



GREENHOUSE GAS EMISSIONS INVENTORY AND MANAGEMENT REPORT

Toitū carbonreduce programme

Prepared in accordance with ISO 14064-1:2018 and the Technical Requirements of the Programme



Fisher & Paykel Healthcare Corporation Limited

Prepared by (lead author): Hyrine Munga

Dated: 14 May 2021

Verification status: Reasonable

Measurement period: 01 April 2020 to 31 March 2021

Base year period: 01 April 2012 to 31 March 2013

Approved for release by:

A handwritten signature in blue ink, appearing to read "Nic Bishop".

Nic Bishop

Head of Sustainability & Environmental Innovation



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This report shall not be used to make public greenhouse gas assertions without independent verification and issue of an assurance statement by Toitū Envirocare.

AVAILABILITY

The EIR report will be shared with Stakeholders via our website and various investor disclosure systems.

REPORT STRUCTURE

The Inventory Summary contains a high-level summary of this year's results and from year 2 onwards a brief comparison to historical inventories.

Chapter 1, the Emissions Inventory Report, includes the inventory details and forms the measure step of the organisation's application for Programme certification. The inventory is a complete and accurate quantification of the amount of GHG emissions and removals that can be directly attributed to the organisation's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the requirements of the Programme¹, which is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) and ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals². Where relevant, the inventory is aligned with industry or sector best practice for emissions measurement and reporting.

Chapter 2, the reduction plan and progress report, forms the manage step part of the organisation's application for Programme certification.

This overall report provides emissions information that is of interest to most users but must be read in conjunction with the inventory workbook for covering all of the requirements of ISO 14064-1:2018.

See Appendix 1 and the related Spreadsheet for detailed emissions inventory results, including a breakdown of emissions by source and sink, emissions by greenhouse gas type, and non-biogenic and bio-genic emissions. Appendix 1 also contains detailed context on the inventory boundaries, inclusions and exclusions, calculation methodology, liabilities, and supplementary results.

¹ Programme refers to the Toitū carbonreduce and the Toitū carbonzero programmes.

² Throughout this document 'GHG Protocol' means the *GHG Protocol Corporate Accounting and Reporting Standard* and 'ISO 14064-1:2018' means the international standard *Specification with Guidance at the Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.

CONTENTS

Disclaimer	2
Availability	2
Report Structure	2
Contents	3
Tables.....	4
Figures	4
Chapter 1: Emissions Inventory Report	7
1.1. Introduction.....	7
1.2. Emissions inventory results	7
1.3. Organisational context	10
1.3.1. Organisation description.....	10
1.3.2. Commitment to certification	10
1.3.3. Importance of report	11
1.3.4. Climate change impacts.....	11
1.3.5. Global parent company targets	11
1.3.6. Statement of intent – Intended use and users	11
1.3.7. Person responsible.....	11
1.3.8. Reporting period	12
1.3.9. Organisational boundary and consolidation approach.....	12
1.3.10. Justification of consolidation approach	12
1.3.11. Excluded business units	14
Chapter 2: Emissions Management and Reduction Report.....	15
2.1. Emissions reduction results	15
2.2. Significant emissions sources	17
2.2.1. Top emission sources.....	17
2.2.2. Activities that generate emissions.....	17
2.2.3. What influences the activity	17
2.2.4. Emissions that cannot be reduced.....	17
2.3. Emissions reduction targets	18
2.4. Emissions reduction projects.....	19
2.5. Staff engagement	20
2.6. Key performance indicators	20
2.7. Monitoring and reporting.....	21
Appendix 1: Detailed greenhouse gas inventory.....	22
A1.1 Reporting boundaries	24
A1.1.1 Emission source identification method and significance criteria	24
A1.1.2 Included sources and activity data collection	24
A1.1.3 Excluded emissions sources and sinks	30
A1.2 Quantified inventory of emissions and removals.....	31
A1.2.1 Calculation methodology.....	31
A1.2.2 Historical recalculations.....	31
A1.2.3 Liabilities	31
A1.2.3.1 GHG stocks held	31

A1.2.3.2	Land-use liabilities.....	32
A1.2.4	Supplementary results.....	32
A1.2.4.1	Contractual instruments for GHG attributes	32
A1.2.4.2	Carbon credits and offsets	32
A1.2.4.3	Purchased or developed reduction or removal enhancement projects	32
A1.2.4.4	Double counting and double offsetting	32
Appendix 2:	Significance criteria used.....	33
Appendix 3:	Certification mark use	34
Appendix 4:	References.....	35
Appendix 5:	Reporting index	36

TABLES

Table 1:	Inventory summary.....	6
Table 2:	GHG emissions inventory summary for this measurement period.....	7
Table 3:	Brief description of business units included in this emissions inventory.....	12
Table 4:	Historical GHG inventory comparisons, all measured emissions.....	16
Table 5:	Emission reduction targets.	19
Table 6:	Projects to reduce emissions.	19
Table 7:	Projects to improve data quality.....	20
Table 8:	Projects to prevent emissions from liabilities.....	20
Table 9:	Key Performance Indicators (KPIs).....	21
Table 10:	Performance against plan.	21
Table 11:	Direct GHG emissions quantified separately for CO ₂ , CH ₄ , N ₂ O, NF ₃ , SF ₆ and other appropriate GHG groups (HFCs, PFCs, etc.).....	22
Table 12:	Biogenic anthropogenic and biogenic non-anthropogenic CO ₂ emissions and removals by category.....	23
Table 13:	Renewable electricity generation on-site.	23
Table 14:	GHG emissions sources and sinks included in the inventory.....	25
Table 15:	GHG emissions sources excluded from the inventory.	30
Table 16:	HFCs, PFCs and SF ₆ GHG emissions liabilities.....	31
Table 17:	Significance criteria used for identifying inclusion of indirect emissions.	33

FIGURES

Figure 1:	Emissions (tCO ₂ e) by Category for this measurement period	6
Figure 2:	GHG emissions (tonnes CO ₂ e) by category.....	9
Figure 3:	GHG emissions (tonnes CO ₂ e) by manufacturing business units.....	9

Figure 4: GHG emissions (tonnes CO₂e) by sales offices. 10

Figure 5: Comparison of gross emissions by category between the reporting periods. 15

EXECUTIVE SUMMARY

This report is the annual greenhouse gas (GHG) emissions inventory and management report for Fisher & Paykel Healthcare Corporation Ltd³ covering the measurement period: 01 April 2020 to 31 March 2021.

Table 1: Inventory summary.

Category (ISO 14064-1: 2018)	Scopes (ISO 14064-1:2006)	2013	2020	2021
Category 1: Direct emissions	Scope 1	153.21	2,067.08	1,465.42
Category 2: Indirect emissions from imported energy	Scope 2	6,148.68	11,186.18	13,998.46
Category 3: Indirect emissions from transportation	Scope 3	28,102.15	46,869.53	90,764.15
Category 4: Indirect emissions from products used by organisation		88.43	1,931.88	165,454.11
Category 5: Indirect emissions associated with the use of products from the organisation				462,772.78
Category 6: Indirect emissions from other sources				
Total direct emissions		153.21	2,067.08	1,465.42
Total indirect emissions		34,339.26	59,987.59	732,989.50
Total gross emissions		34,492.47	62,054.68	734,454.92
Category 1 direct removals		0.00	0.00	0.00
Certified renewable electricity certificates (MWh converted to electricity emissions based on location-based emissions factor)		0.00	2,372.40	2,948.86
Purchased emission reductions		0.00	0.00	0.00
Total net emissions		34,492.47	59,682.28	731,506.06

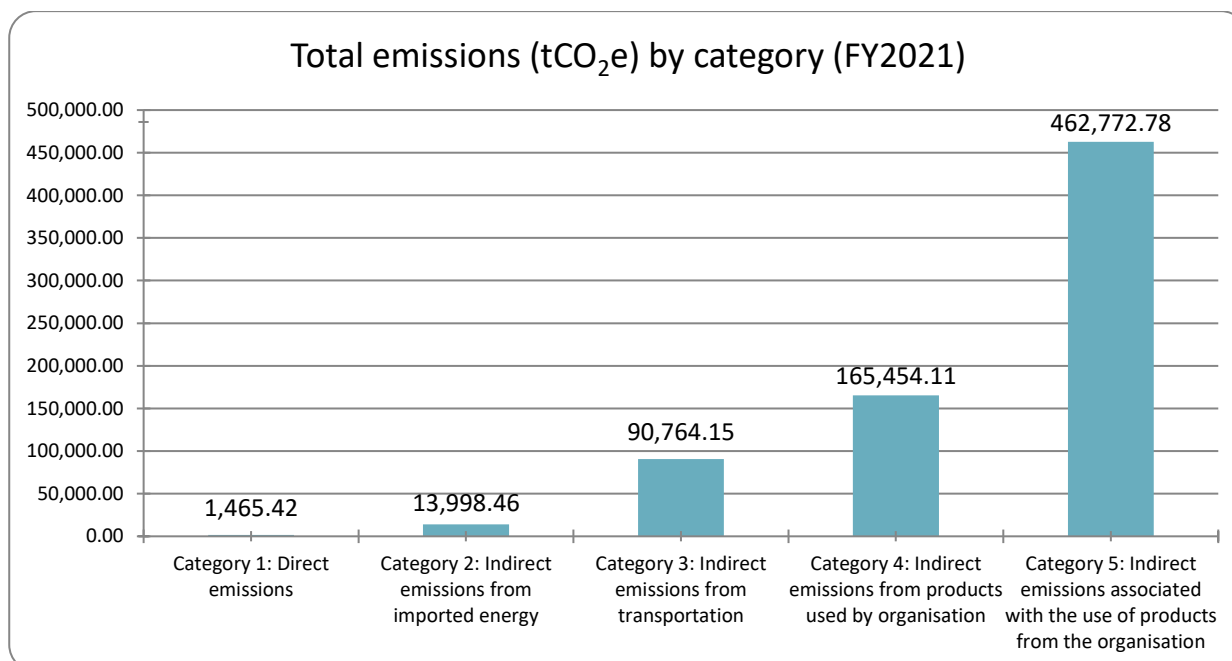


Figure 1: Emissions (tCO₂e) by Category for this measurement period

³ Throughout this document “emissions” means “GHG emissions”.

