



# BUSINESS CASE FOR CERTIFIED SUSTAINABLE PALM OIL

2022

# CONTENTS

ACKNOWLEDGMENTS	3
EXECUTIVE SUMMARY	5
<b>1. THE COST OF SUSTAINABLE PALM OIL</b>	<b>8</b>
– THE TRANSFER OF PREMIUMS UPSTREAM	8
– PRICE PREMIUMS FOR RSPO CSPO	9
– PALM OIL AND REFINED PALM OIL (PO – RBD PO)	9
– PALM KERNEL OIL AND REFINED PALM KERNEL OIL (PKO – RBD PKO)	10
– ADDITIONAL COSTS OF USING RSPO CSPO	12
– OVERVIEW OF SOME COMMON ADDITIONAL COSTS	12
<b>2. THE BUSINESS CASE FOR CERTIFIED SUSTAINABLE PALM OIL IN ASIA</b>	<b>14</b>
<b>3. BENEFITS TO THE BUYERS</b>	<b>18</b>
<b>4. BENEFITS TO THE GROWERS</b>	<b>20</b>
<b>5. RECOMMENDATIONS AND OPPORTUNITIES FOR ACTION</b>	<b>22</b>



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# ACKNOWLEDGMENTS

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**ABOUT WWF:** WWF is one of the world's largest and most respected independent conservation organisations. WWF's mission is to stop the degradation of the earth's natural environment and to build a future in which humans live in harmony with nature.

More information on [www.panda.org](http://www.panda.org)

**ABOUT WWF'S WORK ON PALM OIL:** WWF's vision is to halt the conversion of natural ecosystems by ensuring that palm oil production, trade and consumption is responsible; protects, restores and connects landscapes; and benefits both people and nature. WWF believes that creating a sustainable and responsible palm oil industry that guarantees the wellbeing of people, wildlife and habitats requires a multi-faceted approach that is inclusive of, but not limited to certification. Only through the use of a variety of tools and strategies involving all actors along the palm oil supply chain can the adverse environmental and social impacts of unsustainable palm oil production be addressed. To support both public and private efforts to improve the governance of palm oil production, WWF works in close collaboration with local governments, companies, communities and multi-stakeholder initiatives. WWF interventions focus on implementing integrated, landscape level solutions that aim to halt deforestation and conversion, ensure palm oil production is sustainable, restore degraded ecosystems, and support social equity. More information can be found [here](#).

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# EXECUTIVE SUMMARY

In Asia, the market signals for sustainability are not as developed as markets in the west, and therefore the uptake of certified sustainable palm oil (CSPO) is only ~3-4% of overall palm oil consumption in the region<sup>1</sup>. Asia consumes 60% of palm oil globally, and it is therefore crucial that there is an increase in the uptake of sustainable palm oil. Palm oil production doesn't have to be destructive and it can be produced responsibly as a part of sustainable development that accrues positive socio-economic impacts. This report aims to elucidate the business case for sustainable palm oil in Asia and to persuade industry players to switch over to sustainable practices.

The report fills the knowledge gap about information on the additional premium paid for CSPO, certified sustainable palm kernel oil (CSPKO), and associated fractions and derivatives in the different RSPO supply chains. In a nutshell, the premium ranges are showcased in the table below.

**Table 1: An overview of price premiums as a percentage of base price**

TYPE	SUB-TYPE	SUPPLY CHAIN	PERCENTAGE OF BASE PRICE
Fresh Fruit Bunches (FFB)	FFB	From a certified plantation	20% (Can vary between 8-60% based on structure, size, and arrangements of the plantation or plantation group)
Palm Oil	CSPO and RBD CSPO	MB	0.9 – 3.9%
		SG/IP	2.4 – 7.5%
		Credits	0.1 – 0.3%
		ISH Credits – Crude palm oil	1.5 – 3.0%
Palm Kernel Oil	CSPKO and RBD CSPKO (Higher premium due to shortage of CSPKO in the market)	MB	7.3 – 24.3%
		SG/IP	18.4 – 39%
		Credits	7.3 – 11%
		ISH Credits	6.6 – 8.4%
		Traceable (TTM/TTP)	0.4 – 0.7%
Palm Stearin	RBD palm stearin	MB	3.6 – 4.5%
		SG/IP	7.2 – 13.5%
	RBD palm kernel stearin (Higher premium due to shortage of CSPKO in the market)	MB	16.4%
		SG/IP	35.5 – 60.1%
Palm Olein	RBD palm olein	SG/IP	3.8 – 7.6%
Palm Kernel Expeller (PKE)	PKE	Credits	0.1 – 0.3%
		ISH	0.6%

MB- Mass Balance; SG- Segregated; IP- Identity preserved; ISH- Independent smallholder; TTM/TTP- Traceable to mill/ plantation; Credits refer to credits from mill/crusher. Note that these are the buying premiums, and this can vary between stakeholder and geography for all products mentioned.

