Synlait

SYNLAIT MILK LTD

GREENHOUSE GAS INVENTORY REPORT – FY20

INTRODUCTION

Synlait Milk Limited (Synlait) combines expert and sustainable farming practices with state-of-the-art manufacturing processes to produce a range of nutritional milk products that provide genuine benefits for human health and wellbeing. Our purpose *Doing Milk Differently For A Healthier World* is driven by being different, essential nutrition and sustainability. Our disruptive, innovative spirit combined with resolute determination to do the right thing for planet and people sets us apart from the competition.

Within our sustainability strategy, we have defined the following climate change targets:

- Off-farm: 50% reduction in CO_2e per kilogram of product by 2028, vs 2017-18 base year
- On-farm: 35% reduction in CO_2e per kilogram of milk solids by 2028, vs 2017-18 base year
    - 50% reduction in N_2O per kilogram of milk solids by 2028, vs 2017-18 base year
    - 30% reduction in CH_4 per kilogram of milk solids by 2028, vs 2017-18 base year
    - 30% reduction in CO_2 per kilogram of milk solids by 2028, vs 2017-18 base year

STATEMENT OF INTENT

This inventory report forms part of Synlait's commitments to sustainability and environmental best practice and informs the senior management's decision-making relating to the organisation's sustainability strategy. We intend to make this report publicly available through our website.

BASE YEAR

The base year is 1 August 2017 – 31 July 2018 (FY18). This is the first 12 months period where GHG emissions were calculated and forms the base year for Synlait.

Base year emissions have been restated this year due to an update in OVERSEER®'s software as well as a number of other reasons which are detailed under table 2.

REPORTING PERIOD

This document is our Year 2 Greenhouse Gas (GHG) emissions inventory report, for the period 1 August 2019 to 31 July 2020 (FY20).

GHG INVENTORY SUMMARY FOR FY20

Table 1: GHG Emissions by scopes

	FY18* (base year) – tCO_2e	FY19* – tCO_2e	FY20 – tCO_2e
Scope 1	114,589	120,127	133,609
Scope 2	6,923	7,035	8,804
Scope 3 (off-farm)	43,996	47,947	50,107
Scope 3 (on-farm) **	743,959	734,858	837,296
Total	**909,467**	**909,967**	**1,029,816**
Emissions intensity	1,035 per $M revenue	888 per $M revenue	834 per $M revenue***

* FY18 and FY19 totals restated this year, please refer to notes under Table 2.

** On-farm emissions are for the period 1 July 2019 to 30 June 2020. New suppliers, whose contract agreements started on 1 June 2020, were excluded from both the GHG footprint and milk solids production numbers, as they would have supplied Synlait for only 30 days.

*** The revenue stated in Synlait's FY20 Annual Report includes Dairyworks, however, the revenue from Dairyworks has been excluded in the GHG Inventory Report as it is not within scope for FY20.

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Table 2: GHG Emissions by activities

Emissions sources	FY18 – tCO_2e	FY19 – tCO_2e	FY20 – tCO_2e
Scope 1			
LPG	470	503	586
Coal	108,301	113,643	114,082
Diesel – Milk Tankers *1	4,302	4,196	6,035
Diesel – Boiler *2	Not applicable	Not applicable	906
Distributed Natural Gas	163	169	10,058
Company Cars	73	76	84
Combi lift & Bus *3	0	125	105
Packing Gas	1,266	1,349	1,719
Rental Cars	14	46	34
Refrigerants	0	20	0
Scope 2			
Electricity	6,923	7,035	8,804
Scope 3			
Gas Transmission Losses	19	20	1,181
Electricity transmission losses	565	533	667
Waste to landfill	421	1,108	1,699
Coal & DAF transport	212	209	635
Road freight (outbound) *4	2,481	2,683	3,475
Road freight (inbound) *4	2,152	2,265	2,688
Sea freight (outbound) *4	25,540	25,151	25,831
Sea freight (inbound) *4	9,377	11,983	8,971
Air freight (outbound) *4	392	551	1,617
Air freight (inbound) *4	0	0	99
Inter-warehouse road freight *4	559	605	644
Inter-warehouse sea freight *4	307	756	1,306
Car mileage	4	9	22
Taxi	3	4	Excluded as de minimis
Air travel	1,814	1,829	1,223
Hotel	150	241	49
On-farm emissions *5	743,959	734,858	837,296
Total GHG emissions	**909,467**	**909,967**	**1,029,816**

***1 =** Diesel usage previously included milk tankers, coal & DAF trucks, some inbound/outbound road freight transport, combi lift and employee bus. This has now been separated out to correctly account for milk tankers, combi lift and employee bus in Scope 1, while the other transport activities are separately calculated and reported under Scope 3. In our FY19 GHG Inventory Report, we had disclosed the overall emissions relating to Diesel as FY18 – 5,772 tCO2e, FY19 – 5,692 tCO2e.