⁴ The Toitū carbon programmes mandatory boundary requires of All Category 1 and 2 emissions; Category 3 emissions associated with business travel and freight paid for by the organisation; Category 4 emissions associated with waste disposed of by the organisation, and transmissions and distribution of electricity and natural gas, where appropriate; and any Sector specific mandatory emissions sources as outlined by the Programme (Technical Requirements R4.6)

CHAPTER 1: EMISSIONS INVENTORY REPORT

1.1. INTRODUCTION

This report is the annual greenhouse gas (GHG) emissions inventory and management report for Fisher & Paykel Healthcare Corporation Ltd⁴

Fisher and Paykel Healthcare Corporation Limited (F&P) recognize that the natural environment is of essential value. To reflect our commitment towards a cleaner world, F&P set Science-based carbon reduction targets and is dedicated to implementing sustainable business practices and maintaining an ongoing carbon emission measurement and reporting scheme. This report is the annual greenhouse gas (GHG) emissions inventory for F&P. The inventory is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to the organization's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the requirements of the measure-step of Toitū carbonreduce Programme, which is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) and ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. Where relevant, the inventory is aligned with industry or sector best practices for emissions measurement and reporting.

The inventory report and any GHG assertions are expected to be verified by a Programme-approved, third-party verifier. The level of assurance is reported in a separate Assurance Statement provided to the directors of the certification entity.

1.2. EMISSIONS INVENTORY RESULTS

Table 2: GHG emissions inventory summary for this measurement period.

Measurement period: 01 April 2020 to 31 March 2021.

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
Category 1: Direct emissions	1,465.42 Diesel, Petrol, Natural Gas (Steam Generation), Diesel stationary combustion, HFC-134a, LPG, Natural Gas distributed commercial	NA	1,465.42
Category 2: Indirect emissions from imported energy	13,998.46 Domestic and international office Electricity	NA	13,998.46
Category 3: Indirect emissions from transportation	84,235.79 Freight Air, Freight Rail, Freight Road, Freight Shipping container, Taxi (regular), Air travel domestic, Air travel short haul, Air travel long haul, Rental Car, Private Car average, Diesel commercial	6,528.36 Accommodation domestic and international, Bus travel (diesel), Car Average, Motorcycle	90,764.15

⁴ Throughout this document "emissions" means "GHG emissions".

⁴ The Toitū carbon programmes mandatory boundary requires of All Category 1 and 2 emissions; Category 3 emissions associated with business travel and freight paid for by the organisation; Category 4 emissions associated with waste disposed of by the organisation, and transmissions and distribution of electricity and natural gas, where appropriate; and any Sector specific mandatory emissions sources as outlined by the Programme (Technical Requirements R4.6)

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
Category 4: Indirect emissions from products used by organisation	3,769.22 Domestic and International T&D losses, Waste to Landfill Mixed waste (int. default), Water supply domestic and international, Water treatment, Waste landfilled LFGR Mixed waste, Waste disposal Mixed municipal waste,	161,684.89 CO ₂ – emissions per dollar spend (NZD), CO ₂ – Production resin, Corrugated boxes, Waste disposal recycling of Paper, Plastic, Aluminium, Glass	165,454.11
Category 5: Indirect emissions associated with the use of products from the organisation	NA	462,772.78 CO ₂ electricity use of sold products (carbon footprint emission factor), International and Domestic Electricity,	462,772.78
Category 6: Indirect emissions from other sources	NA	NA	
Total direct emissions	1,465.42		1,465.42
Total indirect emissions	102,003.47	630,986.03	732,989.50
Total gross emissions	103,468.89	630,986.03	734,454.92
Category 1 direct removals	0.00	0.00	
Certified renewable electricity certificates	2,948.86	0.00	
Purchased emission reductions	0.00	0.00	
Total net emissions	100,520.03	630,986.03	731,506.06
Emissions intensity	Mandatory emissions		Total emissions
Operating revenue (gross tCO ₂ e/ \$Millions)	51.73		367.23
Operating revenue (net tCO ₂ e/ \$Millions)	50.26		365.75

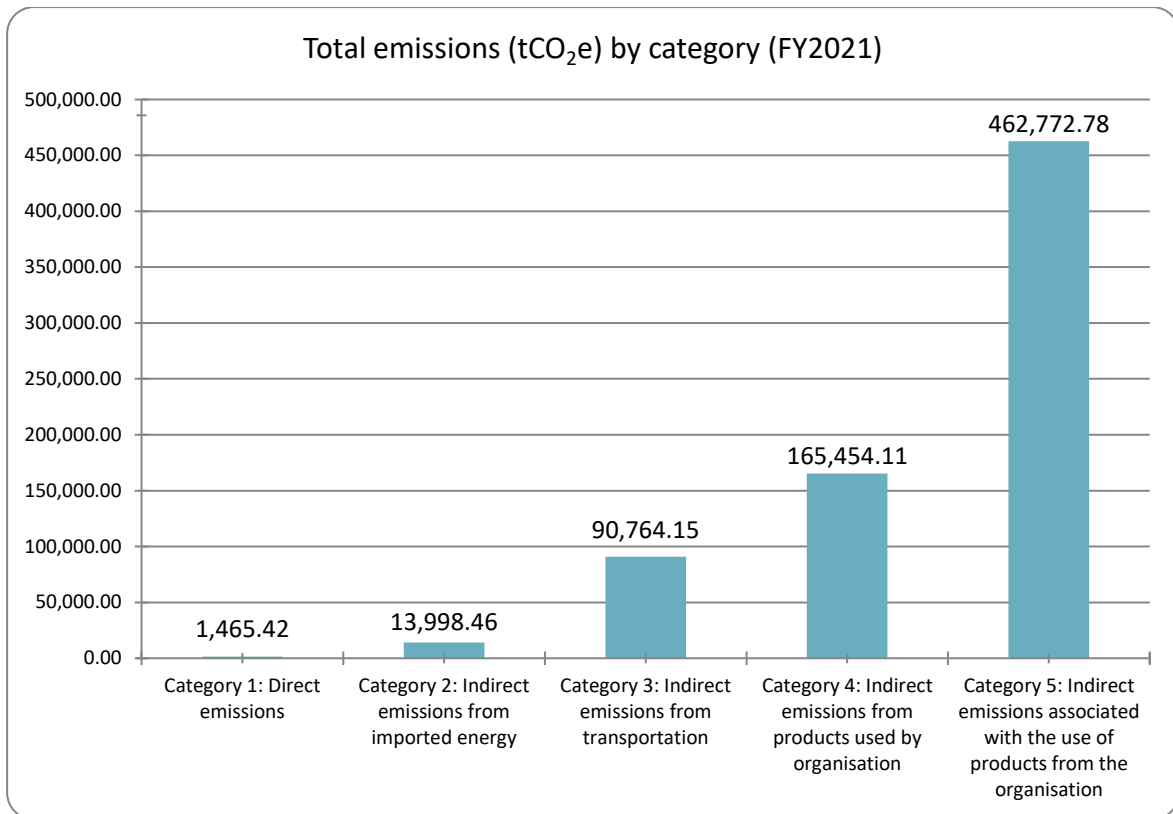


Figure 2: GHG emissions (tonnes CO₂e) by category.

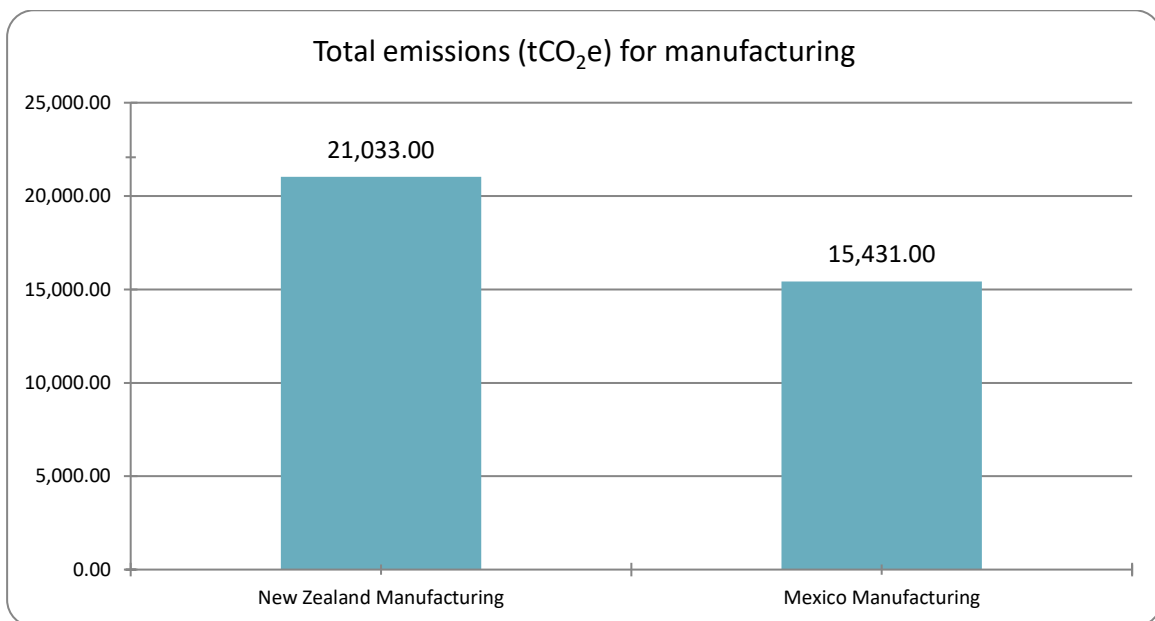


Figure 3: GHG emissions (tonnes CO₂e) by manufacturing business units.

