and emissions generation, as well as reducing reliance on fossil fuels.

As part of its integrated mill operations, APRIL uses lime kilns to convert calcium carbonate to quicklime or calcium oxide. This process generates a significant amount of carbon dioxide. Rather than emitting the carbon dioxide as waste, a portion is captured to produce calcium carbonate through our precipitated calcium carbonate (PCC) plant. A total of 64,056 tonnes of CO$_2$ was captured and recovered at the PCC plant in 2018.

The recovery of materials also includes the processing of weak black liquor, which is derived from the stripping of gases through distillation. This produces valuable methanol which is used as renewable energy to fuel the mill’s boiler. Methanol production in the pulp and paper mill increased from 13,237 tonnes (=4.89 kg/adt) in 2017 to 14,489 tonnes (= 5.58 kg/adt) in 2018.

Side-streams and residues from the pulp production process that can no longer be used such as bark, palm husk and black liquor – a by-product of Kraft pulp production – are also recovered through evaporation and distillation units for biofuel and then utilized as renewable energy to fuel our recovery boiler. A total of 4,479,379 tonnes (= 1.73 t/adt) of black liquor was recycled for biofuel production in 2018. This increase from 2017 is due to the increased production of dissolving pulp during the year, which generates more black liquor. There was also an increase in the recovery of bark and palm husk from 1,008,828 tonnes in 2017 to 1,106,634 tonnes in 2018.
APRIL continued to reduce its dependence on fossil fuels in 2018, with 80.7% of the pulp and paper mill’s energy demands now met by renewable energy resources. The remaining 19.3% of the pulp and paper mill’s energy consumption is supplied by mainly natural gas and coal.

The following energy consumption relates to the pulp and paper mill:

<table>
<thead>
<tr>
<th>Unit</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total renewable fuel consumption</td>
<td>Terajoules</td>
<td>60,908</td>
<td>68,312</td>
<td>63,111</td>
<td>67,600</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>77.19%</td>
<td>82.9%</td>
<td>76.6%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Total non-renewable fuel consumption</td>
<td>Terajoules</td>
<td>17,999</td>
<td>14,106</td>
<td>19,287</td>
<td>16,952</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>22.81%</td>
<td>17.1%</td>
<td>23.4%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Terajoules</td>
<td>78,907</td>
<td>82,417</td>
<td>82,398</td>
<td>84,552</td>
</tr>
</tbody>
</table>
APRIL’s Kerinci pulp and paper mill GHG profile follows an established methodology developed by the International Council of Forest and Paper Associations (ICFPA) and the National Council for Air and Stream Improvement (NCASI) to develop its GHG emissions profile. It also follows the requirements of the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD)’s GHG Protocol.

The GHG measurement process starts with the identification of the emission sources related to pulp and paper mill production. Scope 1 or direct GHG emission information is collected, monitored and analyzed and includes emissions rising from wood preparation, production activities at pulp mill and paper mill, chemical recovery, power generation, waste management and internal transportation at the Kerinci Mill. As APRIL does not purchase electricity, heat or steam, there are no Scope 2 or indirect GHG emission to consider in this analysis.

The reported Scope 1 GHG emissions exclude activities on fiber operations as well as for log transportation to the mill. Biogenic emissions are separately addressed through the installation of GHG flux towers that measure emissions from different types of land use. Research is underway that will allow for this data to be supplemented in the future with broader life cycle data that includes land use emissions and organizational carbon footprint.

In 2018, the Kerinci mill complex Scope 1 GHG emission was 1,650,893 tonnes of CO2 equivalents (tCO2e), representing a small increase on the 1,614,853 tCO2e recorded in 2017. Similarly, the GHG intensity for pulp production and paper production showed a slight increase, at 0.46 tCO2e/adt pulp and 0.77 tCO2e/tonne paper in 2018 compared to 0.44 tCO2e/adt pulp and 0.72 tCO2e/tonne paper in 2017.
**WATER MANAGEMENT AND AIR EMISSIONS**

**Disclosure 205-3 Water withdrawal**

### WATER MANAGEMENT

Water is critical to almost every part of the pulp and paper making process and its efficient and sustainable management is a key area of focus. This is important because as well as supporting the company’s pulp and paper mill in Kerinci, the Kampar River also supports local communities, providing transportation, water supply and fisheries.

