



# **PUBLIC DISCLOSURE STATEMENT**

**HARVEST ROAD OCEANS PTY LTD**

**PRODUCT CERTIFICATION**

**FY2022-2023**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**

**HARVEST**  
ROAD



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Harvest Road Oceans Pty Ltd
REPORTING PERIOD	1 July 2022 – 30 June 2023 True-up report
DECLARATION	To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard. <i>Richard Kohne</i>
	Richard Kohne General Manager of Aquaculture 02/04/2024



**Australian Government**  
**Department of Climate Change, Energy,  
the Environment and Water**

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Version: August 2023

# 1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	905 tCO <sub>2</sub> e
THE OFFSETS USED	100% ACCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Harvest Road Oceans
TECHNICAL ASSESSMENT	Andrew D. Moore

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## 2. CARBON NEUTRAL INFORMATION

### Description of certification

This Public Disclosure Statement (PDS) outlines how shellfish produced by Harvest Road Oceans' (HRO) aquaculture operations have been certified carbon neutral according to the Climate Active Carbon Neutral Standard for Products and Services (2022).

Harvest Road Oceans is a part of Harvest Road Group, one of Australia's largest and most diverse agri-food businesses. We grow and market a range of sustainable, high quality Western Australian products for consumers and wholesale partners in domestic and export markets. Shellfish production is carried out at two locations nearby Albany, Western Australia (Oyster Harbour and King George Sound).

Harvest Road Oceans is focused on delivering best practice in sustainable shellfish aquaculture. Maintaining this focus on a commercial scale protects the marine environments we operate in, while also producing the best quality seafood.

*"Climate Active carbon neutral certification is a clear demonstration of our commitment to producing sustainable seafood".*

### Product description

This PDS covers the product certification of Rock Oysters and Akoya grown under the Leeuwin Coast brand (full coverage of products). Leeuwin Coast was established with the aim to bring the finest Western Australian seafood to the world. The swift flowing currents of Albany create prime shellfish growing conditions that are uniquely Western Australian. We are proud Western Australian primary producers; we acknowledge that the future of our operations hinges completely on our ability to care for our local ecosystems and community. Leeuwin Coast is built on a vision of exemplary environmental stewardship.

The functional unit of our product certification is "1 dozen Rock Oysters / Akoya supplied to customers", and this covers all Rock Oyster and Akoya products. The certification covers cradle-to-grave for the Rock Oysters / Akoya and is based on a Life Cycle Assessment (LCA) covering all the shellfish grown and produced by Harvest Road Oceans. The LCA has been carried out in accordance with the Climate Active Carbon Neutral Standard for Products and Services reference (2022), and includes the carbon emissions from a third-party hatchery, the fuel used in vessels, processing of packaging materials, product freight and disposal of shell waste. The detailed calculation for the LCA has been technically assessed by Life Cycle Logic under the Climate Active validation requirements for carbon neutral certification and submitted to the Climate Active Carbon Neutral Program.

## 3. EMISSIONS BOUNDARY

### Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

**Quantified** emissions have been assessed as 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service, and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

**Non-quantified** emissions have been assessed as attributable and are captured within the emissions boundary but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

### Outside the emissions boundary

**Non-attributable** emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

## Inside emissions boundary

### Quantified

Water.

Waste.

Electricity.

Fuels used in vessels and company vehicles.

Stationary energy.

Refrigerants for HRO cool room and Ice Machines.

Ropes, floats, and baskets.

Freight of inputs.

Freight of product to customers.

Repair/Maintenance of vessels.

Quality Analysis.

Packaging materials.

Hatchery electricity use.

Disposal of empty shells to landfill.

### Non-quantified

Fuels used by Hatchery.

Fuels used by 3<sup>rd</sup> party packers.

Refrigerants used by 3<sup>rd</sup> party packer.

Refrigerants used for refrigerated transport.