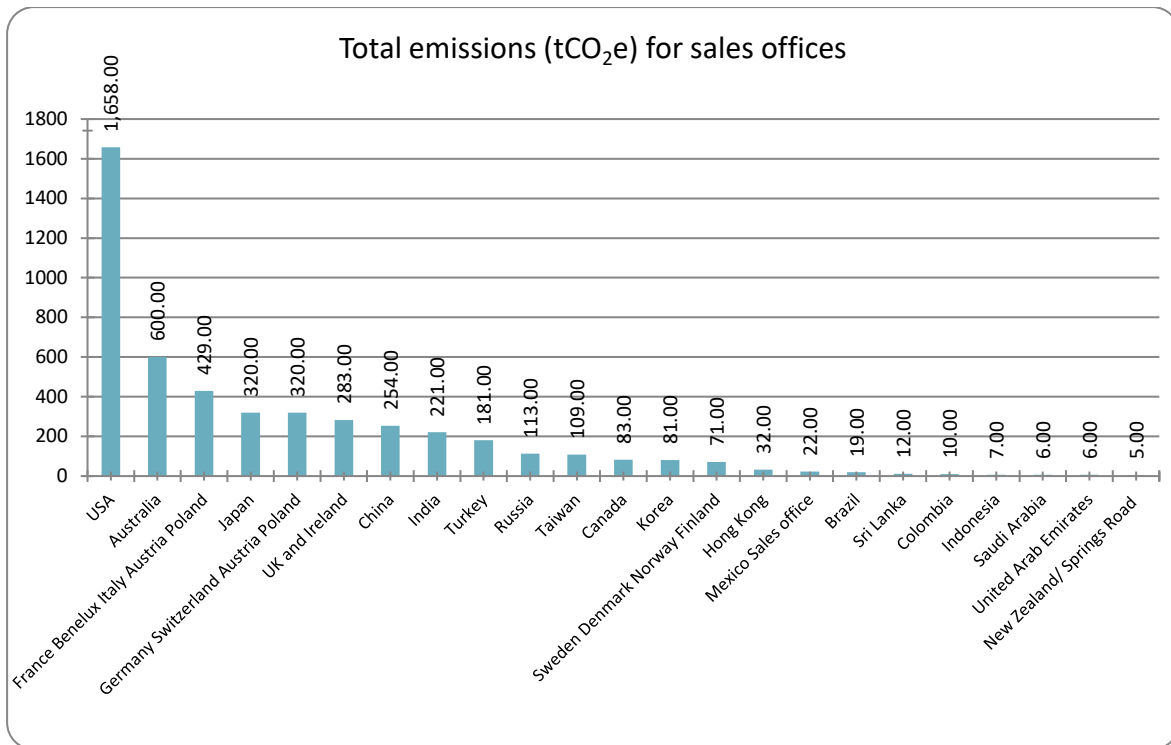


Figure 4: GHG emissions (tonnes CO₂e) by sales offices.

1.3. ORGANISATIONAL CONTEXT

1.3.1. Organisation description

Fisher & Paykel Healthcare Limited (F&P) is a leading designer, manufacturer, and marketer of products and systems for use in respiratory care, acute care, and the treatment of obstructive sleep apnoea. Our products and systems are sold in over 120 countries worldwide. We sell our products through direct sales operations in most of our major markets, and a network of distributors that sell to hospitals, home healthcare providers, distributors, and other manufacturers of medical devices. During FY21 some of our products were also used in the treatment of Covid-19 patients.

Fisher and Paykel Healthcare Limited (F&P) is committed to adopting sustainable business practices across all aspects of the company's operations. This involves a focus on reducing carbon emissions, reducing energy use, investigating renewable energy options, ongoing use and investigation of sustainable products and materials, supplier engagement, and the implementation of comprehensive recycling and waste management programs.

1.3.2. Commitment to certification

Fisher & Paykel Healthcare Corporation Limited (F&P) is committed to measuring its greenhouse gas emissions in accordance with ISO 14064-1:2018 to managing and reducing the organization's operational emissions. Fisher & Paykel Healthcare Corporation Limited(F&P) has set absolute Science-Based Carbon reduction targets for scope 1 & 2 and Engagement targets for Scope 3 and F&P is committed to the achievement of these targets. Fisher & Paykel Healthcare Corporation Limited(F&P) wishes to achieve carbonreduce certification to confirm that our carbon footprint has been accurately measured, is complete and verified and is being reduced in line with climate science and best practice and international standards.

1.3.3. Importance of report

Carbon Inventory and Management Report April 2020 - March 2021 forms a continuous series of previous annual years' reports that track our total carbon footprint and reductions. We have developed a Greenhouse Gas Emissions Management Plan and Science-based-reduction targets. This provides a framework upon which we monitor and trace tested plans and targets.

The GHG inventory numbers in this report are also used in our different sustainability reporting matrices and questionnaires, including but not limited to CDP, Dow Jones Sustainability Index (DJSI), FTSE4Good Index Series etc. Understanding our emissions by source also guides us on where to focus our carbon reduction projects and/or strategies.

1.3.4. Climate change impacts

Uncertain weather patterns may disrupt supply chain distribution which could lead will subsequently disrupt both the delivery of raw materials to our manufacturing sites and delivery of our products to our global customers. Changes to weather patterns in North and Central America will lead to an increased demand for natural resources such as water. This will likely impact our operations in Mexico as there is a significant need for cooling capacity at this site.

1.3.5. Global parent company targets

N/A

1.3.6. Statement of intent – Intended use and users

This inventory forms part of the organisation's commitment to gain Toitū carbonreduce certification.

The users of this Inventory report include the Head of sustainability and Environmental Innovation, Environmental specialists, and Sustainability graduates, and interns for sustainability reporting carbon reduction targets setting, monitoring, and evaluation. The Inventory report is also used by the Executive team and other internal stakeholders in understanding organizational carbon footprint.

We will share this inventory report with the New Zealand Climate Leaders Coalition to assist with overall carbon reporting for the coalition.

The verified GHG inventory will also be used for CDP questionnaire responses and other ESG reporting matrices that the company responds to.

1.3.7. Person responsible

Nic Bishop is responsible for overall emission inventory measurement and reduction performance, as well as reporting results to top management. Nic Bishop has the authority to represent top management and has financial authority to authorise budget for the Programme, including Management projects and any Mitigation objectives.

Other people involved

Hyrine Munga, Ella Meisel, Kimberley Savill, Graeme Mason and Administration officers from global business units.

Hyrine Munga holds a Ph.D. in Environmental Science, experienced in GHG Inventory management and data management. Ella Meisel holds Mechanical Engineering degrees, experienced in LCA and product carbon foot printing and profiling. Kimberley Savill holds a Ph.D. in Condensed Matter Physics and experience in data management. Global business unit administration assistant is either accountants by training and have skills in office management and financial accounting.

Top management commitment

The company's Carbon Footprint is presented to the Board on annual basis after the (re)certification. Based on the carbon footprint, carbon reduction projects and initiatives are then initiated by the sustainability team which are then approved by top management. The top management's commitment is demonstrated by their resource allocation to carbon reduction targets and projects.

Management was not involved in the collection and processing of data and reports submitted.

1.3.8. Reporting period

Base year

Base year measurement period: 01 April 2012 to 31 March 2013

This base year period was selected because it represents the first year in which we have access to a materially complete set of data records for forming the inventory. A calendar year was chosen to align to our Financial reporting cycles.

Measurement period of this report: 01 April 2020 to 31 March 2021

Frequency of reporting

Frequency of reporting will be annual.

1.3.9. Organisational boundary and consolidation approach

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards. The standards allow two distinct approaches to be used to consolidate GHG emissions: the equity share or control (either financial or operational) approaches⁵.

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

The Programme defaults to the equity share consolidation approach. If the intended use goes beyond Toitū certification and an alternative consolidation approach (operational control or financial control) is more appropriate, this shall be justified in the Emissions Inventory and Management Report and approved by the Programme.

1.3.10. Justification of consolidation approach

The operational control consolidation approach was selected based on where F&P has full operational control. This means F&P has full authority to introduce and implement operating policies at the operational level. With this control, F&P collects all required data for GHG Inventory reporting, as well as setting emission reduction targets and implementing them. The selected operational control consolidation approach is consistent with the intended use of F&P's GHG inventory.

Please refer to the organizational description table below.

Table 3. Brief description of business units included in this emissions inventory.

Business unit	Address	Purpose
Australia	19-31 King St, Nunawading, Melbourne Victoria 3131, Australia	Sales & distribution
	Unit 1 and Unit 4, 26 Balaclava Street, Woolloongabba, QLD 4102, Australia	Office
	Suite 302, Level 3, 152 Bunnerong Road, Eastgardens, NSW 2036 Australia	Office

⁵control: the organization accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control. equity share: the organization accounts for its portion of GHG emissions and/or removals from respective facilities.

