GROWING OUR FUTURE
APRIL INDONESIA
SUSTAINABILITY REPORT 2012
The theme of this 2012 Sustainability Report is “Growing Our Future”.

This reflects our belief that responsible development can build a better future for Indonesia, by helping local people to break the poverty cycle and improve their lives.

The 2012 APRIL Indonesia Sustainability Report is produced using plantation fibre grown and harvested from APRIL’s plantations in Riau Province Sumatra. The paper used in this report was manufactured at APRIL’s Kerinci Mill. The photos used in this report were taken on location in and around our operations in Indonesia.
The theme of our 2011-2012 sustainability report is Growing our Future.

We felt this theme expressed APRIL’s journey toward best practice, sustainable forestry in Indonesia. It also reflects our belief that responsible development can build a better future for Indonesia, by helping local people break the poverty cycle and improve their lives.

Operating in a country that is changing at almost every level brings many challenges for APRIL. Meanwhile, we are supplying a world where sustainability is now a key criterion against which businesses are evaluated.

In this complex, ever-changing context, our vision, created almost two decades ago, is as relevant as ever.

We aim to become one of the largest and best-managed sustainable pulp and paper companies in the world. And we are proud to do this from our home base in Indonesia, in a way that best meets this country’s needs.

Indonesia has a strong imperative to find the right development path.

In this country of 238 million people, almost 30 million still live below the poverty line. Poverty is particularly widespread in rural areas.

Indonesia is rightly using its abundant natural resources to bring prosperity to its people and overcome many challenges in employment, health, education and infrastructure.

The key question is: how to best use these natural resources to generate enduring economic growth and long-term social benefits, while protecting sensitive environments?
At APRIL, we believe the principles of Sustainable Forest Management (SFM) are an important part of the solution and we have pioneered the introduction of SFM to Indonesia.

Our plantations are designed as renewable sources of economic growth and social development, while our world-class mill operations add significant value and create economies of scale and opportunities that benefit our local, rural area.

In contrast, other approaches are often driven by the immediate realities of life in Indonesia at this stage of its development. Important forests, which can include ecologically sensitive areas, are frequently decimated by people operating illegally, or without regard to the balance between environmental, social and economic sustainability.

In terms of meeting Indonesia’s long-term needs, there is little doubt which approach is preferable.

Indonesia is a young democracy facing some big challenges. In time, it will cement its place as a world-leading economy. Responsible, sustainable development is fundamental to this journey.

APRIL is proud to be playing a part in growing Indonesia’s future.

This sustainability report marks 10 years of full and transparent formal sustainability reporting by APRIL. In fact APRIL was the first major Indonesian company to publish a sustainability report back in 2002 and we have maintained and enhanced our reporting biannually ever since.

In every sector of business, sustainability has become increasingly important and we work hard to meet expectations in this area. Accordingly, this Sustainability Report follows GRI 3.1 guidelines.

We provide comprehensive information on each aspect of our operations in Indonesia and the relationships between our activities and key stakeholders. The Report covers our directly owned operations and how we work with and seek to influence for the better our diverse wood supply partners. It provides facts, statistics and perspectives resulting from our 19 years of operations and experience in Indonesia.

As a privately owned, non-listed company, we do not disclose commercially confidential information, but we have endeavored in this report to continue our policy of enhancing relevant disclosures on our operations and sustainability practices. We have increased the number of GRI Indicators reported against (compared to our previous Sustainability Report) from 35 to 45. All data used in this report has been validated by APRIL and in many aspects, by third parties.

Unlocking the benefits of this positive economic contribution depends upon productivity and we have been progressively optimising production from our Kerinci mill. As the chart below shows, in 2012, APRIL produced and sold 2.67 million tonnes of pulp.
A proportion of our pulp production is converted to paper after downstream processing at the Kerinci site. In 2012 0.822 million tonnes of paper were produced and sold.

Our commercial viability and our ongoing contribution to Indonesia’s economy are predicated on our concession areas being managed in a sustainable way that ensures long-term productivity. Sustainable development can be defined as using resources to meet human needs while ensuring the sustainability of natural systems and the environment, so that these needs can be met in the present, but also for generations to come.

Our operations must be sustainable, in the true sense of the word. They must endure and continue to contribute. Responsible forestry is the key.

We recognize that through practicing responsible forest management in our own operations, and encouraging it among our supply partners, APRIL can be an important pillar in the ongoing growth and development of a world-class Indonesian forest industry. As such, we strive for world best practice in sustainable forestry.

Deforestation in Indonesia is a real concern, both here and around the world. A common criticism leveled at companies like ours is that by establishing plantations, we are contributing to deforestation.

However, we strongly believe that, rather than being part of the problem, we are part of the solution to the challenges Indonesia is facing in striking the right balance between economic development and environmental management. By practicing responsible forestry, we are making productive use of land that has been degraded in the past and would be likely to be further degraded were it not for our presence.

Our plantations are managed in line with world best practices, while the significant conservation zones within our concessions are well protected. We take pride in the fact that the conservation outcomes being achieved in APRIL conservation zones are having a lasting positive impact and compare favourably with outcomes in forests protected under different arrangements; and demonstrably better than in unmanaged land.

Equally, forestry in Indonesia has a decidedly human face. The jobs created and the economic benefits generated are shared with local communities. We do not however take anything for granted. We work hard through a detailed process of engagement to understand and to meet the needs and wishes of local communities.

As in any community setting that features diverse backgrounds, cultures and ambitions for the future, such community engagement is complex, particularly given that Indonesia’s land tenure system is sometimes confusing and contradictory.

Ensuring positive relationships with local communities and the objective, transparent resolution of disputes through dialogue is important to our business and to our reputation.

The development and growth of APRIL’s business has taken place in stages. APRIL’s first plantation development commenced in Riau Province in Sumatra, Indonesia in 1993. In Kerinci, Riau, we began commercial pulp production in 1995 and commercial paper production in 1998.

APRIL’s pulp and paper mill is one of the world’s largest and most modern. It is export competitive, low cost, and highly efficient, with a designed capacity of 2.8 million tonnes per annum. Kerinci is home to one of the largest single pulp production lines and fastest fine paper machines in the world.

We believe our Kerinci mill serves as an example of the true potential and capability of Indonesian manufacturing. (You can read about this mill and its environmental performance in section 3 of this Report).

Over the past two years we have made important progress towards our objective.
of completing the program of plantation establishment on new concession areas licensed to us in 2009.

As at 30 June 2013, APRIL had less than 20,000 hectares still to be established as plantations within our concessions, primarily on the island of Pulau Padang.

This is balanced by nearly 90,000 hectares identified and protected as conservation forest and indigenous tree species areas within those same concessions. When the conservation and indigenous tree species areas set aside by both APRIL and long-term supply partners are combined, they account for more than 220,000 hectares.

Today, APRIL is one of the world’s largest pulp and paper companies and a leading fibre plantation company. Key markets are served across Asia Pacific and further afield in Europe. Our operations are among the most efficient of their kind. As a leading producer of pulp and paper, APRIL Indonesia engages with customers across the globe that demand from us the highest standards of governance, compliance and commitment to responsible forestry practices.

APRIL’s practices are guided by the principles of the United Nations Global Compact and ISO26000 Social Responsibility Guidance. We have stringent chain of custody policies and procedures controlling fibre supply, while our mill operation is engineered to meet European Best Available Technology (BAT) and is certified under ISO 9001, ISO 14001 and OHSAS 18001 for quality, environment, and health and safety management systems respectively.

In 2011, APRIL achieved Origins and Legality of Timber (OLB) certification, with assurance from Bureau Veritas for our entire forestry and manufacturing operations. We were also recertified for Sustainable Plantation Forest Management (SPFM) certification by the Lembaga Ekolabel Indonesia (LEI), for 2011-2016.

In 2012, we received Sustainable Production Forest Management (PHPL) and Timber Legality Verification (SVLK) Certification from the Indonesian Ministry of Forestry, covering our entire manufacturing operations.

This report details many things of which we are proud: the opportunities we offer our employees; the positive impact we have on poverty alleviation in Riau; the improved living standards we create in our communities; the world-class nature of our operations and the quality of our end products.

Nonetheless, a major issue that I must address in this President Director’s Report is that of employee and contractor safety. Over the 2011 and 2012 years, 22 people lost their lives while working for APRIL and its contracted suppliers. The majority of these incidents involved valued contractors to our company. This situation cannot continue.

Consequently, APRIL is overhauling its occupational health and safety systems, particularly those related to contractor safety management. This is a major project. Although our work in this area must recognize that the inherently hazardous nature of forestry is being exacerbated by the remoteness of our plantations and relatively low education levels, particularly among contractors, we simply must meet the challenge of achieving a safe work environment.

It is vital that we demonstrate to our employees, contractors and their families that APRIL’s operations will become safer. We are determined to present a very different picture in our next Sustainability Report.

The work being done in this critical area is outlined in section 6.4 of this Report.

While this Sustainability Report covers a specific two-year period, it also covers a range of new and enhanced commitments being made to enhance our triple bottom line of people, planet and profit.

We are resolved to boost safety for our workers and others through such measures as improved contractor safety management systems and increased mechanisation of harvesting activities, reducing the levels of manual clearance.

We are continuing to develop major, long-term eco-restoration programmes in Riau Province and on the Kampar Peninsula.

And as world demand for pulp and paper products grows, we will take further steps to showcase our commitment to sustainable development.

In a rapidly changing country, with a great need for the benefits of economic growth, we believe responsible forestry has much to contribute to Indonesia’s future.

Kusnan Rahmin
President Director
APRIL Indonesia
30 August 2013
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1.0
CORPORATE MANAGEMENT
1.1 CORPORATE PROFILE

Asia Pacific Resources International Limited (APRIL) is one of the world’s largest producers of bleached hardwood kraft (BHK) pulp, with manufacturing operations in Riau Province, Indonesia. Established in 1993, APRIL manages a fully integrated pulp and paper mill, as well as about 344,000 hectares of government-licensed production land concessions, together with supply partners and community forest partners.

APRIL’s operations in Pangkalan Kerinci comprise a 1750-hectare complex that holds our pulp and paper mills, offices and employee housing facilities.

Commercial pulp and paper production commenced in 1994 and 1998 respectively. As of 31 December 2012, APRIL and supply partners had set aside and protected more than 220,000 hectares of forest and indigenous tree species areas as conservation in Riau.

As a pioneer of sustainable forestry in Indonesia, APRIL has applied a no-burn policy since operations began in 1993. In 2005, APRIL enacted a voluntary High Conservation Value (HCV) policy for land use planning. This policy provides practical and responsible solutions to the challenges of deforestation and degradation.

APRIL invests significantly in science and technology to cultivate high quality plants. These plants are more disease resistant and demonstrate superior growth rates. APRIL nurseries in Indonesia can produce about 200 million cuttings and seedlings annually to supply trees for our year-round plantation programme. In 2012, APRIL enabled the planting of more than 130 million trees on its own plantations and the land of supply partners.

APRIL sells pulp and paper products to key markets across the Asia Pacific and Middle East, North America, the EU and Africa. Our pulp segment recorded positive growth in 2012, with sales growing 8% over the previous year. Paper sales increased by about 1% in 2012 over the previous year.

APRIL’s flagship office paper brand PaperOne™ is made from renewable plantation fibre and is sold in over 70 countries worldwide.

Name of the organization
Asia Pacific Resources International Limited (APRIL)

Primary brands, products and/or services
Products: Bleached hardwood kraft (BHK) pulp, Paper products in cutsize, folio and rolls
Flagship Brand: PaperOne™

Operational structure of APRIL Indonesia
- PT Riau Andalan Pulp & Paper
- PT. Intiguna Primatama
- PT Riau Andalan Kertas
- PT. Anugrah Kertas Utama
- PT Riau Prima Energi
- PT. Asia Prima Kimiaraya

Locations
Corporate offices: Singapore; Jakarta, Indonesia
Operational base: Pangkalan Kerinci, Riau Province, Indonesia

Countries in which the organisation’s operations are located
- Indonesia

Nature of ownership and legal form
Privately held

Markets served
Asia Pacific, Middle East, North America, Europe, Africa

Scale of reporting organisation
Annual designed production capacity of 2.8 million tonnes for pulp and 820,000 tonnes for paper
Around 5,400 permanent employees
1.2 CORPORATE GOVERNANCE

APRIL has clear and well-developed corporate governance.

The affairs of APRIL Indonesia are overseen by a Supervisory Board comprising, at 31 December 2012, six members: Bey Soo Khiang (Chairman), A.J. Devanesan (President and Chief Operating Officer), Praveen Singhavi (Chief Financial Officer and Deputy Business Head), Ibrahim Hasan (President Commissioner, Indonesia), Kusnan Rahmin (President Director APRIL Indonesia) and Imelda Tanoto.

The Chairman is an Executive Chairman. Two of the Board Members are non-executive. None of the Board Members are independent.

The Supervisory Board of APRIL Indonesia is committed to ensuring that high standards of corporate governance are practiced throughout APRIL and its subsidiaries. This is fundamental to the discharge of its responsibilities to protect and enhance shareholder value.

The principal function of the Supervisory Board is to oversee the business affairs of the APRIL Group. It reviews and determines overall strategy, policies on business direction, financial objectives, control and performance, risk management and issues of resource allocation.

The Supervisory Board is responsible for the effectiveness of governance practices and the overall management and control of all entities within the group. The Board’s role is to oversee the management of the group on behalf of the shareholder.

Where new Board Members are appointed, arrangements are made to fully brief them on the Group’s business, organisational structure and activities, strategic direction and corporate governance practices.

Five members of the Supervisory Board are of the male gender, one member is female.

The Board Members represent a diverse range of perspectives, originating from Indonesia, Singapore and India.

COMMITTEES AND DELEGATION OF AUTHORITY

Specific areas of responsibility are delegated to Committees. These Committees have the authority to examine particular issues and report back to the Board with their recommendations, where appropriate. The ultimate responsibility for final decisions, however, rests with the Supervisory Board.

To ensure smooth operations and facilitate decision making, the Supervisory Board has delegated certain functions to Executive Management Committees. These committees are formed as dictated by business imperatives to deal with specific matters such as strategic direction, performance reviews, market updates, risk management and organizational development of the Group.

Approval sub-limits are set for various management levels to facilitate operational efficiency. The Board has defined financial authorisation limits for operating and capital budgets, procurement of goods and services, new investments and divestments and treasury transactions.

The levels of authority for management are documented in detail in a Delegation of Authority Policy the Supervisory Board has put in place. During 2011 and 2012, authority levels were regularly reviewed and modifications were made to improve the operation of the policy and more clearly delineate responsibilities for the conduct of certain transactions.

The Supervisory Board has approved a risk management program that is being progressively adopted throughout APRIL. The program involves identification and assessment of significant risks and rating of the effectiveness of associated controls, with mitigation strategies being developed and implemented. Periodic reports are made to the Supervisory Board on progress with this work.
ACCESS TO INFORMATION

Board Members are entitled to full access to the information required to discharge their responsibilities, including unrestricted access to all senior executives as well as the internal and external auditors.

The Board and individual directors may obtain independent professional advice at the expense of the company, where they consider it appropriate to do so, in order to carry out their responsibilities.

Mechanisms exist for the viewpoints of employees to be brought to the attention of the Board by means of regular annual employee surveys (results of which are brought in summary form to the Board) and via other informal interactions between employees and Board members that occur on an ongoing basis.

Employees are actively encouraged to raise concerns directly with members of the Board, who are present and visible within the operational units of the company on a regular basis, and at scheduled town hall briefings in which Board members participate.

GOVERNANCE ARRANGEMENTS ON SUSTAINABILITY

In 2010, the company established an External Affairs Council to overview development and delivery of APRIL Indonesia’s sustainability strategy and performance.

This Council meets approximately quarterly. Ex officio members are APRIL Indonesia’s Supervisory Board Chairman, the Chief Financial Officer and Deputy Business Head, President Director, Indonesia and the Sustainability Director. Business Heads and key members of the Sustainability executive team participate in meetings as required.

The Council met seven times in 2011 and four times in 2012.

APRIL Indonesia upholds a strict code of corporate governance and business ethics, standards by which all employees are contractually bound to abide. These guidelines include provisions for fair and non-discriminatory engagement with stakeholders, avoidance of conflicts of interest and intolerance of corrupt practices.

An area of governance that is closely monitored by the Supervisory Board is compliance with environmental laws and regulations. Aspects of the company’s performance in this area are addressed in sections 3.0 and 4.0 of this Report.

A significant non-monetary sanction during the reporting period was a downgrading, and subsequent re-rating, of APRIL under Indonesia’s Program for Pollution Control, Evaluation and Rating (PROPER). This is outlined at section 3.7 of this Report. Apart from this, APRIL Indonesia did not incur any significant monetary or non-monetary sanctions during the reporting period.

An annual report is made to the Supervisory Board of performance against the code of corporate governance and business ethics.

No incidents of corruption have been discovered or disclosed to the Supervisory Board in respect of the reporting period, and accordingly no actions have been taken against management or staff in response to incidents of corruption.

Risks of corruption are, however, continuously monitored and this is a responsibility of the company’s Internal Audit function. Employees are subject to corruption risk education programs on an ongoing basis.

At APRIL Indonesia, all contractors and suppliers are expected to comply with the same culture of business ethics as employees. Enforcement is ensured through a combination of routine and random audits, and through a comprehensive annual review of employee performance.
1.3 CERTIFICATION AND AWARDS

APRIL strives to ensure that our management processes and initiatives are aligned with national and globally accepted standards and benchmarks. Towards that aim, we actively work to achieve international and national certifications that provide end-to-end assurance, from the efficiency, quality and sustainability of our mill and forestry operations, down to that of the end-product.

Our operations in Indonesia are certified under ISO 9001, ISO 14001 and OHSAS 18001 for quality, environment, and health and safety management systems respectively.

Since 2006, our plantation operations have been certified under Sustainable Plantation Forest Management standards by the Indonesian Ecolabelling Institute, locally known as Lembaga Ekolabel Indonesia (LEI). In late 2011, RAPP successfully recertified under SPFM-LEI for the period of 2011-2016.

APRIL’s pulp and paper manufacturing, stores and sales have been certified under Programme for the Endorsement of Forest Certification (PEFC) Chain-of-Custody standards since 2010.

In line with our commitment to progressive improvement, APRIL qualified for several new certifications in the last two years.

In March 2012, APRIL certified under Bureau Veritas’ Origins and Legality of Timber (OLB) Standards for Forestry Companies, the first industrial plantation company in Asia to do so. OLB Standards for Forestry Companies ensure compliance with national laws and regulations for forest management and harvesting, social and environmental aspects.

Supply partners successfully passed audits under OLB ‘Chain of Custody-Accetable Wood’ standards.

APRIL’s pulp and paper production and sales facilities also certified under OLB Chain-of-Custody standards in April 2012.

In August 2012, APRIL successfully attained Timber Legality Verification (SVLK) certification for its entire manufacturing operation. Our forestry operations have held Sustainable Production Forest Management and Timber Legality Verification (PHPL-SVLK) certification since October 2010, the first plantation company in Indonesia to do so.

PHPL-SVLK is a mandatory national timber legality certification jointly developed with the European Union (EU) to meet EU’s Forest Law Enforcement, Governance and Trade (FLEGT) licensing requirements in force from March 2013. The system creates a rigorous chain-of-custody process designed to ensure mills only receive and process timber from legal sources and that all products exported from the country are traceable to verifiable points of origin.

APRIL is certified under the Hong Kong Green Label Scheme (HKGLS) for selected plantation-based paper products including PaperOne™ (All Purpose, Presentation, Copier), Laser and Copy brands.
2.0 SUSTAINABILITY MANAGEMENT
2.1 SUSTAINABLE DEVELOPMENT AND APRIL’S ECONOMIC CONTRIBUTION

With its population of 238 million people and considerable natural resources, Indonesia is on an inexorable journey to becoming a significant global economic force. However, with a per capita GDP that ranks 115th in the world and 12 per cent of its people living in poverty, this country still faces significant challenges.

Continuing rapid economic growth (6.2% in 2012) is creating conditions that will allow Indonesia to address some of its most pressing problems, in areas such as poverty, education, health and infrastructure.

Having operated successfully in Indonesia for the past two decades, we firmly believe that sustainable, responsible development contributes strongly to Indonesia’s response to its considerable challenges.

Sustainable businesses bring prosperity to local communities, improve education and skill levels and contribute to infrastructure development, while ensuring that environmental impacts are appropriately managed.

Riau province, the home of APRIL’s operations, exemplifies the importance of sustainable development in Indonesia.

In our business, operating industrial-scale plantations and a major pulp and paper manufacturing plant, sustainable development entails:

- adherence to regulations
- accountability through significant international scrutiny
- protection of conservation forest areas
- rapid replanting of areas harvested
- a no-burn policy combined with active fire control in forestry activities
- sophisticated water management
- science-based carbon management
- community infrastructure projects
- creation of economic alternatives for local people
- the creation of economic multipliers, and
- providing the capital and resources necessary to ensure best practice.

APRIL’s sustainable forestry and pulp and paper operations have made a significant contribution to the rapid economic growth achieved in Indonesia’s Riau Province.
Riau province plays a key role in Indonesia’s overall development strategy, accounting for 6.7% of Indonesia’s national GDP in 2010.

Over the five year period 2007-2012, Riau experienced rapid economic growth, with GDP increasing by almost 200%. This is due to both government and private sector activity and has resulted in better living standards for Riau’s people in recent years.

From 2007 to 2012, poverty decreased by 17%. Nevertheless, in 2012, more than 8%, or more than 480,000 of Riau’s people were still living in poverty, while the rapid growth of the local population – more than doubling to 5.5 million over the last 30 years, brings additional challenges in raising living standards.

In this context, companies like APRIL, which have a direct, positive economic impact on Riau, are helping improve many lives.

Importantly, our business strategy includes a long-term presence in Riau, so we expect the economic benefits of our activities to flow through to residents for decades to come.

It should be noted that APRIL receives no significant financial assistance from national or local government in Indonesia. We do not rely on subsidies or incentives. APRIL’s sustainable forestry and pulp and paper operations have made a significant contribution to the rapid economic growth achieved.

In 2012, we paid our employees in excess of $US72 million in wages, salaries and benefits. This is a considerable amount in Indonesian terms, but our contribution extends well beyond our employees.

In 2011, the Economic and Social Research Unit of the University of Indonesia completed an analysis of APRIL’s economic contribution. The conclusions of this study can be applied to the reporting period 2011-2012, since there were no changes related to our operations, or to Riau province, that would significantly alter the outcome of this study if it were concluded in 2012.

The study found that between 1999 and 2010, APRIL’s payments to employees, purchases from suppliers and contractors and investments in areas such as training, infrastructure and community benefits represented 6.1% of Riau’s gross regional domestic product (GRDP) and 5.4% of all household income in the province. The University of Indonesia study calculated that in 2009, APRIL created consequential employment opportunities for 90,000 people in Riau Province.

ECONOMIC MULTIPLIERS
The University of Indonesia study also measured the income and output multipliers of APRIL’s economic activity in Riau province. These indicate the extent to which our business activities within the province impacted on the local economy between 1999 and 2010.

The study found that for our forest plantations, the output multiplier was 1.50. Every additional dollar of timber sales from our Forestry business will increase the value of Riau’s output by 1.5 dollars.

The income multiplier for this business was measured as 1.36, meaning every additional dollar spent on employees increases household income in Riau by 1.36 dollars. The employment multiplier was 2.17 - for each additional person employed in our Forestry business, 2.17 employment opportunities were generated in Riau.

As our plantations are established and operated in accordance with Sustainable Forest Management principles, they are renewable resources. Therefore, the contributions our Forestry business makes to Riau will be ongoing.

The multipliers for our pulp and paper industries demonstrate the importance of our mill in adding value and scale within the Riau economy.

For APRIL’s pulp and paper businesses, the output multiplier was 2.29. So every additional dollar of pulp and paper sales increases the value of Riau’s output by 2.29 dollars.

The income multiplier was 2.36, so every additional dollar spent on employees increases household income in Riau by 2.36 dollars. The employment multiplier was 5.7 - each additional person employed in our pulp and paper operation generates 5.7 employment opportunities in Riau.

In terms of the economic development of Riau, we believe that value-adding operations such as our mill are important both as a means of retaining downstream economic benefits within the province and for the broad range of training and employment opportunities they bring to the Riau workforce.
2.2 PRODUCTS AND MARKETS

APRIL’s primary products are bleached hardwood kraft (BHK) pulp and paper products in cut size, folio and rolls. Our flagship paper brand is PaperOne™. Other mill brands produced and sold by APRIL include Perfect Print, Excellent Copy, Copy & Laser, Dunia Mas and Lazer IT.

The company has a global customer base and sells its products across Asia Pacific, the Middle East, North America, Europe and Africa. APRIL’s customers consist of trade customers who on-sell to end-customers or use APRIL’s products to produce finished products for on-sale.

To manage and maintain markets, customers, channels and relationships for its products APRIL has a dedicated Sales and Marketing function which is responsible for understanding customer needs and ensuring those needs are reflected in the specifications of APRIL’s products, design and development of product brands, development and verification of product claims and marketing of products to business-to-business trade customers who may on-sell products to end consumers.

Various certification schemes APRIL adheres to, for example those under the PEFC and ISO umbrellas, have product information and labeling requirements APRIL complies with*. The company maintains internal systems and procedures, both at the Kerinci mill and within its sales and marketing function, to ensure conformity with these requirements*.

APRIL also adheres to a number of voluntary codes relating to products and labeling information such as those of ISO 9001, ISO 9706, ISO 14001 and various forestry certifications, as part of its continuous improvement focus*. The packaging of PaperOne™ for example, references conformity to various codes.

APRIL’s internal programmes ensure that its sales and marketing activities and product claims meet legal and regulatory requirements and are fair and accurate. Regular website updates, customer information and sales kits, channel communications through trade events and partner meetings, emails and letters are means used to keep customers updated on product upgrades and packaging changes, together with brochures and flyers for consumers.

For key markets, APRIL’s Sales and Marketing function in combination with the company’s Legal office periodically reviews marketing communications material related to its products, including product claims made on packaging, to ensure it complies with the relevant laws, standards and codes of the markets where APRIL sells its products to customers*. A comprehensive review was undertaken in early 2012. Customers are then responsible for ensuring that any marketing by them of APRIL products is also compliant with the laws and standards that apply in their markets.

For paper products, APRIL’s packaging and labeling complies with the requirements of its home market and with the country-specific requirements of certain other markets (eg. Japan) for product sold there*. Pulp products are generally not subject to specific packaging and labeling requirements, other than as may be specified by particular customers*.

During the reporting period, there were no incidents of non-compliance with regulations and voluntary codes concerning product and service information and no actions were taken for non-compliance concerning the provision and use of products and services by regulators or other proper authorities.

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*To comply with these requirements, APRIL maintains internal systems and procedures, both at the Kerinci mill and within its sales and marketing function, and works closely with its customers to ensure conformity with these requirements.

