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Triple Bottom Line Evaluation Framework Guidelines

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MEAT & LIVESTOCK AUSTRALIA

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1. How to use this document

This document is intended to be used as a 'how to' guide for Triple Bottom Line (TBL) evaluations by internal MLA Product Managers/General Managers as well as external evaluation service providers. Its purpose is to establish the MLA approach to TBL evaluation and provide clear guidance on evaluating social, environmental and economic impact.

The Triple Bottom Line Evaluation Framework Guidelines (the Guidelines) contained within this document are developed in line with MLA's Triple Bottom Line Evaluation Framework (the Framework). The Framework outlines MLA's key evaluation principles, evaluation timeframes and integration of impact across MLA business areas.

These Guidelines should be used in conjunction with the Framework, as well as any other detailed guides and supporting documents. These include:

- MLA Extension Program Evaluation Framework. This assists with identifying data collection requirements for measuring attributable adoption and on farm economic impact resulting from MLA investment in producer extension programs, or those R&D projects that contain a significant extension component and where producer adoption and resulting productivity and/or cost reduction economic impacts are a project objective.
- MLA Evaluation Framework Guide – Economic. This document provides additional and specific guidance around implementing the overall triple bottom line (TBL) framework for economic benefits within MLA and is for internal MLA use only.
- GHG Emission Reduction User Guides. These four documents provide detailed information about adoption and impact data needed for evaluating the impact of interventions (products) that may reduce industry emissions. These are available from MLA on request.

The Guidelines are a dynamic document that is reviewed regularly to reflect MLA's evolving evaluation approach, and the emergence of material social, environmental and economic opportunities.

1.1 Application and exclusions

While the TBL Evaluation Framework and Guidelines may be revised to broaden their scope, they currently only apply to the below:

Impact evaluation: The Guidelines should be used to evaluate the social, environmental and economic impact of MLA's products, and are not used to evaluate technical project delivery. Technical project delivery is evaluated separately by Project Managers and includes evaluation of the service providers performance against contractual milestones, in such areas as meeting timing, quality and cost objectives (see *Glossary* for further definitions).

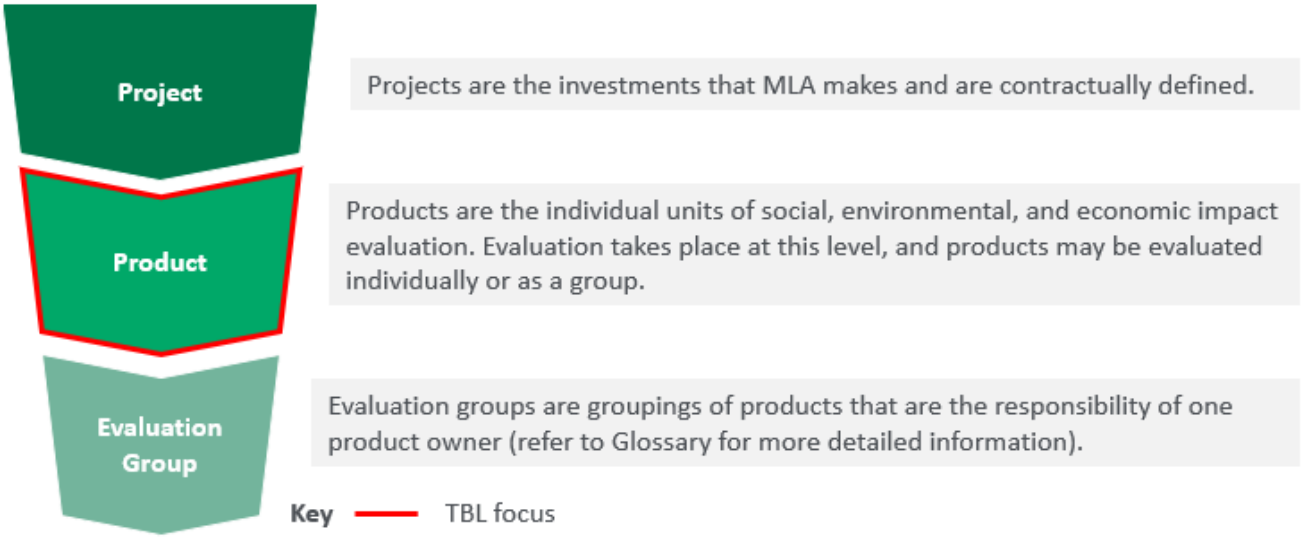
See *Figure 1 – Reporting structure and impact evaluation hierarchy*, which illustrates MLA's reporting structure that guides MLA's impact evaluation process. This figure differentiates between MLA's projects, products and evaluation groups. MLA's evaluation approach under the Framework focuses on evaluation of products, not on individual projects. This product evaluation will be aggregated by evaluation groups.

Evaluation groups represent MLA's primary unit of social, environmental and economic impact evaluation. An evaluation group is defined as a group of related products or product categories that are aggregated for impact reporting purposes. As a guiding principle, sub-programs are linked to those evaluation groups where impact from their investments can be measured.

Before investment and after delivery: As a general principle, evaluation should be carried out as soon as possible within the development and delivery path of the product. Ideally, evaluations should be completed before investment with an initial estimate of the opportunity, identification of the product (category 1 investment), and an estimate of the attributable adoption and impact, which may include a formal ex-ante evaluation, and after investment (ex-post) to evaluate the success of the product against the intended impact.

Category 1 investments: The Guidelines are only applicable to category 1 investments. Category 1 investments have clear product outputs as well as attributable outcomes and impacts.

