



**New Britain  
Palm Oil  
Limited**

A Sime Darby Plantation Company

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**Sustainability Report  
2016/17**



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## CHAIRMAN'S WELCOME



We will continue this work to break barriers and have already begun work to explore new standards, such as the Sustainable Agriculture Network (SAN) standard which forms the basis of the Rainforest Alliance certification scheme. ”

### Dear Stakeholders of New Britain Palm Oil Limited (NBPOL),

Welcome to our sixth sustainability report covering 2016 and 2017. This is a special occasion as this report also marks our 50th year in operation, which has seen us moving from a small player in the industry, to one respected as a global leader in sustainable palm oil.

I believe that there is a clear connection between our longevity

and our commitments to sustainability and to constant and continuous improvement. We have always recognised that caring for nature and maintaining good relationships with local communities are critical to our long-term success. NBPOL was among the first companies in the industry to adopt a zero-burn policy back in 1967, when burning was still the most common means of clearing land. We were also the first palm oil company to achieve the ISO14001

environmental management system certification, in 2004. Always challenging ourselves to do better, we have been an early adopter of Integrated Pest Management (IPM) practices, as well as pioneers in our engagement with local communities and respect for customary land rights.

We have been strongly involved in the development of the Roundtable on Sustainable Palm Oil (RSPO) since its inception in 2004, and have contributed

significantly to the development of the RSPO Principles & Criteria. NBPOL was among the first palm oil companies to complete certification in 2008, and we were the first to include smallholders in our certification.

We have continued to challenge the status quo over the last decade. We published the very first sustainability report in the sector in 2008, and became the first palm oil company to develop a carbon footprint methodology in 2010. We have also continued to strengthen our civil society partnerships, which has played a significant role in our progress. These include the High Carbon Stock Approach No Deforestation framework, which was initiated in 2014, and a new approach to integrated land use planning that is currently under development.

Becoming part of Sime Darby Plantation has not dampened our efforts. In fact, as chair of NBPOL over the past two years, I can genuinely say that these have been exciting times. We have worked our way through a robust integration with Sime Darby Plantation, and have shared best practices in sustainability between our two companies and across all our teams.

NBPOL is now reaping the benefits of this collaboration and partnership, but we continue on our own distinct leadership path. While RSPO certification remains the backbone of our sustainability efforts, we have also put a great deal of hard work into the Sustainable Agriculture Network Standard, which now forms the basis of the Rainforest Alliance Sustainable Agriculture Standard (RA SAS) certification scheme. We are proud to report that we have now successfully completed certification audits for two of our operational sites,

and seek to complete certification audits of all eligible estates and smallholders by 2020.

We are making steady progress against a number of key sustainability indicators. We reviewed our carbon emissions performance this year, and I am happy to note that our commitment to low carbon stock development and methane capture has yielded a 19% reduction in our absolute and relative carbon emissions since 2011. I am likewise pleased to report that our accident rate has dropped by more than 50% since 2015.



**Our work to safeguard the future of the endemic and highly endangered Queen Alexander Bird Butterfly is a stellar example of an initiative where one company can truly make a difference.**”

The eradication of harassment and violence against women has been a focus area for NBPOL for more than a decade. I am particularly encouraged to see our women's safety programmes and domestic violence awareness and support activities being strengthened across all sites and in partnerships with the wider PNG business communities. With the introduction of the Gender Smart Safety Toolkit and the Gender Smart Audit, NBPOL has created a robust approach to ensuring the safety and empowerment of women in and around our operations.

2017 was a year marred by a terrible tragedy. On the afternoon of Monday 9 January, one of our company trucks at Higaturu Oil Palms was involved in a road accident with a public motor vehicle on the main Oro Bay to Kokoda highway. The accident resulted in the deaths of 13 people, with a further 12 people injured. The company extends its deepest condolences to the families and friends of those who died or were injured in the accident.

Beyond our plantation operations, I am happy to note that New Britain Oils Limited in Liverpool is continuing to be a fantastic ambassador for sustainable and responsible palm oil, and is contributing to the continued growth of certified and segregated sustainable palm oil in the European market.

I would like to extend my heartfelt thanks to all of our partners for their role in helping NBPOL become such a tremendous success story. I thank civil society organisations for challenging us to do better. I thank our business partners and customers, without whom we could not continue operating. I also thank our local smallholders and communities, who remind us daily that what we do makes a difference in people's lives. And of course, most of all, I thank every past and present NBPOL employee for their tireless work and adaptability, which safeguards our continuous success and growth. I believe that with such dedicated stakeholders we may see another 50 years of prosperity.

**Dato' Henry Barlow,**  
**Chairman**  
**New Britain Palm Oil Limited**

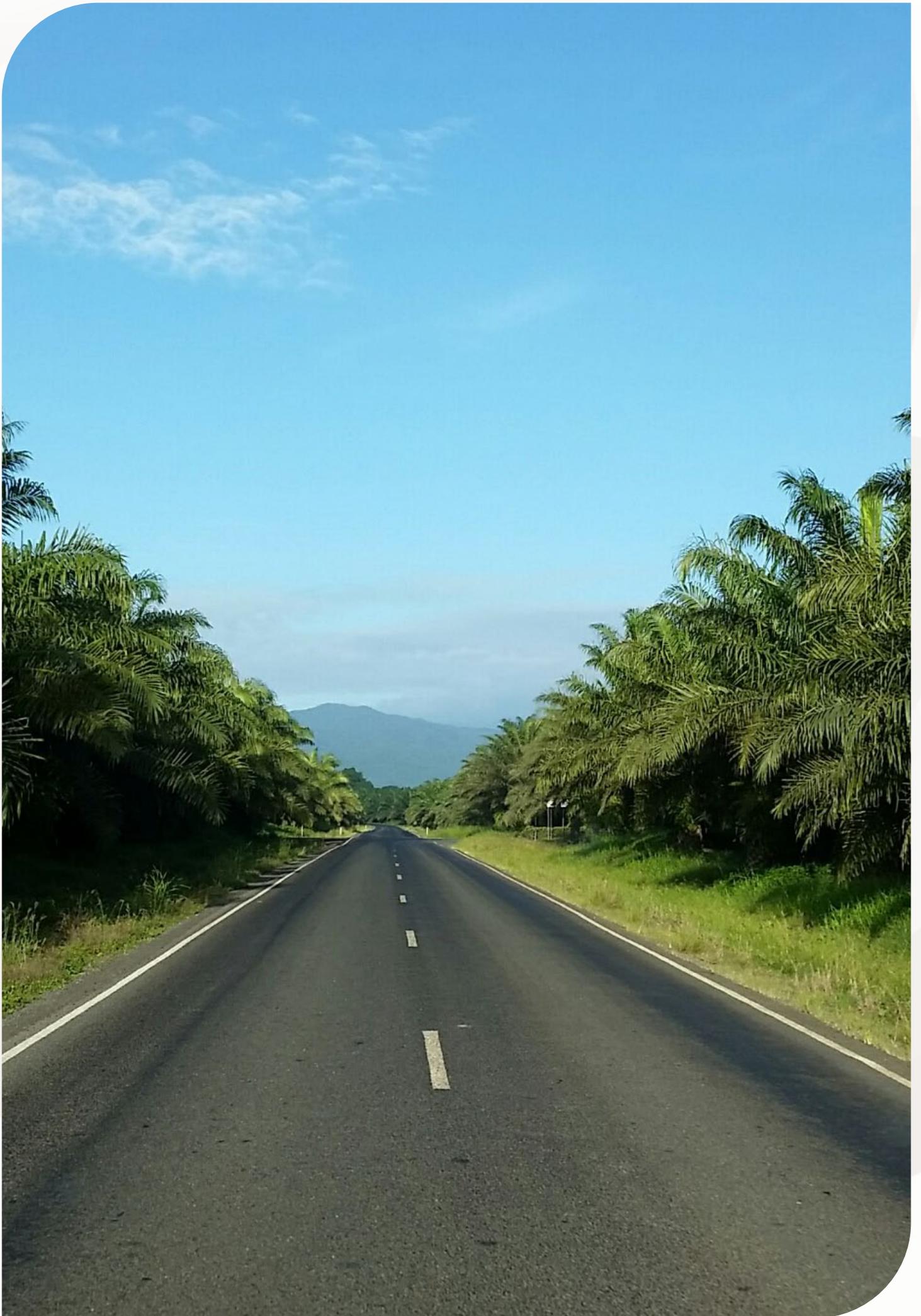
## TARGETS AND ACHIEVEMENTS

Targets	Target dates (year end)	SR 2016/17
<b>Environmental management</b>		
No land developed on peat	Ongoing target	Achieved
BOD levels below 90ppm for all mills built before 2013	Ongoing target	Achieved for 5 sites – not achieved in WNB
Phase out methamidophos	2016	Achieved*
Three new methane capture projects completed across the Group	2020	On track
<b>Smallholder and community engagement</b>		
100% of RSPO premium paid to smallholders	Ongoing target	Achieved
Develop Group-wide tracking categories for grievances	2019	On track
<b>Labour standards</b>		
Reduce Group lost time accident (LTA) rates by 5% annually	Ongoing target	Achieved
No work-related fatalities	Ongoing target	Achieved in GPP and HOP – not achieved in WNB, RAI, POL and MBE
All employees paid above living wage	Ongoing target	Achieved
No employees work more than 12 hours overtime per week	Ongoing target	Not achieved
All employees have a minimum 1 day off per 7 days	Ongoing target	Achieved
<b>Management systems and compliance</b>		
No expansion without FPIC	Ongoing target	Achieved
No legal non-compliances	Ongoing target	Achieved
No expansion without HCV assessment using ALS accredited HCV assessors	Ongoing target	Achieved
No expansion without a peer-reviewed HCS assessment	Ongoing target	Achieved
Roll out an internal management system based on ISO14001, OHSAS18000 and SA8000	2017	Achieved
Maintain RSPO certification for all sites (inclusive of smallholders)	Ongoing target	Achieved
Progressive certification against SAN Standard at two sites	2017	Achieved at WNB & RAI
Certification against SAN Standard for eligible sites	2020	On track
Reduce GHG emissions by 30%	2024	On track
Implement SMART forest monitoring and satellite monitoring protocols	2024	On track

\* No purchases of methamidophos since 2015. Remaining stock in the process of being used up.

WNB – West New Britain  
RAI – Ramu Agri Industries  
MBE – Milne Bay Estates

HOP – Higturu Oil Palms  
POL – Poliamba Limited  
GPP – Guadalcanal Plains Palm Oil Limited

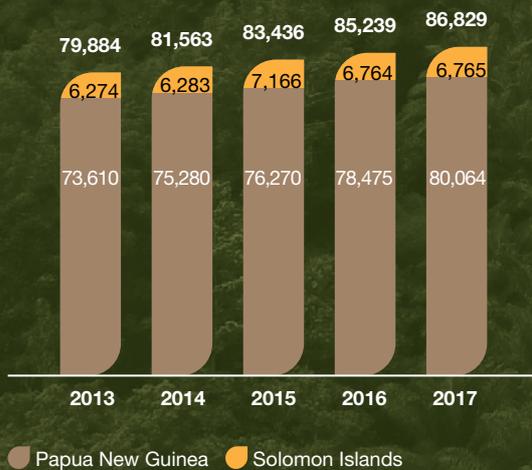


# ABOUT NEW BRITAIN PALM OIL – OVERVIEW

New Britain Palm Oil (NBPOL) is a vertically integrated producer of fully traceable, RSPO certified palm oil products. We have a land bank of approximately 140,000 hectares across six sites in Papua New Guinea (PNG) and Solomon Islands, including 87,000 hectares of oil palm, 5,600 hectares of sugar and 9,000 hectares of cattle pasture. ”

## NBPOL AT A GLANCE:

Total ha oil palm



Note:  
PNG hectareage has been restated for 2015 from 76,451 hectares

Titled land 2017



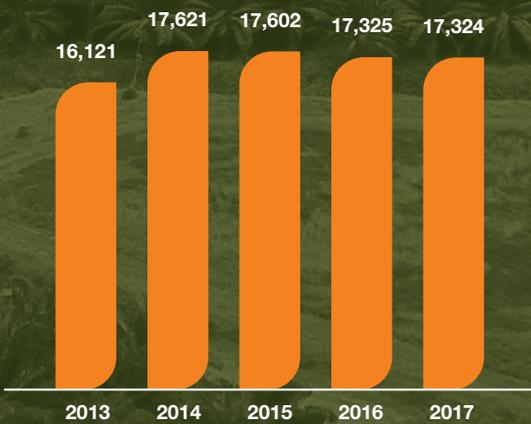
Oil palm	86,829 (62.04%)
Pasture	8,956 (6.40%)
Sugar cane	5,613 (4.01%)
Forestry	259 (0.19%)
Infrastructure/housing/roads etc	6,055 (4.33%)
HCV area	9,483 (6.78%)
Other conservation area	10,128 (7.23%)
Unplantable	10,251 (7.32%)
Plantable reserve	2,384 (1.70%)

New Britain Palm Oil (NBPOL) is a vertically integrated producer of fully traceable, RSPO certified palm oil products. We became part of the Sime Darby Group in March 2015, and now are a wholly owned subsidiary of Sime Darby Plantation Berhad, and are headquartered in Port Moresby, Papua New Guinea (PNG).

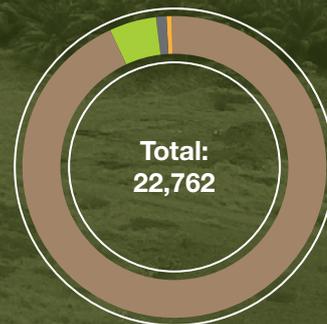
NBPOL operates six sites across PNG and Solomon Islands with a

total land bank of approximately 140,000 hectares. This includes 87,000 hectares of oil palm, 5,600 hectares of sugar and 9,000 hectares of pasture for cattle. We also own and operate state-of-the-art oil refineries in PNG and Liverpool, United Kingdom, as well as joint venture research facilities in Indonesia and PNG, including the acclaimed Dami Research Station and Seed Production Unit in West New Britain.

Number of smallholder blocks



Employees by region



Papua New Guinea	21,234 (93.29%)
Solomon Islands	1,435 (6.30%)
UK	80 (0.35%)
Singapore	13 (0.06%)

OUR OPERATIONS



**West New Britain (WNB), Papua New Guinea**

- RSPO certified since 2008
- SAN certified since March 2017
- 39,143 hectares of oil palm
- Five mills and one palm kernel crusher
- 290,785 tonnes of CPO produced in 2017
- 7,971 hectares managed for conservation
- One refinery and refinery bulking terminal
- 8,303 smallholder blocks producing 32.2% of fresh fruit bunches (FFB)
- 3,365,673 seeds produced in 2017
- Dami Seed Production Unit ISO9001 certified since 2005
- 4,018 head of cattle
- 394 hectares of pasture
- Land is a combination of state agricultural and customary land leased by the company



**Ramu Agri Industries Ltd (RAI), Papua New Guinea**

- Acquired by NBPOL in 2008
- RSPO certified since 2010
- SAN audit completed 2017 (certification achieved in Q1 2018)
- 14,136 hectares of oil palm
- One mill and one palm kernel crusher
- 58,474 tonnes of CPO produced in 2017
- 3,686 hectares managed for conservation
- 322 smallholder blocks producing 3.5% of FFB
- 19,500 head of cattle
- 8,562 hectares of pasture
- 5,613 hectares of sugar
- Land is primarily state agricultural lease



**Milne Bay Estates (MBE), Papua New Guinea**

- Acquired by NBPOL in 2010
- RSPO certified since 2012
- 10,746 hectares of oil palm
- One mill and one palm kernel crusher
- 2,450 hectares managed for conservation
- 56,907 tonnes of CPO produced in 2017
- 868 smallholder blocks produce 6.6% of FFB
- Land is a combination of state agricultural lease and customary land leased by the company



**Higaturu Oil Palm (HOP), Papua New Guinea**

- Acquired by NBPOL in 2010
- RSPO certified since 2012
- 10,548 hectares of oil palm
- Two mills and one palm kernel crusher
- 2,586 hectares managed for conservation
- 83,458 tonnes of CPO produced in 2017
- 5,811 smallholder blocks producing 31.1% of FFB
- Land is a combination of state agricultural lease and customary land leased by the company





**Poliamba (POL),  
Papua New Guinea**

- Acquired by NBPOL in 2010
- RSPO certified in 2012
- 5,492 hectares of oil palm
- One mill and one palm kernel crusher
- 18,144 tonnes of CPO produced in 2017
- 1,811 hectares managed for conservation
- 1,788 smallholder blocks producing 22.3% of FFB
- Land is a combination of state agricultural lease and customary land leased by the company



**Guadalcanal Plains  
Palm Oil Limited  
(GPPOL), Solomon  
Islands**

- Acquired by NBPOL in 2005
- RSPO certified since 2011
- 6,765 hectares of oil palm
- One mill and one palm kernel crusher
- One effluent tertiary polishing plant
- 35,089 tonnes of CPO produced in 2017
- 1,107 hectares managed for conservation
- 232 smallholder blocks producing 4.2% of FFB
- Land is primarily customary land leased by the company



**New Britain Oils  
(NBO), Liverpool,  
United Kingdom**

- Commissioned in 2010
- RSPO SCC certified since 2012
- One refinery
- 100% dedicated to processing traceable RSPO certified sustainable palm oil
- Products include 'New Britain Finest' RSPO branded bakery fats, as well as frying oils, margarines, shortening and palm-based bulk products for the food and personal care industries



**SOLOMON  
ISLANDS**

**Guadalcanal  
Plains Palm Oil Ltd**

**UNITED  
KINGDOM**

**Liverpool**

**FOCUS ON PRODUCTIVITY GAINS THROUGH R&D**

Since the early days of our company we have placed great emphasis on the improvement of yields and extraction rates as an essential means to drive growth. The principle of delivering higher yields per hectare also underpins the very notion of sustainable agriculture.

Our Group 30:30 Charter was designed over 10 years ago to guide our operations in good agricultural practices. The Charter ensures that we work progressively towards our ultimate goal of achieving a 30% combined extraction rate and average yields of 30 tonnes per hectare across our estates.