<sup>1</sup> [sustainable\\_palm\\_oil\\_uptake\\_in\\_asia\\_sept\\_2021.pdf \(panda.org\)](https://panda.org/sustainable_palm_oil_uptake_in_asia_sept_2021.pdf)



- To gain certification, it costs the grower a minimum of \$1 to \$7 per tonne of fresh fruit bunches (FFB) sold. However, the value typically is around \$2.50 per tonne of FFB (20% of the base price). This is equivalent to \$12.50 per tonne of CSPO (where approximately 5 tonnes of FFBs are needed to produce 1 tonne of CSPO).
- As the palm oil moves down the supply chain, there is an increase in the premiums.
- The premiums for certified sustainable crude palm oil and certified refined bleached deodorised palm oil (RBD PO) were more or less in the same range.
- The premiums for independent smallholder (ISH) credits were considerably higher than those for credits from mills/crushers.
- Beyond RSPO certification, traceability to mill (TTM) and traceability to plantation (TTP) also carries a premium due to the additional costs with traceability.
- The base price and premium for CSPKO is substantially higher than that of CSPO, since the supply of palm kernel oil (PKO) is lower than that of CPO.

Several factors seem to affect the base price of palm oil and the premium which include extreme weather events, market fluctuations, supply chain disruptions, volumes purchased, and regulatory changes. Recent events such as migrant labour shortages due to border closures over the COVID-19 pandemic and the blacklisting of large suppliers in this industry have also substantially impacted these prices. It is important to note that the price premiums are subject to a similar volatility as the base prices move with market conditions.

Stakeholders in the palm supply chain face numerous risks that range from financial to operational and reputational to regulatory with continued use of conventional palm oil<sup>2</sup>. In the second half of the report, these risks and opportunities are explored in further detail and to highlight how they build further on the business case for sustainable palm oil.

<sup>2</sup> [Palm Oil: A business case for sustainability | SPOTT](#)



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In Asia, an increasing number of companies have obtained RSPO memberships in the past and more companies are shifting to physical RSPO supply chains and even going beyond certification. For companies that actively source sustainable palm oil, there are reduced reputational risks and better relationships with stakeholders. Due to the increased prevalence of these risks, regulatory changes in markets like the European Union (EU) on deforestation free supply chains, UK's due diligence legislation through the Environment Act, the French Corporate Duty of Vigilance Law, proposed FOREST Act of 2021 in the United States etc., pose a threat to non-compliant value chain actors who stand to lose market access.

There are a number of additional costs that come with RSPO compliance including memberships, audits, staffing, training, etc. For the most part, it was found that these costs are not substantial in the bigger picture, and a lot of the resources required for compliance with the RSPO can be found in-house. An overarching point that came across from a financial standpoint through the stakeholder discussions was that the more companies source CSPO, the easier and cheaper it will become for even more to do the same.

The palm oil market valued at \$62.3 billion in 2021 is expected to reach \$75.7 billion by 2028<sup>3</sup>. However, as noted by the recent events of COVID-19 pandemic coupled with climatic fluctuations, it can be seen that the palm oil supply chain is highly vulnerable. To make the palm oil industry more resilient, it is essential for businesses to switch to more sustainable palm oil. Regulatory provisions, enhanced consumer awareness on sustainable palm oil, higher collaboration between downstream and upstream actors to get more growers certified, innovative business arrangements, and easy access to affordable finance can help facilitate this transition.

<sup>3</sup> [By 2028, Global Demand for Palm Oil Market Will Surpass USD \(globenewswire.com\)](https://www.globenewswire.com)

# THE COST OF SUSTAINABLE PALM OIL

## 1.1 THE TRANSFER OF PREMIUMS UPSTREAM

**In an open market scenario**, the large majority of RSPO certified FFBs are grown on an industrial scale in mill estates<sup>4</sup> with the rest grown by independent plantations and a small portion of smallholders. These smallholders sell their certified FFBs to millers with varying arrangements. In many cases, smallholders also rely on dealers to buy and transport their produce to millers. Through interviews with growers, the premium for FFB's from certified plantations was found to fall between \$1-7. However, the value typically is around \$2.50 per tonne of FFB (20% of the base price). This is equivalent to \$12.50 per tonne of CSPO (where approximately 5 tonnes of FFBs are needed to produce 1 tonne of CSPO).

**Table 2: Premiums for FFBs in the open market for FFBs seen in peninsular Malaysia.**

	AVG. BASE PRICE IN 2021	PREMIUM IN US\$	PREMIUM AS %	ADDITIONAL INFORMATION
<b>RSPO FFB</b>	\$11.55	\$1- \$7 (\$2.50 more typical)	8-60% (20% more typical)	This translates to \$12.50 per tonne of CSPO (where 5 tonne FFBs).

*NB: FFBs do not have a supply chain model such as IP/SG/MB, this only occurs from the mill onwards.*



<sup>4</sup> These comprise of plantations

## 1.2 PRICE PREMIUMS FOR RSPO CSPO

Note that CSPO in this section refers to certified sustainable crude palm oil (distinguished from palm kernel oil), whereas elsewhere in the report it refers to certified palm oil as a whole.

### 1.2.1 PALM OIL AND REFINED PALM OIL (PO – RBD PO)

It is observed that there is a difference in the premiums paid by domestic refiners/processors/traders in Malaysia, Indonesia, and Singapore, and those in India and the west; as the palm oil moves down the supply chain, there is an increase in the premiums. It was seen that the premiums for CSPO and certified RBD PO were more or less in the same range. The premiums for ISH credits were considerably higher than those for credits from mills/crushers. Beyond RSPO certification, traceable palm oil till the mill (TTM) and till the plantation (TTP) also carries a premium due to the additional costs with traceability.

