



SUMMARY OF TOITŪ CARBONREDUCE CERTIFICATION

WAITAKI BIOSCIENCES (A DIVISION OF PHARMAZEN LIMITED)

Year 1 of 3 year certificate period



Waitaki Biosciences (a division of Pharmazen Limited) meets the requirements of Toitū carbonreduce certification having measured its greenhouse gas emissions in accordance with the requirements of ISO 14064-1:2006 and committed to managing and reducing its emissions in respect of the operational activities of its organisation.

Waitaki Biosciences is the trading entity of the publicly listed company Pharmazen Limited. Waitaki Biosciences manufacturing plant and office is located in Christchurch and employs as many as 36 staff. The company specializes in manufacture of nutritional supplement ingredients for the human and animal health nutraceutical markets. Raw materials are sourced as quality by products from the NZ export meat, marine aquaculture and horticultural primary industries. The materials are converted in whole or part to powders using various drying and milling technologies. The products provide solutions to health conditions in single ingredient formats or as part of client designed formulations. As much as 95% of the product sales are exported to the North American, European and Asia Pacific markets.

The company acknowledges that aspects of its operations has an impact on the environment and remains committed to operating as an environmentally responsible company through waste reduction, recycling, energy saving and GHG emission reduction and mitigation.

EMISSIONS SUMMARY ¹

Waitaki Biosciences' emissions for this year (01 January 2019 to 31 December 2019) were 2,811.36 tCO₂e. The operational GHG emission sources included in this inventory are shown in Figure 1 below.

¹ **Disclaimer:** This Disclosure Statement is a summary of the verified information considered for certification and the certification decision. It should not be taken to represent the full submission for certification. Whilst every effort has been made to ensure that the information in this Disclosure Statement is accurate and complete, Enviro-Mark Solutions Limited (trading as Toitū Envirocare) does not, to the maximum extent permitted by law, give any warranty or guarantee relating to the accuracy or reliability of the information.