***2 =** Diesel boiler is a new emissions source associated with the newly acquired Talbot Forest Cheese.

***3 =** As per *1, combi lift and employee bus emissions were reported with the overall diesel emissions in the FY18 and FY19 inventories. Now they have been split out to be reported separately.

***4 =** A new methodology has been defined to calculate freight activities, as the previous methodology had inconsistencies and a narrow scope: for example, inbound freight was previously calculated for top 30 suppliers only, whereas now freight emissions from all raw materials and packaging suppliers are accounted for – see the 'Operational Boundary' section for more information. To ensure consistency, completeness and practicality in ongoing assessment of freight emissions, a new set of assumptions have been applied and recalculated for all periods. – see the 'Methodologies and Uncertainties' section for more details. In our FY19 GHG Inventory Report, we had disclosed the following results:

- Road freight (Outbound): FY18 – 483 tCO2e, FY19 – 756 tCO2e
- Road freight (Inbound): FY18 – 182 tCO2e, FY19 – 103 tCO2e
- Air freight (Outbound): FY18 – 443 tCO2e, FY19 – 654 tCO2e
- Air freight (Inbound): FY18 – 0 tCO2e, FY19 – 0 tCO2e
- Sea freight (Outbound): FY18 – 21,419 tCO2e, FY19 – 24,639 tCO2e
- Sea freight (Inbound): FY18 – 8,743 tCO2e, FY19 – 10,456 tCO2e
- Inter-warehouse Road freight: FY18 – 0 tCO2e, FY19 – 0 tCO2e
- Inter-warehouse Sea freight: FY18 – 0 tCO2e, FY19 – 282 tCO2e

***5** = Our on-farm GHG data is extracted from OVERSEER®, a New Zealand farm management software that is used by all our farmer suppliers. As science evolves and progresses our understanding of farm systems, OVERSEER®'s software is regularly updated. As a result, each year, we are required to update our on-farm GHG data using OVERSEER®'s latest version and restate the numbers back to our base year, FY18, in order to make robust comparisons. In our FY19 GHG Inventory Report, we had disclosed the following results:

- On-farm emissions: FY18 – 727,500 tCO2e, FY19 – 714,008 tCO2e
- Total emissions: FY18 – 884,648 tCO2e, FY19 – 883,255 tCO2e

Figures in tables 1 and 4 have also been updated. These were detailed in the FY19 Inventory report as:

- On-farm emissions intensity (per tonne of milk solids): FY18 – 11.44 tCO2e, FY19 – 11.18 tCO2e
- Scope 3 emissions: FY18 – 761,746 tCO2e, FY19 – 754,642 tCO2e

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Table 3: FY20 GHG emissions by gas type

FY20 emissions by type	Total-tCO_2e	CO_2- tCO_2e	CH_4 -tCO_2e	N_2O-tCO_2e	HFC-tCO_2e
On-farm emissions	837,296	132,256	535,040	170,000	0
Off-farm emissions	192,520	187,613	3,653	1,254	0

Table 4: Emissions intensity – total and per year

Emission intensity metrics	FY18 tCO_2e	FY19 tCO_2e	FY20 tCO_2e	FY28 target tCO_2e
On-farm emissions/tonne of milk solids[1]	11.69	11.51	10.92	7.60
Off-farm emissions/tonne of production[2]	1.19	1.20	1.00	0.59

Table 5: FY20 emissions intensity by gas type

FY20 emission intensity metrics	Total-tCO_2e	CO_2- tCO_2e	CH_4 -tCO_2e	N_2O-tCO_2e	HFC-tCO_2e
On-farm emissions/tonne of milk solids[1]	10.92	1.72	6.98	2.22	0.00
Off-farm emissions/tonne of production[2]	1.00	0.97	0.02	0.01	0.00

[1] While the reporting period for all our data corresponds to our financial year (1 August to 31 July), our on-farm GHG emissions and milk solids production are based on OVERSEER®'s reporting period, which is 1 July to 30 June.

