Annual Update
Indicator Summary
2023

Australian Beef
*Sustainability
Framework*

RMAC

Highlights

In 2020, the Australian beef industry has **reduced its net CO_2e emissions by 64.1%** since 2005.

The A-UK FTA entered into force, delivering **significant increase in tariff-free** beef access to a key market.

Working with industry and government departments, we have ensured **strong barriers** are maintained at biosecurity borders.

Provision of support to Indonesia for management of Foot and Mouth Disease (FMD), including **$5.9 million** for vaccinations, in addition to extensive industry contribution.

Challenges

Australia was subjected to fires, floods, and areas of drought, requiring urgent changes in grazing schedules and creating challenges for rebuilding.

Record high prices for cattle as the herd continued to rebuild proved a challenge for processors, leading to lower than average throughput and reduced efficiency.

43.7% of grazing land is being actively managed for biodiversity, including weed and pest management, prescribed burning, revegetation, soil remedy works, and fencing riparian areas.

The total mortality rate of cattle exported on sea voyages has more than halved in two years, reaching a **record low of 0.05%** in 2022.

Carbon sequestered in vegetation on red meat properties reached its highest recorded amount since 2015, **sequestering 28.42 Mt CO$_2$e.**

400 litres of water is used per kilogram of liveweight gain, **down 18%** over the most recent five years, and 73% lower than 1985.

With unemployment at historical lows of 3.5%, sourcing labour in the agricultural sector - specifically processors - has been difficult.

The discontinuation of the ABS agricultural census will reduce visibility of data, impacting transparency, trust, and decision making.

Energy prices are expected to increase by 20-30% in 2023 putting considerable strain on the red meat supply chain, especially the processing sector.

About the ABSF

Australian Beef Sustainability Framework

The Australian Beef Sustainability Framework (ABSF) reduces risks and leverages opportunities by managing what is most important to stakeholders, as identified in the materiality assessment undertaken in 2020. It shows our intent to be accountable and to accurately tell the Australian beef story.

It aims to:

» Promote industry transparency and progress to customers and the community

» Inform industry investment for continuous improvement in areas most important to our industry and stakeholders

» Help protect and grow access to financial capital

» Foster constructive relationships with external stakeholders to work collaboratively with the industry.

The ABSF does not:

» Establish or endorse measurement systems at an individual business level

» Provide an accreditation or certification system

» Endorse prescriptive management practices

» Create additional work for individual businesses.

Sustainability

Sustainability is the production of beef in a manner that is socially, environmentally, and economically responsible. We do this through the care of natural resources, people and the community, the health and welfare of animals, and the drive for continuous improvement.

Vision

A thriving Australian beef industry that strives to continuously improve the wellbeing of people, animals and the environment.

For further information regarding the data sources, explanations, and updates of industry activities, please refer to the Australian Beef Sustainability Framework 2023 Annual Update - available at:

www.sustainableaustralianbeef.com.au

ABSF 2023 Report Card

Each indicator's historical data has been analysed to determine if it is significantly trending between the first available data point and the most recently available data. A 75% confidence interval has been applied to determine if there is an improvement or decline, or if the data has remained steady. Each indicator has a data source, and more information on the source can be found on the back cover.
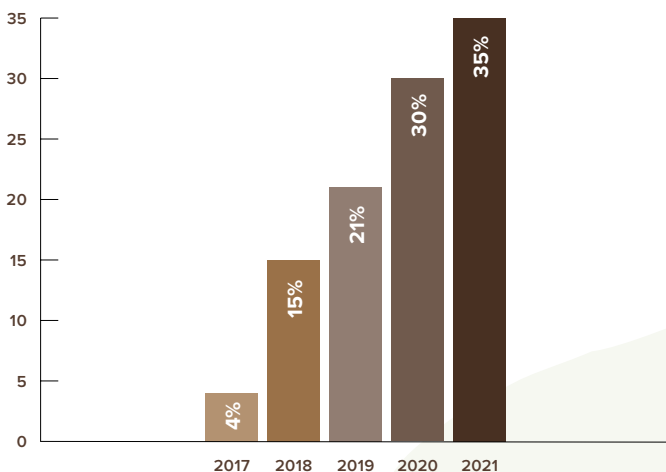
● = Improvement, or maximum limit reached

● = Decline

● = Steady

N/A = Data is unable to be trended, or is a new indicator

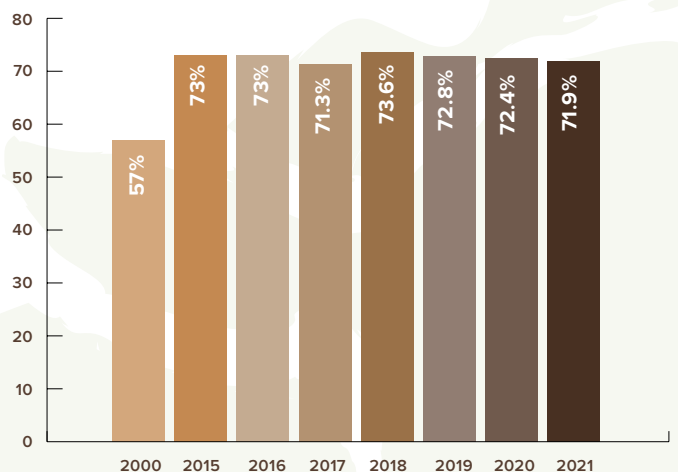## Best Animal Care

Animal Husbandry

1.1 Percentage of industry using pain relief for invasive husbandry practices

TREND ●

	2017	2018	2019	2020	2021
%	4%	15%	21%	30%	35%

1.2 Percentage of polled calves born in seedstock herds

TREND ●

	2000	2015	2016	2017	2018	2019	2020	2021
%	57%	73%	73%	71.3%	73.6%	72.8%	72.4%	71.9%

Biosecurity

2.1 Percentage of cattle properties covered by a documented biosecurity plan

TREND ●

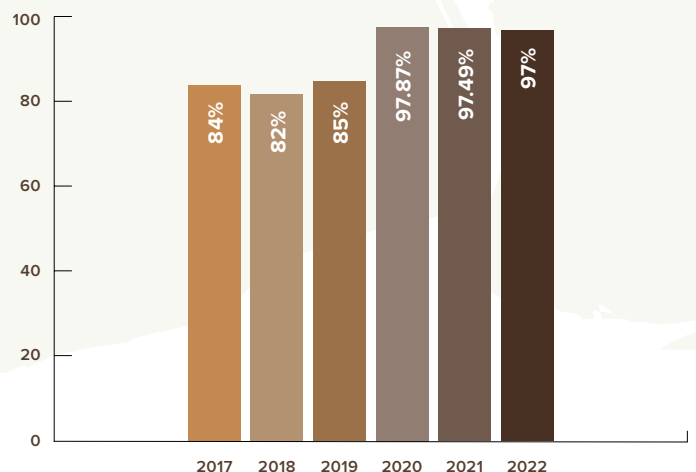|	2018	2019	2020	2021	2022
%	25%	90%	91%	83%	86%
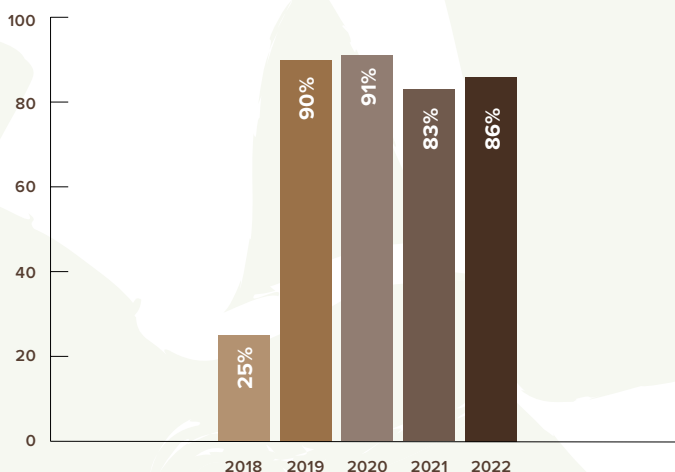
Processing Practices

3.1 Percentage of cattle processed through an establishment accredited under the Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS)
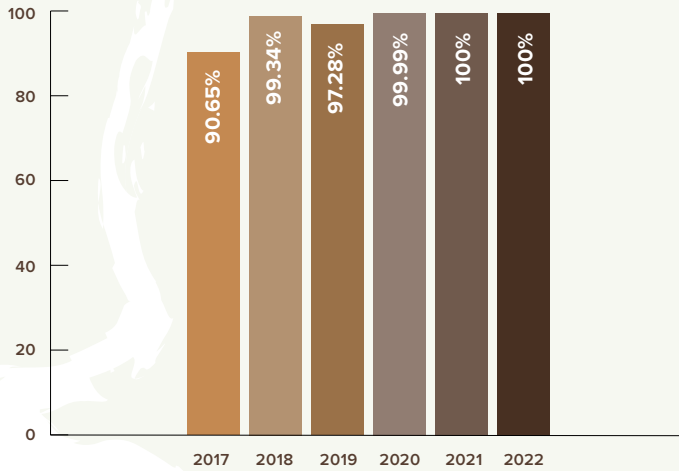
TREND ●