**Table 3: Overview of premiums and percentage increase against base price for CSPO and refined CSPO segregated by stakeholder and geography (values are the additional premium in \$/tonne).**

# PALM OIL

PALM OIL	REFINERS/ PROCESSORS/ TRADERS		REFINERS/ PROCESSORS/ TRADERS		CONSUMER GOODS MANUFACTURER		RETAILER/ HORECA	
	Malaysia, Indonesia, Singapore		India		Germany, Italy, UK, USA, Singapore		UK	
Conventional Price (\$/tonne) <sup>5</sup>	CPO (local delivered): \$1056				RBD Palm Oil: \$1143		RBD Palm Olein: \$1146	
	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price
MB – CSPO	\$10 – 30	0.9 – 2.8%	\$15 – 50	1.4 – 4.7%	–	2.4% Goes up to 2-5% as stated by a CGM	–	3 – 5% > conventional (2017)
MB – RBD PO	–	–	–	–	\$25 – 45 Recent price spikes have increased this to \$60-70, going up to \$100 at times.	2.1 – 3.9% Going up to 5.2 – 8.7% with recent price spikes.	–	–
SG/IP – CSPO	\$25 – 55	2.4 – 5.2%	\$35 – 80	3.3 – 7.5%	\$40 – 70	3.5 – 6.1%	–	–
SG/IP – RBD PO	–	–	–	–	\$40	3.5%	–	–
SG/IP – RBD Palm Olein					\$45 – 85	3.9 – 7.4%		
Credits	\$2.5 – 3.5	0.2 – 0.3%	–	–	\$1 – 3	0.09 – 0.26%	–	–
ISH Credits	\$16 – 32	1.5 – 3.0%	–	–	–	–	–	–
Traceable (TTM/ TTP)	\$5 – 10 for TTP info-data	0.4 – 0.9%	\$5 – 15	0.4 – 1.3%	–	–	–	–

<sup>5</sup> [https://bepi.mpob.gov.my/index.php/en/?option=com\\_content&view=article&id=1033&Itemid=136](https://bepi.mpob.gov.my/index.php/en/?option=com_content&view=article&id=1033&Itemid=136)



## 1.2.2 PALM KERNEL OIL AND REFINED PALM KERNEL OIL (PKO – RBD PKO)

PKO is a vital source for lauric oil/acid which is used in food products such as candies, spreads, creamers and in the oleochemical industry<sup>6</sup>. Similar to the findings for CSPO, it can be seen that the premiums for CSPKO increase as the PKO goes down the supply chain. The base price and premium for CSPKO is substantially higher than that of CSPO, since the supply of PKO is lower than that of CPO as the palm kernel forms about 1/5th of the palm fruits and therefore, lesser PKO is available in the market than CPO. For CSPKO in particular, unless more CSPO is produced, more CSPKO will not be available which contributes to the high premiums.

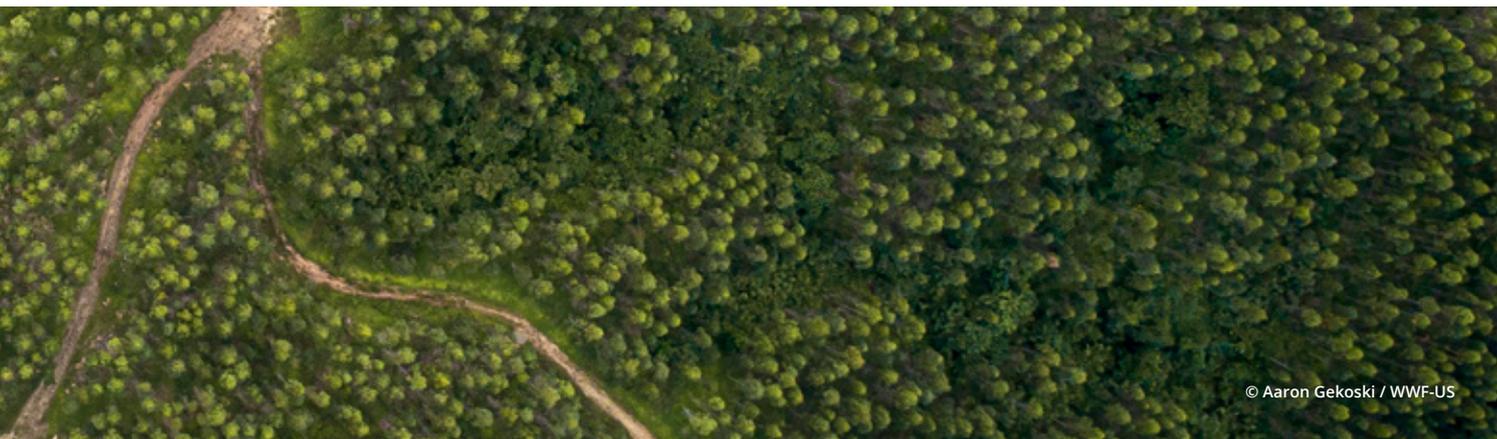
**Table 4: Overview of premiums and percentage increase against base price for CSPKO and refined CSPKO segregated by stakeholder and geography (values are the additional premium in \$/tonne).**

