

SECOND PARTY OPINION

on PT Japfa Comfeed Indonesia Tbk's Sustainability-Linked Bonds

V.E is of the opinion that PT Japfa Comfeed Indonesia Tbk's Sustainability-Linked Bonds are aligned with the core components of the Sustainability-Linked Bond Principles (SLBP) 2020.

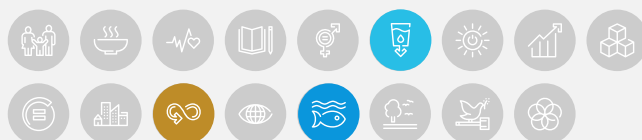


Framework

	Weak	Limited	Robust	Advanced
KPI's Relevance				
SPT's Ambition				

Of note, the assessment on the SPT's ambition is only based on the Issuer's own performance. Benchmarking against sector peers and sector standards and/or targets on the SPT were not possible due to lack of publicly available and comparable information (please see page 10 for the detailed explanation).

SDG Mapping



Characteristics

Audit of the Data	Yes
Three-year Historical Data	No
Nature of the Impacts on the Bond's Characteristics	Financial
Disclosure of measures to achieve the SPT	Yes

Sustainability Performance Target (SPT)

KPI: Water Recycling Facilities for Sustainable Water and Wastewater Management at Poultry Operations

- Measured in annual wastewater discharge at Poultry Operations in m³
- Targets set as the number of new facilities constructed with certification of completion from the building contractor

		2019 (Baseline)	2020	3 years 9 months from bond issuance date*
KPI	Wastewater discharge	1,524,452	1,451,708	8 water recycling facilities out of 15 slaughterhouses under Japfa operations; 1 water recycling facility at a hatchery within the poultry breeding unit

*Trigger event

Issuer

ESG Controversies

Number of controversies	None
Frequency	NA
Severity	NA
Responsiveness	NA

Controversial Activities

The Issuer appears to be involved in 2 of the 17 controversial activities screened under our methodology:

<input checked="" type="checkbox"/> Animal welfare	<input type="checkbox"/> Fossil Fuels industry	<input type="checkbox"/> High interest rate lending	<input type="checkbox"/> Pornography
<input type="checkbox"/> Cannabis	<input type="checkbox"/> Coal	<input type="checkbox"/> Human Embryonic Stem Cells	<input type="checkbox"/> Reproductive medicine
<input type="checkbox"/> Chemicals of concern	<input type="checkbox"/> Gambling	<input type="checkbox"/> Military	<input type="checkbox"/> Tar sands and oil shale
<input type="checkbox"/> Civilian firearms	<input checked="" type="checkbox"/> Genetic engineering	<input type="checkbox"/> Nuclear power	<input type="checkbox"/> Tobacco
<input type="checkbox"/> Alcohol			

Key findings

V.E is of the opinion that PT Japfa Comfeed Indonesia Tbk's Sustainability-Linked Bonds are aligned with the core components of the Sustainability-Linked Bond Principles (SLBP) 2020.

Selection of the Key Performance Indicator (KPI) – aligned with the SLBP

- The KPI is relevant and material from an environmental/social standpoint.
- The KPI is measurable, externally verifiable and can be benchmarked.
- The KPI's definition, the rationale behind their selection, the calculation methodologies and coverage are clearly defined.

Calibration of the Sustainability Performance Target (SPT) – aligned with the SLBP

- The SPT demonstrates a robust level of ambition.
- The timeline, baseline and trigger events are clearly disclosed.
- The means to achieve the SPT are clearly disclosed.

Bond Characteristics – aligned with the SLBP

- The nature of the bond characteristics' variation is clearly disclosed.
- The Issuer commits to disclose the actual financial impact in the bond documentation for the issuance. For the first issuance, it is 25-bps coupon step-up if SPT is not met.

Reporting– aligned with the SLBP and best practices identified by V.E

- The internal control and reporting processes are relevant, transparent and support the provision of reliable data.
- The Issuer commits to annual reporting on all relevant information related to the KPI and its associated SPT, including results, underlying methodologies and assumptions.

Verification– aligned with the SLBP

- The KPI will be externally verified on an annual basis until the Target Observation Date set at 3 years 9 months from the bond issuance date.
- The achievement of the SPT will be externally verified at least on an annual basis and the verification assurance reports will be disclosed publicly.