Business unit	Address	Purpose
Brazil	277 Sampaio Viana, 2nd Floor, Offices 21 and 22, CEP04004-000, Sao Paulo	Sales & distribution
	Avenida Portugaln 1.100 Barrio de Itaquí SP 06694-090 Brazil	Office
Canada	2045 Boulevard Dagenais O. suite #180, Laval, QC H7L 5V1	Sales & distribution
China	301, G12, 31 Kefeng Lu, Guangzhou Science City, Guangzhou Economic & Technological Development District, Guangzhou, China 510663	Sales & distribution
	Unit P, 9th Floor, Building 1, No.1590 Yananxi Road, Changning District, Shanghai.	Office
	B0607, Unit 28, 6th Floor, Building 2, No.26, No.28 No.30 Xuanwumenwaida Street, Xuanwu District, Beijing	Office
Colombia	167-61 Carrera 67, Suba, Bogotá 111156 Colombia	Office
France	10, avenue du Quebec - Batiment F5, Silic 512 - Villebon-s/Yvette, 91946 Courtaboeuf Cedex	Sales & distribution (France, Belgium, Netherlands, Luxembourg, Italy, Spain, Portugal)
	32 avenue de l'Océanie, Batiment C2, ZI de Courtaboeuf, 91140 Villejust	Warehouse
Germany	Wiesenstrasse 49, 73614 Schorndorf	Sales & distribution (Germany, Austria, Switzerland, Poland)
	2 Säntisstrasse, Wil, SG, 9500, Switzerland	Virtual office
Hong Kong	Unit 217-218, 3 On Yiu Street, New Territories, Hong Kong	Warehouse
	Unit 802-5, Delta House, 3 On Yiu Street, Siu Lek Yuen, Shatin, New Territories	Sales & distribution
India	Yelahanka New Town, Bangalore KA560064, India	60% warehouse, 40% office (currently warehouse is up another 10% given the tock balance in India)
Indonesia	Jl. Jalan Tegal Rotan Raya No. 78, Sawah Baru, Ciputat Tangerang Selatan Banten	Office
Japan	ICHIGO SAKURABASHI BLDG, 4-8-2 Hacchobori, Chuo-ku, Tokyo 104-0032	Sales & distribution
	Building 6, 5-1-1 Hirai Edogawa-ku Tokyo 132-0035	Warehouse
	Building 1, 5-1-1 Hirai Edogawa-ku Tokyo 132-0035	Warehouse
Korea	1-221 Ace Hitech City, 55-20 Mullaee-dong 3-ga, Yeongdeungpo-gu, Seoul, Korea 150-972	Sales & distribution
	2F Seoicheon-distribution center, 675 Seoicheon-ro, Majang-myeon, Icheon-si, Gyeonggi-do	Warehouse
Mexico	No 13, Ave. Todos los Santos #12831, Parque Industrial Pacifico, Tijuana, Baja California	Manufacturing & distribution
	C4XR+8F Blvd. La Encantada, Parque Industrial El Florido II, Tijuana, Baja California	Manufacturing & distribution
Mexico Sales Office	Insurgentes 1787 Piso 9. Col. Guadalupe Inn, Álvaro Obregón Ciudad de México Mexico, C.p. 01020	Sales and Distribution
New Zealand	15 Maurice Paykel Place, East Tamaki, Auckland 2013	Head office, manufacturing, sales & distribution
	78 Springs Rd, East Tamaki, Auckland	Warehouse
Russia	Bld 16., 10 Ryazanskiy Boulevard, 109428, Russia	Warehouse (samples)
	109428, office 10.12, Prospect Ryazanskiy, 10, bld.18, Moscow	Office

Business unit	Address	Purpose
	32 Bakhrushina Street, Bld. 1, 115064 Moscow, Russia	Sales & distribution
	52-A Krasnodar regiondemika Lukyanenko street, 103	Office
Saudi Arabia	TBC	
Sweden	Solna Strandväg 78, 171 54 Solna, Sweden	Sales & distribution (Sweden, Denmark, Norway, Finland)
Sri Lanka	2nd Floor, Bernards Business Park, No 106, Dutugemunu Street, Dehiwela, O, Sri Lanka	Sales & distribution
Turkey	Alinteri Bulvari 1161/1 Sokak No:12-14, P.Box 06371 Ostim-Ankara	Sales & distribution
	Ostim Mahallesi, 1249. Cadde, No.6 Ostim Yenimahalle Ankara	50% warehouse, 25% office, 25% kitchen, archives and terrace (over 4 floors)
Taiwan branch	10F.-1, No. 61, and 10F, No. 69, Jhozih Street, Neihu, Taipei City 114	Sales & distribution
United Arab Emirates	Prime TowerMarasi Drive, Dubai الخليج التجاري دبي	Office
United Kingdom	Unit 16, Cordwallis Park, Clivemont Rd, Maidenhead, Berkshire SL6 7BU	Sales & distribution (UK, Ireland)
United States	173 Technology Dr, Suite 100, Irvine, CA 92618	Sales & distribution
	4310 Chef's Way, Suite 104-106, Louisville, KY	Warehouse

1.3.11. Excluded business units

No F&P global business units were excluded from this inventory.

CHAPTER 2: EMISSIONS MANAGEMENT AND REDUCTION REPORT

2.1. EMISSIONS REDUCTION RESULTS

F&P's FY21 emission profile includes emission sources that have not been reported before on the inventory and therefore it does not provide a representative profile for comparison with both the base and the previous years' emission profiles.

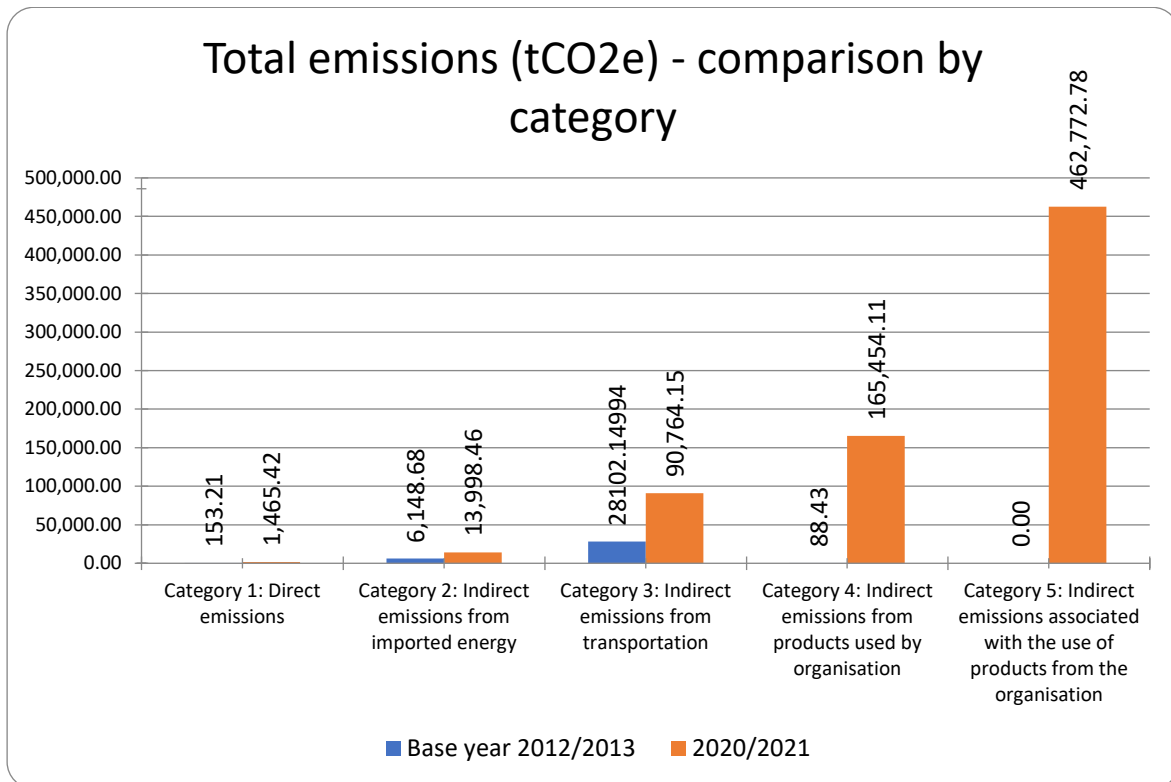


Figure 5: Comparison of gross emissions by category between the reporting periods.

Table 4: Historical GHG inventory comparisons, all measured emissions.