APRIL invests in our water management system to ensure that it conforms with ISO 14001, OHSAS 18001, ISO 45001 as well as recognised international and national standards. Internal water recycling and the reduction of water consumption per unit of production is also targeted to increase overall water efficiency.

In 2018, the mill’s water management systems treated and returned 82% of the water supply drawn from the Kampar River.

### WATER WITHDRAWAL

The mill’s water treatment facility has daily pre-treatment processes that include chlorination, clarification and filtration. In 2018, the total water withdrawn from Kampar River was 101,892,717 m³.

A small fraction of the volume withdrawn was used to facilitate the water filtration process.

In 2018, the mill’s water management systems treated and returned 82% of the water supply drawn from the Kampar River.
WATER CONSUMPTION

Disclosure 303-5 Water consumption

Water drawn from the Kampar River is mostly used in the production of pulp and paper, with a small amount used by households in the Kerinci township, APRIL’s plantation nursery and its power plant facilities. In 2018, our total water consumption for pulp and paper production was 72.43 million m³, representing a small increase on the previous year.

TREATED WASTEWATER DISCHARGE

Disclosure 303-4 Water discharge
Disclosure 306-1 Water discharge by quality and destination

The mill’s wastewater treatment facility processes approximately 280,000 m³ of effluent per day. Treating wastewater involves primary treatment and secondary treatment processes, with discharge points back to Kampar River.

Regular monitoring of the treated wastewater is carried out according to the Ministry of Environment Regulation No.5/2014, which regulates the volume and quality of wastewater for the pulp and paper industry. This monitoring is carried out by mill technicians as well as by an accredited third-party testing company on a monthly basis with the results submitted to the Ministry.

The amount of treated wastewater discharged to the Kampar River in 2018 was 82,333,768 m³ or equal to 29.4 m³/adt. The quality of treated wastewater including metrics such as total suspended solid (TSS), chemical oxygen demand (COD), biological oxygen demand (BOD), absorbed organic halogens (AOX), total nitrogen and total phosphorous, meet the wastewater standard stipulated in Ministry of Environment (MoE) Decree No. 5 of 2014.

Overall, the quality of treated wastewater remained stable, except for AOX, which significantly decreased from 48 tons in 2017 to 5.9 tons in 2018.
AIR EMISSIONS

Recovery boilers, power boilers, fiber lines, bleaching plant and lime kilns are the primary source of air emissions at the Kerinci mill. Several practices are applied across the mill’s operations to reduce emissions including the control of mud dryness and temperature in the kilns to reduce TRS content, the burning of CaCO3 and low NOx at Power Boiler to control SO2 and NOx.

Air pollution control equipment is installed and operated at key emission points to treat the air quality from the mill. This includes electrostatic precipitators in recovery boilers, power boilers and lime kiln stacks to reduce the particulate loading of air emissions to reduce sulfur content in the air. Treated particulate emissions are emitted from three power boilers, four recovery boilers and three lime kilns.

Regular air quality monitoring, consisting of ambient air quality and emission quality, is conducted regularly using Continuous Emissions Monitoring System (CEMS) equipment that is installed at key emission sources. The review and analysis of data is carried out by internal teams in line with the air emission quality stipulated in Government Regulation No. 41 of 1999 regarding Air Pollution Control. In addition, regular sampling of ambient air quality and emissions quality are carried out by verified third-party suppliers, and the monitoring results are reported regularly to the Ministry.

The quality of air emissions derived from the pulp and paper mill production process meets the national standard. In 2018 there were increased emissions of total particulate and Total Reduced Sulphur (TRS) content, whereas the total SOx and total NOx content decreased at 1,086 tons (0.39 kg/adt) and 7,059 tons (2.51 kg/adt) respectively.
The production of pulp and paper generates solid waste including sludge, dregs and grit, lime mud, screen rejects and pin chips (wood). APRIL’s solid waste management processes also include the storage and disposal of hazardous waste from non-process elements such as waste oil and contaminated rags. These are stored at a Hazardous Waste Temporary Storage, separately from production waste such as sludge, fly ash/bottom ash, dregs/grits and lime mud.

APRIL also operates landfill sites at the Kerinci mill that are used to dispose of solid industrial wastes. No prohibited materials such as oil, fuel, lubricants or chemicals are sent to landfill sites.