Research plays a central role in our work towards our 30:30 ambition. For instance, our Dami

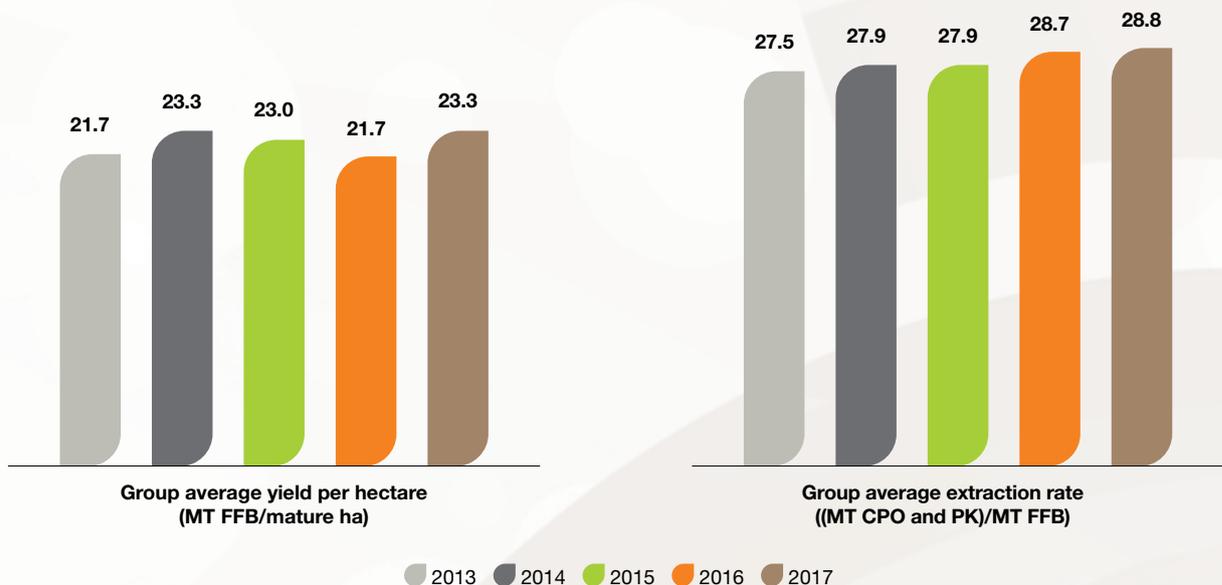
Research Station is one of the world’s leading seed production units. The facility develops planting materials and technical services for our own operations, and makes these available to our customers globally and associated smallholders locally. We have also developed biotechnology services to assist the seed production business. These include a technique called clonal micropropagation in which tissue is extracted from the flowers of a donor palm and used as a starter material.

Much of our research targets better agricultural practices. Our proprietary Oil Palm Management Programme (OMP) database maps the health status and tracks the harvesting progress of individual palms. This enables us to offer agronomy services

to our clients – including advice on soils, climate, foliar nutrient status and other relevant agronomic data – to support sustainable palm oil management. For example, our site-specific data is used to establish more efficient and precise applications of fertiliser and pesticides. Our agronomists also provide advice on organic recycling initiatives and the implementation of zero discharge technology in mills.

In 2014, we built on our research legacy by establishing Verdant Bioscience Singapore Pte Ltd (VBS), a partnership between our wholly owned subsidiary Ultra Oleom Pte Ltd, Sipef and Biosing PTE. VBS researches and develops high-yielding seed varieties with a view to commercialisation. This

**Towards 30:30**





is a long-term venture that has the potential to deliver a quantum leap in palm oil yields through genetics research and development, which does not involve any form of genetic modification.

Our research facilities are also working on innovative solutions for use in downstream operations such as processing. For instance, concern over the level of harmful process contaminants found in vegetable oils and some processed foods has led to a switch to using milder processing conditions, which has in turn led to a reduction in overall oil output. Prompted by this challenge, NBPOL conducted refinery trials throughout 2016 and 2017, in conjunction with colleagues from Sime Darby Plantation Research

and Development (R&D), and introduced new analytical techniques to identify the most effective and cost-efficient way of mitigating the formation of Glycidyl Esters (GE) and 3-MCPD (ME), the main contaminants that can occur in the processing of refined palm oil.

The output of this research will contribute towards our compliance with new EU legislation that comes into effect in March 2018, which will limit the maximum level of GE permitted in refined oil to 1 ppm (with ME legislation to follow at a later stage).

To further optimise our production process, we launched a laboratory-scale

pilot plant research programme at the start of 2017. The programme allows us to carry out small-scale production trials with bakery fats and new product developments without impacting our main production plant. The programme also raises our capacity to develop new and novel products, to extend our existing bakery fats portfolio, to optimise existing products and to provide our customers with in-depth technical support.



**A FULLY SEGREGATED AND TRACEABLE SUPPLY CHAIN**



In 2010, NBPOL became the first company in the world able to deliver fully traceable and segregated RSPO certified palm oil products. Our two refineries – in Liverpool, UK, and in West New Britain, PNG – process only fully segregated RSPO certified palm oil sourced from our own plantations. Both refineries are certified under the RSPO Supply Chain Certification System to provide assurance to our customers of the integrity of our supply chain.

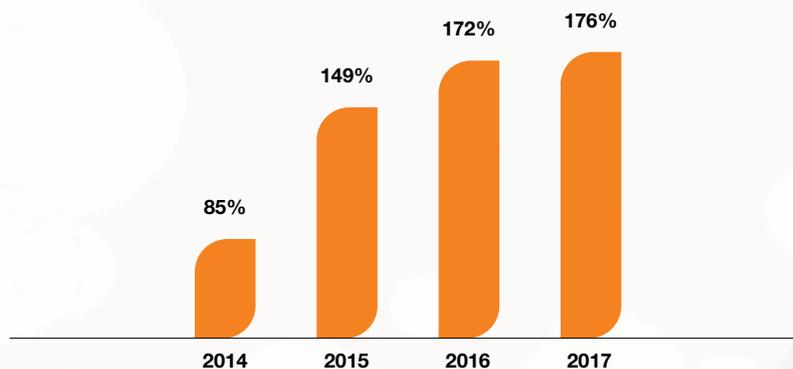
Our New Britain Oils (NBO) refinery in Liverpool currently produces bakery fats such as margarine and shortening, frying oils and bulk oils, including custom blends. We are constantly challenging existing processes and developing new and more efficient ways of working to ensure that sustainable palm oil is accessible across a vast number of food products. Thanks to a concerted and focused sales effort we saw average year-on-year sales increase by more

than 10%. Bakery fat volumes continued to show good growth as manufacturers have increasingly moved to sourcing from physical supply chains.

Our NBO site has continued to embed technical solutions within its supply chain over the last two years, and business systems and practices have now been integrated across the site to support a lean manufacturing approach. We also introduced

Delico PRO – our first liquid, extra long-life frying oil based on Palm Olein – in late 2017. Designed specifically for the quick service restaurant sector, PRO combines the convenience of low temperature pourability with the flavour and robust fry life associated with palm oil. We are confident that sales of PRO will contribute to further volume growth and provide access to areas of the market where we aim to have a stronger presence.

**Packed product sales growth from 2013 baseline**



## ABOUT NEW BRITAIN PALM OIL -

### ■ NBPOL TURNS 50

NBPOL celebrated its Silver Jubilee in West New Britain, PNG, in December 2017. The events, which included the inauguration of the Sir Brown Bai Stadium in Mosa, commemorated our company's development, expansions, and successes over the last 50 years.

NBPOL was founded on 19 May 1967 as a collaboration between the Hoskins Oil Palm Project and the Commonwealth of Australia (which administered the Territory of Papua and New Guinea until 1975), following an agreement signed with the conglomerate Harrisons & Crosfield on 28 February. This marked the beginning of the palm oil industry in PNG.

Overcoming many challenges, NBPOL gradually developed and attained sustainable levels of success, expanding not only its business and production, but also PNG's palm oil industry as a whole. Today the country exports around 5% of the total certified palm oil sold globally.



# 50 YEARS OF SUSTAINABLE PALM OIL

## Corporate Milestones

### 2017 50 YEARS CELEBRATION



#### 2015

- Acquired by Sime Darby Plantation Sdn Bhd (Now Sime Darby Plantation Bhd)



#### 2010

- Acquisition of MBE, HOP and POL
- Commissioning of NBO refinery in UK



#### 2008

- Listing on London Stock Exchange
- Acquisition of RAI



#### 2005

- Acquisition of GPP



#### 1997

- NBPOL Foundation established



#### 1970

- Dami Oil Palm Research Station established



#### 1968

- NBPOL established with 6,000 ha



## Sustainability Milestones

### 2017

- First SAN Standard certification achieved
- Achieved #2 SPOTT ranking
- NBPOL Management Training Academy established

### 2014

- High Carbon Stock Approach Steering Group member

### 2012

- Community baseline assessment
- Fully RSPO certified, inclusive of smallholders

### 2011

- Human Rights and Business Ethics Policy
- Selected as World Economic Forum “New Sustainability Champion”

### 2010

- Carbon Report and No Net Carbon Loss Policy
- No Planting on Peat Policy

### 2008

- RSPO Certification
- First GRI Report
- Fully traceable supply chain

### 2004

- ISO14001

### 1999

- First listed on Port Moresby Stock Exchange

### 1969

- Zero burning

## CONTINUING OUR SUSTAINABILITY JOURNEY – ■ CERTIFICATION

We recognise that third-party assurance of our sustainability initiatives is critical to our continuous improvement. Furthermore, we believe that standards developed in collaboration with both commercial and not-for-profit organisations are the best means for developing credibility and trust, as well as for ensuring that we remain responsive to the ever-evolving stakeholder landscape.

### Roundtable on Sustainable Palm Oil

The Roundtable on Sustainable Palm Oil (RSPO) has been the cornerstone of our sustainability efforts for a decade. In 2008, we were among the first companies in the world to achieve RSPO certification and all of our operations, inclusive of smallholders, have been fully certified against the RSPO Principles & Criteria (P&C) since 2012. We have served three terms as members of the RSPO Board of Governors and remain deeply involved with the organisation.

### Sustainable Agriculture Network and Rainforest Alliance

We continue to explore new avenues for improving our sustainability performance, including extensive engagement with the Sustainable Agriculture



Network (SAN). In the last few years we have undertaken a number of baseline and gap assessments, and have started a series of mapping exercises to explore the possibility of certifying our operations against the SAN Standard with the aim of making this a reality by the end of 2020.

2017 saw the launch of the new Sustainable Agriculture Standard, which is applicable for crop and cattle production systems worldwide. The Standard, now exclusively owned by Rainforest Alliance, focuses on continuous progression in sustainability performance over time, with

specific criteria oriented towards the protection of High Conservation Value (HCV) areas, best agricultural practices, resource conservation, carbon footprint reduction, the improvement of working conditions, and social and community issues.

NBPOL estates, including all associated smallholders, will be audited against the New 2017 SAN Standard and the 2017 SAN List for Pesticide Management, and will be subject to the 2017 SAN Certification Rules document. To ensure better understanding of the new Standard for the inclusion

of smallholders, NBPOL's Sustainability Department is organising training sessions and field trips to build knowledge around the new requirements.

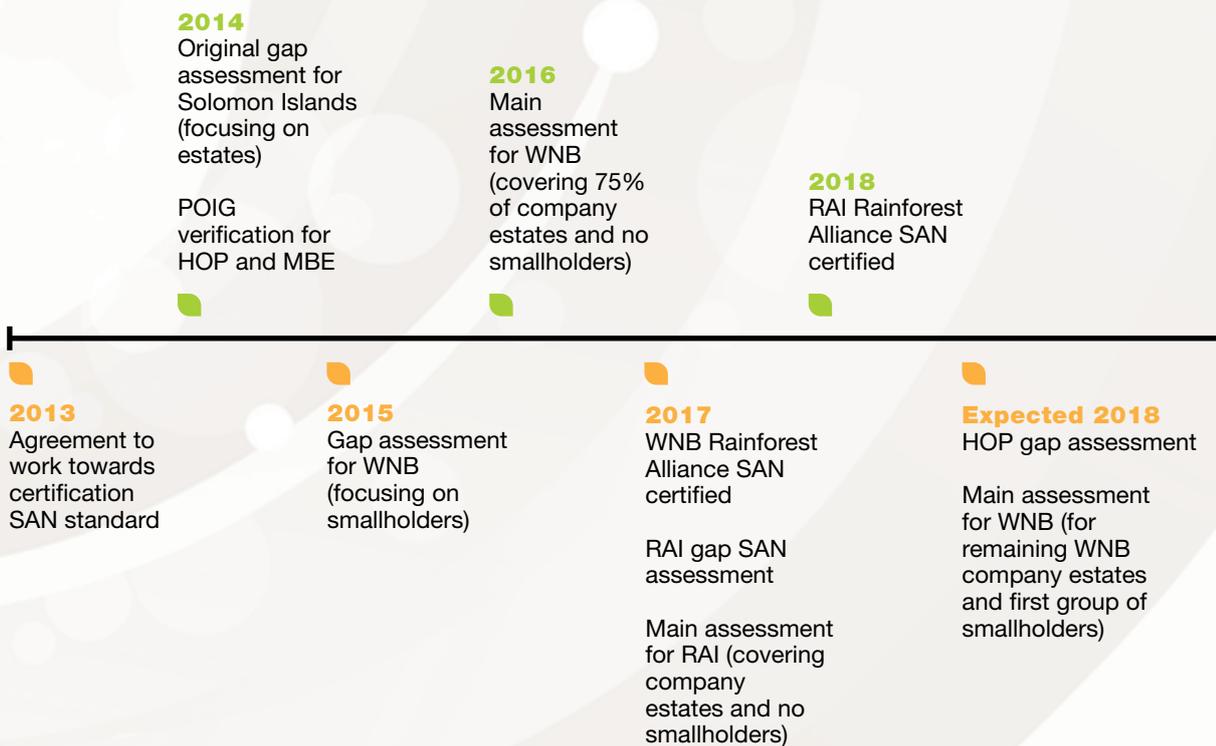
Our WNB operations were first audited against the 2010 SAN Standards in November 2016 and achieved certification on 13 March 2017. The certificate covers 13 estates. Our RAI oil palm operations were successfully audited against the Rainforest Alliance

2017 Sustainable Agriculture Standard in November 2017 and certification was awarded Q1 2018. We plan to roll out certification for all eligible company estates (also referred to as "farms" by Rainforest Alliance). While we aim to complete all audits by 2020, certification for smallholders will be included in a step-wise approach as we develop the support programmes. We are now embarking on expanding the scope of the audit to include WNB's associated

smallholders, starting with the Tamba Lease Settlement Scheme (LSS), a group of 200 smallholders.

We have also maintained our working relationship with The Rainforest Alliance. The Alliance's integrity and iconic logo are well recognised by consumers in our major markets and we believe that this certification could add tremendous assurance and value for our customers.

### Engagement with Rainforest Alliance to achieve certification against the SAN Standard



## CONTINUING OUR SUSTAINABILITY JOURNEY – CERTIFICATION

### High Carbon Stock Approach

NBPOL has been a member of the High Carbon Stock (HCS) Approach Steering Group since its inception in 2014. The Steering Group governs the development and implementation of the HCS Approach alongside other growers, commodity user companies, non-governmental organisations (NGOs) and technical support organisations.

Implementing the HCS Approach has played a fundamental role in our approach to expansion, from drawing up community land use plans, to our consultative processes with communities and stakeholders, to our approach to carbon stock mapping, to including conservation areas within our integrated land use plans. To date, NBPOL has been active in most of the HCS Approach Working Groups,

including those focused on issues relating to forest protection, high forest cover landscapes (HFCL), quality assurance and smallholders. We are working closely with the HFCL Working Group in addressing NBPOL's concerns around managing highly forested areas (see page 28).



## CORPORATE GOVERNANCE, MANAGEMENT AND CAPACITY BUILDING

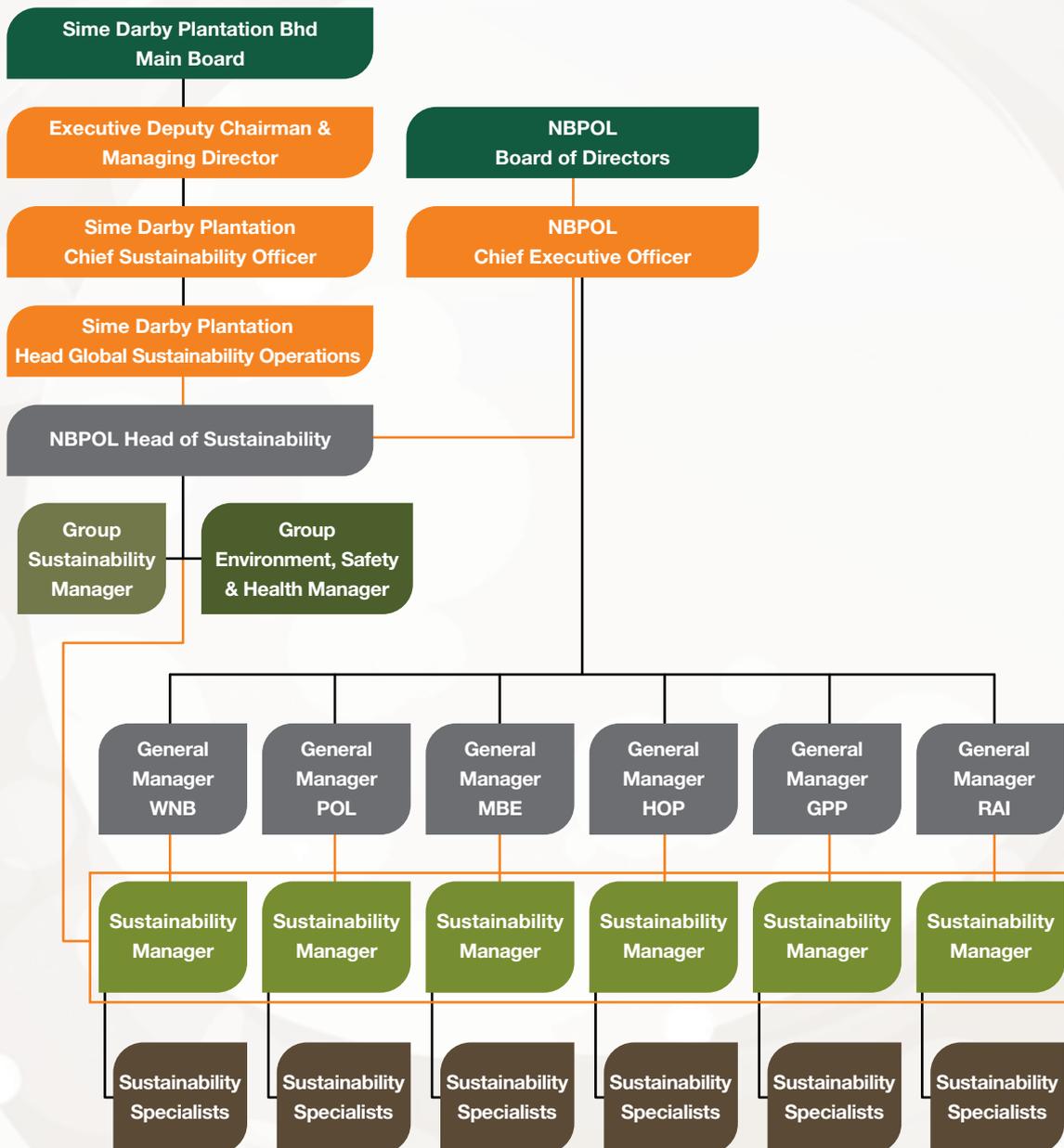
NBPOL is a wholly owned subsidiary of Sime Darby Plantation Berhad. NBPOL has its own Board of Directors and a non-executive chairman. As at 31 December 2017, the Board consists of eight non-executive directors, four of whom are independent, and one executive director. Three members are PNG nationals, two are British citizens and four are Malaysians.

Strong emphasis has been placed on maintaining a consistent approach to sustainability management at NBPOL. The Board continues to receive and discuss quarterly sustainability updates and a detailed report on environmental and social key performance indicators (KPIs) is distributed monthly.

The Chief Sustainability Officer of the Sime Darby Plantation Group (who is also the former

Group Sustainability Director of NBPOL) has oversight of NBPOL's sustainability strategy. At NBPOL Group-level, our Head of Sustainability, our Group Sustainability Manager and our Group Environment, Safety & Health Manager, who are all based in PNG, are responsible for ensuring collaboration across sites. Each NBPOL site has a Sustainability Manager as well as sustainability specialists in relevant disciplines.