[2] Our Advanced Dairy Liquid Packaging Facility was commissioned during FY19, so fresh milk production was excluded in FY18 and FY19; however, it has been included in FY20 production data using the following assumption: 1L milk = 1kg product. The net production reported in the FY20 Annual Report excludes production from the Advanced Dairy Liquid Packaging Facility and Talbot Forest Cheese, however, production from these sites has been included in the GHG Inventory report as those two facilities are within scope.

ORGANISATIONAL BOUNDARY

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO14064-1:2018 standards.

The following table outlines the entities that have been included and excluded in the emissions inventory:

Table 6: Legal entities

Entity name	Description/ Function	Ownership	Status	Comment
Synlait Milk Limited	Parent company	100%	Included	
Synlait Milk Finance	Wholly owned subsidiary, holding company for financing purposes.	100%	Included	No activities that produce GHG emissions therefore not separately reported.
New Zealand Dairy Company	Wholly owned subsidiary, company that previously owned the land to our Auckland facility. The company was acquired at the same time as land purchase.	100%	Included	No activities that produce GHG emissions therefore not separately reported.
Eighty-Nine Richard Pearse Drive Limited	Wholly owned subsidiary, company that previously owned the land to our Auckland facility. The company was acquired at the same time as land purchase.	100%	Included	No activities that produce GHG emissions therefore not separately reported
Synlait Business Consulting (Shanghai)	Wholly owned subsidiary, satellite office for staff based in China.	100%	Included	GHG emissions estimated to be de minimis, therefore not reported.
Synlait Foods (Talbot Forest)	Wholly owned subsidiary, cheese manufacturing site based in Temuka.	100%	Included	New acquisition (August 2019).
Sichuan New Hope Nutritional Foods		25%	Excluded	Shareholding only, no operational control.
Dairyworks and Dairyworks (Australia) Pty	Wholly owned subsidiaries, dairy processing companies in New Zealand and Australia.	100%	Excluded	New acquisition (April 2020).

The following table outlines the business units/sites that have been included and excluded in the emissions inventory:

Table 7: Business units

Business units/ sites	Description/ Function	Location	Status	Comment
Corporate	Corporate emissions across all sites	Dunsandel	Included	Includes staff travel and freight emissions which are not site specific.
Synlait Dunsandel	Milk processing & manufacturing	Dunsandel	Included	Includes milk supply, manufacture and site-specific emissions only.
Synlait Auckland	Milk powder canning and blending site	Auckland	Included	Includes manufacture and site-specific emissions only.
Synlait Pokeno	Milk processing & manufacturing	Pokeno	Included	Newly constructed facility commissioned in FY20. Includes milk supply, manufacture and site-specific emissions only.
Westney Road	Warehousing	Auckland	Included	Leased premise.
Talbot Forest Cheese	Cheese production factory	Temuka	Included	Includes milk supply, manufacture and site-specific emissions only.
Synlait Research and Development Centre	Research and development centre, part of a larger shared campus	Palmerston North	Excluded	Office space leased and emissions estimated to be de minimis.
Synlait Christchurch	Satellite office	Christchurch	Excluded	Office space leased and emissions estimated to be de minimis.
Synlait China	Satellite office	Shanghai	Excluded	Office space leased and emissions estimated to be de minimis.

OPERATIONAL BOUNDARY

Synlait has chosen to report on Scope 1 and Scope 2 emissions, as well as part of Scope 3 emissions.