In 2018, solid waste disposed of in the landfill predominantly consisted of boiler ash (51%), followed by sludge (34%) and dregs and grits (15%). A significant decrease of boiler ash from 166,861 tonnes in 2017 to 111,159 tonnes in 2018 was due to a decrease in the use of fossil fuel in production as a result of increased biofuels generation.

APRIL continues to explore the possibilities of using boiler ash material in road making and brick production.
GRI CONTEXT INDEX

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<td></td>
</tr>
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ORGANIZATIONAL PROFILE

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Name of the organization

Disclosure 102-2
Activities, brands, products, and services

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Location of headquarters

Disclosure 102-4
Location of operations

Disclosure 102-5
Ownership and legal form

Disclosure 102-6
Markets served

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Scale of the organization

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Information on employees and other workers

Disclosure 102-9
Supply chain

Disclosure 102-10
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Membership of associations

STRATEGY

Disclosure 102-15
Statement from senior decision-maker

ETHICS & INTEGRITY

Disclosure 102-16
Values, principles, standards, and norms of behavior

GOVERNANCE

Disclosure 102-17
Governance structure

- Sludge (tonnes): 6,969, 34,149, 73,946
- Dregs & Grits (tonnes): 43,995, 43,202, 38,971, 33,776
- Lime Mud (tonnes): 7,060
- Boiler Ash (tonnes): 141,292, 200,708, 166,861, 111,159
- Total (tonne/adt): 67.9, 85.2, 80.5, 77.7

Solid waste to landfill

- 2015: 0 tonnes
- 2016: 5.0 tonnes
- 2017: 10.0 tonnes
- 2018: 15.0 tonnes

- 2015: 20.0 tonnes
- 2016: 30.0 tonnes
- 2017: 40.0 tonnes
- 2018: 50.0 tonnes

- 2015: 60.0 tonnes
- 2016: 70.0 tonnes
- 2017: 80.0 tonnes
- 2018: 90.0 tonnes
- 2015: 100.0 tonnes

- 2016: 5.0 kg/adt
- 2017: 10.0 kg/adt
- 2018: 15.0 kg/adt

- 2015: 20.0 kg/adt
- 2016: 30.0 kg/adt
- 2017: 40.0 kg/adt
- 2018: 50.0 kg/adt

- 2015: 60.0 kg/adt
- 2016: 70.0 kg/adt
- 2017: 80.0 kg/adt
- 2018: 90.0 kg/adt

- 2015: 100.0 kg/adt
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Acacia crassicarpa and Acacia mangium

Two species of Acacia, characterised by fastgrowing and good pulping qualities. APRIL plants Acacia crassicarpa on peatlands and Acacia mangium on dry, mineral soils.

ADT

Air Dry Tonne, Marketable pulp, air dried which contains 10% water.

AOX

Adsorbable organically bound halogens (AOX) are a group of chemicals that can be adsorbed from water onto activated carbon. AOX expresses the total concentration of chlorine bound to organic compounds in wastewater. It measures all chlorine compounds both harmful and harmless.

Biodiversity

Total diversity or variation of life within a given ecosystem.

Biofuel

Biofuel is based on raw material derived from living organisms and therefore is classified as a renewable source.

BOD

Biological oxygen demand. A measure of the amount of oxygen that bacteria will consume while decomposing biologically available organic matter. BOD is a measure of the degree of organic pollution in water. Also see "COD".

Carbon footprint

A measure of the total amount of carbon dioxide (CO2), nitrous oxide (N2O) and methane (CH4) emissions of a defined population, system or activity, considering all relevant sources, sinks and storage within the spatial and temporal boundary of the population, system or activity of interest. Calculated as carbon dioxide equivalent (CO2e) using the relevant 100-year global warming potential (GWP100).

COD

Chemical oxygen demand. COD does not differentiate between biologically available and inert organic matter, and therefore a measure of the total quantity of oxygen required to oxidize all organic matter into carbon dioxide and water.

CoC

Chain of Custody, involves monitoring, tracing and documenting the flow of fiber from the plantation to the mill.

Concession

General term for licenses where plantation forests are established for the production of pulp and paper products.

Eucalyptus

A large family of trees, common in Australia. Certain species, like the Eucalyptus pellita, are native to Indonesia. APRIL Indonesia is currently expanding its use of Eucalyptus on dry, mineral soils.

Fiber

Fiber from plantation forests.