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Figure 3: Market Distribution Pulp

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Figure 4: Market Distribution Paper

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<td>Other regions</td>
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2.3 SUSTAINABILITY APPROACH AND GOVERNANCE

SUSTAINABILITY APPROACH

APRIL’s vision is “to be one of the largest, best managed and sustainable fibre, pulp and paper companies in the world, the preferred supplier to our customers, and the employer of choice to our people.”

As this vision places sustainability at the core of our values and aspirations, we constantly reinforce our commitment to sustainable management and to best applying practice environmental and safety management across all our operations in Indonesia.

This commitment includes compliance with Indonesian laws and a clear, expressed understanding of our obligations based on the unique and complex context in which we operate. Indonesian regulatory requirements are extensive and highly influenced by developing international norms, although the application of some precepts applied in some western legal systems, for example the “precautionary principle,” are subject to adaptation to the Indonesian context.

Continuous improvement in sustainability by alignment with global best practice is part of APRIL’s commitment.

Through responsible resource management, good governance and stability and balancing of social, business environmental needs, we aim to create long-term business value.

APRIL’s approach to sustainability is guided and influenced by our involvement with leading industry associations and global organisations, which provide avenues to explore sustainable development, to share knowledge, experiences and best practices. We advocate business positions on sustainability issues in a variety of forums, working with governments, nongovernmental and intergovernmental organizations.

APRIL is a signatory to the United Nations (UN) Global Compact. The aim of this compact is to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. As such, we are guided by the Global Compact’s ten principles.

The company has been a member of the World Business Council for Sustainable Development (WBCSD) since 2007 and was the first Indonesian company to attain membership. Throughout the reporting period, APRIL was an active participant in WBCSD’s Forest Solutions Group. The company conforms to that Group’s Membership Principles and Responsibilities against which APRIL undertook structured self-assessments in 2012 and early 2013.

SUSTAINABILITY GOVERNANCE

APRIL’s Sustainability Management Systems are based on strong corporate governance, as outlined in section 1.2 (Corporate Governance).

APRIL’s environmental and related policies serve as cornerstones for the company’s sustainability governance and management.

Our Environmental, Health and Safety, Chain of Custody policy acknowledges that responsible management of environmental and occupational health and safety risks, as well as chain of custody management practices, make our business stronger.

The policy sets out APRIL’s commitments to full legal and regulatory compliance, best practice operations, environmental responsibility in resources and land use, waste management, caring for our employees, empowering our communities and maintaining effective chain of custody procedures.

The development and delivery of APRIL’s sustainability strategy and performance is driven by an External Affairs Council, in place since 2010, which meets (at minimum) on a quarterly basis. Ex officio members of this Council are APRIL Indonesia’s Supervisory Board Chairman, Chief Financial Officer and Deputy Business Head, President Director Indonesia and Sustainability Director. Business Heads and key members of the Sustainability executive team participate in meetings as required.

The Sustainability Director heads an integrated management structure for this key business function, which comprises representatives from both our Jakarta office and our operating business units located in Sumatra.

At operational level, APRIL’s sustainability management is divided between our forestry plantations and our Kerinci mill complex. Dedicated environment and health and safety departments are in place for both the mill and fibre segments. Documented environmental and health and safety procedures exist for both groups of operations. These procedures extend to social aspects including community development.
2.4 SUSTAINABILITY MANAGEMENT SYSTEM

The schematic opposite represents APRIL Indonesia’s Sustainability Management System. It shows how our systems, which are driven by our key governing bodies, are open, dynamic and responsive.

The principles that guide our governing bodies and the sustainability strategies and policies these bodies create reflect both internal values and external factors. These factors include recognizing triple bottom line concerns, direct stakeholder influence and the guidance of elements such as the United Nations Global Compact, ISO 26000 Social Responsibility Guidance and the Global Reporting Initiative.

Sustainability policy is enacted through our Sustainability Management System. Implementation is achieved through processes and procedures that cover planning and target setting, allocation of responsibilities, taking actions, assessing effectiveness and implementing corrections and improvements. Where necessary, auditing tools are applied to help build a culture of continuous improvement.

Through a cyclic process of reporting and communication, we inform and educate our stakeholders and guiding bodies about our work in developing and improving sustainable practices. Much of the information that forms the base of our communications with stakeholders is externally reviewed and assessed, thereby ensuring objectivity and transparency. This process is informed by the messages that stakeholders convey to APRIL.

APRIL maintains an Integrated Management System (IMS) that is certified to ISO9001, ISO14001, and OHSAS18001 standards. These voluntary, third party-certified processes cover our quality management, environmental and health and safety systems, respectively.

We undertake annual surveillance audits for ISO9001, ISO14001 and OHSAS18001, while internal audits for both the plantation and mill complex are based on an internal audit schedule. This is in addition to Chain of Custody audits that are completed for the wood supplied to the mill.

Reports as required under Indonesian law for environmental monitoring are submitted at six monthly intervals.

APRIL achieved ISO14001 certification for its forest operations in 2001, and for mill operations in 2003. We achieved OHSAS18001 for forest operations in 2005 and mill operations in 2006.
Current ISO 14001 Certifications:
- APRIL’s Riau Complex, Certificate no. ID08/1181 valid from 18 November 2008 to 14 November 2014, subject to satisfactory surveillance audits, Certified by SGS.
- Riaufibre (Certificate No. ID01/1179, valid from 14 November 2008 to 14 November 2014, subject to satisfactory surveillance audit), certified by SGS.

Current OHSAS 18001 Certifications:

The audit report for the latest surveillance audit for Riau Fibre, covering ISO 14001 and OHSAS 18001, was undertaken on 5 October 2012.

The audit report for the latest surveillance audit for Riau Complex, covering ISO 14001, OHSAS 18001 and ISO 9001 was undertaken on 28 September 2012.

In meeting these standards, important components are: (i) regular updating of legal and other requirements to ensure these are recognised and incorporated into operations, (ii) a requirement to prevent pollution, work incidents and work related illness and (iii) a requirement for continuous improvement.

APRIL has also adopted other best practice voluntary standards and guidelines including the United Nations Food and Agriculture Organization (FAO) Fire Management Guidelines.

**COMMUNICATIONS**

Transparent reporting and communication is key to building strong stakeholder relationships. It is also important in the evolution of our sustainability strategy.

Our Environmental, Health and Safety, Chain of Custody policy states our commitment to providing stakeholders with information that is understandable, adequately explains issues, and presents an accurate and verifiable representation of the Company’s integrated Environment, Health and Safety and Chain of Custody management systems and its performance in these areas. We are committed to ensuring this policy is communicated, understood by our employees and available to interested parties, including suppliers and customers.

**REPORTING**

APRIL has engaged in Sustainability Reporting since 2002, producing one report biennially, in addition to updates between reports. These are available to the public via our company website.

Our Sustainability Reporting format follows the Global Reporting Initiative (GRI) framework. This widely used framework sets out the principles, indicators and other disclosures that organizations can use to measure and report their economic, environmental, and social performance. In preparing this 2011-2012 Sustainability Report, APRIL followed version 3.1 of the GRI guidelines. A new set of guidelines (GRI 4) came into effect toward the end of the process of assembling this report. It was therefore not feasible to follow the new guidelines.

In general, the data reported in this Sustainability Report covers the calendar years 2011 and 2012 (the “reporting period”). In various cases where the company has previously reported information for the 2008-10 period, data sets have been extended to cover the five-year period 2008-2012. In a number of cases, updates of key pieces of information have been provided at 30 June, 2013.

Our public reporting addresses land areas which are directly linked to APRIL Indonesia value chains. It is not APRIL’s practice to disclose detailed data pertaining to its supply partners, who supply wood fibre to APRIL under long-term supply arrangements. Supply partners are independent companies with their own Boards of Directors and governance arrangements, subject to their own disclosure obligations.

A comprehensive index describing GRI disclosures, referenced to specific pages is set out in section 7.2 of this Report. Within the GRI 3.1 reporting framework, there are three application levels (A, B and C) against which companies can report. This report is aimed at B+ level. This requires that our report include disclosures from this framework we have defined as relevant to our stakeholders and our operations. The plus (+) symbol indicates that an external third party has verified this Report.

Our Sustainability Reports are third party reviewed. This 2011-2012 Sustainability Report has been by Ernst and Young, Singapore. The Assurance Statement appears in section 7.1 of this Report.

While other interim updates are provided via the company website at www.aprilasia.com, APRIL’s Sustainability Reports provide an integrated presentation and review of many areas of our operations.

It should also be noted that many other disclosures made in this Report have been subject to various forms of independent third party review. For example, over the reporting period, Bureau Veritas has extensively audited APRIL’s forest management practices for the purpose of Origins and Legality of Timber certification and a range of other auditors have reviewed operations for the purposes of additional certifications referenced in this section and in Section 4.10 of this Report. In addition, during the first half of 2013, High Conservation Value assessments for the Pulau Padang concession have been expert-reviewed and subject to further independent review (see section 4.8).
2.5 STAKEHOLDER ENGAGEMENT

Given the dynamic social, economic and political landscape in which we operate, active stakeholder engagement has always been a key part of APRIL’s business approach.

Consequently, APRIL has been reaching out to and working with a wide range of stakeholders to share information, gather feedback and to work together on important programmes that inform our approach to achieving outcomes that deliver both sustainability and development.

APRIL operates in a highly regulated industry that attracts interest and scrutiny from many different stakeholders. Our internal structure ensures multiple external touch points for the organisation including through our Sustainability team, our customer teams, our external affairs function, our community liaison teams, our R&D and scientific teams and our finance team.

These teams undertake regular and proactive contact with key stakeholders and gather information and perspectives on our business and operations. It is important that our engagement process provides us with a clear insight to the range of views about APRIL at any given time.

The collaborative initiatives that have come from our stakeholder engagement efforts have led to a number of practical solutions.

APRIL’s stakeholder engagement systems play an important role in improving our communications, obtaining support for our projects and understanding concerns about our practices.

STAKEHOLDER ENGAGEMENT APPROACH

APRIL has in place:

(i) A Stakeholder Engagement Strategy and Plan designed to guide engagement activities;

(ii) Communications protocols and procedures to support the Stakeholder Engagement Plan; and

(iii) Notification and grievance channels to enable stakeholders to communicate their perspectives, expectations and recommendations to APRIL’s decision makers.

APRIL’s stakeholders fall into three broad categories:

(i) Those that have an interest in or are directly affected by the economic, social and environmental impacts and/or benefits of APRIL.

(ii) Those whose views and perspectives on our business are influential in shaping perceptions of the company’s reputation and operating environment;

(iii) Third parties whose through collaboration, knowledge sharing, expertise or other inputs directly contribute to the balance APRIL achieves in effectively shaping its triple bottom line of people, planet and profit.

During 2011-2012, stakeholder engagement included extensive interaction with representatives of each of these groups.

Notable areas of interaction over 2011-2012 were with:

• Local communities in Riau Province and on the Kampar Peninsula in proximity to our concession and mill areas

• The scientific community including independent researchers from organisations such as IVL Swedish Environmental Research Institute and Hokkaido University

• Indonesian government-appointed Monitoring, Reporting and Verification (MRV) teams

In 2011-2012, APRIL further systemised its resources and mechanisms for the gathering of perspectives from a wide range of stakeholders relevant to our business and for transparent communication of APRIL’s practices and plans.

These efforts included:

• Community surveys, the results of which form an important input to our community engagement, land use management and community development activities.

• Stakeholder workshops to gain a detailed understanding of stakeholder concerns.

• Site visits to our operations by government officials, international interest groups, educational institutions and NGOs.

• Participation in international bodies and forums including the World Business Council for Sustainable Development, United Nations Conferences on Climate Change and active membership of forestry and pulp and paper industry bodies domestically in Indonesia and internationally.
Our stakeholder engagement processes indicate that the following areas are of significant ongoing interest to our key stakeholder groups:

- A desire to see APRIL conclude its plantation establishment program as soon as possible.
- The company’s systems for responsible management of its ongoing utilisation of mixed hardwood feedstock sourced from third parties for its mill operations.
- A desire to see APRIL improve relationships and engagement with prominent international NGO’s.
- A need to better explain APRIL’s community level engagement and dispute mitigation or resolution processes.
- Alignment and compliance with APRIL’s core conservation and sustainability commitments by all APRIL fibre supply partners.
- Impact of APRIL’s operations on carbon emissions, including from peatlands.

APRIL is working actively to increase stakeholder confidence in the company’s positions in each of these areas, via disclosures in this Sustainability Report, and through channels such as a new blog site: APRIL Dialog (www.aprildialog.com).

We encourage all stakeholders who have concerns to raise them with the company through the channels accessible via our company website: www.aprilasia.com

LOCAL COMMUNITIES – KEY TO OUR OPERATING ENVIRONMENT

In Indonesia, a stable and productive business environment can only be achieved through close engagement with local communities and diligent, patient work to share information and resolve disputes. We actively seek open dialogue with those who are interested in our business.

Prioritising local community engagement involves deployment of an extensive field force of community development officers who are in everyday contact with local communities. Our most senior executives meet periodically with local community leaders.

Community engagement is also conducted through formal surveys, village level public meetings and third party organised public forums and hearings to understand and address the expectations held by communities.

Typical community engagement includes:

- Public consultations to present and receive feedback on our land management and community development plans.
- Renegotiations of previously concluded arrangements for community livelihood plantations
- Local business forums with SMEs and family-run businesses

Achieving universal or even consensus positions around key issues is often difficult, time-consuming and resource-intensive and frequently involves reaching a compromise that factors in diverse views within and across communities while taking account of the company’s right to operate.

APRIL takes a consultative and dialogue based approach to community engagement. We frequently work with third parties to achieve dispute resolution and APRIL respects and adapts to the outworkings of those processes.

MERANTI ESTATE MRV

Our community engagement activities and delivery of commitments is frequently monitored by independent third parties. For example, at our forestry concession at the Meranti estate, a government Monitoring, Reporting and Verification (MRV) team has been monitoring and reporting on our activities, including community and environmental commitments, since 2009.

This Monitoring, Reporting and Verification process is described at section 4.9 of this Report.

PULAU PADANG

APRIL’s approach is exemplified by steps taken over the reporting period on the island of Pulau Padang. A detailed case study of processes used to resolve Pulau Padang community concerns is set out in section 4.8 of this Report.

There, during the reporting period, a minority of the community protested against licenses granted to APRIL by the Indonesian Government. The majority of local communities have continuously supported APRIL’s presence and the development opportunities the company brings, and have signed community development agreements with APRIL.

APRIL complied fully with a request by the Ministry of Forestry at the start of 2012 that we halt operations while an independent, multi-stakeholder panel comprising government officials, NGOs and scientists undertook a review of APRIL’s proposed land management uses, conservation commitments, plantation establishment plans and community development commitments.

After an exhaustive process, the independent panel’s input was adopted by APRIL including voluntary re-delineation of some concession boundaries, a reduction in plantable area, affirmation of the creation of conservation forest areas and confirmation of community development initiatives including livelihood farming, education spending and upgrading of healthcare facilities.
## 2.6 SUSTAINABILITY PRIORITIES

### Figure 6: APRIL SUSTAINABILITY PRIORITIES

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>The Challenge</th>
<th>APRIL’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health and Safety</strong></td>
<td>Create a safe work environment for employees and contractors by minimising health risks in industrial and remote forest locations. Twenty-two fatalities reported in these settings over 2011 and 2012.</td>
<td>Intense management-led effort to minimise workplace injuries and eliminate fatalities. Health-safety indicators strengthened in performance measurement process. Increased training for employees and contractors. Suppliers must attest to safety preparedness of their employees. Target is Zero Accidents and a Total Safety Culture by January 2014. See section 6.4</td>
</tr>
<tr>
<td><strong>Plantation Establishment</strong></td>
<td>Complete plantation development following year-long delay for intensive community discussions at last undeveloped concession on Pulau Padang.</td>
<td>Completion of establishment of plantations on current APRIL concessions is expected by end December 2014. Plantations comply with approved land-use management plans and reflect community dispute resolution outcomes. See section 4.2.</td>
</tr>
<tr>
<td><strong>Supply Partners</strong></td>
<td>Help supply partners improve sustainability performance ensuring that all new partnerships identify and protect High Conservation Value (HCV) forests.</td>
<td>All new suppliers required to undergo full HCV assessment. Working with long-term supply partners to take them through the process of HCV assessment. Completion of establishment of plantations by all long-term supply partners is expected by end December 2014. See section 3.9.</td>
</tr>
<tr>
<td><strong>Conservation Programs</strong></td>
<td>Protect areas of HCV. Establish a model for ecosystem restoration capable of managing ecologically significant, degraded peatland areas to renewed health.</td>
<td>Maintained commitment to protection of conservation areas identified through HCV assessments. Obtained license to manage 20,265-hectare block on Kampar Peninsula. Helped establish non-profit Riau Ekosistem Restorasi to oversee restoration work. Seeking additional eco-restoration licenses. See section 4.3 and 4.4.</td>
</tr>
<tr>
<td><strong>Peatland Management and MRV</strong></td>
<td>Minimise peatland carbon emissions, ensuring uniform application of water management practices.</td>
<td>Gained government approval for MRV processes applying to three newest peatland concessions. Participated in scientific research to further improve peatland management. See sections 4.6 and 4.9.</td>
</tr>
<tr>
<td><strong>Carbon Emissions</strong></td>
<td>Determine APRIL’s carbon footprint based on sound science.</td>
<td>Employed outside experts to assess total carbon emissions as a baseline for reduction of carbon footprint. Research indicated that emissions from APRIL plantations likely lower than if land were not under management. MRV teams evaluating peatland emission data. Further work underway to calculate comprehensive carbon footprint. See section 3.8.</td>
</tr>
<tr>
<td><strong>Land Tenure and Community Entitlements</strong></td>
<td>Improve the process of engaging and managing partnerships with communities and resolving disputes.</td>
<td>Followed dispute resolution process and reached agreement with community groups to settle Pulau Padang community disputes. See sections 2.5 and 4.8.</td>
</tr>
<tr>
<td><strong>Stakeholder Engagement and Partnerships</strong></td>
<td>Reach out to stakeholders to identify new opportunities to enhance community development.</td>
<td>Continue to implement community development programs in Riau Province aiming to enhance relationships with civil society groups. Worked with specialist experts in community liaison, e.g. BIDARA. See sections 2.5, 4.8 and 5.0.</td>
</tr>
<tr>
<td><strong>Compliance and Certification</strong></td>
<td>Develop standards, staff and management system controls to ensure compliance with all applicable certification requirements. Seek to expand certifications.</td>
<td>APRIL successfully passed audits for certifications under Bureau Veritas’ standards for Origins and Legality of Timber. APRIL re-certified under SPFM-LEI for the period 2011-2016 becoming the first industrial plantation company in Indonesia to certify under Sustainable Production Forest Management and Timber Legality Verification (PHPL/SVLK standards.). See section 4.10.</td>
</tr>
</tbody>
</table>

APRIL regularly reviews and updates a schedule of sustainable priorities that underpin sustainability action plans in each year of operation. Priorities reflect APRIL’s own initiatives and actions the company has determined to take to address issues and opportunities raised by key stakeholders.
3.0
KERINCI MILL
3.1 OVERVIEW

With a designed capacity of 2.8 million tonnes of pulp and 820,000 tonnes of paper per year, APRIL’s Kerinci pulp and paper mill is rated in the top five in the world for efficiency.

APRIL complies rigorously with all Indonesian environmental regulations and our mill meets the EU IPPC directives to cut emissions using best available techniques (BAT) for the pulp and paper industry. From the outset, this mill was engineered to be world class.

Our mill operation benefits Riau province and Indonesia in a number of ways. The mill adds considerable value to our plantation products and importantly, it does this in our local area of Riau province. This brings a range of benefits to the province, in areas such as positive economic impacts, skills training, opportunities for advancement.

At a national level, our pulp and paper mill helps reduce import reliance, with consequent reduced transport impacts and national economic benefits. It also brings competition to the domestic market.

Since our 2010 Sustainability Report and with our operations in Riau province well established, we have focused on optimising the performance of our mill. This has resulted in strong performance, a high level of efficiency and significant environmental benefits. These include reductions in materials and energy required to produce a given amount of product. With our mill running at designed capacity and no additional capacity planned, we continue to invest in better environmental initiatives.

For example, APRIL employs the Lean Manufacturing philosophy. This involves a constant drive for efficiency across all measures combined with a steady elimination of waste to ensure smooth running. Avoiding shutdowns and disruptions has been shown to achieve the best possible environmental outcomes in terms of energy requirements and emissions.
LOCATION

Operating a pulp and paper mill in Riau province Sumatra requires us to be self-sufficient and independent. This location brings a number of challenges in areas such as logistics, lack of power grid connection and absence of state-owned infrastructure. As a result, we operate with a high degree of vertical integration, from tree nursery and plantation to packaging and dispatch.

Our location also demands that we take special care of our employees. Accordingly, we have developed our own town site that is now home to more than 7000 people. Our town includes two schools (including an international school), a health clinic, sports facilities and a hotel. But as well as challenges, there are considerable benefits to operating in Riau province.

ABUNDANT WATER SUPPLY

While water availability is becoming an issue of concern to many pulp and paper manufacturers, our location provides access to a plentiful water supply, in a region where water is abundant, as the map below shows. The impact of our water sourcing on the flow rate of our main water source, the Kampar River, is well below BAT limits. (See Figure 24).

Figure 7: MAP SHOWING GLOBAL WATER AVAILABILITY (m³/person/year)
**STRONG POOL OF POTENTIAL EMPLOYEES**

Riau province also contains a large pool of potential employees who are keen to improve their lives through employment with our company. They take advantage of our training systems, scholarships and other opportunities, which delivers good outcomes for the company, for individual employees and for the community more broadly.

We are proud of the fact that we are helping people in this way, and bringing prosperity to central Sumatra.

**PROXIMITY TO MARKETS**

Being at the heart of the fast growing Asia region means we can supply our markets with far less transport distance than European or American pulp and paper manufacturers.

Our location contributes to the objective of reducing transport emissions.

**IMPACT ON SURROUNDING POPULATIONS**

The relative remoteness of our mill location limits the impact of our operations on major population centres. It is recognized that even the most efficient pulp and paper mills have an impact on surrounding populations in areas such as transport and odours. This requires the development of management systems to mitigate these effects.
BEST AVAILABLE TECHNIQUE (BAT)

To ensure ongoing high operating standards, we benchmark our pulp and paper mill against other leading mills, measuring our environmental performance against stringent European Union IPPC Best Available Techniques (BAT) recommended maximum and minimum levels. Where possible, we have included BAT recommended levels in our mill environmental performance data in this Report.

The following list shows BAT recommendations for bleached kraft pulp mill operations, with our mill meeting all recommendations.

The data provided is in accordance with GRI 3.1 environmental performance indicators. Disclosures include materials use, energy use, water, emissions and waste.

(BREF Pulp and Paper, 2001, p.iii)

1. Increased delignification before the bleach plant by extended or modified cooking and additional oxygen stages;

2. Highly efficient brown stock washing and closed cycle brown stock screening;

3. Elemental chlorine free (ECF) bleaching with low AOX;

4. Recycling of some, mainly alkaline process water from the bleach plant;

5. Effective spill monitoring, containment and recovery system;

6. Stripping and reuse of the condensates from the evaporation plant;

7. Sufficient capacity of the black liquor evaporation plant and the recovery boiler to cope with the additional liquor and dry solids load;

8. Collection and reuse of clean cooling waters;

9. Provision of sufficiently large buffer tanks for storage of spilled cooking and recovery liquors and dirty condensates to prevent sudden peaks of loading and occasional upsets in the external effluent treatment plant;

10. In addition to process-integrated measures, primary treatment and biological treatment is considered BAT for kraft pulp mills.

Figure 8: IPPC BAT RECOMMENDATION
3.2 ENVIRONMENTAL ACHIEVEMENTS 2011-2012

EFFICIENT USE OF ENERGY AND MATERIALS

Figure 9: TOTAL FUEL ENERGY CONSUMPTION

The graph in Figure 9 above shows total fuel energy consumption from 2008 to 2012. Since our 2010 Sustainability Report, improved efficiency and asset utilisation has resulted in better environmental performance.

This can be seen in the decrease in energy and materials required to produce one tonne of mill output (mj/adt).

This trend toward greater efficiency is evident in much of the data presented in this section of this Report.

Figure 10: ENERGY CONTRIBUTION BY FUEL SOURCE, 2011-2012

<table>
<thead>
<tr>
<th>Fuel Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Liquor</td>
<td>73.8%*</td>
</tr>
<tr>
<td>Bark</td>
<td>9.1%*</td>
</tr>
<tr>
<td>Sludge</td>
<td>0.1%*</td>
</tr>
<tr>
<td>Palm Husks</td>
<td>0.6%*</td>
</tr>
<tr>
<td>Methanol</td>
<td>0.3%*</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>6.5%*</td>
</tr>
<tr>
<td>Coal</td>
<td>7.3%*</td>
</tr>
<tr>
<td>Diesel</td>
<td>1.6%*</td>
</tr>
<tr>
<td>MFO</td>
<td>0.7%*</td>
</tr>
</tbody>
</table>
APRIL operates an ongoing program of investing in projects that improve our environmental performance. During the 2011-2012 reporting period, a number of these projects reached their full potential, delivering solid returns on our investment. Figure 10 opposite shows energy contribution by fuel source. Of our total energy consumed, 85 per cent* now comes from biofuel, with the largest component contributed by our recently built recovery boiler.

The commissioning of Recovery Boiler Number 5 to capture energy from black liquor, (a product of Kraft pulp making) greatly increased our use of biofuel for power generation.

As one of the world’s largest recovery boilers, this facility has allowed us to debottleneck our pulp production, thereby reducing our reliance on fossil fuels and cutting the indirect, transport related impacts of these fuels as well as reducing emissions from fossil fuels.

Recovery Boiler Number 5 now contributes a significant amount of our mill’s energy requirements. The energy it and two older recovery boilers generate is used to produce steam for power generation and for drying pulp and paper. The boiler also recovers chemicals for reuse in pulp making.

An additional 10 per cent* of our energy comes from biomass such as bark, sludge, palm husks and methanol.

**MORE FUEL CAPTURED FROM WASTE**

*Figure 11: METHANOL CAPTURED FROM EVAPORATORS*

The graph in Figure 11 above shows that our methanol capture project has reached designed capacity. APRIL can now capture significant volumes of methanol from weak black liquor through a process of evaporation and distillation. This valuable biofuel is reused in our lime kilns, replacing fossil fuel.

Since our last Sustainability Report, methanol production has been ramped up from 4,000 to 15,000 tonnes per year, further reducing dependence on fossil fuels, particularly marine fuel.
REDUCING WOOD FIBRE CONTENT THROUGH CAPTURE AND USE OF WASTE CO2

APRIL has entered into a joint venture partnership with the developer of technology related to the use of precipitated calcium carbonate (PCC) as a filler in paper.

PCC reduces the need for wood fibre, while allowing paper to retain desired characteristics such as stiffness and smoothness.

Our PCC plant combines calcium hydroxide with waste CO₂ that is captured from our lime kilns. As an integrated pulp mill, we use lime kilns to convert calcium carbonate to calcium oxide or “quicklime.” This process generates a significant amount of CO₂.