Type of External Reviews supporting this Framework

<input checked="" type="checkbox"/>	Pre-issuance Second Party Opinion	<input checked="" type="checkbox"/>	Independent verification of KPI(s) reported data
<input checked="" type="checkbox"/>	Independent verification of SPT(s) achievement		

Contact

Sustainable Finance Team | VEsustainablefinance@vigeo-eiris.com

SCOPE

V.E was commissioned to provide an independent opinion (thereafter “Second Party Opinion” or “SPO”) on the integration of one environmental factor to the Sustainability-Linked Bond(s) (the “Bonds”) to be issued by PT Japfa Comfeed Indonesia Tbk’s (“PT Japfa Tbk” or the “Issuer”) in compliance with the Sustainability-Linked Financing Framework (the “Framework”) created to govern its issuance. The Framework aims to highlight both the Issuer’s sustainability strategy and sustainable finance strategy while demonstrating its alignment with the ICMA’s Sustainability-Linked Bond Principles. In addition, the Framework includes the Issuer’s commitment to achieve specific target (“Sustainability Performance Target” or “SPT”) regarding one environmental key performance indicator (hereafter the “KPI”) proposed as part of its sustainability strategy.¹

The Bond(s) is intended to finance general corporate purposes, as opposed to other sustainable financial instruments such as green/social bonds or green/social loans. The facilities are agnostic on how funds are used. The main feature of this type of financing is the variation of the bond's financial characteristics, depending on whether the Issuer achieves predefined sustainability performance objectives.

For the so-called Sustainability-Linked Bonds, the selected KPI to be linked to the variation of the Bond(s)' financial characteristics is the following:

- KPI: Water Recycling Facilities for Sustainable Water and Wastewater Management at Poultry Operations, with the following target and trigger event:
 - o SPT: Defined as the number of new facilities constructed with certification of completion from the building contractor:
 - 8 water recycling facilities out of 15 slaughterhouses under Japfa operations;
 - 1 water recycling facility at a hatchery within the poultry breeding unit.

Our opinion is established using V.E Environmental, Social and Governance (“ESG”) assessment methodology and the International Capital Market Association’s (ICMA) Sustainability-Linked Bond Principles (“SLBP”), voluntary guidelines, published in June 2020. This opinion is strictly limited to the integration of 1 environmental factor in the Bond(s). This opinion does not cover the integration of broader sustainability factors (i.e. social and governance), or the labelling of the Bonds where the final decision is left to PT Japfa Tbk. This opinion does not constitute a verification or certification.

Our opinion is built on the review of the following components:

1. Issuance: we assessed the Bonds' alignment with the core components of the SLBP 2020.
2. Issuer: we assessed the Issuer’s management of potential stakeholder-related ESG controversies and its involvement in controversial activities².

Our sources of information are multi-channel, combining data from (i) public information gathered from public sources, press content providers and stakeholders, (ii) information from V.E exclusive ESG rating database, and (iii) information provided by the Issuer through documents.

We carried out our due diligence assessment from February 10th to March 4th, 2021. We consider that we were provided with access to all the appropriate documents we solicited. Reasonable efforts have been made to verify data accuracy.

¹ This SPO does not cover the sustainability-linked loans part of the Sustainability-Linked Financing Framework created by the Issuer.

² The 17 controversial activities screened by V.E are: Alcohol, Animal welfare, Cannabis, Chemicals of concern, Civilian firearms, Fossil Fuels industry, Coal, Gambling, Genetic engineering, High interest rate lending, Human Embryonic Stem Cells, Military, Nuclear power, Pornography, Reproductive medicine, Tar sands and oil shale, and Tobacco.

ISSUANCE

The Issuer has described the main characteristics of the Bonds within a formalised Framework which covers the core components of the SLBP 2020 (the last updated version was provided to V.E on March 4th, 2021). The Issuer has committed to make this document publicly accessible on its website on the mandate announcement date, in line with good market practices.

Alignment with Sustainability-Linked Bond Principles

Selection of the Key Performance Indicator (KPI)



COHERENCE

V.E considers that the selected KPI is coherent with PT Japfa Tbk's strategy and priorities in terms of sustainability.

The Issuer has established the Sustainability Committee, with its primary role to drive sustainability within the company and align its strategies with the United Nations Sustainable Development Goals (UN SDGs), especially UN SDG 2: End hunger, achieve food security, improved nutrition and promote sustainable agriculture.




Based on UN SDG 2, the Issuer has set up the Japfa Sustainability Pillars to guide the implementation of best practices in sustainability across the Group, namely:

- **Efficient Production System:** *"We contribute to hunger reduction and provide nutrition for our society through healthy animals, efficient use of resources and waste and emission minimisation. These efforts ensure that we produce responsibly while providing affordable and nutritious food for people in emerging economies".*
- **People Development:** *"Through our large-scale operations, we create jobs to reduce poverty and support infrastructure development around our operating units, as well as knowledge management for our employees, farmers and community by providing trainings, technical assistance and skills improvement for farmers and education programmes".*
- **Improving Nutrition:** *"Our industrialised vertically integrated operations and local sourcing facilitates access to affordable nutritious protein for people through transparent and traceable supply chain that ensure food safety. We also approach community to adopt healthy lifestyle by promoting healthy balanced diet through our Japfa for Kids programme".*