Figure 1 – Reporting structure and impact evaluation hierarchy



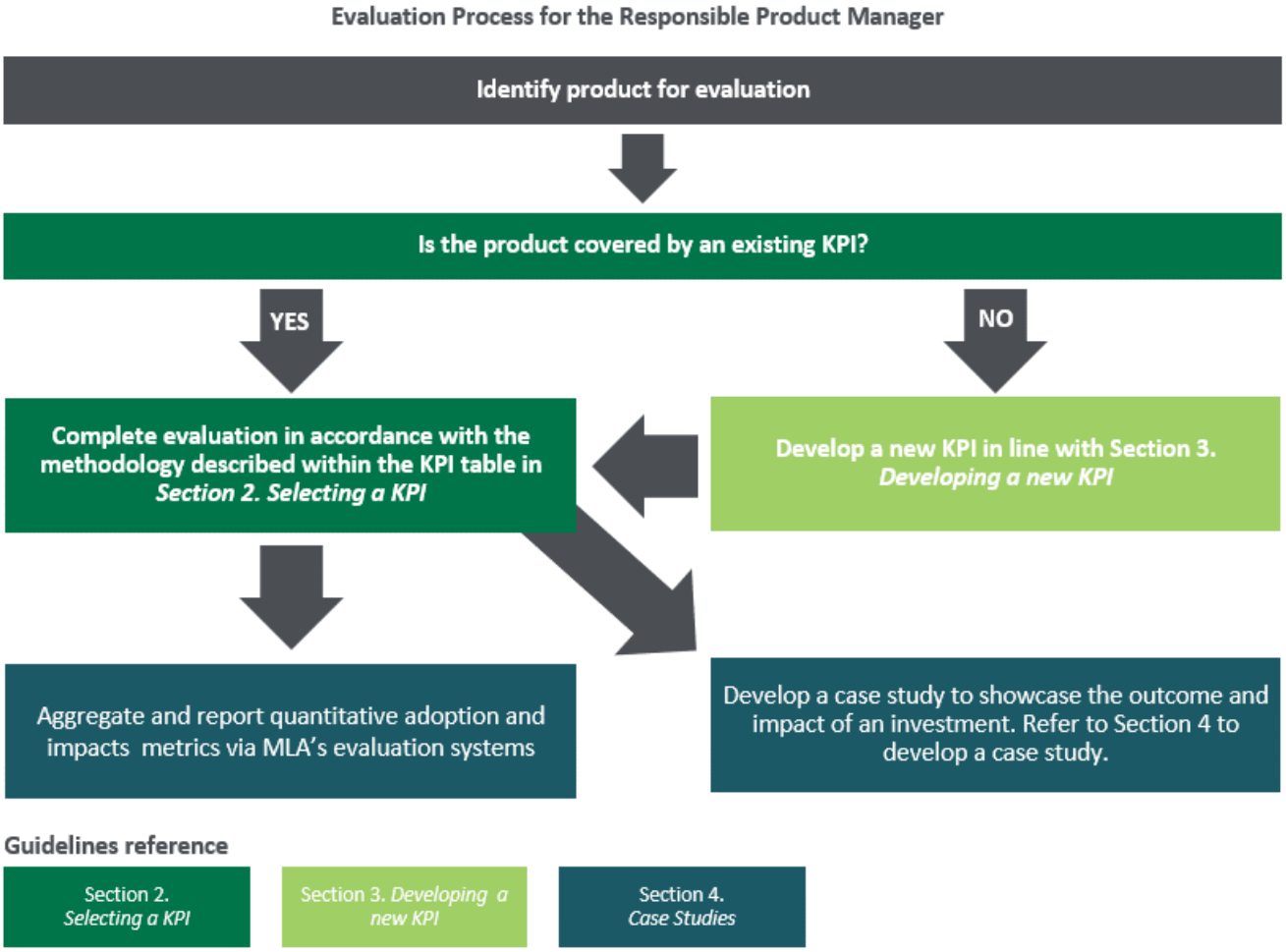
1.2 Triple Bottom Line Evaluation Process

As demonstrated in

Figure 2 – MLA's evaluation **process**, this guideline is structured around the MLA evaluation process, which guides a Product Manager through the key steps required to complete an evaluation of a product under the MLA Triple Bottom Line Framework. The process centres around the following four key steps:

1) **How to use this document**: Context and considerations, purpose of the document, and roles and responsibilities.
2) **Predefined key performance indicators (KPIs):** *Section 2: Selecting a KPI* lists existing KPI which have been developed for existing MLA product areas to evaluate impact. Product Managers should use the existing KPI tables where an appropriate KPI exists for the products they are responsible for.
3) **Develop a new KPI:** Where product impacts are not currently captured in KPIs within *Section 2: Selecting a KPI,* Product Managers should follow the guidance in *Section 3: Developing a new KPI* for evaluation, following the Path2Impact approach, the process to collect data and set baselines for impact measurement and how to report the product impact through KPIs.
4) **Case studies:** Where applicable, Product Managers should identify a showcase example of an investment outcome and impact to be used as a Case Study for reporting.

Figure 2 – MLA's evaluation process



1.3 Roles and responsibilities

Product Managers, the Communications team, MLA leadership, the Evaluation Team, and MLA's Board all have roles and responsibilities in ensuring robust and timely evaluation. The below table outlines the key responsibilities of MLA's internal stakeholders, noting that actual evaluation activities may be outsourced to a contracted project service provider or a third party consultant.

Table 1 – Roles and responsibilities for evaluation across MLA

Role	Role and responsibility
Product Managers	• Identify products and setting outcomes/impact KPIs for category 1 investments. • Adhere to evaluation requirements outlined in these Guidelines. • Work with the Communications Team and Evaluation Team to execute for respective program areas. • Depending on investment type and size, ensure monitoring and evaluation plan delivered as part of contract. • Set baselines and/or counterfactual. • Collect, aggregate and record data for products and KPIs they are responsible for in the defined timeframe and frequency. • Maintain the record of process and methodology for each KPI within responsibility. Depending on the impact and product, gather necessary data for one showcase Case Study. • Confirm the accuracy and completeness of their data and reporting. • Maintain evidence to support data so they can be made available for review as needed. • Submit data within the defined frequency for each KPI to the Business Planning and Evaluation Team.
Project Managers	• Contracting, management, delivery of the project investment milestone deliverables, including any evaluation related activities specific to that project such as data collection. • Submitting any project specific evaluation data to the Product Manager for aggregation and reporting if Product and Project Manager are not the same person • All of the Product Manager responsibilities, if Product and Project Manager are the same person
MLA Communications team	• Coordinate with Product Managers and assist and vet case studies based on worksheets provided. • Provide advice to Planning and Evaluation team regarding Impact Report format and content. • Provide advice to Planning and Evaluation team on updates to stakeholder lists. • Assemble external stakeholder communications as needed.
Business Planning and Evaluation team	• Project manage all aspects of evaluation reporting and timelines. • Work closely with the Communications Team and Project/Product Managers. • Review (and update where applicable) the TBL Evaluation Guidelines and the TBL Evaluation Framework (publicly available) each on an annual basis. • Organise data by TBL strategic intention to demonstrate adoption. • Coordinate reporting cycle across business including approvals, reviews and amendments.