## Outside emission boundary

### Non-attributable

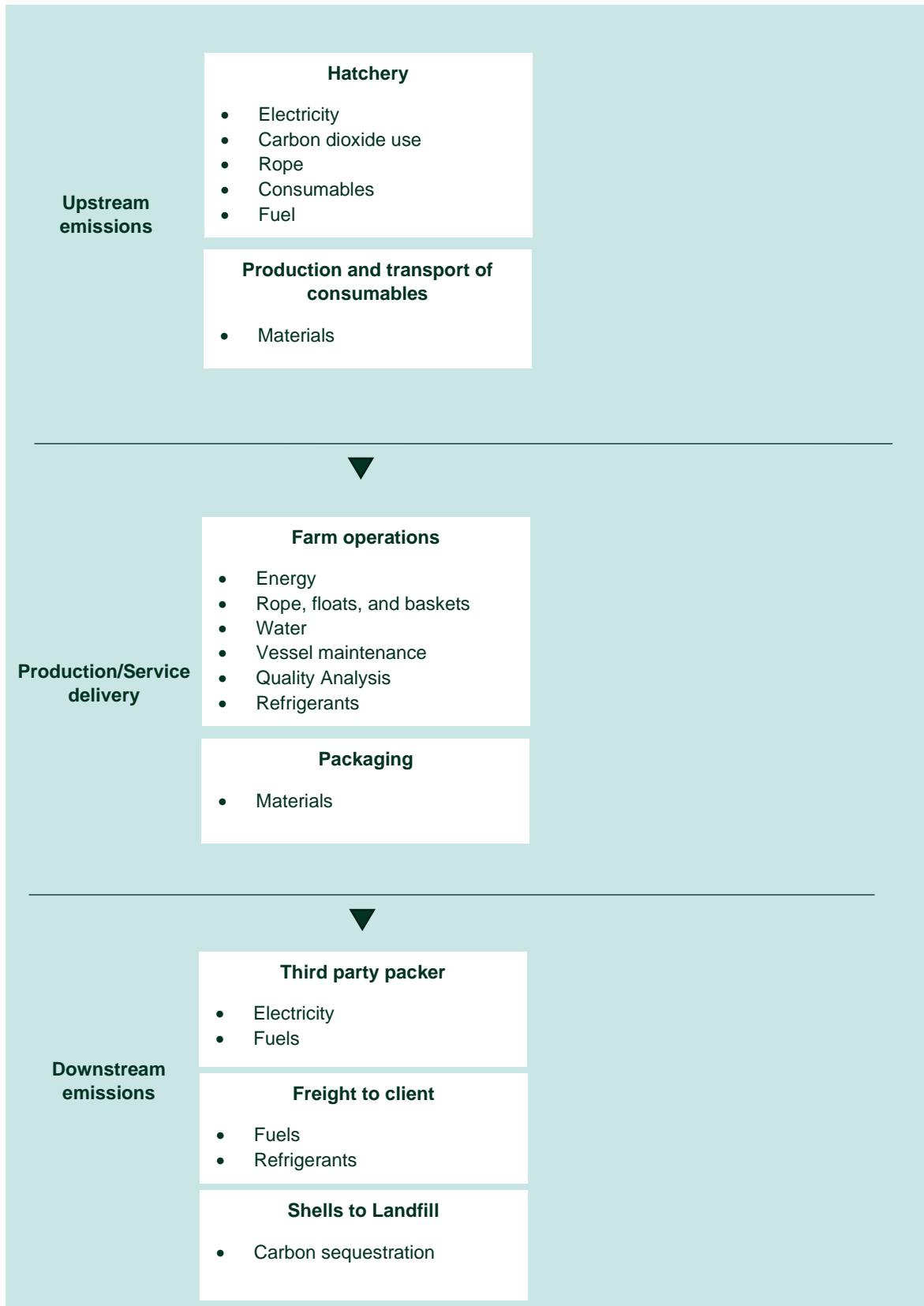
Organisational overhead.

Downstream storage of product before food preparation and consumption.

Food preparation and consumption.

## Product process diagram

The following diagram is a cradle-to-grave boundary.



## 4. EMISSIONS REDUCTIONS

### Emissions reduction strategy

The decision to have our shellfish products certified carbon neutral is demonstration of a firm corporate commitment to embedding sustainability into our business. Harvest Road Oceans is focussed on protecting the ocean environment it operates in and near to safeguard sustainable aquaculture in Western Australia for generations to come.