Rather than emit this gas as a waste, we capture a portion of it to produce calcium carbonate on site. The result is that around 40% of the calcium carbonate filler in our paper originates as waste CO₂.

Another successful project involves a reduction in the amount of bleached soft wood kraft (BSWK) we require. BSWK is used to add strength to paper during papermaking. However, the addition of a strengthening compound during paper making has decreased our consumption of BSWK by around 25,000 tonnes compared with 2009.

This BSWK is imported from Chile, so the reduction represents a meaningful decrease in indirect, transport related CO₂ emissions.

REDUCED MATERIAL IMPORTS

*Figure 12: IMPORTED BLEACHED SOFT WOOD KRAFT (BSWK) USAGE FOR PAPER*
MAXIMISING VALUABLE FIBRE RESOURCES

Figure 13: PIN CHIP PULP PRODUCTION

Our investment in a pin chip digester and chip classification screens continues to prove valuable in waste prevention and resource maximisation. Fine wood particles that were previously used for fuel are now captured by a fine chip classification system.

Instead of burning, this valuable wood fibre resource is then converted to pulp. The volume of pin chips recovered in the last two years equates to around 560,000 tons of pulplogs.

PROTECTING FOREST SOIL AND REDUCING TRANSPORT EMISSIONS

Our multi million dollar investment in mechanical harvesting and debarking, which included the hiring and training of new teams, has delivered a number of benefits. By leaving biomass on the forest floor, we reduce soil erosion.

As de-barked timber dries more quickly and weighs less, we significantly reduce fuel consumption and emissions associated with transporting this timber to our mill.
3.3 MATERIALS

Our overall materials consumption has been positively affected by factors such as increased operating efficiency and greater use of recycled materials. (Materials consumption data for pin chip pulp and BSWK appears in section 3.2).

**Figure 14: PULP AND PAPER MILL MATERIALS USED**

<table>
<thead>
<tr>
<th>Input Materials</th>
<th>Units</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water*</td>
<td>millions m³</td>
<td>128.42</td>
<td>131.16</td>
</tr>
<tr>
<td>Wood*</td>
<td>millions adt</td>
<td>10.19</td>
<td>10.55</td>
</tr>
<tr>
<td>Minerals, Pigments, Fillers and Starch*</td>
<td>millions tons</td>
<td>0.49</td>
<td>0.50</td>
</tr>
<tr>
<td>Fossil Fuels*</td>
<td>Peta Joules</td>
<td>11.57</td>
<td>16.67</td>
</tr>
<tr>
<td>External Biomass*</td>
<td>Peta Joules</td>
<td>0.02</td>
<td>0.94</td>
</tr>
<tr>
<td>Imported BSWK Pulp*</td>
<td>million adt</td>
<td>0.05</td>
<td>0.03</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output Materials</th>
<th>Units</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold Electricity</td>
<td>GW/hrs</td>
<td>82.94</td>
<td>82.94</td>
</tr>
<tr>
<td>Market Pulp</td>
<td>million adt</td>
<td>1.88</td>
<td>2.07</td>
</tr>
<tr>
<td>Paper Products</td>
<td>million adt</td>
<td>0.81</td>
<td>0.82</td>
</tr>
<tr>
<td>Reusable residues, black liquor, etc</td>
<td>million adt</td>
<td>6.11</td>
<td>5.63</td>
</tr>
<tr>
<td>Sold Water</td>
<td>million m³</td>
<td>5.11</td>
<td>5.39</td>
</tr>
<tr>
<td>Water Sold With Products</td>
<td>million m³</td>
<td>0.23</td>
<td>0.24</td>
</tr>
<tr>
<td>Water Evaporated</td>
<td>million m³</td>
<td>24.33</td>
<td>23.45</td>
</tr>
<tr>
<td>Treated Waste Water*</td>
<td>million m³</td>
<td>98.98</td>
<td>102.31</td>
</tr>
</tbody>
</table>
EFFICIENT CONVERSION OF WOOD TO PULP.

Figure 15: WOOD CONVERSION EFFICIENCY

Note: Wood conversion factor is based on pulp production only (paper excluded).

Our target for conversion of wood to pulp in 2013 is 3.75 adt (pulp) per adt (wood).

As mentioned above, our investment in mechanical debarking has resulted in a significant amount of biomass left on the forest floor, helping to protect the soil and prevent erosion.

The lower weight of dry wood reduces both transport costs and emissions. As an indication, a three per cent decrease in wood moisture equates to 300,000 tonnes less wood by weight per year.

REDUCING MATERIALS USE

Figure 16: MINERALS, PIGMENTS AND CHEMICALS

While overall consumption has increased in line with our mill operating at optimum capacity, the minerals, pigments and chemicals required per tonne of pulp (ADT) is significantly reduced compared with 2010. The greater efficiencies gained through optimum asset utilisation are evident in data throughout this section of this Report.
RECYCLED MATERIALS

REPLACING FOSSIL FUEL WITH BIOGENIC FUEL.

Figure 17: BLACK LIQUOR BIO-FUEL

Figure 18: BIO-FUELS USED FOR ENERGY

Biogenic fuel such as palm husks and effluent sludge reduce our reliance on fossil fuels and our fossil generated carbon releases. Transport distances related to biomass fuels are far lower than those associated with fossil fuels, so we are also achieving reductions in indirect energy use and emissions. (Biogenic carbon fuels are in some cases, considered carbon neutral).

The decrease in biomass energy source between 2011 and 2012 reflects the greater volume of biomass left on the forest floor as a result of our mechanical harvesting and debarking initiative. While bark previously added to our biogenic fuel volume, it also helps stabilise and protect soil when left at the site of harvesting.
3.4 ENERGY CONSUMPTION

**Figure 19: PRIMARY ENERGY [FUEL] CONSUMPTION**

![Graph showing energy consumption over years](image)

Figure 19 above shows that while total energy consumption increased as the mill approached designed capacity, energy in MJ/adt has dropped. This is due to smooth operations, full asset utilisation and related efficiencies.

**DIRECT ENERGY CONSUMED PER YEAR, AND COMPARED TO BAT**

**Figure 20: ELECTRICITY CONSUMPTION**

![Graph showing electricity consumption over years](image)

It can be seen here that our electricity consumption exceeds the upper limit of the BAT range. This chart reflects APRIL’s relatively high proportion of external pulp sales, (see Figure 21) compared to contemporary European mills. Pulp driers are reasonably large consumers of electricity.
Figure 21: ELECTRICITY CONSUMED BY MILL AREA

Figure 21 above shows total energy consumed by area during the reporting period, 2011–2012. As can be seen, pulp production consumes 56 per cent of our total electricity. Around two per cent of the power we generate is sold into the local grid.

Figure 22: HEAT ENERGY CONSUMED

Figure 22 above shows heat consumption per adt well within BAT range. Low-pressure steam is a by-product of electricity generation. We conserve the additional energy present in this steam by using it for drying pulp and paper. Following condensation, water is sent back to our power station where it is reheated into high-pressure steam and recycled through our system.
3.5 WATER

Figure 23: WATER SOURCE INFORMATION

<table>
<thead>
<tr>
<th>Name of water source</th>
<th>Do average annual withdrawals amount to more than 5% of average annual volume?</th>
<th>Recognised by authorities as a sensitive area?</th>
<th>Volume of water source (Million m3 per day)</th>
<th>Biodiversity value and protection status</th>
<th>Value/importance to local communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kampar River</td>
<td>No</td>
<td>Yes</td>
<td>18.9 million m3/day (Average volume flow ANDAL 1992 - 2006 at 219 m3/sec)*.</td>
<td>No special protection status but Kampar Peninsular is designated an IBA due to five threatened bird species</td>
<td>Medium. River used for transport, fisheries, hydro-electricity generation upstream from Mill. APRIL is the only pulp and paper mill on the Kampar River.</td>
</tr>
</tbody>
</table>

APRIL’s mill operations are located in an area where water is plentiful. The average annual rainfall in Riau Province is around 2.5 metres per year. Our mill water source, the Kampar River, has an annual average flow (1992 to 2006) of 219 cubic metres/second. This river is used for transportation and fisheries as well as supplying water to local communities. APRIL operates the only pulp and paper mill on the river. A hydro electricity plant is located upstream.

TOTAL WATER WITHDRAWALS

Figure 24: TOTAL ANNUAL WATER WITHDRAWALS FROM KAMPAR RIVER

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Sold</th>
<th>Paper</th>
<th>Power</th>
<th>Pulp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>103.1</td>
<td>68.5</td>
<td>24.1</td>
<td>5.7</td>
<td>5.4</td>
</tr>
<tr>
<td>2009</td>
<td>102.7</td>
<td>5.2</td>
<td>23.3</td>
<td>5.7</td>
<td>5.6</td>
</tr>
<tr>
<td>2010</td>
<td>106.2</td>
<td>5.2</td>
<td>23.4</td>
<td>5.6</td>
<td>6.1</td>
</tr>
<tr>
<td>2011</td>
<td>128.4</td>
<td>5.1</td>
<td>24.2</td>
<td>6.1</td>
<td>9.3</td>
</tr>
<tr>
<td>2012</td>
<td>131.2</td>
<td>5.4</td>
<td>24.5</td>
<td>5.6</td>
<td>9.5</td>
</tr>
</tbody>
</table>

In line with our mill reaching optimum capacity, our water consumption has increased since our last Sustainability Report. In 2012, total water withdrawals were 131.2 million m3. This equates to a water withdrawal rate of 4.15m3 per second, or 1.89% of the Kampar River measured mean flow of 219 m3/sec*. Some of this water undergoes pre-treatment including chlorination, clarification and filtration. We return around 78 per cent of withdrawn water to the river. [see Figure 27] The balance of water is either evaporated in cooling systems or embedded in the end product as moisture.
**MATERIALS USED - WATER**

*Figure 25: WATER CONSUMPTION FOR PULP AND PAPER*

Note: Water consumption rate is calculated after deducting water evaporated from cooling, as per BAT guidelines. Water flow is based on the assumption that cooling water and other clean water are discharged separately. (BREF, 2001, p.iii). Total water consumption has increased since 2010, but water efficiency has also improved. Water use (35.4 M3/ADT) is now at the lower end of the BAT range, which is indicative of a modern pulp and paper mill working at optimum capacity.

*Figure 26: WATER CONSUMPTION BY AREA*

Water is used in almost every part of the pulp and paper making process, both directly as a solvent, and indirectly in transporting materials (for example pulp slurry) through the mill, and in power generation.

Figure 26 above shows that pulp is the biggest consumer of water, accounting for 73 per cent, followed by power generation, then paper. A small amount is sold to locations such as our town site, our hotel, forestry research and development facilities and our nursery.
Figure 27: WASTE WATER DISCHARGED TO KAMPAR RIVER

WASTEWATER TREATMENT

Typically, mill effluent has high levels of biological oxygen demand (BOD), chemical oxygen demand (COD). As such, it requires treatment before discharge. Our mill has an on-site wastewater treatment facility, and treats around 280,000 m3 of effluent per day. Suspended solids are removed, and recovered for use in the recovery boiler. Additionally, leachate collected from landfill operations is directed towards the mill effluent treatment system.

The mill wastewater treatment process can be summarised as follows.

Primary Treatment: Screening, Primary clarifier, Equalization, Neutralisation, Cooling.

Secondary Treatment: Aeration, Secondary clarifier, Sludge handling, Decanter centrifuge.

Post treatment effluent monitoring is carried out every shift by mill technicians and twice a year by an approved third party testing company and reported to regulators.

In 2010 APRIL engaged a testing and monitoring company to design and carry out an environmental monitoring program. This program includes mill effluent quality, river water quality, river sediment, riverbank soils and biological monitoring. There are 34 proposed sites for sampling, with ongoing sampling to be undertaken on an annual basis.

This project is driven by APRIL’s internal sustainability agenda and is not the result of legal requirements. The first year’s results will act as a baseline and can be used to assess any future improvements or degradations in environmental quality.

TOTAL RECYCLING OF WATER

Our mill uses high levels of internal recycling. Some production stages, such as the paper machine forming section, involve very dilute processes, so high water efficiency is a priority. We currently re-use more than 90 per cent of our water. Around six to seven per cent of water consumption is contained within the end product, with pulp containing around 10 per cent water and paper around four to five per cent.

Some stakeholders are becoming interested in our overall water footprint. There are a number of emerging methodologies for determining water footprint. APRIL is in the process of deciding which of these methodologies to employ.
3.6 EMISSIONS

EMISSIONS TO AIR

An integrated pulp and paper mill has a number of associated air emissions, arising mostly from operational processes and to a lesser extent from vehicle transport. Key point sources of air emissions at our mill include recovery boilers, power boilers, fibre lines, bleaching plant and lime kilns.

Recovery and power boilers are used to generate steam. These power seven steam turbines, generating 535MW of electricity. The recovery boiler, power boilers and lime kiln stacks are fitted with emissions abatement equipment in the form of electrostatic precipitators, to reduce the particulate loading of air emissions.

We have also installed continuous emissions monitoring (CEM) equipment at key emission sources. This provides a continuous set of data for our control rooms to review, while supplementing third party monitoring for regulatory reporting. Emissions-to-air monitoring is carried out twice yearly by an approved third party testing company. The results are reported to regulators.

APRIL makes ongoing efforts to reduce emissions from the mill. These efforts include fitting of additional plant and equipment to recover by-products for use as fuel. The methanol recovery project mentioned in section 3.2 is an example.

APRIL’s pulp and paper mill conforms to the following EU Best Available Techniques for reducing emissions to air:

1. Collection and incineration of concentrated malodorous gases and control of the resulting Sulphur Dioxide (SO2) emissions. The strong gases can be burnt in the recovery boiler, in the lime kiln or a separate, low Nitrogen Oxides (NOx) furnace. The flue gases of the latter have a high concentration of SO2 that is recovered in a scrubber.

2. Diluted malodorous gases from various sources are also collected and incinerated and the resulting SO2 controlled.

3. Total Reduced Sulphides (TRS) emissions of the recovery boiler are mitigated by efficient combustion control and CO measurement;

4. TRS emissions of the lime kiln are mitigated by controlling the excess oxygen, by using low-Sulphur fuel, and by controlling the residual soluble sodium in the lime mud fed to the kiln.

5. The SO2 emissions from the recovery boilers are controlled by firing high dry solids concentration black liquor in the recovery boiler and/or by using a flue gas scrubber.

6. BAT is furthering the control of NOx emissions from the recovery boiler (i.e. ensuring proper mixing and division of air in the boiler), lime kiln and from auxiliary boilers by controlling the firing conditions, and for new or altered installations also by appropriate design.

7. SO2 emissions from auxiliary boilers are reduced by using bark, gas, low Sulphur oil and coal or controlling Sulphur emissions with a scrubber.

8. Flue gases from recovery boilers, auxiliary boilers (in which other biofuels and/or fossil fuels are incinerated) and lime kiln are cleaned with efficient electrostatic precipitators to mitigate dust emissions.

DUST

Figure 28: TOTAL PARTICULATE AIR EMISSIONS

Note: [BREF, BAT, 2001, p.iv] includes dust emissions from 3 lime kilns, 4 recovery boilers and 3 power boilers.
Figure 28 opposite shows dust emitted in tonnes and total suspended particles per dry weight tonne (TSP/DWT). This data is collected every three months by a third party and represents a snapshot of dust emissions. It is not derived from continuous monitoring.

Although they exceed BAT, these levels are within Indonesian national limits. The Indonesian limits for power and recovery boilers and for lime kilns are 230 mg/Nm$^3$ and 350 mg/Nm$^3$ respectively.

In 2012, total dust emissions and TSP/DWT decreased.

A modern electrostatic precipitator system was installed during the construction of Recovery Boiler Number 5. We are currently working on several initiatives that will allow further reductions of dust emissions.

**SULPHUR OXIDES - WITHIN BAT**

*Figure 29: SO$_x$ TREATED AIR EMISSIONS*

Note: Recalculation of historical ratios based on total mill output have varied ratios reported above for 2008 and 2009.

SO$_x$ reported as Sulphur: See note: (BREF, BAT, 2001, p.iv) includes emissions from 3 lime kilns, 4 recovery boilers and 3 power boilers.

Sulphur oxide (SO$_x$) emissions (kg/ADT) are within BAT limits. These have been reduced since the commissioning of Recovery Boiler Number 5 and burning of black liquor for fuel. This process has decreased our consumption of higher sulphur fuels such as coal and marine fuel oil. When we burn coal, it is mixed with limestone to precipitate out sulphur as calcium sulphate. This prevents sulphur being emitted as a gas.
NITROGEN OXIDES

*Figure 30: NOx TREATED AIR EMISSIONS*

Note: Recalculation of historical ratios based on total mill output and re-analysis of data have resulted in increased ratios for 2008-10. Increased NOx emissions have resulted from greater amounts of energy being derived from biomass.

MALODOROUS GAS - BELOW BAT LOWER LEVEL

*Figure 31: TRS TREATED AIR EMISSIONS*

Note: Recalculation of historical ratios based on total mill output and re-analysis of data have resulted in increased ratios for 2010. TRS reported as Sulphur (mill data H2S). Includes emissions from FL1, 3 lime kilns and 4 recovery boilers. Figure 31 above shows that total reduced sulphur (malodorous gas) levels are well below BAT recommended range.
EMISSIONS TO WATER

Figure 32: WATER DISCHARGE - TOTAL SUSPENDED SOLIDS (TSS)

Total suspended solid discharge per ADT of pulp has increased as production has increased, but remains just outside the upper limit of BAT range.

Volume of total suspended solids discharged per ADT was slightly lower in 2012, due to operating efficiencies. As can be seen, TSS volumes remain well within our Indonesian permit level.

Figure 33: WATER DISCHARGE - CHEMICAL OXYGEN DEMAND (COD)

Note: Treated wastewater, bleached Kraft mills [BREF, BAT, 2001, p.iii]. Chemical oxygen demand is below the lower end of BAT range, comparing favourably with European mills. COD decreased lightly lower in 2012 and is well within our Indonesian permitted level.
Note: Recalculation of historical ratios based on total mill output and re-analysis of data have resulted in increased ratios for 2010. Treated waste water bleached Kraft mills. (BREF, BAT, 2001, p.iii)

Biological oxygen demand of wastewater has remained at the lower end of the BAT recommended range since 2008. BOD of wastewater (tons/tonnes) increased to 1,995 tones in 2012 but remains well within Indonesian permitted levels.

Note: Adsorbable organic halide levels per ADT remained at the lower end of the BAT recommended range in 2011 and 2012.
Figure 36: WATER DISCHARGE - TOTAL NITROGEN

Note: Treated wastewater, bleached Kraft mills (BREF, BAT, 2001, p.iii).

Figure 37: WATER DISCHARGE - TOTAL PHOSPHOROUS
Pulp and paper production generate significant waste streams. APRIL is committed to reducing, reusing and recycling these streams. APRIL currently operates a 1.4 hectare landfill site within our mill complex. This site incorporates modern leachate systems and is run according to best practice. Within the mill precinct, we face similar environmental challenges to other leading pulp and paper manufacturers around the world. Disposing of solid waste is an ongoing issue for our industry, whenever a high percentage of fuel used is biofuel.

Boiler ash is a significant component of our total solid waste volume. Solid waste output reflects increased production, although the impact of the commissioning of Recovery Boiler number 5 can be seen in the increase of boiler ash per ADT since 2010. In line with our industry counterparts around the world, we continue to work on alternative solutions to this problem.

The absence of sludge in landfill since 2009 is due to our biomass energy recovery initiative. We continue to develop alternative uses for our waste streams with the ultimate aim of having no waste sent to landfill.

Our mill landfill is for the disposal of non-hazardous wastes only. We have prohibited disposal of oil, fuel, lubricants, chemicals, COD analysis bottles or vials, dyes or colorants, bark and wood waste, screened rejects, used chemical bags, chemical and oil containers, tyres, paints or thinners, toner and toner cartridges, scrap metal, metal chips, etc., wooden pallets, pulp machine felts, scrap computers and instruments and laboratory waste.

The mill site also includes an original landfill that was started in the mill development phase. Subsequently, remediation of this older landfill commenced in 2004. Remediation did not remove the material, but concentrated on leachate recovery and venting of methane. Remediation of this facility was undertaken with approval from the Indonesian authorities. A network of groundwater monitoring wells has been established around the remediated landfill and these are monitored on a quarterly basis with results reported to the regulator. Monitoring of this site continues.

A dedicated store for hazardous wastes (B3) is also located at the mill site. We have strict environmental procedures for operations and control of this facility and for appropriate disposal of hazardous waste.

The data reported in Figure 38 above is based on a comprehensive review of historical waste management data undertaken in late 2012.
Figure 39 above shows the relative proportions of solid waste generated over 2011 and 2012. While Recovery Boiler number 5 has delivered significant environmental benefits in allowing fossil fuels to be replaced by biofuel, it has also increased the amount of solid waste we produce, thus increasing our demand on landfill capacity.

It can be seen that boiler ash now represents just over half of all solid waste from our mill.

As we have continued to look for better solutions in solid waste management, we have examined the feasibility of using this material in road making and brick production. Other possible uses being explored in our industry include construction and concrete manufacture. We are working to find an alternative to landfill that is acceptable to our stakeholders, meets Indonesia’s regulatory requirements and constitutes a global best practice solution. The zero value for sludge is a result of this waste stream being redirected as part of our energy recovery program.

Our ongoing efforts to find a solution to the landfill issue led to a situation in late 2011 that resulted in APRIL having its valued green rating with Indonesia’s Program for Pollution Control, Evaluation, and Rating (PROPER) downgraded*. A green rating indicates that mill emissions are around 50% below permissible discharge limits.

When a boiler ash recycling initiative did not meet our expectations, we were compelled to dispose of the resultant solid waste in an emergency landfill site. That landfill area was not compliant with Ministry of Environment requirements. This led to our PROPER rating being downgraded from green to red*.

We immediately began remediation of the site and consequently, we have been upgraded to a blue rating*. We hope to regain our PROPER green rating in due course.

Throughout this episode, we benefitted from constructive engagement with the Ministry of Environment, which again demonstrated to us that Indonesia’s authorities have both the regulatory means and the will to engage meaningfully on such matters, and that the Government’s system of annual compliance checks is effective.

On occasions when APRIL recognizes it has operated outside a regulation, immediate steps are taken to address the position. We are continuously working to further reduce our mill’s environmental impacts through modifications to plant and processes.
APRIL is focused on achieving a sound scientific basis for ongoing carbon monitoring and reporting. We are committed to tracking and reporting on carbon dioxide (CO2) emissions. We are making progress in our efforts to manage the reduction of green house gas (GHG) emissions.

Our focus on determining carbon emissions includes monitoring of our mill operations and of carbon emissions from our concessions including those located on peatland.

APRIL’s overall goals in regard to carbon emissions are to:

- Establish a carbon emissions total from our current operations and activities combined, including all the land we are responsible for
- Establish a verifiable baseline range of carbon emissions from the concessions awarded to APRIL at the point at which APRIL took them over (“Take Over Point”)
- Determine our carbon footprint, i.e. the difference between our current total emissions and our baseline emissions before we took over those land areas
- Measure the effectiveness of current initiatives to minimise carbon emissions from the mill and forest lands
- Formulate plans and initiatives with a strong scientific basis to reduce carbon emissions in the future

Understanding peatlands and carbon is complex and the science is still evolving. Measurement technologies are at a point where measurement of carbon emissions from peat can only deliver a plus or minus range, often with many variables. These variables include peat composition, condition and history; vegetation condition including canopy closure (exposure of peat surface to sunlight tends to raise emissions), weather including rainfall, humidity and air temperature, and ground water levels and flow rates.

APRIL has embarked on a comprehensive and long-range programme including work with a number of third-party experts to build knowledge about carbon emission factors to reduce the company’s overall carbon footprint.
TAKING ACTION TO REDUCE CARBON FOOTPRINT

While research is ongoing, APRIL has designed and implemented a suite of initiatives in the management of its operations that, based on best currently available science, have the greatest potential to minimise carbon emissions from our operations.

It is APRIL’s firm view that carbon management strategies must be based on best available science, not hypotheses or vested-interest driven policy derived from limited data.

Most fossil fuel emissions in the production of pulp and paper occur at the mill manufacturing stage; smaller emissions arise from transport of raw materials to the mill and of pulp and paper products to the mill gate for export via our own port. Some fossil emissions also occur in the fiber supply chain, from nurseries to plantation management to harvesting.

APRIL complies fully with Indonesian legal requirements throughout the production process, from operating concession lands and sourcing fiber to manufacturing, disposal of mill wastes and export of product.

We have implemented a number of programs that have reduced the Kerinci mill’s reliance on fossil fuel. In particular, the increased use of biomass for energy generation means that only 7.4 per cent of the energy consumed by our mill now comes from coal. (See section 3.2 of this Report). This represents a significant reduction in coal consumption.

In the past the use of coal in our mill has been a major contributor to our fossil CO₂ emissions per metric tonne of pulp and per metric tonne of paper, but a significant reduction in the use of coal has been achieved.

Other initiatives that have led to reduced GHG emissions include: methanol capture and re-use; capture and use of waste CO₂ from lime kilns in our precipitated calcium carbonate plant and; reduced import and use of bleached softwood kraft. (See section 3.2 of this Report).

In the operation of plantation concessions on peatlands we comply fully with Indonesian legal and regulatory requirements and have played a lead role in having improved practices of peatland management recognized and adopted. Within Indonesia, we have been instrumental in creating awareness and solutions with respect to the need to protect critical headwaters of peat landscapes.

We have also implemented for several years measures designed to minimise carbon emissions from those of our concessions located on peatland. These initiatives include:

- Protection of critical headwater peat areas to maintain the integrity and hydro function of peat domes
- Water management practices that ensure water levels compared to At Take Over levels in conservation areas are maintained or improved over the long term
- Plantations configured as a ring around conservation and natural forest areas to discourage encroachment, illegal logging, unmanaged drainage and entering of the core
- Maintenance of tree canopied buffer zones between our plantation and areas of conservation natural forest
- Applying best practice water management throughout peatlands, and for plantations working to maintain highest practical water tables and to avoid unnecessary discharge of water
- Periodic review and adjustment of plantation rotation cycles to maximise the time plantations have a closed canopy protecting the peat
CARBON FOOTPRINT STUDY

APRIL commissioned IVL Swedish Environmental Research Institute to undertake a carbon footprint study of our operations in Riau, Indonesia. The initial work for the study was carried out during the second half of 2009 and this was updated with new emission factors during 2011 and finalised in January 2012.

IVL is an independent, non-profit research institute, owned by a foundation jointly established by the Swedish Government and Swedish industry. This institute has been operating since 1966 and has extensive experience across the entire environmental field.

The IVL study included a full product life cycle analysis (LCA) for the period 2006 – 2009. This analysis covered plantations and forestry, production of other raw materials, pulp and paper production, transport and waste management. Our pulp and paper was assumed sold into markets in Europe, China, Japan and Korea. The methodology employed for the study was the Framework for Development of Carbon Footprint by the Confederation of European Paper Industries, (CEPI).