Table 8: Scope 3 categories included in the inventory

Category	Comment
Category 1 – Purchased goods and services	GHG emissions from Canterbury and Waikato dairy farms supplying Synlait were included in the inventory. However, emissions from dairy cows when they are wintering, i.e. when they are removed from milking platforms and sent to other farms during winter, were excluded from the inventory.
Category 2 – Capital goods	Emissions from capital assets have been excluded, however electricity for the construction of our Pokeno site has been included.
Category 3 – Fuel and energy related activities not included in Scope 1 or Scope 2	Transmission losses linked to the purchase of electricity and natural gas were included in the inventory.
Category 4 – Upstream transportation and distribution	Sea freight may have a component of road and rail; however, we have not received this information from suppliers. An assumption of 50 km from site to port and 50 km from port to final destination has been made to cover the road component and included in the inventory. Any rail freight is estimated to be de minimis. Inbound freight data includes all raw material and packaging purchases. Engineering purchases have been excluded due to the weight information being unavailable and it is estimated that most of the inbound parts are under 2kg, therefore deemed de minimis.
Category 5 – Waste	Waste from all manufacturing sites was included.
Category 6 – Business travel	Air travel (domestic and international), hotel stays and reimbursed travel in private cars were included. Taxis have been excluded for FY20 as significant manual work is required to obtain the information and they have been shown to be de minimis in previous years.
Category 7 – Employee commuting	Excluded.
Category 8 – Upstream leased assets	Synlait does not have any upstream leased assets.
Category 9 – Downstream transportation and distribution	All outbound sea, road and air freight were included. However, outbound couriers were excluded from the inventory. Since FY19 we have also included our inter-warehouse sea and road freight, i.e. finished inventory and raw materials that are transported between premises under Synlait's control for storage management purposes. This source of emissions had not been calculated in FY18 and will be included as part of restatement of inventory.
Category 10 – Processing of sold products	Excluded. Most of our ingredients are processed by our customers into a multitude of products. It would be technically difficult to estimate our share of our customers' processing GHG emissions.
Category 11 – Use of sold products	Excluded. We have carried Life Cycle Analyses for two of our key products and in both cases GHG emissions from consumer use represented less than 2.4% of total emissions.
Category 12 – End-of-life treatment of sold products	Excluded. We have carried Life Cycle Analyses for two of our key products and in both cases GHG emissions from consumer disposal represented less than 0.3% of total emissions.
Category 13 – Downstream leased assets	Included. We lease a warehousing facility in Auckland (Westney Road). Emissions from LPG use are included in scope 1, electricity consumption is included in scope 2, waste and refrigerants are included in scope 3.
Category 14 – Franchises	Synlait does not operate any franchises.
Category 15 – Investments	Not evaluated, and therefore excluded.

METHODOLOGIES AND UNCERTAINTIES

The inventory has been prepared in accordance with the requirement of the Greenhouse Gas Protocol and ISO 14064-1:2018 specification. Where relevant, the inventory is aligned with industry or sector best practice for emissions measurement and reporting.

An operational control consolidation approach was used to account for emissions.

Synlait used a Microsoft Excel spreadsheet to calculate GHG emissions.

Emissions source inclusions

Table 9 below provides an overview of how data were collected for each GHG emissions source, the source of the data and an explanation of any uncertainties or assumptions made.

Table 9: Emissions source inclusions and source data uncertainties

Emissions sources	Scope	Business unit reported	Purpose	Data process / uncertainties
Sub-Bituminous Coal	1	Synlait Dunsandel	Process heat.	Weighbridge tonnage recorded from supplier invoices on a monthly basis.
Distributed Natural Gas & Gas Transmission Losses	1 & 3	Synlait Auckland and Synlait Pokeno	Process heat.	Monthly invoices provide natural gas consumption data in kWh and in GJ.
Diesel – Milk tankers	1	Synlait Dunsandel, Synlait Pokeno and Talbot Forest Cheese (non-applicable to Synlait Auckland)	Road transport of milk from farm to manufacturing sites, and transfer of milk between factories.	Our transportation partner is contracted to use their vehicles for milk transportation – they are not owned by Synlait. However, as most milk tankers have Synlait branding and do transport for Synlait exclusively, diesel used for milk transportation has been allocated to Scope 1. A system is in place to record individual trips (km) that are allocated to Synlait. Average fuel efficiency for each vehicle type is used to convert km to L diesel usage.
Diesel – Boiler	1	Talbot Forest Cheese	Process heat.	Monthly invoices provide the amount of fuel purchases in litres.
LPG	1	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Westney Road	Mainly used for forklifts.	The supplier provides a monthly usage report.
Packing CO2	1	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Talbot Forest Cheese	Used for packing.	The suppliers provide a monthly usage report.
Company Vehicles	1	Corporate	Business travel.	Fuel card information provides fuel purchases in Litres by fuel type.
Combi lift and Bus	1	Corporate	Business travel	Diesel purchases are provided in Litres at the end of each financial year.
Rental Cars	1	Corporate	Business travel.	The supplier provides a monthly usage report. The report includes travel distances and class of rental vehicle.