	2017	2018	2019	2020	2021	2022
%	84%	82%	85%	97.87%	97.49%	97%

Processing Practices

3.2 Percentage of cattle processed in compliance with the Exporter Supply Chain Assurance System (ESCAS)

TREND ●

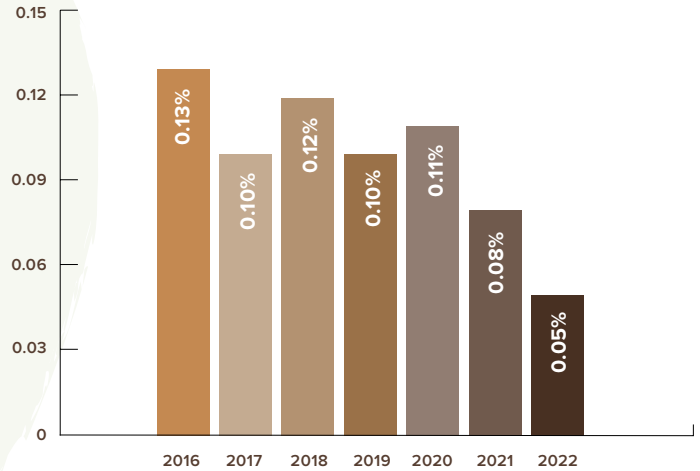| Year	Value
2017	90.65%
2018	99.34%
2019	97.28%
2020	99.99%
2021	100%
2022	100%

Livestock Transport

4.1 The total mortality rate of cattle exported on sea voyages

TREND ●

Year	Value
2016	0.13%
2017	0.10%
2018	0.12%
2019	0.10%
2020	0.11%
2021	0.08%
2022	0.05%

Health & Welfare

5.1 Percentage producer awareness of the Australian Animal Welfare Standards for Cattle

TREND ●

Year	Value
2018	56%
2019	73%
2020	97.3%
2021	99.9%
2022	100%
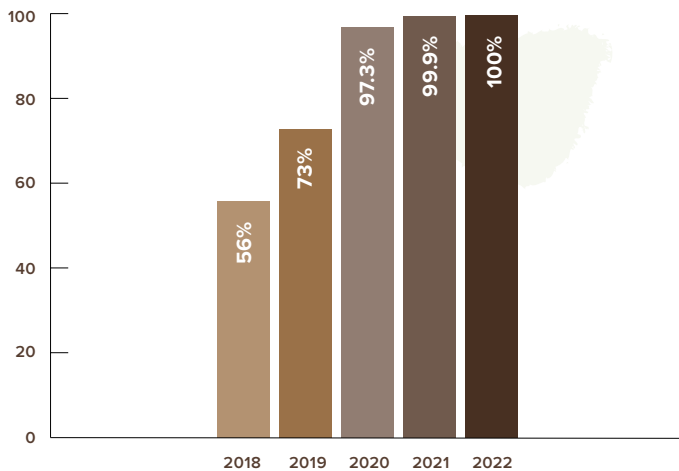
5.2 Percentage compliance with National Feedlot Accreditation Scheme (NFAS) Animal Welfare requirements

TREND ●

Year	Value
2017	96.24%
2018	97.15%
2019	98.03%
2020	94.7%
2021	99.5%
2022	88.02%
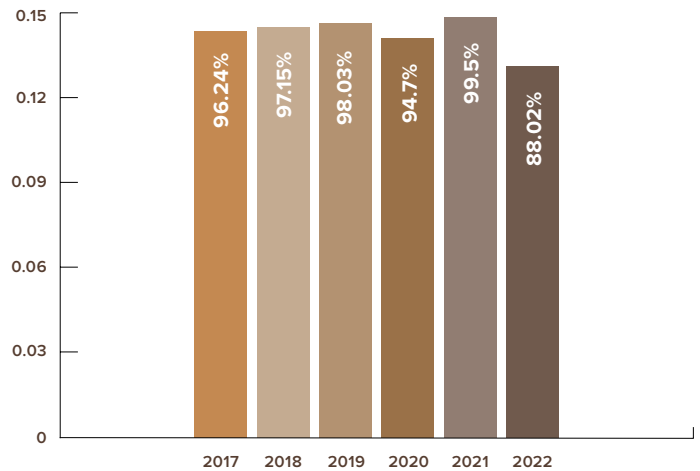
5.3 Percentage of feedlot capacity with access to shade

TREND ●

Year	Value
2021	58.9%
2022	63%
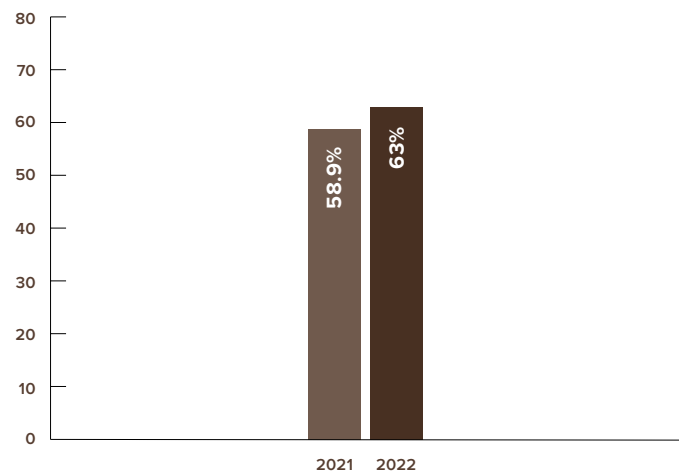
5.4 Vaccination rates for clostridial diseases

TREND ●

Year	Value
2017	71%
2018	82%
2019	70%
2020	72%
2021	77%
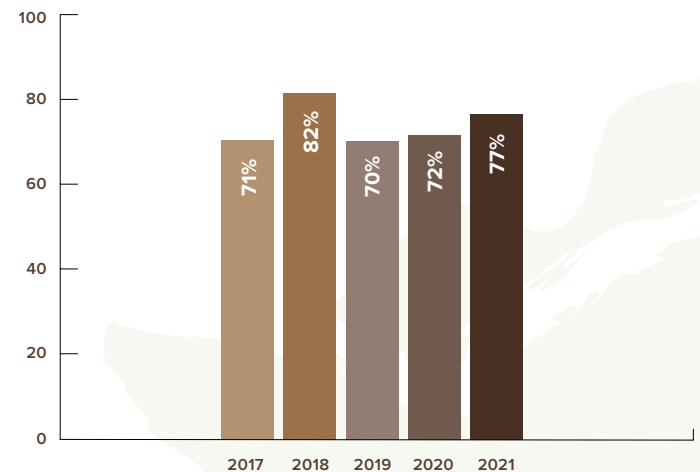
Health & Welfare

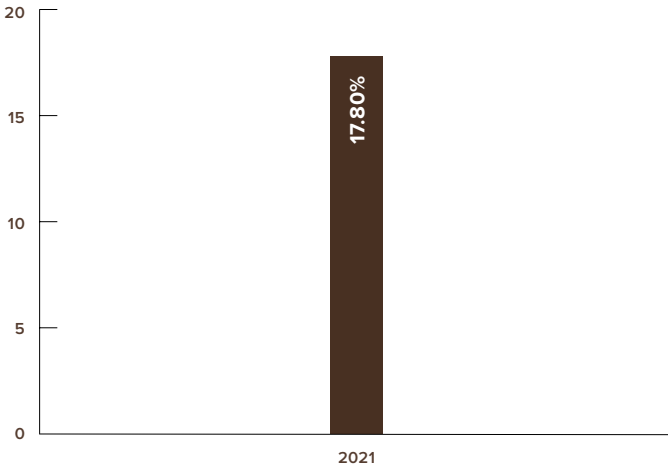**5.5 Percentage of producers undertaking low stress stock handling**
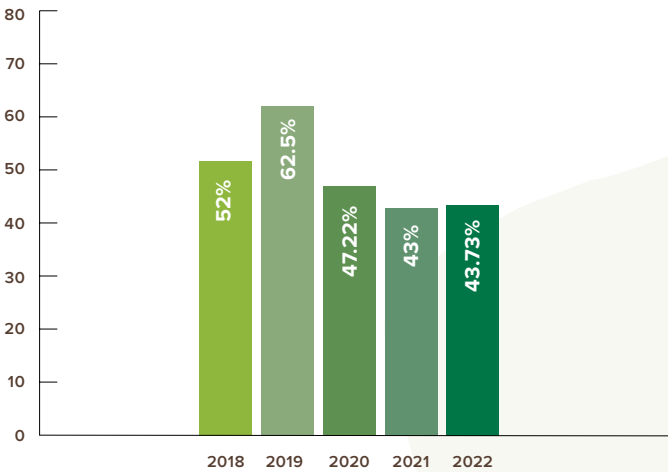
TREND N/A

Environmental Stewardship

Biodiversity

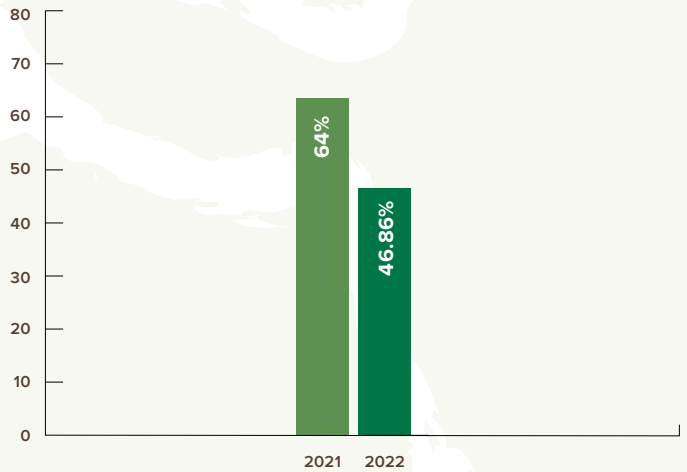**6.1 Percentage cattle-producing land managed for biodiversity outcomes through active management**