Our emissions intensity per functional unit is a leading indicator to our efficiency of production at Harvest Road Oceans. Production of Rock Oysters is approximately 90% of our farms activity and we currently produce 9.13 kg CO<sub>2</sub>-e for every Dozen we sell. Our goal is to reduce our emissions intensity per functional unit year on year leading into 2030, using FY23 as baseline. This will be achieved through:

1. Significant increases in the sale of rock oysters year on year. Utilising stock developed for which emissions have already been offset in past reporting periods.
2. The rationalisation of aquaculture lease footprint to a more consolidated location, reducing the amount of upstream/internal freight.
3. Review of our fuel efficiency strategy for all heavy and marine vehicles. To identify opportunities for an improvement in fuel efficiency. Present recommendations to reduce diesel & unleaded consumption such as routine hull maintenance and route optimisation.
4. Continue to review options for renewable energy sources including providing support for any external renewable projects in the south-west region of WA.
5. Review Work from Home policy to reduce emissions from staff commute.

As a company that optimises several supply chain partners, it is difficult to predict our future emissions. Seeking the most accurate possible information from our partners is vital to the overall accuracy of our carbon accounting. These relationships are something we can always improve. We see reducing the environmental footprint of our current supply chain partners more beneficial to the wider community and environment than shifting supply chain partners. However, we are cognisant of our limited ability to influence, given the size and infancy of our business at this stage.



## Emissions reduction actions

Harvest Road Oceans is a young business that is growing rapidly with a focus on continual improvement as our operations expand and develop. Over the past reporting period we have demonstrated strong environmental stewardship for the marine environment that supports our business through the following initiatives:

- Investing in on-water Rock Oyster grading infrastructure to minimise vessel trips, which reduces aggregate fuel consumption.
- The installation of solar panels at our 3<sup>rd</sup> party hatchery.
- Continued review of potential viable renewable energy sources for our operations.
- Using modern floating aquaculture infrastructure which has a smaller seabed footprint and reduces sea floor disturbance.

## 5. EMISSIONS SUMMARY

### Emissions over time

Emissions since base year		Total tCO <sub>2</sub> -e	Emissions intensity of the functional unit (1 dozen Oysters)	Emissions intensity of the functional unit (1 dozen Akoya)
Base year:	2020–21	115 tCO <sub>2</sub> -e	0.48 kg CO <sub>2</sub> -e	0.67 kg CO <sub>2</sub> -e
Year 1:	2020–21	281 tCO <sub>2</sub> -e	6.45 kg CO <sub>2</sub> -e	5.26 kg CO <sub>2</sub> -e
Year 2:	2021–22	749.29 tCO <sub>2</sub> -e	7.86 kg CO <sub>2</sub> -e	4.25 kg CO <sub>2</sub> -e
Year 3:	2022-23	904.41 tCO <sub>2</sub> -e	9.13 kg CO <sub>2</sub> -e	6.80 kg CO <sub>2</sub> -e

## Significant changes in emissions

Emission source name	Previous year emissions (t CO <sub>2</sub> -e)	Current year emissions (t CO <sub>2</sub> -e)	Detailed reason for change
Oyster – Hatchery Electricity usage	27.8	195	Significant increase in hatchery supply to support higher level of future production.
Oyster – Downstream freight; Airfreight	0.000	113.6	Utilisation of Airfreight to penetrate NSW & VIC markets.
Oyster – Ropes, Floats & Baskets	267.4	9.8	In FY23, Given the 30-year life span of this infrastructure the CO <sub>2</sub> -e value is allocated incrementally over a conservative 20-year period.
Oyster – Transport Diesel	56.1	80.7	Increased production and transport of akoya spat is captured here in FY23 due to marine transport of spat direct to mistaken island lease.
Oyster – Transport Petrol	59.2	109.8	Increased production.
Oyster – Waste; Sanitary and garbage disposal	86.3	53.7	Reduced activity in relation to removal of old infrastructure and clearing site for minor construction works.
Akoya – Hatchery Electricity usage	12.4	45.7	Increased in activity linked to expected future production.
Akoya – Ropes & Floats	59.2	4.5	Based on guidance from 3 <sup>rd</sup> party auditor. The CO <sub>2</sub> -e value of the 30-year life span of this infrastructure it is now allocated incrementally over a conservative 20-year period.
Akoya – 3 <sup>rd</sup> Party packer electricity usage	13.9	57.8	Increased production, beginning of bulk packing akoya for serving international customers.
Akoya – Downstream freight; Refrigerated Airfreight	0	62.7	This was the first year where HRO airfreighted Akoya to new markets.