Emissions sources	Scope	Business unit reported	Purpose	Data process / uncertainties
Refrigerants	1 & 3	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Westney Road and Talbot Forest Cheese	All units and systems that use refrigerants such as air-conditioning, chillers, fridges.	Suppliers confirm whether or not any top ups have occurred and if so provide amount and type of gas topped up. All refrigerants are in scope 1 except for Westney Road's which are in scope 3.
Electricity & Electricity Transmission Losses	2 & 3	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Westney Road and Talbot Forest Cheese	Office and manufacturing use.	The supplier provides a monthly usage report.
Outbound Freight (Sea, Road and Air)	3	Corporate	Delivery of finished goods to national and international distributors.	Distances in km are calculated from origin and destination countries and multiplied by the weight of goods delivered to obtain tonnes per kilometre (TKM). Information on the exact discharge port is not readily available therefore the first alphabetically listed port was used for distance calculation. We have made the following assumptions: 1/ all sea consignments depart from Lyttleton Port, 2/ all road consignments depart from Dunsandel, 3/ all air consignments depart from Christchurch International Airport, 4/ consignments travel directly to final destination, 5/ the road components for sea and air freight (from original location to port and from port to final destination) are 50km at each end, making it an estimated 100km of road freight and 6/ all air consignments are >3700km therefore the long haul emissions factor is to be used.
Inbound Freight (Sea, Road and Air)	3	Corporate	Procurement of ingredients and packaging materials.	Distances in km are calculated from origin and destination countries and multiplied by the weight of goods delivered to obtain tonnes per kilometre (TKM). Information on the exact discharge port is not readily available therefore the first alphabetically listed port was used for distance calculation. We have made the following assumptions: 1/ all sea consignments arrive at Lyttleton Port, 2/ all air consignments arrive at Christchurch International Airport, 3/ all road consignments travel the average distance of 358km (this is the average distance from major cities in New Zealand to Dunsandel), 4/ the road components for sea and air freight (from original location to port and from port to final destination) are 50km at each end, making it an estimated 100km of road freight and 5/ all air consignments are >3700km therefore the long haul emissions factor is to be used.
Inter-Warehouse Freight (Road and Sea)	3	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Westney Road	Movement of goods between sites and warehousing facilities.	The total weights moved between each site are multiplied by distance between the sites. Assumed all inter-island transfers travelled by sea and are transported to and from the nearest port to the site.

Emissions sources	Scope	Business unit reported	Purpose	Data process / uncertainties
Diesel – Trucks	3	Synlait Dunsandel and Synlait Pokeno	Road transport of coal and DAF sludge.	The supplier records km and converts to L diesel usage based on average fuel efficiency for each vehicle type.
Air Travel, Hotels	3	Corporate	Business travel.	The supplier provides a monthly usage report. The report includes travel distances and class of travel. Hotel information includes location and number of nights.
Waste to Landfill	3	Synlait Dunsandel, Synlait Auckland, Synlait Pokeno, Westney Road and Talbot Forest Cheese	Manufacturing and office waste.	Waste data is accessed directly through the waste management provider's online portal. The mixed waste non methane recovery emissions factor is applied to all sites.
Car Mileage	3	Corporate	Staff use of own car for business travel.	Km travelled are calculated from staff mileage claims.
On-farm emissions	3	Synlait Dunsandel, Synlait Pokeno and Talbot Forest Cheese (non-applicable to Synlait Auckland)	Supply of raw milk.	On-farm emissions were directly obtained from OVERSEER®, a farm management software that models agricultural GHG emissions based on various parameters, such as the production of effluent, the application of nitrogen fertiliser and the supplements provided to the cows.

Emissions source exclusions

Table 10: Emissions source exclusions

Scope	Emissions source	Reason for Exclusion
3	Inbound & outbound couriers	To-date we have been unable to collect this data from suppliers. Most courier items are estimated to be less than 2kg, therefore are considered de minimis.
3	Inbound & outbound rail freight	The sector from seaport to inland port by rail has been excluded (de minimis).
3	Taxi	It has been proven to be de minimis in previous inventories and due to data being highly manual to obtain, have been excluded in this inventory.

Emissions factors

Emissions factors released by MfE (2019) were used where available. Where there were no appropriate MfE factors, DEFRA (2019) factors were used.