TREND 🟡

Soil Health

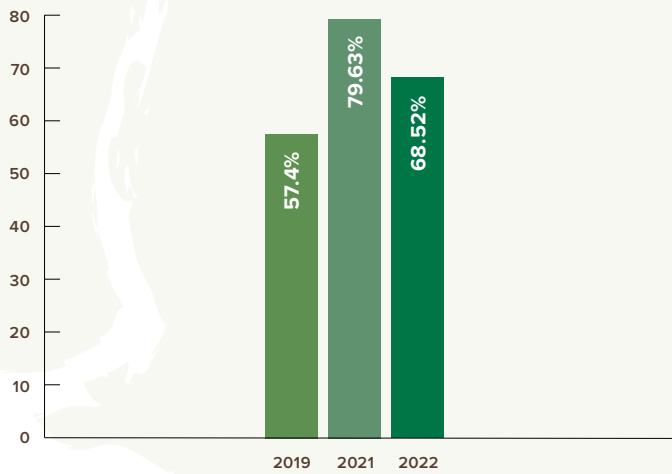**7.1 Percentage of cattle producers adopting practices to improve soil water retention**

TREND 🔴

Groundcover

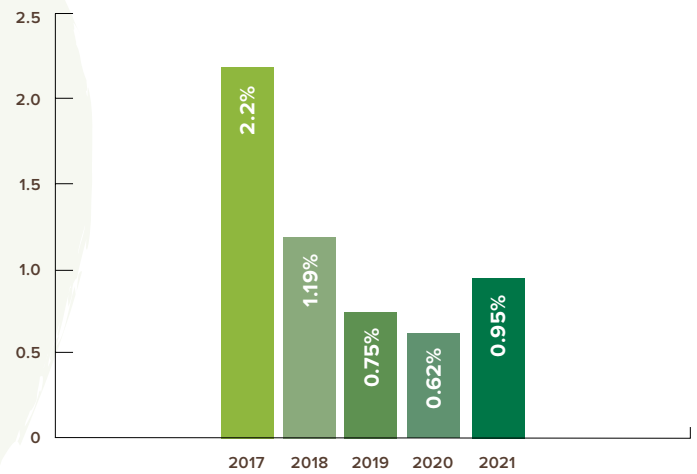**8.1 Percentage of NRM regions achieving healthy groundcover thresholds**

TREND 🟡

Year	Value
2019	57.4%
2021	79.63%
2022	68.52%

Balance of Tree & Grass Cover

9.1 Percentage of national forest cover gain

TREND N/A

Year	Value
2017	2.2%
2018	1.19%
2019	0.75%
2020	0.62%
2021	0.95%

9.2 Percentage of national forest cover loss

TREND N/A

Year	Value
2017	1.30%
2018	1.60%
2019	1.15%
2020	1.24%
2021	1.24%
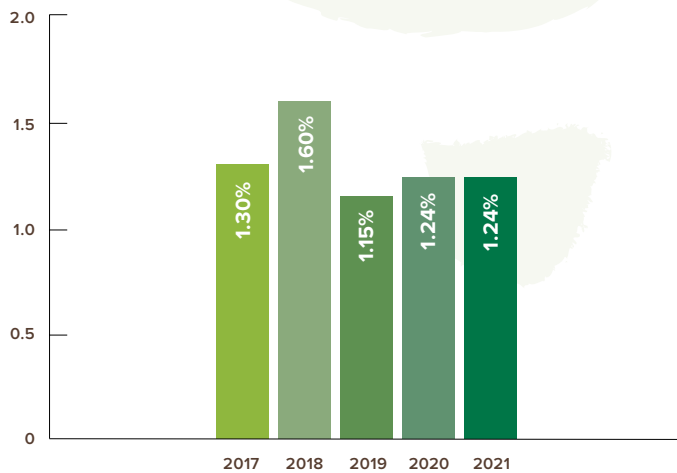
9.3 Percentage of national woodland cover gain

TREND N/A

Year	Value
2017	4.5%
2018	5.88%
2019	3.25%
2020	3%
2021	3.17%
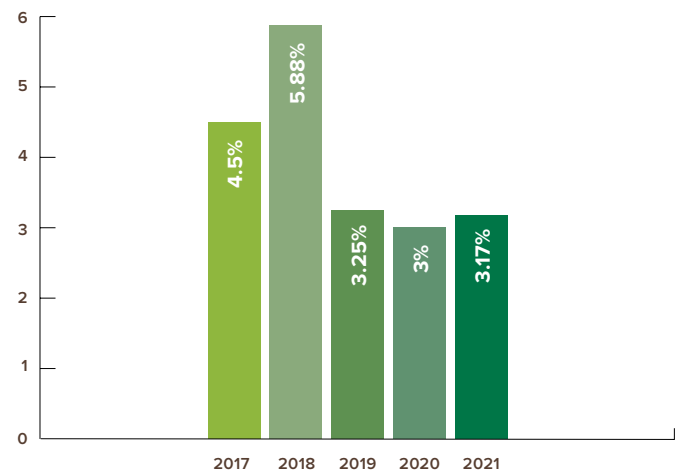
9.4 Percentage of national woodland cover loss

TREND N/A

Year	Value
2017	3.2%
2018	5.48%
2019	3.36%
2020	1.71%
2021	2.61%
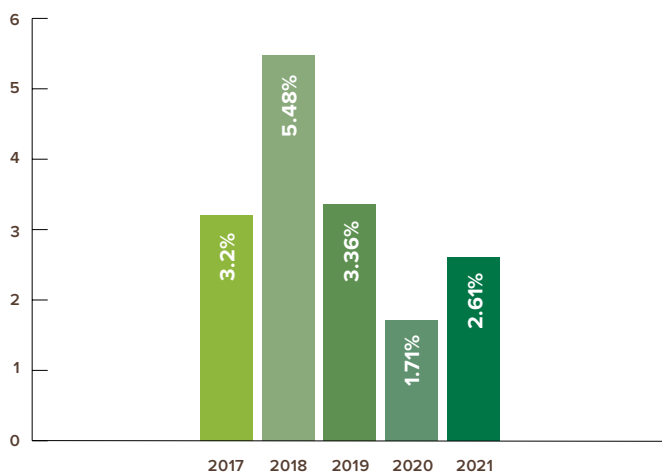
GHG Emissions & Carbon Capture

10.1 Percentage total CO_2e reduced by beef industry from a 2005 baseline

TREND 🟢

Year	Value
2015	42.8%
2016	55.65%
2017	56.85%
2018	51.16%
2019	61.7%
2020	64.07%
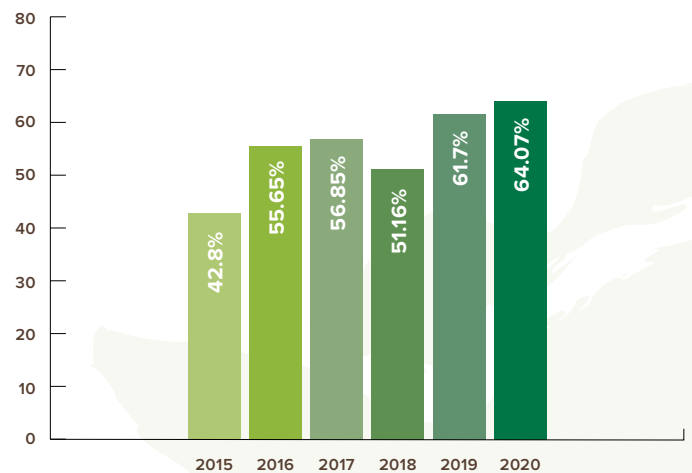
GHG Emissions & Carbon Capture

10.2 Net emissions: Mt of CO_2e emitted by the beef industry
TREND ●

- 2005: 125.83 Mt
- 2015: 71.98 Mt
- 2016: 56.55 Mt
- 2017: 55.81 Mt
- 2018: 61.46 Mt
- 2019: 48.19 Mt
- 2020: 45.21 Mt
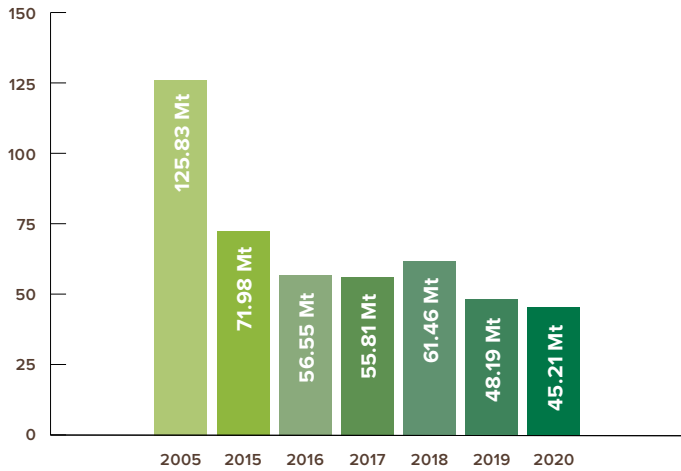
10.3 kg CO_2e emitted per kg liveweight when raising beef
TREND N/A