The resulting carbon footprint included greenhouse gas (GHG) emissions from fossil fuels, calculated as carbon dioxide equivalents (CO₂e), and net removal of biogenic CO₂ from the atmosphere (sequestration). To give a carbon footprint, current net emissions from managed land were compared to those before APRIL took over the concessions.

The fossil fuel part of the Carbon Footprint study for pulp and paper published in 2012 showed that fossil GHG emissions associated with APRIL pulp and paper production and transportation to the customer gate were 850 kg CO₂e/tonne pulp [see Figure 40 opposite] and 1070 kg CO₂e/tonne fine paper.

Figure 41 above is expanded from Figure 40. The fossil GHG emissions are divided by IVL into various production stages from “cradle to customer gate”.

GHG emissions are in units of Global Warming Potential (over 100 years): CO₂e of net emissions per metric tonne of market pulp and per metric tonne of fine paper, including distribution to Europe and end of product life in Europe.

IVL similarly derived estimates of biogenic (forest biomass and soil) net CO₂e emissions to the atmosphere per tonne of product, from comparing the situation before APRIL took over management of the concession lands, with APRIL’s current land management practices.

IVL found that net emissions for the period 2006-09 have in fact been negative. This reflects increases in forest biomass stocks resulting from APRIL management. Productive plantations and protected conservation areas have replaced what was degraded natural forest at the time APRIL first took over the land. This “At Take Over” situation is also referred to by IVL as a reference scenario – to give a comparison of net biogenic emissions today “with APRIL” with the emission level expected “without APRIL”, today.
It was concluded that the impact of APRIL management in reducing the overall rates of carbon losses from APRIL forest lands has very likely, though not absolutely certainly, been a significant one.

Another key finding was that, despite this emission reduction compared to Take-Over, APRIL forest lands currently do act as a net source for CO₂, emitting to the atmosphere in the range of five to nine million tonnes CO₂e/year. IVL found it most likely that the size of present day (calculated over 2006-09) emission reduction was between three and ten million tonnes of CO₂e/year.

For the plantation areas, the emissions of CO₂ decreased following APRIL take-over of this land.

IVL have concluded that while unregulated degradation of remaining unoccupied state forests in Indonesia remains widespread, APRIL’s operations on peatland result in a comparative reduction in carbon emissions.

Figure 42: FORECAST CO₂e EMISSIONS FROM APRIL PLANTATIONS VERSUS UNMANAGED LAND.

The method used to generate these scenarios was based on the Intergovernmental Panel on Climate Change (IPCC) “Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, guidance for land use, land-use change and forestry, default method”.

The forest and plantation carbon analysis undertaken was based on annual carbon stock changes of all forest areas under APRIL forest management control. The plantation component of carbon footprint, expressed as tonnes of biogenic CO₂ per tonne of pulp, was determined by relating the total estimated annual forest carbon stock change to the annual production of pulp and paper.

The “At Take Over” scenario that served as a baseline for the comparison in carbon stock change between land under APRIL management and unmanaged land was based on calculations that reflected expert assessment of the status of unmanaged land.

It is important to note that when APRIL took over the concessions, the existing forests were not in pristine condition. They were affected by previous logging activity by other parties, particularly illegal loggers. Drainage canals, wildfire and agricultural encroachment had also impacted on these areas.

A clear finding of the IVL study was that the estimated CO₂ emissions from forest land under APRIL management would likely be substantially higher or at least the same in the absence of APRIL management. A number of variables have created uncertainty over the magnitude of lowering and whether emissions are somewhat lower or substantially lower now, compared to before APRIL.

It was concluded that the impact of APRIL management in reducing the overall rates of carbon losses from APRIL forest lands has very likely, though not absolutely certainly, been a significant one.

Another key finding was that, despite this emission reduction compared to Take-Over, APRIL forest lands currently do act as a net source for CO₂, emitting to the atmosphere in the range of five to nine million tonnes CO₂e/year. IVL found it most likely that the size of present day (calculated over 2006-09) emission reduction was between three and ten million tonnes of CO₂e/year. For the plantation areas, the emissions of CO₂ decreased following APRIL take-over of this land.

It was also concluded that the process of conversion of degraded natural forest to plantations has resulted in considerable emissions of CO₂ at time of conversion. IVL included these emissions in accounting for the net effect of APRIL land management on atmospheric emissions.

Figure 42 above shows future accumulated CO₂ emissions from APRIL-managed forestland with emissions from unmanaged forestland. This data was derived from an extrapolation over time for identical forestland areas, with and in the absence of APRIL forest management. It can be seen that a considerable variation range has been included in extrapolated CO₂ emission volume.

IVL have concluded that while unregulated degradation of remaining unoccupied state forests in Indonesia remains widespread, APRIL’s operations on peatland result in a comparative reduction in carbon emissions.
3.9 FIBRE SOURCING

APRIL’s objective is to establish an entirely plantation-based source of renewable plantation grown wood to supply the essential raw material needed to sustain our business and the livelihoods of those who depend on it. Developing the network of plantation estates to underpin the business has been an intensive undertaking since the inception of our company 19 years ago.

Acacia plantations in Indonesia take approximately 5-6 years from planting to reach maturity. As plantation-based fibre supplies sufficient to meet the requirements of the Kerinci mill are not yet fully mature, the mill sources a combination of plantation-derived fibre and mixed hardwood.

In the 2012 calendar year, 65 per cent of the timber consumed by the Kerinci mill was plantation wood (Acacia and Eucalyptus) and 35 per cent was mixed hardwood*. All wood was from legal sources.

Since mid-2012, all paper produced at Kerinci has been based on plantation sourced fibre.

Wood is supplied from APRIL’s own plantations, long term supply partners and community plantations (community fibre farms). As at 31 December 2012 community fibre farms occupied a combined gross area of 28,384 hectares, with the plantable areas within them totaling 19,640 hectares.

APRIL also maintains contractual supply arrangements with a range of limited-term suppliers who are subject to the requirements of APRIL’s responsible procurement policies.

For both supply partners and community fibre farms, APRIL provides advisory support and specific services to encourage good agricultural management and sustainable practices. For example, we provide partners with high-yield seedlings from our network of three central nurseries supplemented by satellite nurseries that together have the capacity to produce over 150 million plants per year. In 2012, APRIL enabled the planting of more than 130 million trees.

The company assists its long-term supply partners to develop and manage the land areas for which they are responsible to enable them to develop sustainable sources of renewable plantation fibre. Promoting the adoption of advanced forestry practices by supply partners whose operations will help sustain our business for the long term is a key element of APRIL’s business strategy.

We work with all long-term supply partners, over time, to encourage them to adhere to APRIL practices and to help improve their on-the-ground management capacity.

Long-term supply partners are encouraged to adopt standards similar to APRIL’s in land use planning, identification and protection of high conservation value (HCV) forest and community engagement. In particular we are working with these partners to take them through the process of HCV assessment.

APRIL maintains intensive dialogue with supply partners and discusses any supplier issues raised by external stakeholders with the supplier concerned, provides feedback and viewpoints and encourages actions by supply partners to address any problems identified.

WOOD PURCHASE POLICY

APRIL’s approach to the procurement and sourcing of wood fibre as feedstock for the Kerinci Mill is a responsible one.

Key elements of APRIL’s Wood Purchase Policy governing the sourcing of fibre include:

- Taking necessary measures to ensure that wood is properly checked and verified as being of legitimate source and origin before deliveries from any new supply source commence.

- Insisting that all suppliers and contractors comply with all licensing requirements and relevant rules and regulations related to cutting, transport or delivery of wood raw materials to the mill.

- Immediately warning any suppliers identified as violating relevant legal requirements and/or the provisions of APRIL’s Wood Purchase Policy.

- Ceasing purchasing from suppliers who disregard applicable licensing and regulatory requirements.

- Ensuring that all our employees responsible for the procurement, purchase, and acceptance of wood delivered to or used as raw materials for the pulp and paper mill are properly informed and trained to enforce the provisions of APRIL’s Wood Purchase Policy.

- Taking disciplinary action, including potential termination, against any staff found violating the Wood Purchase Policy.
APRIL has a clear position against illegal timber use. Our policies dictate that only legal wood can be purchased for use in our mill. To maintain the integrity of our wood supply procedures, we have implemented a third party-audited Chain of Custody system to ensure the legality of the timber we use.

Wood tracking is used to prevent illegal wood entering the mill, with third party audits undertaken to verify i) the legal right to harvest the wood and ii) the origin of the wood supply. Chain of Custody (CoC) procedures and systems are in place such that sourcing is consistent with our policy of legal wood supply and with the requirements of the Programme for the Endorsement of Forest Certification (PEFC) standards.

Suppliers are required to demonstrate that they have all necessary permits including valid cutting permits, transport permits etc. APRIL has a zero tolerance approach to illegally harvested wood being supplied to our mill.

A plantation wood CoC System is used to track the origin of products sold by APRIL. This system ensures that plantation wood is strictly segregated from mixed hardwood, from the supply source through to production.

The plantation CoC System is regularly audited by PEFC and independent, third party auditors to confirm that the system is effectively implemented, thus assuring customers of the effective segregation of plantation wood from mixed hardwood in the entire production process.

The range of national and international certifications held by APRIL that provide end-to-end assurance are described in section 4.10 of this Report.

We assist our partners to develop and manage the land areas for which they are responsible to enable them to develop sustainable sources of renewable plantation fibre to underpin the future of our pulp and paper manufacturing operations.

### PRODUCTION INFORMATION MANAGEMENT SYSTEM

APRIL has designed and implemented a system known as the Production Information Management System (PIMS) for tracing wood from APRIL's forest management units (FMUs) to the mill-site.

PIMS maintains records necessary for internal and external auditors to verify compliance to legal requirements.

PIMS is based on a Geographic Information System (GIS), linked to databases that include information on plantation stock, inventories, operational status, orders and costs.

The company also maintains a database of all licences and permits required to harvest and transport wood. Our system and processes aim to ensure that our entire supply meets legal requirements as well as APRIL's wood sourcing criteria.

The aim of these systems is to ensure that wood is legally harvested and that harvesting does not violate traditional and civil rights, take place in forests where high conservation values could be threatened by management activities, or occur in forests in which genetically modified trees are planted.

Any such sources identified are excluded from APRIL’s supply chain.
4.0 PLANTATIONS
4.1 OVERVIEW

GROWING GLOBAL DEMAND FOR PLANTATION FIBRE

The United Nations has estimated that the world’s population will be at least 9 billion people by 2050. The World Business Council for Sustainable Development (WBCSD) has estimated that the total yield and harvest from planted forests will need to increase threefold, with the area under fibre plantations needing to grow by 60% versus 2011 to meet expected demand for fibre in 2050.

Plantation establishment undertaken now will ensure a sustainable and renewable source of fibre to meet future global demand.

Due to the faster growth cycle of acacia species in tropical climates, the volume of wood that can be harvested per hectare is very high compared to northern latitudes. In Indonesia, acacia rotation times are five to six years, a considerably shorter time than for northern latitude plantation species.

Various countries around the world, including Indonesia, are legitimately capitalising on these trends as part of their economic development agenda.

FORESTRY - A KEY DRIVER OF INDONESIA’S DEVELOPMENT

Indonesia has emerged from decades of sporadic growth to become a positive economic story in recent years. With 238 million people, more than half of whom are under 40 years-old, growth and opportunity must continue to deliver a viable future for Indonesians.

Poverty however remains endemic, particularly in rural areas. Despite a strong improvement in the number of people rising out of poverty, almost 30 million people still live below the poverty line in Indonesia.

Production forestry is important to the livelihoods of more than 20 million Indonesians and is estimated to generate 1.8 million jobs. In Riau Province, where APRIL has its primary operations, forestry contributed 16.9% of the Province’s GDP in 2012.

BALANCING DEVELOPMENT WITH ENVIRONMENTAL PROTECTION

In September 2011, Susilo Bambang Yudhoyono, Indonesia’s President stated: “Sustainable development is part of our efforts to boost Indonesia’s economy so that it will become the 12th largest economy by 2024... We therefore need to go into partnership with all stakeholders to sustainably manage our forest resources.”

Unsanctioned human encroachment and illegal logging in forest areas has, over recent decades, led to a reduction in the areas of undisturbed forest remaining in Indonesia, although deforestation of pristine forest areas has slowed considerably in the past five to ten years.

In addition, the Government has made international commitments to ensure development is undertaken responsibly, particularly in relation to climate change, carbon emissions and environmental sustainability.
INDONESIAN PULP & PAPER INDUSTRY CONTEXT

Indonesia has 131 million hectares designated by the government as forest areas.

Of that, 78 million hectares has been zoned for production forestry. Land earmarked for pulp and paper activity accounts for approximately 10.5 million hectares of production forest areas, or 8% of total forest areas in Indonesia.

Of that 10.5 million hectares, approximately half (5.25 million hectares) has been licensed to pulp and paper commercial interests through formal concession licenses, representing 4% of total forest areas.

The government requires that the maximum area of any pulp and paper concession that can be used for plantations is +/-70% (APRIL and supply partners only use 51% of their concession areas for plantations).

That means the total area currently licensed and identified for plantation establishment accounts for approximately 2.8% of total forest areas in Indonesia. APRIL’s own concessions account for approximately 0.15% of all forest areas in Indonesia.

Responsible forest management is a challenge in Indonesia. The forest areas are vast and often remote. Poverty and lack of economic alternatives drive illegal forest activities that have no regard for regulation or conservation. International scrutiny of Indonesian forestry practices often ignores the fact that without responsible private sector management, significant areas of forest are lost to illegal logging, slash-and-burn farming and destructive human encroachment.

By contrast, APRIL’s responsible forest management ensures sensitive areas of forest are conserved, land use is optimized and local communities share the benefits of development.

APRIL’s responsible forest management ensures sensitive areas of forest are conserved, land use is optimized and local communities share the benefits of development.
4.2 APRIL’S LAND USE MANAGEMENT

APRIL’s goal is to reach a point where all fibre used in its mill comes from renewable and sustainable plantation fibre and to achieve it as soon as possible. Establishment of plantations on APRIL’s concessions is an essential step to meeting that goal.

Plantation establishment for APRIL began in 1993, with the objective of achieving sustainable fibre supply from plantations operated according to principles of sustainable forest management.

When concessions are licensed, APRIL undertakes comprehensive land management planning and submits those plans for approval to government. In developing land management plans, APRIL undertakes High Conservation Value (HCV) assessments within its concessions before operations commence. This approach, undertaken voluntarily, has been in place since 2005.

These assessments identify areas to be set aside for conservation and protection. They also identify plantable non-conservation areas for plantation establishment, areas suitable for community plantation and continued community use, and areas for infrastructure development.

LAND USE CATEGORIES

APRIL is guided by the Indonesian Government’s forestry regulations that stipulate the general allocation of land to be used for fibre, community livelihood, natural tree plantations, conservation forest and infrastructure.

Indonesia’s Ministry of Forestry provides broad guidance on the allocation of land use within industrial forest plantation licenses that includes:

- Industrial tree plantation +/- 70%
- Infrastructure +/- 5%
- Community livelihood plantation +/- 5%
- Conservation +/- 10%
- Natural tree plantation +/- 10%.

Under the land use management plans APRIL has in place for all of its directly held concessions, the company meets all land use criteria and delineation requirements.

LAND CONCESSIONS KEY DATA

APRIL currently holds direct licenses for 14 concessions in Riau Province. As at 31 December 2012, APRIL concessions covered a total area of 357,851 hectares.

Adjustments were made to the dimensions of the Pulau Padang and Ukui concessions in early 2013, with the result that the total land area of the concessions held by APRIL at 30 June 2013 was 344,560 hectares.

Of this total area, 62% was plantable area for plantation establishment.

Overall, as at 30 June 2013, 88,610 hectares or 26% of APRIL’s concession areas were set aside for conservation and indigenous tree species with 44,147 hectares or 13% delineated for continued use by local communities, infrastructure and other uses.

When the conservation and indigenous tree species areas set aside by both APRIL and its long term supply partners are combined, they account for more than 220,000 hectares of concession lands that are set aside and protected.

Figure 43: APRIL LAND USE (AT 30 JUNE FOR APRIL CONCESSIONS)
Following changes made during the reporting period to APRIL’s contractual arrangements with suppliers, the total gross land area of concessions held by APRIL and long-term supply partners, at 30 June 2013, was approximately 817,000 hectares.

After taking into account conservation and indigenous tree species areas, areas for community use, infrastructure areas and land not suitable for plantation establishment, the combined total plantable area identified in land use plans on APRIL and its supply partners’ concessions is 51% of the total gross land area.

**COMPLETION OF PLANTATION ESTABLISHMENT ON APRIL CONCESSIONS**

Since commencement of operations, APRIL has worked toward creating an entirely plantation-grown supply of wood. Establishment of plantations involves the harvesting of existing degraded forested areas on designated plantable areas within licensed concession areas, then planting seedlings to establish plantations. Plantable areas are designated after HCV assessments have been conducted.

APRIL expects to complete the establishment of plantations in these concession areas by the end of December 2014.

As at 30 June 2013, the plantable area remaining to be established within APRIL’s own concessions was less than 20,000 hectares.

The areas still remaining to be established as plantation areas are primarily within one concession, licensed to APRIL in 2009, on the island of Pulau Padang.

The Pulau Padang case study in section 4.8 of this Report describes how, in late 2011, there was a halt to plantation establishment activities in this estate, in compliance with Government directives while concession boundaries were affirmed and some local community disputes were resolved. This resulted in a delay to the completion of plantation establishment in that concession.

In 2011, APRIL established 17,367 hectares as plantation areas. In 2012, 4,526 hectares were established as plantation areas.
4.3 FOREST FIRE MANAGEMENT

Since establishment, APRIL has had a strict “no burn” policy within our concessions. We also ensure adherence to this policy by our supply partners. We do not use fire in the process of land clearance or plantation establishment.

Fibre from trees is the key raw material in the pulp and paper process, so any fires within our concessions reduce our commercial returns. We therefore act quickly to extinguish fires that do occur in or near our concessions.

Fires in our concessions occur for two main reasons. The first is when fires in land used by local communities within our concessions spread to our plantation or conservation areas. The second is when fires started by third parties outside our concession areas spread into our concessions.

Burning is widely used by small farmers as an inexpensive way to prepare their land for farming activities. During Indonesia’s dry season, these activities are intensified and this can be the key source of fires that occur in our concession areas.

APRIL is committed to United Nations Food and Agriculture Organization (FAO) Fire Management Guidelines, which include ongoing commitments to improve fire management through policy, regulation, procedures, plans and implementation.

We have a Fire Danger Rating System, which includes analysis of weather conditions and appropriate preventative and precautionary measures.

APRIL has built comprehensive fire management capability, investing more than US$5 million in manpower, equipment and training.

We now have 665 rapid response team members available to fight and prevent fires. The equipment used by our firefighters includes aerial, land and water-borne vehicles. We have also helped establish 22 community-based fire prevention and control groups, working closely with local communities and providing education, training and equipment.

Fire management objectives include detection before fires reach 0.1 hectares in size, fire suppression within two hours of reporting, and containment within 48 hours to an area of less than 10 hectares.

Our performance against these objectives in 2011 and 2012 is shown in the table below.

![Figure 44: RESULTS OF APRIL FIRE MANAGEMENT PROGRAMME (INCLUDING SUPPLY PARTNERS)](image)

<table>
<thead>
<tr>
<th>Description</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of fires</td>
<td>133</td>
<td>224</td>
<td>147</td>
<td>225</td>
<td>410</td>
</tr>
<tr>
<td>Hectares burnt</td>
<td>1,187</td>
<td>2,486</td>
<td>307</td>
<td>258</td>
<td>602</td>
</tr>
<tr>
<td>Average fire size</td>
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<td>11.1</td>
<td>2</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Fire management performance rating</td>
<td>96</td>
<td>87</td>
<td>94</td>
<td>98</td>
<td>98</td>
</tr>
</tbody>
</table>

WE UNDERTAKE REGULAR LAND, AIR AND WATER PATROLS AND USE SATELLITE IMAGERY AND DIRECT FIELD VERIFICATION TO DETECT AND MAP FIRE RISKS AND FIRES.

APRIL COLLABORATES WITH GOVERNMENT AGENCIES IN FIGHTING FIRES NEAR TO OUR CONCESSIONS. THROUGH OUR COMMUNITY DEVELOPMENT PROGRAMME, WE WORK WITH LOCAL FARMERS IN EDUCATION ON FIRE PREVENTION AND IN ALTERNATIVE FARMING METHODS, SUCH AS NATURAL MULCHING TECHNIQUES, THAT CAN REPLACE THE TRADITIONAL USE OF FIRE.

ILLEGAL BURNING PRACTICES DETECTED BY APRIL ARE REPORTED TO POLICE AND FORESTRY AUTHORITIES.
4.4 CONSERVATION

Sustainable forest management practices are essential to maintaining healthy and productive forests. APRIL’s forest management practices aim to safeguard the quantity and quality of the company’s forest resources by achieving a long-term balance between harvesting and re-growth.

APRIL complies with all laws, regulations and licensing requirements in the management of its concessions and meets or better than meets Government benchmark requirements for the delineation and protection of conservation forest.

Our approach to managing land has been developed based on the cumulative experience of our 19 years of operation in Riau Province. During that period, APRIL has learned which conservation strategies are effective and which are not. We have continually adapted our practices accordingly.

A key learning has been that in Riau Province, areas identified for conservation but not effectively protected are subject to significant degradation by human encroachment and illegal logging.

As a result, APRIL’s own land-use delineation practices now emphasise protection – both in terms of on-the-ground resources and in designing plantations to establish buffer zones that make encroachment and illegal logging in conservation areas more difficult.

The company’s policies ensure that no fibre for APRIL’s production processes is sourced from areas delineated as conservation zones in Government-approved land use plans or from tree species protected under Indonesian laws.

It is APRIL’s view that well run production forests deliver strong environmental and social outcomes through Government-mandated systems and practical, tested sustainable forest management and conservation programmes.

Land-use planning, which since 2005 has included high conservation value assessments, is completed prior to commencement of plantation establishment.

Before a plantation concession license is awarded, APRIL’s land development specialists conduct preliminary evaluations of available concessions, assessing soil and land types for potential fibre plantation growth rates, access and wood transport distances, the quality of existing vegetation and identification of any social issues.

A land-use planning process then follows that ensures and incorporates compliance with legal requirements, science-based practices and voluntary commitments.

We are guided by the Indonesian Government’s forestry regulations that stipulate the general allocation of land to be used for fibre, community livelihood, natural tree plantations, conservation forest, and infrastructure.

A macro-delineation occurs using available vegetation and environmental data to broadly identify appropriate land use allocations within the concession.

Subsequently, a micro-delineation occurs by an expert third party to differentiate areas to be maintained as natural forest and those areas suitable for development into fibre plantations. This is done based on specific legal criteria focusing on protecting sensitive soils, hydrological features, wildlife and cultural sites. These processes fulfill Indonesia’s legal requirements for land-use plan development.

Particular additional steps take place where development occurs on peatland concessions (described in section 4.7 of this Report).
HIGH CONSERVATION VALUE FOREST DELINEATION

Prior to the development of concessions and as a voluntary commitment since 2005, APRIL has conducted High Conservation Value (HCV) assessments for each new concession area based on the Toolkit for Identification of High Conservation Values in Indonesia (2008). These assessments identify and delineate exceptionally important biodiversity values, ecosystem elements and social or cultural values and recommend management and monitoring activities to maintain and enhance these values.

APRIL reaffirms its commitment to the integration of High Conservation Value (HCV) assessments into its land-use planning processes and to the application of the HCV Indonesia Toolkit to delineate and protect conservation zones and indigenous tree species areas within its concessions.

APRIL incorporates the findings of HCV assessments into its land-use planning processes and undertakes fibre plantation development in ways that will maintain the HCV.

Generally, the HCV process confirms the micro-delineation and water management planning that has been conducted.

APRIL has found the HCV processes and concepts to be valuable planning tools. We identify and delineate additional values that may result in the conservation of additional areas of natural forest.

The guidance and recommendations from HCV experts enable our planners and managers to implement best practices and achieve sustainable wood production through a rational balance between environmental conservation, social concerns and economic development.

It is important to recognize that the HCV approach in Indonesia acknowledges that one or more forms of active management can be undertaken to ensure the maintenance or enhancement of one or more high conservation values in an area.

APRIL Indonesia works closely with leading HCV experts in Indonesia and through the Global HCV Resource Network to develop consistent approaches for application of HCV processes to the context of developing fibre plantations in Indonesia. Many detailed questions and issues of interpretation can arise on the appropriate manner for applying the HCV Toolkit in the Indonesian context.

Our managers and internal specialists participate in regional and global HCV forums and work with partners who are experts in the application of the HCV Toolkit.

OVERALL PROTECTION OF CONSERVATION AREAS BY APRIL

Of APRIL’s total concessions, the areas set aside and conserved following incorporation of HCV assessments in land-use plans account for approximately 26% of our total concession areas or 88,610 hectares. As referenced in section 4.2 of this Report, when the conservation and indigenous tree species areas set aside by both APRIL and long-term supply partners are combined, they account for more than 220,000 hectares.

APRIL audits its own concessions to ensure actual conservation areas correspond with areas identified as conservation in land management plans and where any discrepancies are found, an investigation takes place and rectification actions are undertaken.

Figure 45: HCV INDICATORS

| HCV 1: Areas with Important Levels of Biodiversity (Habitats for Critically Endangered Species) |
| HCV 2: Important Landscapes and Dynamics (Ecosystems and Populations) |
| HCV 3: Rare or Endangered Ecosystems |
| HCV 4: Environmental Services (Watersheds, Erosion Prevention, Fire Control) |
| HCV 5: Natural Areas Critical to Meeting the Basic Needs of Local People |
| HCV 6: Areas Critical for Maintaining the Cultural Identity of Local Communities |
APRIL Indonesia’s forest conservation activities contribute to protecting natural forests with high levels of biodiversity. These areas commonly occur along streams, rivers and other hydrologic features.

Constant monitoring, patrols and collaboration with law enforcement authorities reduce the incidence of poaching of protected animal species. APRIL’s forest protection officers and security teams conduct both ground and aerial patrols to identify, quickly respond to and stop threats to native wildlife.

APRIL’s conservation zones and the buffering of them with strategically placed plantations provide significant biodiversity and wildlife security, compared with other land management practices occurring outside our concessions.

The International Union for Conservation of Nature (IUCN) maintains a Red List of Threatened Species (also known as the IUCN Red List or Red Data List). It is the world’s most comprehensive inventory of the global conservation status of biological species. Protection of listed species is fully factored into APRIL land-use evaluations and protective actions.

Within the broader landscape of the areas in Riau Province where we operate, there are habitats for a number of notable species, including the Sumatran tiger, Asian elephant, tapir, hornbill species, white-winged wood duck, Storm’s stork and giant river turtle.

On an ongoing basis, at a concession level, APRIL’s land-use management plans and our standard operating procedures provide for monitoring for indications of the presence of these species.

