

No deforestation

Breaking the link between
palm oil production,
deforestation, peat and
climate change

Photo credit: Chris J Ratcliffe / WWF-UK

Palm Oil **Innovation** Group



No deforestation



Photo credit: Agropalma

A journey towards **responsible** palm oil

Breaking the link between palm oil production, deforestation, peat and climate change

Protection and conservation of natural forest, and mitigating carbon emissions from palm oil cultivation and processing was the initial driving force behind the Palm Oil Innovation Group (POIG). A number of growers and NGOs saw the Roundtable on Sustainable Palm Oil (RSPO) addressing environmental issues such as pollution, localised conservation and good agricultural practice, but these approaches needed to be improved to tackle broader landscape and global impacts of palm oil expansion. In the early days of developing the RSPO Principles and Criteria (P&C), WWF and other environmental and conservation NGOs insisted on the inclusion of the High Conservation Value (HCV) framework into

the first P&C, which at the time was the most advanced forest protection framework. For social NGOs such as Forest Peoples Programme, preservation of forest was also critical as a home for indigenous forest people, and as a critical food and cultural resource. However, over the first five years after the founding of the RSPO, stakeholders recognised that the progress to address deforestation issue was slow and there were fears that the expansion of biofuels from palm oil would drive further deforestation.

The battle over forest conversion was heated from the very early days of the RSPO. Although the first 2007 P&C were adopted and supported by the vast majority of the RSPO membership, many non-member observers as well as some members early on raised the need for more comprehensive action on deforestation and climate change. In 2009, the RSPO took some tentative steps by adopting the New Planting Procedure, which required a detailed assessment of all new palm oil developments, whether on greenfield or brownfield¹. While widely welcomed and seen as a necessary step, many stakeholders felt that it did not adequately address the emerging concerns about the

role of deforestation in driving climate change, such as a moratorium for planting on peat, and mandatory GHG reduction plans. A group of growers which included Agropalma, New Britain Palm Oil and DAABON were vocal in support of these proposals, and made unilateral commitments to implement both GHG reporting and reduction plans, as well as a moratorium on new plantings on peat². At the time, the majority of RSPO growers were opposed to such initiatives, and the RSPO Executive Board decided to delay further requirements by at least a year.

In the following years, the slow progress on the landscape and climate change issues caused a number of progressive growers to develop their own No Deforestation policies, as well as trialling GHG frameworks developed specifically for oil palm. Such initiatives were broadly welcomed by NGOs and other stakeholders, but concerns were raised that this somewhat scattered approach did not appear to have real impacts on the ground.

In many respects, the lack of progress, combined with the growing threat of climate

change and deforestation formed the starting point for POIG as it laid the groundwork for an alliance between non-RSPO member NGOs, a handful of RSPO member NGOs, and a small group of RSPO growers.

¹ Brownfield land refers to previously developed land, whereas greenfield land refers to all land that is in a natural state and largely unaltered by human activity.

² [Impasse Over Gas Emission – MPOC](#)