- 2010: 14.5 kg
- 2015: 13.4 kg
- 2020: 13.1 kg
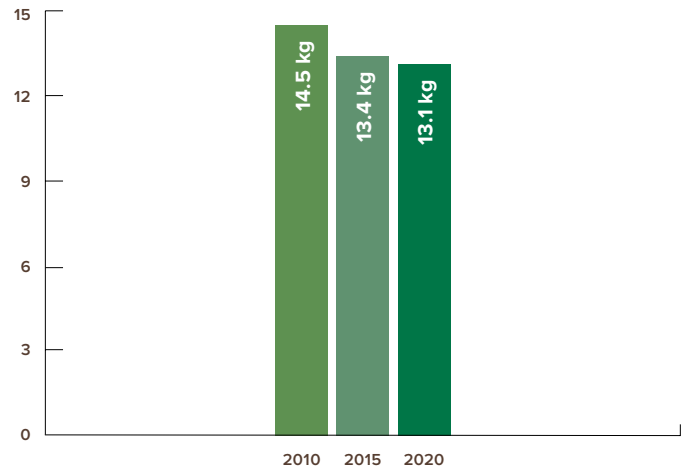
10.4 kg CO_2e emitted per tonne HSCW when processing beef
TREND ●

- 2014: 432 kg
- 2020: 397 kg
- 2022: 476 kg
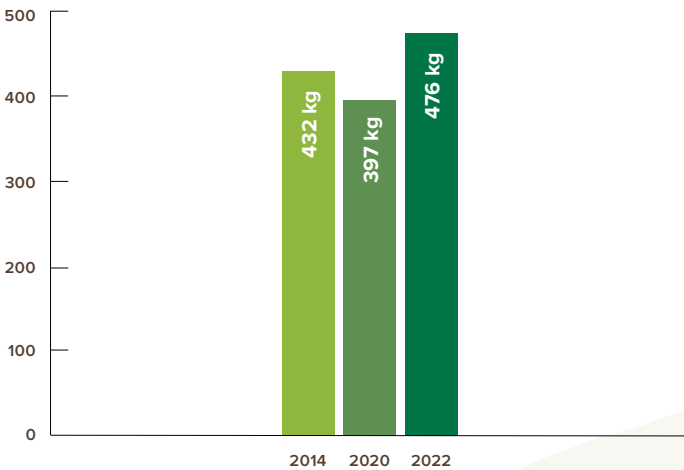
10.5 Percentage CO_2e captured and reused in processing
TREND ●

- 2014: 5.8%
- 2020: 6.6%
- 2022: 10.5%
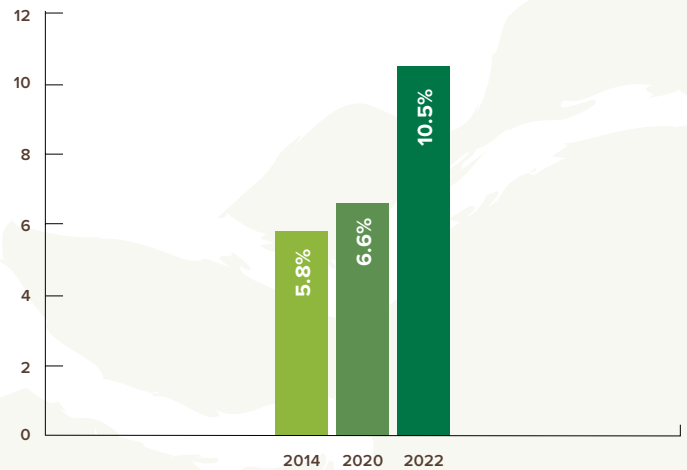
10.6 Carbon sequestered in on-farm vegetation (MT CO_2e)
TREND ●

- 2015: 14.31 Mt
- 2016: 26.54 Mt
- 2017: 28.39 Mt
- 2018: 27.33 Mt
- 2019: 21.65 Mt
- 2020: 28.42 Mt
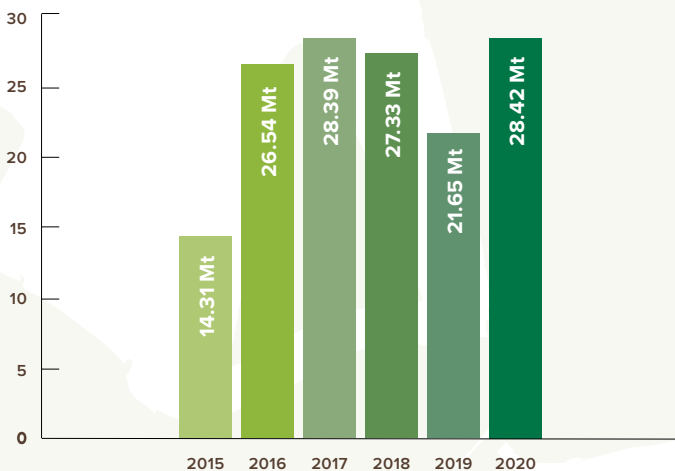
Water

11.1 Litres of water used per kilogram of liveweight for raising cattle
TREND ●

- 2010: 567 L
- 2015: 486 L
- 2020: 400 L
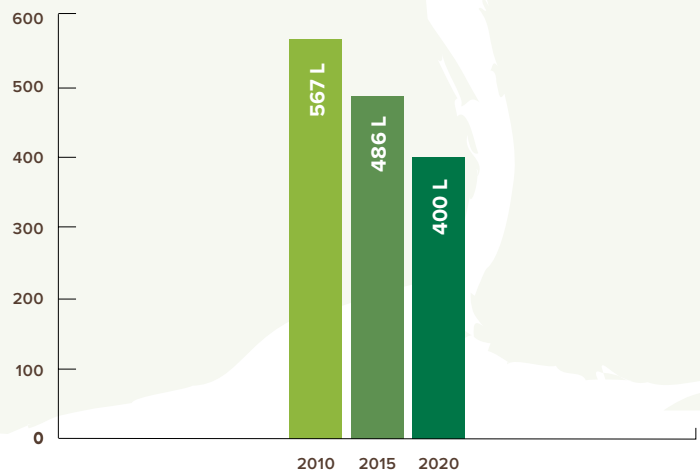
Water

11.2 Kilolitres of water use per tonne HSCW when processing beef

TREND 🟡

Year	Value
2014	8.6 kL
2020	7.6 kL
2022	8.3 kL
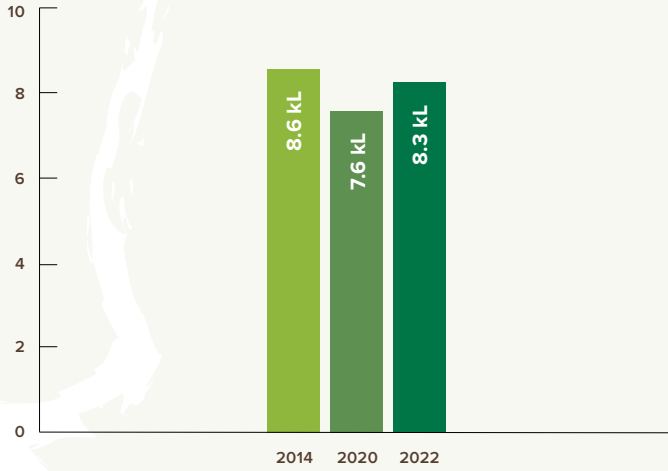
Waste

12.1 Kilograms of solid waste per tonne HSCW when processing beef

TREND 🔴

Year	Value
2014	2.9kg
2020	11.9kg
2022	12.7kg
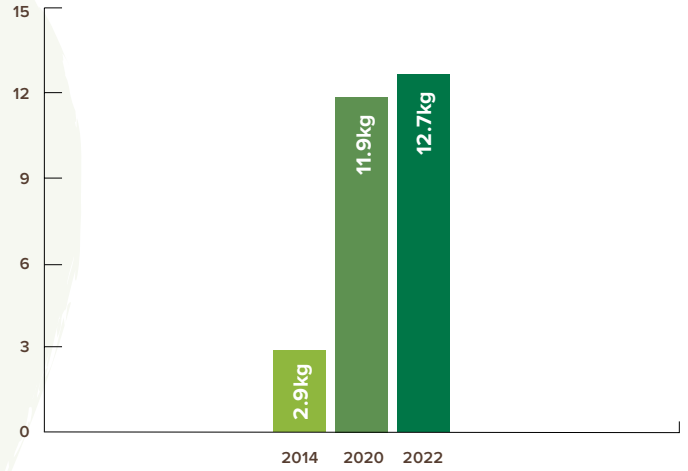
12.2 Tonnes of food waste recovered along the supply chain

TREND N/A

Year	Value
2021	2.39 m
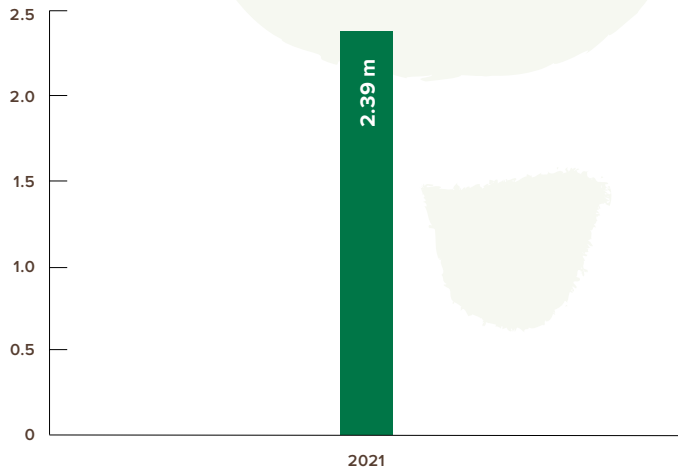
Economic Resilience