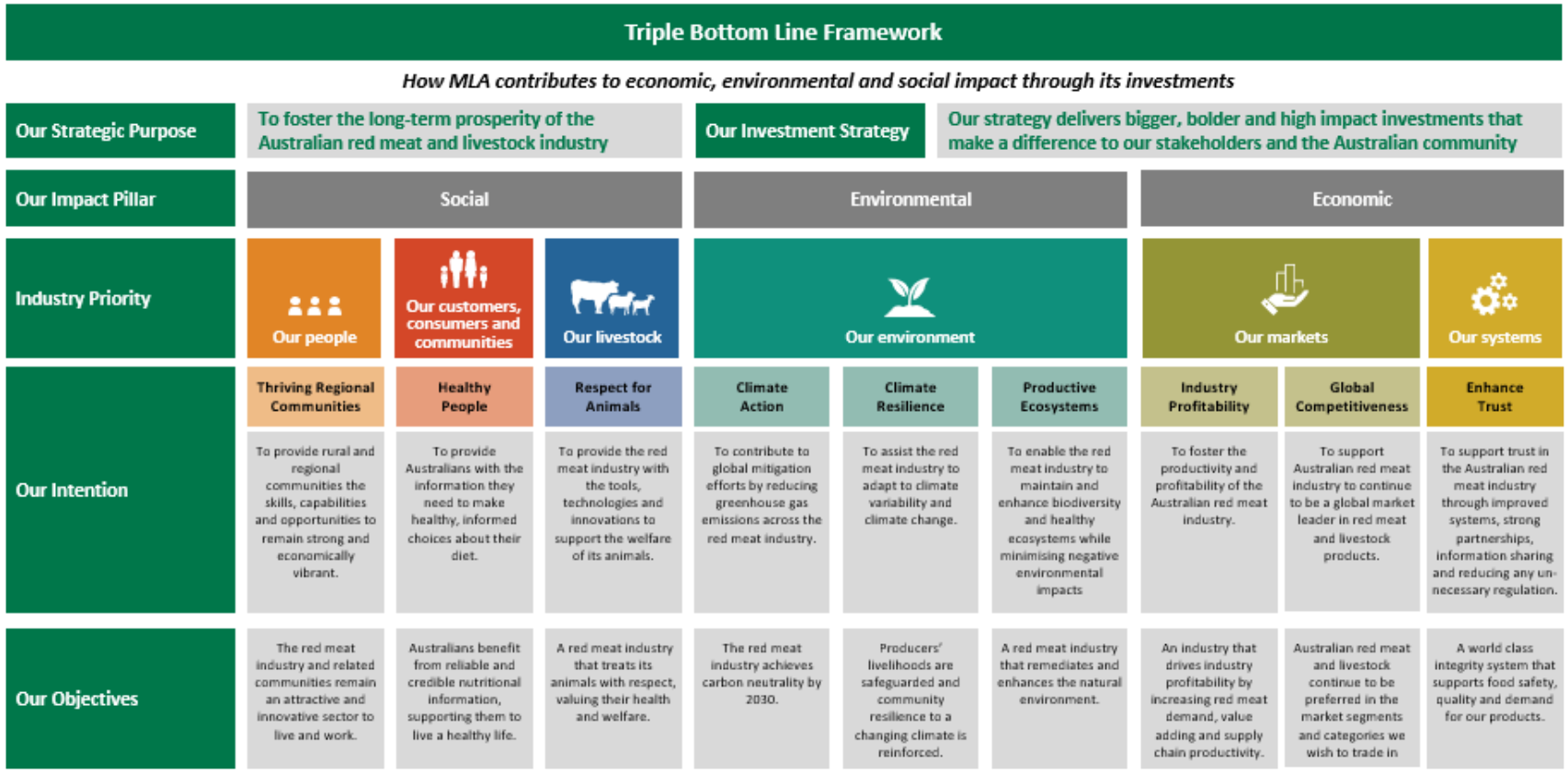
Role	Role and responsibility
	• Conduct quality assurance of KPI data submitted by Project/Product Managers to confirm the accuracy and completeness of data, and adherence to the TBL Evaluation Guidelines and Framework. • Liaise with the Communications team on reporting. • Communicate MLA's data collection and reporting requirements internally. • Respond to queries from Project/Product Managers as needed.
MLA leadership	• Responsible and ultimately accountable for delivery of MLA's evaluation approach.
MLA Board	The Board works with its key stakeholders to build sustainable value for MLA's members and the red meat industry, and to achieve MLA's mission. The Board requires that reports demonstrate: • Evidence of improvement • Transparent reporting • Clear, concise, and well-presented information in a variety of formats and suitable for various stakeholder groups (both industry and wider Australian stakeholders) • Evidence of effort made towards addressing material issues

1.4 Triple Bottom Line Evaluation Framework

MLA's TBL Evaluation Framework is strategically aligned to the red meat industry Red Meat 2030 (RM2030) Plan as well as MLA's 5-year strategic plan.

The TBL Evaluation Framework is used to **understand, measure and report on the impacts** of MLA's activities as well as **indicate where MLA has an opportunity to better address social, environmental and economic and opportunities through our investments**. Please refer to the TBL Evaluation Framework document for further details on MLA's evaluation principles, timeframes and integration into MLA's operations.

Figure 3 – Triple Bottom Line Framework



2. Selecting a KPI

This section is to be used by Product Managers to select the appropriate KPI to use for assessing products, where predefined and existing KPIs have already been developed. Product Managers should navigate to *Table 2 – KPI table index for existing Social, Environmental, and Economic Product Impacts* to find the KPI relevant to the product they seek to assess.

Product Managers should then navigate to the appropriate KPI Table in *Appendix 5.1: KPI Table Lookup,* which will step through the impact evaluation process, including:

- Identifying product impacts
- Collecting data and measuring impact
- Reporting on impact

Only category 1 investments are required to follow the process outlined in the KPI tables (see the MLA TBL Evaluation Framework document for more information).