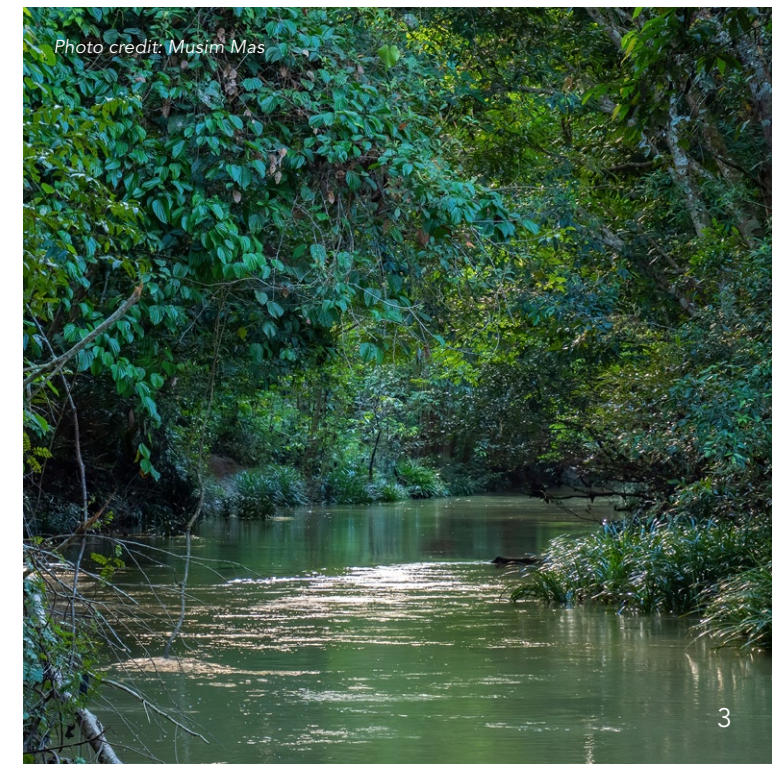


Photo credit: Musim Mas

No deforestation and the High Carbon Stock Approach

When POIG was established in 2013, a major concern was the lack of robust action in the RSPO P&C on deforestation. The RSPO had adopted the innovative HCV assessment as its primary tool for forest and landscape protection, but by 2013 it was clear that the impact as far as wider landscapes and forest protection was inadequate as forest containing no HCVs was not protected under this framework. Although a number of growers had taken separate initiatives to address this, the 2013 standard did not reflect wider issues around deforestation.

However, a group of scientists, researchers and NGOs had started work on the development of a framework to define and identify forests to be conserved to preserve critical ecosystems and reduce the carbon impact of deforestation based on a high carbon stock (HCS) forest approach. The POIG Charter became the first multistakeholder initiative to codify the HCS Approach (HCSA) and require its members to pilot it.

HCSA is a methodology that distinguishes forest areas should be protected from degraded lands

with low carbon and biodiversity values that may be suitable for development. In 2013 it was still in its infancy, and a detailed methodology had yet to be developed. However, early grower member NBPOL, which at the time was the only member actively expanding its plantings, committed to trialling the HCSA and use it to make decisions on new plantings.

In 2014, as it became clear that the HCSA required a more detailed methodology, a separate initiative was set up to develop a toolkit for implementation of the HCSA, which was launched in 2015, and in the RSPO 2018 P&C the HCSA toolkit was eventually adopted as a requirement for oil palm expansion and to identify areas requiring conservation and monitoring.

Among the lasting impacts of POIG is that it served as an incubator and early promoter of the HCSA, to be undertaken as an addition to the HCV assessment.

No peat

In addition to prohibiting deforestation, the POIG Charter took a clear stance with regards to development on peat which was still allowed under some circumstances by the 2013 P&C. At

the time, RSPO's emphasis was on management of peat soils, but not on outright preventing members from establishing new plantations on peat soils. However, this position became less tenable in light of research on GHG emissions and national initiatives such as the establishment of the Indonesian Peatland Protection Agency (BRG) in 2016. In the 2018 version of the RSPO P&C the development of new plantations on peat was finally prohibited.

While the impact of POIG on the ground with respect to expansion of peat was limited – due to the fact that only grower member Musim Mas (and former member NBPOL) operate in areas with peat soils – the POIG Charter requirement on peat fuelled the discussions within RSPO and the industry over the prohibition of peat development.

Protecting biodiversity in practice

Over POIG's ten years in existence, POIG's oil palm growing members have demonstrated the distinct challenges of preventing deforestation and conserving existing natural habitat.