Climate Change Resilience

13.1 Climate-adjusted average annual growth rate in Total Factor Productivity - Baseline of 100 (1989)

TREND 🟡

Year	Value
2017	108
2018	108
2019	117
2020	113
2021	126
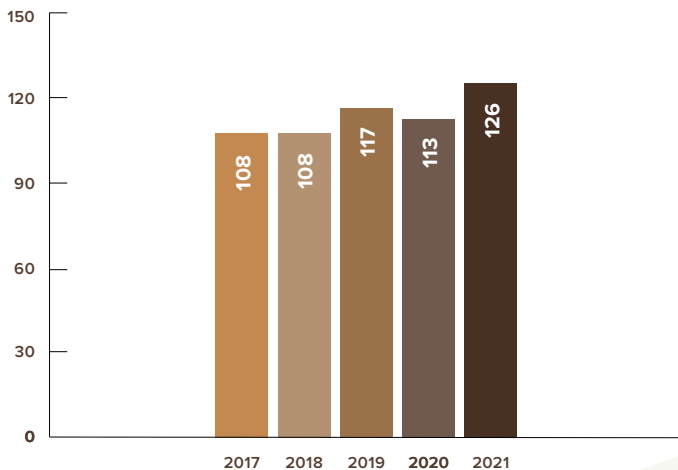
Productivity

14.1 Total Farm Productivity - Baseline of 100 (1978)

TREND 🟡

Year	Value
2017	120
2018	128
2019	119
2020	99
2021	115
2022	129
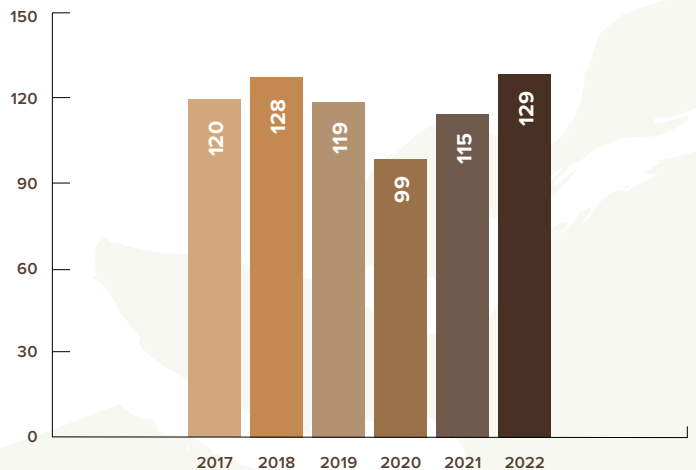
Productivity

14.2 Cost of beef produced on Australian farms (AUD)

TREND 🟡

Year	Value
2016	756 c/kg
2017	802 c/kg
2018	784 c/kg
2019	853 c/kg
2020	731 c/kg
2021	563 c/kg
2022	631 c/kg
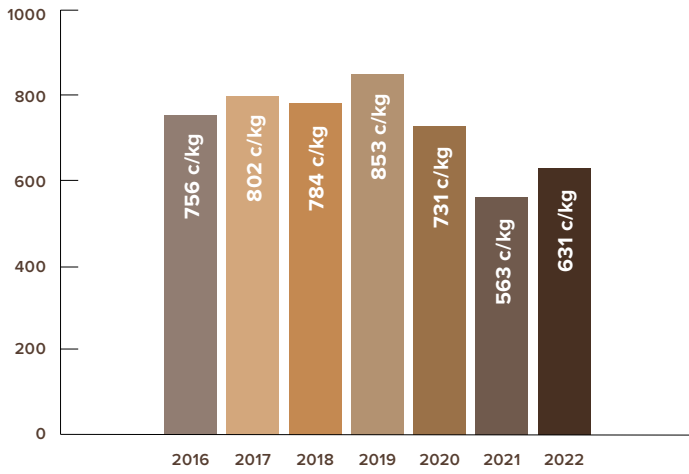
Profitability

15.1 Farm business profit at full equity (expressed as rate of return)

TREND 🟡

All Producers
- Inc capital appreciation
- Exc capital appreciation

	2021	2022
Inc capital appreciation	3%	15%
Exc capital appreciation	0.6%	3%

TREND 🟡

Top 25% Producers
- Inc capital appreciation
- Exc capital appreciation

	2022	2021
Inc capital appreciation	7.3%	19.3%
Exc capital appreciation	3.6%	5.2%
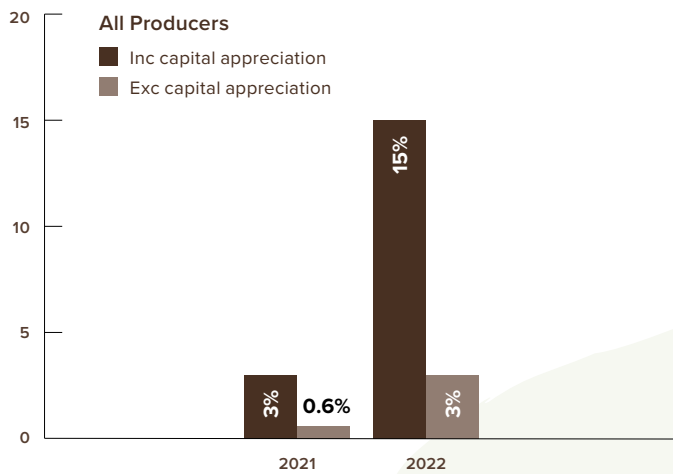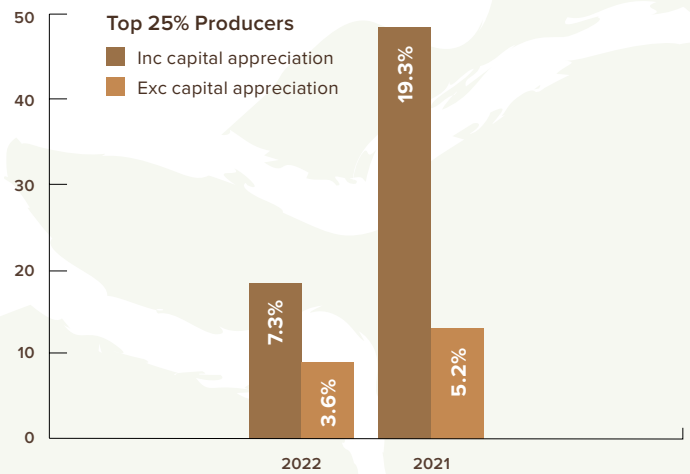
Market Access

16.1 Costs of technical trade barriers

TREND 🟢

Year	Value
2017	$1.9894 bn
2018	$1.8523 bn
2019	$1.8422 bn
2020	$1.7262 bn
2021	$1.6997 bn
2022	$1.695 bn
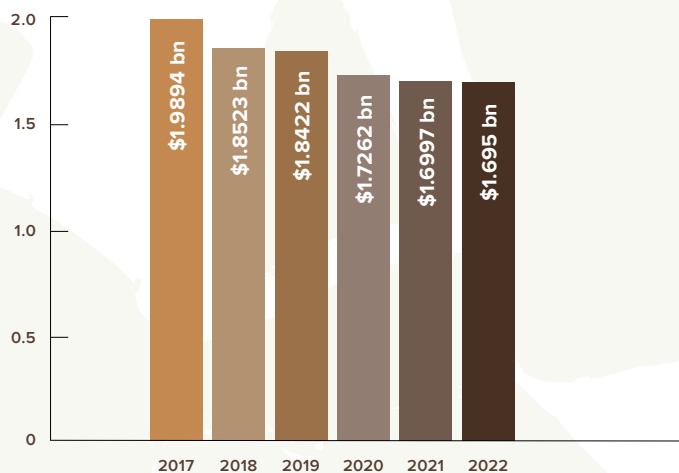
16.2 Percentage value share of Australian beef and live cattle exports covered by one or more preferential trade agreements

TREND 🟡

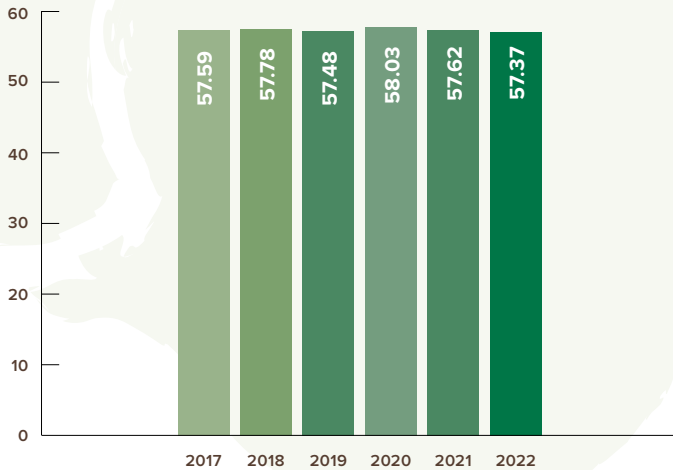
Year	Value
2017	85.7%
2018	87.1%
2019	89.7%
2020	91.4%
2021	91.1%
2022	90.3%
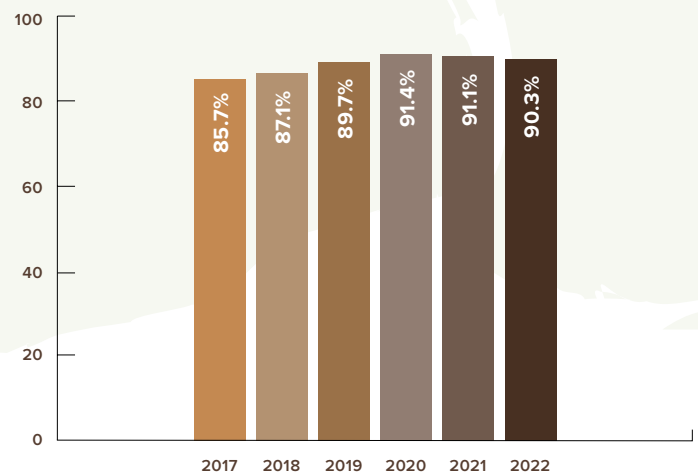
People & Community