# PALM KERNEL OIL

PALM KERNEL OIL	REFINERS PROCESSORS/ TRADERS		REFINERS/ PROCESSORS/ TRADERS		DERIVATIVE MANUFACTURER		CONSUMER GOODS MANUFACTURER	
	Malaysia, Indonesia, Singapore		India		EU, UK, USA, Singapore		UK and EU	
Conventional Price (\$/tonne) <sup>7</sup>	CPKO (local delivered): \$1362				RBD Palm Kernel Oil: \$1443			
	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price
MB – CSPKO	\$100 – 200	14.7% – 18.4%	India: \$200 – 250	14.7 – 18.4%	\$250 – 300	18.4 – 22%	\$150 – 250	11 – 18.4 %
MB – RBD CSPKO	-	-	-	-	-	-	\$300 – 350	20.8 – 24.3%
SG/IP – CSPKO	\$250 – 400	-	-	-	-	-	\$530	39%
Credits	\$100 – 150	7.3 – 11%	-	-	-	-	\$100 – 150	7.3 – 11%
ISH Credits	\$90 – 115	6.6 – 8.4%	-	-	-	-	-	-
TTM/TTP	\$5 – 10 for TTP info-data	0.4 – 0.7%	-	-	-	-	-	-

<sup>6</sup> [Production Systems and Agronomy | Oil Palm and Coconut, B.S. Jalani, A. Kushairi, S.C. Cheah, 2003.](#)

<sup>7</sup> [https://bepi.mpob.gov.my/index.php/en/?option=com\\_content&view=article&id=1033&Itemid=136](https://bepi.mpob.gov.my/index.php/en/?option=com_content&view=article&id=1033&Itemid=136)



## HIGH COST FOR CERTIFIED PALM KERNEL OIL (CSPKO)



The migrant labour crunch in Malaysia, decreasing yields in Indonesia, and the backlisting of major palm oil suppliers by the U.S. Customs and Border Protection (CBP)<sup>8</sup> among overall logistic challenges posed by the COVID-19 pandemic affected the supply of both palm oil and palm kernel oil in the global market<sup>9</sup>. Lower availability coupled with a supply shortage has resulted in a drastic increase in premiums for CSPKO. Multiple respondents stated that the cost of conventional PKO as well as the premiums for CSPKO increased to the degree of three to five times. The ISH Credits for CSPKO have varied in the range of \$50-95/tonne between mid-2018 to May-2021 with a spike down in late 2019 and then a breakout in mid-2021, to over \$100/tonne now<sup>10</sup>.

Although the Identity Preserved (IP) supply chain has a higher degree of traceability than segregated (SG), a number of buyers stated that the money spent for sourcing IP can be more impactful if spent elsewhere. Given the many products that come from oil palm, some have higher premiums than others due to high market demand. Stearin and fatty acid distillates are fractions of palm/palm kernel oil and find use in various food and non-food applications such as production of surfactants, raw oleochemicals, bakery shortenings, margarines, cocoa butter alternatives etc<sup>11</sup>. These products are highly sought after and fetch a considerable premium when certified. Further details on premium values and ranges for certified sustainable palm stearin, and palm kernel expeller can be found in table 1.

<sup>8</sup> [The Chain: Sime Darby, FGV See Reputational Hits from U.S. Stop Orders](#)

<sup>9</sup> [The World's Most Consumed Edible Oil Is Facing a Supply Crunch](#)

<sup>10</sup> [The PalmTrace Marketplace](#)

<sup>11</sup> <http://www.ijstr.org/final-print/feb2020/The-Recent-Application-Of-Palm-Stearin-In-Food-Industry-A-Review.pdf>

## 1.3 ADDITIONAL COSTS OF USING RSPO CSPO

As part of complying with the RSPO, there are several additional costs for instance, RSPO membership, audits, and staffing and training that stakeholders operating across the value chain need to bear. These costs can vary based on position in the supply chain, volumes worked with, type of palm oil used, existing sustainability measures, and upstream supplier network<sup>12</sup>. Note that the costs detailed in this section below were derived through stakeholder consultations and this does not represent all the additional costs associated in working with the RSPO. Some of these costs are one-off, others recur annually, or on a per tonne basis. Many stakeholders consulted for this study stated that price premiums were among the largest costs in working with CSPO, and these other additional costs are auxiliary and become negligible in the grand scheme of things.

### 1.3.1 OVERVIEW OF SOME COMMON ADDITIONAL COSTS

#### MEMBERSHIP COSTS

Companies can become members at varying capacities based on their role in the supply chain, scale of operations, & company willingness.

ORDINARY	SUPPLY CHAIN ASSOCIATE	SMALLHOLDER FARMERS	AFFILIATE
\$2,200	\$110	<1000 ha/yr: \$280 1000 – 2000 ha/yr: \$1100 >2000 ha/yr: \$2200	\$280

Table 5: Membership costs for different types of RSPO members.

#### AUDIT AND STAFFING & TRAINING COSTS

As part of complying with RSPO P&C, 3<sup>rd</sup> party audits are required to maintain certification. Note that all members need to be audited; however, audits are done by 3<sup>rd</sup> party auditors and the costs can vary based on geography, scale of operations, the number of sites and the mode of audit (physical/virtual) amongst other factors. Compliance to RSPO P&C, requires additional administrative work that needs to be done along with participation in other member groups and industry associations and training costs.

Table 6: Audit and Staffing & Training costs for stakeholders operating in different stages of the palm oil value chain.