In addition, numerous other less well known and less studied species can be found. Importantly, APRIL conservation areas maintain the potential for protection and connectivity of species at the landscape level.
4.4 Plantations - Conservation
4.5 NEW ECO-RESTORATION ACTIVITIES

APRIL continues to develop its conservation efforts in Riau Province.

In April 2013, a multi-year ecosystem restoration programme involving the establishment of a peat forest reserve on the Kampar Peninsula of Riau Province, on the east coast of Sumatra, was launched by the Indonesian Minister of Forestry Zulkifli Hasan.

The programme, which will restore and protect 20,265 hectares of peat forest as a forest reserve, is showcased at www.rekoforest.org.

The project leader is Restorasi Ekosistem Riau (RER), a new not-for-profit organization. APRIL initiated the establishment of RER and will provide financial and technical assistance.

RER’s programme is being conducted under a 60-year restoration license issued by the Ministry of Forestry. More than US$7 million will be invested in the first three years to create an enduring, world-class forest reserve.

RER’s approach involves four main pillars which are described below.

PROTECT

Indonesia’s remaining forest areas are facing increasing threats from illegal land clearance for agriculture and human settlement, hunting of wildlife, forest fires and continued drainage of water from peat swamp forests.

RER will adopt appropriate protection strategies that will include the establishment of a formal guard and patrol function and bespoke community resource management and protection schemes. RER will work with its stakeholders to ensure that solutions are practical and effective.

ASSESS

Detailed assessments of remote peat swamp forests can be logistically challenging but RER is committed to delivering the time and resources required to understand the ecosystem that is to be protected.

RER will carry out an inventory of the current presence and condition of flora, fauna and wildlife habitats, assisted by expert third-party partners. The restoration zone’s current physical and social environment will be assessed to establish the baseline against which future assessments can be benchmarked. The assessment will include:

- Biogenic carbon and carbon stored within peat soils.
- The water cycle and other components of the physical systems.
- Communities and their relationship with the forest resource, in terms of the frequency and purpose of usage of the forest.
- Biodiversity in terms of the number and distribution of flora and fauna species present

RESTORE

The RER zone is not pristine. Certain areas have been degraded by fire, selective harvesting, hunting, fishing and illegal logging.

RER will restore the degraded sites through a process of “restocking”, using seedlings from the surrounding local forest. It will establish a nursery to cultivate native seedlings and carry out a programme of staged replanting. Water level restoration will be conducted in tandem to maintain water levels critical to the health of peat forest ecosystems, and we will continually evaluate the effectiveness of our efforts.

MANAGE

With a diverse set of partners, RER possesses the knowledge, expertise and skill sets to carry out the restoration efforts. It also draws on the experience of various partners in the management of High Conservation Value tropical peat forest areas.

RER will develop a comprehensive, long-term management plan with its advisory panel of Indonesian and international specialists. This plan will incorporate the outcome of consultations with local communities, the Indonesian Government and adjacent forest concession licence-holders. It will be disseminated to national government bodies and international interest groups for their feedback. APRIL’s vision is for RER to be the first in a series of eco restorations.
We are guided by the definition of Sustainable Forest Management (SFM) laid down by the Food and Agriculture Organisation of the United Nations (FAO): “Achieving a balance between society’s increasing demands for forest products and benefits, and the preservation of critical biodiversity – essential for the survival of forests, and the prosperity of forest-dependent communities”.

APRIL derives clear business benefits from an SFM approach, which represents a form of risk management. Factors such as disaffected local communities, corruption, damaging farming practices, fire and haze, and unstable economics can potentially disrupt our operations. By applying SFM principles, we can minimize the business risk related to these factors. We believe our success in obtaining both plantation concession licenses and a major eco-restoration license reflects our SFM approach.

Our forestry practices are contained in the company’s Code of Best Practice and in Standard Operating Procedures. All APRIL employees and contractors are trained in these practices.

Key best practices include:

**TREE PLANTING**
Ensuring plantation areas are rapidly replanted is important for sustainable wood supply and to maintain vegetation cover.

We operate a network of three central nurseries and six satellite nurseries that have the capacity to produce over 150 million plants per year. From these, we supply high-yield seedlings for our own plantations and those of supply partners and community partners. In each of 2011 and 2012, APRIL enabled the planting of more than 130 million trees.

**EFFICIENCY AND YIELD**
Maximising yields is a key aspect of effective plantation management as higher productivity minimizes the amount of land needed to deliver the necessary fibre supply to the mill. Since commencement of plantation establishment in 1994, APRIL has worked to increase the fibre yield of its plantations through improvements in areas such as planting and harvesting.

Continually improving yield and efficiency requires ongoing R&D and rigorous implementation of standardised processes.
SILVICULTURE AND YIELD IMPROVEMENT

APRIL’s approach to plantation management is to capitalise on the natural advantages of our location in Riau Province - fertile soils, high rainfall and a tropical climate, while caring for the land we operate on.

Focus areas include best practice silviculture, achieving genetic improvements through research and development, optimal matching of sites with species and effective water management. We do not use GMO in our silviculture practices.

NURSERY OPERATIONS

Plantation development is supported by three central nurseries producing a total of approximately 10 million plants per month. These are supplemented by a network of satellite nurseries that play an important role in creating employment opportunities for local communities. Our total nursery capacity means we can grow over 150 million plants per year. Plants are produced from cuttings and seeds. Seeds are supplied by the Research & Development Department.

USE OF FERTILISERS

In APRIL’s plantations, plant debris, including branches and bark, is left in the field to maximise retention of nutrients, reduce erosion, and reduce the need for artificial fertiliser.

The cultivation of plantations requires the addition of fertilisers in order to maintain and enhance yields. Application of fertiliser is done in a manner that minimises its impact on off-site locations through prevention of groundwater and surface water eutrophication.

Fertiliser availability is controlled via central stores. Procedures such as the dosage and type of fertiliser to be applied are formulated by the Research and Development department.

Soil mapping and site classification has been completed for all plantations. This assists in delineating planting areas and applying site-specific fertiliser regimes.

PEST MANAGEMENT

Managing pests is a necessary part of maintaining plantation productivity.

The key threats to acacia trees are root rot Ganoderma, Ceratosystis and insect pests (in particular Helopeltis). APRIL uses an Integrated Pest Management (IPM) approach, including biological control.

We also manage pests and diseases through regular monitoring and reporting of tree health, while pest and disease resistance are key selection criterion in the production of high-quality planting stock.

Pest-control chemicals are managed by central stores. Training in agrochemical use is provided for employees, and MSDS sheets are available. Regular medical checks are undertaken for people dealing with agrochemicals. High levels of weed control are achieved with minimal use of chemicals, using prescribed herbicides.

MECHANISATION OF HARVESTING

From 2011, APRIL has taken actions to increase the level of mechanized harvesting within our forestry operations. Mechanized harvesting improves efficiency and worker safety. It also reduces harvesting time and wastage, which allows for improvements in replanting.
4.7 PEATLAND MANAGEMENT

The fact APRIL has significant operations located on peatland brings additional responsibilities in land management. Our approach to managing peatland concessions is "real world", based on a "total landscape" perspective and on best-available science. It includes efforts to minimise greenhouse gas (GHG) emissions from peat through careful land-use planning and detailed implementation that includes hydrology management.

Effective peatland management requires a "total landscape" approach. This involves protection and buffering of central peat domes to guard against drainage impacts. Our approach, based on landscape hydrology, aims to protect the critical headwaters of raised peat domes, ensuring connections to major riparian corridors.

In locations such as the Kampar Peninsula and the island of Pulau Padang, our concessions are configured to assist in preserving and protecting central peat dome areas located outside our concessions. Water tolerant species are planted. Buffer zones are created to protect peat domes and other set-aside natural areas including those outside of our concessions, from impacts arising from active water management within the plantations. This is the "total landscape" management approach.

APRIL’s peatland management approach incorporates the following principles:

- Forests and carbon sinks in peatland can only be sustainably managed if the hydrological system is protected or rehabilitated. This is of importance for conservation, and is also vital for long-term economic production on peat land
- Degraded land which may be of relatively low conservation value and hold marginal potential for agriculture, can nevertheless hold considerable carbon deposits. Such land is managed to retain and rebuild treed cover, to exclude fire and to maintain or rehabilitate the hydrology
- Management is designed to maximize fiber production from designated plantation lands, leaving designated set-aside lands both within and adjacent to concessions as extensive and as intact as possible
- On the most degraded lands, create fibre plantations that provide livelihood opportunities for local communities and so reduce the poverty that drives degradation and loss of forest cover, while also supporting small local business development
The “total landscape” approach is applied holistically right across our concessions, to community lands, plantations, conservation and other areas like buffers and local-use forest.

It should also be noted that consistent expansion in the area of APRIL’s plantations over the 20 years that we have been planting, means that APRIL’s concessions can be considered a significant carbon storage. By comparison, some government backed climate mitigation programs have horizons of just 10 years.

It is APRIL’s firm view that our approach provides an effective alternative to the continued degradation through illegal logging and human encroachment that would occur if APRIL were not managing the peatland areas covered by our concessions. This is the “real world” position.

Some stakeholders have expressed viewpoints that in the absence of legitimate professional forestry sector activities on peatland, these areas would exist in a pristine condition and carbon sequestration would be optimized. However, the reality today is that just 10% of the original peatland forest in Riau remains in a semi-intact state (with 50% or more of original canopy trees remaining). Illegal logging, drainage and slash-and-burn clearing are still widespread today on the remaining unmanaged peat forests, and consequently these forests continue to degrade and reduce in area.

APRIL has learnt from experience of nearly two decades that active management involving a human presence on the land, across the landscape, is the only effective way to curtail carbon emissions.

APRIL believes the responsible approach is to play an active role in managing forest areas that are subject to these risks.
4.8 COMMUNITY PARTNERSHIPS & ENGAGEMENT

APRIL’s concessions exist in remote areas and our operations co-exist with some villages and local communities. Positive relationships with local communities are essential to our long-term success. See Section 5.0.

We work to maintain good relationships with local people who live near our plantation estates. APRIL’s management systems ensure that plantation development processes foster full respect for the dignity, culture, human rights, aspirations and natural resource-based livelihoods of indigenous peoples and other local people.

We also provide opportunities for development benefits in culturally appropriate ways and we seek to do this in a manner that acknowledges the aspirations of local people.

LIVELIHOOD CREATION

APRIL creates direct employment for around 5,400 workers, while it has been estimated that around 90,000 livelihoods are indirectly dependent on APRIL’s operations.

APRIL’s operations provide a legitimate means of earning an income for local people. This provides an alternative to illegal logging and destructive land conversion.

With support from APRIL, Community Fiber Plantations (HTR) have been set up by communities to provide APRIL with wood supplies. 28,384 hectares are dedicated to community fibre farms. Crops are sold to APRIL under a pre-agreed benefit-sharing scheme. APRIL invests around US$1,200 in each hectare planted, creating around 30 to 35 jobs for every 100 hectares planted.

In addition to community farms which sell fibre to APRIL, about 5% of our total areas are classified as community livelihood plantations - areas within our concessions made available for community planting of crops such as rubber and sago. To support this, APRIL assists in the learning of farming skills by community members.

The company also has an Integrated Farming System (IFS) programme for the farming of other staples. The IFS trains local people in horticulture, livestock, freshwater fish cultivation, composting and organic waste recycling. Three training centres have been established for this purpose. We are also heavily involved in education and health programs for local communities.

Employment of local workers and sub-contractors is a priority. If jobs are lost through mechanization, we endeavor to find alternative employment, in line with our community development commitments.

COMMUNITY DIALOGUE & AGREEMENTS

High Conservation Value assessments are undertaken prior to plantation establishment. These take into account cultural, economic or religious factors as well as archeological and cultural heritage.

The identification of communities as falling within the definition of “indigenous peoples” is a complex issue in Indonesia and subject to the possibility of ongoing debate, given differing levels of integration of communities into broader society. Generally, the members of rural communities in Riau Province do not self-identify as indigenous peoples.

A common factor affecting many rural communities in Riau is entrenched poverty. Consequently, the economic opportunities and improved livelihoods that result from our operations are generally welcomed. This has been confirmed by social audits and community dialogue.

Over the course of 2011 and 2012, APRIL has been in close dialogue with the communities that live in close proximity to our most recently licensed forestry concessions – the Meranti, Tasik Belat and Pulau Padang estates. These were licensed in 2009.

During the reporting period, multiple Memoranda of Understanding have been entered into with local communities neighboring our estates.
**DISPUTE RESOLUTION**

APRIL operates only on concessions that have been licensed to us by the Government of Indonesia and have therefore been assessed by the Government not to be subject to any prior legitimate community land rights claims.

However, ongoing land disputes do exist in relation to plantation concession areas. APRIL therefore maintains a specialized department responsible for the management and resolution of land disputes.

APRIL is careful not to operate in areas where legitimate pre-existing land rights may exist and where prior agreement with local communities has not been reached.

However, the land tenure system in Indonesia is relatively immature and has been complicated over the past decade by a process of decentralization of decision-making from a previously highly centralized model. Jurisdictional overlap, lack of clear records and lack of precise delineation and definition are commonplace.

In addition, significant trans-migration under government policy over the past 30 years means assessment of the origin of peoples in local communities and their historical and heritage links to land is complex.

On occasions where local people have perceived that development of an operation may have adverse impacts on them, the company seeks through dialogue to minimize and mitigate such impacts and maximize commensurate benefits in other areas.

Over the course of the reporting period, improvements were made to APRIL’s method for registering grievances and to conflict resolution processes within MOUs.

An independent Grievance Redress Unit (GRU) was designated for the Pulau Padang concession. This unit includes more vulnerable groups (such as women’s groups) as representatives from local villages.

Land claim resolution procedures have been developed by APRIL to work towards the settlement of claims in a responsible, transparent, peaceful and collaborative manner.

APRIL does not undertake any forced resettlement of local communities regardless of licenses for land that may be affected by disputes.

Under APRIL’s policies, access to its concession land is preserved under agreed protocols that incorporate safety considerations and assurances that no illegal activity, such as illegal logging, will be undertaken. Access for fishing, hunting, native food gathering and river transits are uniformly included in all APRIL community engagement outcomes.

Disputes can arise with local villagers who take issue with the shared-usage protocols established by APRIL.

For example, APRIL’s practice is to identify and set aside significant conservation areas within its concessions. These areas are protected by regular patrols to ensure the forest is not degraded through human encroachment or illegal logging.

On occasion, this causes tension and disputes with groups of local people who wish to use the conservation areas for other purposes that would involve clearing of forest.

During the reporting period, APRIL complied with and embraced all requirements under Indonesian law and regulations regarding community engagement and dispute resolution.
PULAU PADANG CASE STUDY – RESPONSIBLE FORESTRY AND COMMUNITY ENGAGEMENT AT WORK

In 2009, after a comprehensive licensing process, APRIL was granted a forest concession license for the development of Acacia plantations on the island of Pulau Padang in Riau Province.

The licensing process, development of a land use management plan, interaction with local communities and ultimately the incidence of community dispute requiring third party involvement illustrate the complexities of establishing sustainable forestry in Indonesia.

The Pulau Padang concession area awarded to APRIL originally consisted of 41,205 hectares.

The area within the concession to be used for plantation establishment consisted of largely degraded forest – a result of its previous status as a selective logging concession held by other parties.

Third party reviews of the concession areas confirmed that significant illegal logging activities were underway at the time the concession was awarded.

HCV ASSESSMENTS

Our concession area on Pulau Padang has been the subject of numerous HCV assessments since it was awarded to us in 2009.

Using the HCV Indonesia Toolkit, we conducted an HCV pre-assessment of the likely concession area in 2005, followed by a full assessment in 2008.

Both assessments were conducted in conjunction with third party experts and the findings influenced land use management proposals during the course of the concession licensing process.

After being awarded the concession, APRIL undertook a further HCV assessment in 2010 using three different external expert consultants.

At the conclusion of the 2010 process it was determined that of the total 41,205 hectares of the concession, 66% or 27,375 hectares would be utilised for plantation establishment while 34% or 13,830 hectares would consist of conservation areas, areas for community use and infrastructure.

Land-use planning also used plantation and indigenous tree species areas as buffer zones for the identified conservation areas to reduce the likelihood of illegal encroachment and illegal logging in the conservation and peat dome areas of the island.

COMMUNITY CONSULTATION

After receiving the concession license in 2009, APRIL undertook extensive community consultation on its land use management plans with villages located near the concession area.

More than 60 rounds of consultation were undertaken over 12 months. The process of dialogue included discussions at community and individual level with representatives appointed by villagers. Public consultation sessions involving local government, NGOs and local communities were attended by local media.

As a result of these processes all local villages voluntarily signed community agreements with APRIL. These agreements expressed support for APRIL’s plantation establishment activities and set out a variety of community shared-value initiatives to improve the living standards of local villagers.

Subsequently however, in late 2011, the leadership of three of the villages changed and they withdrew their earlier consent to the agreements.
COMMUNITY DISPUTES

In late 2011, subsets of the communities at the three villages, with support from a complex web of third party groups, some with political agendas, protested against APRIL’s land use plans. Despite calls for dialogue and peaceful resolution from all sides, some villagers resorted to self-harm tactics to attract attention to their protests. Arson attacks occurred against company property and tragically, this escalation resulted in the murder of one of APRIL’s contractors.

In late 2011, APRIL suspended all activities on Pulau Padang. In late December 2011, the Indonesian Ministry of Forestry issued a decree to form a multi-stakeholder team to find a solution to the remaining community disputes.

A mediation team was subsequently appointed. This included government officials, members of NGOs and scientists. The mediation team’s initial recommendations included re-checking of concession boundaries, community consultation and mapping of community areas, involvement of independent parties in the dispute resolution dialogue and the appointment of a Monitoring, Reporting and Verification (MRV) team for Pulau Padang. This MRV team was appointed in February 2012.

Based on an agreed protocol for boundary demarcation, APRIL commenced the government-supervised process of participatory boundary mapping.

The independent MRV team commenced a new round of consultations with all village heads of Pulau Padang and other community representatives, local government stakeholders, numerous NGOs and APRIL. These consultations focused on developing a comprehensive understanding of remaining concerns about APRIL’s plans.

In November 2012, the MRV team convened a meeting of scientists to assess and make recommendations regarding APRIL’s operations on Pulau Padang peatlands. These recommendations covered peatland subsidence management, water management and protection of conservation areas. A framework was established for future monitoring of APRIL’s land-use management and conservation practices.

HCV ASSESSMENT REVIEWS

In early 2013, APRIL undertook an expert-reviewed analysis and update of all HCV assessments conducted on Pulau Padang over the previous seven years. This resulted in the addition of several hundred hectares of land set aside for conservation.

The expert review of HCV assessments also underwent independent peer review by two members of the internationally recognised HCV Resource Network Indonesia.

Key observations and findings from the further peer review included:

- Without responsible land management such as proposed by APRIL, there are intense external factors that threaten the sustainability of the Pulau Padang landscape.
- That on balance, the APRIL operational plan offers an opportunity for sustainable management of the Pulau Padang region.
- Acknowledgment of the importance of APRIL taking a lead role in the conservation of the large core area of deep peat swamp which is surrounded by and buffered from encroachment by APRIL’s land concession.
- Endorsement of the “exceptional levels of public consultation carried out during the concession boundary demarcation process” and the excising of land by APRIL from the original concession area to accommodate community expectations.

RESOLUTION

In May 2013, APRIL was given Ministerial approval to proceed with its revised land-use management plan. As at 30 June 2013, the community disputes that led to APRIL’s halt in operations on Pulau Padang were considered to be resolved.

As a result of the independent mediation and MRV processes:

- All parties agreed that APRIL’s gross concession area would be reduced from 41,205 hectares to 34,865 hectares, a reduction of 15%. Redrawing of the concession boundaries took out areas that would have been in proximity to villages that had expressed ongoing concerns during the review process.
- Conservation areas were increased to 12% of the adjusted concession area.
- Community livelihood areas were increased in two areas, consistent with adjacent village wishes.

During the period of dispute resolution, APRIL continued to develop shared-value initiatives with the villages that had entered into agreements with the company.

In 2013, APRIL plans to spend approximately US$900,000 to implement community programmes including:

- Establishment of integrated community farming systems through planning and supply of agricultural materials
- Business assistance, loans and training for small-medium enterprises establishing in the area
- Scholarships, teacher training and education equipment
- Support of enhanced health services
- Provision of social infrastructure including sports equipment, road infrastructure improvement, bridge repair and electricity generation capacity
- Religious and other training focused on youth
4.9 MONITORING, REPORTING AND VERIFICATION

INCREASED MONITORING, REPORTING AND VERIFICATION

In 2009, Indonesia’s Ministry of Forestry appointed an independent and integrated team of specialists to evaluate APRIL’s land-use planning and water management system on the Kampar Peninsula through a multi-year Monitoring, Reporting and Verification (MRV) process. The MRV teams have been active throughout the period of this report and have indicated that the work being undertaken with APRIL may, in time, become a model for other forestry sector participants.

The implementation of MRV is based on four key areas related to peatlands and the establishment of plantations on peatland:

1. Community preparedness for changes in social and cultural values as a result of plantation development
2. Communities’ ability and opportunity to benefit from plantation development
3. Managing the impacts of peat water drainage on carbon emissions and impacts on protected natural forests
4. Ability to sustainably manage water levels to reduce the likelihood of fires

The MRV teams’ analysis, the process for which was signed off by the Ministry of Forestry, is based on monitoring and reporting on 19 indicators in three categories. The teams produce monitoring results and recommendations on a six monthly basis. Results are based on field visits, stakeholder interviews and verification of data.

The categories and indicators are depicted in the table below.

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**Figure 46: KAMPAR PENINSULA MRV INDICATORS**

<table>
<thead>
<tr>
<th>Community, social and economic development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Values that support the improvement of prosperity, education and health through training and health screenings</td>
</tr>
<tr>
<td>2. Economic improvement by developing community farmer groups with necessary infrastructure, equipment and resources, and developing community livelihood plantations</td>
</tr>
<tr>
<td>3. Social improvement through access to formal education and improved nutrition and health</td>
</tr>
<tr>
<td>4. Promote local culture and ecotourism Environmental monitoring and protection</td>
</tr>
<tr>
<td>5. Measuring peat subsidence and closing old drainage canals</td>
</tr>
<tr>
<td>6. Measuring carbon emissions</td>
</tr>
<tr>
<td>7. Measuring methane emissions</td>
</tr>
<tr>
<td>8. Measuring carbon sequestration</td>
</tr>
<tr>
<td>9. Monitoring biodiversity using protected species lists</td>
</tr>
<tr>
<td>10. Measuring water table depths based on land use</td>
</tr>
<tr>
<td>11. Measuring soil moisture content and temperature in surface peat</td>
</tr>
<tr>
<td>12. Reducing “hotspots” and fire occurrence in village and concession areas and developing community fire response teams</td>
</tr>
</tbody>
</table>

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**Stakeholder participation**

| 13. Identifying key stakeholders to achieve harmony and reduce conflict |
| 14. Ensuring involvement with key stakeholders |
| 15. Disseminating information on water level management to other companies on the Kampar Peninsula |
| 16. Applying APRIL Indonesia’s water management to other companies on the Kampar Peninsula |
| 17. Reducing contributions to national emissions levels |
| 18. Increasing education infrastructure and training to develop human resources |
| 19. Developing local contractors in plantation management and employing local labor |
MRV ASSESSMENT

APRIL’s operations in the Kampar Peninsula have been favorably rated in the Measurement, Reporting and Verification (MRV) assessments conducted by a team from Indonesia’s Ministry of Forestry. The MRV assessment occurred every six months over the reporting period. This involved report analysis, field visits, discussion and verification of indicators and the progress or constraints for 19 MRV indicators which covered production and social and environment issues including biodiversity.

APRIL cooperates fully with the MRV team. We provide access to all areas of our operations and actively participate in gathering and delivering data for analysis and verification.

The company has assisted in the formation of farmer’s groups, provided training on integrated farming systems, participated in the creation of savings and loans facilities for local communities and provided advice and resources for production from community farming areas. Such activities are monitored by the MRV team.

Key findings over the January-December 2012 period by the MRV team have included:

• APRIL’s contribution has helped meet important socio-economic and local-culture indicators by maintaining the values that support the Human Development Index (HDI) through its community development programme. The programme supports the development of education, health, infrastructure, and agriculture for community welfare.

• APRIL has implemented a mutual cooperation programme with the community. This includes environmental clean-ups by employee volunteers, procurement of library books in villages (more than 3,640 books), a health education program and character-building training for students. Most of the programs are above target.

• APRIL helped establish 19 farmer groups and set up four savings and credit units. In 2012, 101 community residents were trained in the use of the Integrated Farming System. The achievements are above target.

• Initial evaluations of progress in establishing rubber livelihood crops for local communities showed that progress was below target. But after APRIL followed and implemented the MRV team recommendations, rubber establishment has shown substantial progress, i.e., 4,040 hectares of rubber livelihood crops have been established. Initial constraints to completion of the livelihood crops programme included availability of high quality seeds, lack of trained manpower, delays due to weather and plant disease.

• For the last two years, activities for measuring and analysing environmental data, including hydrology (water management), carbon source and sink, peat subsidence, fire prevention, and biodiversity have been underway. Gathering of data on eco-hydro peat subsidence, watertable levels and carbon emissions have taken place across the main crop areas, local species areas and protected areas. The impact of closure of illegal drainage canals has also been monitored.

• Measurement of soil water (water table) has been carried out, initially being monitored manually each month and gradually transitioned to monitoring by sensors and data loggers. Soil water content and soil temperature measurement has been conducted in conjunction with CO2 measurement, and methane gas measurement has also been performed. Measurement methodologies have been progressively adjusted to reduce variability and improve accuracy.

• The management of carbon emissions and peat subsidence produced results that exceeded targets.

• Measurement of above ground biomass has been undertaken but no significant work has been done to measure below ground biomass such as biodiversity and respiration. Below ground observations will be considered.

• The result of biomass assessment shows that Acacia crassicarpa sequestrates more carbon than alternatives and stores it as biomass. However, studies continue to seek more certain conclusions and a specific allometric equation for the species. Measurement of biomass data will continue to be undertaken and data made public at a later stage. Biomass measurement in Estate Meranti has been regularly conducted over the 2-year period up to the end of 2012 (age classes 1 and 2). Therefore, biomass data from Estate Pelalawan will be able to be used as a reference for age classes 3 and 4 for Acacia crassicarpa.

• APRIL has measured and monitored biodiversity within its conservation areas and been recognized for this work. The MRV team has recommended APRIL grouping the species favored by communities, increasing the economic benefit for communities and comparing the results associated with non-timber species and species in conservation areas.
4.10 FOREST CERTIFICATION AND LEGALITY

CERTIFICATION IS PART OF APRIL’S COMMITMENT TO CONTINUOUS IMPROVEMENT AND PRODUCT AND PROCESS ASSURANCE FOR STAKEHOLDERS SUCH AS CUSTOMERS, BANKERS AND GOVERNMENTS. THE COMPANY CURRENTLY HOLDS A DIVERSE PORTFOLIO OF NATIONAL AND INTERNATIONAL CERTIFICATIONS THAT PROVIDE END-TO-END ASSURANCE IN THE AREAS OF EFFICIENCY, QUALITY AND SUSTAINABILITY. THIS PORTFOLIO COVERS MILL AND PLANTATION OPERATIONS AND EXTENDS TO FINISHED PRODUCTS.

