



Final report

Cape Grim Sustainable Development Framework

Project code: P.PIP.0770

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Date published: 30 June 2020

PUBLISHED BY
Meat and Livestock Australia Limited
PO Box 1961
NORTH SYDNEY NSW 2059

This is an MLA Donor Company funded project.

Meat & Livestock Australia acknowledges the matching funds provided by the Australian Government and contributions from the Australian Meat Processor Corporation to support the research and development detailed in this publication.

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Abstract

This project involves the development of a Framework to guide the sustainable development of the Cape Grim value chain. Derived from the Australian Beef Sustainability Framework, the Cape Grim Framework will be used to guide and track performance on-farm and through the value chain to ensure that Cape Grim continues to be recognised as Tasmania’s most sustainable grassfed beef value chain.

The project provided information back to the Australian Beef Sustainability Framework on application of industry indicators and measures at a value chain level. It enabled the development of a draft framework with key measures and indicators selected across people, economic and environment (animal welfare was already covered by existing Greenham Tasmania programs). The producers involved on the supplier work group were positive about the project. The key positive was seen as the opportunity to be proactive in helping to develop a scheme that is practical and outcome focused, and can be used to help educate consumers about southern beef production systems. This project has provided a clear way forward for fine-tuning the framework into a workable accreditation scheme, which can be implemented on-farm. The economic assessment of the project indicated an annualised benefit over a ten-year period of 19%.

Executive summary

Background

The project will provide information back to the Australian Beef Sustainability Framework on application of industry indicators and measures at a value chain level. It has enabled the development of a draft framework with key measures and indicators selected across people, economic and environment (animal welfare was already covered by existing Greenham Tasmania programs). The producers involved on the supplier work group were positive about the project. The key positive was seen as the opportunity to be proactive in helping to develop a scheme that is practical and outcome focused, and can be used to help educate consumers about southern beef production systems. This project has provided a clear way forward for fine-tuning the framework into a workable accreditation scheme, which can be implemented on-farm. The economic assessment of the project indicated an annualised benefit over a ten-year period of 19%. Provide a brief overview of the purpose of this research, including:

Objectives

- Develop a framework to guide the sustainable development of the Cape Grim value chain.
- Provide recommendations for further research, development and adoption activities required for further development and implementation of the framework.

Both project objectives were fully achieved.

Methodology

The project methodology was comprised of the following steps:

- Develop realistic, measurable KPIs (indicators) against each of the core elements and for each of the value chain areas where Greenham Tasmania has a moderate or high ability to influence
- Develop measures to assess achievement of the indicators by consulting with relevant stakeholders (e.g. suppliers, customers, transport operators).
- Design the draft Cape Grim sustainability framework, including how performance to meeting indicators will be measured.
- Provide an estimate of the cost – benefit of implementing such a framework.

Results/key findings

While there are always improvements that can be made in how we all run our businesses, the development of a value chain sustainability framework will provide an opportunity for producers to communicate what industry is doing well and what we are working to improve, backed up by rigorous data and information. This will be positive for industry and provide an opportunity to educate consumers about the sustainability of southern beef production systems.

Benefits to industry

The key positive was seen as the opportunity to be proactive in helping to develop a scheme that is practical and outcome focused, and can be used to help educate consumers about southern beef production systems.

Future research and recommendations

Review the opportunity for enabling training materials to be available on-line to facilitate access (e.g. low stress stock handling basics, injections basics, measuring carrying capacity and stocking rate, MLA pasture ruler, etc.). Consider the development of short video guides to using existing MLA tools (e.g. advanced and basics).

On-farm carbon footprints are currently limited to tools that estimate emissions from on-farm activities (e.g. B-GAF) and separate (complex and difficult to use tools) that measure sequestrations and storage (e.g. FullCAM). In order to provide a true picture of the carbon story on-farm to customers and to educate producers about their farm carbon footprint, a tool or process that can provide the complete picture is needed. Industry investment will be required for this to happen.

This project has provided a clear way forward for fine-tuning the framework into a workable accreditation scheme, which can be implemented on-farm.