### NBPOL Sustainability Management Structure



## CORPORATE GOVERNANCE, MANAGEMENT AND CAPACITY BUILDING

We ensure our teams are kept up to date with the latest sustainability systems. We have implemented a Sustainable Integrated Management System, which incorporates ISO14001, OHSAS18001 and SA8000. This internal system strengthens our adherence to our environment policies and has been rolled out to all teams through training and socialisation on the standards.

Since mid-2016 we have been streamlining the way we monitor our sustainability KPIs. Each site now submits their progress against targets to a third party, who then manages and analyses the data that feed into our monthly reports. This enables

us to highlight outliers at an operational level while keeping the big picture at Group-level in view. We are constantly finding ways to make this process more robust to strengthen our sustainability performance. In the next two years we will be setting a composite safety-health-environmental KPI with consultation from all site managers to better our monitoring process.

To ensure compliance to RSPO standards throughout our operations, we conduct site-level training sessions to build each site's capacity to conduct internal auditing based on the RSPO P&C. Through this annual training, all mills and sites required to carry out internal audits are prepared for quarterly audits and annual external RSPO audits.

We provide regular updates on our sustainability efforts to ensure our external stakeholders and our employees are kept fully up to date with our progress on audits, certifications, community projects and safety campaigns.

These updates also provide case stories from our PNG communities.

### Integrity and anti-corruption

We understand that the foundation of sustainability is to ensure transparency and integrity in everything we do. We abide by our comprehensive Business Ethics Policy, which provides guidance to our business units, and we are also bound to the Sime Darby Plantation Code of Business Conduct, which strengthens this commitment across all of our operations.

We also recognise that such guidance plays a critical role in avoiding unethical business practices. This is particularly important as our primary operations are in PNG, which, despite some improvement, remains ranked in the lowest 25th percentile on the Corruption Perception Index published annually by Transparency International.



## STAKEHOLDER ENGAGEMENT



Stakeholder engagement is a fundamental part of our business. At site level, our key stakeholders are the communities we depend on for access to land, as well as for employment and local goods and services. From a wider Group perspective it is also vital that we maintain strong links to regulatory bodies at both provincial and national levels.

Formal and informal stakeholder consultations have continued to prove vital across all NBPOL sites as we engage and promote dialogue between different stakeholder groups on issues that affect both themselves and NBPOL. Our approach has been to bring different stakeholders from across the province on site tours, as well as for presentations on the RSPO Certification standards. The programme has so far engaged NGOs, provincial government officers, students, businesses, schools, community

organisations, industry bodies, the media, and faith-based organisations.

A Lands Forum covering all NBPOL operations is held biannually between government officers and NBPOL lands and sustainability representatives. Following the last Forum in March 2016, it has been decided to rename the engagement the NBPOL Lands, Legal & Sustainability Forum, signifying the strong and important links between these three departments.

NBPOL also hosts field days in collaboration with key associations, including smallholder associations, the Oil Palm Industry Corporation, the Oil Palm Research Association, provincial government representatives, as well as representatives from mills, plant breeding groups and transport groups. Mobilised across our operations, field days are organised

as a platform for associations to reach out and share presentations and best practices on related topics for outgrowers.

Social Impact Registers, consistent with SA8000 standards, are maintained and regularly updated at all operations. These registers take into account the social risks and concerns associated with our operations and identify control measures to mitigate or minimise these risks.

We have regular radio broadcasts to disseminate public information. Broadcasts cover RSPO and SAN Principles, NBPOL grievance procedures, support and empowerment initiatives for women, health and safety information, environmental programmes and children's rights.

## CONTINUING OUR SUSTAINABILITY JOURNEY – STAKEHOLDER ENGAGEMENT

### Engagement with commercial stakeholders

As a company operating in a heavily scrutinised industry, and being focused on exports to highly sophisticated European and US markets, we need to be responsive to evolving market expectations. We have therefore built strong relationships with our

customers and with NGOs all over the world. We have a hands-on approach to engagement and seek to respond fully and rapidly to all queries from stakeholders.

### International engagement and recognition

We maintain a high rank in the Sustainable Palm Oil Transparency

Toolkit (SPOTT), an initiative developed by the Zoological Society of London to track progress against sustainability commitments and encourage transparency. In 2017, NBPOL moved up from third to second place among 50 companies based on a detailed set of sustainability and certification-related criteria.



Stakeholder group	Theme	NBPOL's engagement
<b>Employees</b>	Health and safety	Conducting safety campaigns and training
	Social welfare	Social awareness programmes, gender-based violence (GBV) awareness and support programmes, child labour awareness programmes, social impact registers
	Supporting livelihoods	Providing gardening space and tools to resident workers, constructing marketplaces, providing facilities for fish ponds and chicken farms; engaging with government for food security programmes
	Financial literacy and empowerment	Providing financial literacy and income management training, savings and superannuation accounts for smallholders; providing Mama Card system for smallholders
	Environmental restoration (protecting buffer zones, enhancing mangroves, shoreline rehabilitation)	Conducting awareness drives and outreach programmes; monitoring and enforcement
<b>Smallholders, landowners and communities</b>	Socialisation of standards and best practice	Carrying out on-farm field days; briefings and site visits; auditing against standards
	Environmental restoration (protecting buffer zones, enhancing mangroves, shoreline rehabilitation)	Conducting awareness drives and outreach programmes
	Safeguard community lands and ownership	Ensuring Free, Prior and Informed Consent (FPIC); undertaking community needs assessments and participatory processes
		Assisting registration of Incorporated Landowner Groups (ILG)
		Ensuring presence of special lands officers dedicated to communities' land matters
		Supporting customary landowners to comply with PNG government on customary land laws
	Women empowerment and financial literacy	Developing and implementing land usage agreements
		Providing support services for victims of domestic violence and child abuse
		Delivering gender-oriented programmes and workshops
		Providing financial literacy and income management training
Supporting livelihoods	Assisting in women's leadership training	
	Providing a Mama Card system	
	Engaging villagers in community forestry	
	Running awareness programmes and workshops for access to potable water	
	Implementing programmes on best management of oil palm blocks for smallholders	
Education and literacy	Providing credit to and share sustainability premium with smallholders	
	Providing loans for chicken farming	
Community health	Managing book donation programmes; building classrooms	
<b>Customers</b>	Market standards and customer policies	Providing access to clinics and free medical care, coordinating family planning programmes, coordinating workshops on food and personal hygiene
		Conducting briefings and site visits
<b>NGOs</b>	Collaborations on best practice sharing, certification standards	Maintaining ongoing dialogue
		Conducting briefings and site visits
		Maintaining ongoing dialogue
<b>Government and regulators</b>	Collaborations on empowering outgrowers and community welfare, certification standards	Collaborating to produce RSPO PNG National Interpretation on Climate Change Forums and Sustainable Palm Oil Platforms
		Conducting briefings and site visits
	Land and legality issues	Maintaining close cooperation with the Conservation and Environment Protection Authority (CEPA), Department of Labour and Industrial Relations, Climate Change and Development Authority and Department of Lands and Physical Planning
<b>Industry associations</b>	Collaborations on best practice sharing, certification standards and national sectoral policy	Participating in biannual forums
		Conducting briefings and site visits
<b>Media</b>	Sharing events, responding to media queries	Being members of PNG Oil Palm Research Association, the Palm Oil Producers Association and the Rural Industries Council
<b>Universities</b>	Collaborations on best practice sharing and certification standards	Conducting briefings and site visits
<b>Multi-stakeholder organisations</b>	Sustainable palm oil production	Conducting briefings and site visits
	No deforestation	Being members of RSPO
	Sustainability performance	Being members of HCS Approach Steering Group
		Securing SAN and Rainforest Alliance certification

Each of our sites keeps a record of all registered grievances from both internal stakeholders (employees) and external stakeholders (including communities, contractors and NGOs). These are categorised and addressed on an ongoing basis. Auditors have access to these records during internal and external audits to ensure that we can document proactive engagement.

Grievances are currently recorded against locally developed indicators. To enhance Group-wide monitoring, we will be looking to develop a new template for all sites to track grievances in a more consistent manner. We expect to roll out this work in 2019 in consultation with the sites.

All operational areas have established guidance on communication and consultation to manage and handle each grievance in an appropriate manner. Internal grievances or requests must be closed within 10 days of receipt, while external grievances or

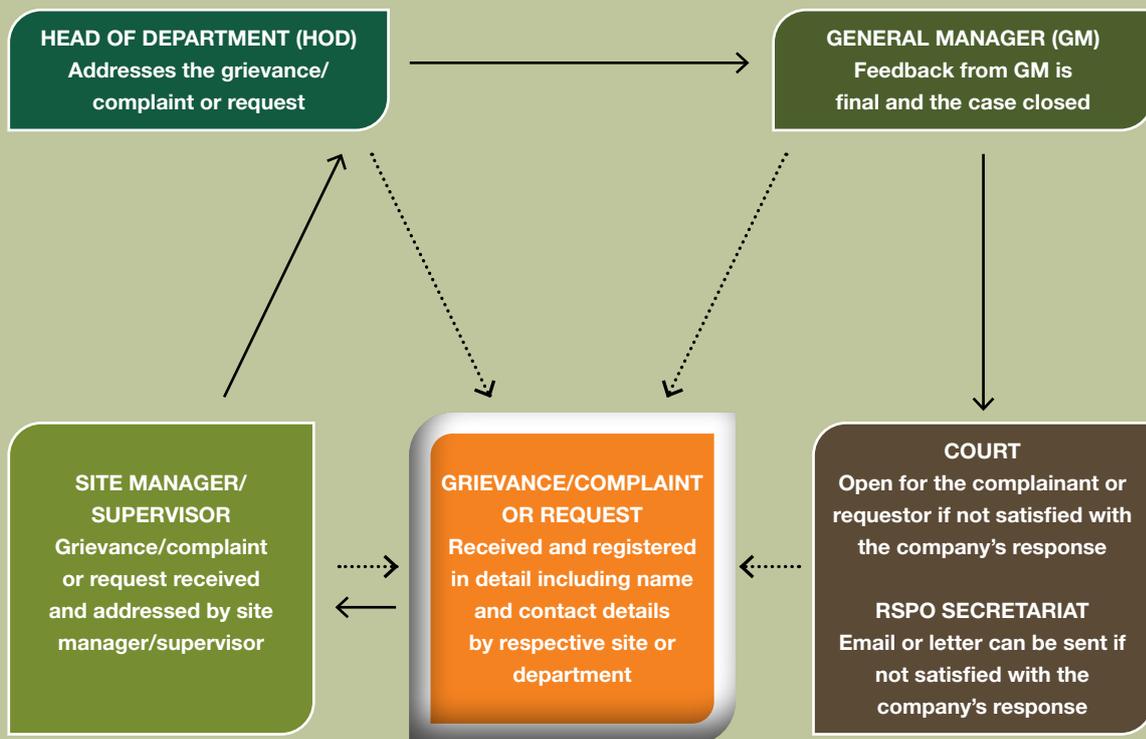
requests must be closed within 30 days. Grievances can be registered at all operational sites (including estate offices, mills and smallholder departments) where the details of the grievance are recorded directly into the grievance register. Site managers are then responsible for addressing and closing the respective grievances, or referring them to a more suitable department for appropriate action. Our Sustainability Department monitors all registers and ensures that corrective action is taken via internal audits to close each request or grievance raised. Only grievances or complaints involving

third parties (governments, civil societies, human right defenders) or those formally registered through RSPO and other entities are published on our website. Other grievances raised locally are registered and addressed internally.

All sites have designated personnel to handle employee welfare issues or concerns, including domestic violence, sexual harassment, sexual assault and other domestic issues. These officers provide counselling and follow up to all parties concerned and are also responsible for maintaining welfare records.

Nature of grievance	Number of cases in 2016/2017
Deforestation	0
Environmental	4
Human rights	0
Livelihoods	2
Land	2
Health & safety	3

### Grievance request procedure



- .....> Grievance/complaint or request REFERRED to higher person in authority due to dissatisfaction for feedback received by complainant or requestor.
- ← Grievance/complaint or request feedback ACCEPTED by complainant or requestor; outcome registered and closed by assigned company employee.

NBPOL has only been subject to one formal complaint raised through the RSPO Complaints System since becoming an RSPO member in 2004. This issue was lodged and resolved in 2015 (see our 2015 Sustainability Report for details).

## PROTECTING OUR PLANET – PROTECTING FORESTS AND BIODIVERSITY



### Responsible expansion

Launched in 2013, our Forest Policy sets out our clear commitment to protect forests and biodiversity in the areas where we operate, with 'No Deforestation' as our ultimate objective. We have worked hard at transforming the means by which we expand our plantations. Fully adopting the HCS Approach to secure our commitment to zero-deforestation, we carry out HCS and HCV assessments to delimit areas for potential conversion and protection. At the same time, our social impact assessments (SIA) and continual field presence with communities determine the

areas they want to lease to us and delimit the areas they require for living space and food security. The whole engagement is a dynamic process of integrated land use planning that extends beyond the technical boundaries of the science-based assessments and into the social realm. This ensures our engagement does not end with the planting of palms, but continues to address the community needs assessed.

All NBPOL expansion since 2010 has been onto communal lands (where 97% of land in PNG and 87% of land in Solomon Islands is customary land). Our integrated land use plans are the result of

a long process of engagement with the communities, including genealogical mapping, participatory mapping and community needs assessments. The entire process, which takes at least two years, is completed prior to any agreed planting. We are currently working with The Forest Trust (TFT) to document this process as a means to ensure our best practice is consistently implemented by the palm oil industry at large (see page 44 for details on our Free, Prior and Informed Consent (FPIC) process).

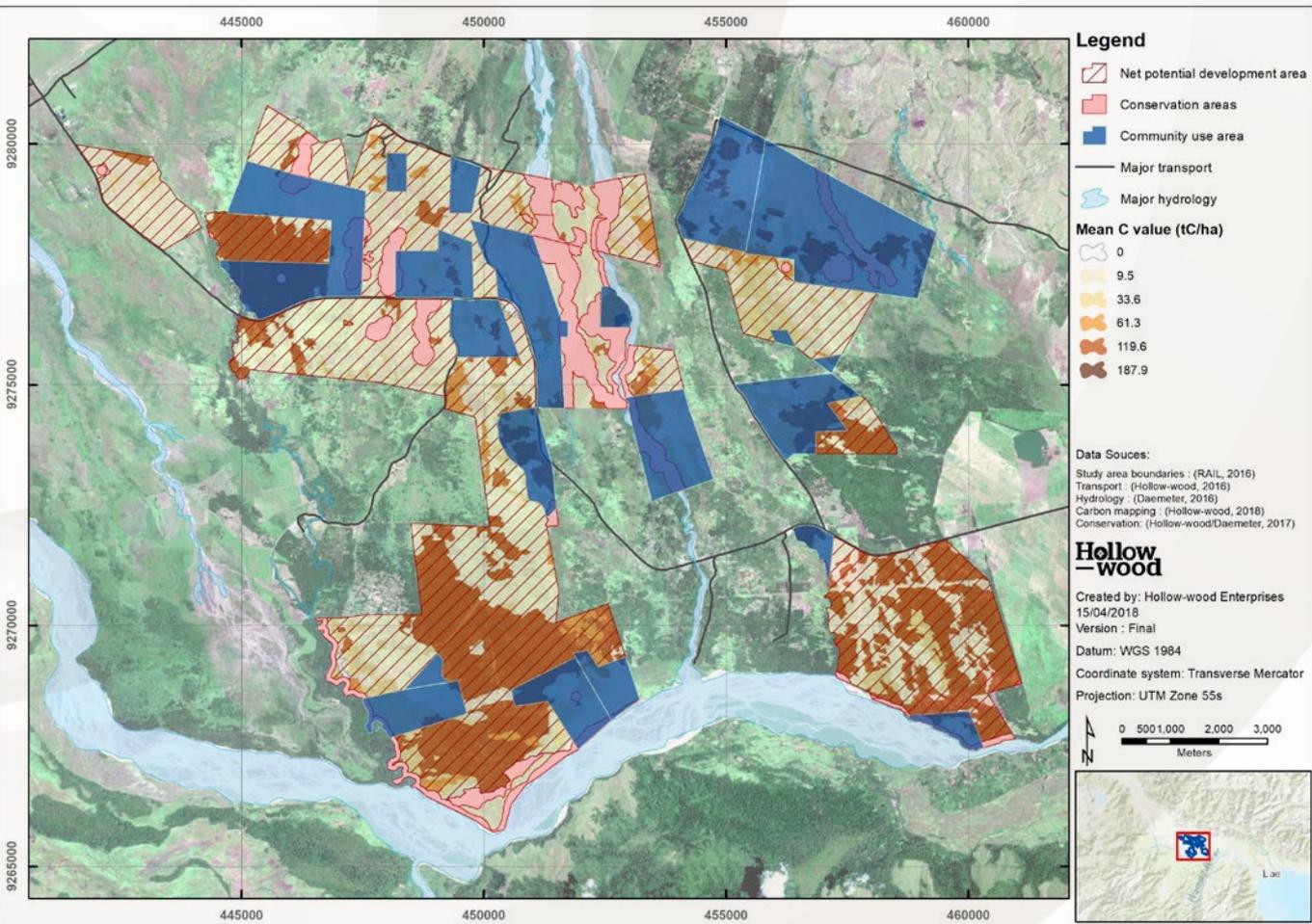
With the full adoption of the HCS Approach methodology, and

with the support of TFT, our new developments have increasingly incorporated community needs as part of our approach to integrated land use planning. Since 2014, we have carried out HCS assessments for our MBE, HOP, GPP and RAI estates. These HCS assessments cover a combined total of 42,329 hectares

and have been registered with the HCS Approach Steering Group Secretariat for approval through the HCS Approach Quality Review Process. All future assessments will be undertaken in conjunction with HCV assessments following the launch of the integrated HCV-HCSA Assessment Manual in November 2017.



**Land use plan for RAI Ltd**



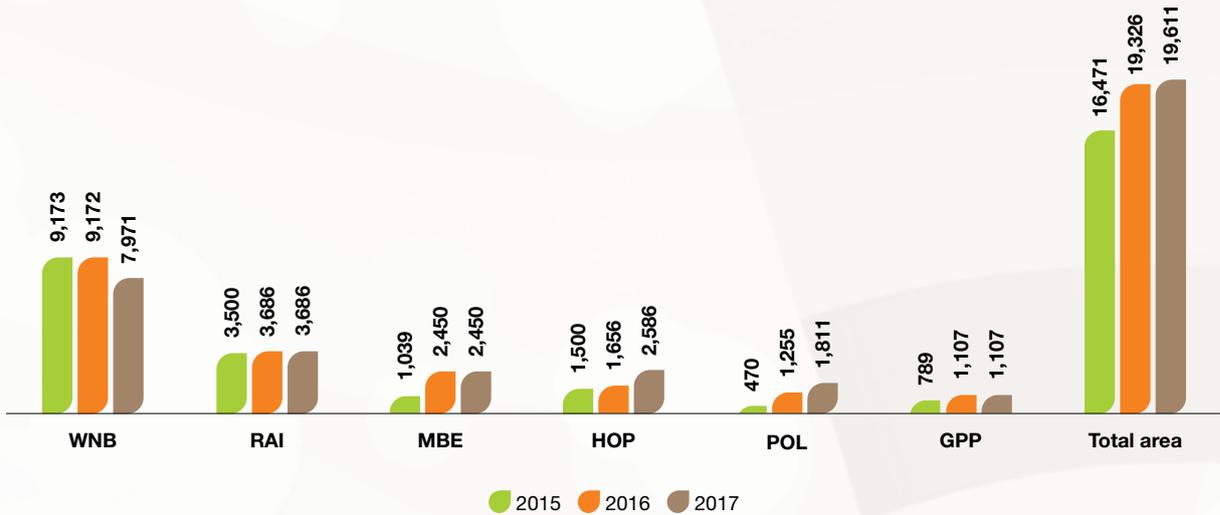
The biggest challenge we face in implementing our commitments to no deforestation is how to act in the case of high forest cover landscapes. Strict market demands for no deforestation and the resulting thresholds for conversion set by the HCS Approach set severe restrictions on agricultural development in least developed countries that are highly forested – including PNG and Solomon Islands. This imposes harsh limits on the ability of local communities in these countries to achieve access to

better incomes, infrastructure and social development. We continue working with the HCS Approach HFCL Working Group to find ways to address these limitations.