Where a KPI does not exist in the predefined KPIs, Product Managers should refer to *Section 3: Developing a new KPI*. The KPI tables in *Appendix 5.1: KPI Table Lookup* may be used as examples while developing new KPIs as per *Section 3: Developing a new KPI*.

It is recommended that the relevant KPIs and their related data collection and reporting requirements be explicitly outlined in the contractual obligations (or Statements of Work) agreed with service providers as part of the project initiation process.

2.1 KPI Table Index

Product Managers should use the KPI Table Index to navigate to the predefined KPI relevant for assessing their product. To navigate directly to the page of the relevant KPI, use the Document Reference column to hold down "Control" while clicking the KPI name hyperlink.

Table 2 – KPI table index for existing Social, Environmental, and Economic Product Impacts

Index of KPIs for Social, Environmental, and Economic Product Impacts						
Industry Priority	**Our Intention**	**Product Purpose**		**Our Objectives**	**Key performance indicator (KPI)**	**Document Reference**
Impact Pillar	**Social**					
Our People	**Thriving Regional Communities**	To provide rural and regional communities that the red meat industry is a part of the skills, capabilities, and opportunities to remain strong and economically vibrant	Capability building of those employed in the red meat industry and access to talent and labour	Rural and regional communities that the red meat industry is a part of remain an attractive place to live and work	Increase in relevant capability (individual) (% from a baseline)	***KPI 1 – Increase in relevant capability (individual) (% from a baseline)***
					Increase in relevant capability (organisation/corporate /business) (% from a baseline)	***KPI 2 – Increase in relevant knowledge (organisation/corporate/business) (% from a baseline)***
					Number of program participants who secure relevant employment in the sector and are retained for x years	***KPI 3 – Number of program participants who secure relevant employment in the sector and are retained for x years***

Index of KPIs for Social, Environmental, and Economic Product Impacts						
Industry Priority	**Our Intention**	**Product Purpose**		**Our Objectives**	**Key performance indicator (KPI)**	**Document Reference**
Our customers, consumers and communities	**Healthy People**	To provide Australians with the information they need to make healthy, informed choices about their diet	Human health and nutrition	Australians benefit from reliable and credible nutritional information to allow them to live a healthy life	Increase likelihood of health professionals recommending the consumption of a healthy portion of red meat as a way to contribute to a better diet (from a baseline)	***KPI 4 – Increase likelihood of recommending healthy portion of red meat as a way to contribute to a better diet (from a baseline)***
Our livestock	**Respect to Animals**	To provide the red meat industry with the tools, technologies and innovations to continue to support and evolve the welfare of its animals	Animal welfare and wellbeing	A red meat industry that treats its animals with respect, valuing their health and welfare	Number of producers and animals using animal welfare / wellbeing related products and practices when undertaking aversive husbandry practices (e.g., horn removal, mulesing, castration, tail docking, bobby calves)	***KPI 5 – Number of producers and animals using animal welfare / wellbeing related products and practices when undertaking aversive husbandry activities***

Index of KPIs for Social, Environmental, and Economic Product Impacts						
Industry Priority	**Our Intention**	**Product Purpose**		**Our Objectives**	**Key performance indicator (KPI)**	**Document Reference**
Impact Pillar	**Environmental**					
Our environment	**Climate Action**	To contribute to global mitigation efforts by reducing greenhouse gas emissions across the red meat industry	Emissions Reduction	We will develop and communicate greenhouse gas-reducing interventions and methods that enable our producers to reduce emissions associated with raising livestock	Number of emissions reductions practices implemented	***KPI 6 – Number of emissions reductions practices implemented***
					Megatons carbon dioxide equivalent avoided, reduced, captured or sequestered	***KPI 7 – Megatonne CO2e avoided, reduced, captured or sequestered***
	Climate Resilience	To prepare the red meat industry to adapt their practice for climate variability and climate change	Adaptability to Climate Change	We will prepare our producers for the impacts of a changing climate	Number of climate adaptation plans implemented	***KPI 8 – Number of climate adaptation plans implemented***
					Number of climate adaptation practices implemented	***KPI 9 – Number of climate adaptation practices implemented***
					Financial implications of climate adaptation (using economic modelling to demonstrate adaptation impact)	***KPI 10 – Financial implications of climate change***

Index of KPIs for Social, Environmental, and Economic Product Impacts						
Industry Priority	**Our Intention**	**Product Purpose**		**Our Objectives**	**Key performance indicator (KPI)**	**Document Reference**
	Productive Ecosystems	To equip the red meat industry with the technologies and practices needed to maintain and enhance biodiversity and healthy ecosystems while reducing negative environmental impacts	Biodiversity and Habitat Enhancement	We will enable producers to enhance their natural landscapes	(Increase in) Hectares of land managed for biodiversity outcomes through active management	***KPI 11 – Hectares of land managed for biodiversity outcomes through active management***
					(Increase in) Hectares of habitat remediated or restored	***KPI 12 – Hectares of land remediated or restored by the red meat industry***
			Soil Health	We will enhance soil health by expanding producer knowledge of management techniques	(Increase in) Hectares of land under soil health management regimes	***KPI 13 – Hectares of land under soil health management regimes***
					(Increase in) Fractional vegetation coverage	***KPI 14 – Fractional vegetation coverage***
Impact Pillar	**Economic**					
Markets	**Industry Profitability**	To foster the productivity and profitability of the Australian red meat industry	Profitability	We will ensure the ongoing profitability of the red meat industry	Per unit annual productivity and/or cost saving impact of adoption, measured in financial dollar terms	***KPI 15 – Industry profitability***

Index of KPIs for Social, Environmental, and Economic Product Impacts						
Industry Priority	**Our Intention**	**Product Purpose**		**Our Objectives**	**Key performance indicator (KPI)**	**Document Reference**
	Global Competitiveness	To support Australian red meat industry to continue to be a global market leader in red meat and livestock products	Market Competitiveness	We will enable our producers to be market leaders in red meat production.	Changes in industry sector income (2nd round benefit) arising from changes in supply or demand	***KPI 16 – Global Competitiveness***
Systems	**Enhance Trust**	To support trust in the Australian red meat industry through improved systems, strong partnerships, information sharing and reducing any un-necessary regulation	Trust along the Value Chain	We will ensure customers are confident in the Australian red meat products they purchase.	Changes in industry sector income (2nd round benefit) arising from changes in supply or demand	***KPI 17 – Trust Along the Value Chain***

3. Developing a new KPI

In instances when a KPI does not yet exist to measure the impact of a product, the Product Manager should develop a new KPI using the KPI Table Worksheet in *Section 3.1: Worksheet for a new KPI* and submit it to the Business Planning and Evaluation Team. The process for a Product Manager to follow to develop a new KPI is documented below in *Figure 4 – Detailed Path2Impact approach for developing a new KPI worksheet*.