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1. Background

Consumers world-wide are placing increasing importance on the sustainability of the products and services that they consume. There has been a spotlight on animal production, particularly in the context of greenhouse gas emissions and the carbon footprint of red meat consumption. There is also increasing confusion about different beef production systems and their differing environmental footprints. Over the last year Greenham Tasmania have been approached by several customers wanting more information on the sustainability of land management practices and carbon footprint of the Cape Grim products. Greenham Tasmania have led the way with establishing an animal welfare assurance system to satisfy customer interest regarding practices to support animal welfare (Never Ever). Greenham Tasmania are committed to addressing customer concerns and queries regarding the environmental sustainability of the Cape Grim value chain. This project was instigated by Greenham Tasmania to respond to customer demands, however it has broader implications for the Australian beef industry. The project is the first where the Australian Beef Sustainability Framework has been applied at a value chain level. This process will provide important learnings regarding practical application of the Australian Beef Sustainability Framework. This project will give Greenham Tasmania suppliers the opportunity to be recognised for their current management practices that contribute to sustainability in animal welfare, economic, environment and community (people). It will also provide ideas for a way forward to build on and improve what industry is currently doing.

The aim of this project was to develop a sustainability framework for the Greenham Tasmania Cape Grim brand, based on the Australian Beef Sustainability Framework. The project incorporated the four key sustainability pillars - animal welfare, environmental stewardship, economic resilience and people/community. It encompassed the entire value chain from the farm through to the customers, with a particular focus on suppliers. The project identified relevant Key Performance Indicators (KPIs), and measures for each of the sustainability pillars (animal welfare, environmental stewardship, economic resilience and people/community).

The sustainability framework project was designed to enable Cape Grim suppliers to work collaboratively with other value chain stakeholders to design a platform for accountable and transparent reporting of sustainable practices. It provided a process and forum for producers to own the on-farm component of the framework, ensuring it adds value to their businesses, and is practical and realistic to implement.

2. Objectives

Both project objectives have been fully achieved, as described below:

1. Develop a framework to guide the sustainable development of the Cape Grim value chain.
 - The indicators and measures for demonstrating sustainability of Cape Grim suppliers have been identified and form the basis of the draft on-farm framework. This is now ready for being developed ready for implementation. Animal welfare will require minimal effort, as this is already covered under existing Greenham Tasmania programs.
2. Provide recommendations for further research, development and adoption activities required for further development and implementation of the framework.
 - The project has provided clarity on the next steps required and way forward to achieve implementation of the sustainability framework on-farm. This is expected to be done in a step-wise process, focusing on areas where there is clear customer

demand/interest as a priority and as the program evolves bringing other areas into the program (refer to Table 7).

- The project has also provided a value-chain perspective of the Australian Beef Sustainability Framework. This may support adjustments being made to the ABSF, to ensure it is as useful as possible as an industry guide for sustainability (Table 6).

3. Methodology

The project methodology was comprised of the following steps:

1. Develop realistic, measurable KPIs (indicators) against each of the core elements and for each of the value chain areas where Greenham Tasmania has a moderate or high ability to influence (as outlined in Table 1).
2. Develop measures to assess achievement of the indicators identified at step 1.
3. Steps 1 and 2 were achieved by consulting with relevant stakeholders (e.g. suppliers, customers, transport operators).
4. Design the draft Cape Grim sustainability framework, including how performance to meeting indicators will be measured.
5. Provide an estimate of the cost – benefit of implementing such a framework.

Table 1: Summary of influence of Greenham Tasmania (Cape Grim) over different elements of the value chain for sustainability outcomes

Value chain element	Welfare	Economic	Environment	Community
On-farm	High	Low	High	Moderate
Saleyards*	NA	NA	NA	NA
Transport livestock	Moderate	Low	Low	Low
Transport product	NA	Low	High	Low
Processor	High	High	High	High
Customer	NA	Low	Moderate	Low
Consumer#	NA	NA	NA	Moderate

* Greenham buy direct from producers, not through saleyards. While some suppliers may buy store cattle from saleyards the capacity of Greenham to control the sustainability of this element of the supply chain is limited.

Whilst the consumer has influence over Greenham Tasmania, the influence in the reverse direction is limited, with the exception of community. This is assessed by Greenham Tasmania's influence on meat quality and human health (e.g. antibiotic use).

This project focussed on the suppliers to Cape Grim, as this is where the key interest of customers lies and there were a large number of the ABSF indicators that were specific to suppliers. This project provided an opportunity to thoroughly investigate suitable sustainability indicators for the on-farm component of the supply chain, via consultation with producers.