Category	2013	2014	2015	2016	2017	2018	2019	2020	2021
Category 1: Direct emissions	153.21	143.03	95.96	95.66	1,315.13	2,030.68	2,104.02	2,067.08	1,465.42
Category 2: Indirect emissions from imported energy	6,148.68	5,987.00	6,514.70	7,919.70	7,892.83	8,767.31	9,094.31	11,186.18	13,998.46
Category 3: Indirect emissions from transportation	28102.14	27558.01	24721.29	36388.66	33597.30	23360.04	19364.54	46869.53	90,764.15
Category 4: Indirect emissions from products used by organisation	88.43	98.22	80.16	156.96	322.10	2360.99	2566.13	1931.88	165,454.11
Category 5: Indirect emissions associated with the use of products from the organisation									462,772.78
Category 6: Indirect emissions from other sources									
Total direct emissions	153.21	143.03	95.96	95.66	1,315.13	2,030.68	2,104.02	2,067.08	1,465.42
Total indirect emissions	34,339.26	33,643.24	31,316.15	44,465.32	41,812.23	34,488.35	31,024.99	59,987.59	732,989.50
Total gross emissions	34,492.47	33,786.26	31,412.11	44,560.99	43,127.36	36,519.02	33,129.01	62,054.68	734,454.92
Category 1 direct removals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Certified renewable electricity certificates								2,372.40	2,948.86
Purchased emission reductions									
Total net emissions	34,492.47	33,786.26	31,412.11	44,560.99	43,127.36	36,519.02	33,129.01	59,682.28	731,506.06
Emissions intensity: Operating revenue Gross emissions (tCO ₂ e per \$Millions)	62.04	54.19	46.72	54.64	48.22	37.23	30.96	51.65	367.23

2.2. SIGNIFICANT EMISSIONS SOURCES

2.2.1. Top emission sources

The top emission source is the Indirect emissions associated with the use of products from the organization, category 5. This emission source contributed 462,772.78 tCO₂e which represents 63% of the total emission sources. This emission source involves the electricity use during the use phase over the entire use life of our electrical medical devices sold globally during the reporting period. The second top emission source is the Indirect emissions from products used by organization, category 4. This emission source contributed 165,455.51 tCO₂e which represents 22.5% of the total emission sources. This emission source comprises of embodied emissions from purchased goods including production resin, corrugated cartons, wood pallets, purchased food for MX and NZ cafeteria operations, disposal of solid waste products and T&D loss emissions. Long haul international air freight is our third largest contributing source of emissions as F&P exports products worldwide. This emission source contributed 80,136 tCO₂e which makes up 11% of total GHG emissions for 2020/2021. Compared to last year, this emission source increased by 152% and this was attributed to increased demand for F&P products in responding to Covid-19.

2.2.2. Activities that generate emissions

Emissions from the use stage of the product, were calculated from electricity use during the use phase of the sold electrical medical devices by F&P during the reporting period. Emissions from the products used by the organization were generated from the embodied carbon in the purchased goods mainly from, the resin used for production, the corrugated cartons for packaging, wood pallet for shipping, and warehouse operation different food cooked in both Mexico and New Zealand sites cafeterias and from the dollar spend in services and other products where we could not quantify the embodied carbon. Emissions from transportation were mainly generated from outbound freight for distribution of sold products and inbound freight for bringing raw materials and machinery to the manufacturing sites, employee commuting, and business travel. Emissions from imported electricity were generated from operational electricity consumption in manufacturing, distributing centres and global sales offices. Emissions from mobile combustion were generated mainly from the fuels (petrol and diesel used by sales staff fleets). Direct emissions from stationary combustion were generated from diesel emissions from generators and fire pumps.

2.2.3. What influences the activity

The level of activity is influenced by company growth in terms of number and location of its operations, manufacturing capacity which subsequently influences imported raw material quantities and number of products sold. Number of employees also influences activities in terms employee commuting, business travel, waste generated and food related emissions.

2.2.4. Emissions that cannot be reduced

Although we have included in this inventory value chain emissions, unfortunately we have no direct control over their reductions. To this effect, we have set Supplier Engagement targets for our value chain emissions. For instance our largest emission source is the electricity use during the use phase of the medical products sold in different countries and used in different homes and hospitals in these countries. Reduction of these emissions is dependent on the global decarbonization of the global energy sector and the healthcare sector, and we have no control of this. We however endeavour to engage our customers to adopt renewable energy systems. Reduction on emissions from embodied carbon of the materials we use is entirely dependent on availability of low carbon alternatives in the market and the approval of these low carbon alternatives by the highly regulated medical devices industry that we operate in.

2.3. EMISSIONS REDUCTION TARGETS

The organisation is committed to managing and reducing its emissions in accordance with the Programme requirements. Table 5 provides details of the emission reduction targets to be implemented. These are 'SMART' targets (specific, measurable, achievable, realistic, and time-constrained).

F&P 's carbon reduction targets were 'science-based' developed in line with the scale of reductions required to keep global warming below 1.5° C from pre-industrial levels. Science Based targets are the global benchmark in long term carbon reduction target setting, with 1400 organizations globally committing to support a 1.5-degree future world. Fisher & Paykel Healthcare has also joined the Climate Leaders Coalition in New Zealand, supporting the New Zealand Government commitment to a net zero 2050 world.

Science Based Targets were approved in June 2020, using a baseline of 2019 which was estimated using the Science Based Target screening tool. This used a mixture of actual Scope 1 and 2 data from Toitū and forecast data for expanded Scope 3 using cost carbon intensity factors.

Table 5. Emission reduction targets.

Target name	Baseline period	Target date	Type of target (intensity or absolute)	Categories covered	Target	Baseline (tCO ₂ e)	KPI	Responsibility	Rationale
FPH commits to reduce absolute Scope 1 & 2 GHG emissions by 67.2% by FY2034 from a 2019 baseline.	2019	2034	Absolute	Category 1&2	67.2%	11,198 tCO ₂	tCO ₂	Head of Sustainability and Environmental Innovation.	The Target was set using the Science based target setting methodologies and tools and it is achievable
FPH also commits that 87% of its' suppliers by spend covering purchased goods and services and use of sold products will have science-based emission reduction targets by, FY2024 from a 2019 base year	2019	2024	Engagement	Category 4: Purchased goods and services and Category 5: Use of sold products.	87%	486,924.4 tCO ₂	Number of suppliers engaged	Head of Sustainability and Environmental Innovation.	The Target was set using the Science based target setting methodologies and tools and it is achievable

2.4. EMISSIONS REDUCTION PROJECTS

In order to achieve the reduction targets identified in Table 5, specific projects have been identified to achieve these targets, and are detailed in Table 6 below.

Table 6. Projects to reduce emissions.

Objective	Project	Responsibility	Completion date	Potential co-benefits	Potential unintended consequences	Actions to minimise unintended consequence
Scope 1&2 Reduction	Mexico Solar Initiative	Nic Bishop	2/20/2022	N/A	N/A	N/A
Scope 1&2 Reduction	UK Renewable Electricity Contract	Nic Bishop	4/1/2021	N/A	N/A	N/A
Scope 1&2 Reduction	Mexico Renewable Electricity Certificates	Nic Bishop	4/1/2022	N/A	N/A	N/A
Scope 3 - use phase emission reduction	Ecodesign program - use phase emissions reduction awareness campaign (renewable electricity use in hospitals)	Nic Bishop	4/1/2025	N/A	N/A	N/A
Scope 3 - embodied carbon	Ecodesign program - embodied carbon reduction	Nic Bishop	4/1/2023	N/A	N/A	N/A
Scope 3 - freight emissions	Minimise air-freight emissions	Nic Bishop	4/1/2024	N/A	N/A	N/A

Table 7 highlights emission sources that have been identified for improving source the data quality in future inventories.

Table 7. Projects to improve data quality.

Emissions source	Actions to improve data quality	Responsibility	Completion date
Embodied Carbon	Work with procurement team to source primary data from suppliers. Aim is to add embodied carbon categories each year to show continuous improvement, supporting the ecodesign program with improvements in data quality.	Nic Bishop	01/04/2023
Employee commuting	Continue employee commuting survey every two years.	Nic Bishop	01/04/2023
Food footprint	Work directly with food suppliers to streamline data collection, while also educating suppliers on their contribution to our food footprint.	Nic Bishop	01/04/2022
Global Carbon Data	Coordinate a project so that all global carbon data can be compiled in a streamlined way.	Nic Bishop	01/03/2022

The emissions inventory chapter identified various emissions liabilities (see Liabilities section). Table 8 details the actions that will be taken to prevent GHG emissions from these potential emissions sources.

Table 8. Projects to prevent emissions from liabilities.

Emissions source liability	Actions to prevent emissions	Responsibility	Completion date
Global Refrigerant Use	Set up a monitoring process to verify that routine servicing and maintenance is being carried out for our global operations sites.	Nic Bishop	04/01/2022

2.5. STAFF ENGAGEMENT

F&P staff are made aware of the emission reduction commitments through internal communication channels including but limited to, the intranet, annual reports, internal meetings, green teams, and induction day programmes. The new staff company induction day has a one-hour slot where staff are explained current sustainability projects and commitments and how they can be involved. There is an internal sustainability intranet page, and a range of events that are organised each year by the green teams.

2.6. KEY PERFORMANCE INDICATORS

Our Carbon and Climate related KPI's are reflected in our carbon reduction targets. The primary target is a 67.2% reduction of Scope 1&2 emissions by 2034 from a 2019 baseline. We also track annual reductions to support meeting this trajectory. The annual KPI is for a 4.2% reduction. We note that projects are not always able

to be implemented on an annual basis due to project complexity, so some years we will be over and some years we will be under target. Our long-term Scope 1&2 reduction program supports achieving the 67.2% reduction for Scope 1&2 BY 2034.

Table 9. Key Performance Indicators (KPIs).

KPIs
No KPIs being reported to the programme apart from revenue.

2.7. MONITORING AND REPORTING

Table 10. Performance against plan.