Food Safety & Quality

17.1 National Average MSA Index (30-80)
TREND 🟡

Year	Value
2017	57.59
2018	57.78
2019	57.48
2020	58.03
2021	57.62
2022	57.37

17.2 Overall compliance with the National Residue Survey Australian and International Standards for Cattle
TREND 🟢

Year	Value
2017	99.85%
2018	99.89%
2019	99.94%
2020	99.91%
2021	99.96%
2022	99.96%
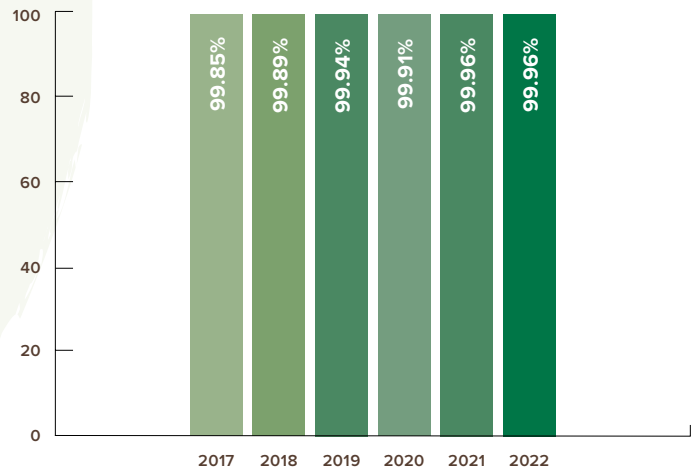
Nutrition

Nutritional Profile

Nutrition Information*	per 150g serve*
Good Source^	
Protein	**34.3g**
Iron	**3.1mg**
Zinc	**6.7mg**
Vitamin B12	**1.4µg**
Source^	
Omega-3 fatty acids	**48.2mg**
Riboflavin (B2)	**0.29mg**
Niacin (B3)	**7.5mg**
Pantothenic acid (B5)	**0.54mg**
Vitamin B6	**0.21mg**
Magnesium	**38mg**
Phosphorus	**328mg**
Selenium	**16µg**

* Average nutrition information per 150g serve raw weight of four major beef cuts.

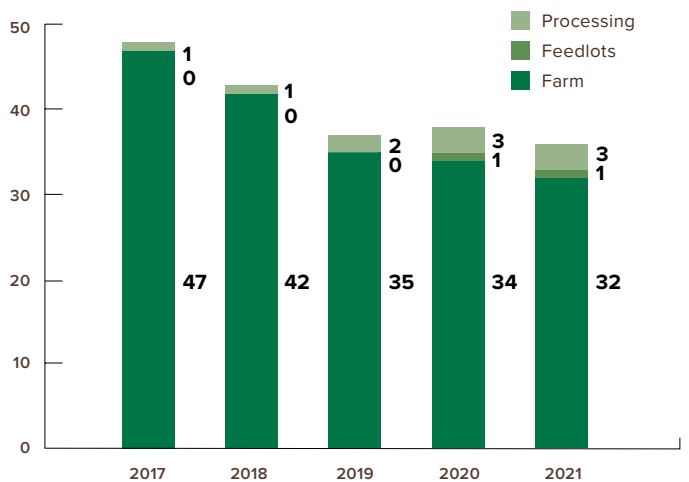^ Foods that are a 'good source of protein' have more than 10g per serve; 'good sources' of essential nutrients have 25% or more and 'sources', 10% or more of the recommended daily intake (RDI) as defined for labeling purposes in the Australian Food Standards (1.2.7).
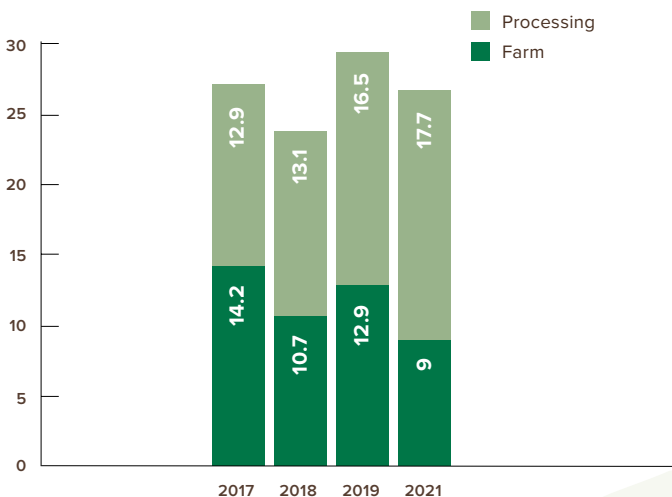
Work Health & Safety

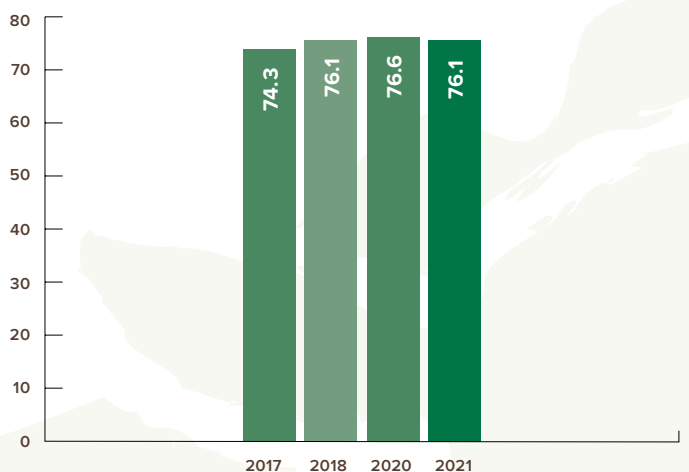### 18.1 Notifiable fatalities (five-year totals)
TREND 🟢

Legend: Processing, Feedlots, Farm

Year	Farm	Feedlots	Processing
2017	47	0	1
2018	42	0	1
2019	35	0	2
2020	34	1	3
2021	32	1	3

18.2 Lost time Injury Frequency Rate (number of claims per million hours worked)
TREND 🟡

Legend: Processing, Farm

Year	Farm	Processing
2017	14.2	12.9
2018	10.7	13.1
2019	12.9	16.5
2021	9	17.7

18.3 Global Life Satisfaction Index (0-100)
TREND 🟡

Year	Value
2017	74.3
2018	76.1
2020	76.6
2021	76.1

Labour Practices

19.1 Fair Work Ombudsman Compliance Notice Issued (Beef cattle farms)
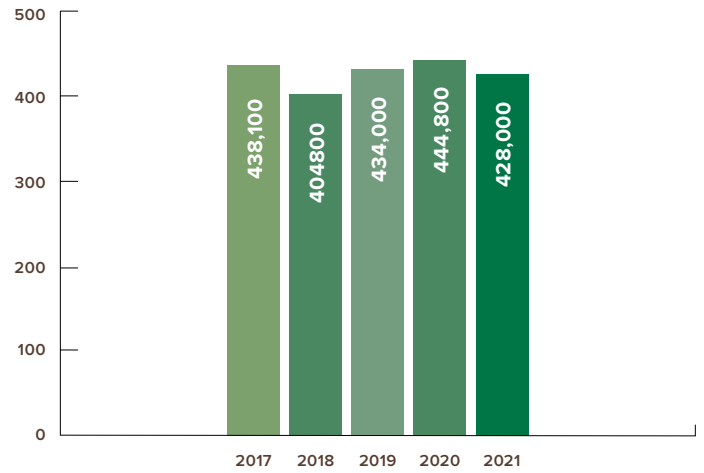
TREND ●

- 2021: 6
- 2022: 5
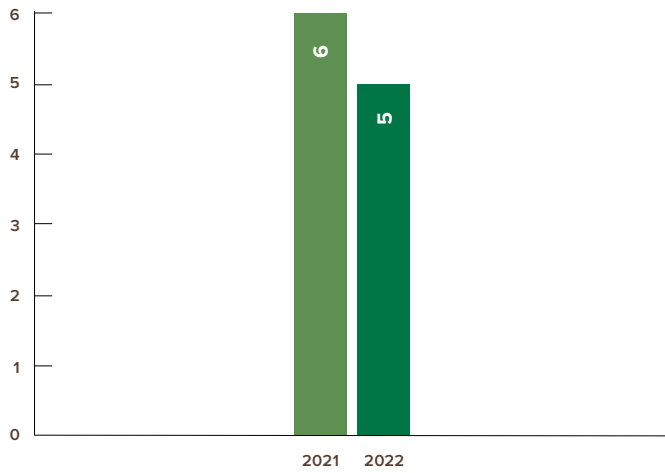
Community Contribution