## Use of Climate Active carbon neutral products and services

Certified brand name	Product or Service used
Opal Australian Paper	Certified Paper Products

## Product Emissions summary

Stage	Oyster Emissions tCO <sub>2</sub> -e	Akoya Emissions tCO <sub>2</sub> -e
Hatchery Electricity	194.9	45.7
Hatchery Liquid CO <sub>2</sub>	0.8	0.2
Transport from Hatchery to farm	0.6	N/A. This transport is made by an HRO vessel. Resultingly, emissions have been included in HRO vehicle fuel consumption values this reporting period.
Rope, floats and Baskets	9.76	4.5
Product packaging materials	0.7	0.045
Upstream freight	7.6	0.9
HRO fuel use	214.4	16.2
HRO land base electricity use (location-based approach)	17.2	7
HRO Land based waste	62.4	5.6
HRO Refrigerants	0.9	0.1
HRO Land base water supply	2.3	0.2
HRO Vehicle R & M	40.9	3.1
HRO Quality Analysis	7.4	3.0
3 <sup>rd</sup> Party packer electricity	N/A	57.8
3 <sup>rd</sup> Party packer – uplift for fuel and refrigerants	N/A	2.9
Downstream freight to customers	126.3	63.1
Empty shells transported to landfill	0.6	0.2
End-of-life disposal (CO <sub>2</sub> Sequestration)	-11.3	-3.1
Hatchery – Fuels Uplift	9.7	2.3

Downstream Freight – Refrigerants Uplift	6.3	3.2
Translocation of oysters	2.84	0

Uplifts have been applied to both Rock Oysters and Akoya. Rock Oysters received a 5% Uplift for Downstream freight refrigerants and a 5% uplift for fuels used in the hatchery. Akoya received both uplifts as well as an additional third 5% uplift for missing fuels and refrigerants used by 3<sup>rd</sup> party packer.

<b>Emissions intensity per functional unit</b>	9.125kg CO2-e/doz	6.89kg CO2-e/doz
<b>Number of functional units to be offset</b>	76082	30886
<b>Total emissions to be offset</b>	694.24 tCO2-e	212.80 tCO2-e

## 6. CARBON OFFSETS

### Offsets retirement approach

This certification has taken in-arrears offsetting approach. The total emission to offset is 905 t CO<sub>2</sub>-e. The total number of eligible offsets used in this report is 905. Of the total eligible offsets used, 618 were previously banked, and 287 were newly purchased and retired. 0 are remaining and have been banked for future use.

## Eligible offsets retirement summary

Offsets retired for Climate Active carbon neutral certification												
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO <sub>2</sub> -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)	
Western Australian Rangeland Conservation Initiative	ACCU	ANREU	02 Aug 2023	8,379,383,798 – 8,379,384,547	2023-24		750	132	0	618	68.3%	
Reforestation by Environmental Plantings – Western Farm Trees – EOP101162	ACCU	ANREU	02 Apr 2024	9,005,042,956 – 9,005,043,242	2023-24		287	0	0	287	31.7%	
<b>Total offsets retired this report and used in this report</b>										905		
<b>Total offsets retired this report and banked for future reports</b>									0			
Type of offset units							Eligible quantity (used for this reporting period)	Percentage of total				
Australian Carbon Credit Units (ACCU)							905	100%				

## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

### Renewable Energy Certificate (REC) Summary

N/A

## APPENDIX A: ADDITIONAL INFORMATION

N/A

## APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting. Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

### Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

### Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets, and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

For this certification, electricity emissions have been set by using the **location-based approach**.



Market Based Approach Summary			
Market Based Approach	Activity Data (kWh)	Emissions (kg CO <sub>2</sub> -e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	0	0	0%
<b>Total non-grid electricity</b>	<b>0</b>	<b>0</b>	<b>0%</b>
LGC Purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	0	0	0%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCs surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	8,250	0	19%
Residual Electricity	35,635	34,031	0%
<b>Total renewable electricity (grid + non grid)</b>	<b>8,250</b>	<b>0</b>	<b>19%</b>
<b>Total grid electricity</b>	<b>43,885</b>	<b>34,031</b>	<b>19%</b>
<b>Total electricity (grid + non grid)</b>	<b>43,885</b>	<b>34,031</b>	<b>19%</b>
Percentage of residual electricity consumption under operational control	100%		
<b>Residual electricity consumption under operational control</b>	<b>35,635</b>	<b>34,031</b>	
Scope 2	31,470	30,053	
Scope 3 (includes T&D emissions from consumption under operational control)	4,165	3,978	
<b>Residual electricity consumption not under operational control</b>	<b>0</b>	<b>0</b>	
Scope 3	0	0	