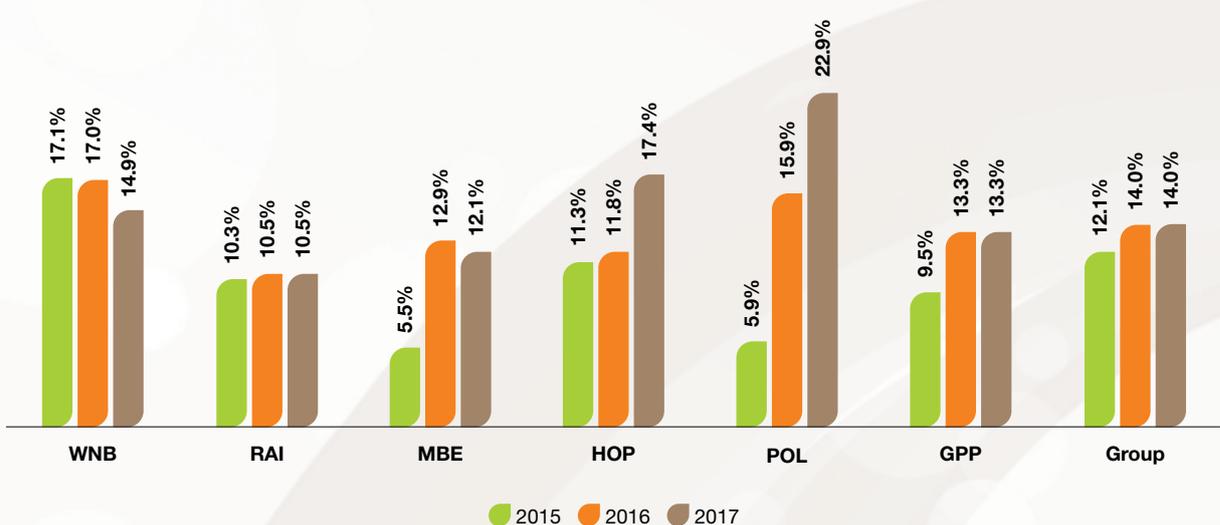
Three of our sites covering 17,417 hectares have been submitted for the RSPO New Planting Procedure (NPP). For our most recent proposed developments – in GPP and RAI – we have assessed a total of 14,158 hectares of land. Of this, 1,490 hectares have been categorised as HCV and/or HCS area, 4,552 hectares have been

enclaved for community use, and 8,116 hectares have been identified for potential conversion. These areas are largely low carbon stock, with 6,457 hectares of the total areas assessed being classified as grasslands or scrub. Other areas of potential conversion include ecosystems dominated by invasive species, such as the Raintree (*Samanea saman*) and the Paper Mulberry (*Broussonetia papyrifera*) in Solomon Islands.

Land set aside for conservation (ha)



Percentage of leased land set aside for conservation



We document IUCN Red List and CITES species that we have confirmed as present on our leases. This list is a work in progress and grows with our knowledge as we start to conduct more science-led monitoring of our conservation areas.

### *IUCN Red List species identified in NBPOL's areas of operation as of 2017*

Common and binomial names	Taxa	CITES	Endemic
<b>Endangered</b>			
<i>Calophyllum waliense</i>	Tree		Yes
<i>Manilkara kanosiensis</i>	Tree		
Palm ( <i>Ponapea hentyi</i> )	Tree		Yes
Papua ebony ( <i>Diospyros insularis</i> )	Tree		
Queen Alexandra's Birdwing ( <i>Ornithoptera alexandrae</i> )	Insect	Appendix I	Yes
Wild talis ( <i>Terminalia archipelagi</i> )	Tree		Yes
<b>Vulnerable</b>			
Black Honey Buzzard ( <i>Henicopernis infuscatus</i> )	Bird		Yes
Burmese Rosewood ( <i>Pterocarpus indicus</i> )	Tree	Appendix II	
Golden Masked Owl ( <i>Tyto aurantia</i> )	Bird	Appendix III	Yes
<i>Helicia neglecta</i>	Tree		Yes
<i>Helicia peekelii</i>	Tree		Yes
Kwila ( <i>Intsia bijug</i> )	Tree		
<i>Mastixiodendron stoddardii</i>	Tree		
Merbau ( <i>Intsia bijuga</i> )	Tree		
<i>Osmoxylon lanceolatum</i>	Tree		Yes
Paho ( <i>Mangifera altissima</i> )	Tree		
Rosewood ( <i>Pterocarpus indicus</i> )	Tree		
<b>Near Threatened</b>			
Cycad ( <i>Cycas schumaniana</i> )	Tree	Appendix II	Yes
Green-fronted Hanging Parrot ( <i>Loriculus tener</i> )	Bird	Appendix II	Yes





**Identifying and protecting endangered species**

We are privileged to have the Queen Alexandra's Birdwing Butterfly (QABB) (*Ornithoptera alexandrae*) as a flagship species near our operations at Higaturu. The QABB is the world's largest butterfly, with a wingspan between 19cm and 30cm. It is endemic to northern Papua New Guinea, east of the Owen Stanley Mountains, and has an extremely small home range. The QABB is commonly found in Papua New Guinea's lowland rainforests, up to 900m above sea level. The QABB caterpillar mainly feeds on *Aristolochia dielsiana*, a toxic pipevine species that plays a central role in the QABB's reproduction. The caterpillar feeds on fresh vine foliage and then, prior to pupating, 'ring-barks' the base of the vine stem. This kills

the vine above the cut and may create new shoot growth of the preferred vine type for subsequent larval generations. Adult QABBs feed on flower nectar from a variety of flowering trees, vines and bushes.

The QABB is endangered and one of the only three butterflies listed on Appendix 1 of CITES, which makes international trade in the species illegal. It is also classified as endangered on the IUCN red list of threatened species. Despite this, as the world's largest butterfly, and also one of the most rare and beautiful, the QABB is extremely attractive to collectors. QABB specimens have been reported fetching between USD 5,000 and USD 10,000 on the black market, and the species has suffered severely from illegal poaching in the wild. Poachers

typically collect the pupae and store them until they hatch. The newly emerged butterflies are killed for presentation once the wings are fully expanded and in pristine condition.

NBPOL has for many years cultivated larval food vines in its oil palm nurseries to provide young plants to establish in areas identified as QABB habitat. Given increasing concerns over the sustainability of the QABB population, especially on the Popondetta Plains, the Sime Darby Foundation agreed in August 2017 to fund a major project to help conserve the butterfly. The objective of this project is to create a stable and

sustainable population of QABB through the establishment of a laboratory-based facility for the captive breeding of QABB. Using successful protocols developed at the Australian Butterfly Sanctuary for other Birdwing Butterfly species, the project will release captive-reared healthy QABB back into the wild while performing research relating to QABB larval food-plant and its propagation. Furthermore, the project will engage with government and local communities to spread awareness and preserve forest areas.

Construction of the QABB rearing laboratory and staff housing was

well under way at the end of 2017. A larval food plant nursery has also been established with 1,340 vines, and is expected to expand to about 6,000 vines by the end of the first quarter of 2018. These vines are used for habitat restoration as well as feeding the captive reared QABB.

A key project partner is the Swallowtail and Birdwing Butterfly Trust (SBBT), which is a not-for-profit organisation established in 2017 in the UK ([www.sbbt.org.uk](http://www.sbbt.org.uk)). SBBT will supply technical and scientific advice to the project as well as providing media and fund-raising support.

Our MBE operation has identified a lack of sound scientific baseline data on the forest biological and ecological characteristics of the local vegetation buffer zone (VBZ), HCV and riparian forest areas. In 2017, an independent biologist was engaged to conduct a baseline survey to document the status and ecosystem functionality of the VBZ and HCV. A total of 29 bird species, three rodent species, three bat species and four reptile species were identified.

Moving forward, we plan to implement forest monitoring and satellite monitoring protocols using the Spatial Monitoring and Reporting Tool (SMART) (<http://smartconservationtools.org/>) which will enable us to better measure and evaluate our conservation efforts across our sites.





**Protecting buffer zones and enhancing mangroves**

We continuously manage the buffer zones within our plantations and mini-estates to restore their biodiversity. Our buffer rehabilitation efforts include tree planting and propagation, as well as the planting of *Aristolochia dielsiana* at Higaturu to support QABB larvae.

We have established a policy prohibiting all kinds of human activity in buffer zones, including firewood collection, gardening, making fires and cutting trees. Following instances of encroachment by local communities and our employees, we have now introduced tough disciplinary measures for anyone caught

breaching the policy. Regular awareness drives are conducted to ensure that our employees understand the rules. In Milne Bay, local community awareness on the importance of HCV preservation and ongoing habitat management is being strengthened through informative radio broadcasts.

We are also working to allocate our employees sufficient land for food gardening so they do not feel the need to farm in buffer zones. In West New Britain, where population pressure is greatest, we conduct an annual survey to ensure that this commitment is being met.

To address erosion and the harvesting of mangroves along shorelines near our

plantations, our Sustainability Department in WNB initiated a rehabilitation programme in 2016 in partnership with local NGO, Mahonia Na Dari. The objective is to replant seven kilometres of the Numundo coastline with both mangroves and forest trees. Local communities and schools have been engaged to raise awareness, run the nurseries and carry out the plantings. In 2017, we began trialling biodegradable alternatives to the polybags conventionally used for mangrove planting, using bamboo and coconut baskets for coastal rehabilitation in the Kimbe Bay region, PNG. This ongoing study will expand our expertise in mangrove planting methods for the current rehabilitation project at Numundo, as well as for future

coastal rehabilitation projects in the region. It will also provide social benefits by enabling local communities to make the baskets themselves, and reducing our reliance on plastics.

In addition to native forest restoration, we continue to encourage local villagers to adopt community forestry as a livelihood activity. These engagement activities are

set to increase the amount of wooded area in the valley, with positive impacts for both the communities and the wider environment.

### Partnership to promote native species in the Markham Valley

The Australian Centre for International Agricultural Research (ACIAR) has commissioned a four-year forestry research project to support PNG's Forest Policy Medium Term Development Plan to increase the area of planted forests in PNG from 62,000 hectares to 150,000 hectares by 2025. The programme, managed through the University of the Sunshine Coast (Australia)

as a collaboration with various government, NGO, private sector and community partners in PNG, aims to identify how community forestry in PNG can be enhanced and scaled up to achieve better economic, social and environmental outcomes. Its activities currently focus in three areas in the region, which including the Ramu Markham Valley. To date the RAI forest nursery has expanded to produce over 100 species of native trees from the Valley. At NBPOL the goal of our efforts is to create protective buffers

along riverbanks and form linkages between forest patches and conservation areas within the landscape. In November 2016, the ACIAR project was awarded accreditation under the Queen's Commonwealth Canopy and formally acknowledged by Her Majesty Queen Elizabeth II.



## PROTECTING OUR PLANET - PREVENTING FIRES



We have had a strong ethos of zero burning since 1969. We believe zero burning is important for avoiding air pollution and the spreading of fires, and is also best for soil conservation and crop performance.

We keep a detailed fire register at every one of our sites and investigate all fires to understand how we can prevent or mitigate them in the future. Fire fighting drills are also routinely conducted across the various estates with the purpose of equipping our employees and ensuring that they know how to react quickly and appropriately in any fire situation.

Since 2016, Sime Darby Plantation has had in place a Hotspot Alert Dashboard to

enable monitoring of hotspots, not only in concession areas, but also within a 5km radius beyond estate boundaries. This round-the-clock monitoring system uses NASA satellite data to provide information on the number of hotspots recorded throughout the year as well as actions that have been taken by the respective estates if hotspots are confirmed to be actual fires in or near our operations. When a hotspot is detected, email alerts are sent to the respective estates for investigation and immediate action to extinguish the fire. The respective estates then revert with feedback either confirming the alert or the action taken.

We identified seven hotspots in PNG in 2016, and 45 hotspots in 2017. With the exception of

three instances in HOP and in MBE, these all occurred in our RAI operation. This area is generally prone to fire due to dry conditions as well as local communities' custom of using fire to clear gardens. RAI is also located in landscapes where man-made fires on grassland are common. These include fires resulting from accidents, fires set deliberately, often by communities wishing to clear land, and in some cases arson.

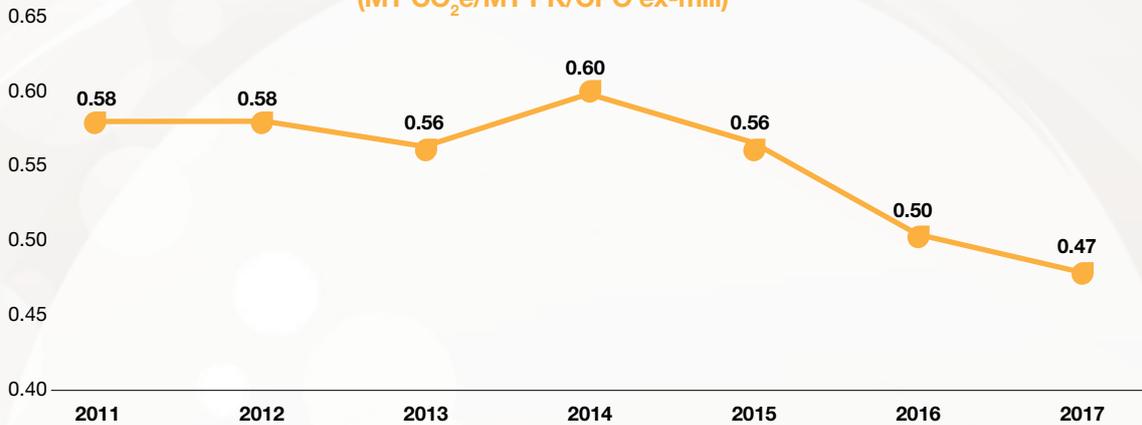
## MINIMISING CARBON EMISSIONS

We are committed to the ongoing reduction of our greenhouse gas (GHG) emissions and our carbon footprint with a target of reducing our emissions by 30% by 2024 from our 2017 baseline. We use the RSPO PalmGHG calculator to monitor our progress and for this report, we have undertaken a major review and have transferred all our monitoring data since 2011 into the latest version of PalmGHG.

Using PalmGHG version 3.0.1, our total net emissions for 2017 were 318,261 tonnes of carbon dioxide equivalent (MT CO<sub>2</sub>e), a 19% reduction compared to 2011 (393,724 MT CO<sub>2</sub>e). Our carbon footprint in terms of emissions per tonne of product has seen a similar reduction of 19%, from 0.58 MT CO<sub>2</sub>e per tonne of crude palm oil (CPO) and palm kernel (PK) in 2011, to 0.47 MT CO<sub>2</sub>e in 2017. This reduction is primarily a

result of an increase in electricity generated by our methane capture projects, which was fed into local power grids. In addition, greenfield developments over the last two decades have been primarily on grassland in RAI and GPP, and many of our estates are now in the second cycle of planting and are therefore categorised as replanted oil palm (rather than secondary forest, for example).

Overall palm product carbon footprint (MT CO<sub>2</sub>e/MT PK/CPO ex-mill)



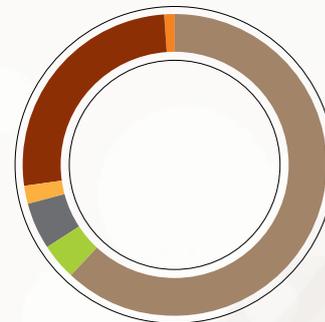
However, in absolute terms, the impact of previous land use change (LUC) remains the most significant emissions source and was responsible for 62% of our 2017 carbon emissions, constituting a total of 838,734 MT CO<sub>2</sub>e.

Our second most significant GHG source is palm oil mill effluent (POME) from our mills. If left untreated, POME releases methane, a powerful

GHG. We treat POME in ponds and have biogas facilities at two mills to capture methane for flaring and electricity production.

There are no peat emissions from our operations as no peat land has been used for oil palm cultivation. Soil studies by NBPOL have shown that planted areas previously reported to be peat land do not fall within the definition.

Gross emissions by source 2017



Land use change	838,734 (62%)
CO <sub>2</sub> emissions from fertiliser	46,104 (4%)
N <sub>2</sub> O	68,074 (5%)
Field fuel	31,996 (2%)
POME	345,529 (26%)
Mill fuel	13,965 (1%)

PROTECTING OUR PLANET –  
**MINIMISING CARBON EMISSIONS**

Emissions sources and sinks 2011-2017 (MT CO<sub>2</sub>e)



	Net emissions	Land clearing	Crop sequestration	CO <sub>2</sub> emissions from fertiliser	N <sub>2</sub> O	Field fuel	Peat	Conservation credit	POME	Mill fuel	Mill credit
2011	393,724	779,125	-726,200	59,001	67,647	16,617	-	-171,305	346,528	27,478	-5,167
2012	365,304	788,067	-737,932	54,901	63,416	20,201	-	-171,305	328,940	24,623	-5,607
2013	320,371	790,247	-745,739	51,593	56,309	20,871	-	-171,305	301,792	22,509	-5,906
2014	387,494	789,795	-751,408	71,058	67,975	22,250	-	-171,305	338,448	26,635	-5,955
2015	355,717	801,232	-771,001	48,854	68,192	24,747	-	-171,305	330,514	28,006	-3,522
2016	307,572	827,353	-796,642	42,590	61,717	20,174	-	-171,305	316,565	17,794	-12,673
2017	318,261	838,734	-822,165	46,104	68,074	31,996	-	-179,837	345,529	13,965	-24,139

**Emissions by site**

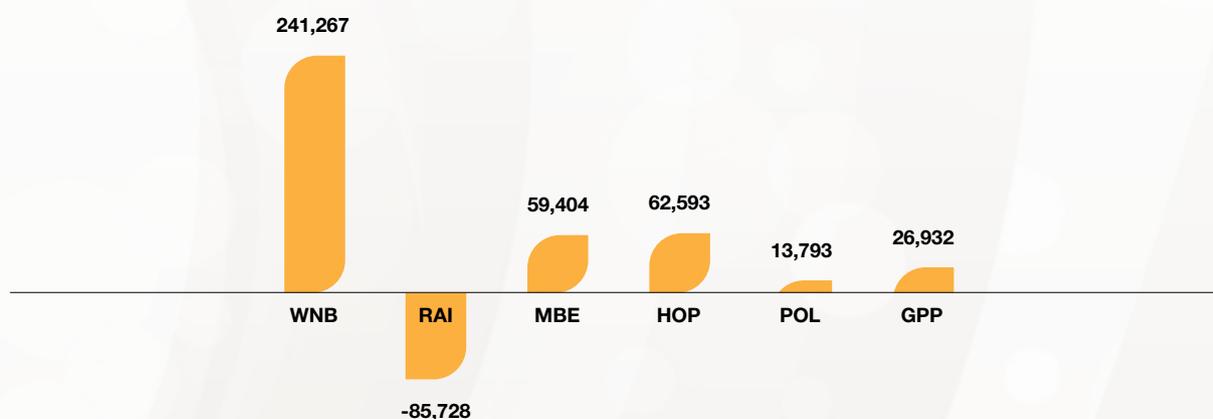
Our largest site at WNB is responsible for three quarters of our combined net GHG emissions. This is due to both its size and the fact that most of this site was developed as greenfield, whereas other sites were developed on grassland or previously cultivated land. This has resulted in high emission numbers derived from previous land use change. In contrast, RAI has negative emissions, as all oil palm was planted either on grass or on former sugar plantations, which have very low sequestration values.