STAKEHOLDER	ANNUAL AUDIT COSTS	STAFFING & TRAINING COSTS
Grower/ Mill Estate	\$15,000 (for ~10,000ha)	\$75,000 (for 20,000ha)
		\$250,000 – 350,000 (for 200,000ha)
Refiner/ Processor/ Trader	Site audits: from \$25,000	From \$125,000 for 2 – 4 part- & full-time staff for working with the RSPO.
	Port audits: \$10 – 15/MT	
Derivatives Manufacturer	\$4000	\$3000 (internal training done 1 – 2 times a year)
Consumer Goods Company	Onsite: \$10,000 – 15,000	\$1000 (for a CGM based in Malaysia & Singapore). A lot of these costs done with existing resources. Virtual audits were found to be more cost effective.
	Virtual: \$5000	
Retailer/HORECA	Supplier audits: \$13,500	20% of sustainability manager's time goes into RSPO related work.

Note that the group certification scheme offered to SASPO members covers audit costs.

## OTHER STAKEHOLDER SPECIFIC ADDITIONAL COSTS

In addition to the common additional costs incurred by stakeholders working with RSPO CSPO on top of the premium, below are some specific costs applicable to the respective stakeholders:

**Table 7: Other stakeholder specific costs associated with RSPO and sustainable palm oil production, procurement, and uptake.**

STAKEHOLDER	SOME ANNUAL ADDITIONAL COSTS			
<b>Grower/ Mill Estate</b>	HCV, SIA, LUCA, CSA/GHG, Soil, and Topography Assessments: \$62,000 for 20kha or \$3.1/ha	RACP (corrective action): \$100,000/year (RACP liability at ~\$2500/year).	Establishing a conservation area: In-situ projects \$5 – 6/ha/year, Ex-situ \$20 – 100/ha/year.	
<b>Refiner/ Processor/ Trader</b>	Traceability documentation (non-RSPO, from NDPE pledges): \$5 – 10/tonne.	3 <sup>rd</sup> party traceability consultants \$35,000 – \$40,000/year or \$1 – 4 cents/	RSPO brokerage fee: CSPO \$1.4/tonne, CSPKO: \$0.63/tonne.	Segregated infrastructure: \$10/tonne on top of normal storage costs.
<b>Derivatives Manufacturer</b>	Marketing: \$2000 – 3000/year for marketing CSPO use & use of RSPO logo.		Documentation: \$1000 – 2000/year	Total annual cost: \$30,000 – 40,000. Can go up to \$50,000.
<b>Consumer Goods Company</b>	Transport: \$48/tonne to transport SG oil in an 80MT tanker within 200km of mill.	Membership in industry body: \$1100 for RSPO group certification.	Supply chain mapping: \$50,000 (through external agency).	Satellite monitoring of suppliers: \$15,000 – 20,000.
<b>Retailer/HORECA</b>	Membership in industry body: \$2700 – 4100/year This is the cost of be a part of the Retailer's Palm Oil Group (RPOG)		Supply chain mapping: \$50,000/year (inclusive of software and technical expertise) for retailer working with ~15,000 tonnes of palm oil and associated fractions.	

**Growers/Mill Estate:** Large growers consulted as part of this study reported that there was no major increase in the cost of complying with the RSPO in recent years. For RSPO members that have established plantations without prior HCV assessments, remediation & compensative (RACP) action needs to be taken.

**Refiner/P&T:** While the costs for sustainable palm oil can run high, all the additional costs are transferred to downstream customers.

**Consumer Goods Company (CGM):** For some companies using a diverse range of palm oil fractions and derivatives, availability of sustainable options becomes a hurdle often resulting in having a bigger supplier base to meet the demands. With an extension of the supplier base, monitoring for each supplier becomes a challenge and often elevates the cost for ensuring compliance. According to another consumer goods company working with around 15,000 tonnes of sustainable palm oil (CSPO and CSPKO), a switch from MB to SG supply chain can increase the additional costs by 10-20%.

**Retailer/HORECA:** For a large retailer dealing with 100,000 tonnes of palm oil, the transition to a fully segregated supply chain can cost millions of dollars due to the necessary infrastructure, however, with such large volumes, economies of scale can be achieved overtime which can be amortised overtime. One retailer consulted who has an uptake of 2000 – 3000 tonnes of palm oil annually states that the overall cost of sustainability measures ranges from \$50,000 – 70,000.

<sup>12</sup> [https://wwfint.awsassets.panda.org/downloads/saspo\\_business\\_guide\\_to\\_sustainable\\_palm\\_oil.pdf](https://wwfint.awsassets.panda.org/downloads/saspo_business_guide_to_sustainable_palm_oil.pdf)

# THE BUSINESS CASE FOR SUSTAINABLE PALM OIL IN ASIA

It was found that the premium price for sustainable crude palm oil ranges between 1-7% of the base price and for palm kernel between 6-40% of the base price. This can vary based on the segregation of the supply chain and geography. Processed derivatives and fractions also can carry additional costs.

However, it can be seen below illustrative that the impact of segregated CSPO premiums on the final per unit price of common goods is near negligible.

A photograph of a man with dark hair, wearing a striped polo shirt, looking upwards with a thoughtful expression. He is in a lush green forest with sunlight filtering through the trees, creating a bokeh effect in the background.