The approach to developing on-farm indicators (KPIs) against each of the sustainability pillars was as follows:

1. Supplier working group Terms of Reference developed and producers chosen to be part of the supplier working group. Producers were selected to ensure a diversity of enterprises, geography, etc.
2. Information about the project was provided to producers and an introductory webinar held. The Terms of Reference were endorsed, and background on the ABSF and Greenham Tasmania project provided. The group committed to further consultation and providing input to develop the supplier component of the sustainability framework.
3. Structured one-on-one interviews with producers were conducted to obtain feedback into suitable indicators for animal welfare, people, economic and environment.
4. Interview findings collated and summarised, and framework design refined. This step enabled shortlisting of sustainability indicators.
5. Draft potential measures for each of the shortlisted indicators.
6. Conduct a series of on-line meetings (one each for economic/animal welfare, people and environment) followed by a wrap up meeting. The key purpose of these sessions was to shortlist measures against each indicator (in addition to finalising the preferred indicators)

4. Results

4.1 Economic impact assessment

The economic impact assessment (cost benefit for the project and the framework once implemented) has been estimated based on the following assumptions:

- The numbers of producers who will use the framework has been based on the number of producers currently participating in the top tier Greenham Tasmania GAP program. This is estimated at 150. The adoption rate of this pool of producers increases over time from 10% in year 1 to 75% in year ten.
- The price premium for producers in the program is estimated at \$0.20 in year one increasing to \$0.31 in year ten (increase is based on 3% inflation).
- The demand for the product is estimated at 89,250kg per annum.
- The costs to develop the program are estimated at \$137,000 (the total costs for this project, including MDC and Greenham Tasmania contributions).
- The ongoing compliance costs and implementation are estimated at \$350 per year per farm for auditing plus the costs to implement activities required under the scheme (on-farm and processor costs estimated at a total of \$3million for year one, decreasing to \$1 million in year two and then increasing over time up to \$3.9 million on year ten).

A copy of the calculation spreadsheet is provided in Appendix 1.

The results from the economic impact assessment indicate that the net present value of a sustainability framework over 10 years is estimated be \$2million at a discount rate of 7%.

The annualised benefit over a ten-year period is 19% and the cost benefit ratio is 15.6 to 1.

4.2 Discussion

The supplier working group provided feedback throughout the process on the approach and structure of the proposed GTSF sustainability framework. This feedback will be used in designing the implementation phase of the framework, to ensure that the system is practical, robust and meaningful to both producers and customers. Themes that consistently emerged were:

- The program shouldn't be prescriptive. Identify the outcomes that are desired and let producers decide on their own pathway to achieving them.
- Keep it simple, effective and useful.
- Be careful not to exclude people – the program will need to deal with complexity and diversity of different businesses (regions and enterprises).
- Two-way educational opportunities should be built into this process. This would involve educating customers on the sustainability of the Cape Grim production systems and supporting producers improve their own knowledge in some areas (e.g. climate change).
- The framework should bring producers on a journey, which recognises their individual starting points (baseline) and provides opportunity for them to progress and improve.
- Focus on what the customer wants to know (and are prepared to pay for).
- Minimise compliance costs.

4.3 Animal Welfare

On-farm

As previously stated, animal welfare indicators identified by the ABSF are already covered by existing GT assurance programs (Never Ever and Global Animal Partnership) and LPA. The only exception to this was the ABSF indicator about horned animals. The supplier working group agreed that the following indicator should be added to existing GT programs:

The percentage of polled animals in the Greenham Tasmania supply chain.

The measures agreed were:

1. Plant to provide feedback to producers on the number of horned animals supplied
2. Plant to keep these records so that the percentage of horned animals killed per year can be calculated (target is for decrease over time)
3. Suppliers that consistently have a high proportion of horned animals must provide proof that they are sourcing polled genetics and culling horned animals
4. If de-horning is required pain relief is compulsory
5. GT will continue to accept horned animals, as culls (under point 3 conditions)

4.4 Economics

On-farm

There was some uncertainty amongst the supplier working group around how much consumers really need to know (or want to know) about economic sustainability on-farm. The importance of connecting all four sustainability pillars and ensuring that the framework promotes a synergistic relationship between the different pillars was highlighted. The following was suggested as a GTSF principle:

Our suppliers are ahead of the game on resource use efficiency, with economic sustainability linked to sustainable best practice use of our people, animals and natural environment.