For the first sustainability pillar "Efficient Production System", the Issuer has identified relevant measures including ensuring the health and welfare of chickens, the efficient use of resources and waste minimisation. The selected KPI is specifically related to the efficient use of water resources where the Issuer stated: *"as part of our efforts to conserve water, we are looking at wastewater treatment and water recycling facilities at relevant operations."*

SDG CONTRIBUTION

The selected KPI is likely to contribute to three of the United Nations' Sustainable Development Goals ("SDGs"), namely:

KPI	SDG	SDG TARGETS
KPI	 6 Clean Water and Sanitation	6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.
KPI	 12 Responsible Production and Consumption	12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
KPI	 14 Life Below Water	14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

KPI: Water Recycling Facilities for Sustainable Water and Wastewater Management at Poultry Operations

MATERIALITY

V.E considers that the selected KPI is relevant to the company's sustainability and business strategy, and it reflects one of the Issuer's material sustainability issues as well as a material challenge for its sector.

V.E considers the selected KPI being robust in terms of materiality in the context of the company and the country.

- According to the Dataset of US SDG Indicator 6.4.2 - Level of water stress: freshwater withdrawal as a proportion of available freshwater resources³, Indonesia has a water stress level of 29.7% (categorised as low water stress) in 2017, but has shown an increasing trend since 2000 (15.1%).⁴ Since agriculture overall accounts for over 85% of total water withdrawal in Indonesia⁵, efforts to reuse water in agriculture production processes would help reduce the need for water withdrawal and potentially alleviate the country's water stress level.
- According to FAO, the water quality of Indonesian rivers and lakes is poor, due to a combination of untreated domestic sewage, solid waste disposal and industrial effluents. FAO also highlighted the need for Indonesia to adopt adaptive strategies and appropriate water management, in light of increasing climate change impacts (e.g. seasonable variation in rainfalls, droughts, etc.), to ensure stability and availability of food.⁶ Moreover, the *Strategic Plan of the Indonesian Ministry of Agriculture 2020-2024* identified "increasing quantity and quality of raw water resources" as one of the priority programs for the country's agriculture and food development.⁷
- According to the Issuer's SR2019, its poultry operation contributed to 30% of the company's total wastewater discharge, which were treated complying to relevant regulations. The Issuer's own life cycle analysis (LCA) also identified wastewater management as a key area where it can make a positive impact.
- KPI 1 is not highlighted as one of the 12 materiality topics in the Issuer's Sustainability Report 2019, but it is part of the Issuer's sustainability pillar "Efficient Production System". As highlighted in the same report, the Issuer commits to address water-related issues seriously and keep on developing strategies to conserve water as its precautionary approach, given the rising water security issue in Indonesia.⁸ The Issuer also reports that in the 2020 version of the Sustainability Report, which is currently being prepared, KPI 1 would be embedded under the key material topic "Resource efficient and responsible waste management".
- In addition, the current national regulations in Indonesia primarily focus on the quality of wastewater discharge and does not specifically require companies to install wastewater treatment facilities within their organisational boundaries. There is also currently no specific policy to encourage wastewater recovery in the agriculture and food sectors.⁹

MEASURABILITY AND VERIFICATION

³ It is defined as the ratio between total freshwater withdrawn by major economic sectors and total renewable freshwater resources, after taking into account environmental water requirements. The scale is: No Stress (0%-25%); Low (25%-50%); Medium (50%-75%); High (75%-100%); Critical (>100%)

⁴ <http://www.fao.org/sustainable-development-goals/indicators/642/en/>. Last accessed on February 25th, 2021

⁵ <http://www.fao.org/aquastat/statistics/query/results.html>

⁶ <http://www.fao.org/3/i7696e/i7696e.pdf>

⁷ <https://ap.fttc.org.tw/article/1842>

⁸ <https://www.japfcomfeed.co.id/en/investors/sustainability-report>

⁹ <https://jurnal.ugm.ac.id/jcef/article/view/52755>

The KPI is externally verifiable and measurable on a consistent methodological basis. The selected KPI and its historical performance are included in the Issuer's Annual Sustainability Reports since at least 2018.

In case of any methodology change (including changes in perimeter, KPI methodology, SPT calibration etc.), the Issuer commits to conduct a post-issuance external review of the relevant changes and to inform the relevant stakeholders.

CLARITY

The rationale and process for the selection of the KPI are considered relevant and are clearly disclosed within the Framework.

The definition, perimeter and underlying methodologies for the selected KPI are defined in the Framework.

The KPI reflects the reporting items required under the GRI framework (e.g. GRI 303), but the exact metric is company specific. The KPI cannot be directly benchmarked against external references such as sector peers and sector standards and/or targets, although it does allow certain degree of indirect comparison with the national context and sector peers' practices.