Target	Baseline period	Target date	Type of target (Intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments
Science Based Target - Scope 2	2019	2020	absolute	8,813.78	-4.20%	An overall reduction of 4.2% was achieved in 2020 - led by the sourcing of renewable energy certificates for the New Zealand campus.
Science Based Target - Scope 2	2019	2021	absolute	11,049.48	21.50%	Growth in Mexico electricity use and new business units included in the FY21 Inventory (Colombia, Saudi Arabia, United Arab Emirates, Indonesia, and Sri Lanka) contributed to the increase.
Science Based Target - Scope 1&2 (Joint)	2019	2020	absolute	10,880.86	-3%	An overall reduction of 3% was achieved in 2020 - led by the sourcing of renewable energy certificates for the New Zealand campus.
Science Based Target - Scope 1&2 (Joint)	2019	2021	absolute	12,514.89	12.59%	Growth in Mexico electricity use contributed to the increase, while scope 1 fuel use reduced
Science Based Target - Scope 1	2019	2020	absolute	2,067.08	-1.70%	Switching to more efficient refrigerants.
Science Based Target - Scope 1	2019	2021	absolute	1,465.42	-27.50%	Reduction due to less fuel use by our global sales fleet.

APPENDIX 1: DETAILED GREENHOUSE GAS INVENTORY

Additional inventory details are disclosed in the tables below, and further GHG emissions data is available on the accompanying spreadsheet to this report (Appendix1-Data Summary Fisher & Paykel Healthcare Corporation Ltd.xls).

Table 11. Direct GHG emissions quantified separately for CO₂, CH₄, N₂O, NF₃, SF₆ and other appropriate GHG groups (HFCs, PFCs, etc.).

Category	CO ₂	CH ₄	N ₂ O	NF ₃	SF ₆	HFC	PFC	Emissions total (tCO ₂ e)
Direct emissions from stationary combustion	69.53086	0.14497	0.03456	0.00	0.00	0.00	0.00	69.71039
Direct emissions from mobile combustion	1,301.20	8.70	30.04	0.00	0.00	0.00	0.00	1,339.94
Process emissions/removals arising from industrial processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Direct fugitive emissions arising from the release of GHGs in anthropogenic systems	0.00	0.00	0.00	0.00	0.00	55.77	0.00	55.77
Direct emissions from land use, land-use change and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Direct removals from land use, land-use change and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total gross emissions	1,370.73	8.84	30.07	0.00	0.00	55.77	0.00	1,465.42

Table 12. Biogenic anthropogenic and biogenic non-anthropogenic CO₂ emissions and removals by category.

Category	Anthropogenic biogenic CO ₂ emissions	Anthropogenic biogenic (CH ₄ and N ₂ O) emissions (tCO ₂ e)	Non-anthropogenic biogenic (tCO ₂ e)
Category 1: Direct emissions	0.00	0.00	0.00
Category 2: Indirect emissions from imported energy	0.00	0.00	0.00
Category 3: Indirect emissions from transportation	0.00	0.00	0.00
Category 4: Indirect emissions from products used by organisation	1,473.59	2,100.08	0.00
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	0.00	0.00
Category 6: Indirect emissions from other sources	0.00	0.00	0.00
Total gross emissions	1,473.59	2,100.08	0.00

Table 13. Renewable electricity generation on-site.

Renewable generation source on site	kWh generated	tCO ₂ e avoided
Fisher and Paykel Healthcare	10,8875	11.041
Total	10,8875	

A1.1 REPORTING BOUNDARIES

A1.1.1 Emission source identification method and significance criteria

The GHG emissions sources included in this inventory are those required for Programme certification and were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards as well as the Programme Technical Requirements.

The GHG emissions sources included in this inventory are those required for Programme certification and were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards. Identification of emissions sources was achieved via personal communications with Fisher & Paykel Healthcare staff in all operations and cross-checked against operational expenditure records for the reporting period. These records were viewed to see what activities may be associated with emissions from all the operations in the relevant categories and sub-categories.

Significance of emissions sources within the organisational boundaries has been considered in the design of this inventory. The significance criteria used comprise:

- All direct emissions sources that contribute more than 1% of total Category 1 and 2 emissions
- All indirect emissions sources that are required by the Programme.

No changes to the significance criteria have been made since initially developed for the current year.

A1.1.2 Included sources and activity data collection

As adapted from ISO 14064-1, the emissions sources deemed significant for inclusion in this inventory were classified into the following categories:

- **Direct GHG emissions (Category 1):** GHG emissions from sources that are owned or controlled by the company.
- **Indirect GHG emissions (Category 2):** GHG emissions from the generation of purchased electricity, heat and steam consumed by the company.
- **Indirect GHG emissions (Categories 3-6):** GHG emissions that occur because of the activities of the company but occur from sources not owned or controlled by the company.

Table 14: GHG emissions sources and sinks included in the inventory. provides detail on emissions sources included in the GHG emissions inventory, an overview of how activity data were collected for each emissions source, and an explanation of any uncertainties or assumptions made. Detail on estimated numerical uncertainties are reported in Appendix 1.

As adapted from the ISO 14064-1:2018 standard these emissions were classified into the following categories:

Category 1: Direct GHG emissions, Category 2: Indirect GHG emissions from imported energy, Category 3: Indirect GHG emissions from transportation, Category 4: Indirect GHG emissions from products used by the organization, Category 5: Indirect GHG emissions associated with the use of products.

After liaison with the organization, the emissions sources in the below table have been identified and included in the GHG emissions inventory. Many of the global offices are in business centres and the use of utilities such as waste, water, recycling, and electricity is accounted for within rent payments. In these situations, values have been applied based on the average consumption per full-time employee calculated across all offices able to report actual use data.

Table 14: GHG emissions sources and sinks included in the inventory.

Business unit	GHG emissions source or sink	GHG emissions category	Data source	Unit	Uncertainty (qualitative)	Availability of evidence
Fisher and Paykel Healthcare	Accommodation (international)	Category 3: Indirect emissions from transportation	Air Travel Reports.	v.ngt	Assumed all the hotel night provided by the air travel companies represented actual number of hotel nights spent in different in the stated cities.	Air Travel Reports
Australia, Canada, China, France Benelux Italy Spain Portugal, Germany Switzerland Austria Poland, Hong Kong, India, Japan, Mexico, New Zealand, Russia, Sweden Denmark Norway Finland, Turkey, USA	Air travel	Category 3: Indirect emissions from transportation	Air Travel Reports.	pkm	No uncertainties, supplier air travel reports were assumed be accurate and complete	Air Travel Reports
New Zealand	Bus travel (diesel)	Category 3: Indirect emissions from transportation	Transport Survey Results & HR address database	pkm	Uncertainty expected, survey data may not be an accurate representation of employee commuting pattern	Transport Survey Results & HR address database
New Zealand	Car Average (unknown fuel type)	Category 3: Indirect emissions from transportation	Transport Survey Results & HR address database	km	Uncertainty expected, survey data may not be an accurate representation of employee commuting pattern	Transport Survey Results & HR address database
Fisher and Paykel Healthcare	CO ₂	Category 4: Indirect emissions from products used by organisation	Procurement report	t	No uncertainty expected on expenditure, the procurement report is considered to be accurate and complete. The uncertainty is expected from the emission factors applied to generic categories of expenditure.	Procurement report
Mexico, New Zealand	CO ₂	Category 4: Indirect emissions from products used by organisation	Waste and food supply purchase reports	t	No uncertainty expected, supplier invoices and reports assumed to be accurate and complete	Waste and food supply purchase reports
Fisher and Paykel Healthcare	CO ₂	Category 5: Indirect emissions associated with the use of products from the organisation	Sales data and product development specification for 12 of the medical products	t	Estimated based on a detailed quantification methodology that calculated emissions associated with electricity use over the entire use phase of sold products in different country electricity grids and reported in the year products were sold.	Research and development project

Fisher and Paykel Healthcare	Corrugated boxes	Category 4: Indirect emissions from products used by organisation	Supplier reports	t	No uncertainty expected, supplier invoices and reports assumed to be accurate and complete	Supplier reports
Australia, Brazil, France Benelux Italy Spain Portugal, Germany Switzerland Austria Poland, Hong Kong, New Zealand, Sweden Denmark Norway Finland, Turkey, United Kingdom and Ireland	Diesel	Category 1: Direct emissions and removals	Fuel card usage reports and receipts (SAP), Supplier Fuel Reports	L	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Fuel card usage reports and receipts (SAP), Supplier Fuel Reports
Mexico	Diesel commercial	Category 3: Indirect emissions from transportation	Bus Fuel Reports	L	No uncertainties, fuel reports were assumed to be accurate and complete	Bus Fuel Reports
Germany Switzerland Austria Poland, India, Mexico, New Zealand	Diesel stationary combustion	Category 1: Direct emissions and removals	Facilities Maintenance Report	L	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Facilities Maintenance Report
New Zealand, New Zealand/Springs Road-NZ 2	Electricity	Category 2: Indirect emissions from imported energy	Supplier electricity invoices	kWh	No uncertainty expected in electric consumption metered data	Supplier electricity invoices
Sweden Denmark Norway Finland	Electricity	Category 2: Indirect emissions from imported energy	Normalised electricity consumption	kWh	One rented room and electricity is included in rent - no invoiced consumption. Uncertainty expected since consumption was calculated from normalised consumption per full time employee in business units with invoiced electricity.	Normalised electricity consumption
Fisher and Paykel Healthcare	Electricity	Category 5: Indirect emissions associated with the use of products from the organisation	Sales reports and product use profiles	kWh	Some uncertainty expected, forecast use based on best available information	Sales reports and product use profiles
Australia, Brazil, Canada, China, Colombia, France Benelux Italy Spain Portugal, Germany Switzerland Austria Poland, Hong Kong, India, Japan, Mexico, Korea, Russia, Taiwan, Turkey, United Kingdom and Ireland, USA	Electricity	Category 2: Indirect emissions from imported energy	Supplier electricity invoices	kWh	No uncertainty expected in electric consumption metered data	Supplier electricity invoices
Australia, Mexico, New Zealand,	Electricity distributed T&D losses	Category 4: Indirect emissions from products used by organisation	Electricity Supplier Invoices	kWh	No uncertainties expected, supplier invoices assumed to be accurate and complete	Electricity Supplier Invoices
Mexico/Mexico Sales Office, United Arab Emirates, Indonesia, Saudi Arabia, Sri Lanka	Electricity	Category 2: Indirect emissions from imported energy	Normalised electricity consumption	kWh	One rented room and electricity is included in rent - no invoiced consumption. Uncertainty expected	Normalised electricity consumption