Our biggest reduction efforts have therefore been in WNB, where we have two operational biogas plants. The biggest plant, in Mosa, is dedicated to supplying 900 kWh per hour to the local electricity grid, and powers housing compounds, workshops and offices. The second plant, at our Kumbango mill, powers the Kumbango Oil Refinery. We are exploring further biogas facilities at Kapiura, Numondo and Waraston mills.

We seek to share our experience in carbon emissions reduction with our peers. In 2016, we attended a three-day REDD+ Workshop

hosted at the Liamo Reef Resort, PNG, by the Climate Change and Development Authority. The workshop was conducted in collaboration with the Forest Carbon Partnership Facility and the United Nations Development Programme, and a total of 37 participants representing the government, civil society and the private sector participated. As part of the workshop, NBPOL was able to showcase the different mechanisms involved in minimising GHG emissions. This included a field trip to Roka Mini Estate and a site tour of the Kumbango biogas plant.

### GHG emissions by site 2017



### Product emissions by site (MT CO<sub>2</sub>e/MT PK/CPO ex-mill)

Site	Mill Name	2011	2012	2013	2014	2015	2016	2017
WNB	Numondo, Kumbango, Mosa, Kapiura, Warastone	0.75	0.83	0.87	0.86	0.83	0.81	0.81
RAI	Gusap	-3.45	-3.11	-2.09	-1.69	-1.82	-2.05	-1.29
MBE	Hagita	1.27	1.19	1.03	1.11	1.07	0.93	0.87
HOP	Sangara, Sumberipa Mamba	0.81	0.76	0.77	0.79	0.74	0.67	0.53
POL	Poliamba	1.10	1.07	1.05	1.11	1.12	0.82	0.58
GPP	Tetere	0.40	0.53	0.53	0.76	0.69	0.73	0.61

#### Changes to methodology

Since 2010 we have been measuring the product carbon footprint of CPO and PK produced at our mills in Papua New Guinea and Solomon Islands, as well as that of the refined products from our UK and PNG refineries. The lack of an industry-wide reporting framework made it necessary for us to develop our own methodology. In 2012, we adopted the RSPO-led PalmGHG version 1 to ensure that we could benchmark our figures against peers. However, in 2014 and subsequently in 2016, the RSPO GHG Working

Group launched a major revision to the PalmGHG framework that significantly changed the way previous land use is categorised and the way sequestration and POME emissions are calculated. The differences between PalmGHG versions 1 and 2 resulted in our plantation footprint more than doubling due to the introduction of new previous land use categories and accompanying increases in default values. Likewise, the changes in the crop sequestration model between PalmGHG versions 2 and 3 resulted in a net effect of land use change of more than 91,000 MT CO<sub>2</sub>e, or 150%.

It is critical for our company and our ability to live up to our commitments that we can monitor our GHG emissions. We have therefore decided to recalculate all our data using PalmGHG version 3.0.1. While we strongly support the use of best available science and the constant improvement of measurement tools, we hope that PalmGHG will not continue to evolve in a manner that makes tracking year-on-year comparisons and measuring progress impossible.

## PROTECTING OUR PLANET – INTEGRATED PEST MANAGEMENT

We have operated an Integrated Pest Management (IPM) system since 1998. The system follows generally accepted principles of field monitoring, cultural control practices, biological controls and the targeted use of pesticides to maintain pest damage below economic damage thresholds. The system is supported and updated through ongoing research and development.

### Biological controls

Good agricultural practices are the first step in our IPM strategy, including ground cover management, the maintenance of nectar-producing plants and the use of high-quality planting materials to suppress pests and diseases. Manual weeding is undertaken around immature plantings to minimise the need for chemical application.

We train our field operators to recognise signs of pest and disease outbreaks in order to initiate early control responses. Smaller infestations of weeds or insect pests are limited through manual weeding or hand picking. Smallholder extension officers are also trained in the early detection and reporting of potential outbreaks.

### Pesticides currently allowed for use in our operations

#### Adjuvants

- Propionic acid
- Alcohol alkoxyolate
- Alkyl polyoxyethylene

#### Fungicides

- Thiram
- Thiabendazole

#### Insecticides

- Methamidophos
- Dimehypo
- Imidacloprid
- Carbofuran (GPP only)
- Cypermethrin



Our R&D team is continuously reviewing and improving our use of biological controls through a long-term R&D programme. A wide range of methods are being trialled, including the mass rearing and distribution of native hymenoptera egg parasitoids and stichotrema to control sexava, baculovirus to control oryctes, psyllid bugs to suppress mimosa, and the gall fly to combat chromolaena.

### Pesticides

Access to pesticides is highly restricted, and all hazardous substances are stored in designated custom-designed

buildings. We keep a register of accidents and incidents of abuse or misuse of chemicals, and closely monitor health effects and toxicity. We have continuously reduced our pesticide usage over the past decade and, based on available public data, we have one of the lowest usage levels in the industry.

We do not use bio-accumulative or persistent pesticides. In accordance with our commitment to the RSPO P&C and the latest SAN pesticide management requirements, we do not use chemicals identified by the WHO as Class 1A or 1B, or those listed on the Stockholm or Rotterdam Conventions and the FSC 'Highly Hazardous' list. We have also recently sought and gained the approval from the RSPO to use carbofuran (listed under WHO Class 1B) before using it to control an outbreak of Guam biotype coconut rhinoceros beetle in GPP. We do not use paraquat (N,N'-dimethyl-4,4'-bipyridinium dichloride).

We phased out methamidophos in 2016 and substituted dimehypo, a less toxic Class 3 chemical that has been trialled and shown to be an effective alternative.

#### Herbicides

- Dicamba
- 2,4-D Amine
- Fluazifop-P-butyl
- Glufosinate-ammonium
- Glyphosate
- Metsulfuron methyl
- Diuron
- Triclopyr
- Fluroxpyr

#### Rodenticides

- Flocoumafen
- Brodifacoum

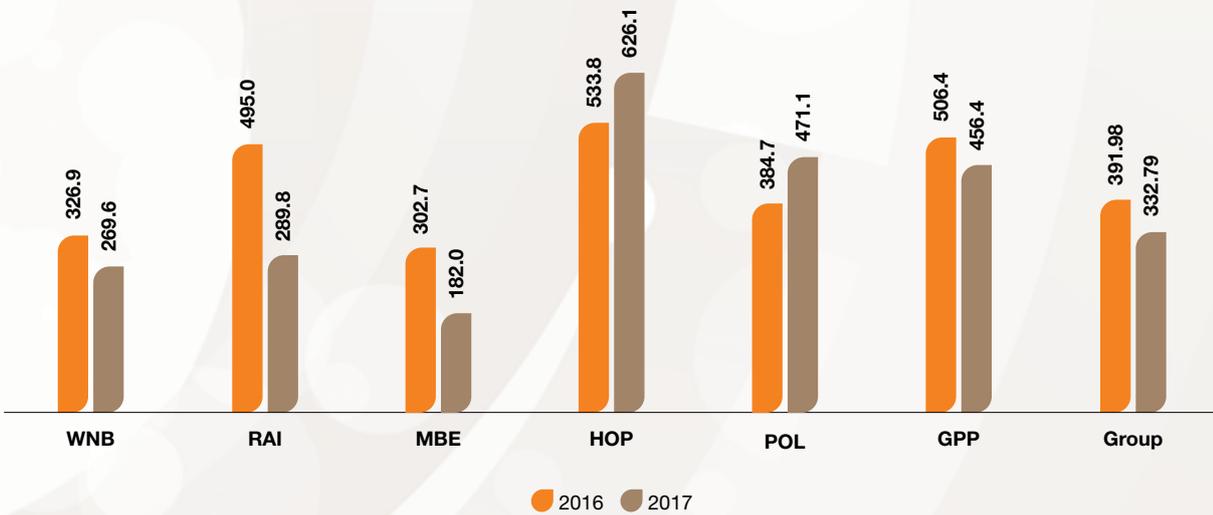
### Monitoring and reporting

The use of pesticides is monitored through monthly reports submitted by our estate offices. Group-level pesticide use, measured in toxicity units per hectare, is reported biennially in our sustainability reports. Pesticide usage will typically vary year-on-year in line with climatic conditions, pest levels and crop

lifecycles, requiring longer-term monitoring. At WNB, we now have 20 years of data, enabling tracking long-term trends and have noted a dramatic decrease in toxicity units over time. This trend is particularly linked to the phasing-out of paraquat, which we completed in 2012. For our other sites, systematic tracking began later, and we will continue

to report on trends over time. We limit our reporting to herbicides due to their common usage in plantation management and because insecticides, rodenticides and other pesticides are used infrequently and are targeted and limited in accordance with the restrictions set out by the RSPO P&C and the SAN List of Prohibited Pesticides.

### Herbicide (toxicity units/ha)



### Herbicide toxicity West New Britain 1998-2017



Note: 2002 has been removed from the data series as the underlying data was incomplete. NBPOL phased out paraquat from 2010-2012.

PROTECTING OUR PLANET -

PROTECTING WATERWAYS AND ENHANCING ACCESS TO WATER

We use water from local rivers and boreholes for mill processing, as supply to housing and offices, and for the irrigation of our nurseries. Although there is no water shortage in any of the landscapes in which we operate, we are still monitoring

our water usage at mills and ensuring that any discharge meets the highest standards. We are in the process of establishing a baseline for water use efficiency, and will be developing targets once this work is complete.

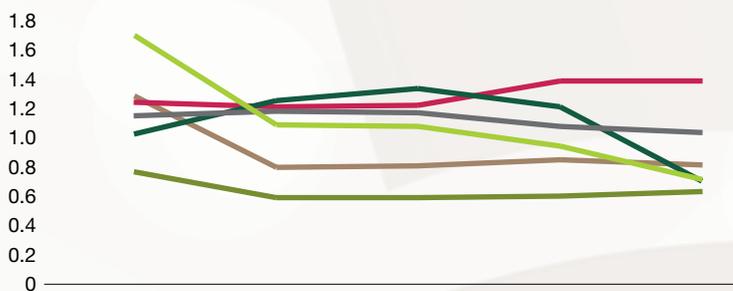
Where we apply mill effluent for soil nutrition in the field, we have had no instances of biological oxygen demand (BOD) levels above the legally required 5,000 ppm (which will be reduced to 4,000 ppm from 2018).

**BOD reading of discharged effluent incidents exceeding target**

NBPOL Sites	Target Limit	2014	2015	2016	2017
WNB (4 sites)	90 ppm	16	5	1	6
WNB (1 site)	20 ppm	0	0	1	1
RAI	4000 ppm	0	0	0	0
MBE	4000 ppm	0	0	0	0
HOP	4000 ppm	0	0	0	0
POL	90 ppm	0	0	0	0
GPP	90 ppm	No discharge	No discharge	0	0
<b>Total</b>		<b>16</b>	<b>5</b>	<b>2</b>	<b>7</b>

Our mills use water and steam to process fresh fruit bunches (FFB) and we work continually to eliminate water waste and spillage in these processes. We are pleased to report that all of our mills have reduced water usage to less than 1.5 m<sup>3</sup> per tonne of FFB processed, and that five of our six sites have achieved significant reductions in water usage over the past five years.

**Water usage m<sup>3</sup>/MT FFB processed**



	2013	2014	2015	2016	2017
WNB	1.28	0.81	0.82	0.86	0.83
RAI	1.68	1.09	1.08	0.95	0.73
MBE	1.24	1.21	1.22	1.38	1.38
HOP	0.78	0.61	0.61	0.62	0.65
POL	1.03	1.25	1.33	1.21	0.72
GPP	1.15	1.18	1.17	1.08	1.04

In order to improve the treatment of POME we have starting using Geotubes®. These devices are essentially large bags made up of semi-permeable textile through which POME is pumped. The textile retains the solids while the liquids are pumped back into the pond system for further digestion. This process serves various beneficial functions and replaces the conventional means of desilting our ponds with a much more cost-effective methodology. The desilting itself improves the digestion of POME by increasing retention time of POME in our pond system. The removal of solids in general improves the overall quality of the POME before final treatment. Finally, the removed solids themselves prove to be a very rich organic fertiliser which we have found to be very useful in our nursery and gardens. This system is being steadily rolled out to all of our mill effluent ponds and show encouraging results in lowered BOD and solids.

**Access to water for communities**

PNG faces significant water challenges. It is known that communities have limited access to clean water and an estimated 60% of the population do not have a safe water supply. To address these issues, NBPOL contributes to improving local infrastructure, such as through the construction of wells. We also help educate the general public on the importance of protecting our waterways. In 2017, we partnered with Project WET, a US-based organisation that provides water education resources and expertise on the most pressing water challenges. Some 20 local educators –



including primary and secondary teachers from public and private schools, corporate volunteers, government officials and NGO representatives – participated in a two-day workshop to learn new methods for teaching children about water using an education module customised for Papua New Guinea. The programme has initially rolled out across WNB, and our long-term plan is to scale up the programme in the other four provinces we operate in.

For villages in the vicinity of our HOP operations, the main source

of water is rainwater collected at from bottom of sago palm trees more than an hour's walk away. In response to this situation, NBPOL is partnering with Nestlé and TFT to provide safe and reliable access to drinking water for these communities. The project will fund water infrastructure projects in dozens of villages where access to drinking water is scarce.

## SUPPORTING LIVELIHOODS – PARTNERSHIPS WITH COMMUNITIES AND SMALLHOLDERS

Community relations at our operations go far beyond philanthropy. Local communities own most of the land we plant on through customary rights, and we work in close partnership to ensure that everyone in the community benefits from our activities. Smallholders are also among our most important stakeholders. They provide 25% of our annual FFB, and we believe that we get the best results by empowering and supporting them.

NBPOL's philosophy has been to introduce palm oil cultivation in PNG to drive local economic development, providing technical and market support to the rural poor through our nucleus estates in the name of economic inclusion. However, we have been facing difficulties in adding any smallholders to our supply chain since 2015. This is due to barriers created by certification standards for assessments, which currently require smallholders to undertake the same process as proposed large-scale conversions – even if they just want to expand their

plot by two hectares. Such requirements are blocking the entry of poor rural landowners into a responsible supply chain. To address these issues, we are in some cases carrying out assessments for smallholders that are interested in developing land and then guiding them through the RSPO NPP. Looking forward, we will explore an approach that simplifies industry standards for smallholders.

Despite this smallholder dilemma, we actively share best practices to motivate farmers to obtain basic skills and knowledge for proper management of their oil palm blocks. We promote sustainable growth using visual aids and provide simplified awareness tools to guide smallholders on topics such

as FFB quality, cover crops, fertilisers, costing and pricing formulae. These activities are carried out during field days, block demos, and through our financial literacy training sessions held in consultation with our partners. Our community training programmes also ensure farmers are kept up to date on current sustainability issues, such as proper land use planning, management committee responsibilities and community needs assessments. This equips them to plan effectively for development and expenditures from income generated through mini-estate palm oil businesses.

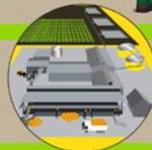
We also provide interest-free credit to smallholders for their farm inputs – for example tools and fertilisers – and have outstanding credit in 2017 of around PGK 18.55 million.





New Britain  
Palm Oil  
Limited

# PRICE FORMULA



Supported by: **Solidaridad**



Issued by: NBPOL Sustainability Department - Dami  
West New Britain Province, 1<sup>st</sup> July, 2015.

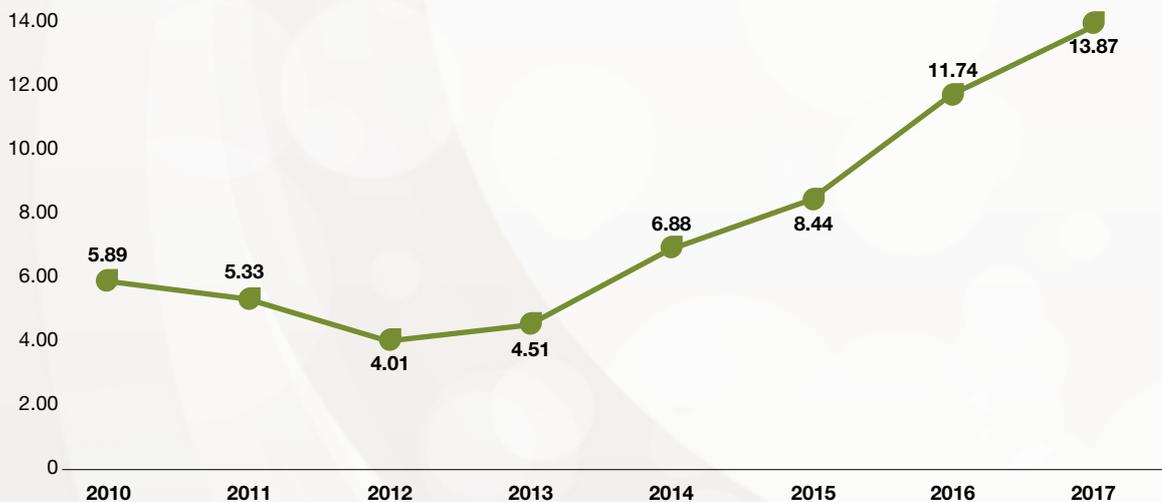
**Sharing the sustainability premium**

All smallholders selling fruit to our mills have been RSPO certified since 2012 and they receive a significant sustainability premium. Originally, we paid out a premium corresponding to the value of

GreenPalm certificates. Since we achieved full certification, and are able to sell oil as segregated, we now calculate premiums based on the more substantial direct RSPO premiums. These are received on the sale of certified sustainable palm oil (CSPO) converted to FFB

equivalents, and are paid to each smallholder on the basis of their production with no administrative or other deductions. NBPOL covers all smallholder certification costs and these are not charged back to the growers.