FPIC

Free, prior, informed consent, a form of bottom-up participation and consultation with local/indigenous communities prior to the beginning of development at a particular area.

FFVP

Fire Free Village Programme

FFA

Fire Free Alliance

Grievance mechanism

Grievance mechanism introduced in August 2016 that applies to the settlement or resolution of grievances relating to the implementation of SFMP 2.0 within APRIL and suppliers’ operations, recognizing the principle of Free, Prior, Informed Consent (FPIC) as a starting point.

GJ

Gigajoule, a unit of energy equal to one billion joules.

GHG

Greenhouse gas. Gases such as carbon dioxide, nitrous oxide and methane that absorb and re-emit thermal radiation (heat).

GRI

Global Reporting Initiative

Hectare (Ha)

Metric unit of area that is equivalent to 10,000 square metres or 2.471 acres.

HCS

High Carbon Stock assessment

HCV / HCVF

High Conservation Value Forest assessment that comprises six HCV values: HCV 1 Species diversity, HCV 2 Landscape-level ecosystems and mosaics, HCV 3 Ecosystems and habitats, HCV 4 Ecosystem services, HCV 5 Community needs, HCV 6 Cultural values.

ISO

The International Organisation for Standardisation is a worldwide federation of national standards bodies, representing more than 140 countries. ISO is a non-governmental organisation established in 1947, to promote the development of standardisation and related activities globally.

IUCN

The International Union for Conservation of Nature is the world’s oldest and largest global environmental network– a democratic membership union with more than 1,000 government and NGO member organisations, and almost 11,000 volunteer scientists in more than 160 countries. The organisation helps the world find pragmatic solutions to the most pressing environment and development challenges. It supports scientific research, manages field projects all over the world and brings governments, non-government organisations, United Nations agencies, companies and local communities together to develop and implement policy, laws and best practices.

IFCC

Indonesian Forestry Certification Cooperation is the national PEFC-endorsed forest certification system in Indonesia.

IFS

Integrated Farming System: Initiated in 1999, this initiative is to enable farmers achieve greater diversification, efficiencies and yields. The main activities of the programme include training and, providing ongoing technical and agricultural support to farmers.

Karinci

Location in Riau Province, Sumatra, Indonesia. Home to APRIL’s Indonesia operations.

Kraft

Kraft process (also known as sulphate pulp making process). This process is versatile, allowing most types of wood to be used as raw material. Unbleached kraft pulp is brown in colour, and its uses include brown sack paper and bags. For use as printing or writing papers, it needs to be bleached.

Kampar Peninsula

The Kampar Peninsula is situated in the province of Riau, on the east coast of central Sumatra in Indonesia. It is delimited by sea in the north and east, by Kampar River in the south and the Kutup River in the west.
### Land dispute

Land in Indonesia is predominantly state-owned. The right to use the land is given to certain companies and individuals under licensed concessions for which fees or royalties are payable. A major exemption to this is traditional village land, usually small plots on which villagers grow subsistence and cash crops. Disputes may arise through overlapping claims to the same land, or through lack of provable land titles (i.e. encroachment) and questionable recognition of traditional rights.

### LTIFR

Lost Time Injury Frequency Rates

### MHW

Mixed hardwood

### Multi stakeholder forum

Multi stakeholder forum or rembuk desa is a consultation forum between community and APRIL representatives to discuss the type of in-kind social infrastructure assistance needed at a particular area.

### New development

New development is the clearing of previously uncleared land for planting or building of infrastructure.

### NOx

Nitrogen oxides such as nitric oxide and nitrogen dioxide, (NO and NO2).

### Occupational Health and Safety certification

Defined as SMK3 certification as required by Indonesian law or an equivalent certification for those suppliers operating outside Indonesia.

### PIMS

Plantation Information Management System is a software utilized by APRIL, using Geographic Information Systems software linked to databases on plantation stock, inventory, operational status, work-orders and costs.

### Pulp

Cellulose fibers used in the production of paper, tissue and board. Can be derived from hard-woods, softwoods and plant fibers.

### Petajoule

A unit of energy equal to $10^{15}$ joules.

### Peatland

Areas of land with naturally formed layers of peat. Peat is dead organic (vegetative) material that has accumulated over thousands of years due to a combination of permanent water saturation, low oxygen levels and high acidity. Peat consists of 90% water and 10% plant material. Peatlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance.