					since consumption was calculated from normalised consumption per full time employee in business units with invoiced electricity.	
Fisher and Paykel Healthcare	Freight Air travel long haul (average)	Category 3: Indirect emissions from transportation	Air Travel Reports.	tkm	No uncertainties, supplier freight reports were assumed be accurate and complete	Air Travel Reports.
Fisher and Paykel Healthcare	Freight Air travel short haul (average), Freight Rail, Freight Road all trucks average, Freight Shipping container (average)	Category 3: Indirect emissions from transportation	Freight Supplier Reports	tkm	No uncertainties, supplier freight reports were assumed be accurate and complete	Freight Supplier Reports
Mexico	HFC-134a	Category 1: Direct emissions and removals	Facilities Maintenance Report	kg	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Facilities Maintenance Report
Mexico	LPG	Category 1: Direct emissions and removals	Supplier Invoices	L	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Supplier Invoices
New Zealand	Motorcycle	Category 3: Indirect emissions from transportation	Transport Survey Results & HR address database	km	Uncertainty expected, survey data may not be an accurate representation of employee commuting pattern	Transport Survey Results & HR address database
Canada, United Kingdom and Ireland, USA, Turkey	Natural Gas (Steam Generation)	Category 1: Direct emissions and removals	Supplier Invoices	kWh	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Supplier Invoices
Mexico, New Zealand	Paper use - default	Category 4: Indirect emissions from products used by organisation	Supplier Invoices	t	No uncertainties expected, supplier invoices assumed to be accurate and complete	Supplier Invoices
Australia, Brazil, China, Colombia, France Benelux Italy Spain Portugal, India, Indonesia, Japan, Mexico, Mexico/Mexico Sales Office, Russia, Saudi Arabia, Sri Lanka, Taiwan, United Arab Emirates, United Kingdom and Ireland,	Petrol	Category 1: Direct emissions and removals	Fuel card usage reports and receipts (SAP), Supplier Fuel Reports	L	Assumed that data from fuel reports and processes was accurate and complete, therefore no uncertainties	Fuel card usage reports and receipts (SAP), Supplier Fuel Reports
Korea, New Zealand, Russia, USA	Private Car average (fuel type unknown)	Category 3: Indirect emissions from transportation	Employee Reimbursement Reports	km	Uncertainty expected, the mileage claimed by employees might be incomplete or inaccurate	Employee Reimbursement Reports

Canada, China, Germany Switzerland Austria Poland, New Zealand, Turkey, USA	Rental Car average (fuel type unknown)	Category 3: Indirect emissions from transportation	Supplier Car Rental Reports	km	No uncertainties, supplier mileage reports / invoices were assumed be accurate and complete	Supplier Car Rental Reports
Brazil, Canada, China, Germany Switzerland Austria Poland, India, Korea, New Zealand, Turkey	Taxi (regular)	Category 3: Indirect emissions from transportation	Mileage Reports / Supplier Invoices	\$	No uncertainties, supplier mileage reports / invoices were assumed be accurate and complete	Mileage Reports / Supplier Invoices
Australia, Brazil, Canada, China, Colombia, Hong Kong, India, Indonesia, Japan, Korea, Mexico/Mexico Sales Office, Russia, Saudi Arabia, Sri Lanka, Sweden Denmark Norway Finland, Taiwan, Turkey, United Arab Emirates, United Kingdom and Ireland	Waste landfilled	Category 4: Indirect emissions from products used by organisation	Normalised waste output per full time employee in invoiced business units	t	Uncertainty expected, not all business units may produce the same waste per full time employee	Normalised waste output per full time employee in invoiced business units
Canada, Germany Switzerland Austria Poland, Mexico, New Zealand	Waste disposal recycling of Aluminium, Glass, Paper, Plastic	Category 4: Indirect emissions from products used by organisation	Waste collection invoices from supplier	t	No uncertainty expected, supplier invoices and reports assumed to be accurate and complete	Waste collection invoices from supplier
New Zealand, France Benelux Italy Spain Portugal, Germany Switzerland Austria Poland, Mexico, USA	Waste landfilled	Category 4: Indirect emissions from products used by organisation	Waste collection invoices from supplier	t	No uncertainty expected, supplier invoices and reports assumed to be accurate and complete	Waste collection invoices from supplier
New Zealand, Australia, China, Germany Switzerland Austria Poland, India, Korea, Mexico, Russia, Turkey, USA	Water supply	Category 4: Indirect emissions from products used by organisation	Supplier water bills	m ³	No uncertainty expected, metered invoices are assumed to be accurate	Supplier water bills
Brazil, Canada, Colombia, France Benelux Italy Spain Portugal, Hong Kong, Indonesia, Japan, Saudi Arabia, Sri Lanka, Sweden Denmark Norway Finland, Taiwan, United Arab Emirates, United Kingdom and Ireland	Water supply	Category 4: Indirect emissions from products used by organisation	Normalised data based on water consumption per full time employee in metered invoices	m ³	Uncertainty expected, not all business units have the same water consumption patterns per full time employee	Normalised data based on water consumption per full time employee in metered invoices
Mexico/Mexico Sales Office	Water supply (int. default)	Category 4: Indirect emissions from products used by organisation	Normalised data based on water consumption per full time employee in metered invoices	L	Uncertainty expected, not all business units have the same water consumption patterns per full time employee	Normalised data based on water consumption per full time employee in metered invoices

Australia, Brazil, Canada, China, Colombia, France, Benelux, Italy, Spain, Portugal, Hong Kong, India, Indonesia, Japan, Korea, Mexico/Mexico Sales Office, Russia, Saudi Arabia, Sri Lanka, Sweden, Denmark, Norway, Finland, Taiwan, Turkey, United Arab Emirates, United Kingdom and Ireland, USA	Water treatment	Category 4: Indirect emissions from products used by organisation	Data calculated as .95 of volume of water supplied	m ³	Uncertainty expected based on the normalised water supply calculation that may not be an accurate representation of each business unit	Data calculated as .95 of volume of water supplied
Germany, Switzerland, Austria, Poland, Mexico, New Zealand	Water treatment	Category 4: Indirect emissions from products used by organisation	Supplier water bill	m ³	No uncertainty expected, metered invoices are assumed to be accurate	Supplier water bill

A1.1.3 Excluded emissions sources and sinks

Emissions sources in Table 15 have been identified and excluded from this inventory.

Table 15. GHG emissions sources excluded from the inventory.

Business unit	GHG emissions source or sink	GHG emissions category	Reason for exclusion
Brazil, Colombia, Indonesia, Korea, Russia, Saudi Arabia, Sri Lanka, Taiwan, UAE & UK& Ireland	Air Travel	Category 3	Not technically feasible to quantify this data at the time of this report. In some instances, there was no travel due to Covid-related border restrictions.
Australia, France, Hong Kong, Japan, Sweden, Taiwan, Turkey, UK & Ireland, USA	Mileage	Category 3	Not technically feasible to quantify this data at the time of this report.
Australia, Brazil, China, France, Hong Kong, India, Japan, Korea, Mexico, Sweden, Taiwan, UK & Ireland	Rental car mileage	Category 3	Not technically feasible to quantify this data at the time of this report.
Australia, Colombia, France, Hong Kong, Indonesia, Japan, Mexico, Russia, Saudi Arabia, Sri Lanka, Sweden, Taiwan, UAE, UK & Ireland and USA.	Taxi	Category 3	Not technically feasible to quantify this data at the time of this report.
Brazil, Canada, Colombia, France, Germany, Hong Kong, Indonesia, Japan, Korea, Saudi Arabia, Sri Lanka, Sweden, Taiwan, UK & Ireland	Water treatment	Category 1	Included in rent and not invoiced to individual units.
Canada, USA, Korea, Sweden	Petrol	Category 1	Not technically feasible to quantify this data at the time of this report.
Canada, USA, Korea, Sweden	Diesel	Category 1	Not technically feasible to quantify this data at the time of this report.
France	Natural gas	Category 1	Included in rent and not invoiced to individual units.
Sweden, Indonesia, Sri Lanka, UAE, Saudi Arabia	Electricity	Category 2	Included in rent and not invoiced to individual units.
Indonesia, Sri Lanka, UAE, Saudi Arabia and Mexico Sales office.	Water Supply	Category 2	Emissions associated with water supply in these offices have been excluded as they have been estimated to be <i>de minimis</i> (1-2) employees in a rented room/ office.
All global business units except for Mexico and New Zealand.	Employee Commuting	Category 3	Not technically feasible to quantify this data at the time of this report.
All global business units except for Mexico and New Zealand.	Purchased goods and services	Category 4	Not technically feasible to quantify this data at the time of this report.
New Zealand EDL HR 2	Electricity	Category 2	Not technically feasible to quantify this data at the time of this report. Considered <i>de minimis</i> since we have not fully occupied the property.