Base year recalculation policy

Base year data may need to be revised when material changes occur and have an impact on calculated emissions. When the changes are estimated to represent more than 5% of Scope 1, 2 or 3 emissions, or when there are significant changes to our reporting boundaries or calculation methodology (such as an update in OVERSEER®'s software), our policy is to recalculate base year data and to disclose previously stated data in a separate note.

GHG information management and monitoring procedures

GHG emissions are measured annually and compared against the base year. The calculated GHG emissions are stored in an Excel summary for the relevant inventory year. A detailed management report outlining data collection processes, roles and responsibilities, GHG measurement methodology, document retention, archiving and record keeping procedures for each emissions source, is prepared each year. It also provides information on the internal review process as well as the procedure to address errors and omissions in the GHG Inventory report.

Synlait's GHG Inventory is prepared by employees and contractors that have experience calculating GHG emissions. If a new person was in charge of the GHG Inventory, Synlait would provide appropriate training to that person to ensure accuracy and consistency of the GHG calculations.

Other emissions – HFC, PFC, NF3 and SF6

Air conditioning units and chillers contain HFCs. No sites have reported any top-ups of gas for this reporting period. Air conditioning is excluded from the inventory where offices are leased.

There are no operations that use PFC, NF3 or SF6.

Other emissions - biomass

532 tonnes of wood pellet fuel were consumed during FY20. The CO_2 content of the wood pellets is 458 tonnes, which represents the carbon sequestered during the growing process. This means that the relevant measure of emissions for the purposes of disclosure is therefore limited to methane (CH_4) and nitrous oxide (N_2O). This totals to 8 tCO_2e.

Emissions sources	FY20 – tCO2e	**CO_2 – tCO_2e**	CH_4 – tCO_2e	N_2O – tCO_2e
Biomass	8	458	3	5

GHG INVENTORY ASSURANCE

Deloitte Limited has been appointed as the third-party independent assurance provider. A reasonable level of assurance has been given over the Scope 1 and 2 assertions and quantifications included in this report and a limited level of assurance over the Scope 3 assertions and quantifications.

Person responsible:	Hamish Reid, Director of Sustainability and Brand	Frequency of report:	Once a year
Dated:	30 October 2020	Base year:	2017-2018 (FY18)

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INDEPENDENT REASONABLE AND LIMITED ASSURANCE REPORT
TO THE BOARD OF DIRECTORS OF SYNLAIT MILK LIMITED

Report on Greenhouse Gas Emissions Inventory Report

We have undertaken a reasonable assurance engagement in relation to Scope 1 and 2 emissions and a limited assurance engagement in relation to Scope 3 emissions within the Greenhouse Gas Inventory Report (the 'Inventory Report') of Synlait Milk Limited and its subsidiaries ('Synlait Milk Limited') for the year ended 31 July 2020, comprising the Emissions Inventory and the explanatory notes set out on pages 1 to 14.

The Inventory Report provides information about the greenhouse gas emissions of Synlait Milk Limited for the year ended 31 July 2020 and is based on historical information. This information is stated in accordance with the requirements of International Standard ISO 14064-1 Greenhouse gases – Part 1: *Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals* ('ISO 14064-1:2018') and the Greenhouse Gas Protocol: *A Corporate Accounting and Reporting Standard (2004)* ('the GHG Protocol').

Board of Directors' Responsibility

The Board of Directors are responsible for the preparation of the Inventory Report, in accordance with ISO 14064-1:2018 and the GHG Protocol. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of an Inventory Report that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on Scope 1 and 2 emissions and a limited assurance conclusion on Scope 3 emissions in the Inventory Report based on the evidence we have obtained. We conducted our reasonable and limited assurance engagements in accordance with International Standard on Assurance Engagements (New Zealand) 3410: *Assurance Engagements on Greenhouse Gas Statements* ('ISAE (NZ) 3410'), issued by the New Zealand Auditing and Assurance Standards Board. That standard requires that we plan and perform the engagement so as to obtain reasonable assurance that Scope 1 and 2 emissions within the Inventory Report, and limited assurance that Scope 3 emissions within the Inventory Report are free from material misstatement, respectively.