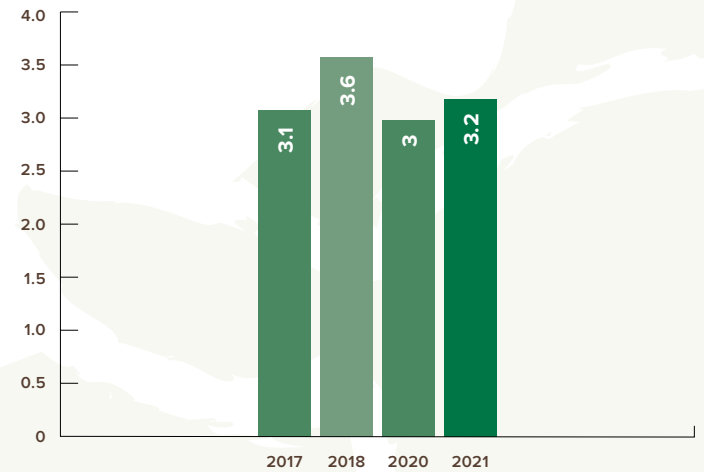**20.1 Total people employed directly or indirectly in the red meat and livestock industry**

TREND ●

- 2017: 438,100
- 2018: 404800
- 2019: 434,000
- 2020: 444,800
- 2021: 428,000

20.2 Beef farming, feedlot, and processing contribution to GDP

TREND ●

- 2019: $12.99 Billion
- 2020: $13.5 Billion
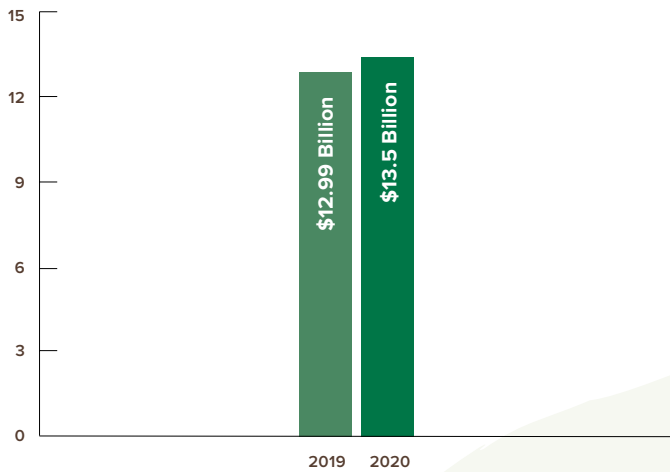
20.3 Getting involved in the community index (1-7)

TREND ●

- 2017: 3.1
- 2018: 3.6
- 2020: 3
- 2021: 3.2

Diversity in the Workforce

21.1 Percentage of women and men in the workforce

Farms

TREND ●

Men / Women		

- 2017: Men 60.4%, Women 39.6%
- 2018: Men 70%, Women 30%
- 2019: Men 60.5%, Women 39.5%
- 2020: Men 60.4%, Women 39.6%
- 2021: Men 67.9%, Women 32.1%
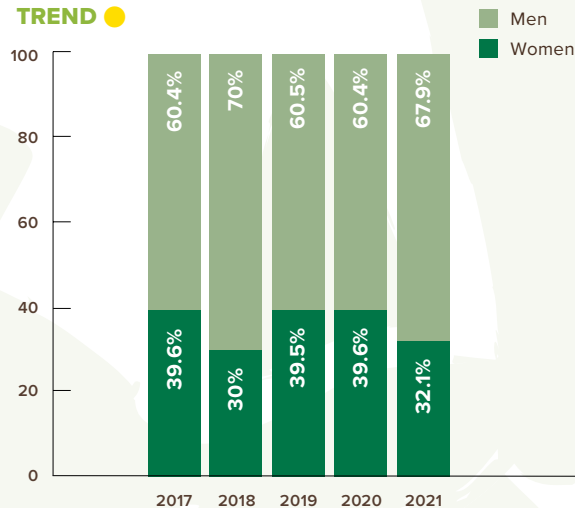
21.1 Percentage of women and men in the workforce

Feedlots

TREND ●

Men / Women		

- 2021: Men 66%, Women 33.7%
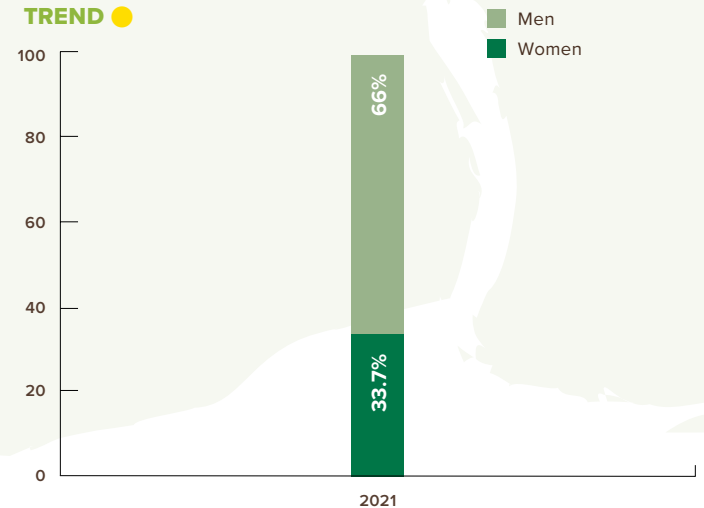
Diversity in the Workforce

21.1 Percentage of women and men in the workforce

Processors

TREND 🟡

Legend: Men, Women

Bar chart data:
- 2017: Men 75%, Women 25%
- 2018: Men 75%, Women 25%
- 2019: Men 73%, Women 27%
- 2020: Men 74.3%, Women 25.7%
- 2021: Men 70.8%, Women 29.2%
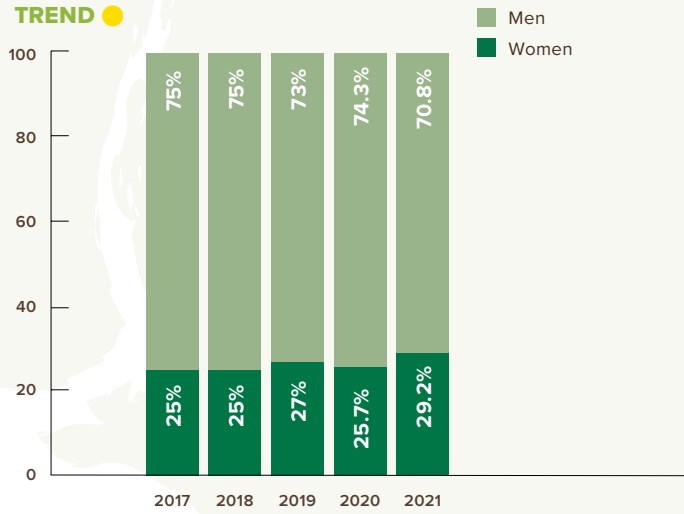
21.2 Age breakdown of the workforce

TREND N/A

Legend:
- 15-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

Donut chart data:
- 15-24: 9.5%
- 25-34: 16.4%
- 35-44: 16.1%
- 45-54: 17.4%
- 55-64: 19.2%
- 65+: 21.4%
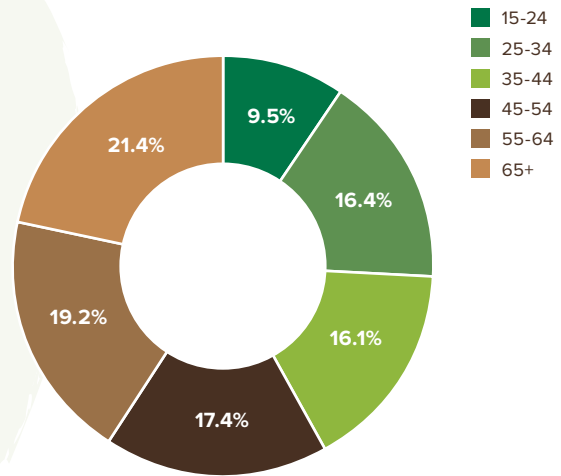
21.3 Percentage of Indigenous employment in the workforce

TREND 🟡

Bar chart data:
- 2018: 3.2%
- 2019: 5%
- 2020: 2.8%
- 2021: 2.1%
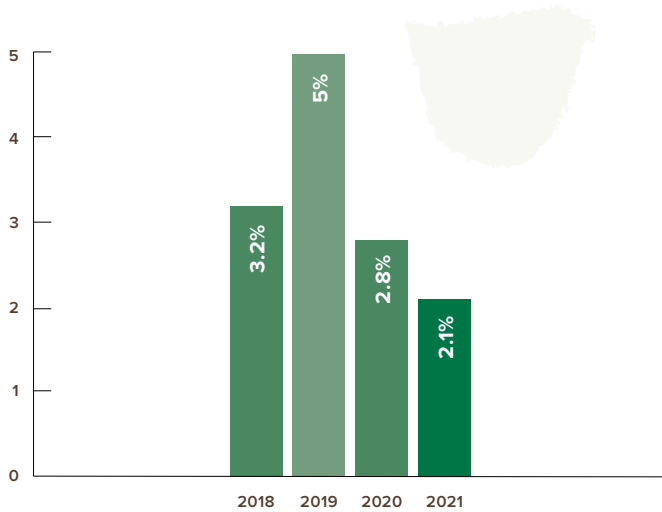
Antimicrobial Stewardship