### RKU

Rencana Kerja Usaha or General Working Plan, is a 10-year workplan document that includes information on working location, spatial planning and area management, production sustainability, environmental protection and social condition. This document is submitted by concession license holders to the Ministry of Environment and Forestry.

### RKT

Rencana Kerja Tahunan or Annual Work Plan, is a document that details the activities as stated in the RKU document.

### Riparian

Relating to the immediate surrounding area of a natural watercourse. This includes vegetation as well as the soil.

### Road built

Road built by APRIL or supply partner for community’s use.

### SDGs

The United Nations Sustainable Development Goals are a universal set of goals, targets and indicators that UN member states are expected to use to frame their agenda over the next 15 years to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.

### SOx

Sulphur oxides such as sulphur monoxide, sulphur dioxide and sulphur trioxide (SO, SO2, SO3).

### SFMP 2.0

Sustainable Forest Management Policy 2.0

### Social infrastructure projects:

Social infrastructure projects: The building of schools, community halls, roads, bridges, education and health support, religious and sports facilities. Completed: Social infrastructure projects completed within the reporting period. Materials provided: Provision of materials for social infrastructure projects.

### SMEs

Small and Medium Enterprises; companies or individuals with business revenue of less than IDR 500 million per month with formal, clearly defined agreement to supply goods and/or services to APRIL.

### SMK3

Sistem Manajemen Keselamatan dan Kesihatan Kerja or Health and Safety management system as set out in Indonesia’s Ministry of Manpower Regulation 50/2012.

### TRIR

Total Recordable Incident Rate

### TSS

Total Suspended Solids, measure of the level of solids in waste water to determine quality.

### TRS

Total Reduced Sulphur are compounds released from both natural and industrial sources that produce offensive odors, but not normally considered a health hazard.

### UNGC

United Nations Global Compact, one of the largest voluntary corporate citizenship initiatives, consists of 10 principles covering human rights, fair labour, environmental protection and anti-corruption. Established in July 2000, it seeks to promote responsible corporate citizenship by providing a framework for businesses to follow in response to the challenges of globalisation.

### Water withdrawn

Sum of all water drawn from Kampar River for any use over the course of the reporting period.

### Water consumption for pulp and paper

Includes water used as an input for the pulp and paper production process which includes denim and soft water used in the pulp mill. Excludes water consumption for the power plant, town site, evaporation losses and water sold with product.

### Water discharges

Sum of all effluent, used water and unused water released into Kampar River at the defined discharge point.
INDEPENDENT LIMITED ASSURANCE REPORT

To the management of APRIL Group:

We have been engaged by the management of APRIL Group (‘APRIL’) to undertake a limited assurance engagement on certain performance information disclosed in the Sustainability Report (the ‘Report’) for the period covering January 1 – December 31, 2018.

SELECTED INDICATORS AND APPLICABLE CRITERIA

The scope for our limited assurance engagement, as agreed with management, comprises the performance information (the ‘Selected Indicators’) as described in Appendix A and denoted by the symbol ‘Selected Indicators’ within the Report.

The Selected Indicators, contained within the Report, have been determined by management on the basis of APRIL’s assessment of the material issues contributing to APRIL’s sustainability performance and most relevant to their stakeholders.

There are no mandatory requirements for the preparation, publication or review of sustainability performance metrics. As such, APRIL applies the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard, Revised Edition (the ‘GHG Protocol’) and its own internal reporting guidelines and definitions for sustainability reporting in preparing the Selected Indicators, which can be found in the Glossary section of the Report.

APRIL’S RESPONSIBILITIES

Management is responsible for the preparation and presentation of the Selected Indicators in accordance with the GHG Protocol and APRIL’s internal reporting guidelines and definitions for sustainability reporting current as at the date of our report. Management is also responsible for determining APRIL’s objectives in respect of sustainability performance and reporting, including the identification of stakeholders and material issues, and for establishing and maintaining appropriate performance management and internal control systems from which the reported performance information is derived.

OUR RESPONSIBILITY AND PROFESSIONAL REQUIREMENTS

Our responsibility in relation to the Selected Indicators is to perform a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised) Assurance Engagements other than Audits or Reviews of Historical Financial Information and ISAE 3410 Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board. ISAE 3000 and ISAE 3410 require that we plan and perform our procedures to obtain the stated level of assurance, in accordance with the applicable criteria.