RIGOROUS LEGAL COMPLIANCE

APRIL has maintained strict compliance with all relevant Indonesian legal and regulatory requirements related to its operations. Our code of conduct is rigorously enforced to ensure all employees of the company act lawfully. The company has maintained a comprehensive wood “Chain of Custody” system that ensures no illegal wood enters its supply chain.

During the period of this report, APRIL was not subject to any adverse rulings against it on any matters related to its corporate conduct or legal compliance with Indonesian law.

CHAIN OF CUSTODY AND LEGALITY ASSURANCE

APRIL has a clear position against illegal timber use and has implemented rigorous systems to ensure that no wood from illegal sources enters its wood supply at any point. To this end APRIL has a policy and a Chain-of-Custody (CoC) system for sourced timber, with third party audits of the CoC system undertaken to assure its integrity. As a forest manager and wood supplier to its mill, APRIL has adopted a number of wood certification and CoC schemes.

We have strict policies on the purchase of only legal wood for use in our mill. These policies are implemented through contracts that are signed before delivery. Wood is supplied from APRIL’s own plantations, supply partners and community plantations (Community Fibre Farms). Suppliers are required to demonstrate that they have a valid cutting permit, transport permit etc. Our commitments to sustainable fibre sourcing and the methods we use to ensure accurate sourcing are outlined in section 3.9 (Fibre Sourcing).
INTERNATIONAL CERTIFICATIONS

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

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

In October 2011, APRIL successfully passed audits for certification under Bureau Veritas’ standards for Origins and Legality of Timber (OLB), the first industrial plantation company in Asia to do so. Certificates for OLB Standards for Forestry Companies covering APRIL’s plantations and production facilities were issued in the first half of 2012. RAPP supply partners also successfully passed audits under OLB ‘Chain of Custody-Acceptable Wood’ standards.

Bureau Veritas’ OLB certification is recognized by the Netherlands’ highly respected Kerhout Legal System. Forest management certification is assessed against the requirements of the Dutch government for sustainable forest management. The Kerhout framework was developed in response to the needs of various European governments to assess that timber has been produced, processed and traded in a legal manner.

APRIL is also certified under the Hong Kong Green Label Scheme (HKGLS) for selected plantation-based paper products including PaperOne™ (All Purpose, Presentation, Copier), Laser and Copy brands.

In addition to the certifications and audit processes highlighted above, APRIL continues to work actively towards additional certifications including the Programme for Endorsement of Forest Certification (PEFC) forest management certification via the new Indonesian certification body being established under the PEFC system, the Indonesian Forestry Certification Cooperation (IFCC).

In Indonesia, adoption of sustainable forest management (SFM) is a mandatory obligation for forest operators, as stipulated by the Law of the Republic of Indonesia No.41/1999 on Forestry. This law recognises that an effective implementation of SFM will help ensure that the country’s forest resources continue to provide ecological, economic, social and cultural services in an optimal, balanced and sustainable way. The aim of the law is to promote SFM by allowing forestry stakeholders to assess the progress a company is making toward achieving certification.

NATIONAL CERTIFICATIONS

Since 2006, APRIL has been certified for Sustainable Plantation Forest Management (SPFM) under the Indonesian Ecolabel Institute’s (LEI) standards. In late 2011, APRIL successfully re-certified under SPFM-LEI for the period of 2011-2016.

LEI has received increasing recognition in global markets including in Japan, where its standards are recognised in the Green Procurement Policy of Japan (Green Ko Nyuho) and are a requirement for Indonesian pulp and paper exporters to Japan. Various LEI-labeled products are also recognised in Europe and the US.

APRIL was the first industrial plantation company in Indonesia to certify under Sustainable Production Forest Management and Timber Legality Verification (PHPL/ SVLK) standards from the Indonesian Ministry of Forestry.

PHPL/SVLK certification was jointly developed and will be endorsed by the European Union (EU) through the Voluntary Partnership Agreement (VPA) programme between EU and the Government of Indonesia. This was developed in preparation for the EU’s Forest Law Enforcement, Governance and Trade (FLEGT) licensing requirements which came into force in March 2013.
5.0 COMMUNITIES
5.1 OVERVIEW

APRIL IS COMMITTED TO THE PRINCIPLE OF COMMUNITY EMPOWERMENT AND ACTIVELY SUPPORTS AND PARTICIPATES IN ECONOMICALLY Viable AND SUSTAINABLE DEVELOPMENT PROGRAMMES THAT FOSTER COMMUNITY SELF-RELIANCE.

“APRIL’s programmes and presence have brought benefits to the village, especially in the empowerment of our people.”

We have a long-term commitment to be part of Riau Province’s economic and social fabric, hence building genuine and mutually beneficial relationships with local communities is an imperative for us. Our community partnership strategy is to create shared value, which means going well beyond legal compliance to form partnerships.

These partnerships are based on trust, integrity, fair achievement of majority consent and respect for human rights. Our aim is to have a direct, lasting impact on the socio-economic wellbeing of those who live within our areas of operations.

The communities whom we work with are spread across 150 villages throughout our operational areas in Riau Province, covering the districts of Pelalawan, Kuantan Singingi, Siak, Kampar and Meranti Island.
5.2 COMMUNITY DEVELOPMENT PROGRAMMES

Our Community Development programmes have these specific objectives:

i. Poverty alleviation
ii. Economic development for income growth
iii. Building a capacity for local partnerships and cooperatives
iv. Improving quality of education for children
v. Providing community healthcare services
vi. Developing businesses based on community participation
vii. Developing social infrastructure.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Farming System (IFS)*</td>
<td>Community empowerment through agricultural initiatives such as horticulture, plantation, animal husbandry, fishery and paddy planting development. Main activities include training, facilitating and providing ongoing technical support to farmers*.</td>
</tr>
<tr>
<td>Education and talent-pool</td>
<td>Scholarship programmes covering primary, secondary and university levels, teacher training and honorariums, supply of school and education equipment, study tours.</td>
</tr>
<tr>
<td>Enterprises (SME)*</td>
<td>SME development programme targeted at businesses that directly support company operations, as well as businesses not related to APRIL*.</td>
</tr>
<tr>
<td>Community healthcare</td>
<td>Building of community clinics to provide free health services including immunization, nutritional supplement support, surgical procedures such as cataract and harelip operations, family planning advisory and health education.</td>
</tr>
<tr>
<td>Social infrastructure</td>
<td>Improving physical and social infrastructure such as schools, places of worship, road construction and maintenance, sanitation infrastructure and civic buildings.</td>
</tr>
<tr>
<td>Vocational training</td>
<td>Vocational training in trades such as tailoring, hair styling, baking, bee keeping and honey production, carpentry and automotive repairs.</td>
</tr>
<tr>
<td>Community religious affairs</td>
<td>Improving soft skills of religious leaders through training and capacity building.</td>
</tr>
<tr>
<td>Employee volunteerism</td>
<td>Supporting employees to undertake volunteer work in partnership with local communities in areas where we operate. Activities include joint ‘gotong royong’ or cleaning, improvement and beautification of community areas.</td>
</tr>
<tr>
<td>Youth sport development</td>
<td>Sport development for community youth. Training facilities, coaching and equipment are provided in targeted sports - badminton, karate, football and tennis.</td>
</tr>
</tbody>
</table>


5.3 HIGHLIGHTS

LAUNCH OF BLUEPRINT FOR SUSTAINABLE COMMUNITY DEVELOPMENT

For almost two decades, APRIL has been implementing community development in Riau Province, to help alleviate poverty and improve quality of life through economic development, health, education and social infrastructure programmes.

Over the last two years we have re-examined our programme design and delivery mechanisms. Our aim was to achieve better outcomes from sustainable programmes tailored to individual communities. Programmes in areas such as health and education which were found to have overlapping objectives with existing government initiatives, were refocused to avoid duplication of efforts, and to ensure maximization of resources for more effective outcomes.

In October 2011, APRIL launched a new community development initiative that focused directly on self-reliance. Called the “Eco Village Development Programme” (EVDP), it served as a blueprint for a new approach to community development.

While self-reliance has always been a priority in our work with communities, EVDP places a greater emphasis on enabling self-reliance though the creation of long-term and sustainable economic activity with low environmental impacts, based on local resources.

With this new approach, we are aiming to bring real, positive change to the lives of thousands of people.

The EVDP pilot programme was launched in the villages of Desa Sering* and Teluk Binjai*, home to 2,800 people in 800 households. Nine months after the launch, the following income-generating activities had been established.

Given the success of these initiatives, APRIL is examining the application of the EVDP model to 150 villages where community programmes are already in place.

1. Freshwater fish cultivation*

In the village of Teluk Binjai, community members were trained to cultivate fish in ponds they constructed from tarpaulins, supported by timber frames. The programme began with a visit to an established fish cultivation facility and included training in pond building and fish breeding. APRIL provided all training and materials needed for six ponds. We are also providing ongoing assistance and training in management and maintenance.

2. Local handicrafts*

Our community development staff also worked with the women of Desa Sering and Teluk Binjai to establish local handicrafts businesses. APRIL helped foster these initiatives by facilitating meetings, monitoring the development of handicraft products, providing handicraft training, and assisting with sales, marketing and exhibition of products.

3. Cattle farming*

In Teluk Binjai, APRIL supported the expansion of an existing cattle farm. Training for 29 community members covered areas such as animal husbandry and management, as well as production of compost from cow manure, a new business venture for farmers. APRIL provided 28 bulls and helped establish two farming groups.

4. Compost fertilizer development*

In Teluk Binjai, a community initiative that has met with early commercial success is the production of liquid organic fertilizer made from composted water hyacinth plants (known locally as “Kiambang”). The process, which uses the bioactivator EM4, has gained commercial interest from a local palm oil company. The initial training phase was attended by 40 people, but with small amounts of fertiliser being sold, opportunities now exist to increase the scale of this venture.

SUSTAINABLE COMMUNITY DEVELOPMENT

For almost two decades, APRIL has been implementing community development in Riau Province, to help alleviate poverty and improve quality of life through economic development, health, education and social infrastructure programmes.

Over the last two years we have re-examined our programme design and delivery mechanisms. Our aim was to achieve better outcomes from sustainable programmes tailored to individual communities. Programmes in areas such as health and education which were found to have overlapping objectives with existing government initiatives, were refocused to avoid duplication of efforts, and to ensure maximization of resources for more effective outcomes.

In October 2011, APRIL launched a new community development initiative that focused directly on self-reliance. Called the “Eco Village Development Programme” (EVDP), it served as a blueprint for a new approach to community development.

While self-reliance has always been a priority in our work with communities, EVDP places a greater emphasis on enabling self-reliance though the creation of long-term and sustainable economic activity with low environmental impacts, based on local resources.

With this new approach, we are aiming to bring real, positive change to the lives of thousands of people.

The EVDP pilot programme was launched in the villages of Desa Sering* and Teluk Binjai*, home to 2,800 people in 800 households. Nine months after the launch, the following income-generating activities had been established.

Given the success of these initiatives, APRIL is examining the application of the EVDP model to 150 villages where community programmes are already in place.

1. Freshwater fish cultivation*

In the village of Teluk Binjai, community members were trained to cultivate fish in ponds they constructed from tarpaulins, supported by timber frames. The programme began with a visit to an established fish cultivation facility and included training in pond building and fish breeding. APRIL provided all training and materials needed for six ponds. We are also providing ongoing assistance and training in management and maintenance.

2. Local handicrafts*

Our community development staff also worked with the women of Desa Sering and Teluk Binjai to establish local handicrafts businesses. APRIL helped foster these initiatives by facilitating meetings, monitoring the development of handicraft products, providing handicraft training, and assisting with sales, marketing and exhibition of products.

3. Cattle farming*

In Teluk Binjai, APRIL supported the expansion of an existing cattle farm. Training for 29 community members covered areas such as animal husbandry and management, as well as production of compost from cow manure, a new business venture for farmers. APRIL provided 28 bulls and helped establish two farming groups.

4. Compost fertilizer development*

In Teluk Binjai, a community initiative that has met with early commercial success is the production of liquid organic fertilizer made from composted water hyacinth plants (known locally as “Kiambang”). The process, which uses the bioactivator EM4, has gained commercial interest from a local palm oil company. The initial training phase was attended by 40 people, but with small amounts of fertiliser being sold, opportunities now exist to increase the scale of this venture.
5.4 COMMUNITY PROGRAMME OUTCOMES

INVESTMENT
In 2011 and 2012, APRIL Indonesia invested approximately USD4.6 million in various community programmes. These have yielded a range of positive outcomes. Figure 48a below shows a summary of the total community development investments in the last two years.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Cumulative Investment (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Integrated Farming System</td>
<td>500,000</td>
</tr>
<tr>
<td>2. Education</td>
<td>400,000</td>
</tr>
<tr>
<td>3. Social Infrastructure</td>
<td>1,100,000</td>
</tr>
<tr>
<td>4. Other CD Programmes</td>
<td>2,600,000</td>
</tr>
<tr>
<td>Total</td>
<td>4,600,000</td>
</tr>
</tbody>
</table>

INTEGRATED FARMING SYSTEM
The Integrated Farming System (IFS) is a key component of our community development strategy. IFS aims to improve the skills of community farmers and raise the income-generating opportunities of community farmer groups.

IFS has three main focus areas:
- Training villagers in farming activities such as horticulture, vegetable farming, livestock rearing and husbandry, and freshwater aquaculture.
- Providing start-up investments, tools and materials.
- Continuing ongoing technical and managerial guidance through APRIL Community Development field officers.

Since its inception, APRIL’s Integrated Farming System (IFS) has progressed from covering about 170 hectares in 1999, to approximately 2,400 hectares* of village farmland by the end of 2012.

Income generated per participating household has consistently increased (or been maintained) over the last 5 years. In 2011, it was IDR1.5 million/month, and in 2012, it rose to IDR1.7 million/month. Monthly income of IFS farmers in previous years was IDR1.4 million/month in 2009 and 2010. To place the financial impact of the IFS programme in context, the average monthly household income of farmers in Riau Province was about IDR 1.1 million/month and IDR 1.2 million/month in 2011 and 2012 respectively, comparatively lower than the monthly income of IFS-supported farmers.

Between 2011 and 2012, APRIL expanded the hectarage of land involved in IFS by about 28% (from 1,354 hectares to approximately 2400 hectares)*.

From 1999-2012, IFS has (cumulatively) benefited 3387 farmers*.

As of 2011, there were 2,913 participants from 96 villages in the IFS*. The year 2012 saw 474 new farmers join the programme, bringing the total number of participants to 3,387 farmers from 94 villages*.

In 2011 and 2012, 105 and 112 farmers participated in training programmes respectively*.

Over the last two years, 1,418 households (2011) and 1,618 households (2012) received support for agricultural materials*.
SMALL AND MEDIUM ENTERPRISE DEVELOPMENT

APRIL launched the Small and Medium Enterprise (SME) development programme with the objective of providing aspiring entrepreneurs with technical and financial expertise. This programme supports a wide range of businesses, within and outside the forestry industry. Examples of SME businesses that directly support our operations are fibre plantation planting and maintenance teams, harvesting contractors and transport services.

Another group of entrepreneurs have participated in our vocational training programmes to develop livelihood skills such as tailoring, honey production, carpentry and motorcycle repair.

APRIL has also assisted these entrepreneurs to secure bank loans to fund their businesses, by providing formal assurance to banks that the entrepreneurs hold legitimate contracts with the company that will enable them to meet loan repayment commitments.

In 2011, APRIL helped SMEs secure over IDR 9 billion in bank funding to start and develop their businesses. In 2012, over IDR7 billion in bank funding was supported by APRIL.

In 2011, APRIL hired and supported 40 new entrepreneurs to provide services to directly support its operations. This added to 132 existing participants who received support that year. In 2012, 17 new SME’s were included in the programme, while 143 businesses received training and assistance.*

APRIL’s vocational training programme created in 2002 has seen 70 new entrepreneurs graduate over the reporting period*.

57 new local SMEs were hired as APRIL contractors from 2011-2012*.

Figure 49: KEY FACTS AND FIGURES FOR SMEs
EDUCATION

We strongly believe that education is a major factor in alleviating poverty. Hence providing economically disadvantaged children with access to quality education is a core community development programme comprising:

- Scholarships
- Grants & Teacher training support
- Educational Infrastructure support

In 2011, APRIL re-worked its school scholarship programme to focus specifically on high achieving and economically disadvantaged students who are in their last two years of secondary school.

This was done to avoid duplicating the efforts of Government financial aid programmes, which also cover economically disadvantaged primary and lower secondary level students.

APRIL’s teacher development programme previously awarded bursaries to teachers in rural areas. In 2009, the programme refocused its efforts to training in order to better support teacher skill development and help raise the quality of education in rural areas.

APRIL has invested in developing the quality of Indonesian pulp and paper professionals through our talent development programme. The APRIL Master’s Scholarship Programme aims to nurture the best local talent in the industry, which in turn, adds depth to our organisation’s expertise.

Since the programme’s inception in 2007, APRIL has sponsored 26 employees for graduate studies at the Asian Institute of Technology in Thailand, with an average of four grants awarded per year.

Local high school graduates can apply for full scholarships to study at the Akademi Teknologi Pulp & Kertas (Academy for Pulp and Paper Technology), part of the well respected Bandung Institute of Technology in Java.

In 2011, a new scholarship programme was introduced for local high school graduates to pursue agricultural diploma studies at the Institut Teknologi Pertanian (INSTIPER), the Institute of Agricultural Technology in Jogjakarta. Scholarship recipients have their full tuition fees and costs covered, in addition to living bursaries for the full duration of their studies.

Figure 50: KEY FACTS AND FIGURES FOR EDUCATION INITIATIVES

From 1999-2010, APRIL provided a (cumulative) total of 17,613 scholarships to deserving primary and secondary school students

Under its Pro-Poor programme, APRIL granted scholarships to 765 high achieving and deserving students over the last two years - 380 students from 116 villages in 2011, and 385 students from 122 villages in 2012.

Over 2011 and 2012, 25 university students per year successfully qualified for full academic scholarships, which are renewable annually, based on results.

Since our talent development programme’s inception in 2006, a total of 57 scholars have received full scholarships (as of end 2012) to the Akademi Teknologi Pulp & Kertas (ATPK). In the last two years, 14 local students received full scholarships to ATPK. To date, 30 of the 57 scholars were hired by APRIL

In 2011 and 2012, APRIL provided 30 and 20 scholarships respectively to local high school graduates to pursue agricultural studies diplomas at INSTIPER.

Since 1999, APRIL has supported the renovation and development of 219 schools in rural areas where we operate. 25 schools received support in the last two years.

APRIL has sponsored training for 600 teachers from 2009-2012.

Over the last two years, 451 teachers benefitted from training programmes.
HEALTH

APRIL’s community development programme includes access to healthcare for communities in rural areas. Prior to 2011, APRIL’s programme supported the provision and funding of government mobile clinics, an immunization programme, a food and nutrition supplement programme and a public health education programme. From 1999-2012, a total of 132,716 individuals were served by APRIL’s health programmes.

In 2011, APRIL re-worked this programme’s design to avoid duplicating efforts of the government’s health services programmes. To support the Indonesian government’s effort to improve its Human Development Index, APRIL now focuses efforts on education programmes that are preventive in nature, as opposed to curative.

The current programme has a two-prong approach, the first being public health education such as hygiene campaigns in schools. The other part focuses on supporting public health officers at the village level, focusing on family planning, pre-natal, post-natal and maternal health programmes in order to reduce the rates of maternal and infant mortality in villages.

APRIL also sponsors nutrition supplement programmes for mothers and babies at the village level.

Over the last two years, the programme served 9,965 people (2011: 7324 in 93 villages and 2012: 2641 in 3 villages), as well as ran 25 health campaigns.
SPORTS DEVELOPMENT

APRIL sponsors the professional coaching and development of local talent in four sports: karate, lawn tennis, badminton and football. Since the programme’s inception in 2009, 142 talented youth from schools in our area have received training and coaching at the APRIL sports facilities in Kerinci, where our mill is located.

Our goal is to groom sporting talent to compete at regional and national levels. In a relatively short time, our sponsored athletes have achieved some impressive results, earning 18 medals at National level and 123 medals at the Regional level over the last two years.

SOCIAL INFRASTRUCTURE

In 2011 and 2012, APRIL undertook 441 social infrastructure projects for local communities. This included infrastructure development and improvements to schools, places of worship, road and drainage maintenance, water and sanitation, family planning clinics, civic buildings and sporting facilities and equipment.

Our goal is to groom sporting talent to compete at regional and national levels. In a relatively short time, our sponsored athletes have achieved some impressive results, earning 18 medals at National level and 123 medals at the Regional level over the last two years.

EMPLOYEE VOLUNTEERISM

APRIL’s employee volunteer programme aims to foster stronger relationships with local communities. Our employees work with local people on a range of village improvement activities known as “gotong royong.” These involve tree planting, repair and improvement of buildings and other structures, rubbish collection and cleaning and tidying of public areas.

In 2011, 2077 employees spent 120,385 hours volunteering in 48 villages, working with 5900 members of local communities.

In 2012, 1676 employees spent 8380 hours working with 6325 locals across 51 villages.

Figure 51: APRIL INDONESIA SOCIAL INFRASTRUCTURE INITIATIVES 2011-2012

<table>
<thead>
<tr>
<th>Social infrastructure initiatives</th>
<th>2011-2012 (Number of units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Places of worship and religious schools</td>
<td>178</td>
</tr>
<tr>
<td>Public schools</td>
<td>96</td>
</tr>
<tr>
<td>Health, water and sanitation projects</td>
<td>30</td>
</tr>
<tr>
<td>Roads and drainage projects</td>
<td>19</td>
</tr>
<tr>
<td>Electric generators</td>
<td>98</td>
</tr>
<tr>
<td>Civic buildings</td>
<td>2</td>
</tr>
<tr>
<td>Sporting facilities</td>
<td>17</td>
</tr>
<tr>
<td>Historical sites</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>441</td>
</tr>
</tbody>
</table>
6.0 EMPLOYEES
At the end of 2012, APRIL was providing direct employment for about 5,400 employees in our forestry and mill operations*. The vast majority of these are permanent, fulltime employees, with only 2% of the workforce comprising employees on renewable contracts*.

There are advantages for employees to be engaged on a fulltime basis and this is a preferred basis of employment for us. Procedures require that all fulltime employees receive regular performance appraisals and high performers are encouraged to explore the many progression opportunities that are available within the company.

APRIL’s pulp and paper business comprises a forestry operation and a mill operation, both sectors which are traditionally male dominated. However we continuously try to increase female participation in our workforce, which increased slightly from 9% in 2011 to 10% in 2012*. Women in the APRIL family are well represented in other parts of our operations, in areas such as research & development, nursery operations, finance and administration.

Our employees are a diverse group, reflecting, in part, the considerable cultural diversity of Indonesia. In 2012, APRIL’s workforce comprised employees from 15 nationalities, including Indonesian, and from six different belief systems or religious faiths*. As our company continues to grow, this diversity will provide strength and flexibility.

APRIL’s long-term objective has been to help grow the Indonesian pulp and paper industry into a competitive world-class industry. A key part of this goal is our strong commitment to and our focus on grooming the next generation of Indonesian nationals, preparing them for roles in company leadership. In 2012, 79%* of senior management comprised Indonesian nationals, a rise over 75%* the year before and 74% in 2010.

As expatriate managers continue to develop local staff and transfer knowledge, we expect this percentage to increase further. This is evidenced by the lower number of expatriates employed over the last three years, a trend that will likely continue as more qualified Indonesians rise through the ranks. In 2012, APRIL had 56 expatriates on its workforce, a decrease of 12 people from the previous year*. In 2010, 78 expatriates were employed by APRIL.

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**Figure 52: BREAKDOWN BY AGE (DIRECT EMPLOYEE AGE DISTRIBUTION) - 2012**

- 18 - 24: 15.5%
- 25 - 34: 38.5%
- 35 - 44: 33%
- 45 - 54: 12%
- 55: 1%

**Figure 53: TOTAL NUMBER OF NEW HIRES BY YEAR**

- 2011: 15.9% (814 pax)*
- 2012: 7.4% (405 pax)*

**Figure 54: TURNOVER OF STAFF/YEAR**

- 2011: 6% (304 pax)*
- 2012: 8.6% (467 pax)*
6.2 EMPLOYEE RIGHTS AND BENEFITS

IN A RELATIVELY REMOTE PROVINCE LIKE RIAU, IN A DEVELOPING COUNTRY LIKE INDONESIA, EMPLOYMENT HAS A PARTICULAR LEVEL OF SIGNIFICANCE FOR BOTH APRIL AND OUR PEOPLE.

Our remote location means we have to care for our employees in ways that many of our international pulp and paper industry counterparts do not. To meet their day-to-day needs, our employees receive quality housing, medical facilities, international and national-syllabus schools for their children, as well as sporting and recreational facilities.

However, our impact on their lives does not end there. The skills, training and opportunities we offer our employees enable them to improve their lives and the lives of their families. It is a matter of great pride for us that we can bring these opportunities to the people of Riau Province.

For APRIL, the benefits are equally powerful. By caring for and training our employees well (in some cases sponsoring them through Masters-level degrees), we are building a local workforce of increasing depth and expertise. This adds greatly to our strength as a company.

EMPLOYEE SATISFACTION

APRIL and our employees both benefit from strong employee satisfaction. To ensure an accurate understanding of employee satisfaction levels, we commission an annual independent employee satisfaction survey. This survey covers areas such as rewards, recognition, training and development. The results so far have been encouraging.

Over the last three surveys, all scores have been in the “Good” category with a slight year-on-year increase.

The 2012 survey results provided insights into employee commitment levels and concerns. Employees identified three areas that were most important to them. These were “clear career path”, “opportunity to develop career” and “earlier promotions for high performance employees.” This information will be used to improve HR programmes, policies and practises.
6.2 Employee - Employee Rights and Benefits

EMPLOYEE RIGHTS

APRIL Indonesia adheres strictly to national labour laws and our own codes of practice to ensure appropriate employment practices are implemented. These include strict rules against the use of child labour - Indonesian Labour Act No. 13 of 2003 defined the term “child” as every person whose age is under 18 (eighteen) years old (Article 1). Our standard operating procedures (SOPs) provide for the checking of identity cards of all people working on our sites. This enables us to check that no under-age employees have been engaged.

APRIL’s entire supply chain is covered by Origins and Legality of Timber (OLB) Standards for Forestry Companies, an international legality certification that is externally verified by Bureau Veritas. Ours was the first industrial plantation company in Asia to achieve this certification in 2011, which requires adherence to all laws and regulations on employment and labour. These include respecting the legal hiring age and allowing staff to organise and negotiate their hiring in accordance with conventions 87 and 98 of the International Labour Organisation.