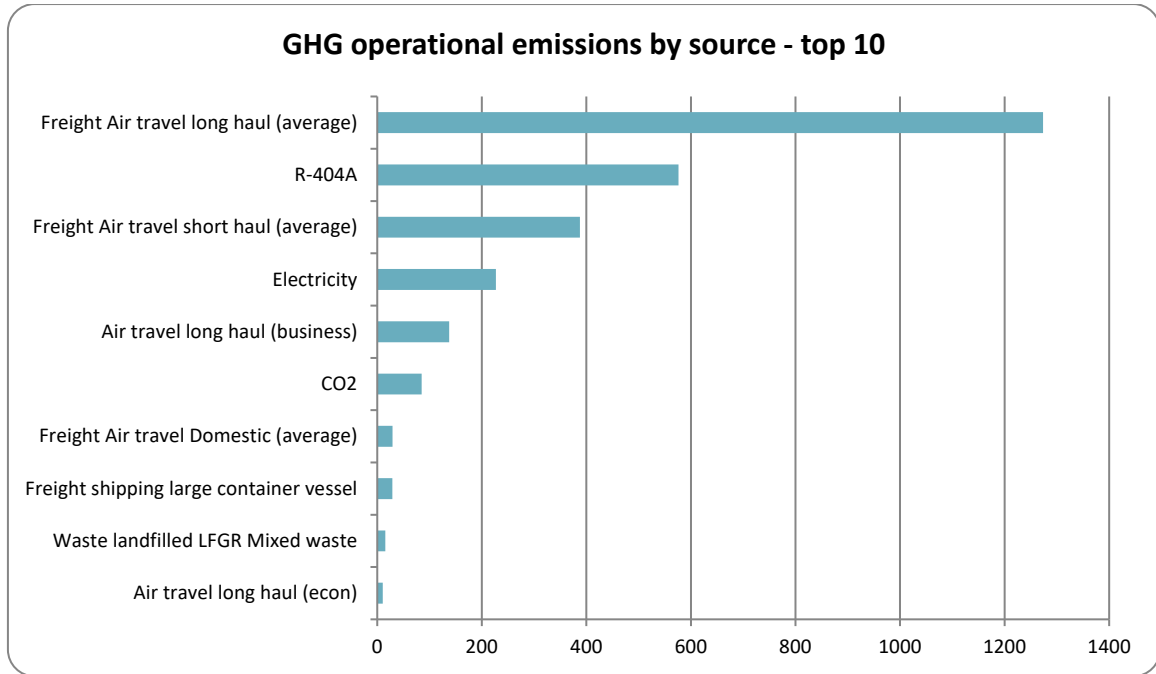


Figure 1: GHG emissions by emissions source

Emissions as tonnes of carbon dioxide equivalents (tCO₂e) for this period were:

| Scope | tCO ₂ e |
|------------------------------|--------------------|
| Scope 1 | 676.48 |
| Scope 2 | 227.09 |
| Scope 3 Mandatory | 1,906.74 |
| Scope 3 Additional | 1.05 |
| Scope 3 One time | 0.00 |
| Total gross emissions | 2,811.36 |

EMISSIONS REDUCTIONS

To reduce its emissions, Waitaki Biosciences has developed a GHG emissions management plan and reduction targets. Some of these plans include:

Waitaki Biosciences is committed to managing and reducing its emissions in accordance with the program requirements.

| Emissions reduction initiative | Target | Baseline (tCO ₂ e) | Target date |
|---------------------------------------|--------|-------------------------------|-------------|
| Reduce Long Haul airfreight | 2.5% | 1,273.66 | 30/12/2020 |
| Reduce fugitive refrigerant emissions | 2.5% | 576.14 | 30/12/2020 |
| Reduce Short Haul airfreight | 2.5% | 387.76 | 30/12/2020 |
| Reduction of Electricity use | 2.5% | 227.09 | 30/12/2020 |
| Reduce CO ₂ use | 2.5% | 85.00 | 30/12/2020 |



This is the 10th year of reporting under the Toitū carbonreduce. An absolute reduction in Scope 1 and 2 emissions of 505.77 tCO₂e has been achieved against base year. A reduction in emissions intensity (for Scope 1, 2 and mandatory Scope 3 emissions) of 132.25 tCO₂e/\$M has been achieved based upon a 5 year rolling average.

EMISSIONS BOUNDARIES

The boundary for the preparation of the organisation’s greenhouse gas (GHG) inventory is for one site. All business activities have been included.

An operational control consolidation approach was used to account for emissions. The operational control consolidation was used to account for emissions which is line with the Program methodology described in the GHG Protocol and ISO 14064-1:2006 standards.

This is with reference to the methodology described in the GHG Protocol and ISO 14064-1:2006 standards.

The following emissions sources were excluded from the inventory for this measurement period:

| Business unit | GHG emissions source | GHG emissions level scope | Reason for exclusion |
|---------------------|--------------------------------------|---------------------------|---|
| Waitaki Biosciences | Courier freight | 3 | <i>De minimis</i> . Parcels all <2kg |
| | Office air-conditioning refrigerants | 3 | <i>De minimis</i> . Domestic size units. |
| | Processing aids and cleaning agents | 3 | Embodied emissions that are outside the scope of the organisational inventory |
| | Packaging | 3 | Embodied emissions. |
| | Wastewater solids | 3 | <i>De minimis</i> |

Excluded emissions do not exceed 5% of the total footprint within the organisation boundary stated.

CERTIFICATE DETAILS

Certification status – Toitū carbonreduce certified organisation

Certificate number – 2020091J, Year 1 of 3 year certificate period

Valid until – 8 September 2023

Measurement period – 01 January 2019 to 31 December 2019

Base year – 01 January 2010 to 31 December 2010

Verified by – Enviro-Mark Solutions Limited

Level of assurance – Reasonable

Data quality score – Good

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