The work group supported a modelling approach to demonstrating economic sustainability (return on assets). This would focus on trends over time (e.g. 5-year rolling average) to even out prices, seasonal affects and land values. The proposed approach could include the following:

- Benefits and costs (with and without the program).
- Average and above average performing businesses included within the framework.
- Opportunities to develop skills around KPIs and what this would mean for economic growth.

In time, this data could be provided to suppliers for use as industry benchmarks, supporting opportunities for value chain growth.

4.5 People

On-farm

The people indicators that will be included in the draft framework are summarised in Table 2.

Table 2: Summary of people indicators and measures

Indicator	Agreed measures	Comments
The percentage of cattle covered by an antibiotic stewardship plan	Already covered under Never Ever. No changes recommended.	
Competent and experienced in animal husbandry and handling	<p>Already covered under Never Ever and GAP. Other measures suggested:</p> <ul style="list-style-type: none"> • Animal handling facilities are safe for animals and people working in them and promote low stress movement or demonstrated commitment to improving • Demonstrated competency in minimum of injections, calf marking, identifying sick/injured animals early (training can be on-farm and informal but must be documented against staff names) 	<p>Check if option to have LSS basics via on-line / video delivery (and other skills areas)</p> <p>If included, these measures would need to be consistent with how Never Ever and GAP compliance are currently assessed.</p>
Commitment to ongoing learning and skill development of self and staff	<ul style="list-style-type: none"> • Documented staff training register that includes staff skills goals and evidence of training to help them meet those goals (formal and informal training) • Greenham Tasmania supported/organised training programs in key areas where gaps identified 	<p>General agreement that GT shouldn't have total responsibility for organising or funding workshops and training. This needs to be self-driven from producers. GT could provide links to training resources and opportunities (increase awareness amongst suppliers of these opportunities).</p> <p>Avoid too much complexity and formality around training register (not too prescriptive about what it looks like).</p> <p>Training register is already required as part of Never Ever and GAP.</p>

<p>Commitment to workplace health and safety</p>	<p>Attendance at WH&S training course and/or demonstrated commitment to progressing implementation of basic WH&S systems (63% support from working group for this measure).</p> <p>Support was spread across the other measures and further work is required in phase 2 to confirm which are appropriate:</p> <ul style="list-style-type: none"> a. Minimum procedures etc. that should be in place b. Proof of incident/near miss reporting systems in place c. Position descriptions and annual performance reviews for all staff d. Staff rating of how safe they feel at work 	<p>General agreement that WH&S is a critical part of business management, but is something that many producers struggle with and which isn't done well. The framework could provide an opportunity/pathway/impetus for producers to access good basic guidelines and training/support.</p>
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4.6 Environment

On-farm

The proposed vision for environmental sustainability:

Natural resources are the foundation of our businesses, and are sustainably managed for productivity, environmental outcomes and future generations.

The key areas selected to demonstrate environmental sustainability are:

- Land management
- Climate change
- Biodiversity

This selection was based primarily on the key areas of customer interest and support from the supplier working group. The indicators and measures proposed against each of these key areas are summarised in the tables below.

Table 3: Summary of land management indicators and measures

Indicator	Agreed measures	Details	Comments
Maintaining ground cover	<p>The working group did not support the measure that was put forward. An alternative approach (that addresses their concerns) is:</p> <ul style="list-style-type: none"> • Each producer to set an appropriate target for ground cover (% ground cover) or average pasture cover (kg DM/ha) at late February/early March and explain how they measure their performance against this. 	<p>This measure should not prescribe how ground cover is managed but encourage producers to think about targets to aim for to maintain soil carbon and minimise erosion / land degradation.</p>	<p>It may need further discussion and will require information packs to be provided to producers.</p>