A1.2 QUANTIFIED INVENTORY OF EMISSIONS AND REMOVALS

A1.2.1 Calculation methodology

A calculation methodology has been used for quantifying the emissions inventory based on the following calculation approach, unless otherwise stated below:

$$\text{Emissions} = \text{activity data} \times \text{emissions factor}$$

The following alternative emissions quantification approaches have been used in this inventory:

- Forest removals using programme supplied template based on growth rate lookup tables.

The quantification approach(es) has changed since the previous measurement period.

All emissions were calculated using Toitū e-manage with emissions factors and Global Warming Potentials provided by the Programme (see Appendix 1 - data summary.xls). Global Warming Potentials (GWP) from the IPCC fifth assessment report (AR5) are used as the preferred GWP conversion⁶.

Where applicable, unit conversions applied when processing the activity data has been disclosed.

There are systems and procedures in place that will ensure applied quantification methodologies will continue in future GHG emissions inventories.

A1.2.2 Historical recalculations

No historical recalculations have been conducted.

N/A

A1.2.3 Liabilities

A1.2.3.1 GHG STOCKS HELD

HFCs⁶, PFCs and SF₆ represent GHGs with high global warming potentials. Their accidental release could result in a large increase in emissions for that year, and therefore the stock holdings are reported under the Programme (Table 16).

GHG stocks have been reported in this inventory and added into the GHG Stock Liability questionnaire.

Table 16. HFCs, PFCs and SF₆ GHG emissions liabilities.

GHG gas stock held	Quantity (kg)	Potential Liability (tCO ₂ e)
HCFC-22 (R-22, Genetron 22 or Freon 22)	0.85	1.54
HFC-134a	5019.23	7177.5
HFC-23	12.9	190.92
Diesel Commercial	3385.58	9.02
R-404A	113.77	446.16
R-407C	22.71	40.28
R-410A	138.81	289.77
R-600A	0.55	0.00
Total		8,155.19

⁶ HFC stock liabilities for systems under 3 kg can be excluded.

A 1 . 2 . 3 . 2 LAND-USE LIABILITIES

Organisations that own land subject to land-use change may achieve sequestration of carbon dioxide through a change in the carbon stock on that land. Where sequestration is claimed, then this also represents a liability in future years should fire, flood, management activities or other intentional or unintentional events release the stored carbon.

Land-use change has not been included in this inventory.

A1.2.4 Supplementary results

Holdings and transactions in GHG-related financial or contractual instruments such as permits, allowances, renewable energy certificates or equivalent, verified offsets or other purchased emissions reductions from eligible schemes recognised by the Programme are reported separately here.

A 1 . 2 . 4 . 1 CONTRACTUAL INSTRUMENTS FOR GHG ATTRIBUTES

Contractual instruments are any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims. This includes Renewable Energy Certificates.

Contractual instruments are applicable for this reporting period.

29,080 Renewable energy certificates purchased from Meridian for the period 1st April 2020-31st March 2021. The 29,080 MWh of generated electricity against which these certificates have been issued led to the emission of an estimated zero (0) tonnes of equivalent carbon dioxide (CO₂-e), of which zero (0) tonnes are biogenic carbon emissions.

A 1 . 2 . 4 . 2 CARBON CREDITS AND OFFSETS

No carbon credits have been purchased for this reporting period.

A 1 . 2 . 4 . 3 PURCHASED OR DEVELOPED REDUCTION OR REMOVAL ENHANCEMENT PROJECTS

Not applicable

A 1 . 2 . 4 . 4 DOUBLE COUNTING AND DOUBLE OFFSETTING

There are various definitions of double counting or double offsetting. For this report, it refers to:

- Parts of the organisation have been prior offset.
- The same emissions sources have been reported (and offset) in both an organisational inventory and product footprint.
- Emissions have been included and potentially offset in the GHG emissions inventories of two different organisations, e.g., a company and one of its suppliers/contractors. This is particularly relevant to indirect (Categories 2 and 3) emissions sources.
- Programme approved 'pre-offset' products or services that contribute to the organisation inventory.
- The organisation generates renewable electricity, uses, or exports the electricity and claims the carbon benefits.
- Emissions reductions are counted as removals in an organisation's GHG emissions inventory and are counted or used as offsets/carbon credits by another organisation.

Double counting / double offsetting has not been included in this inventory.

APPENDIX 2: SIGNIFICANCE CRITERIA USED

Table 17. Significance criteria used for identifying inclusion of indirect emissions.

Emissions source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Level of influence	Outsourcing	Employee engagement
Overall F&P has decided to include all emissions sources where information is available, so that we can show full transparency. As the vast majority of our full carbon footprint are indirect emissions in categories 3, 4 and 5 and because this is material, we have chosen to have a very broad inclusion basis.	F&P has decided to include all available data irrespective of magnitude.	F&P has included all available information, irrespective of our ability to influence these emissions to show full transparency.	Current significance is driven by transparency, while risks and opportunities will be considered as significance criteria in future.	F&P has included all categories, which is more broad than typical sector-specific guidance.	Overall F&P has decided to include all emissions sources where information is available, so that we can show full transparency. As the vast majority of our full carbon footprint are indirect emissions in categories 3, 4 and 5 and because this is material, we have chosen to have a very broad inclusion basis.	Overall F&P has decided to include all emissions sources where information is available, so that we can show full transparency. As the vast majority of our full carbon footprint are indirect emissions in categories 3, 4 and 5 and because this is material, we have chosen to have a very broad inclusion basis.	Overall F&P has decided to include all emissions sources where information is available, so that we can show full transparency. As the vast majority of our full carbon footprint are indirect emissions in categories 3, 4 and 5 and because this is material, we have chosen to have a very broad inclusion basis. This includes employee commuting.

APPENDIX 3: CERTIFICATION MARK USE

F&P uses the certification marks for internal and external sustainability reporting.

APPENDIX 4: REFERENCES

International Organization for Standardization, 2018. ISO 14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. ISO: Geneva, Switzerland.

World Resources Institute and World Business Council for Sustainable Development, 2004 (revised). The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. WBCSD: Geneva, Switzerland.

World Resources Institute and World Business Council for Sustainable Development, 2015 (revised). The Greenhouse Gas Protocol: Scope 2 Guidance. An amendment to the GHG Protocol Corporate Standard. WBCSD: Geneva, Switzerland.

APPENDIX 5: REPORTING INDEX

This report template aligns with ISO 14064-1:2018 and meet Toitū carbon programme Organisation Technical Requirements. The following table cross references the requirements against the relevant section(s) of this report.

Section of this report	ISO 14064-1:2018 clause	Organisational Technical Requirement rule
Cover page	9.3.1 b, c, r 9.3.2 d,	TR8.2, TR8.3
Availability	9.2 g	
Chapter 1: Emissions Inventory Report		
1.1. Introduction	9.3.2 a	
1.2. Emissions inventory results	9.3.1 f, h, j	TR4.14
1.3. Organisational context	9.3.1 a	
1.3.1. Organisation description	9.3.1 a	
1.3.2. Statement of intent		TR4.2
1.3.3. Person responsible	9.3.1 b	
1.3.4. Reporting period	9.3.1 l	TR5.1, TR5.8
1.3.5. Organisational boundary and consolidation approach	9.3.1.d	TR4.3, TR4.5, TR4.7, TR4.11
1.3.6. Excluded business units		
Chapter 2: Emissions Management and Reduction Report		
2.1. Emissions reduction results	9.3.1 f, h, j, k 9.3.2 j, k	TR4.14, TR6.18
2.2. Significant emissions sources		
2.3. Emissions reduction targets		TR6.1, TR6.2, TR6.4, TR6.6, TR6.8,
2.4. Emissions reduction projects	9.3.2 b	TR6.8, TR6.11, TR6.12, TR6.13, TR6.14, TR6.15
2.5. Staff engagement		TR6.1, TR6.9
2.6. Key performance indicators		TR6.19
2.7. Monitoring and reporting	9.3.2 h	TR6.2
Appendix 1: Detailed greenhouse gas inventory	9.3.1 f, g	TR4.9, TR4.15
A1.1 Reporting boundaries		
A1.1.1 Emission source identification method and significance criteria	9.3.1 e	TR4.12, TR4.13
A1.1.2 Included emissions sources and activity data collection	9.3.1 p, q 9.3.2 i	TR5.4, TR5.6, TR5.17, TR5.18,
A1.1.3 Treatment of biogenic emissions and removals	9.3.1 g	TR4.15
A1.1.4 Excluded emissions sources and sinks	9.3.1 i	TR5.21, TR5.22, TR5.23
A1.2 Quantified inventory of emissions and removals		
A1.2.1 Calculation methodology	9.3.1 m, n, o, t	
A1.2.2 Historical recalculations		
A1.2.3 Liabilities		
A1.2.3.1 GHG stocks held		TR4.18
A1.2.3.2 Land-use liabilities	9.3.3.	TR4.19

A1.2.4 Supplementary results		
A1.2.4.1 Contractual instruments for GHG attributes	9.3.3	TR4.16, TR4.17
A1.2.4.2 Carbon credits and offsets	9.3.3.3	
A1.2.4.3 Purchased or developed reduction or removal enhancement projects	9.3.2 c	
A1.2.4.4 Double counting and double offsetting		
Appendix 2: Significance criteria used	9.3.1.e	TR4.12
Appendix 3: Certification mark use		TR3.6
Appendix 4: References		
Appendix 5: Reporting index		