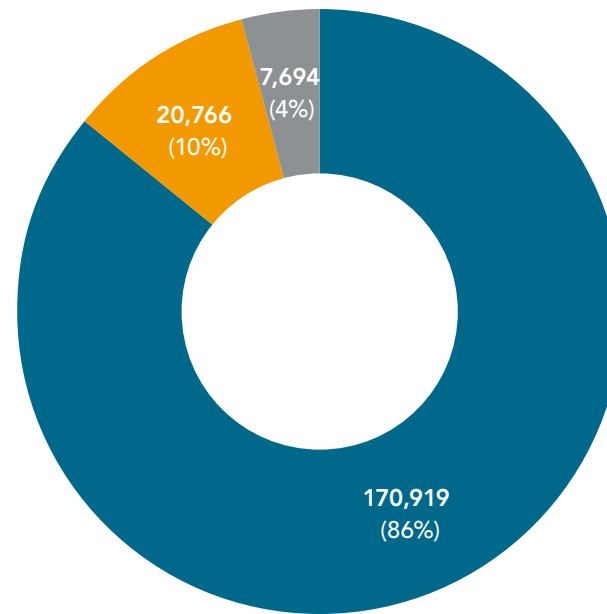


Musim Mas

Protecting peat, HCV and HCS areas in Indonesia

For Musim Mas, a significant challenge has been how to manage the extensive peatlands within its operations, which covers a total of 39,507 hectares (2022). 11% of this land has been set aside for conservation, while the remainder is planted with oil palm. Musim Mas will not plant oil palm on peat and expects their suppliers to adhere to Musim Mas' 31 December 2015 No Deforestation, No Peat (NDP) commitment. As a matter of fact, Musim Mas has not developed any plantations on peat since 2008. For the planted on peat areas, Musim Mas is continually changing its approach in line with the latest science and employ best practices that align with RSPO and legal requirements and, when required, seeks expert advice for managing peatlands and fragile soils.

Musim Mas has also made extensive use of the HCSA and the HCV frameworks when considering expanding and replanting, resulting in approximately more than 28,000 hectares of land set aside for conservation. In 2021, Musim Mas partnered with the Sabah-based research facility, South East Asia Rainforest Research Partnership (SEARRP) and University of Oxford scientists to conduct an independent assess-



ment to determine the effectiveness of HCV monitoring efforts across the company's operations. This review referenced 12 years of archived data collected during monthly bird diversity surveys by Musim Mas monitoring teams across concessions in Indonesia. The programme concluded in July 2022. It was followed by a final report and a workshop for Musim Mas' employees in October 2022, combining classroom and field sessions in the HCV areas at its Central Kalimantan concession.

The project provided a biodiversity baseline for the company's HCV areas and will support efforts to set measurable objectives to avoid

Musim Mas land 2022

Total: 199,379 ha

- Land for palm oil cultivation (planted, unplanted, smallholders, and infrastructure)
- Conservation area - HCV
- Conservation area - HCS and other

species loss and improve biodiversity in plantations. It also highlighted the importance of establishing standard definitions for habitat types, drawing guidance from a single taxonomic authority, and consolidating all digitised data for species. The recommendations are meant to not only support Musim Mas in improving its internal practices, but will be helpful for the palm oil industry's conservation efforts at a broader scale. A draft with monitoring recommendations has been submitted to the RSPO and has been published on the Sensor³ website.

³ <http://www.sensorproject.net/wp-content/uploads/2023/05/Recommendations-for-monitoring-of-biodiversity-in-HCVs- FINAL-for-SEnSOR-website.pdf>

Agropalma

Sharing lessons from forest protection in Brazil



Photo credit: Agropalma

Agropalma's land includes the largest conservation area of any palm oil grower. In fact, despite being one of the smaller RSPO growers, Agropalma's conservation area exceeds 20% of total RSPO conservation area⁴. The company's 64,000 hectare forest reserve in the Amazon is home to 1,029 species registered, 40 of which are considered endangered, and 11 endemic species. The forest reserves are located in the Belém Center of Endemism (CEB), the smallest one in Amazonia and the most degraded one, with 70% of the native vegetation already converted to human use. So the forests protected by Agropalma play a strategic role in CEB biodiversity conservation.

Agropalma's reserve was partially established as a legal requirement for Brazilian plantations, but the company has enhanced its conservation stewardship efforts to ensure that the land is adequately monitored and protected. This entails long-term partnerships with local and international conservation NGOs, but also an emphasis on protection due to the severe risk of illegal logging and hunting in the area. In addition to its own efforts, Agropalma has taken on a significant role in supporting guidance for the wider agricultural industry operating in the Amazon region.

Agropalma's conservation experience has also been put to good use beyond the Amazon. In 2016, the company opened on a new refinery in

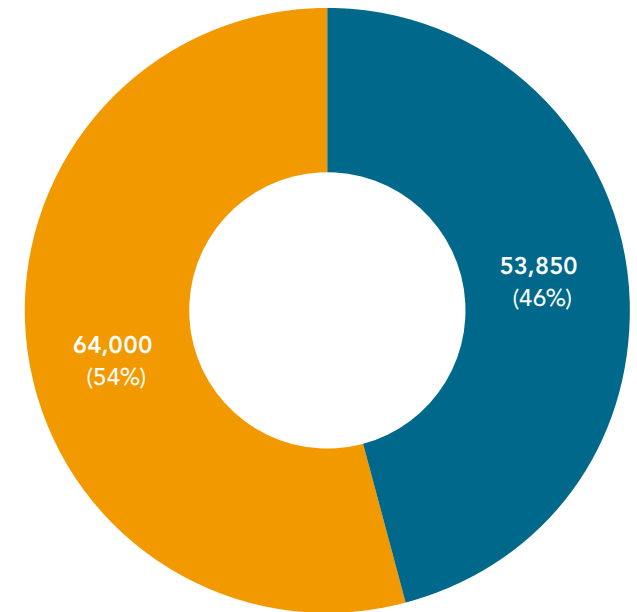
the state of São Paulo on a previous industrial estate. Agropalma restored and reforested 2.5 hectares of Atlantic Forest adjacent to the new plant.