<b>Total renewables (grid and non-grid)</b>	<b>18.80%</b>
<b>Mandatory</b>	<b>18.80%</b>
<b>Voluntary</b>	<b>0.00%</b>
<b>Behind the meter</b>	<b>0.00%</b>
<b>Residual scope 2 emissions (t CO<sub>2</sub>-e)</b>	<b>30.05</b>
<b>Residual scope 3 emissions (t CO<sub>2</sub>-e)</b>	<b>3.98</b>
<b>Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO<sub>2</sub>-e)</b>	<b>30.05</b>
<b>Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO<sub>2</sub>-e)</b>	<b>3.98</b>
<b>Total emissions liability (t CO<sub>2</sub>-e)</b>	<b>34.03</b>

Location-based approach summary						
Location-based approach	Activity Data (kWh) total	Under operational control			Not under operational control	
		(kWh)	Scope 2 Emissions (kgCO <sub>2</sub> -e)	Scope 3 Emissions (kgCO <sub>2</sub> -e)	(kWh)	Scope 3 Emissions (kgCO <sub>2</sub> -e)
Percentage of grid electricity consumption under operational control	100%					
ACT	0	0	0	0	0	0
NSW	0	0	0	0	0	0
SA	0	0	0	0	0	0
VIC	0	0	0	0	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	43885	43885	22381	1755	0	0
TAS	0	0	0	0	0	0
<b>Grid electricity (scope 2 and 3)</b>	<b>43885</b>	<b>43885</b>	<b>22381</b>	<b>1755</b>	<b>0</b>	<b>0</b>
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
<b>Non-grid electricity (behind the meter)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Total electricity (grid + non grid)</b>	<b>43885</b>					

Residual scope 2 emissions (t CO <sub>2</sub> -e)	22.38
Residual scope 3 emissions (t CO <sub>2</sub> -e)	1.76
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	22.38
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO <sub>2</sub> -e)	1.76
<b>Total emissions liability</b>	<b>24.14</b>

# APPENDIX C: INSIDE EMISSIONS BOUNDARY

## Non-quantified emission sources

The following emissions sources have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable, but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
Fuel used by Hatchery	Data unavailable
Fuel used by 3 <sup>rd</sup> party packer	Data unavailable
Refrigerants by 3 <sup>rd</sup> party packer	Data unavailable
Refrigerants used in refrigerated transport	Data unavailable

## Data Management Plan

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources. Namely, fuels and refrigerants consumed by our supply chain partners. We plan to update our calculations with the best available data. We expect the accuracy of this data to improve over time.

Fuel use at the hatchery and third-party packer: We have not received any information regarding fuel use by these external supply chain partners. We do know their activities are high demand for electricity, but we are unable to collect data on third-party fuel use, nor can we extrapolate this or use proxy data to fill the data gap. We believe the third-party fuel use is not material, and therefore we have applied a conservative 5% uplift factor to account for the missing electricity emission data.

Refrigerant use at the hatchery, third-party packers and in downstream freight: The use of uplift factors for refrigerant use and emissions associated with packing and refrigerated transport is considered appropriate for the foreseeable future. While we will seek data on refrigerant use from our third-party packer, this is unlikely to be available. For refrigerated transport, it would be a significant exercise to establish refrigerant use and attribute this to HRO. The impact is estimated to be negligible, so we will continue our current approach, applying a conservative 5% uplift factor based on associated electricity and transport emissions to account for the missing emission data.

### Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**.

	No actual data	No projected data	Immaterial
N/A	N/A	N/A	N/A

## APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make, or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.
2. **Influence** The responsible entity could influence emissions reduction from a particular source.
3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.

## Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Organisational Overhead	Y	Y	N	N	N	<b>Size:</b> This is not relevant to product specific certification.
Storage by our customers	N	Y	N	N	N	<b>Influence:</b> We do not have the potential to influence the emissions from this source, we have no control over the treatment or consumption of our product once its sold.
Food preparation and consumption	N	Y	N	N	N	<b>Influence:</b> We do not have the potential to influence the emissions from this source, we have no control over the treatment or consumption of our product once its sold.



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