Our conclusion does not cover any periods prior to the year ended December 31, 2018.

ASSURANCE APPROACH

We planned and performed our work to obtain all of the evidence, information and explanations we considered necessary in order to form our conclusion as set out below. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of performance information for the Selected Indicators, and applying analytical and other evidence gathering procedures, as appropriate. Our procedures included:

• Performing site visits to a sample of forestry operations, including APRIL’s own concessions and those of its suppliers;
• Completing a mill site visit to assess the completeness of greenhouse gas emission sources, sinks and reservoirs;
• Inquiries regarding key assumptions and the re-performance of calculations on a sample basis; and,
• Reviewing the performance information for the Selected Indicators presented in the Report to determine whether it is consistent with our overall knowledge of, and experience with, the sustainability performance of APRIL.

The extent of evidence gathering procedures performed in a limited assurance engagement is less than that for a reasonable assurance engagement, and therefore a lower level of assurance is obtained.

INDEPENDENCE, QUALITY CONTROL AND COMPETENCE

We have complied with the relevant rules of professional conduct/ code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The engagement was conducted by a multidisciplinary team which included professionals with suitable skills and experience in both assurance and in the applicable subject matter including environmental, social, and governance aspects.

OUR CONCLUSION

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that for the period from January 1, 2018 to December 31, 2018, the Selected Indicators, as described in Appendix A and disclosed in the Sustainability Report, have not been prepared and presented, in all material respects, in accordance with the GHG Protocol and APRIL Group’s internal reporting guidelines and definitions for sustainability reporting, current as at the date of our report.

Chartered Professional Accountants,
July 02, 2019
Vancouver, Canada
### Sustainability Report Indicators For Assurance

#### Sustainable Forest Management
- Hectares developed by category
- Total area and HCV/HCS area by concession publicly available (H)
- PT. RAPP and supplier concession maps publicly available (%)
- Number of PT. RAPP and supplier non-compliant new development detected and % of non-compliances resulting in corrective action
- Land or licenses acquired by APRIL after 3 June 2015 and # of hectares of associated development (HCV/HCS and non-HCV/HCS)

#### Sustainable Forest Management (Continued)
- Number of tonnes mixed hardwood (MHW) deliveries utilized by the Kerinci mill
- Third party mill deliveries (if of tonnes) from post June 3, 2015 clearing of HCV, HCS forests or forested peatlands
- Tonnes and % of fiber supply by region (PT. RAPP, suppliers, concessions, community forests)
- % change in mill fiber consumption capacity
- % of fiber covered by legality certification
- Ha of plantation in outgrower programs

#### Water
- Description of water management and monitoring including process of water withdrawal, water consumption and water discharge (qualitative)
- Total water withdrawal from Kampar River
- Total water discharge to Kampar River

#### Forest Protection, Conservation and Restoration
- Hectares and % of conservation and restoration area impacted by fire, development or encroachment
- Ratio of conservation area to total plantation area
- Number and ha of APRIL and supplier concessions included within landscape level processes
- % of ecosystem restoration area with formal plans for protection and/or restoration objectives for rare, threatened and endangered species.

#### Peatland Management
- Plantation, conservation and ecosystem restoration area on peatland (ha)

#### Emissions
- Overall carbon footprint (Scope 1 Emissions)
- Mill tonnes of greenhouse gas emissions/tonne of pulp (tCO2e/adt)
- Mill tonnes of greenhouse gas emissions/tonne of paper (tCO2e/tonne)

#### Strategic Fire Management
- Number of instances of fires on concession
- Number of villages in fire free village program

#### Legal Compliance and Certification
- % of mill energy needs met by source
- Energy contribution by fuel type (Renewable/Non-Renewable) (%)

#### Materials
- Renewable and non-renewable materials for pulp production and paper production
- Supplier list publicly available
- % of new suppliers for which the supplier due diligence process was completed prior to the first wood delivery

#### Additional SFMP Indicators
- Status of SAC Recommendations
- Ha of APRIL and supplier concessions currently inactive due to unresolved conflicts
- % of grievances resolved in accordance with the grievance SOP

#### Occupational Health & Safety
- # of fatalities
- % of PT. RAPP, supplier and contractor operations covered by OHS certification

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### APPENDIX A