**Smallholder premium/MT FFB (PGK)**



*Note: Not all sites were certified from 2010 to 2013. The figures for these years are calculated as the average premium to certified smallholders. From 2014, all smallholders across all PNG sites were paid a uniform premium.*

**Engagement with landowners**

*Free, Prior and Informed Consent (FPIC)*

Without the FPIC of landowners, we would not be able to sustain our operations. We are very much involved in ensuring that due process takes place and is truly representative of the rightful customary land owners, as PNG and Solomon Islands recognise customary land rights within their constitutions. In accordance with our management guidelines, NBPOL does not solicit expressions of interest for

expansion. After verification, the associated communities are made fully aware of the pros and cons of the potential project. Given the sentiment of the communities, the awareness phase will continue while the subsequent stage of land registration is embarked upon. Land registration is a legally mandated process that allows clans owning communal land to register and title their land so as to sublease all or portions of it to developers in a joint venture partnership. This is an extremely thorough process that involves the preparation and review of investigation reports and vetting

documents by several layers of local, provincial and national governments before a title can be issued. Our teams support and strengthen this process by providing genealogical mapping using the latest available software so as to ensure that our land dealings are secure and ongoing historical records are maintained. The whole process takes at least two years prior to a single palm being planted and can be halted at any time due to the reconsideration of the land owners or the existence of internal disputes.



### Land use planning

We conduct extensive land use planning throughout the development phase to ensure that proposed NBPOL oil palm projects do not displace communities or put their food security at risk. After mapping land ownership boundaries, community members are invited to delineate land uses onto posters printed with satellite imagery of their land holdings. The entire community attends these meetings and they are provided with ample time to reflect on their designation of land to conversion. Areas excluded from the development also include

areas that the communities have identified as being important to them for living space and food security. For this we calculate that the communities need to set aside at least 0.5 hectares per person over the entire lease period, taking into account population growth using the national average of 3.1% since the last census period. These areas are then enclaved from the conversion and are not subleased to NBPOL. The resulting land use map, including areas to be subleased to NBPOL (as well as conversion and conservation areas), and areas enclaved for living space

and food security, comprises the integrated land use plan. This plan forms the foundation of subsequent agreements of land leases and rules of land use, and remains a dynamic document that may change to accommodate community needs.

Each site has a Lands Department with specialist officers who address landowner requests and queries and resolve any disputes. Since 2015, we have carried out FPIC and community engagement and participatory processes at HOP, RAI, and GPP, and have supported these with other environmental and social assessments. Land tenure at these sites is either under customary ownership or mixed, with the majority being community-owned while a small proportion is registered. Concurrent to the HCV and HCS assessments, other procedures are woven into the process, including the registration of the Incorporated Landowner Groups (ILGs) and preliminary participatory mapping to develop land use plans at each site. Communities are also kept informed about the One Hour Principle (access to potable water, medical health post and primary school within one hour's walk), which guides NBPOL's approach to rural development (access our Forest Policy at [www.nbpol.com](http://www.nbpol.com). pg for further details).





### Safeguarding customary rights

We are committed to safeguarding community lands and ownership. The PNG Government is currently implementing a new legislative and administrative system of Voluntary Customary Land Registration (VCLR) to better protect landowners' customary rights. This is in response to widespread concern about administration of Special Agricultural and Business Leases (SABLs), which have caused significant controversy since they were introduced due to the potential for wrongful suspension of customary rights in some cases. NBPOL is working closely with the PNG Government in the transition to the new VCLR system. All new NBPOL oil palm developments on customary lands will now utilise VCLR, and NBPOL has committed to work with customary landowners and the PNG Government to convert existing SABL land titles to VCLR.

In October 2017, a court order confirmed that NBPOL is the title holder with exclusive rights to Sagarai in Milne Bay, PNG. This concludes a disagreement between NBPOL and the traditional landowners over



67.7 hectares of land that was legally leased to MBE by the provincial government more than two decades ago. A 1992 Memorandum of Understanding (MOU) signed by the landowners, the provincial government, MBE and the Lands Department suggested that insufficient claims had been made to the landowners, and promised to reassess any compensation due, however neither the provincial government nor the Lands Department took proportionate action over the following years. Following a joint meeting with all parties in February 2017, during which NBPOL's rightful ownership of the land was confirmed, we agreed to halt operations as a precautionary measure until further site investigations had been undertaken.

While we are satisfied by the court's findings, we have remained mindful of the complexity surrounding historical customary rights in the areas we operate, and have made every effort to respect the needs and concerns of the traditional landowners throughout the process. We have taken steps to ensure they receive their just claims from the government. We have supported the landowners by providing transportation funds for them to attend meetings, and continue to assist them with their claims. We also initiated an environmental impact assessment (EIA) and addressed immediate concerns raised by the Gulubwai Daidai Clan over a gravesite within a plantation, taking corrective action to preserve the site and relocate 12 palms.

### Financial literacy training for smallholders and landowner groups

NBPOL has established a 'train the trainer' programme across five of our estates to empower smallholders and landowner groups. In the past, the programme has covered practical issues, such as intercropping and good agricultural practices. For 2017, we shifted the focus towards improved management and capacity building. We have also made financial literacy manuals available in both English and Pidgin. To date more than 1,000 growers, employees and dependents have received financial literacy training in WNB alone. The training covers topics such as budgeting, planning finances, good financial practices and banking. We also facilitate the opening of personal bank accounts for interested ILG members.

For more information on how NBPOL caters financial and capacity building programmes for women, see page 51.



**Community development**

Beyond our commercial relationships, we also want to contribute to the development of the wider community and to broader national development goals. Papua New Guinea and Solomon Islands are both ranked low on the UN Human Development Index (154 and 156 respectively), which measures basic needs such as primary education, child mortality and access to potable water. We see this as an important opportunity: operating in remote rural areas means we are often best placed to assist in providing communities

with basic facilities, infrastructure and support to address some of these challenges.

We established the New Britain Palm Oil Foundation in 1997 as a means to structure our community investment programmes. In 2014, the Foundation adopted the One Hour Principle Partnership and its three pillars: access to water, health and primary education – all within one hour’s walk. (For more information about our access to water initiatives, see page 41).

In addition to the activities carried out at Group and Foundation

levels, sites also develop local programmes for employees and their dependants. Since 2016, we have started to organise Social Management Plans to address social issues and enhance social wellbeing within our operations. These plans have four main components: safe and harmonious communities, education and literacy programmes for all, healthy lifestyle, and spiritual wellbeing. We have initiated these management plans in WNB with an aim to rolling them out at our other sites.





### *Education and literacy programmes*

Reading books and textbooks have been continuously distributed to secondary, technical, primary and elementary schools across our sites since 2012. The books are transported in from schools and libraries in Australia. To date, a total of 2,431 books have been distributed to primary and high schools in New Ireland, more than 1,000 to

schools in WNB and more than 1,000 to schools across the Guadalcanal plains.

We also ensure children have access to good educational facilities. For instance, elementary classrooms have been established on all plantations with Prep, Year 1 and Year 2 classes enrolled. Classrooms are equipped with computers and furnishings such as chairs and desks. Housing for teachers is provided for under tax credit scheme projects.

Education assistance programmes are rolled out in partnership with local communities and ILGs. In RAI, the As Ples Scholarship programme issued 38 scholarships to deserving students in 2017. We also engage with relevant government authorities on behalf of 16 schools that have not yet received school codes to ensure that all schools within 10km are registered to receive government funding. Sporting events are regularly organised for children to participate in.

*Employees' social welfare*

We place great emphasis on providing employees and their dependants with tools and space for gardening. Designated areas have been allocated to all staff on plantation sites, and market places are being provided to sell their produce. Fish ponds and chicken farms are also encouraged for employees and their families to increase the availability of fresh food and facilitate healthy diets in the community. Feedback about the initiative indicates that

employees and their dependants are benefitting from an increased sense of ownership and productivity that has improved their overall welfare.

We also host group programmes for workers and their dependants. In 2017, 135 workers attended the Garu Plantation Social Awareness Programme to learn about the RSPO Principles & Criteria, environmental issues, law and order, safety in the workplace and family planning.

In September 2017, a Food Security Action Plan Consultation Workshop was conducted in Milne Bay Province. The workshop brought together key government officials, NGOs and private sector representatives to jointly review the National Food Security Policy 2017–2027, including its Action Plan. One of the key outcomes of this meeting will be the ongoing identification and alignment of all relevant food security actions and programmes at provincial and district levels.





### *Programmes for women*

NBPOL has continued to develop and implement initiatives that empower women in PNG and Solomon Islands to contribute to their own welfare.

The Mama Loose Fruit scheme was set up in 1997 to ensure that women benefit from their families' oil palm blocks. The project involved the introduction of the Mama Card, which enables women (workers, including smallholders, and dependants) to be paid directly for their work. The scheme was trialed in a group of 10 women, and there are now more than 6,000 Mama Card holders who are benefitting from additional income and directly contributing to the welfare of their families. As part of the Mama Loose Fruit initiative, trainers organise empowerment

programmes for women throughout the community, and we have now made it compulsory for all participants to undertake one day of financial literacy training for any income-generating course they participate in. Related initiatives include the Chicken Revolving Fund, which enables Mama Card holders to raise and sell chickens as an additional means of income. The group also raises money through grants and donations that go towards facilities to help women generate income.

At each site we develop programmes that empower women in the community to use the resources available in their natural surroundings to generate income. These include craft-waste recycling programmes in Milne Bay that create valuable home and

decorative items out of rubbish for the marketplace, catering and pastry-training for women in GPP, sewing programmes in GPP and other sites, as well as entrepreneurship training. We partner with groups such as Bank South Pacific, World Bank and the International Labour Organization (ILO) to carry out these initiatives. New programmes for women will be launched in 2018 across the Group covering topics such as floriculture, baking and climate change adaptation focused on food crops.

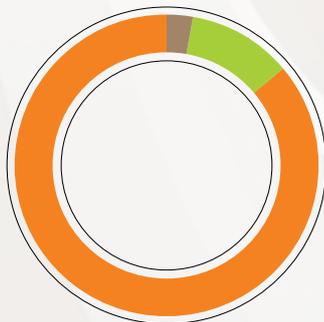
We also place great emphasis on empowering the women of PNG and Solomon Islands by instilling them with confidence and leadership skills (more information can be found on our empowerment programmes for women on page 59).

## SUPPORTING LIVELIHOODS – A FAIR PLACE TO WORK

Our almost 23,000 employees are the backbone of our operations. We are the largest private employer in PNG and contribute significantly to employment in Solomon Islands. With such a large footprint among the communities in which we operate, we want to uphold the highest standards for fair and safe workplace practices. We support the ILO core labour standards, which are embedded in both the RSPO P&C and our Human Rights Policy.

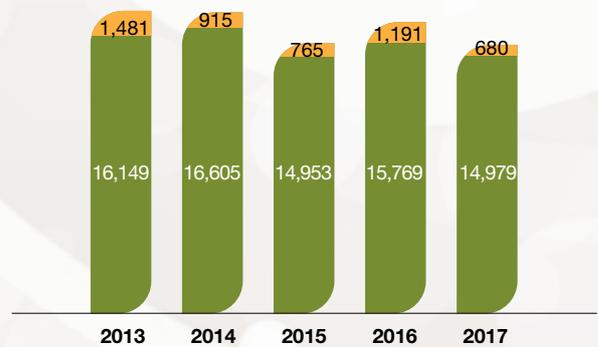


Employees by level



Management and executives	539 (2%)
Junior staff	2,609 (12%)
Workers	19,614 (86%)

Field workers by contract type



Permanent workers (includes all manual workers and junior field staff) Seasonal workers

### Our employees

Our employees are predominantly local, with less than 1% coming from outside our countries of operation. Our largest employee groups are field and mill workers, and around 95% of these are on permanent contracts. We employ a small group of seasonal labourers for special projects and in the high season. Seasonal workers are housed and given

access to the same benefits as permanent workers.

We established the NBPOL Management Training Academy in 2017 to nurture and develop the leadership competency of our staff so they may become managers in their respective sections. The Academy has a training administration office, two classrooms, a library,

accommodation and other facilities. It offers the first executive level of training and focuses on their tasks, roles and responsibilities. Training also covers palm oil production, including nursery upkeep, development, harvesting, mill processes, sustainability, transport, logistics and other relevant disciplines.

### A fair pay structure

Almost all of our employees are remunerated through a combination of wages, housing, utilities, medical care, schooling and transport. Our lowest wage for Grade 1 unskilled workers has for decades been significantly above the national minimum wage. In 2014 and 2015, the Government of PNG increased the minimum wage by over 40%. The Government recognises, however, that in rural industries an employee's remuneration package comprises of a significant non-cash component, as for NBPOL employees as outlined above. In light of this, the Government has made partial payment provisions for agricultural employers to

discount the value of the non-cash employee benefits from the national minimum wage rate. Following application to the Government for partial payment allowance, along with all other agricultural employers, the partial payment review committee awarded NBPOL a concession based on an analysis of non-cash benefits provided to its employees.

In 2017, the take-home pay of our lowest wage earners was PGK 2.77 per hour. When the value of housing and other benefits is included, this effective pay is PGK 4.88 per hour, 27% higher than the mandatory national minimum wage.

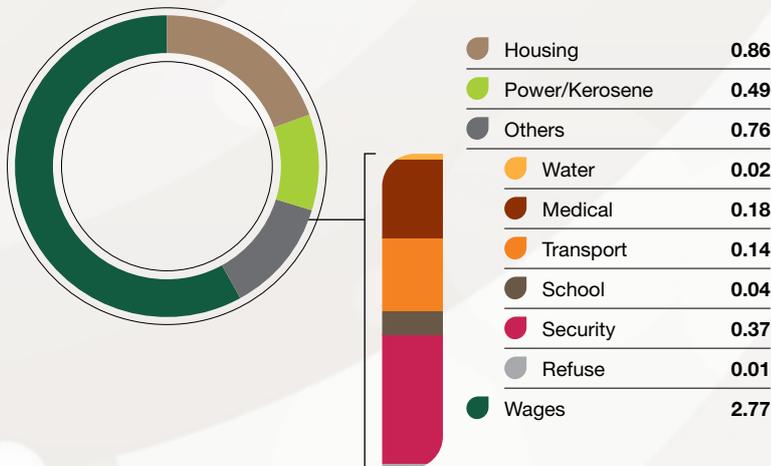
### Child labour and bonded labour

New Britain Palm Oil has a strict policy to prevent child labour and will not employ anyone under the age of 16. The minimum age for workers in PNG is 16 years old and the company goes to great lengths to verify the age of all employees, checking birth certificates, school and church records, ID cards from previous employment, driving licenses and statutory declarations. All potential employees undergo a mandatory medical examination before commencing employment.

It is not unusual for children to work on smallholder farms, picking loose fruit or weeding to support their family. Through our ongoing engagement with smallholders, we seek to raise awareness about potential hazards for children and the need for them to attend school. Reminders about our child labour policies are regularly communicated via field visits, radio programme broadcasts and through social media activity targeting women.

We also uphold a complete ban on any form of coerced labour practice. We do not require bonds, deposits or the withholding of travel documents for any of our workers.

### Composition of NBPOL's minimum wage (2017: PGK 4.88/Hr)



**SUPPORTING LIVELIHOODS –  
A FAIR PLACE TO WORK**

**Freedom of association**

All NBPOL employees are free to form and join unions of their choosing. Around 16% of our employees across all of our sites are members of independent unions. There were 10 incidences of work stoppages in 2016 and four in 2017. Most work stoppages were due to disputes over pay and terminations, while two were due to security issues

and one was related to an alleged sexual assault in the workplace.

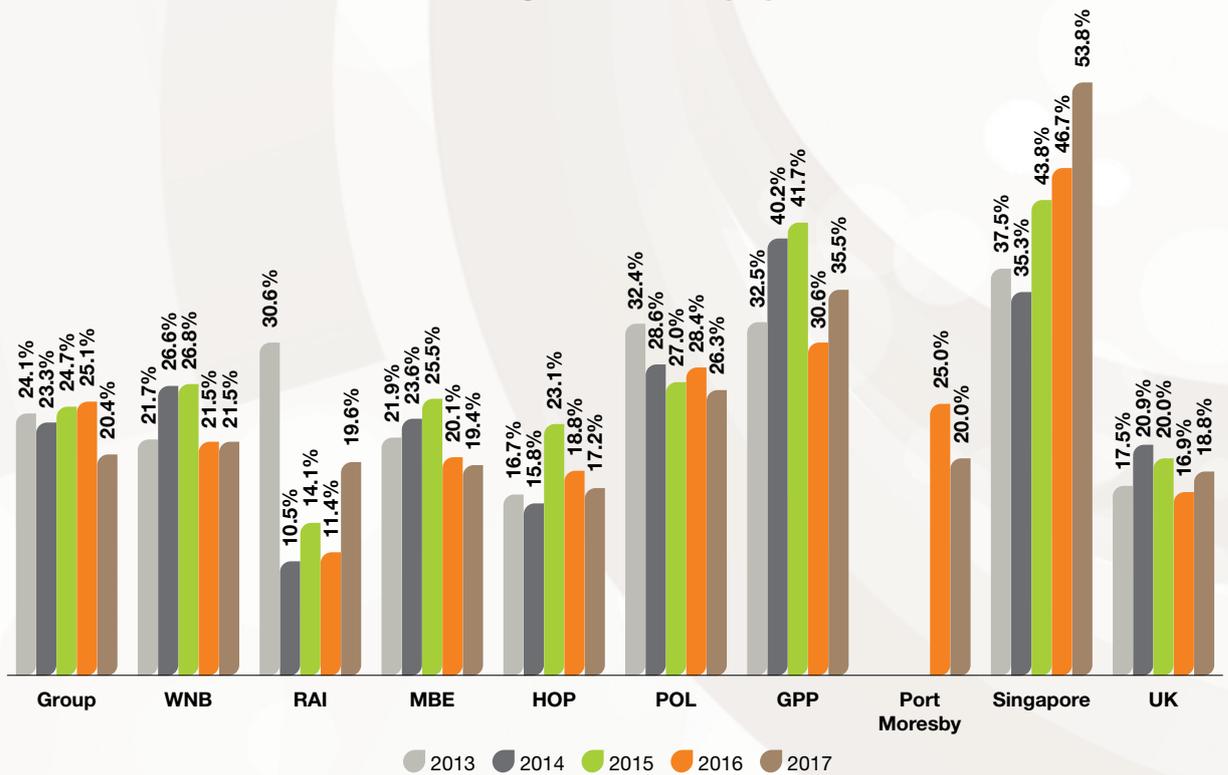
**Non-discrimination**

We operate on the basis of equal opportunities and our employees receive the same pay and benefits regardless of gender. Around 20% of our employees are women and all sites have established gender committees to ensure that issues of particular concern for women are raised and addressed.

NBPOL fully supports women taking on careers traditionally dominated by men, such as tractor operators. This gender equality is appreciated by men and serves as encouragement to other women across our operations.



**Percentage of female employees**



## PROMOTING HEALTH AND SAFETY FOR WORKERS AND COMMUNITIES

### A safe workplace

Since the beginning of 2016 there has been concentrated effort by all our employees to make our workplaces safer. Since our last report, we have cut our average lost time accident (LTA) rate by 58% to 33 LTAs per million working hours.