This distinct and vulnerable ecoregion stretches along South America's east coast and extends inland towards the Amazon. Although just 7% of the original forest remains, it is still one of the most diverse ecosystems in the world and second only to the Amazon. This area is home to around 15,700 species of plants, and can shelter 450 tree species in one hectare alone. In this threatened biome, 6% of the genus and 45% of the species of plants are endemic⁵. Trees in the restoration project are getting taller by the year, and their trunks are becoming more expansive. Many are already bearing fruit, and the forest canopy is becoming thicker, blocking direct sunlight from reaching the ground. In several parts of the forest, the grasses are gone, and the soil is reverting to mature forest covered by a layer of dead leaves. New fauna such as cougars, foxes, toucans, hedgehogs, and capybaras have also been sighted.

⁴ According to the RSPO 2022 Impact Report, total member conservation area was 301,020 hectares in 2021.

[RSPO-Impact-Report-2022.pdf](#)

⁵ <https://www.ufmg.br/online/arquivos/016293.shtml>



Agropalma land 2021

Total: 117,850 ha

- Land for palm oil cultivation (planted, unplanted, smallholders, and infrastructure)
- Conservation area



DAABON

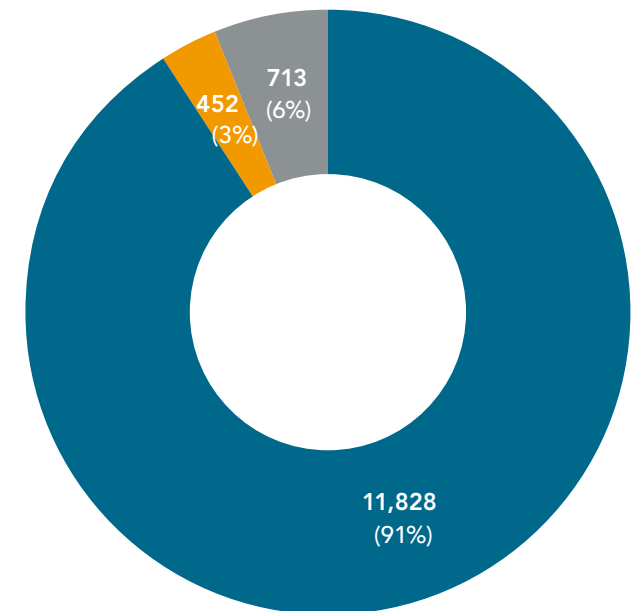
Organic agriculture in Colombia

DAABON's operations on the Caribbean coast of Colombia were established on land which has been cultivated for food production for over a century, so there are limited conservation areas. However, its organic operation emphasizes the support and protection of pollinators through maintenance of beehives which benefit the larger region, as well as restoring riparian habitats to support native turtle populations.

DAABON is the first company to set up a premium related to climate change, where smallholders receive the proportion of carbon

credits to the amount of fresh fruit bunches they have delivered to the extraction mill. This allows for solar investment at their farms and logistics fuelled primarily by natural gas. DAABON has ambitious plans to mitigate its emissions by 2027 for scope 1, 2 and 3, and the company is investing in producing pellets and briquets to standardise biomass use to displace firewood as fuel and bio-char use to displace organic fertilisation at surrounding communities.

Technology and digital infrastructure are also playing a fundamental role in DAABON's new sustainability strategy named "Planetary Health", and focuses on the active role of clients in this transition. Digital platforms account for real-time aggregated emissions and the options for mitigation in the company programmes.