We also have strict rules against the use of forced labour. All employees receive proper employment contracts which stipulate job title, terms of employment as per standard company practice, and compensation. We require contractors to also adhere to all laws and regulations in regards to employment and labour. For example, contractors who provide us with labour supply are required to show proof of payment for their workers’ national social security prior to receiving payment on their invoices submitted.

OLB certification also requires that we align the company’s policy for health and work safety with legal and regulatory requirements, and develop it in open co-operation with workers. For example, our workers have access to appropriate individual protection equipment and we ensure that we possess the means to take care of any worker who suffers an industrial accident, regardless of their contract type.

APRIL recognises and respects the right of freedom of association and the right to form or be members of labour unions, as permitted under Indonesian law. We maintain collective bargaining agreements with trade and labour unions. In 2012, union membership in our company increased from 67.8% in 2010 to 74.8%*. In accordance with existing collective labour agreements, the first attempt to resolve a significant dispute is made at the level of the employee and the relevant Company superior.

If unresolved at this level, the dispute will be elevated to deliberation and resolution by a bipartite body comprising members of the Company and the union.

If this fails, the worker may pursue the grievance with the local government authority (Department of Labour) through the union for mediation and resolution, in accordance with existing labour law and regulations. Such issues may include retrenchment, salary negotiation and payment of incentives.

Our plantation and mill are also certified under the Health & Safety Management System OHSAS18001. This system is underpinned by the development and implementation of policies and procedures.

In 2011-2012, APRIL Management experienced no significant issues in regards to employee rights or relations. For example, there were no strikes or similar stop work periods.
Employee benefits that comply with national laws and ensure the welfare and living standards of our staff. Our comprehensive benefits packages are fundamental to the retention of talented people. Employee benefits include:

**Medical care***
- Health insurance, on-site medical clinics, and employee physical examination annually
- Employee relief fund granted to employee/spouse/children suffering from a critical illness or accident hazard
- Regular company doctor visits to employees and/or employee family members who are hospitalized in area hospitals.

**Housing***
- Accommodation or monthly housing allowance

**Safety***
- Safety induction briefing as part of the orientation programme
- Personal Protective Equipment (hardhat, safety shoes, eye and hearing protection, etc.)
- Regular emergency drills

**Insurance***
- Social security benefits such as retirement plan, group life and accidental insurance coverage

**Schools***
- Employee families have access to schools in areas where we operate, which includes on company premises and within all our concessions in Riau. These schools are staffed by qualified teachers and school fees are subsidised.

**Training***
- APRIL employees have the opportunity to receive training certification as form of recognition. Training covers areas such as our Driving Licence Programme (DLP) certification

**Awards and incentives***
- Annual competition for continuous improvement initiatives

**Service awards and gifts***
- Recognition for long-service employees as well as for special events such as marriage, new births, birthdays or funerals of family members
6.3 TRAINING AND DEVELOPMENT

Employee training is an essential part of any successful business. Training has positive impacts on employee satisfaction, performance and retention. By training our employees well, we enable them to reach their full potential, which makes our organisation more competitive. In a broader context, the skills we give our employees help them to find their place in Indonesia’s rapidly developing economy.

SUMMARY OF EMPLOYEE TRAINING

In 2011, 4796 participants spent 337,206 man-hours in 1301 training programmes.

In 2012, 4358 participants spent 110,060 man-hours in 713 training programmes.

Each employee received an average of 70 hours of training in 2011 and 25 hours in 2012.

The comparatively higher number of training hours in 2011 over 2012 was due to increased hiring, a significant proportion of new hires that year being fresh graduates. APRIL training programmes for new or recent graduates are intensive, long-term programmes of 6 to 12 months in duration, which are required to quickly build a sound knowledge base and skill set in line with APRIL standards. There were very few new graduate hires in 2012, hence the more normalised average training hours per employee that year.

APRIL LEARNING INSTITUTE (ALI)

The APRIL Learning Institute (ALI), which started in Kerinci, Riau Province in 2005, is an example of the value we place on staff training and learning. All ALI programmes are based on three Cultural Pillars – Customer Focus, Performance Driven and Proactive Teamwork. Following the establishment of ALI, another specialist institute for the forestry and plantation operations was created, the APRIL Asian Agri Learning Institute (AAALI). The two learning centres adopt a holistic approach based on competency-based methodologies.

Individual employee training needs are determined via the APRIL Assessment Centre which conducts pre-assessments of most employees to determine competency gaps. Individually tailored development programmes are then provided for employees through the Individual Development Plan.

Our programmes have the collective aim of securing a flow of talent for the Company. As such, APRIL works to develop and improve employees at all levels - from talent identification in young scholars, to skills enhancement in senior management. We achieve this through five main programmes:

<table>
<thead>
<tr>
<th>Programme Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. APRIL Citizen</td>
<td>A mandatory programme for all employees that covers general information on safety, work environment, new job function, compensation and benefits, company culture and the company’s improvement methodologies.</td>
</tr>
<tr>
<td>2. APRIL Academy</td>
<td>A programme designed for recent graduates to learn and grow with the Company.</td>
</tr>
<tr>
<td>3. APRIL Expert</td>
<td>An employee development programme that specifically addresses technical and functional competencies.</td>
</tr>
<tr>
<td>4. APRIL Leader</td>
<td>An employee development programme focused on the organisation and business, as well as leadership and management competencies.</td>
</tr>
<tr>
<td>5. Fibre Talent Development</td>
<td>The programme focuses on fibre technical and soft skill development, including retention and attraction schemes, and scholarship programmes for external talent.</td>
</tr>
</tbody>
</table>
PROGRAMME PARTICIPATION AT ALI

ALI aims to build a culture of learning to boost employee morale and team spirit. The programme design has shifted from larger workshops to tailor-made sessions, as well as more participative methodologies like self-directed learning, acting in specific roles and partnerships.

ENABLING STAFF TO IMPROVE OUR BUSINESS

Continuous staff improvement is essential to our business success. APRIL Indonesia’s strategy is to maintain our competitiveness by:

- Leveraging individual and business team innovation
- Motivating people to use company-wide standard frameworks and methods to maximise efficiencies
- Creating value-add in day-to-day activities through both incremental and breakthrough improvements

In 2005, we implemented the APRIL Improvement Management System (AIMS) - a comprehensive framework to guide and monitor continuous improvement activities. AIMS enables improvement ideas through:

- Suggestion system for simple improvement ideas by employees
- Small group activity for medium complexity initiatives by departments
- Task force project for complex programmes by cross-functional teams

In 2006, a dedicated Business Continuous Improvement Department (BCID) was set up to promote this mind-set and implement all improvement projects and activities throughout the organisation. The BCID team also organises annual competitions between business units to select the “best-of-the-best” improvement projects and initiatives.

In 2007, the BCID team launched a Total Productive Maintenance programme, which ran till 2012. Following an evaluation process, six new pilot projects were launched in 2012, covering Work Area Management and Autonomous Maintenance.

BCID is also involved in Enterprise Risk Management (ERM) and works closely with all business units on risk evaluation, preparedness and business continuity.
6.3 Employee - Training and Development
MASTERS SCHOLARSHIP PROGRAMME

A key component of APRIL’s employee development is a Masters Scholarship programme aimed at developing the next generation of pulp and paper professionals. Every year, we sponsor about four employees for graduate studies overseas under this programme.

Since 2007, APRIL has selected top performing employees to attend leading Indonesian or overseas universities specialising in pulp and paper or agriculture technology.

To date, 26 scholars have attended the Institute of Technology (AIT) in Thailand and 60 scholars have attended the Academy of Pulp and Paper Technology (ATPK) in Bandung, Indonesia.

In 2012, an event occurred that exemplifies our commitment to our people. Three APRIL scholars were in the last term of their Masters degrees at Thailand’s Asian Institute of Technology (AIT) when major floods occurred, destroying university laboratories and equipment.

The three expected a premature end to their studies, however we worked with AIT in order to secure an alternative university to host them. The scholars subsequently completed their research towards their respective Masters in Engineering degrees at Canada’s highly-regarded University of British Columbia (UBC).

One of these scholars, Zulfauzein Nadra, is now APRIL’s Mill Environmental Officer in Kerinci.

“The chance to complete our research at UBC was a blessing. Canada is one of the most advanced countries for pulp and paper and UBC’s R&D activity is amongst the best. We have been exposed to the most advanced thinking and practises in the field and we will apply this experience at APRIL.”

ZULFAUZEIN NADRA, MILL ENVIRONMENTAL OFFICER, KERINCI.
As an operator of both forestry plantations and a large industrial facility, safety is of critical importance to APRIL.

Our Occupational Health and Safety (OHS) policy promotes the maintenance of a safe, healthy and secure work environment for all employees, temporary staff, contractors, customers and visitors. “Safety First” must become the dominant mindset for any person connected to our operations.

A most concerning aspect of our operating activities over 2011 and 2012 was the occurrence of injuries and fatalities. We must be able to assure our employees and their families that APRIL’s businesses will become safer places to work.

Whilst forestry is inherently a hazardous industry and in our case this situation is exacerbated by the remoteness of our plantations and by the relatively low education levels of some of our workforce and in particular, contractors, this can in no way excuse loss of life.

Accordingly, APRIL has engaged in a new set of safety programmes and initiatives with contractor safety management becoming a major area of emphasis. We have undertaken a major overhaul of our company’s approach to the management of its occupational health and safety.

Safety statistics reported and other observations during the first half of 2013 suggest these programs are having a positive effect.

We have set ourselves a goal of Zero Accidents. This requires a company-wide commitment. The alternative, to allow the situation of recent years to persist, is not an option.

DEFINITIONS

Under the “OSHA” Standard used for reporting here, Lost Time Injury Frequency Rate (LTIFR) is calculated as the number of Lost Time Injuries plus fatalities, divided by the number of hours worked, multiplied by a factor of 200,000. Total Recordable Incident Rate (TRIR) means the number of injuries and illnesses, or lost workdays, per 100 full-time workers.

IMPROVEMENTS

A major focus during 2011 and 2012 was improving the consistency and comprehensiveness of our systems for capturing statistical safety performance data. This reflects our belief that proper measurement is a key step in implementing improvement. Statistical outcomes from 2011 onwards reflect this commitment to diligent recording of data.

While our overall safety performance over 2011-2012 was unacceptable, some statistical improvements have become evident in measures such as reduction in LTIFR and TRIR for both fibre and mill operations.
The above table suggests that the comprehensive range of safety measures we introduced in 2012 (including the 12 new programmes referenced below under the heading “Implementing behavioural safety”) are beginning to have an impact, with downward trends being established (as at the date of reporting) in LTIFR and TRIR for both our forestry and mill operations. The effectiveness of these programmes is being closely monitored and will be reported in future years.

Significant progress was also made in building organisation-wide commitment to our goal of Zero Accidents. We will continue this process, while working to translate commitment into better day-to-day safety practices.

One initiative that we expect to have a major impact on safety performance is the shift toward full mechanical tree harvesting. Manual felling activity is hazardous and difficult to manage safely for reasons detailed in this section of the report. The transition to mechanical harvesting will lessen risk among contractors.

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013 (Jan-Jun)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTIFR - Fibre</td>
<td>0.38</td>
<td>0.22</td>
<td>0.20</td>
</tr>
<tr>
<td>LTIFR - Mill</td>
<td>0.49</td>
<td>0.29</td>
<td>0.27</td>
</tr>
<tr>
<td>TRIR - Fibre</td>
<td>1.70</td>
<td>0.88</td>
<td>0.54</td>
</tr>
<tr>
<td>TRIR - Mill</td>
<td>1.26</td>
<td>1.22</td>
<td>1.14</td>
</tr>
</tbody>
</table>

Figure 57: LTIFR AND TRIR PERFORMANCE
CHALLENGES

While APRIL Indonesia has always placed workplace safety as a top priority, safety improvements are needed if we are to discharge our responsibilities as a leading employer in Indonesia. In order to establish Zero Accident workplaces, we must first commit to building a Total Safety Culture.

We have revised our statement of commitment to achieving this goal. APRIL’s “HSE Management System Paradigm” now states: “We, APRIL Riau Complex and our Business Partners are committed to working towards a Total Safety Culture by January 2014”.

We acknowledge that the challenge we have undertaken in this area is effectively, a safety revolution. To achieve this, we are addressing a number of specific challenges.

1. Time. We cannot implement the necessary cultural and behavioural changes overnight. The process of change is time-consuming and requires great commitment right across the organisation. This commitment must be reflected in comprehensive systems and processes.

2. Priorities. A key insight into managing occupational risk has been the recognition that our organisation’s traditional paradigm of “Priority = Production” must change to “Safe Operations First”. Recognising that improvement in safety performance is a journey, we have adopted “Behaviour Based Safety” (BBS) as our target. To emphasise this priority shift, our OHS management unit has conducted monthly meetings on safety issues with top management and department heads.

3. Leadership. Change is required in leadership at every level. We have now modified our human resources and management systems to embed ten key safety behaviours as key performance criteria/indicators. Leaders will be individually assessed for their performance in demonstrating these behaviours and outcomes will be linked to remuneration and bonuses.

4. Training. Low education levels and inadequacy of on-the-job training (especially in the case of contractors) have been identified as key contributing factors in a number of fatalities. APRIL has embarked on a programme of extensive coaching and training to begin improving this situation.

5. Changes in work practices. Where our analysis of operating procedures identifies significant risks, we will consider changing practices. For example, in harvesting activities, we are working toward the objective of full mechanical felling, where terrain and soil conditions permit, in order to minimise the felling activity that has caused a number of fatalities in the past.

SAFETY PERFORMANCE

The following graphs summarise the five-year safety performance of the Kerinci Mill complex and our Fibre operations, (connected to forestry).

**Figure 58: NUMBER OF LOST TIME INJURIES**
Figure 59: LOST TIME INJURY FREQUENCY RATE

Figure 60: TOTAL RECORDABLE INCIDENT RATE

Figure 61: NUMBER OF MEDICAL INJURIES
Figure 62: MAJOR ILLNESSES 2008 - 2012 RIAU FIBRE

<table>
<thead>
<tr>
<th>Year</th>
<th>Respiratory Tract Infections</th>
<th>%</th>
<th>Malaria</th>
<th>%</th>
<th>Non GE Motility Disorders (including abdominal colic)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>6,089</td>
<td>5.01%</td>
<td>3748</td>
<td>3.08%</td>
<td>2267</td>
<td>1.86%</td>
</tr>
<tr>
<td>2009</td>
<td>4,499</td>
<td>4.36%</td>
<td>1431</td>
<td>1.39%</td>
<td>343</td>
<td>0.33%</td>
</tr>
<tr>
<td>2010</td>
<td>4,059</td>
<td>5.08%</td>
<td>887</td>
<td>1.11%</td>
<td>136</td>
<td>0.17%</td>
</tr>
<tr>
<td>2011</td>
<td>5,593*</td>
<td>9.17%</td>
<td>781*</td>
<td>1.28%</td>
<td>139*</td>
<td>0.23%</td>
</tr>
<tr>
<td>2012</td>
<td>5,154*</td>
<td>5.51%</td>
<td>180*</td>
<td>0.19%</td>
<td>123*</td>
<td>0.13%</td>
</tr>
</tbody>
</table>

Note: Detailed continuous records have been kept for the above three illness categories, identified as the most prevalent major illnesses in the APRIL workforce in 2008. Records of other significant illnesses are also maintained.
SAFETY SYSTEMS

APRIL’s Occupational Safety and Health Management System (OHSMS) is based around a series of well-recognised Standards:

The company adheres to the Occupational Health and Safety Assessment Series (OHSAS) 18001 Standards (for both plantation forestry and mill operations).

To systematically implement business improvement in our operations we follow the 5 ‘S’ Workplace Organisation Process - the Kaizen-based system. We are in the process of moving to a 6 ‘S’ system, which adds the element of Safety.

A further key process is the principal Indonesian Occupational Health and Safety system, SMK3 (“Sistem Management Keselamantan Kesehatan Kerja”).

REVIEW

APRIL is audited every three years under OHSAS as well as under SMK3. In November 2011, we successfully passed a 3-yearly OHSAS audit.

In April 2013, we were awarded a “Golden” flag and certificate under SMK3, signifying we are implementing the 166 criteria within the 12 elements of the SMK3 system (representing 90% plus implementation).

FATALITIES

As mentioned above, despite our statistical improvement, an unacceptable number of fatalities occurred in our businesses during 2011 and 2012.

Mill operations: four fatalities occurred in 2011 and five in 2012*.

Fibre operations: nine fatalities occurred in 2011 and four in 2012*.

The incidents which led to fatalities in Mill operations were diverse and included: a contractor falling from height while replacing materials on a roof; a contractor suffering an electric shock while chipping off Boiler Wall Tube Refractory in the furnace of the power boiler; a contractor electrocuted while drilling a retaining wall of a calcium hydroxide sludge bunker and a contractor coming into contact with moving parts on a conveyor while performing on-the-run repairs*.

A mill employee died after inhaling noxious gases at a recovery plant, the result of non-use of protective equipment, required by Standard Operating Procedures*.

In a catastrophic incident on a fibre line on February 7, 2011, three contractors and one employee lost their lives when they came into contact with high temperature pulp while performing on-the-run repairs*.

Of the total of 13 fatalities in Fibre operations across the reporting period, eight involved deaths of chainsaw operators struck by trees during felling*.

The remaining five fatalities in Fibre operations involved a drowning in a canal, a worker trapped in a pontoon ramp, two road traffic accidents and a boat accident*.
PROCEDURE FOR ANALYSING FATALITIES

We thoroughly review and analyse all serious incidents, including fatalities, and take corrective actions. In the event of a fatality, we commission a full investigation as required by Indonesian law, OHSAS 18001 and our own systems.

A fatality report is produced and reviewed in detail by senior management. Process improvements are then implemented. Every fatality that has occurred has been exhaustively analysed and investigated, resulting in system improvements. All fatalities are reported to the Indonesian government. Senior staff are assigned to work with and assist the families of the victims.

Each of the incidents leading to these deaths, and the circumstances behind each fatality are extensively investigated and the results presented to, and reviewed by, senior management. As a result, insights have been reached about the nature of the risks in our business and the steps needing to be taken to move our safety performance to new, more acceptable levels.

Key insights obtained from this process of review and analysis include:

- The high rate of fatalities among contractors has shown inadequacies in safe work training procedures used by many contractors.
- The fatality rate also demonstrated deficits in our previous procedures for on-boarding contractors. We have upgraded our training programme to ensure contractors are fully apprised of the workplace risks in heavy industrial mill and forestry environments.
- A high number of fatalities have been due to workers not following standard operating procedures, and this particularly relates to the large number of fatalities in tree felling operations.
- A contributing factor is generally low education levels among the population from which many contract workers are engaged.
- An identified need to place stringent limitations on who is permitted to work on our sites.

IMPLEMENTING BEHAVIOURAL SAFETY

APRIL has planned a staged methodology and approach to achieving a Total Safety Culture by 2014. Our challenge is to accelerate through this process to the point of Zero Accidents. Behavioural Safety cannot be achieved overnight. It is not easy to fundamentally change safety behaviour. A relentless focus is required from supervisors, managers and front line employees.

Our success is directly related to the well-being of our employees. Their most basic requirement is a safe work environment. Therefore, our top priority must be ensuring that everyone is safe on the job.
Figure 63: ORGANISATIONAL SAFETY MODELS AND ASSOCIATED INJURY RATES

- Safety by natural instinct
- Compliance is the goal
- Delegated to safety manager
- Lack of management involvement
- Management commitment
- Condition of employment
- Fear/discipline
- Rules/procedures
- Supervisor control
- Personal knowledge, commitment and standards
- Internalisation
- Personal value
- Care for self
- Practice and habits
- Individual recognition
- Helping others conform
- Others keeper
- Networking contributor
- Care for others
- Organisational pride
The schematic on the preceding page shows the process of evolution from Traditional to Behavioural safety, with the associated reduction in injury rates. It can be seen that the Traditional approach to organisational safety is characterised by reactivity and natural instinct and tends to be associated with high rates of injury. In this approach, compliance, rather than self care is the goal. The next phase, Engineering Control has a higher level of management involvement but is driven by external pressure to conform to regulations. The Health and Safety Management phase involves employees internalising or “owning” the responsibility for safety. The final and desired position, Behavioural Safety involves employees extending this approach to caring for each other. It is when safety becomes embedded in employee behaviour that a Zero Accident level can be maintained.

As part of our focused drive toward Zero Accident workplaces, we have introduced the following new programmes and enhanced a range of existing safety initiatives.

**Figure 64: NEW SAFETY PROGRAMMES 2011-2012**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Contractor Safety Management System (CSMS)</strong></td>
<td>In November 2011, a pilot Contractor Safety Management System project commenced in the Mill. This project involved the appointment of 350 positions designated as Process Safety Engineers (PSEs). This group consisted of both existing and new employees. All PSE’s underwent retraining and modification of job responsibilities. Extensive systematic education and the attainment of certification from the Ministry of Manpower of Indonesia (a two-week programme) have given these individuals a reasonable level of expertise in safe business processes.</td>
</tr>
<tr>
<td><strong>2. Contractor Safety Management (CSM)</strong></td>
<td>A new stipulation is that only contractors who pass CSM accreditation can be involved in bidding for work. Following a process of review, we have reduced the overall number of contractors working within our Contractor Safety Management System, resulting in a smaller number of contractors with the desired focus on safety. Work permits are only issued to contractors who have completed the required safety training.</td>
</tr>
<tr>
<td><strong>3. Fibre operations initiatives</strong></td>
<td>In response to the high fatality rates among contractors working in Fibre operations, we have implemented an improved OHS Management system specifically for these businesses. These cover HIRADC, SOP and a Plantation Quality Checklist. Improvements include an OHS management system designed for chainsaw operators. Training for these operators has been upgraded with tools such as audio-visual support material. We have also introduced new First Aid protocols such as the provision of first aid kits to all chainsaw operators and the training of assigned staff First Aiders. We have also introduced a system of rewards and incentives to encourage better safety behaviour among employees and improved health and safety related facilities in housing and workers’ camps.</td>
</tr>
<tr>
<td><strong>4. Safety Inductions</strong></td>
<td>A full-day safety induction is held for each new employee in technical and operational areas in our Mill and Fibre operations.</td>
</tr>
<tr>
<td><strong>5. Training</strong></td>
<td>As mentioned, low education levels and inadequacy of on-the-job training (especially in the case of contractors) have been identified as key contributing factors in a number of fatalities. Consequently, in 2011 and 2012, more than 3,200 people were safety-trained in the Mill operation alone. We have also undertaken extensive coaching and training of employees and contractors. Safety refresher training is continuously provided for all workers. In keeping with the foundations of Total Safety Culture, training has emphasised the need for workers to look out for the welfare of one another, as consistent with the “others’ keeper” notion. They are trained to intervene whenever unsafe behaviours are observed and to help educate one another about potential hazards and the consequences of unsafe behaviour.</td>
</tr>
<tr>
<td></td>
<td>6. Better Engagement with Union and other Workforce Leaders</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td></td>
<td>7. Supply of Personal Protective Equipment</td>
</tr>
<tr>
<td></td>
<td>8. Zero Tolerance of Disregard for Safety</td>
</tr>
<tr>
<td></td>
<td>9. Standard Operating Procedures and Work Directions</td>
</tr>
<tr>
<td></td>
<td>10. Worksite inspections</td>
</tr>
<tr>
<td></td>
<td>11. Employee Health and Wellbeing</td>
</tr>
<tr>
<td></td>
<td>12. Communications</td>
</tr>
</tbody>
</table>
7.0 APPENDICES
Independent Limited Assurance Statement to the Management of APRIL Management Pte Ltd

We have performed limited assurance procedures in relation to APRIL Management Pte Ltd's Sustainability Report 2012 ("the Report") as detailed in the "Scope of work" below.

The Management's responsibility

APRIL Management Pte Ltd's Sustainability Report (2012) has been prepared by the Management of APRIL Management Pte Ltd, which is responsible for the collection and presentation of the information it contains and for maintaining adequate records and internal controls that are designed to support the sustainability reporting process. There are currently no legally prescribed requirements relating to the preparation, publication and verification of sustainability reports.

The auditor's responsibility

Our responsibility in performing limited assurance activities is to the Management of APRIL Management Pte Ltd only and in accordance with the terms of reference agreed with them. We do not accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance any such third party may place on the Report is entirely at their own risk.

Our review was limited to the information on the select indicators set out within the Company's sustainability report from 01 January 2011 to 31 December 2012 and our responsibility does not include:

- Review of the materiality of issues identified for reporting;
- Any work in respect of sustainability information published elsewhere on APRIL Management Pte Ltd's annual report, website and others;
- Sustainability information prior to 01 January 2011;
- Sustainability information subsequent to 31 December 2012;
- Plantations related subject matter; and
- Management's forward looking statements such as targets, plans and intentions.

Our multi-disciplinary team has the required competencies and experience to conduct this assurance engagement. The professionals have experience in both assurance skills and in the applicable subject matter including environmental, social and financial aspects.

Reporting criteria

As a basis for the assurance engagement, we have used relevant criteria in the sustainability reporting guidelines of the Global Reporting Initiative (GRI G3.1). We consider these reporting criteria to be relevant and appropriate to review the Report.
Assurance standard used and level of assurance

Our limited assurance engagement has been planned and performed in accordance with the ISAE 3000\(^1\). We have also considered the Global Reporting Initiative G3.1 ('GRI G3.1') reporting guidelines in conducting our limited assurance procedures.

A limited assurance engagement consists of making enquiries and applying analytical and other limited assurance procedures. Our procedures were designed to provide a limited level of assurance and as such do not provide all the evidence that would be required to provide a reasonable level of assurance.

The procedures performed depend on the assurance practitioner's judgement including the risk of material misstatement of the specific activity data, whether due to fraud or error. While we considered the effectiveness of Management's internal controls when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls. We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Scope of work

We have been engaged by the Management of APRIL Management Pte Ltd ('Company') to perform limited assurance on selected indicators of the Report.

Subject Matter

The subject matter and GRI indicators for our limited assurance engagement are as follow:

1. Economic
   i. Aspect: Market Presence
      * EC 7 - Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation

2. Environment
   ii. Aspect: Materials
      * EN 1 - Material used by weight or volume
   iii. Aspect: Energy
      * EN 3 - Direct energy consumption by primary energy source
   iv. Aspect: Water
      * EN 8 - Total water withdrawal by source
      * EN 9 - Water sources significantly affected by withdrawal of water
   v. Aspect: Emissions, Effluents and Waste
      * EN 16 - Total direct and indirect greenhouse gas emissions by weight
      * EN 19 - Emissions of ozone-depleting substances by weight
      * EN 20 - NOx, SOx, and other significant air emissions by type and weight
      * EN 21 - Total water discharge by quality and destination
      * EN 22 - Total weight of waste by type and disposal method

3. Labour Practices and Decent Work
   vi. Aspect: Employment
      * LA 1 - Total workforce by employment type, employment contract, and region, broken down by gender

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\(^1\) International Federation of the Accountants' International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (ISAE3000)
LA 2 – Total number and rate of new employee hires and employee turnover by age, gender and region
LA 3 – Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operations

Labour/Management Relations
LA 4 – Percentage of employees covered by collective bargaining agreements.