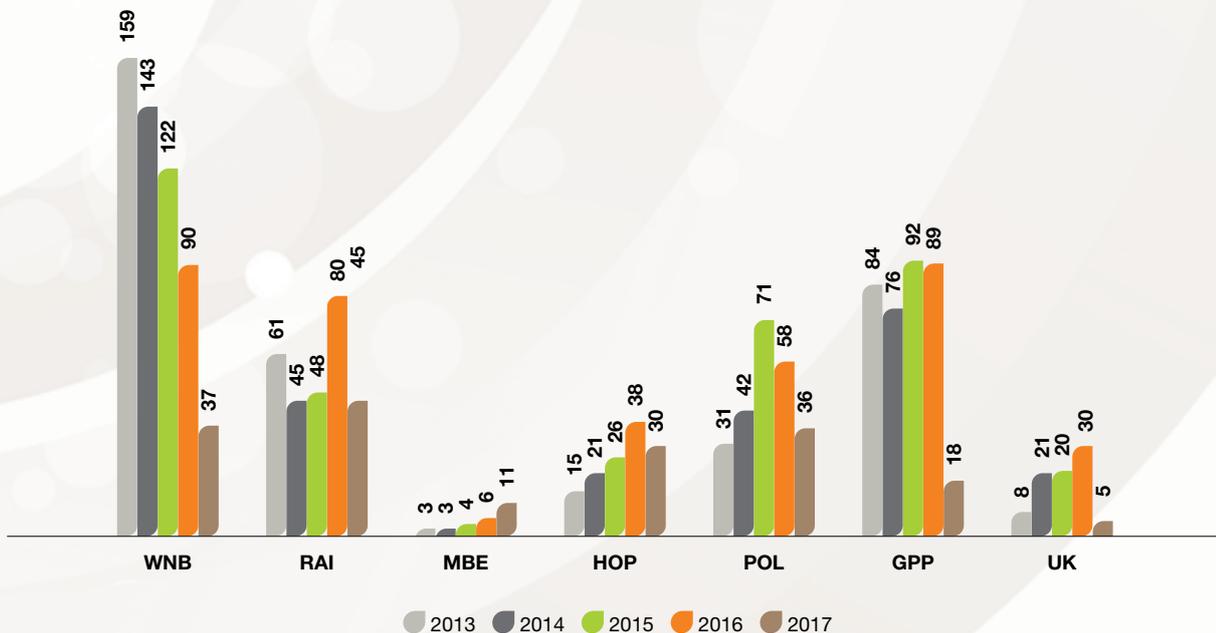
A big part of our ability to drastically reduce LTAs over the two year period has been an increased emphasis on hazard identification and near-miss reporting. Through these forms of proactive reporting, incident prevention has become a reality. It is still early days and there is further improvement and momentum to be gained,



however positive results have been achieved. Plans are also in place to create an information system platform

to make hazard identification and near-miss reporting easier and more accessible for all employees.

Lost time accident rate (per 1,000,000 working hours)

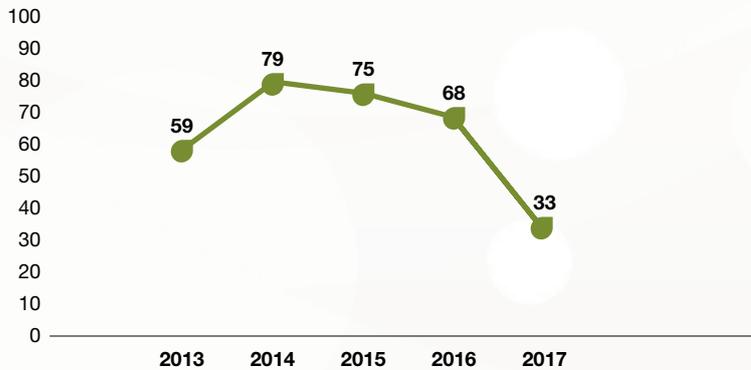


Note:  
In previous reports, we reported on accidents per 200,000 working hours. All figures have been adjusted to align to one million working hours.

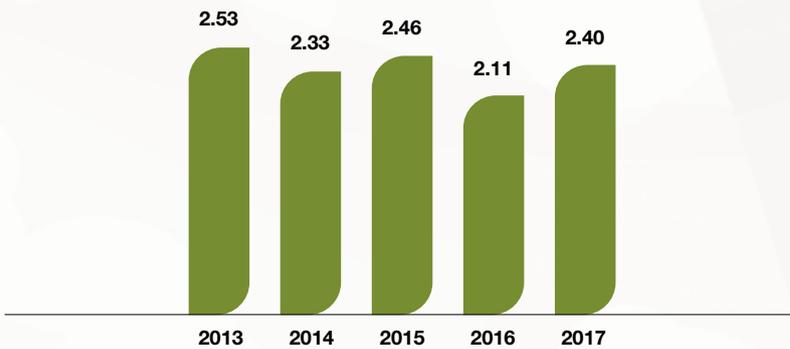
SUPPORTING LIVELIHOODS –

**PROMOTING HEALTH AND SAFETY FOR WORKERS AND COMMUNITIES**

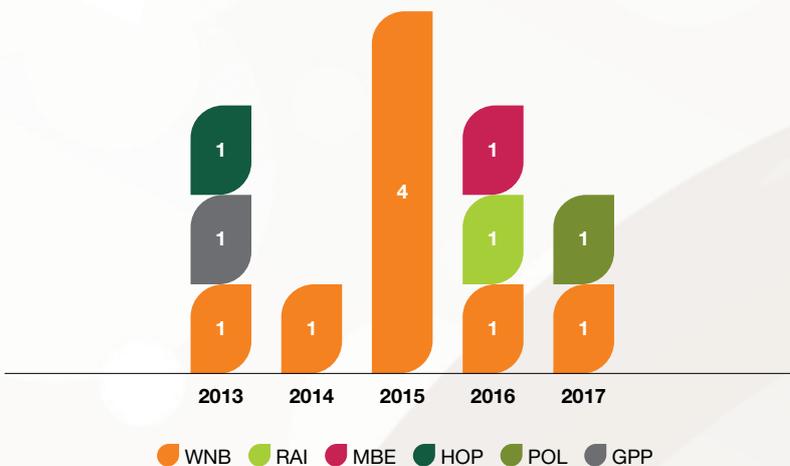
**Group lost time accident rate (per 1,000,000 working hours)**



**Severity rate (Average lost days per accident)**



**Fatalities**



The vast majority of accidents are minor injuries such as cuts and palm nail injuries, resulting in relatively short periods of lost time for most incidents.

Throughout our operations we are inculcating a new approach to safety in the workplace with our slogan “Safety is Everybody’s Responsibility”. In early 2016, to support this new approach, we conducted a two-week programme across 15 plantations, mills and departments. Over the two weeks, 329 safety climate surveys were conducted to better comprehend the level of safety understanding among our employees, and behavioural safety training was provided. We continuously provide safety training for all our employees and ensure they are equipped with first aid kits. We conducted almost 3,000 health and safety training and awareness sessions for employees across our sites in 2017.

**Fatalities**

We are saddened to report that five fatalities occurred in our operations during 2016 and 2017. Three incidents involved the use of machinery and vehicles, one involved a collapsing concrete wall, and one involved a fall from a tree.

On the afternoon of 9 January 2017, an FFB truck operated by Higaturu Oil Palms was involved in a road traffic accident with a local public motor vehicle on the main Oro Bay to Kokoda highway in Oro Province. The accident tragically took the lives of 13 people and a further 12 people were injured. Higaturu Oil Palms personnel cooperated fully with police investigations and provided broad ranging support to families of those affected. We are unable at this time to provide further comment as the matter is still under investigation by the relevant authorities.



### Supporting community health

There is no functioning public healthcare available in many of our communities. Our clinics and aid-posts are therefore vital for ensuring that employees, their families and the wider community have access to a reasonable level of healthcare. Every plantation has a clinic on site, including our mills, where employees and dependants can get a check-up and receive treatment. Supported by the NBPOL Foundation, aid posts are also set up centrally in remote areas to ensure access for multiple communities. In 2017, the NBPOL Foundation also pledged to donate PGK 500,000 annually to the Youth with a Mission (YWAM) medical ship over the next four years in support of community health outreach.

Our clinics provide both emergency assistance and a broad range of general services. We dispensed 740 immunisations in 2017, of which 710 were given

to dependants. In 2016, just over 1,000 community members received sabin polio vaccines. Sites also provide access to eye testing and prescription eyewear. In partnership with the Hepatitis-B Free Team in Higaturu, our clinics facilitate improved health care through Hepatitis B vaccines to isolated communities in the area. We also facilitate and host other organisations' programmes to raise funds and provide healthcare in our communities.

A number of our health outreach efforts are geared towards raising community awareness on hygiene and sanitation. All sites partner with the Provincial Health Department at some level to organise activities. In WNB, for example, targeted training sessions are held on food handling, food preparation, kitchen and cutlery storage, clean homes and personal hygiene. Sessions also cover the causes of common illnesses and diseases in tropical countries. To date,

more than 250 participants have been trained.

Alongside our ongoing awareness programmes on hygiene, we also facilitate student visits from nursing schools to assess the living standards of employees and surrounding community members. Students offer guidance on healthy lifestyles, food security, and water and sanitation. Our Days for Girls programme in Poliamba periodically hosts programmes aimed at educating and supporting young women in New Ireland Province with information and advice on hygiene, health and education.

A key focus area over the past two years has been to clean up community areas and raise awareness on proper waste disposal. These activities are carried out either weekly or monthly and rely heavily on community participation.

## SUPPORTING LIVELIHOODS – PROMOTING HEALTH AND SAFETY FOR WORKERS AND COMMUNITIES

### *Women and children*

We place special focus on ensuring women and children have adequate access to healthcare services across our sites. In WNB for example, immunisation programmes are available for children aged one month to five years at each plantation clinic, and two doctors are on call at all times to provide thorough check-ups and referrals to hospitals.

NBPOL also provides family planning programmes linked to Spacim Pikinini (family planning) that are now underway in West New Britain, Higaturu and Milne Bay. In 2016, volunteers from Milne Bay and the Provincial Health Authority in WNB partnered with the Rotary Club to roll out a contraceptive implant programme. The week-long programme provided advice on family planning and contraceptive implants to more than 1,000 women. Almost 400 people enrolled for family planning at our clinics across all sites in 2017, an increase of 100 people from the previous year.

Women's groups from our sites have also taken their own initiatives out into the surrounding communities to address health concerns. The WNB Women Cancer Awareness and Fundraising Committee periodically hosts events, raises funds and assists NGOs and community-based organisations in the province. In 2016, the Committee raised donations for the Wantok Health Foundation to conduct free Pap smear screenings and other health-related activities within the province. NBPOL officers work closely with the Foundation to make sure that all women, including workers and dependants, have access to screening.

Other women's groups have raised funds for maternity ward renovations, the purchase of



ultrasound scanners and hospital supplies, and for renovations of outpatient department clinics. In WNB, the Women Empowering Women (WEW) initiative has recently raised funds for mammography equipment that has

been donated to the local hospital to provide women with better access to screening to ensure the earlier detection of breast cancer.

As part of the GPP's social procedure we also conduct rehabilitation programmes for young adults and rebellious teens in our communities. Young people involved in social issues are usually called in to the site office with their parents for consultation and disciplinary action. They are guided to take part in community service cleaning programmes, as well as unique programmes to upgrade their talents such as being trained in dance skills by hired choreographers. These teenagers also participate in informative role plays, where they act out situations on how to address social problems. These measures are usually well received by the youth.





### Outreach on domestic violence and women's empowerment

We recognise that protecting our female employees and their families against domestic violence and harassment is an immediate priority. Domestic violence is one of the biggest issues facing women in PNG and we are committed to combatting such abuse in all its forms. There were 356 domestic violence cases reported in 2017.

All our sites have domestic violence policies and undertake extensive awareness activities to ensure that employees and dependants understand our zero tolerance policy and know how to report violations. We also reach out to our communities to encourage them to work together to prevent and minimise

violence in their villages. All cases of domestic violence and child abuse are referred to our Community Policing & Welfare section and support services are made available across all sites to address all domestic violence cases. External consultants have started to train our personnel on peer counselling to better provide on-site support for women associated with our sites. WNB's WEW Committee Secretary and company lawyer provide legal advice to all women, men and families that register cases through WEW.

Established in December 2011 in West New Britain, WEW is a registered member of the Business Coalition for Women (BCFW). NBPOL is active member of the Against Violence Working Group of the BCFW,

which provides insights and recommendations to the BCFW relating to its programmes and activities within PNG. Two of the most successful initiatives developed by the Working Group have been the Gender Smart Safety Toolkit and the Gender Smart Audit, and NBPOL has been the first player from the agriculture sector to get involved. The Gender Smart Safety workshop hosted in June 2016 included the development of audit reporting templates, measures and KPIs that will be used for each of the companies, as well as a Draft Minimum Standards for women's safety in the workplace. We are currently raising awareness and building capacity among our staff and management around measuring targets and we are including this in our KPIs.

## SUPPORTING LIVELIHOODS – PROMOTING HEALTH AND SAFETY FOR WORKERS AND COMMUNITIES

The strength of the WEW Association in WNB is also replicated across our operations, with each site having its own women's groups. In Milne Bay, a ten-day women's leadership training course was organised for women employees and dependants at the end of 2017. The purpose of the initiative was to strengthen the participants' leadership skills so they can better represent the groups they work with. By providing tools and a platform to work together, such initiatives will continue empowering women in and around our operations to address the issues they face in the workplace and in the community.

### Community security

Although we have a strict no violence policy and provide a high level of security and ongoing training of security officers, violent incidents continue to occur at some sites.

To address security concerns, each of our plantations has a security department led by experienced local experts. All security departments are adequately resourced and officers selected from are among internal personnel or outsourced to local security companies with long-standing presence in PNG. Only a small percentage of our security staff

carry licensed weapons, which are always concealed.

Our security departments work in close collaboration with our Sustainability teams to identify potential threats and resolve issues before they arise through good community relations and a participatory conflict resolution process. Our grievance procedure is also instrumental in ensuring that grievances are addressed in a timely manner before they escalate.



## BEING TRANSPARENT – BASE DATA AND NOTES

Category/ indicator	Measurement unit/breakdown	2017	2016	2015	2014	2013
<b>Employees</b>						
<b>Total number of employees</b>	<b>Full time equivalents</b>	22,762	24,204	22,794	25,432	25,077
	<b>WNB</b>	10,251	10,601	10,210	10,571	10,365
	<b>RAI</b>	3,644	4,090	3,529	3,825	3,554
	<b>MBE</b>	2,555	3,105	3,029	3,347	2,999
	<b>HOP</b>	2,833	2,865	2,653	3,639	3,729
	<b>POL</b>	1,946	2,013	1,902	2,458	2,974
	<b>GPP</b>	1,435	1,434	1,380	1,508	1,377
	<b>Port Moresby</b>	5	4	0	0	0
	<b>Singapore</b>	13	15	16	17	16
	<b>UK</b>	80	77	75	67	63
<b>Female employees</b>	<b>Group</b>	4,945	4,939	5,730	5,915	6,047
	<b>WNB</b>	2,203	2,279	2,739	2,816	2,252
	<b>RAI</b>	716	465	496	403	1,088
	<b>MBE</b>	495	624	771	791	657
	<b>HOP</b>	488	540	614	576	622
	<b>POL</b>	511	571	513	703	963
	<b>GPP</b>	509	439	575	606	448
	<b>Port Moresby</b>	1	1	0	0	0
	<b>Singapore</b>	7	7	7	6	6
	<b>UK</b>	15	13	15	14	11
<b>Female employees – Management</b>	<b>Group</b>	77	71	68	60	63
	<b>WNB</b>	28	27	26	24	23
	<b>RAI</b>	16	12	13	11	11
	<b>MBE</b>	6	7	6	5	4
	<b>HOP</b>	12	11	6	6	10
	<b>POL</b>	6	6	6	5	7
	<b>GPP</b>	5	5	3	2	4
	<b>Port Moresby</b>	0	0	0	0	0
	<b>Singapore</b>	2	2	7	6	3
	<b>UK</b>	2	1	1	1	1

● Employees						
<b>Total management (expats &amp; national)</b>	<b>Group</b>	539	544	532	500	440
	<b>WNB</b>	218	226	224	214	210
	<b>RAI</b>	110	103	102	93	90
	<b>MBE</b>	52	58	58	57	55
	<b>HOP</b>	71	68	67	62	8
	<b>POL</b>	35	36	37	36	36
	<b>GPP</b>	31	30	25	27	28
	<b>Port Moresby</b>	3	3	0	0	0
	<b>Singapore</b>	10	12	13	5	7
	<b>UK</b>	9	8	6	6	6
<b>Employee turnover (%)</b>	<b>WNB</b>	48.30	46.57	60.00	60.00	14.85
	<b>RAI</b>	59.35	34.94	39.82	47.76	49.07
	<b>MBE</b>	71.33	50.04	63.96	65.08	17.17
	<b>HOP</b>	18.35	31.51	58.33	11.81	8.70
	<b>POL</b>	29.36	32.43	27.52	48.23	39.10
	<b>GPP</b>	64.76	67.09	82.96	95.56	73.82
	<b>Singapore</b>	8.00	0.00	50.00	0.00	27.03
	<b>UK (Management &amp; staff   Manual workers)</b>	11   0	23   8	13   6	9   4	17   8

● Health and safety						
Lost time accident rate – total number of accidents per employee per 1,000,000 working hours	WNB	37	90	122	143	159
	RAI	45	80	48	45	61
	MBE	11	6	4	3	3
	HOP	30	38	26	21	15
	POL	36	58	71	42	31
	GPP	18	89	92	76	84
	UK	5	30	20	21	8
Severity rate – Average number of lost days per accident	Group (excluding UK)	2.40	2.11	2.46	2.33	2.53
Fatalities	Number	2	3	4	1	3
Lost work day rate – total number of lost days per employees due to accidents per 1,000,000 working hours	WNB	73	172	329	322	350
	RAI	140	191	157	147	185
	MBE	97	77	113	50	18
	HOP	72	72	59	47	29
	POL	110	105	171	87	48
	GPP	23	122	160	88	110
● Training						
Total training cost (% of payroll (USD))	WNB	2.8	3.1	1.2	0.9	3.5
	RAI	2.0	2.0	2.1	2.5	2.0
	MBE	2.8	3.0	2.5	2.1	1.6
	HOP	3.0	3.0	2.0	2.0	2.0
	POL	2.3	1.3	1.0	0.8	0.7
	GPP	1.1	0.5	0.9	1.1	2.1
	UK	1.4	1.6	1.9	1.3	1.2

BEING TRANSPARENT –  
**BASE DATA AND NOTES**

Land						
<b>Hectares</b>	<b>Group – titled</b>	139,958	138,194	136,268	135,204	134,611
	<b>Group – oil palm</b>	86,829	85,239	83,178	81,563	79,884
	<b>WNB – titled</b>	53,551	53,897	53,610	53,610	53,610
	<b>WNB – oil palm</b>	39,143	38,505	37,451	36,985	36,948
	<b>RAI – titled</b>	35,003	35,004	34,032	33,962	33,962
	<b>RAI – oil palm</b>	14,136	13,491	12,941	12,434	11,490
	<b>MBE – titled</b>	20,300	19,013	19,013	19,013	19,013
	<b>MBE – oil palm</b>	10,746	10,825	10,895	10,968	10,730
	<b>HOP – titled</b>	14,881	14,069	13,279	12,805	12,364
	<b>HOP – oil palm</b>	10,548	10,090	9,564	9,228	8,819
	<b>POL – titled</b>	7,908	7,908	8,030	7,922	7,922
	<b>POL – oil palm</b>	5,492	5,564	5,601	5,665	5,623
	<b>GPP – titled</b>	8,315	8,304	8,304	7,892	7,740
	<b>GPP – oil palm</b>	6,765	6,764	6,727	6,283	6,274
<b>Area set aside for conservation (Hectares)</b>	<b>Group</b>	19,611	19,326	16,471	16,471	14,798
	<b>WNB</b>	7,971	9,172	9,173	9,173	9,478
	<b>RAI</b>	3,686	3,686	3,500	3,500	254
	<b>MBE</b>	2,450	2,450	1,039	1,039	1,940
	<b>HOP</b>	2,586	1,656	1,500	1,500	2,905
	<b>POL</b>	1,811	1,255	470	470	219
	<b>GPP</b>	1,107	1,107	789	789	2
<b>Peat developed</b>	<b>Hectares</b>	0	0	0	0	0