<p>Healthy soils</p> <p>Matching nutrient inputs to outputs and soil/pasture requirements</p>	<ul style="list-style-type: none"> • Regular (every 5 years) soil testing of perennial pasture paddocks conducted. • Demonstrate that nutrient management is proactive and informed by soil test results and nutrient removal 	<p>Each business conducts regular soil testing (for perennial pasture paddocks at least every 5 years) (minimum of nutrients, organic carbon, CEC, organic matter, salinity, pH).</p> <p>Where soil test parameters are outside the optimal range, demonstrated actions are taken to address (optimal range reference will be provided to participating producers). Trends over time in soil test results are important and will be audited.</p> <p>Each business must demonstrate that nutrient applications are appropriate to balance inputs and outputs (so soils aren't mined or over-fertilised)</p>	
<p>Grazing management practices</p>	<ul style="list-style-type: none"> • Carrying capacity and stocking rate are calculated and matched • Grazing management systems enable recovery (rest) periods for pastures that meet plant physiological requirements and minimum ground cover thresholds 	<p>Average annual carrying capacity is calculated for each property (supply), using an approved methodology (e.g. More Beef from Pastures manual)</p> <p>Average annual stocking rate is calculated for each property (demand), using an approved methodology (e.g. MLA stocking rate calculator).</p> <p>Demonstrated efforts to match annual average stocking rate to annual average carrying capacity (at a minimum stocking rate should not exceed carrying capacity).</p> <p>Other alternative approaches that will demonstrate properties are not being overgrazed (e.g. stocking rate can be calculated using stock days per ha per 100mm rainfall).</p>	<p>The program will not prescribe to producers how they should run their businesses (graze), but it will ensure that the linkages between ground cover, grazing management and productivity are highlighted.</p> <p>An option to assess could be asking producers what are their strategies for maintaining SR and preserving soil and pastures?</p>

Table 4: Summary of climate change indicators and measures

Indicator	Agreed measures	Details	Comments
Carbon footprint	Measure the carbon footprint of a sub-set of GT suppliers (covering off on the different business/enterprise types and environments) to improve the understanding of the greenhouse gas emissions footprint of the GT value chain.	C footprint must tell the whole story (i.e. not just emissions, also storage and sequestered carbon). Using the carbon footprint assessments as a basis, provide educational opportunities for producers to increase understanding along the value chain of climate change mitigation opportunities and the importance of these.	The next steps for managing GHG mitigation and communicating with consumers will be determined once the footprint assessment is completed.
Emergency preparedness	<ul style="list-style-type: none"> Emergency preparedness demonstrated by having plans in place to deal with emergency situations relevant for the location of the property (e.g. floods, bushfires, heat waves, drought) 		May be opportunity to increase understanding of producers regarding climate resilience. This may be included in the program later.

Table 5: Summary of biodiversity indicators and measures

Indicator	Agreed measures	Details	Comments
Proactive management of native vegetation	Demonstrated activities to proactively manage areas of native vegetation	GT would provide a list of identified threatening processes/activities and positive activities for native vegetation (e.g. fenced from production areas and managed differently, fire regimes appropriate to the vegetation community, weed management activities, etc.). Assessment could either be via visual inspection at audit or review of records of management activities.	
	Vegetation cover (TBC)	This indicator requires more work. It was not supported at an individual farm/business level, but an alternative could include collecting information on the area of native vegetation on supplier properties so that this information could be communicated to consumers (e.g. GT suppliers manage over XX ha of native vegetation).	
Threatened species management	All threatened species and communities are managed to maintain and enhance their populations	Producers in the program have a list of threatened species that are likely to be found on their properties (generated from the Natural Values Atlas). They are provided with information on how best to conserve threatened species that are likely to occur on their property. Producers are able to provide information on activities done to protect threatened species and communities.	There is potential to use case studies/stories to highlight positive threatened species outcomes by GT suppliers.
Healthy waterways	Demonstrated commitment to protecting waterways from damage by livestock. The key ways will be by progressing waterway fencing and/or establishing off-stream watering points on the properties	There is not a prescription to fence all waterways on a property, or a fully reticulated stock water system. Where it can be demonstrated that there is limited value in fencing waterways/off-stream watering points (e.g. ephemeral, no stock access/damage to riparian areas, etc.) then these areas will be exempt from a requirement to fence/trough. It would be expected that these areas would be monitored over time to demonstrate that they are not being degraded (e.g. photo points).	

5. Conclusion

5.1 Key findings

This project has provided the first information on the applicability of the ABSF at a supply chain level, as opposed to the industry level that the ABSF was designed for. Observations from this process, that can be fed back to the ABSF sustainability steering group for consideration are summarised in Table 6.