**“THE RISK OF NOT SOURCING SUSTAINABLY IS HIGHER THAN THE COST OF SOURCING SUSTAINABLY.”**

**PALM OIL PROCESSOR**

Copyright Credit © Matthieu Paley

Please note the assumptions made: (1) all fat in the product was palm oil if more specific information was not found, (2) for products containing derivatives information was not available for, the closest product in the supply chain information was available for was used (e.g. for monoglyceride emulsifier, the premium value of stearin was used), (3) the price increase is from the impact of the premium and not from the other additional costs associated with CSPO, and (4) The information for the premiums is based on the data we collected for premiums through various stakeholder interviews done as part of this study. Physical supply chain values have been taken from stakeholders, and credit values have been taken from PalmTrace on 6/4/22. (Presented in the table below)

**Table 8: Overview of premium values used for product case studies presented below**

## REFINED PALM COOKING OIL

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	35
SG	65.5
Credits from Mill/Crusher	2
ISH Credits	12

## PKO

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	262.5
SG	530
Credits from Mill/Crusher	195
ISH Credits	200

## PALM STEARIN

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	40
SG	150

## PALM KERNEL STEARIN

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	300
SG	950

## AN OVERVIEW OF THE COSTS AND BENEFITS IN WORKING WITH CSPO

### COSTS OF WORKING WITH CSPO

The costs associated with transitioning to and working with CSPO include memberships, assessments, audits, documentation, trainings, and the premium price paid for certified palm oil.

#### THE IMPACT OF CSPO SG PREMIUMS ON THE PER UNIT COST OF SOME COMMON PRODUCTS\*, \*\*



70g pack of Instant Noodles  
**\$0.0009**



125g bar of Soap  
**\$0.006**



350g jar of Peanut Butter  
**\$0.005**



1kg box of Laundry Detergent  
**\$0.08**



80g bag of Potato Chips  
**\$0.002**



0.35g pencil of Pencil Eyeliner  
**\$0.0001**

Overall, the total cost of working with CSPO can vary. It can be as little as \$800 a year for those working with credits and can range between \$30,000 - \$70,000 for those working with physical supply chains, having audits conducted, etc. However, stakeholders stated that some of these costs are only incurred in the beginning and become negligible in the grand scheme and that the additional costs are also minimal on a per unit basis.

Note:

\* Details on the calculations and the per unit price of these products can be found in annexure 5.3 in the full report.

\*\* The premium prices used were taken during COVID-19 and are likely higher than those in normal circumstances.

# BENEFITS OF SWITCHING TO CSPO



## HOW DOES THIS BENEFIT THE WORLD AT LARGE?

- The **10 million ha** of rainforest that is annually converted to palm plantations will be saved from deforestation.
- This is **2.9 billion tonnes of carbon** that will continue to be sequestered.<sup>\*\*\*</sup>
- Millions of workers working across the palm oil value chain will have **fair wages and better working conditions**.



## HOW DOES THIS BENEFIT GROWERS?

- **Increased revenue** from certified FFB sales and RSPO credits.
- Increased likelihood of FFB **sales** (particularly for smallholder farmers).
- **Increased yield** per hectare from better agricultural practices.
- **Improved health of communities** and better environmental quality in the region.



## HOW DOES THIS BENEFIT BUSINESSES?

- Business practices cater better to **growing consumer demand for sustainably produced** products.
- **Reduced reputational risks** and better relationships with NGOs.
- **Increased traceability** across supply chain and operational efficiency.
- **Adaptability to regulatory changes** on deforestation and sustainable production.
- **Access to ESG funds** and green finance.

<sup>\*\*\*</sup> Besar, N. A., Suardi, H., Phua, M., James, D., Mokhtar, M. B., & Ahmed, M. F. (2020). Carbon Stock and Sequestration Potential of an Agroforestry System in Sabah, Malaysia. *Forests*, 11(2), 210.

**Table 9: An overview of the costs and benefits associated with RSPO certification.**

### **COSTS ASSOCIATED WITH RSPO CERTIFICATION**

- Additional price premium paid for purchase of raw materials.
- Membership costs
- Audit costs
- Staffing & training costs
- Documentation costs
- Costs associated with the use of RSPO logo.

### **MONETARY BENEFITS THAT COME WITH RSPO CERTIFICATION**

- Increased revenue from sale of raw material with premium pricing.
- Increased market access (particularly higher value markets like the EU and North America).
- Access to capital through ESG funds, sustainability linked loans, and other green financial instruments.
- Increased yield through better agricultural practices.

### **NON-MONETARY BENEFITS THAT COME WITH RSPO CERTIFICATION**

- Improved reputation and brand value.
- Improved operational efficiency & supplier relations.
- Adaptability to regulatory changes on increased sustainability requirements.
- Reduced risks from non-compliance.

# BENEFITS TO THE BUYERS

In addition to cost components with CSPO, there are broader benefits and opportunities that come with sourcing CSPO, as well as the risks mitigated from not continuing with conventional sourcing practices, particularly in the Asian context.



## GROWING AWARENESS ON SUSTAINABILITY

There is an increased awareness on sustainability issues such as deforestation and forced labour, and on the importance of addressing them, particularly among the new generation of

consumers. Asian markets tend to have more price sensitive consumers; however, an increasing number of Asian consumers have indicated that they are 'value conscious'<sup>13</sup>.

## INCREASED FINANCIAL OPPORTUNITIES

A number of companies consulted for this study stated that procuring CSPO and communicating this publicly helped with investor requests. 151 companies reporting on CDP Forests attributed

a value of \$53.1 billion to forest-related risks. The cost of taking action against these risks was estimated at \$6.6 billion, a mere 13% of what companies stand to lose<sup>14</sup>.

## REDUCED REPUTATIONAL RISKS

Given the increasing awareness of deforestation and its climate change impacts, deforestation driven reputational risks could highly become material for companies<sup>15</sup>. Companies with strong sustainable palm oil policies have fared better in assessments like the POBS<sup>16</sup>, ZSL's SPOTT<sup>17</sup>, CDP forests<sup>18</sup>, etc. In addition, these companies also

performed better among different types of ESG ratings, which is becoming increasingly relevant. For companies with sustainable palm policies in place, participating in these scorecards and ratings can help demonstrate better practices, increase brand value, and expand sales overall.