22.1 The percentage of feedlots covered by an antimicrobial stewardship plan

TREND 🟢

Bar chart data:
- 2018: 39%
- 2019: 58.5%
- 2020: 62.48%
- 2021: 62%
- 2022: 100%
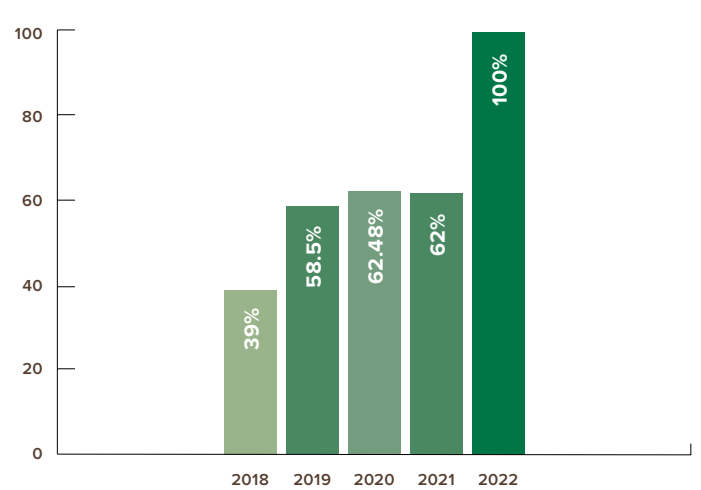
Antimicrobial Stewardship

22.2 Percentage of compliance with antibiotic Maximum Residue Limits

TREND ●

Bar chart:
- 2021: 99.9%
- 2022: 100%
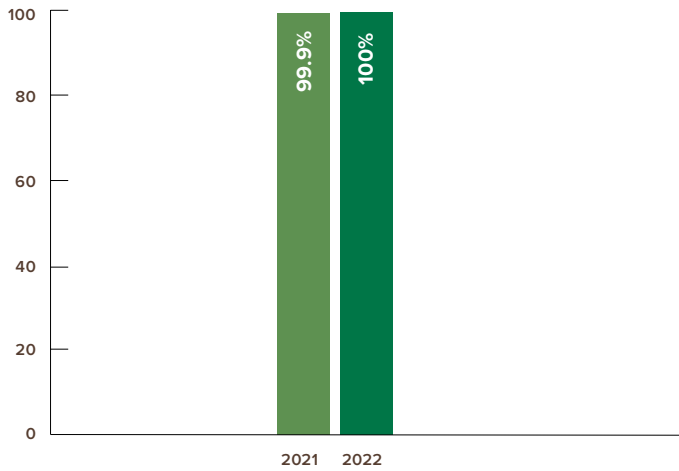
23.1 Number of traineeships and apprenticeships enrolled and completed

Feedlots

TREND ●

Stacked bar chart (Completed / Commenced):
- 2020: Commenced 39, Completed 33
- 2021: Commenced 49, Completed 25
- 2022: Commenced 67, Completed 15
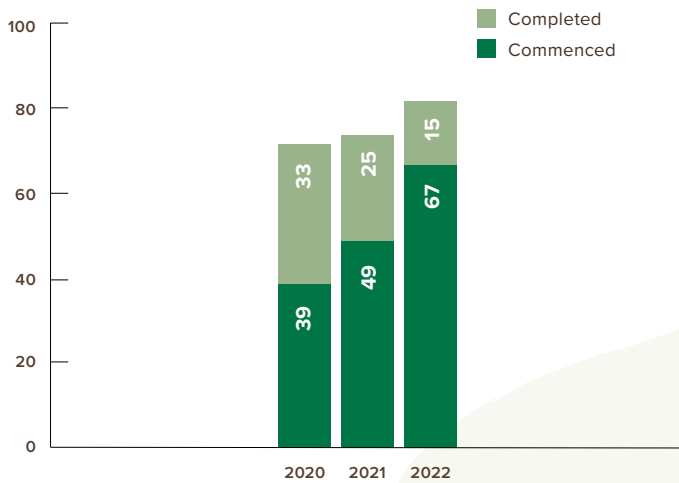
23.2 Percentage of industry workforce with a higher education qualification

TREND ●

Bar chart:
- 2017: 17%
- 2018: 20%
- 2019: 46%
- 2020: 34.7%
- 2021: 22.4%
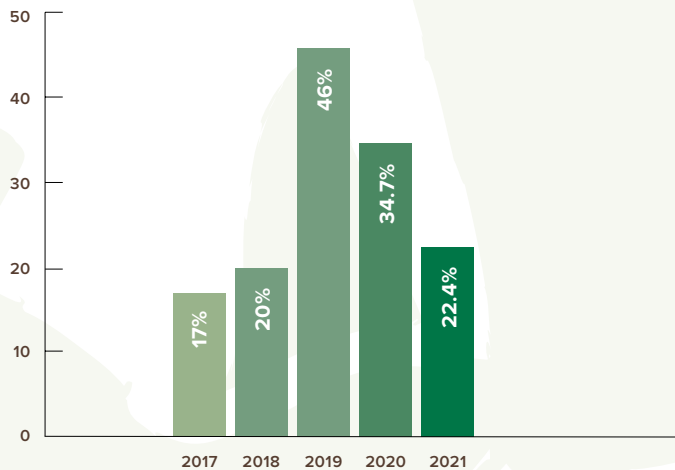
Capacity Building

23.1 Number of traineeships and apprenticeships enrolled and completed

Farms

TREND ●

Stacked bar chart (Completed / Commenced):
- 2020: Commenced 1022, Completed 2576
- 2021: Commenced 1816, Completed 659
- 2022: Commenced 1443, Completed 739
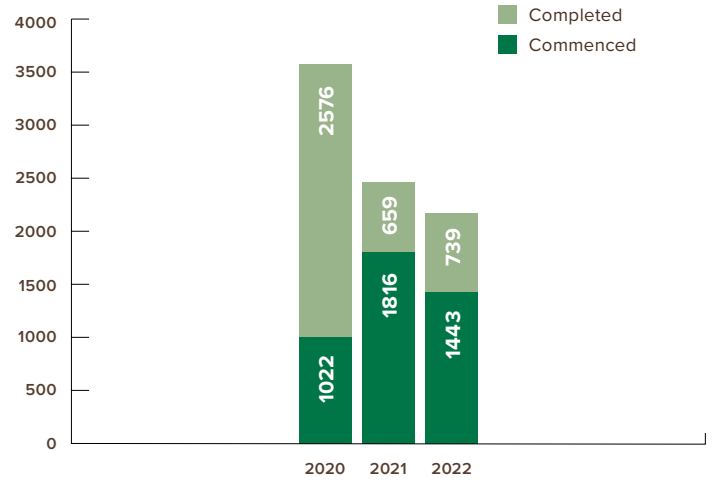
23.1 Number of traineeships and apprenticeships enrolled and completed

Processing

TREND ●

Stacked bar chart (Completed / Commenced):
- 2020: Commenced 3800, Completed 2167
- 2021: Commenced 3914, Completed 1325
- 2022: Commenced 5377, Completed 1386
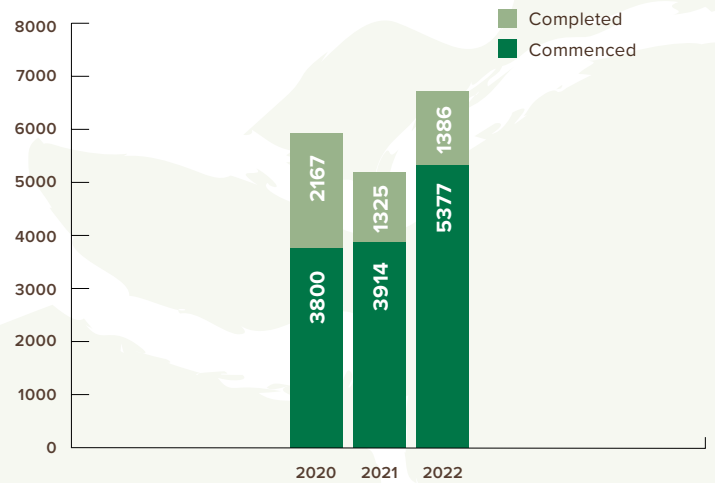
23.3 Number of participants undertaking MLA, LiveCorp, AMPC, or Peak Industry Council training

TREND ●

Bar chart:
- 2021: 10468
- 2022: 15125
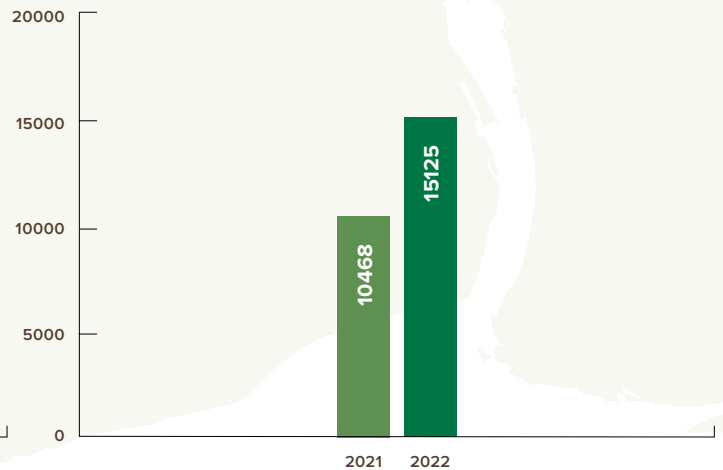
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RMAC