EXHAUSTIVENESS

The Issuer reports that the KPI covers the business activity related to poultry operations, which represent approximately 85% of the Company's annual revenue.

The Issuer reports that the coverage of the KPI will not be subject to modifications.

BEST PRACTICES

- ⇒ The rationale and process for the KPI selected are clearly disclosed in the Framework.
- ⇒ The Issuer commits conduct a post-issuance review (which will be made available to bondholders) in case of material changes to the KPI's coverage, calculation methodology, and in particular the SPT calibration.

Calibration of the Sustainability Performance Target (SPT)

Not Aligned	Partially Aligned	Aligned	Best Practices
-------------	-------------------	---------	----------------

AMBITION

KPI: WATER RECYCLING FACILITIES FOR SUSTAINABLE WATER AND WASTEWATER MANAGEMENT AT POULTRY OPERATIONS

By using the number of water recycling facilities instead of the estimated wastewater discharge at the poultry operations or targeted amount of wastewater to be recycled in 2024, the SPT does not allow the direct analysis of KPI's trends due to different metric used by historical data, which may prevent some investors from making an appropriate assessment of the overall KPI's performance. However, our assessment below recognises the potential contribution of the SPT in reducing the company's wastewater discharge and increasing its capacity to reuse the treated wastewater.

Table 1 –KPI (measured in annual wastewater discharge at the poultry operations (in m³))

		REPORTED DATA		OBJECTIVE			
KPI		2019 (Baseline)	2020	1 year from bond issuance date	2 years from bond issuance date	3 years from bond issuance date	3 years 9 months from bond issuance date*
	Wastewater Discharge (m ³)	1,524,452	1,451,708	Defined as the number of new facilities constructed with certification of completion from the building contractor:			
	Annual variation (%)	NA	-4.8%	<ul style="list-style-type: none"> 8 water recycling facilities out of 15 slaughterhouses under Japfa operations; 1 water recycling facility at a hatchery within the poultry breeding unit 			
Proposed construction completion schedule of the water recycling facilities		NA	NA	1 (slaughterhouse) + 1 (hatchery)	3 (slaughterhouses)	3 (slaughterhouses)	1 (slaughterhouse)
Estimated annual wastewater to be recycled based on the Framework (m ³)		NA	NA	82,820**	295,279**	507,737**	578,557**
Wastewater Discharge from Poultry Breeding unit (m ³)		460,290	369,038	NA			
Annual variation (%)		NA	-19.8%	NA			
Wastewater Discharge from Poultry Slaughterhouses unit (m ³)		867,811	926,749	NA			
Annual variation (%)		NA	6.8%	NA			
Total volume of planned and unplanned water discharges from		1,258,350	NA	NA			

poultry operations ¹⁰ (m ³)			
Difference between the KPI's data and the relevant figure in annual sustainability reports (m ³)	(266,102)***	NA	NA

*Trigger event

** Assuming that the 8 water recycling facilities at slaughterhouses will have the same annual wastewater recycling potential = $566,557 / 8 = 70,820 \text{ m}^3$

*** The Issuer clarified that due to the 100% acquisition of So Good Food in 2020¹¹, the data for KPI in 2019 now also includes figures from So Good Food, which were not counted in the annual sustainability report for Year 2019.

The selected SPT is consistent with PT Japfa Tbk's overall sustainability strategy and its Sustainability Pillar "Efficient Production System". The objective is to "contribute to hunger reduction and provide nutrition for our society through healthy animals, efficient use of resources and waste and emission minimisation".

Based on several points of comparison, we consider that PT Japfa Tbk's targets demonstrates a robust¹² level of ambition.

Of note, the assessment on the SPT's ambition is only based on the Issuer's own performance. Benchmarking against sector peers and sector standards and/or targets on the SPT were not possible due to lack of publicly available and comparable information.

Business-as-usual Trajectory Benchmark

The Issuer has provided two years' of historical data on the KPI, which shows that the total volume of wastewater discharge at the poultry operations decreased by 4.8%. This indicates that there is potentially an ongoing effort to reduce its wastewater discharge. In particular, the Poultry Breeding unit saw 19.8% fall in 2020 compared to 2019, although it may be partly due to the effects of the Covid-19 crisis.

The SPT is set as the number of new facilities constructed with certification of completion from the building contractor over the period of 3 years 9 months, instead of directly using the metric of the KPI. It is not directly comparable against the historical records, however it is understandable given the fact that the total volume of wastewater discharge will depend on the production capacity of poultry operations in the future, which may be unpredictable due to external factors such as market dynamics and consumer demands.