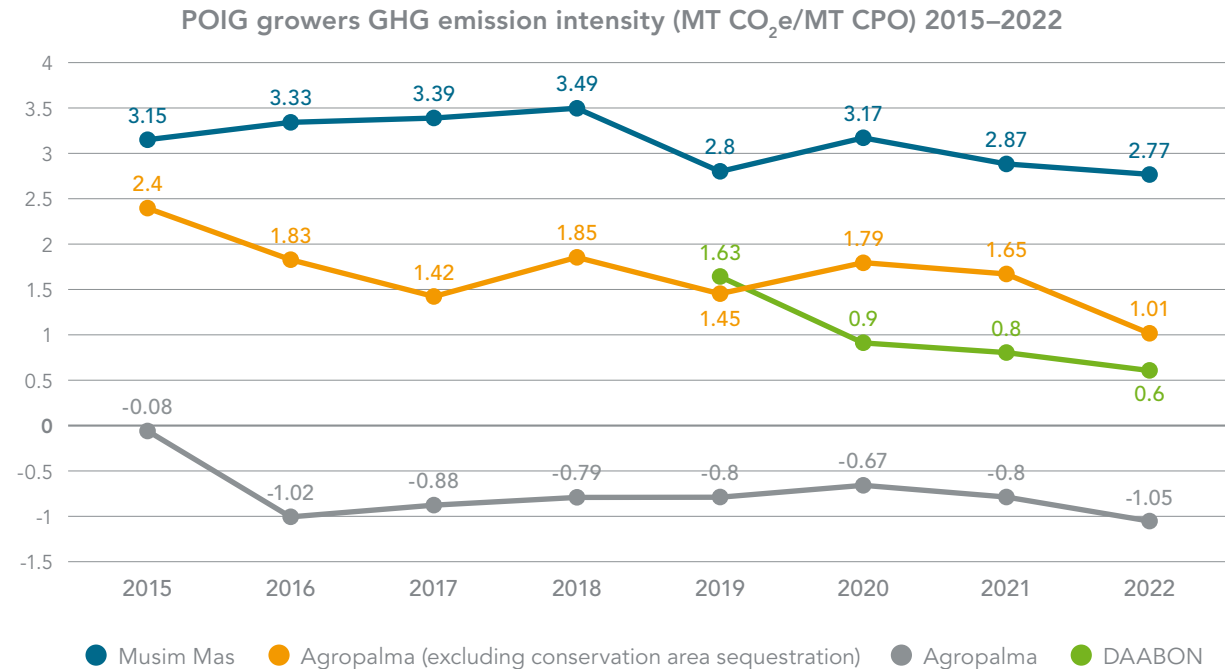
DAABON land 2021

Total: 12,993 ha

- Land for palm oil cultivation (planted, unplanted, smallholders, and infrastructure)
- Conservation area - HCV
- Conservation area - other

Reducing GHG emissions

When the RSPO was first established, climate change and the impacts of GHG emissions from agriculture and deforestation had yet to be considered a major concern. However, with increased global attention on the threat posed by global warming and the adoption of the Kyoto Protocol in 2005, it was clear that this was a significant gap in the P&C. In addition to the potent methane emissions arising from the treatment of palm oil mill effluent, scientists pointed to the significant emissions arising from clearing of natural vegetation, and the huge emissions arising from draining of peat lands. However, despite extensive calls for inclusion, requirements to address such emissions were not included in neither the 2007 nor the 2013 P&C. The RSPO Executive Board did appoint a science-based committee in 2009 to look at the issue, which developed the RSPO PalmGHG calculator, a voluntary tool for growers to calculate its palm oil emissions. However, despite having been trialled and adopted by a number of RSPO certified growers, its use was not made mandatory in the 2013 P&C.



As with the HCS Approach, POIG became the first multistakeholder initiative to adopt mandatory GHG emissions accountability, and required grower members to report on emissions reductions.

Notes: 2019–2022 figures from RSPO ACOP reporting. 2015–2018 from company sustainability reports

All figures are calculated using the RSPO PalmGHG calculator. Due to significant changes to the calculator methodology and emissions factors, figures cannot be used to calculate exact reductions over time. For comparison, the Musim Mas production carbon footprint without peat is roughly 0.5 MT CO₂e/MT CPO and the company is aiming to reduce the emissions contribution by peat.

Where to from here?

The direct impact of POIG on deforestation, peat expansion and climate change is difficult to quantify. Although it is clear that POIG members themselves have halted new developments on high carbon stock land or peat and invested significantly in GHG reduction, their impact is limited both in absolute terms as well as at the landscape scale. This is due to the fact, that there is no peat in the landscapes where Agropalma and DAABON operate and overall all three grower members have not expanded significantly, or at all, into forest areas. Finally, although the POIG grower members are role models in their respective countries their potential impacts on the global palm oil industry are small. Issues such as deforestation, peat or GHG emissions are global and require action on a much larger scale to achieve real impact. However, the willingness of POIG's oil palm producing members to trial complex and costly new frameworks, and to share the outcomes from these trials should not be underestimated.