Occupational Health and Safety
LA 7 – Rates of injury, occupational diseases, lost days, and absenteeism, and number of work related fatalities by region and by gender
LA 8 – Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.

Human Rights
HR 6 – Operations and significant suppliers identified as having significant risk for incidents of child labour, and measures taken to contribute to the elimination of child labour
HR 7 – Operation and significant suppliers identified as having significant risk for incidents of forced or compulsory labour, and measures to contribute to the elimination to all forms of forced or compulsory labour.

Local Community
SO 1 – Percentage of operations with implemented local community engagement, impact assessments, and development programs

Product and Service Labeling
PR 3 – Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements.

The figures and statements reflecting GRI indicators assured are marked with an "**" in the report.

What we did to form our conclusions

The procedures performed in order to obtain limited assurance aim to verify the plausibility of information and probe less deeply than those performed for assurance engagements aimed at obtaining reasonable assurance. We designed our procedures in order to state whether anything has come to our attention to suggest that the subject matter detailed above has not been reported in accordance with the reporting criteria cited earlier. In order to form our conclusions we undertook the steps outlined below.

1. Inquiries with APRIL Management Pte Ltd’s sustainability management to
   a. Understand principal business operations.
   b. Appreciate key sustainability issues and developments
   c. Map out information flow for sustainability reporting
   d. Identify data providers with their responsibilities and
   e. Recognize the likelihood of possible manipulation of sustainability data.

2. Conduct independent media research in relation to the concerned subject matters in the sustainability report.
3. Undertake 2 visits to Pangkalalan Kerinci, Riau Province, Indonesia covering the mill operations and community engagement.

4. Conduct process walk-through with relevant personnel to understand the quality of checks and control mechanisms, assessing and testing the controls in relation to the concerned subject matters in the sustainability report.

5. Obtain documentation through sampling methods to assess assumptions, estimations and computations made by management in relation to the concerned subject matters in the sustainability report.

6. Interviews with employees and management (human resources, health & safety, communities' development, mill operations technical, sales & marketing, finance) in relation to the concerned subject matters in the sustainability report.

7. Interviews with communities (affected and benefited) in relation to the concerned subject matters in the sustainability report.

8. Obtain various certifications, financial statement report and correspondence with stakeholders in relation to the concerned subject matters in the sustainability report.

Our independence

Ernst & Young has provided independent assurance services in relation to the APRIL Management Pte Ltd's Sustainability Report (2012).

In conducting our assurance engagement we have met the independence requirements of Institute of Singapore Chartered Accountants, Code of Professional Conduct and Ethics. Our independence policies prohibit any financial interests in our clients that would or might be seen to impair independence. Each year, partners and staff are required to confirm their compliance with the firm’s policies.

Observations and areas for improvement

Our observations and areas for improvement will be raised in an internal report to APRIL Management Pte Ltd’s Management. These observations do not affect our conclusions on the Report set out below.

Conclusion

We believe that our procedures provide us with an appropriate basis to conclude with a limited level of assurance on the select indicators for APRIL Management Pte Ltd’s Sustainability Report 2012.

Based on the procedures performed, nothing has come to our attention that causes us to believe that the Subject Matter, described above, as presented in APRIL’s Sustainability Report, for the years ended 31 December 2011 and 2012 respectively, was not presented fairly, and calculated in all material respects in accordance with the Criteria detailed above.

Ernst & Young LLP
Signed for Ernst & Young LLP by
K Sadasiv
Partner, ASEAN Climate Change and Sustainability Services Assurance Leader
Singapore, 20th September 2013
## 7.2 GRI STANDARD DISCLOSURES TABLE

**Figure 64: SUSTAINABILITY REPORT 2011-2012 TABLE OF STANDARD DISCLOSURES**

| Sustainability Report 2011-2012 Table of Standard Disclosures  
(In accordance with GRI profile 3.12) | Status  
Reported = Y  
Unreported = N  
Externally Assured = EA |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRI profile and description</strong></td>
<td><strong>Relevant section and subsection of this report</strong></td>
</tr>
<tr>
<td>Strategy and Profile</td>
<td></td>
</tr>
<tr>
<td>1.1 Statement from the CEO</td>
<td>President Director’s Statement</td>
</tr>
</tbody>
</table>
| 1.2 Description of key impacts, risks and opportunities | President Director’s Statement  
2.5 Stakeholder Engagement | Y |
| Organisational Profile |  |
| 2.1 Name of the organisation | 1.1 Corporate Profile | Y |
| 2.2 Primary brands, products and/or services | 1.1 Corporate Profile | Y |
| 2.3 Operational structure of the organisation | 1.1 Corporate Profile  
1.2 Corporate Governance | Y |
| 2.4 Location of headquarters | 1.1 Corporate Profile | Y |
| 2.5 Countries in which the organisation’s operations are located | 1.1 Corporate Profile | Y |
| 2.6 Nature of ownership and legal form | 1.1 Corporate Profile | Y |
| 2.7 Markets served | 1.1 Corporate Profile  
2.2 Products and Markets | Y |
| 2.8 Scale of the reporting organisation | 1.1 Corporate Profile | Y |
| 2.9 Significant changes during the reporting period | 4.2 APRIL’s Land Use Management | Y |
| 2.10 Awards received during the reporting period | 1.3 Certifications and Awards | Y |
| Report Parameters |  |
| 3.1 Reporting period | President Director’s Statement | Y |
| 3.2 Date of most recent previous report | President Director’s Statement | Y |
| 3.3 Reporting cycle | President Director’s Statement | Y |
| 3.4 Contact point for questions | Inside back cover | Y |
| 3.5 Process for defining report content | 2.5 Stakeholder Engagement | Y |
| 3.6 Boundary of the report | 2.4 Sustainability Management System | Y |
| 3.7 Specific limitations on the scope or boundary | 2.4 Sustainability Management System | Y |
| 3.8 Basis for reporting on joint ventures, subsidiaries etc | President Director’s Statement | Y |
| 3.9 Data measurement techniques | President Director’s Statement | Y |
| 3.10 Explanation of the effect of any re-statements of information | 3.6 Emissions  
3.7 Waste Management  
6.4 Health and Safety | Y |
| 3.11 Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report. | 4.2 APRIL’s Land Use Management  
3.6 Emissions  
3.7 Waste Management  
6.4 Health and Safety | Y |
## Table of Standard Disclosures contd

<table>
<thead>
<tr>
<th>GRI profile and description</th>
<th>Relevant section and subsection of this report</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.12 Table identifying the location of the Standard Disclosures in the report</td>
<td>7.2 GRI Standard Disclosures Table</td>
<td>Y</td>
</tr>
<tr>
<td>3.13 Policy and current practice regarding external assurance</td>
<td>2.4 Sustainability Management Systems</td>
<td>Y</td>
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</table>

### Report Parameters contd

<table>
<thead>
<tr>
<th>Description</th>
<th>Relevant Section and Subsection</th>
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</tr>
<tr>
<td>3.13 Policy and current practice regarding external assurance</td>
<td>2.4 Sustainability Management Systems</td>
<td>Y</td>
</tr>
</tbody>
</table>

### Governance, Commitments and Engagement

<table>
<thead>
<tr>
<th>Description</th>
<th>Relevant Section and Subsection</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.2 Position of the chair of the board of directors</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.3 Independent, non-executive directors on the board of directors</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.4 Mechanisms for shareholders and employees to provide recommendations to the board of directors</td>
<td>2.5 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.5 Executive compensation</td>
<td>1.2 Corporate Governance</td>
<td>N</td>
</tr>
<tr>
<td>4.6 Avoiding conflicts of interest</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.7 Determining the qualifications and expertise of board members</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.8 Mission or values statements, codes of conduct, sustainability principles</td>
<td>1.2 Corporate Governance, 2.3 Sustainability Approach and Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.9 Board-level procedures overseeing sustainability performance</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.10 Evaluating board performance with respect to sustainability performance</td>
<td>1.2 Corporate Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.11 Explanation of whether and how the precautionary approach or principle is addressed by the organization.</td>
<td>2.3 Sustainability Approach and Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.12 External charters, principles or initiatives endorsed</td>
<td>1.3 Certifications and Awards, 2.3 Sustainability Approach and Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.13 Memberships in associations</td>
<td>1.3 Certifications and Awards, 2.3 Sustainability Approach and Governance</td>
<td>Y</td>
</tr>
<tr>
<td>4.14 List of stakeholder groups engaged</td>
<td>2.5 Stakeholder Engagement</td>
<td>Y</td>
</tr>
<tr>
<td>4.15 Identification and selection of stakeholders</td>
<td>2.5 Stakeholder Engagement</td>
<td>Y</td>
</tr>
<tr>
<td>4.16 Approaches to stakeholder engagement</td>
<td>2.5 Stakeholder Engagement</td>
<td>Y</td>
</tr>
<tr>
<td>4.17 Responding to key topics resulting from stakeholder engagements</td>
<td>2.6 Key Sustainability Issues</td>
<td>Y</td>
</tr>
</tbody>
</table>
### Table of Standard Disclosures contd

<table>
<thead>
<tr>
<th>GRI profile and description</th>
<th>Relevant section/subsection of this report</th>
<th>Status</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Reported = Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unreported = N</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Externally Assured = EA</td>
</tr>
</tbody>
</table>

#### Economic Performance

| EC1 | Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments. | 2.1 Sustainable Development and APRIL's Economic contribution | Y |
| EC3 | Coverage of the organization’s defined benefit plan obligations. | 6.2 Employee Benefits | Y |
| EC7 | Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation. | 6.1 About our Employees | Y |
|     |                                                          | Externally Assured = EA |
| EC8 | Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement. | 2.1 Sustainable Development and APRIL's Economic contribution | Y |
| EC9 | Understanding and describing significant indirect economic impacts, including the extent of impacts. | 2.1 Sustainable Development and APRIL's Economic contribution | Y |

#### Environmental

| EN1 | Materials used by weight or volume. | 3.2 Environmental Achievements 3.3 Materials 3.4 Energy Consumption 3.5 Water 3.9 Fibre Sourcing | Y |
|     |                                           | Externally Assured = EA |
| EN2 | Percentage of materials used that are recycled input materials. | 3.2 Environmental Achievements 3.3 Materials | Y |
| EN3 | Direct energy consumption by primary energy source | 3.2 Environmental Achievements 3.4 Energy Consumption | Y |
| EN4 | Indirect energy consumption by primary source | 3.2 Environmental Achievements 3.4 Energy Consumption | Y |
| EN5 | Energy saved due to conservation and efficiency improvements. | 3.2 Environmental Achievements 3.4 Energy Consumption | Y |
| EN6 | Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives. | 3.2 Environmental Achievements 3.4 Energy Consumption | Y |
| EN7 | Initiatives to reduce indirect energy consumption and reductions achieved. | 3.2 Environmental Achievements 3.3 Materials | Y |
| EN8 | Total water withdrawal by source. | 3.5 Water | Y |
|     |                                           | Externally Assured = EA |
| EN9 | Water sources significantly affected by withdrawal of water. | 3.5 Water | Y |
|     |                                           | Externally Assured = EA |
## Table of Standard Disclosures contd

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<td><strong>Environmental contd</strong></td>
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<td>EN10  Percentage and total volume of water recycled and reused.</td>
<td>3.5 Water</td>
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<td>EN11  Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.</td>
<td>4.2 APRIL’s Land Use Management</td>
<td>Y</td>
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<td>EN12  Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.</td>
<td>4.2 APRIL’s Land Use Management 4.4 Conservation 4.5 New Eco-Restoration Activities</td>
<td>Y</td>
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<tr>
<td>EN13  Habitats protected or restored.</td>
<td>4.2 APRIL’s Land Use Management 4.4 Conservation 4.5 New Eco-Restoration Activities</td>
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<td>EN14  Strategies, current actions, and future plans for managing impacts on biodiversity.</td>
<td>4.2 APRIL’s Land Use Management 4.5 New Eco-Restoration Activities</td>
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<td>EN15  Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.</td>
<td>4.4 Conservation 4.5 New Eco-Restoration Activities</td>
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<td>EN16  Total direct and indirect greenhouse gas emissions by weight.</td>
<td>3.2 Environmental Achievements 3.3 Materials 3.4 Energy Consumption 3.8 Carbon</td>
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<td>EN18  Initiatives to reduce greenhouse gas emissions and reductions achieved.</td>
<td>3.2 Environmental Achievements 3.3 Materials 3.8 Carbon</td>
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<tr>
<td>EN19  Emissions of ozone-depleting substances by weight.</td>
<td>3.6 Emissions</td>
<td>Y</td>
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<tr>
<td>EN20  NOx, SOx, and other significant air emissions by type and weight.</td>
<td>3.6 Emissions</td>
<td>Y</td>
</tr>
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<td>EN21  Total water discharge by quality and destination.</td>
<td>3.5 Water</td>
<td>Y</td>
</tr>
<tr>
<td>EN22  Total weight of waste by type and disposal method.</td>
<td>3.6 Emissions</td>
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<tr>
<td>EN28  Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.</td>
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<td>LA1</td>
<td>6.1 About our Employees</td>
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<td><strong>Y</strong></td>
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<tr>
<td>LA2</td>
<td>6.2 Employee Rights and Benefits</td>
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<td>LA7</td>
<td>6.4 Health and Safety</td>
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<td>LA8</td>
<td>6.4 Health and Safety</td>
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<td>HR3</td>
<td>6.3 Training and Development</td>
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<td>HR6</td>
<td>6.2 Employee Rights and Benefits</td>
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<td>HR7</td>
<td>6.2 Employee Rights and Benefits</td>
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<td>HR3</td>
<td>6.3 Training and Development</td>
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<tr>
<td>HR6</td>
<td>6.2 Employee Rights and Benefits</td>
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<tr>
<td><strong>Society</strong></td>
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<td>SO1 Percentage of operations with implemented local community engagement, impact assessments, and development programs.</td>
<td>5.0 Communities</td>
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<tr>
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<td>EA</td>
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<tr>
<td>SO4 Actions taken in response to incidents of corruption.</td>
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</tr>
<tr>
<td>SO9 Operations with significant potential or actual negative impacts on local communities.</td>
<td>4.8 Community Partnerships and Engagement 5.0 Communities</td>
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</tr>
<tr>
<td>SO10 Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.</td>
<td>4.8 Community Partnerships and Engagement 5.0 Communities</td>
<td>Y</td>
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<td><strong>Product Responsibility</strong></td>
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<tr>
<td>PR3 Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements.</td>
<td>2.2 Products and Markets</td>
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<tr>
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<tr>
<td>PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information, by type of outcomes.</td>
<td>2.2 Products and Markets</td>
<td>Y</td>
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</tbody>
</table>
### 7.3 GLOSSARY: APRIL SUSTAINABILITY REPORT 2011-2012

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acacia (crassicarpa, mangium and auriculiformis)</td>
<td>Genus of tree belonging to subfamily Mimosoideae of the family Fabaceae. APRIL cultivates three species of Acacia, all characterised by rapid growth and good pulping qualities. The company plants Acacia crassicarpa on low-lying poorly drained land and Acacia mangium on better-drained soils. For mineral soils, APRIL is currently evaluating Acacia hybrids (A. mangium x A. auriculiformis).</td>
</tr>
<tr>
<td>ADT</td>
<td>Air Dry Tonne (1000 kg). In the pulp and paper industry, air-dried pulp is defined as containing 90 per cent solids, and is therefore 10 per cent water. (Paper is around 94-95% solids.)</td>
</tr>
<tr>
<td>ANDAL</td>
<td>Analisis Dampak Lingkungan (environmental impact assessment study)</td>
</tr>
<tr>
<td>AOX</td>
<td>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.</td>
</tr>
<tr>
<td>BAT</td>
<td>Best Available Techniques. A term that describes best practice in limiting pollutant discharges. The term constitutes a moving benchmark on practices, since developing societal values and advancing techniques may change what is currently regarded as “reasonably achievable”, “best practicable” and “best available”.</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>Total diversity or variation of life within a given ecosystem.</td>
</tr>
<tr>
<td>Biofuel</td>
<td>In contrast to fuel based on products derived from the petrochemical industry [i.e. fossilized biomaterial] biofuel is based on raw material derived from living organisms and therefore can be classified as renewable resource.</td>
</tr>
<tr>
<td>Bleached Chemical Market Pulp</td>
<td>Pulp obtained by digestion of wood with solutions of various chemicals. The principal chemical processes are the sulfate (kraft), sulftie, and soda processes. Chemical pulps are used to make shipping cartons, paper bags, printing and writing papers, and other products that require strength.</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical Oxygen Demand. A measure of water quality. Specifically, the amount of oxygen that bacteria will consume while decomposing biologically available organic matter. BOD expresses the degree of organic pollution in water. See COD also.</td>
</tr>
<tr>
<td>BREF</td>
<td>Best Available Technique Reference document. Published by the European Commission Joint Research Centre, the documents summarise BAT across a wide range of industries.</td>
</tr>
<tr>
<td>Carbon footprint</td>
<td>A measure of the total amount of carbon dioxide (CO2) 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).</td>
</tr>
<tr>
<td>Chain of Custody System (CoC)</td>
<td>For APRIL, CoC involves monitoring, tracing and documenting the flow of fibre from the plantation to the mill. Part of APRIL’s commitment to sustainable fibre plantation management. Through APRIL’s Chain of Custody (CoC) System, plantation wood can be identified and segregated from mixed hardwood at any point from the plantation to the mill production chain.</td>
</tr>
<tr>
<td>Elemental Chlorine Free (ECF)</td>
<td>Pulp bleaching process, where no chlorine gas [i.e. no elemental chlorine (Cl2) is used, but only chlorine dioxide (ClO2). Using chlorine dioxide (a powerful oxidant) minimizes the formation of chlorinated organic compounds during bleaching.</td>
</tr>
<tr>
<td>ELV</td>
<td>Emission Limit Values - relating to National regulations concerning environmental discharges from a pulp and paper factory.</td>
</tr>
<tr>
<td>Eucalyptus</td>
<td>A large family of trees, common in Australia. Certain species, like the Eucalyptus pellita, are native to Indonesia. APRIL is evaluating the suitability of planting Eucalyptus hybrids on a large scale on mineral soils.</td>
</tr>
<tr>
<td>FAO</td>
<td>The Food and Agriculture Organisation of the United Nations, headquartered in Rome, Italy. The FAO promotes the principles and practice of sustainable forest management.</td>
</tr>
<tr>
<td>FLEGT</td>
<td>Forest Law Enforcement, Governance and Trade. The European Union’s effort to exclude illegal timber from markets, to improve the supply of legal timber and increase the demand for responsible wood products.</td>
</tr>
</tbody>
</table>
**GHG**
Greenhouse gas. Gases such as carbon dioxide and methane that absorb and re-emit thermal radiation (heat).

**GJ**
Gigajoule A unit of energy equal to one billion joules.

**GRI**
The Global Reporting Initiative (GRI). A non-profit organization that promotes economic sustainability. The GRI produces one of the world’s most prevalent standards for sustainability reporting. GRI Guidelines are used by around 4,000 organizations from 60 countries to produce their sustainability reports.

**Hectare**
Metric unit of area equal to 10,000 square metres (2.471 acres)

**HCV/ HCVF**
High Conservation Value Forests. HCVFs are defined as forests of outstanding and critical importance due to their environmental, socio-economic, biodiversity or landscape values.

**Illegal Logging / Illegal Wood**
The practice of cutting trees from natural forests, private concessions and village land without legitimate government authorisation or permits. It also includes wood obtained through bribery and wood acquired in violation of the conditions of the permit (e.g. cutting more than the authorised volume, or cutting outside the permit area). Illegal logging is a global multi-billion dollar industry affecting many countries. APRIL is actively combating illegal logging.

**IPPC**
A European Union directive that serves as a legislative instrument for the protection of the environment and human health through pollution control.

**IUCN**
The International Union for Conservation of Nature. The world’s oldest and largest global environmental network. The organisation describes its mission as “helping the world find pragmatic solutions to our most pressing environment and development challenges.” The IUCN 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 practice.

**IUCN Red List**
The world’s most comprehensive inventory of the global conservation status of biological species. The IUCN Red List is based on criteria that evaluate the extinction risk of thousands of species and subspecies.

**ISO**
The International Organization for Standardization, also known as ISO, is a worldwide federation of national standards bodies representing more than 140 countries, one representative from each country. ISO is a non-governmental organization established in 1947. The mission of ISO is to promote the development of standardization and related activities in the world with a view to facilitating the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological and economic activity. ISO’s work results in international agreements that are published as International Standards.

**ISO 9000:2000**
Comprises a series of documents (standards, guidelines and technical reports) that set out more specific standards for areas such as auditing procedures, quality performance evaluation, quality improvement, quality in project management, training, techniques and statistical process control; however, they do not result in “certifications”. ISO 9001:2000 “Quality management systems - Requirements” is the standard used to assess an organization’s ability to meet customer and applicable regulatory requirements and thereby address customer satisfaction. ISO 9001:2000 is the only standard in the ISO 9000:2000 family against which third-party certification can be carried out.

**ISO 14001**
“Environmental Management Systems - Specification with guidance for use” The standard within the ISO 14000 series against which an organization’s environmental management system (EMS) can be certified. ISO 14001 requires that an organization’s EMS provide a framework to identify and address the significant environmental aspects and related impacts of its activities, products and services. ISO 14001 requires compliance with all relevant legislation and a commitment to continual improvement of the organisation’s EMS. However, the ISO standard does not set specific environmental performance criteria nor does it establish absolute requirements for environmental performance; these are defined by the organisation seeking certification to this standard.

**IVL**
The Swedish Environmental Research Institute is an independent non-profit owned by a foundation jointly established by the Swedish Government and Swedish industry.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Kampar Peninsula</td>
<td>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. The 700,000 ha peninsula is covered by peat swamp forests – a special type of rainforest growing on an accumulating, water-logged peat soil up to 15 metres thick. (See also Peat and Peatland)</td>
</tr>
<tr>
<td>Kerinci</td>
<td>Location in Riau Province, Sumatra, Indonesia. Home to APRIL’s Indonesia operations.</td>
</tr>
<tr>
<td>Kraft pulp</td>
<td>Pulp produced by the most widely used chemical pulping process, the kraft process (also known as sulphate pulping 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. The name of the process comes from the German word “kraft” (power, strength), referring to the high strength of kraft pulp (as compared with sulphite pulp, a product of the less common sulphite pulping process).</td>
</tr>
<tr>
<td>LEI</td>
<td>Lembaga Ekolabel Indonesia. The Indonesian Ecolabelling Institute, a non-profit constituent-based organization that develops forest certification systems. LEI aims to promote just and sustainable forest resource management in Indonesia.</td>
</tr>
<tr>
<td>Megajoule</td>
<td>A unit of energy equal to one million joules.</td>
</tr>
<tr>
<td>Melaleuca</td>
<td>Melaleuca is a genus of around 170 species belonging to the Myrtle family (Myrtaceae). APRIL is testing Melaleuca intensively to determine the best planting material sources, to further develop our management techniques, and to understand their fibre properties in pulp production.</td>
</tr>
<tr>
<td>Mixed Hardwood pulp</td>
<td>A specific type of pulp that, in the case of APRIL, is produced from a mixture of various hardwood species harvested from concession areas that are being developed into Acacia plantations.</td>
</tr>
<tr>
<td>MRV</td>
<td>Monitoring, Reporting and Verification. Processes developed by Indonesia’s Ministry of Forestry to evaluate land-use planning and water management systems for peatland, based on 19 indicators.</td>
</tr>
<tr>
<td>NOx</td>
<td>Nitrogen oxides such as nitric oxide and nitrogen dioxide, (NO and NO2).</td>
</tr>
<tr>
<td>OHSAS 18001</td>
<td>OHSAS 18001 is an Occupational Health and Safety Assessment Series for health and safety management systems. It is intended to help organizations control occupational health and safety risks.</td>
</tr>
<tr>
<td>Peat</td>
<td>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.</td>
</tr>
<tr>
<td>Peatland</td>
<td>Also known a “wetlands,” peatlands are ecosystems based on peat soils. These vary widely due to regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance. Peatlands are found from the tundra to the tropics and on every continent except Antarctica.</td>
</tr>
<tr>
<td>PEFC</td>
<td>Program for the Endorsement of Forest Certification is an international, non-governmental, non-profit organization dedicated to promoting sustainable forest management. PEFC is the world’s largest certification system.</td>
</tr>
<tr>
<td>Petajoule</td>
<td>A unit of energy equal to 1015 joules.</td>
</tr>
<tr>
<td>pH</td>
<td>The pH scale commonly measures the acidity or alkalinity of water. It ranges from 0 to 14. A pH of 7 is neutral (pure water). A pH less than 7 is acidic, and a pH greater than 7 is basic.</td>
</tr>
<tr>
<td>PROPER</td>
<td>Program Penilaian Kinerja Perusahaan or Program for Pollution Control, Evaluation, and Rating. The Government of Indonesia’s National Environmental Impact Agency reporting initiative and regulatory tool. PROPER is designed to promote industrial compliance with pollution control regulations, to facilitate and enforce the adoption of practices contributing to “clean technology,” and to ensure a better environmental management system.</td>
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<tr>
<td>Pulp</td>
<td>Cellulose fibres used in the production of paper, tissue and board. Can be derived from hard-woods, soft-woods and plant fibres.</td>
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<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Riau Province (Riau Propinsi)</td>
<td>The province on the island of Sumatra, Indonesia, where APRIL’s pulp &amp; paper mills are located. For administrative purposes, Indonesia is divided into a number of provinces, each administered by its own government.</td>
</tr>
<tr>
<td>Riparian</td>
<td>Relating to the immediate surrounding area of a natural watercourse. This includes vegetation as well as the soil.</td>
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<tr>
<td>SME</td>
<td>Small &amp; Medium-sized Enterprises. APRIL helps establish and encourages local SMEs both through our industrial operation and via community development.</td>
</tr>
<tr>
<td>SOx</td>
<td>Sulphur oxides such as sulphur monoxide, sulphur dioxide and sulphur trioxide (SO, SO2, SO3).</td>
</tr>
<tr>
<td>TRS</td>
<td>Total Reduced Sulphur. Compounds released from both natural and industrial sources that produce offensive odors, but not normally considered a health hazard.</td>
</tr>
<tr>
<td>TTSS</td>
<td>Total Suspended Solids. A measure of the solids in suspension in wastewater, effluent or water bodies.</td>
</tr>
<tr>
<td>UNGC</td>
<td>United National Global Compact. A compact consisting of 10 principles covering human rights, fair labour, the environment and anti-corruption. Established in July 2000, the UNGC seeks to promote responsible corporate citizenship by providing a framework for businesses to follow in response to the challenges of globalisation. The UNGC has been signed by more than 3,000 participants, including 2,500 companies around the world, making it one of the world’s largest voluntary corporate citizenship initiatives.</td>
</tr>
<tr>
<td>WBCSD</td>
<td>World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 200 companies dealing exclusively with business and sustainable development.</td>
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</tbody>
</table>