It is suggested that the KPI Tables in *Appendix 5.1: KPI Table Lookup* are used as examples of the information required to measure and evaluate impact. Once a KPI has been developed and approved by the Business Planning and Evaluation Team, the new KPI will be added to the *Appendix 5.1: KPI Table Lookup* for use in future evaluation of products.

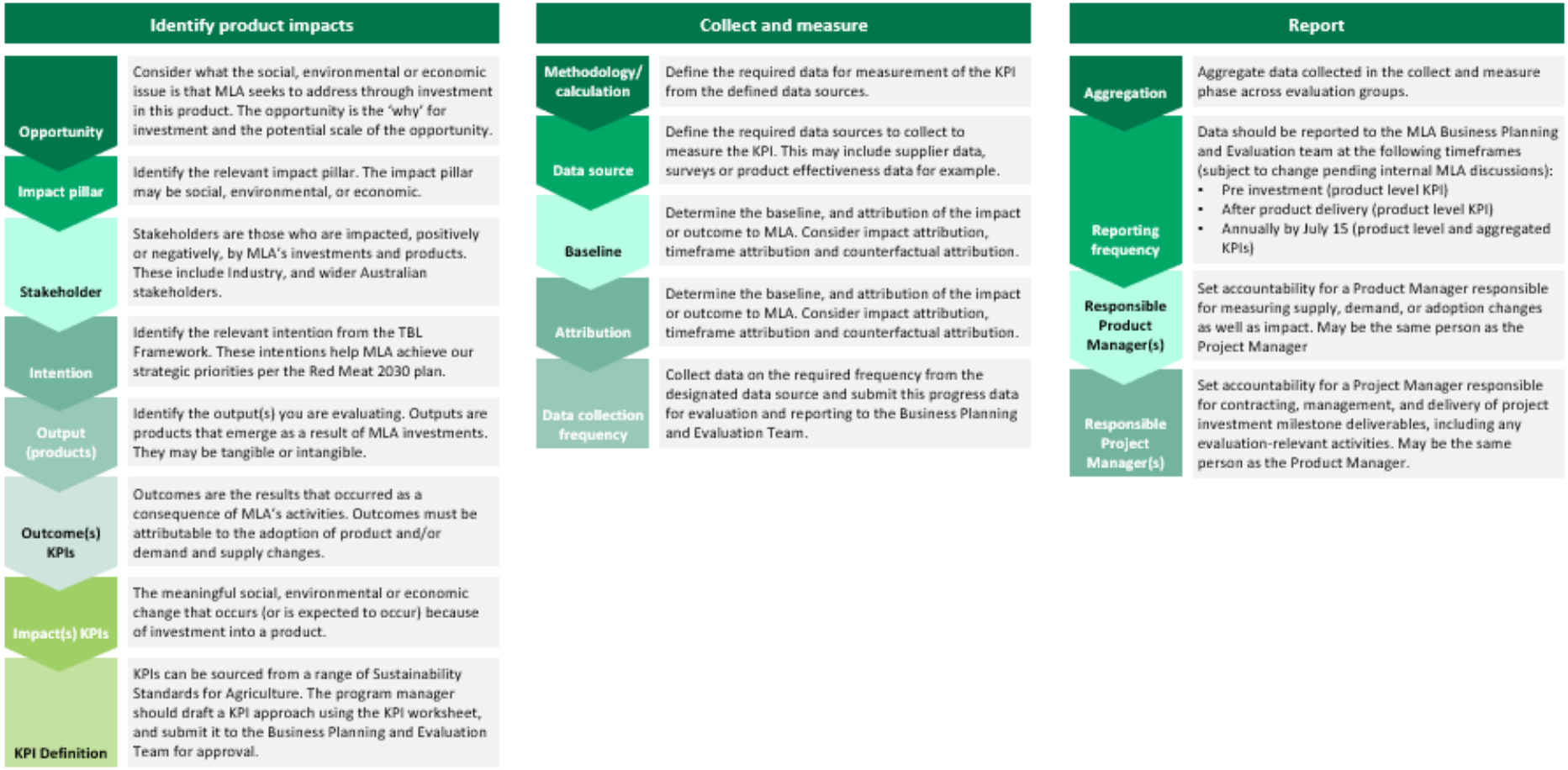
MLA evaluation reporting includes both quantitative data (KPIs) and/or qualitative data (case studies) for product impacts. Where possible, quantitative data is preferred, as it can be aggregated to facilitate reporting to the Board and other industry and wider Australian stakeholders. However, MLA recognises that in some cases, qualitative data (case studies) based reporting is appropriate, especially for social and environmental impacts.

These should still, where possible, reference any quantitative metrics. This new KPI section provides guidance on both quantitative data (KPIs) and/or qualitative data (case studies) reporting.

For further information, please see:

- *Appendix 5.1: KPI Table Lookup* for examples of this process completed for a number of existing MLA products. Product Managers can select the most relevant KPI to their product as a relevant example while developing a new KPI.
- *Appendix 5.3: Social, Environmental and Economic Themes* for possible opportunities to be addressed by future investments.
- *Appendix5.4 5.4: KPI Reference Sources* for guidance on external KPI sources.
- The TBL Evaluation Framework for the key theoretical concepts for impact evaluation.

Figure 4 – Detailed Path2Impact approach for developing a new KPI worksheet



3.1 Worksheet for a new KPI

The below worksheet is to be used by Product Managers in the development of new KPIs. For examples of completed worksheet, refer to *Appendix 5.1: KPI Table Lookup*.