Reasonable assurance for Scope 1 and 2 emissions

A reasonable assurance engagement undertaken in accordance with ISAE (NZ) 3410 involves performing procedures to obtain evidence about the quantification of emissions and related information in the Inventory Report. The nature, timing and extent of procedures selected depend on the assurance practitioner's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error, in the Inventory Report. In making those risk assessments, we considered internal control relevant to the Company's preparation of the Inventory Report. We also:

- Assessed the suitability in the circumstances of the Synlait Milk Limited's use of ISO 14064-1:2018 and the GHG Protocol as the basis for preparing the Inventory Report;
- Evaluated the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by the Synlait Milk Limited; and
- Evaluated the overall presentation of the Inventory Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance opinion in respect of the Scope 1 and 2 emissions.

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Limited assurance for Scope 3 emissions

A limited assurance engagement undertaken in accordance with ISAE (NZ) 3410 involves assessing the suitability in the circumstances of the Company's use of ISO 14064-1:2018 and the GHG Protocol as the basis for the preparation of the inventory report, assessing the risks of material misstatement of the inventory report whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the inventory report. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.
The procedures we performed were based on our professional judgement and included enquiries, observations of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Reviewed adherence to the principles and requirements outlined in ISO 14064-1:2018 and the GHG Protocol, which included a consideration of completeness;
- Obtained an understanding of the process of compiling and validating information received from data owners for inclusion in the Inventory Report;
- Reviewed material quantitative data, including corroborative enquiry and examined selected supporting documentation and calculations; and
- Compared the Inventory Report to the reporting requirements of ISO 14064-1:2018 and the GHG Protocol.

Inherent Limitations

Scope 1, 2 and 3 emissions

Non-financial information, such as that included in Synlait Milk Limited Inventory Report, is subject to more inherent limitations than financial information, given both its nature and the methods used and assumptions applied in determining, calculating and sampling or estimating such information. Specifically, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

As the procedures performed for this engagement are not performed continuously throughout the relevant period and the procedures performed in respect of the Company's compliance with ISO 14064-1:2018 and the GHG Protocol are undertaken on a test basis, our assurance engagement cannot be relied on to detect all instances where the company may not have complied with the ISO 14064-1:2018 and the GHG Protocol. Because of these inherent limitations, it is possible that fraud, error or non-compliance may occur and not be detected.

The Company uses publicly available emissions factors in preparation of the Greenhouse Gas Inventory. We have agreed these to their source, but the scope of the engagement does not provide assurance over the emissions factors or the agricultural science used to determine the emissions factors.

Scope 3 emissions

For the Scope 3 emissions, we note that a limited assurance engagement is not designed to detect all instances of non-compliance with the ISA 14064-1:2018 and the GHG Protocol, as it generally comprises making enquires, primarily of the responsible party, and applying analytical and other review procedures.

In addition, Scope 3 emissions relating to on-farm emissions (especially fertiliser and methane production for dairy cows) are inherently uncertain due to the fact that they arise from natural processes which may vary depending on contributing factors.

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Our Independence and Quality Control

We have complied with the independence and other ethical requirements of Professional and Ethical Standard 1 International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) ('PES-1') issued by the New Zealand Auditing and Assurance Standards Board, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Other than in our capacity as auditor and the provision of other assurance and taxation compliance services, we have no relationship with or interests in the Company or any of its subsidiaries.

The firm applies Professional and Ethical Standard 3 (Amended): *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements* issued by the New Zealand Auditing and Assurance Standards Board, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Use of Report

Our assurance report is made solely to the directors of the Company in accordance with the terms of our engagement. Our work has been undertaken so that we might state to the directors those matters we have been engaged to state in this report and is for no other purpose. We accept or assume no duty, responsibility or liability to any other party in connection with the report or this engagement, including without limitation, liability for negligence in relation to the conclusions expressed in this report.

Reasonable Assurance Opinion for Scope 1 and 2 Emissions

In our opinion, the Scope 1 and 2 emissions of Synlait Milk Limited within the Inventory Report for the year ended 31 July 2020 have been prepared, in all material respects, in accordance with the requirements of ISO 14064-1:2018 and the GHG Protocol.

Limited Assurance Conclusion for Scope 3 Emissions

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Synlait Milk Limited's Scope 3 emissions within the Inventory Report for the year ended 31 July 2020 are not prepared, in all material respects, in accordance with the requirements of ISO 14064-1:2018 and the GHG Protocol.

Deloitte Limited

Auckland, New Zealand
30 October 2020