Table 6: Summary of feedback from the project on the ABSF indicators

Pillar	Indicator	Feedback
Animal welfare	All ABSF animal welfare indicators were able to be adapted to a supply chain level (the majority already part of GT existing QA programs for animal welfare)	NA
Economic	<ul style="list-style-type: none"> Rate of return to total capital for beef farms Cost of beef produced on Australian farms 	Concerns regarding confidentiality of financial information, implications of transparency in finances through the supply chain. Including these indicators in the Cape Grim sustainability framework was not supported.
People	The percentage of women and men in the workforce	Including this indicator in the Cape Grim sustainability framework was not supported: <ul style="list-style-type: none"> Most important thing is passion for industry and job; gender is not important, skill is. Understand that customers want to know that the industry is an equal opportunity employer, but this isn't the way to demonstrate that. A bigger question is how do we as an industry encourage and educate young men AND women to work in agriculture?
	The age breakdown of the workforce	Including this indicator in the Cape Grim sustainability framework was not supported: <ul style="list-style-type: none"> The importance of having a mix of ages in the workforce and transfer of knowledge between generations. Succession plans in progress was seen as a better way of expressing this
	Notifiable fatalities	Including this indicator in the Cape Grim sustainability framework was not supported: <ul style="list-style-type: none"> What's the benefit of highlighting when it's already officially recorded? Focus on competency to do the job and WH&S instead

<p>Environment</p>		<p>As written, it was difficult to directly transcribe many of the environmental indicators, as they need to be so regionally specific. Many of the vegetation indicators (e.g. balance of tree and grass cover) were more applicable to northern Australia than southern.</p> <p>The environmental indicators were substantially re-worked to enable inclusion in a southern supply chain.</p>
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5.1.1 The proposed sustainability framework

Table 7: Outline of the proposed Greenham Tasmanian Cape Grim sustainability framework

Sustainability pillar	Indicator/commitment	Proposed measures	Timeframe for implementation
Animal welfare	The percentage of polled animals in the Greenham Tasmania supply chain	<ol style="list-style-type: none"> 1. Plant to provide feedback to producers on the number of horned animals supplied 2. Plant to keep these records so that the percentage of horned animals killed per year can be calculated (target is for decrease over time) 3. Suppliers that consistently have a high proportion of horned animals must provide proof that they are sourcing polled genetics and culling horned animals 4. If de-horning is required pain relief is compulsory (already a Never Ever/GAP requirement) 5. GT will continue to accept horned animals, as culls (under point 3 conditions) 	Phase 1 (immediate)
Economic	<i>Our suppliers are ahead of the game on resource use efficiency, with economic sustainability linked to sustainable best practice use of our people, animals and natural environment.</i>	<p>Modelling approach (return on assets). Focus on trends over time (e.g. 5-year rolling average). The proposed approach could include the following:</p> <ul style="list-style-type: none"> • Benefits and costs (with and without the program). • Average and above average performing businesses included within the framework. • Opportunities to develop skills around KPIs and what this would mean for economic growth 	Phase 3 (long term)
People	The percentage of cattle covered by an antibiotic stewardship plan	Already covered under Never Ever and GAP	Already implemented

	Competent and experienced in animal husbandry and handling	Partially covered under Never Ever and GAP	Partially implemented, changes to be made in phase 1
	Commitment to ongoing learning and skill development of self and staff	<ul style="list-style-type: none"> Documented staff training register that includes staff skills goals and evidence of training to help them meet those goals (formal and informal training) Greenham Tasmania supported/organised training programs in key areas where gaps identified 	Partially implemented already (Never Ever/GAP Phase 1 (immediate))
	Commitment to workplace health and safety	<ul style="list-style-type: none"> Attendance at WH&S training course and/or demonstrated commitment to progressing implementation of basic WH&S systems Further work required on other measures 	Phase 1 (immediate) Phase 2 (medium term)
Environment	Maintaining ground cover	Each business determines suitable target for ground cover (% ground cover) or average pasture cover (kg DM/ha) at late February/early March and explain how they measure their performance against this. GT will provide indicative targets for different rainfall zones for ground cover and pasture cover.	Phase 1 (immediate)
	Healthy soils	<ul style="list-style-type: none"> Regular (every 5 years) soil testing of perennial pastures conducted (depending on scale as representative areas or paddocks). 	Phase 1 (immediate)
	Matching nutrient inputs to outputs and soil/pasture requirements	<ul style="list-style-type: none"> Demonstrate that nutrient management is proactive and informed by soil test results and nutrient removal 	Phase 1 (immediate)
	Grazing management practices	<ul style="list-style-type: none"> Carrying capacity and stocking rate are calculated and matched Grazing management systems enable recovery (rest) periods for pastures that meet plant physiological requirements and minimum ground cover thresholds 	Phase 1 (immediate) Phase 1 (immediate)
	Understand our carbon footprint	Measure the carbon footprint of a sub-set of GT suppliers (covering off on the different business/enterprise types and environments) to improve the understanding of the greenhouse gas emissions footprint of the GT value chain.	Phase 1 (immediate)