Table 3 – Example worksheet for a new KPI

KPI x – Example worksheet	
Identify product impacts	
Opportunity	Define the opportunity this product or investment is addressing.
Impact Pillar	Select: Social, Environmental and/or Economic
Stakeholders	Select one or more of the following: Industry stakeholders (producer, feedlot, processor, value adder) Wider Australian stakeholders • Customers, consumers and communities • Environment • Livestock
Intention	Select one or more of the following: • Social: Thriving Regional Communities, Healthy People, and Respect of Animals • Environmental: Climate Action, Climate Resilience, and Productive Ecosystems • Economic: Industry Profitability, Global Competitiveness and Enhance Trust
Output (product)	The product(s) being evaluated
Outcome(s) KPIs	Measures of attributable supply, demand, or adoption changes
Impact(s) KPIs	Measures associated with change due to supply, demand, or adoption changes
KPI Definition	Definition of the KPI. Sources of new KPIs considering: • GRI Agriculture Sector Standard • Sustainability Accounting Standards Board (SASB) • IRIS+ • Australian Agriculture Sustainability Framework • UNSDGs A full list of applicable KPI sources can be found in *Appendix 5.4.*
Collect and measure data	
Methodology/ calculation	How the data is collected and calculated, where relevant

Data source	Source(s) of data inputs for the KPI. These may be for example supplier data, surveys, or other data collected on product effectiveness.
Baseline	Baseline value for the data
Attribution	Refer to the Framework and example KPIs in *Appendix 5.1* for guidance on how attribution may be determined. Consider impact attribution, timeframe attribution and counterfactual attribution. Defining the attribution to MLA assists with defining the appropriate baseline data to measure a required change from.
Data collection frequency	Frequency of data collection and frequency of submission to the Business Planning and Evaluation Team.
Reporting	
Aggregation	Identify how data will be aggregated for reporting if applicable across evaluation groups.
Reporting frequency	Data should be reported to the MLA Business Planning and Evaluation team at the following timeframes (subject to change pending internal MLA discussions): • Pre investment (product level KPI) • After product delivery (product level KPI) • Annually by July 15 (product level and aggregated KPIs)
Responsible Product Manager(s)	The Product Manager is responsible for measuring supply, demand, or adoption changes as well as impact. The actual evaluation activity may be delegated to a project service provider or third party consultant. Product Manager's responsibilities include: • Choosing KPIs • Developing a new KPI to measure impact, where a KPI does not already exist • Measuring adoption and impact • Developing case study • Ensuring that data collection requirements are integrated into contracted Statements of Work (SOW). • Submitting product related evaluation data to Business Planning and Evaluation team
Responsible Project Manager(s)	Project Manager is responsible for the technical success of an investment. This includes contracting and delivery of milestones as well as any evaluation related deliverables within that project. They may or may not be also in charge of the product related to that investment.

	Project Manager's responsibilities include: • Contracting, management, delivery of the project investment milestone deliverables, including any evaluation related activities specific to that project such as data collection; • Submitting any project specific evaluation data to the Product Manager for aggregation and reporting if Project and Product Manager are not the same person; and • All of the above Product Manager responsibilities, if Project and Product Manager are the same person.

4. Case studies

As part of the aggregation and reporting process, Product Managers should identify a showcase example of an investment outcome and impact to be used as a Case Study for reporting. One Case Study should be developed for each strategic intention outlined in the TBL Evaluation Framework. The purpose of the Case Study is to illustrate the social, environmental or economic contribution of their programs. The Case Study should follow MLA's Path2Impact logic.

Product Managers are responsible for completing the following Case Study worksheet, which includes responding to the guiding questions and contacting stakeholder(s) as needed to interview.

It is important that the guiding questions are responded to from the stakeholder's perspective rather than the Product Managers. Product Managers should seek explicit consent to include Case Study details in any public reporting from stakeholders interviewed.

Product Managers should provide the completed Case Study worksheet and a drafted case study to the Communications Team, who will then review, approve and format for any public reporting.

Product Managers should follow this worksheet when developing their case studies for MLA's Impact Report.

4.1 Case Study worksheet

Step 1. Collect background information

Product Managers should provide the following background information for the case study.

Question	Response
Which MLA investment, product or story that you are responsible for had a significant environmental or social impact and should be included as a case study in our Impact Report? Example: an individual who achieved significant positive outcomes from participation in MLA's program / a significant contribution recently made by MLA to reduce greenhouse gas emissions	
What social or environmental need or problem did MLA seek to address with this product, program or investment?	
Who was the stakeholder of the investment? E.g., an individual, a business, livestock, the environment, a community etc.	
What was the investment that MLA made?	
What outcome or impact resulted from the investment?	

Step 2. Collect information on benefits of MLA activities from the perspective of the stakeholder

If the stakeholder was a person, the Product Manager should contact stakeholder and conduct an interview to answer the following questions. If the stakeholder was not an individual, the Product Manager should consider the following questions from the perspective of the stakeholder.

Question	Response
Please describe a brief description of who you are to add some context to the case study.	
What is your relationship to MLA? (e.g., benefits from MLA's services, member of the red meat industry etc.)	
Please describe your experience as part of the MLA program or investment you were a part of.	

How did you benefit from participation in the program or investment?	
What broader environmental or social impact might the MLA product contribute to?	
Why was the MLA product instrumental to the particular result?	
Is there anything else you would like to add?	

Step 3. Product Managers should expand the above into a draft case study, then submit this to the Business Planning & Evaluation Manager for feedback and approval.

Step 4. Product Managers will submit this worksheet to the Communications Team, who will finalise the case study for their stakeholder communication channels.

5. Appendices

5.1 KPI Table Lookup

This section contains predefined KPI Tables which Product Managers should use for evaluation of products. The index at the front of this document and in *Section 2: Selecting a KPI* can aid in navigating the below tables.