The SPT is related to the construction of water recycling facilities at the slaughterhouses and one of the hatcheries to reuse the treated wastewater:

- As per data disclosed in the Framework, the majority of wastewater discharge came from the Poultry Slaughterhouses Unit (57% in 2019 and 64% in 2020), while the Poultry Breeding Unit accounted for 30% of wastewater discharge in 2019 and 25% in 2020. These two units combined accounted for 89% of total wastewater discharge at the poultry operations in 2020.
- The Issuer reports that all the slaughterhouses are equipped with a wastewater treatment plant. By installing 8 water recycling facilities out of 15 slaughterhouses under Japfa operations) and 1 water recycling facility at one of the hatcheries within the poultry breeding unit (out of 30 hatcheries in total), it can potentially reduce wastewater discharge from these two operation units.
- By the time when all the water recycling facilities are completed (3 year 9 months from the bond issuance date), they will cover over half of all the slaughterhouses, and are also estimated to recycle 61% of wastewater discharged from the Poultry Slaughterhouses Unit in 2020 and 3% from the Poultry Breeding Unit.
- The Issuer estimates that the installation process of each water recycling facility is likely to take 11 months, and has provided the proposed construction completion schedule in the Framework. Based on the information, the estimated annual wastewater to be recycled has also been added in the Table above for reference. Potentially by the end of Year 3, over half of wastewater discharged from the Poultry Slaughterhouses Unit might be recycled.

¹⁰ Figures are derived from the Issuer's annual sustainability report

¹¹ <https://industri.kontan.co.id/news/japfa-comfeed-jpfa-akan-mengakuisisi-so-good-food-dengan-nilai-rp-121-triliun>

¹² VE scale of assessment: Weak / Limited / Robust / Advanced

The SPT is thus considered robust compared to a “business-as-usual” trajectory as it covers over half of its targeted operations and it does represent a material improvement compared to its past performance and ongoing efforts.

Official International Targets and Scenarios Benchmark

There is no applicable international standards or regulations for this specific SPT. This benchmark analysis has been thus deactivated. Wastewater discharge and water reuse at the company level are subject to relevant national/local environmental regulations and sector standards.

As acknowledged in section “SDG CONTRIBUTION” above, the issuer’s efforts in achieving the SPT can potentially contribute to the UN SDG 6, 12 and 14.

Sector Peers Benchmark

Water is one of the most material drivers for the Food sector as per V.E’s ESG rating methodology. Some companies in V.E’s “Food Asia Pacific” sector have disclosed relevant measures to water conservation and wastewater management. However, the information is not directly comparable amongst sector peers, due to differences in types of operations and production scale, the amount and characteristics of wastewater generated, the water quality required in case of reuse of treated wastewater, as well as different regulatory requirements for the wastewater discharge and water reuse, etc. Moreover, companies often use different metrics and the scope of data disclosed as well as their coverage are often unclear, which also leads to the difficulty in direct comparison.

Moreover, there is also uncertainty around the quality of treated wastewater, which may potentially limit the reuse of treated wastewater and hence the reduction of wastewater discharge. To enable reuse, the quality of treated wastewater would need to meet the quality level required by the process in need of water, and if applicable, relevant regulatory requirements. Although Indonesia currently does not have relevant standard and regulation yet, globally speaking, some other countries or regions do have specific quality/safety guidelines or regulations on the reuse of treated wastewater in agriculture and food production (e.g. US EPA¹³ and the EU¹⁴).

Overall, due to lack of publicly available and comparable information, direct sector peers benchmark analysis was not possible and thus has been deactivated.

¹³ <https://www.epa.gov/sites/production/files/2019-08/documents/2012-guidelines-water-reuse.pdf>

¹⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0741>

MEASURES TO ACHIEVE THE SPT

The measures to achieve the SPT are credible and disclosed in the Framework. The SPT will be achieved through investment on the installation of water recycling facilities in slaughterhouses and a water recycling facility in a hatchery.

- The Issuer estimates that the installation process of each water recycling facility is likely to take 11 months, from getting the relevant permits to construction and commissioning.
- In terms of selection of sites for the installation, the Issuer reports that over the next 4 years, it will prioritise locations where water-related impacts are expected to be most meaningful.
- The Issuer also commits to include the construction progress of the water recycling facilities in its annual Sustainability Report, including the number of facilities completed and the annual amount of water recycled to appropriate standards or water consumption saved in m³ as a result of the water recycling facilities in its poultry operations.

BEST PRACTICES

- ⇒ The measures for achieving the SPT are disclosed.
- ⇒ The means for achieving the SPT are credible and detailed.

Bond Characteristics



The Issuer confirms that the bonds will be subject to variations in their financial characteristics depending on the achievement of the defined trigger events. The details pertaining to the point of review and coupon adjustment mechanism will be provided as part of the pre-issuance documentation to the investor or announced publicly.