Emergency preparedness	Emergency preparedness demonstrated by having plans in place to deal with emergency situations relevant for the location of the property	Already addressed by GAP and Never Ever
Threatened species management	All threatened species and communities are managed to maintain and enhance their populations	Phase 1 (immediate)
Vegetation cover	Requires more work	Phase 2 (medium term)
Healthy waterways	Demonstrated commitment to protecting waterways from damage by livestock. The key ways will be by progressing waterway fencing and/or establishing off-stream watering points on the properties	Phase 1 (immediate)

5.1.2 The next steps to implement the proposed framework

1. Review where there is overlap in indicators and/or measures with other accreditation schemes that Cape Grim suppliers may participate in (these may include enterprises other than beef, e.g. vegetables, grains). Where overlap occurs, ensure that the requirements for the Cape Grim sustainability framework match existing requirements. This will minimise compliance costs and maximise efficiencies for producers. Coverage of WH&S is particularly important.
2. Review ways in which Greenham Tasmania can share relevant training opportunities with their suppliers and where appropriate support/facilitate training activities being held. This may require leveraging or collaborating with other organisations/industries. This includes enabling some training materials to be available on-line to facilitate access (e.g. low stress stock handling basics, injections basics, measuring carrying capacity and stocking rate (guide to using existing MLA tools), MLA pasture ruler, etc.).
3. Implement a program to measure the carbon footprint of a sub-set of GT suppliers (covering off on the different business/enterprise types and environments across the supplier network). This must include whole of farm GHG assessment (i.e. emissions and sequestration/storage). Use this process as an opportunity to improve the understanding of producers of greenhouse gas emissions and sequestrations.
4. Develop and implement the systems for measuring performance against the following, so that messages can be formulated to communicate to consumers:
 - a. Maintaining ground cover
 - b. Healthy soils
 - c. Grazing management practices
 - d. Threatened species management
 - e. Healthy waterways
5. Obtain further clarity on what customers want to know regarding economic sustainability of the supply chain before proceeding any further with addressing this indicator.
6. It will be important continue to consult with suppliers as measures for the framework and materials and resources are developed to ensure that the framework is adoptable by industry (and it complies with the criteria outlined in section 5.2).
7. Build into the framework the capacity for incremental change, to build and improve on sustainability measures and bring producers on-board a sustainability journey.

5.2 Benefits to industry

While there are always improvements that can be made in how we all run our businesses, the development of a value chain sustainability framework will provide an opportunity for producers to communicate what industry is doing well and what we are working to improve, backed up by rigorous data and information. This will be positive for industry and provide an opportunity to educate consumers about the sustainability of southern beef production systems.

6. Future research and recommendations

6.1 Recommendations for MLA

- Review the opportunity for enabling training materials to be available on-line to facilitate access (e.g. low stress stock handling basics, injections basics, measuring carrying capacity and stocking rate, MLA pasture ruler, etc.). Consider the development of short video guides to using existing MLA tools (e.g. advanced and basics).
- On-farm carbon footprints are currently limited to tools that estimate emissions from on-farm activities (e.g. B-GAF) and separate (complex and difficult to use tools) that measure sequestrations and storage (e.g. FullCAM). In order to provide a true picture of the carbon story on-farm to customers and to educate producers about their farm carbon footprint, a tool or process that can provide the complete picture is needed. Industry investment will be required for this to happen.

7. References

Australian Beef Sustainability Framework (2017). Framework report. Red Meat Advisory Council

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