**“IT IS BETTER FOR A COMPANY TO INCUR THE COSTS AND IMPLEMENT SUSTAINABLE PRACTICES THAN LOSE BRAND VALUE”**

**RETAILER**

## ADAPTABILITY TO REGULATORY CHANGES

At COP26 in November 2021, 141 countries endorsed the Glasgow Declaration of Forests & Land Use with an overarching aim of committing to sustainable land use and protecting terrestrial ecosystems<sup>19</sup>. In Asia, this included China, Indonesia, Malaysia,

Singapore, Japan, and South Korea among others. Companies that do not anticipate such regulatory changes and implement sustainable sourcing policies for palm and other forest companies face the risk of fines and market exclusion from non-compliance.

## IMPROVED OPERATIONAL EFFICIENCY AND SUPPLIER RELATIONS

Traceability helps in verifying compliance by upstream suppliers as well. There are an increasing number of tools & services that help map out supply chains and monitor plantations for deforestation related risks such as Starling<sup>20</sup> & RADD<sup>21</sup>. The procurement of CSPO requires close coordination between

buyers and suppliers to claim a product as 'RSPO certified'. Buyers also work closely with suppliers to establish short-, medium-, and long-term contracts to hedge fluctuating market prices. Working closely with suppliers can help reformulate products as needed to mitigate the effects of fluctuating prices.

<sup>13</sup> [Consumer Price Sensitivity | Global Pricing Strategies | BCG](#)

<sup>14</sup> [https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/630/original/CDP\\_Forests\\_analysis\\_report\\_2020.pdf?21616334771](https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/630/original/CDP_Forests_analysis_report_2020.pdf?21616334771)

<sup>15</sup> Chain Reaction Research. (2019, May 9). *Deforestation-Driven Reputation Risk Could Become Material for FMCGs*.

<https://chainreactionresearch.com/report/deforestation-driven-reputation-risk-could-become-material-for-fmcgs>

<sup>16</sup> [WWF Palm Oil Buyers Scorecard - POBS \(panda.org\)](#)

<sup>17</sup> [Palm oil: ESG policy transparency assessments - SPOTT.org | SPOTT.org](#)

<sup>18</sup> [Forests - CDP](#)

<sup>19</sup> [Glasgow Leaders' Declaration on Forests and Land Use - UN Climate Change Conference \(COP26\) at the SEC - Glasgow 2021 \(ukcop26.org\)](#)

<sup>20</sup> [Starling | No Deforestation Monitoring Tool to make an informed decision \(starling-verification.com\)](#)

<sup>21</sup> [New Radar Alerts Monitor Forests Through the Clouds | Global Forest Watch Blog](#)

# BENEFITS TO THE GROWERS

## GROWING AWARENESS ON SUSTAINABILITY

There are positive signs towards increasing awareness of consumers on deforestation, deforestation linked commodities, and human rights violations with increased access to information and resources. As a response to changing consumer demands, improved awareness and pressures from civil society organisations, many companies in Europe

and North America have implemented strong sustainable palm sourcing policies with well-defined targets and expect their supply to originate from deforestation-free sources. This is also trickling into Asian markets and producing geographies with NGOs holding plantation companies accountable for palm related deforestation.

## INCREASED FINANCIAL OPPORTUNITIES

Multiple studies have attested to improved yield from RSPO certified growers in comparison to conventional palm oil. Through better agricultural practices, RSPO certified growers have increased yield by 10-42%, and ~16% increase in revenue from FFB sales despite the additional costs incurred<sup>22</sup>. With RSPO premiums increasing, some companies stated that their costs from the inception of their

sustainable transitions have been recouped. Larger suppliers have the ability to achieve economies of scale easily and can manage costs better across their operations. Growers also tend to have increased access to sustainable finance. In 2021, OCBC extended Wilmar a 3-year sustainability linked loan valued at \$150 million<sup>23</sup>.

## REDUCED REPUTATIONAL RISKS

With targets for addressing their emissions, plantation companies can also benefit from RSPO certification. Sustainable production of palm oil can help companies with commitments to GHG reduction as RSPO certified sustainable palm oil has a 35% lower global warming impact and a 20% lower biodiversity impact from land use changes

than non-certified palm oil produced in Indonesia and Malaysia<sup>24</sup>. Sustainable production of palm and improved disclosures can help growers reduce these reputational risks, improve assessment scores, meet buyer and investor expectations, and assure continued business with buyers with strong sustainable procurement policies.

## ADAPTABILITY TO REGULATORY CHANGES

The latest IPCC report<sup>25</sup> depicted the pressing need for climate action and the increasingly dire consequences of inaction. As a response, more and more governments are implanting regulations relating to deforestation and sustainable sourcing.

Plantation companies and growers that do not anticipate such regulatory changes face the risk of fines and market exclusion due to non-compliance with regulations and more stringent procurement policies.



## INDEPENDENT SMALLHOLDER FARMERS

Smallholder farmers account for ~40% of global palm oil cultivation<sup>26</sup>. Smallholders following sustainable production practices, increases the amount of sustainable palm oil available and benefits smallholder communities as a whole from proper use and storage of chemicals and a lack of burning practices. RSPO's distinct ISH Standard<sup>27</sup> makes RSPO certification more accessible to ISHs.