Where a KPI does not exist in the outlined KPIs below, Product Managers should refer to *Section 3: Developing a new KPI.*

KPI 1 – Increase in relevant capability (individual) (% from a baseline)	
Identify product impacts	
Opportunity	Capability building, including research and non-research capability (e.g., leadership skills)
Impact Pillar	Social
Stakeholder	Industry
Intention	Thriving Regional Communities
Output (product)	Innovation Capability Building products which target individual capability building including: • Producer Extension Programs • ICMJ • Farmers2Founders • Rural Professional Program • Post-Graduate Scholarships & Support • Scholarship Programs • Leadership Development Programs • Co-Innovation Programs • Integrity Systems • Scholarships • Post graduate support • MLA funded consulting businesses
Outcome(s) KPIs	Participation numbers and demographics
Impact(s) KPIs	Increase in relevant capability (individual) (% from a baseline)
KPI Definition	Increase in knowledge resulting from participation in MLA program, by relevant product and in total.
Collect and measure data	
Methodology/ calculation	Define the relevant capability that each product is seeking to enhance (e.g. innovation). Provide a survey to program participants in both an ex-ante and ex-poste session: *How would you assess your current knowledge and skills relating to [relevant topic area] from 1 (extremely low) to 10 (extremely high)?*
Data source	Survey data sourced from applicable product categories (per the output above)
Baseline	First year of data collection.

	A participant's change in knowledge is assessed by comparing the knowledge of the participant from the pre- and post-participation
Attribution	Attribution is determined by response to the survey, as the question specifies engagement in an MLA program (as noted in the Data Sources above).
Data collection frequency	Start and end of program participation
Report Impact	
Aggregation	Aggregated across relevant output (product) categories for an average change in capability across capability building programs.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with capability building social impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with capability building social impacts.

KPI 2 – Increase in relevant knowledge (organisation/corporate/business) (% from a baseline)	
Identify product impacts	
Opportunity	Capacity building
Impact Pillar	Social
Stakeholder	Industry
Intention	Thriving Regional Communities
Output (product)	Innovation Capability Building products which target organisation, corporate and business capability including: • ICMJ • Rural Professional Program • Post-Graduate Scholarships & Support • Scholarship Programs • Leadership Development Programs • Co-Innovation Programs • Integrity Systems
Outcome(s) KPIs	Participation numbers and demographics
Impact(s) KPIs	Increase in relevant knowledge (organisation/corporate/business) (% from a baseline)
KPI Definition	Increase in knowledge resulting from participation in MLA extension program, by relevant product and in total.
Collect and measure data	
Methodology/ calculation	Define the relevant capability that each product is seeking to enhance (e.g. innovation). The following questions should be provided to program participants in both an ex-ante and ex-post survey: *How would you assess your current knowledge and skills relating to [relevant topic area] from 1 (extremely low) to 10 (extremely high)?*
Data source	Survey data sourced from applicable product categories (per the output above)
Baseline	First year of data collection. A participant's change in knowledge is assessed by comparing the knowledge of the participant from the pre- and post-participation
Attribution	Attribution is determined by response to the survey, as the question specifies engagement in an MLA program (as noted in the Data Sources above).

Data collection frequency	Start and end of program participation
Report Impact	
Aggregation	Aggregated across relevant output (product) categories for an average change in capability across capability building programs.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with capacity building social impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with capacity building social impacts.

KPI 3 – Number of program participants who secure relevant employment in the sector and are retained for x years	
Identify product impacts	
Opportunity	Capacity building
Impact Pillar	Social
Stakeholders	Industry
Intention	Thriving Regional Communities
Output (product)	Innovation Capability Building targeting employment outcomes, including: • ICMJ • Zanda McDonald • ARLP • Australian Beef Industry Foundation Leadership • Horizon • Nuffield
Outcome(s) KPIs	Participation numbers and demographics
Impact(s) KPIs	Number of program participants who secure relevant employment in the sector and are retained for x years
KPI Definition	The number of participants in MLA programming who retain their employment in the red meat industry per product and in total across relevant products.
Collect and measure data	
Methodology/ calculation	The following questions should be provided to program participants in an ex-post survey: • *What was your employment status prior to participation in the program?* • *What is your current employment status?*
Data source	Ex-post survey data sourced from applicable product categories (per the output above)
Baseline	First year of data collection. Result to be compared to the industry average retention and to the results of question a in the methodology/calculation section above.
Attribution	Attribution is determined by response to the survey, as the question specifies engagement with the MLA program.
Data collection frequency	Annually

Report Impact	
Aggregation	Aggregated across relevant output (product) categories for an average change in retention across capability building programs.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with employment related social impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with employment related social impacts.

KPI 4 – Increase likelihood of recommending healthy portion of red meat as a way to contribute to a better diet (from a baseline)	
Identifying product impacts	
Opportunity	Human health and nutrition
Impact Pillar	Social
Stakeholders	Wider Australian stakeholders: Our customers, consumers, and communities
Intention	Healthy People
Output (product)	Nutrition
Outcome(s) KPIs	Medical professional survey participation and demographics
Impact(s) KPIs	Increase likelihood of recommending healthy portion of red meat as a way to contribute to a better diet (from a baseline)
KPI Definition	Increase in medical professionals' likelihood to recommend healthy portion of red meat to improve diet and or eating habits
Collect and measure data	
Methodology/ calculation	Percent change is calculated annually by analysing survey responses from medical professionals in response to a question asked by Medibus' Health Professional Campaigns.
Data source	Data from the Health Professional Campaigns being collected via Medibus
Baseline	First year of data collection. Measure change from the first year of data collection in the likelihood of recommendation. Compare to the average likelihood across the population which has not received the MLA intervention.
Attribution	Attribution is determined by response to the survey, as the question specifies MLA engagement.
Data collection frequency	Annually
Report Impact	
Aggregation	Aggregate across relevant product categories to find a total likelihood of recommending across relevant MLA programs.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with animal wellbeing and welfare social impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with human health and nutrition social impacts.

KPI 5 – Number of producers and animals using animal welfare / wellbeing related products and practices when undertaking aversive husbandry activities	
Identify product impacts	
Opportunity	Animal welfare and wellbeing
Impact Pillar	Social
Stakeholders	Wider Australian stakeholders: Our livestock
Intention	Respect to animals
Output (product)	Animal Wellbeing
Outcome(s) KPIs	Number of producers and animals using animal welfare / wellbeing related products and practices when undertaking aversive husbandry activities
Impact(s) KPIs	N/A – Outcome KPI
KPI Definition	Number of producers and animals using animal welfare / wellbeing related products and practices when undertaking aversive husbandry activities
Collect and measure data	
Methodology/ calculation	Data being collected via Animal Welfare Survey, commercial sales/use of animal welfare focussed products, % of herd with genetic polling change etc.
Data source	Data being collected from extension programs via Animal Welfare Survey
Baseline	First year of data collection.
Attribution	Attribution is determined by response to the survey, as the question specifies MLA engagement.
Data collection frequency	Bi-annually
Report impact	
Aggregation	Aggregate across animal welfare extension programs for a total across the output category.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with human health and nutrition social impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with animal wellbeing and welfare social impacts.