The communicated trigger events are the following:

- If the SPT is not met as of the reference date (i.e. the Target Observation Date set at 3 years 9 months from the bond issuance date), it will trigger a 25-bps coupon step-up, bringing an increase in the interest rate applicable to interest periods following such reference date.

*V.E considers that, as of today, there is insufficient information and market precedent to appropriately assess the potential best practices regarding the bond characteristics' variation. In this sense, the "Aligned" level is currently considered to be the highest level to be achieved by Issuers on this pillar. In addition, the meaningfulness of the variation of the SLB's structural and/or financial characteristics of the Bonds cannot be assessed due to a lack of comparison data.

Reporting

Not Aligned	Partially Aligned	Aligned	Best Practices
-------------	-------------------	---------	----------------

KPI: WATER RECYCLING FACILITIES FOR SUSTAINABLE WATER AND WASTEWATER MANAGEMENT AT POULTRY OPERATIONS

REPORTING PROCESS

The intended scope and granularity of the reporting are clear and cover all the required elements.

The Issuer commits to report on the progress on its selected KPI and SPT at least on an annual basis until the Target Observation Date set at 3 years 9 months from the bond issuance date, either in its annual sustainability report or as a separate document whichever is more suitable considering the timeline and administrative arrangement. The document will be made publicly available.

The data for the KPI are directly monitored and the methods for the monitoring will be consistent over the life of the bond. The Issuer has committed to publicly disclose the methodologies or supporting documents used to derive the numbers for the KPI against the SPT.

ACCESSIBILITY OF RESULTS

The issuer confirms that information about the SPT will be disclosed publicly at least on an annual basis, either in its annual sustainability report or as a separate document whichever is more suitable considering the timeline and administrative arrangement.

BEST PRACTICES

- ⇒ KPI data undergoes both internal and external verification
- ⇒ The Issuer will provide regular reporting on it the SPT

Verification



The performance level against the SPT for the KPI will be externally verified annually until the Target Observation Date set at 3 years 9 months from the bond issuance date.

The external verification on the performance against the KPI will be conducted by a qualified external reviewer with relevant expertise (an auditor or environmental consultant, depending on the nature of the KPI and SPT selected) at least once a year.

The Issuer commits to publicly disclose the external verification report in its Annual Sustainability Report.

ISSUER

PT Japfa Tbk is a leading integrated agri-food company based in Indonesia. It is listed on the Indonesia Stock Exchange and are majority owned by Japfa Ltd listed on the Singapore Stock Exchange. Its business is vertically integrated from animal feed production and breeding to commercial farming and food processing.

Management of ESG Controversies

As of today, the review conducted by V.E did not reveal any ESG controversy against PT Japfa Tbk over the last four years.

Involvement in Controversial Activities

The Issuer appear to be involved in 2 of the 17 controversial activities screened under our methodology, with major involvement in Animal welfare and minor involvement in Genetic engineering:

- Animal welfare: Japfa Comfeed Indonesia Tbk PT has an estimated turnover from intensive farming operations which is between 10% and 33% of total turnover. This turnover is derived from the breeding and processing of poultry, cattle, fish and shrimps. In its poultry breeding segment (8.7% of 2019 sales), as of 2019, the Company had around 78 breeding farms and 27 hatcheries in various parts of Indonesia. The Company produces and markets both broiler and layer day old chicks. The Company's aquaculture segment (8.7% of 2019 sales) covers fish, shrimp, and eel feeds, shrimp and freshwater fish breeding, shrimp, eel, freshwater fish farming, and fish processing industry and cold storage. In addition, in two of its other segments, commercial farm and poultry processing (40.7% of 2019 sales) and beef (2.1% of 2019 sales) segments, the Company owns and operates poultry and cattle slaughterhouses. Considering the Company's intensive farming operations integrated within its different business segments, we have reasonably assumed that it derives at least 10% of its sales from this activity.
- Genetic engineering: Japfa Comfeed Indonesia Tbk PT supplies own-branded food products potentially containing GMOs. In its animal feed segment (36.8% of 2019 sales), the Company produces and markets animal feed products, especially poultry feed, in Indonesia under the Comfeed and Benefeed trademarks. It indicates, in its Sustainability Report 2019, that its feed for its aquaculture feed is GMO-free. The Company also appears to have a local supply of corn for its poultry partnering with farmers in Indonesia. Japfa Comfeed Indonesia Tbk PT does not appear to have adopted a group GMO policy. However, since it operates in Indonesia, requiring GMO foods labelling, we have reasonably assumed that the Company has adopted a Labelling / Partial avoidance GMO policy.