The most obvious successes are the way in which the RSPO 2018 P&C and even more so the upcoming 2023 review will reflect the vision of POIG. The inclusion of the HCS Approach, the prohibition of development on peat and

the requirement of oil palm producers to be accountable for their climate impacts are huge achievements for a small group of maverick organisations.

On a wider scale, POIG has demonstrated that even extremely complex and challenging global problems can be tackled with determined dialogue, ongoing trial and error, and a willingness to learn across sectors and geographies.

Of course, the issues which POIG meant to address have by no means been resolved. Deforestation continues at a high pace in some regions, thousands of plant and animal species remain under threat, and the climate emergency is more acute than ever. On the other hand, governments like Indonesia have undertaken earnest and successful efforts to

address deforestation and peat conservation. Many companies, including POIG retailers and manufacturers have made commitments to achieve net zero emissions. It is expected that some POIG grower members will soon follow suit. So while time appears to be running out, there are encouraging signs by governments and the private sector to assume responsibility.

Obviously such developments are outside the influence of POIG. Nevertheless, POIG has showcased that local innovations can lead to the development of larger solutions which may eventually lead to global progress.



Photo credit: Ola Jennersten / WWF-Sweden

Reflections from the Orangutan Land Trust

In the opinion of Orangutan Land Trust, POIG has been a real change-maker.

Having participated in the development of the RSPO's New Plantings Procedure Guidelines (2010) and the RSPO's Principles and Criteria Revision Taskforce 2013, we've fought hard for improved standards and their implementation for a number of years. Unfortunately, the resultant Principles and Criteria of 2013 fell quite short of what we had hoped in terms of describing truly responsible production of palm oil. We were therefore very encouraged to see leading growers, NGOs and other stakeholders in the palm oil value chain come together to form POIG and begin to address the shortcomings of the RSPO standard at the time, and to demonstrate how innovation could drive impact.

The POIG Charter for growers used concise but firm language, which not only guided its grower members how to go beyond RSPO, but also set in place an expectation for the supply chain and consumers that palm oil

could and should be produced in a way that does not result in deforestation or biodiversity loss and that respected the rights of workers and communities. The Charter also addresses the protection of peatland, traceability and support for smallholders. The establishment of the Charter and the members' commitments to upholding it set a challenge for RSPO to "do better." RSPO Next was born, we believe, in response to this challenge. But the very existence of RSPO Next suggested that regular RSPO certification was substandard. Ultimately, this paved the way for POIG, and members such as Orangutan Land Trust who served on the Principles and Criteria Review Taskforce 2018, to push the needle significantly to deliver an RSPO standard that essentially encompassed most of what fell under the POIG Charter. When the new RSPO P&C was adopted by the General Assembly in November 2018, POIG members were amongst the 100s of attendees who exuberantly celebrated the win. Even the NGOs most critical of RSPO applauded the result.

For Orangutan Land Trust, we feel that this influence POIG has had on RSPO and other systems and processes is one of the most important impacts delivered over its ten years of existence. It took guts and huge commitment to see something so aspirational become tangible, and this shook up the system. Following the success of the 2018 P&C, when POIG shifted its focus on innovation in order to implement the standard, we can see real progress on the ground, at the coalface, so to speak. And for wildlife, including the orangutan, and for its rainforest habitat, this is where the change was needed. Indonesia has seen huge declines in deforestation rates for the past 4+ years, hitting the lowest rates in 30 years in 2020. According to analysts, this is due to a large degree to the emergence of NDPE commitments. And POIG was most certainly a major catalyst for this. Orangutan Land Trust is proud to have played a small part in this major transformation brought about by POIG.

Michelle Desilet, Orangutan Land Trust

Palm Oil Innovation Group

Photo credit: Agropalma



If you want to know
more about the Palm Oil
Innovation Group,
please contact us:

C/O Helikonía
Suite 15-2a Plaza See Hoy Chan
Jalan Raja Chulan
50200 Kuala Lumpur
Malaysia

Phone: +603 2072 2130
Email: info@poig.org
Web: www.poig.org