To get certified, ISHs form a group which then becomes a RSPO member. This provides them with increased access to buyers and more negotiation power. This particularly increases the likelihood of sales during the harvest period when mills tend to be overburdened with their own produce. There are a number of cost efficiencies attached to a group and ISHs also have access to benefits like health insurance and collective training. The money from RSPO IS-Credits is routed directly to smallholder farmers, and the rising price of

credits is beneficial to them. There are a number of grants and subsidies for smallholder farmers such as the RSPO Smallholder Support Fund which helps smallholder farmers with audit costs<sup>28</sup>.

There are many on-ground programmes by companies like Musim Mas, P&G, Unilever, Golden Agri etc. which provide support to ISHs in varying technical and financial capacities to encourage sustainable production. This includes capacity development in good agricultural practices, book-keeping, fire prevention, understanding RSPO requirements etc. Some programs provide ISHs access to high yielding seeds, fertilisers and equipment at below market rates. As part of the P&G programme, the 10 core learning farms have observed a 22% increase in annual yields and 13.5% increase in income. The programmes have also been noted to help smallholders gain documentation and legal rights to their land.

<sup>22</sup> Tey, Y. S., Brindal, M., Djama, M., Hadi, A. H. I. A., & Darham, S. (2021). A review of the financial costs and benefits of the Roundtable on Sustainable Palm Oil certification: Implications for future research. *Sustainable Production and Consumption*, 26, 824–837. <https://doi.org/10.1016/j.spc.2020.12.040>

<sup>23</sup> [OCBC Bank Provides Sustainable Finance for Agribusiness Wilmar](https://lca-net.com/files/Schmidt_RSPO-certified-palm-oil_20191106reduced-size.pdf)

<sup>24</sup> [https://lca-net.com/files/Schmidt\\_RSPO-certified-palm-oil\\_20191106reduced-size.pdf](https://lca-net.com/files/Schmidt_RSPO-certified-palm-oil_20191106reduced-size.pdf)

<sup>25</sup> [IPCC\\_AR6\\_WGIII\\_FinalDraft\\_FullReport.pdf](#)

<sup>26</sup> Perkebunan, D. (2016). *Statistik Perkebunan Indonesia 2015–2017: Komoditas Kelapa Sawit*. Kementerian Pertanian

<sup>27</sup> [RSPO Independent Smallholder Standard](#)

<sup>28</sup> [Introduction RSSF | RSPO - Roundtable on Sustainable Palm Oil](#)

# RECOMMENDATIONS & OPPORTUNITIES FOR ACTION



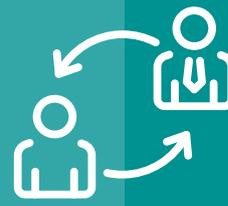
## GROWER

### CHALLENGES

- Smallholder farmers face issues with accessing finance to meet the certification requirements.
- Maintaining the certification is also a challenge.

### RECOMMENDATIONS

- Enhanced collaborations from small and medium companies and continued financial and technical support post-certification can help smallholders to get and stay certified.
- Multiple requirements under the MSPO and ISPO standards are in line with RSPO P&C if not as robust and hence complying with MSPO and ISPO can act as a stepping stone towards RSPO certification.



## PROCESSOR AND TRADER

### CHALLENGES

- P&Ts struggle with low demand in Asia for sustainable palm oil, high costs of procuring CSPO, and establishing a traceability system. They also tend to prioritise food safety certifications over sustainability given budgetary constraints.
- A sporadic customer base makes it difficult for them to commit to sourcing SG variety and implementing the associated practices.
- Given their large geographic presence, managing multiple certifications becomes expensive.

### RECOMMENDATIONS

- Long-term contracts between P&Ts and buyers can help counter this sporadic demand.
- With the upcoming EU regulation on supply chain due diligence, an early switch to sustainable palm operations can help P&Ts be prepared for the upcoming demand.



## CONSUMER GOODS MANUFACTURER

### CHALLENGES

- Lack of sustainable alternatives, especially of SG variety, for palm fractions and derivatives makes sourcing difficult.
- Supply chain disruptions have created a major squeeze on CSPKO and derivatives resulting in the prices being bid up to exorbitant levels affecting the company budget.

### RECOMMENDATIONS

- On-ground support to growers and higher promise for sustainable procurement from CGM companies can help marginal and smallholder growers to opt for sustainable practices. This can close the supply-demand gap and stabilise prices for sustainable palm oil.
- Long-term contracts between CGMs and suppliers can help ensure continuous supply and protect buyers from price fluctuations.



## RETAILER

### CHALLENGES

- Lack of access to information on supplier networks and arrangements. Last mile traceability is difficult and expensive when working with small suppliers.
- Lack of awareness among suppliers on the presence of palm oil in certain products pushes the accountability onto the retailers for traceability and understanding of different materials.
- Some companies fear losing their competitive edge if they translate the cost of sustainability onto the customer.

### RECOMMENDATIONS

- A central database with information on these ingredients and which products contain them can help suppliers trace the palm oil in their supply chain and implement sustainable practices.
- Some coalitions and industry associations are working to bring together stakeholders across the supply chain, and with greater transparency on these arrangements and CSPO prices, more companies can be encouraged to work with it.



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NATURE AND REDUCE THE  
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TO THE DIVERSITY OF  
LIFE ON EARTH.**

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