The Issuer appear to be not involved in any of the other controversial activities screened under our methodology, namely: Alcohol, Cannabis, Chemicals of concern, Civilian firearms, Coal, Fossil Fuels industry, Unconventional oil and gas, Gambling, Human embryonic stem cells, High interest rate lending, Military, Nuclear Power, Pornography, Reproductive Medicine and Tobacco.

The controversial activities research provides screening of companies to identify involvement in business activities that are subject to philosophical or moral beliefs. The information does not suggest any approval or disapproval on their content from V.E.

METHODOLOGY

In V.E' view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organisation, activity or transaction. In this sense, V.E provides an opinion on the Issuer's ESG performance as an organisation, and on the processes and commitments applicable to the intended issuance.

Our Second Party Opinions (SPOs) are subject to internal quality control at three levels (Analyst, Project Manager and Quality Reviewer). If necessary, this process is complemented by a final review and validation by the Expertise Committee and Supervisor. A right of complaint and recourse is guaranteed to all companies under our review, following three levels: first, the team in contact with the Issuer; then the Executive Director in charge of Methods, Innovation & Quality; and finally, V.E' Scientific Council. All employees are signatories of V.E' Code of Conduct, and all consultants have also signed its add-on covering financial rules of confidentiality.

ISSUANCE

Alignment with the Sustainability-Linked Bond Principles

Scale of assessment: Not aligned, Partially aligned, Aligned, Best Practices

The Framework (only the Sustainability-Linked Bonds part) has been evaluated by V.E according to the ICMA's Sustainability-Linked Bond Principles - June 2020 ("SLBP") and on our methodology based on international standards and sector guidelines applicable in terms of ESG management and assessment.

Selection of Key Performance Indicators (KPIs)

KPI's materiality and coherence with the Issuer overall sustainability strategy and with the Issuer sector's main sustainability challenges. KPI's measurability and clarity, internal and external control over the KPI's data, exhaustiveness of the KPI's coverage.

Calibration of Sustainability Performance Targets (SPTs)

Coherence of the SPTs with the overall sustainability strategy, ambition of the SPTs (compared the Issuer's own performance, sector peers and relevant international standards), trigger events' disclosure, disclosure and credibility of the means for achievement (including scope and geographical coverage of the means).

Bond characteristics

Disclosure of the bond characteristics' variation, meaningfulness of these variation.

Reporting

Reporting process formalisation and verification, data's accessibility.

Verification

Verification of the performance against the SPTs and disclosure of the assurance reports.

ISSUER

Management of stakeholder-related ESG controversies

A controversy is an information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation based on unproven facts.

V.E reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources is considered as long as it is public, documented and traceable.

V.E provides an opinion on companies' controversies risks mitigation based on the analysis of 3 factors:

- **Frequency:** reflects for each ESG challenge the number of controversies that the Issuer has faced. At corporate level, this factor reflects on the overall number of controversies that the Issuer has faced and the scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).

- **Severity:** the more a controversy is related to stakeholders' fundamental interests, proves actual corporate responsibility in its occurrence, and have caused adverse impacts for stakeholders and the Issuer, the higher its severity is. Severity assigned at the corporate level will reflect the highest severity of all cases faced by the Issuer (scale: Minor, Significant, High, Critical).
- **Responsiveness:** ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the Issuer for all cases faced (scale: Proactive, Remediate, Reactive, Non- Communicative).

The impact of a controversy on an Issuer's reputation reduces with time, depending on the severity of the event and the Issuer's responsiveness to this event. Conventionally, V.E' controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.

Involvement in controversial activities

17 controversial activities have been analysed following 30 parameters to screen the Issuer's involvement in any of them. The Issuer's level of involvement (Major, Minor, No) in a controversial activity is based on:

- An estimation of the revenues derived from controversial products or services.
- The specific nature of the controversial products or services provided by the Issuer.

V.E'S ASSESSMENT SCALES

Scale of assessment of the KPI(s) materiality and the associated SPT(s) ambition.	
Advanced	The selected KPI(s) reflects the most material issues for the Issuer's core sustainability and business strategy and address the most relevant environmental, social and/or governance challenges of the industry sector.
	An advanced ambition is achieved when the SPT(s) can demonstrate the following: (i) alignment with the 2D scenario/recognized sector standards (ii) a top performance in comparison to sector peers, and (iii) an improvement of the company's performance.
Robust	The selected KPI(s) reflects material issues for the Issuer's core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector.
	A robust ambition is achieved when the SPT(s) can demonstrate at least two out of three of the following items: (i) alignment with the 2D scenario/recognized sector standards (ii) a performance in line with the average performance of sector peers, and (iii) an improvement of the company's performance.
Limited	The selected KPI(s) does not appropriately reflect material issues for the Issuer's core sustainability and business strategy and partially address relevant environmental, social and/or governance challenges of the industry sector.
	A limited ambition is achieved when the SPT(s) can demonstrate only one out of three of the following: (i) alignment with the 2D scenario/recognized sector standards (ii) a performance in line with the average performance of sector peers, and (iii) an improvement of the company's performance.
Weak	The selected KPI(s) does not reflect material issues for the Issuer's core sustainability and business strategy and do not address relevant environmental, social and/or governance challenges of the industry sector.
	A weak ambition is achieved when the SPT(s) (i) is not aligned the 2D scenario/recognized sector standards (ii) is below the average performance of its sector peers, and (iii) shows a negative trend in the company's performance.