Production						
Fruit processed (MT)	WNB	1,281,919	1,182,673	1,256,795	1,303,516	1,176,249
	RAI	239,634	172,984	187,906	180,520	145,552
	MBE	239,086	214,113	232,784	234,020	199,704
	HOP	366,235	365,574	339,504	351,747	299,406
	POL	83,701	78,277	101,096	112,362	121,684
	GPP	147,207	150,394	151,502	149,591	143,076
Crude palm oil (CPO) (MT)	WNB	290,785	264,290	275,809	289,531	258,534
	RAI	58,474	42,536	44,731	44,404	35,673
	MBE	56,907	50,779	52,648	53,225	45,280
	HOP	83,458	83,105	75,354	77,958	65,479
	POL	18,144	16,353	19,471	22,334	24,939
	GPP	35,089	36,407	34,919	33,752	32,154
Palm kernel oil (PKO) (MT)	WNB	31,843	30,285	30,219	29,484	26,239
	RAI	4,995	3,305	3,727	3,516	2,544
	MBE	5,117	4,878	5,806	5,727	4,648
	HOP	9,105	9,159	8,453	8,438	6,533
	POL	1,745	1,633	2,209	2,409	2,659
	GPP	3,491	3,616	3,614	3,347	3,173

BEING TRANSPARENT –  
**BASE DATA AND NOTES**

● Smallholders						
<b>Smallholder hectares</b>	<b>Hectares</b>	41,216	41,152	42,497	47,396	46,202
<b>Smallholder blocks</b>	<b>Number</b>	17,324	17,325	17,602	17,621	16,121
<b>Smallholder production (MT FFB)</b>	<b>WNB</b>	413,510	369,755	389,076	423,037	395,687
	<b>RAI</b>	8,313	6,343	5,268	6,296	3,974
	<b>MBE</b>	15,720	11,178	11,701	14,856	12,957
	<b>HOP</b>	114,008	129,021	132,606	162,777	143,104
	<b>POL</b>	18,663	18,084	21,756	23,255	22,826
	<b>GPP</b>	6,239	6,053	7,187	11,339	10,976

● Environment – oil palm						
<b>Water usage (M<sup>3</sup>/MT FFB)</b>	<b>WNB</b>	0.83	0.86	0.82	0.81	1.28
	<b>RAI</b>	0.73	0.95	1.08	1.09	1.68
	<b>MBE</b>	1.38	1.38	1.22	1.21	1.24
	<b>HOP</b>	0.65	0.62	0.61	0.61	0.78
	<b>POL</b>	0.72	1.21	1.33	1.25	1.03
	<b>GPP</b>	1.04	1.08	1.17	1.18	1.15
<b>Total number of significant spills</b>	<b>Number</b>	0	0	1	0	0

## ABOUT THIS REPORT

### Completeness

The report covers the calendar years 2016 and 2017. Data includes all of our operations as at 31 December, unless otherwise noted. The report does not include detailed information on our small office-based operations in Singapore, or any joint ventures in which we hold less than 51%. In our 2015 report, we included our joint venture in Indonesia – however, as our share is now 49% and we have no management control, this operation has been omitted from this report. We officially closed down project operations in the Philippines in 2016, and have not included any figures in this report. In addition to impacts within our own organisational boundaries, the report covers material aspects for all associated smallholders in PNG and Solomon Islands.

There have been no changes in scope since our 2014/15 Sustainability Report.

### Materiality, stakeholder inclusiveness and sustainability context

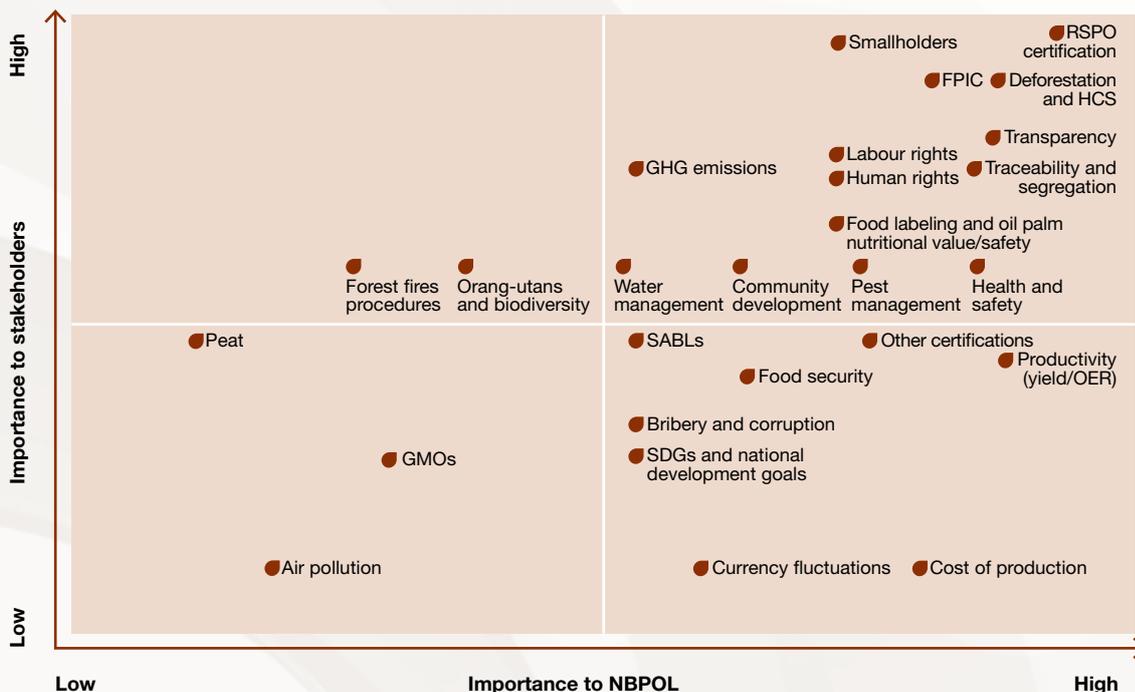
We determine material aspects for our business based on in-depth and ongoing discussions with a wide range of stakeholders. This includes local engagement at site level by our operational teams, as well as international engagement in organisations such as the RSPO and other multi-stakeholder initiatives. We also look to leading standards such as SAN and the Palm Oil Innovation Group Charter, as well as benchmarks such as the Sustainable Palm Oil Transparency Toolkit published by the Zoological Society of London, to ensure that we are responsive to the themes and aspects which are critical to stakeholders. The

extent to which these themes are directly relevant to our business has guided us in balancing report content and the in-depth data included. Throughout the report we seek to provide an appropriate context for our performance, particularly in relation to the unique social and environmental landscapes in Papua New Guinea and Solomon Islands.

### Report cycle and assurance

This is our sixth biennial Sustainability Report. Our previous report was published in October 2015. We have not sought third-party assurance for the content of this report. We are reviewing the need for such assurance on an ongoing basis, based on feedback from our stakeholders.

### Materiality Matrix



The Global Reporting Initiative (GRI) is a multi-stakeholder standard for sustainability reporting, providing guidance on determining report content and indicators. GRI is the first and most widely adopted global standard for sustainability reporting and has been designed to enhance the global

comparability and quality of information on environmental and social impacts, thereby enabling greater transparency and accountability of organisations. Sustainability reporting based on the GRI Standards should provide a balanced and reasonable representation of an organisation's positive and negative

contributions towards the goal of sustainable development. There are two options for preparing a report in accordance with the GRI Standards: Core and Comprehensive. This report has been prepared in accordance with the GRI Standards: Core option.

<b>GRI 101: Foundation 2016</b>		
<b>GRI 102: General Disclosures 2016</b>		
<b>Disclosure</b>	<b>Page or reason for omission</b>	
<b>Organisational Profile</b>		
102-1	Name of organisation	About New Britain Palm Oil 6
102-2	Activities, brands, products, and services	About New Britain Palm Oil 6
102-3	Location of headquarters	About New Britain Palm Oil 6
102-4	Location of operations	About New Britain Palm Oil 6-9
102-5	Ownership and legal form	Corporate governance, management and capacity building 19-20
102-6	Markets served	About New Britain Palm Oil 6-9, 13
102-7	Scale of the organisation	About New Britain Palm Oil 6-13
102-8	Information on employees and other workers	About New Britain Palm Oil 6-7 Our employees 52 Base data and notes 61-62
102-9	Supply chain	A fully segregated and traceable supply chain 13 Partnership with communities and smallholders 42
102-10	Significant changes to the organisation and its supply chain	No major changes in the reporting period
102-11	Precautionary Principle or approach	Continuing our sustainability journey 16-18 Protective forests and biodiversity 26-41
102-12	External initiatives	Chairman's welcome 2-3 Continuing our sustainability journey 16-18
102-13	Membership of associations	Continuing our sustainability journey 16-18 Stakeholder engagement 21-23
<b>Strategy</b>		
102-14	Statement from senior decision-maker	Chairman's welcome 2-3
102-15	Key impacts, risks, and opportunities	Stakeholder engagement 21-23 About this report 67
<b>Ethics and Integrity</b>		
102-16	Values, principles, standards, and norms of behaviour	Corporate governance, management and capacity building 19-20
102-17	Mechanisms for advice and concerns about ethics	Complaints and grievances 24-25

Governance		
102-18	Governance structure	Corporate governance, management and capacity building 19-20
102-19	Delegating authority	Corporate governance, management and capacity building 19-20
102-20	Executive-level responsibility for economic, environmental, and social topics	Corporate governance, management and capacity building 19-20
102-21	Consulting stakeholders on economic, environmental, and social topics	Continuing our sustainability journey 16-18 Stakeholder engagement 21-23
102-22	Composition of the highest governance body and its committees	Corporate governance, management and capacity building 19-20
102-23	Chair of the highest governance body	Corporate governance, management and capacity building 19-20
102-26	Role of highest governance body in setting purpose, values, and strategy	Corporate governance, management and capacity building 19-20

Stakeholder Engagement		
102-40	List of stakeholder groups	Stakeholder engagement 21-23
102-41	Collective bargaining agreements	Freedom of association 54
102-42	Identifying and selecting stakeholders	Stakeholder engagement 21-23
102-43	Approach to stakeholder engagement	Stakeholder engagement 21-23
102-44	Key topics and concerns raised	Stakeholder engagement 21-23 Protecting forests and biodiversity 26-29 Preventing fires 34 Minimising carbon emissions 35-37 Protecting waterways and enhancing access to water 40-41 Partnership with communities and smallholders 42-46, 51 Promoting health and safety for workers and communities 55-60

Reporting Practice		
102-45	Entities included in the consolidated financial statements	As NBPOL is no longer a listed entity, there are no stand-alone financial statements
102-46	Defining report content and topic Boundaries	About this report 67
102-47	List of material topics	About this report 67
102-48	Restatements of information	About this report 67
102-49	Changes in reporting	About this report 67
102-50	Reporting period	About this report 67
102-51	Date of most recent report	About this report 67
102-52	Reporting cycle	About this report 67
102-53	Contact point for questions regarding the report	Contact us 79
102-54	Claims of reporting in accordance with the GRI Standards	Global Reporting Initiative (GRI) Index 68-77
102-55	GRI Content Index	Global Reporting Initiative (GRI) Index 68-77
102-56	External assurance	We have not engaged third party assurance About this report 67

Material Topics			
GRI Standard	Disclosure		Page or reason for omission
<b>Economic</b>			
<b>Economic Performance</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	Focus on productivity gains through R&D 10-11 A fully segregated and traceable supply chain 13 Partnerships with communities and smallholders 42-44 A fair pay structure 53
	<b>103-2</b>	The management approach and its components	Focus on productivity gains through R&D 10-11 A fully segregated and traceable supply chain 13 Partnerships with communities and smallholders 42-44 A fair pay structure 53
	<b>103-3</b>	Evaluation of the management approach	Partnerships with communities and smallholders 42-44 A fair pay structure 53
<b>GRI 201: Economic Performance 2016</b>	<b>201-1</b>	Direct economic value generated and distributed	Focus on productivity gains through R&D 10-11 A fully segregated and traceable supply chain 13 Partnerships with communities and smallholders 42-44 A fair pay structure 53
<b>Market Presence</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	A fair place to work 52-53
	<b>103-2</b>	The management approach and its components	A fair place to work 52-53
	<b>103-3</b>	Evaluation of the management approach	A fair place to work 52-53
<b>GRI 202: Market Presence 2016</b>	<b>202-1</b>	Ratios of standard entry level wage by gender compared to local minimum wage	A fair pay structure 52-53
	<b>202-2</b>	Proportion of senior management hired from the local community	Our employees 52

<b>Economic</b>			
<b>Indirect Economic Impacts</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	Partnerships with communities and smallholders 42-51
	<b>103-2</b>	The management approach and its components	Partnerships with communities and smallholders 42-51
	<b>103-3</b>	Evaluation of the management approach	Partnerships with communities and smallholders 42-51
<b>GRI 203: Indirect Economic Impacts 2016</b>	<b>203-1</b>	Infrastructure investments and services supported	Access to water for communities 41 Partnerships with communities and smallholders 42-51 Supporting community health 52
	<b>203-2</b>	Significant indirect economic impacts	Partnerships with communities and smallholders 42-45 Financial literacy training for smallholders and landowner groups 47 Community development 48-51
<b>Procurement Practices</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	Partnerships with communities and smallholders 42-45
	<b>103-2</b>	The management approach and its components	Partnerships with communities and smallholders 42-45
	<b>103-3</b>	Evaluation of the management approach	Partnerships with communities and smallholders 42-45
<b>Anti-corruption</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	Integrity and anti-corruption 20
	<b>103-2</b>	The management approach and its components	Integrity and anti-corruption 20 Complaints and grievances 24-25
	<b>103-3</b>	Evaluation of the management approach	Integrity and anti-corruption 20
<b>Environment</b>			
<b>Materials</b>			
<b>GRI 103: Management Approach 2016</b>	<b>103-1</b>	Explanation of the material topic and its Boundary	Our operations 8-9 A fully segregated and traceable supply chain 13
	<b>103-2</b>	The management approach and its components	Our operations 8-9 A fully segregated and traceable supply chain 13
	<b>103-3</b>	Evaluation of the management approach	Our operations 8-9 A fully segregated and traceable supply chain 13
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**Biodiversity**

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

**Biological oxygen demand (BOD)**

The amount of oxygen used when organic matter undergoes decomposition by micro-organisms. Testing for BOD is done to assess the amount of organic matter in water.

**CO<sub>2</sub> equivalents**

Carbon dioxide equivalents (CO<sub>2</sub>e) provide a universal standard of measurement against which the impacts of releasing (or avoiding the release of) different greenhouse gases can be evaluated.

**Deforestation**

Deforestation is defined by POIG as direct human-induced conversion of forest to non-forests, with an exception for small-scale low intensity subsistence conversion by indigenous peoples and forest dependent traditional communities (consistent with HCV 5).

**Effluents**

Water discharged from one source into a separate body of water, such as mill process water.

**Emissions**

Greenhouse gas (GHG) or carbon emissions are gases in an atmosphere that absorb and emit radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the Earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

**Environmental impact assessment (EIA)**

EIA is tool used to identify environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers.

**Extraction rate**

The amount of oil extracted from oil palm fruit at a mill. Crude palm oil (CPO) is extracted from the flesh; palm kernel oil (PKO) from the nut.

**Fresh fruit bunch (FFB)**

Bunch harvested from the oil palm tree. The weight of the fruit bunch ranges between 10 kg to 40 kg depending on the size and age.

**Free, Prior and Informed Consent (FPIC)**

Principle that a community has a right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or use.

**Global Reporting Initiative (GRI)**

A multi-stakeholder standard for sustainability reporting, providing guidance on determining report content and indicators.

**High Carbon Stock (HCS) Approach**

The HCS Approach is a practical methodology for distinguishing forest areas that should be protected from degraded lands that may be developed. It is a sequence of processes and assessments undertaken within two overarching modules: a social requirements module, which focuses on respecting communities' rights to their lands, and an integration module, which includes the FPIC and HCV processes.

**High Conservation Values (HCV)**

The concept of High Conservation Value Forests (HCVF) was first developed by the Forest Stewardship Council (FSC) in 1999 as their ninth principle. The FSC defined HCVF as forests of outstanding and critical importance due to their environmental, socio-economic and cultural biodiversity and landscape value.

**International Labour Organization (ILO)**

Is a tripartite world body representative of labour, management and government, and is an agency of the United Nations. It disseminates labour information and sets minimum international labour standards called "conventions", offered to member nations for adoption.

**Integrated Pest Management (IPM)**

IPM is the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimise risks to human health and the environment. IPM emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms.

**Non-governmental organisation (NGO)**

Is used in this report to refer to grassroots and campaigning organisations focused on environmental or social issues.

**New Planting Procedure (NPP)**

The RSPO NPP consists of a set of assessments and verification activities to be conducted by RSPO grower members and certification bodies prior to a new oil palm development, in order to help guide responsible planting and ensure that social and environmental requirements have been met. The NPP report goes through a 30-day public consultation and planting and associated development can only begin once the NPP is complete and RSPO approval is granted.

**PalmGHG**

The PalmGHG Calculator is a tool developed by the RSPO Greenhouse Gas Working Group 2 to allow palm oil producers to estimate and monitor their net greenhouse gas emissions. The Calculator also enables palm oil producers to identify crucial areas in their production chain and thereby guiding emission reduction opportunities.

**Palm oil mill effluent (POME)**

By-product of processed fresh fruit bunch (FFB).

**Peat**

Peat is an accumulation of partially decayed vegetation matter. Peat forms in wetlands or peat lands, variously called bogs, moors, muskegs, pocosins, mires, and peat swamp forests.

**Roundtable on Sustainable Palm Oil (RSPO)**

A multi-stakeholder organisation based in Kuala Lumpur, Malaysia. The organisation has developed a certification scheme for sustainable palm oil.

**Social impact assessment (SIA)**

Social impact assessments include the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programmes, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.

**Stakeholders**

Any group or individual who are affected by or can affect a company's operations.

**Sustainability**

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

**Toxicity**

Toxicity measures the degree to which a substance is harmful to living organisms. Toxicity in agricultural chemicals is measured using the LD50 methodology, i.e. the toxicity units corresponding to a lethal dose for 50% of a population of rats.

**Traceability**

Traceability is the capability to track sustainable palm oil along the entire supply chain.

**Segregation**

This system allows sustainable palm oil to be kept separate from conventional palm oil throughout the entire supply chain.

## Contact us

We improve by listening to our stakeholders' comments. If you have any comments or questions or the contents of this report or on our sustainability performance, we would welcome your contribution.

Please contact us on email [sustainability@nbpol.com.sg](mailto:sustainability@nbpol.com.sg), or through our Port Moresby office:

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