Scale of assessment of financial instrument's alignment with Sustainability-Linked Bond Principles	
Best Practices	The Instrument's practices go beyond the core practices of the ICMA's Sustainability-Linked Bond Principles by adopting recommended and best practices.
Aligned	The Instrument has adopted all the core practices of the ICMA's Sustainability-Linked Bond Principles.
Partially Aligned	The Instrument has adopted a majority of the core practices of the ICMA's Sustainability-Linked Bond Principles, but not all of them.
Not Aligned	The Instrument has adopted only a minority of the core practices of the ICMA's Sustainability-Linked Bond Principles.

DISCLAIMERS

Transparency on the relation between V.E and the Issuer: V.E has not carried out any audit mission or consultancy activity for PT Japfa Tbk. No established relation (financial or commercial) exists between V.E and the Issuer. V.E's conflict of interest policy is covered by its Code of Conduct, which can be found at <http://vigeo-eiris.com/wp-content/uploads/2018/07/Code-of-Conduct-Vigeo-Eiris-EN.pdf>.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bond, based on the information which has been made available to V.E. V.E has neither interviewed stakeholders out of the Issuer's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by V.E neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. V.E is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

Restriction on distribution and use of this opinion: The deliverables remain the property of V.E. The draft version of the Second Party Opinion by V.E is for information purpose only and shall not be disclosed by the client. V.E grants the Issuer/Borrower all rights to use the final version of the Second Party Opinion delivered for external use via any media that the Issuer/Borrower shall determine in a worldwide perimeter. The Issuer/Borrower has the right to communicate to the outside only the Second Party Opinion complete and without any modification, that is to say without making selection, withdrawal or addition, without altering it in any way, either in substance or in the form and shall only be used in the frame of the contemplated concerned bond(s) issuance. The Issuer acknowledges and agrees that V.E reserves the right to publish the final version of the Second Party Opinion on V.E's website and on V.E's internal and external communication supporting documents.

© 2020 Vigeo SAS and/or its licensors and subsidiaries (collectively, "V.E"). All rights reserved.

V.E provides its customers with data, information, research, analyses, reports, quantitative model-based scores, assessments and/or other opinions (collectively, "Research") with respect to the environmental, social and/or governance ("ESG") attributes and/or performance of individual issuers or with respect to sectors, activities, regions, stakeholders, states or specific themes.

V.E'S RESEARCH DOES NOT ADDRESS NON-ESG FACTORS AND/OR RISKS, INCLUDING BUT NOT LIMITED TO: CREDIT RISK, LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. V.E'S RESEARCH DOES NOT CONSTITUTE STATEMENTS OF CURRENT OR HISTORICAL FACT. V.E'S RESEARCH: (i) DOES NOT CONSTITUTE OR PROVIDE CREDIT RATINGS OR INVESTMENT OR FINANCIAL ADVICE; (ii) IS NOT AND DOES NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES; AND (iii) DOES NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. V.E ISSUES ITS RESEARCH WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

V.E'S RESEARCH IS NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE V.E'S RESEARCH WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. V.E'S RESEARCH IS NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT V.E'S PRIOR WRITTEN CONSENT.

ALL INFORMATION CONTAINED HEREIN IS OBTAINED BY V.E FROM SOURCES BELIEVED BY IT TO BE ACCURATE AND RELIABLE. BECAUSE OF THE POSSIBILITY OF HUMAN OR MECHANICAL ERROR AS WELL AS OTHER FACTORS, HOWEVER, ALL INFORMATION CONTAINED HEREIN IS PROVIDED "AS IS" WITHOUT WARRANTY, EXPRESS OR IMPLIED, OF ANY KIND, INCLUDING AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. V.E IS NOT AN AUDITOR AND CANNOT IN EVERY INSTANCE INDEPENDENTLY VERIFY OR VALIDATE INFORMATION IT RECEIVES.

To the extent permitted by law, V.E and its directors, officers, employees, agents, representatives, licensors and suppliers (together, "V.E Parties") disclaim liability to any person or entity for any (a) indirect, special, consequential, or incidental losses or damages, and (b) direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded); on the part of, or any contingency within or beyond the control of any V.E Party, arising from or in connection with the information contained herein or the use of or inability to use any such information.