KPI 6 – Number of emissions reductions practices implemented	
Identify product impacts	
Opportunity	Emissions Reduction
Impact Pillar	Environmental
Stakeholders	Our Environment
Intention	Climate Action
Output (product)	Sustainability On-Farm and Feedlot Sustainability programs which target emissions reduction.
Outcome(s) KPIs	Number of emissions reductions practices implemented
Impact(s) KPIs	N/A – Outcome KPI
KPI Definition	The number of MLA-developed emissions reduction practices and products implemented by producers or feedlotters.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW). SOW should specify that data will need to be collected with the following units of measure, depending on the nature of the project: *Number of businesses implementing a climate mitigation practice [#]* *Number of animals affected by an implemented climate mitigation practice [#]* *Number of hectares affected by an implemented climate mitigation practice [#]* *Number of climate mitigation practices implemented, where 1 property/1 business = 1 unit of adoption, regardless of area size or number of affected animals [#]* SOW should specify the frequency with which the data is collected (see Data collection frequency section).
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: Supplements and additives to avoid emissions • Genetics/selection to avoid emission

	• Feedlot greenhouse gas suppressing technologies • Forages to avoid emissions • Trees and pastures for carbon storage • Dung beetles for carbon storage
Baseline	First year of data collection is measured as a baseline for change in practice over time.
Attribution	Attribution is determined based on to what extent a practice was implemented as a result of as a result of an MLA project. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregate the number of emissions reduction practices across all relevant outputs above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with emissions reduction environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with emissions reduction environmental impacts.

KPI 7 – Megatonne CO2e avoided, reduced, captured or sequestered	
Identify product impacts	
Opportunity	Emissions reduction
Impact Pillar	Environmental
Stakeholder	Wider Australian stakeholder: Environment
Intention	Climate Action
Output (product)	Sustainability On-Farm and Feedlot Sustainability products that target emissions reduction.
Outcome(s) KPIs	Animal numbers, hectares or other adoption profile metrics
Impact(s) KPIs	Megaton CO2e avoided, reduced, captured or sequestered
KPI Definition	Megatonnes of carbon dioxide equivalent avoided, reduced, captured, or sequestered as a result of producer and feedlotter implementation of MLA-developed practices and products.
Collect and measure data	
Methodology/ calculation	A methodology and associated GHG Excel model for evaluating actual or potential emissions reductions from MLA funded interventions (products) has been completed via project J20663. Use of this model is mandatory for all emissions related products. This covers the following intervention types: • Vaccines, devices & feed additives that are directly applied at the individual animal level to reduce enteric methane emissions. • Pastures that reduce enteric methane. • Genetics that develop new traits (EBV's) that are targeted toward reductions in gross methane emissions. • Land Use (LULUCF) that captures both sequestration and emission-avoidance interventions such as savannah burning, vegetation management, soil carbon, biomass sequestration and forestry. Data collection: 1) Product Managers are responsible for building provisions around data collection into the statement of work (SOW). 2) The SOW should specify that data for emissions reduction adoption and impact will need to be collected in accordance with the User Guide relating to each intervention type above.

	These User Guides specify the data required for input into the GHG model for each intervention type. 3) SOW should also specify the frequency with which the data is collected (see Data collection frequency section). Calculation: 4) The GHG model provides projected annual emissions for both the baseline and intervention scenarios out to 2050. These projections are presented at both the sectoral level (aggregated emissions for the Red Meat Industry) and at industry levels across the grassfed beef, feedlot and sheep industries. Model results include GP100, GWP* and emissions intensity numbers and graphs. These may be easily extracted and aggregated to show the impact of multiple intervention types and scenarios. For each scenario, intervention impact reflects the difference in annual emissions between the baseline and intervention scenarios.
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Vaccines, devices & feed additives. • Pastures that reduce enteric methane. • Genetics that develop new traits (EBV's) that are targeted toward reductions in gross methane emissions. • Land Use (LULUCF) that captures both sequestration and emission-avoidance interventions such as savannah burning, vegetation management, soil carbon, biomass sequestration and forestry. Additional data sources may include non MLA funded interventions or emission reductions that are proposed by non MLA organisations e.g. large scale tree planting.
Baseline	2020-2050 business-as-usual projection in the absence of MLA program intervention.
Attribution	Attribution of GHG emission reductions to MLA products is based on the proportion of funding (including any related extension or commercialisation activities) made by MLA.
Data collection frequency	Annually
Report Impact	

Aggregation	Aggregate across applicable outputs above for the total CO2e avoided, reduced, captured or sequestered across MLA outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with emissions reduction environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with emissions reduction environmental impacts.

KPI 8 – Number of climate adaptation plans implemented	
Identify product impacts	
Opportunity	Adaptability to Climate Change
Impact Pillar	Environmental
Stakeholders	Industry Wider Australian stakeholder: Environment
Intention	Climate Resilience
Output (product)	Sheep and Goat Productivity and Sustainability On-Farm products including: • Nexus projects • NACP • Extension programs
Outcome(s) KPIs	Number of climate adaptation plans implemented
Impact(s) KPIs	N/A - Outcome KPI
KPI Definition	The number of climate adaptation plans implemented by producers to establish a plan of action in the event of extreme weather or climate change.
Collect and measure data	
Methodology/ calculation	Data collection: 1. Product Managers are responsible for building provisions around data collection into the statement of work (SOW). 2. SOW should specify an ex-ante survey and ex-post survey of project participants is to be distributed. Data should be collected at the business/producer level. The ex-ante survey should include the following question: *Do you have a climate adaptation plan currently in place that provides guidance on how to respond to climate variability and/or climate change?* The ex-poste survey should include the following question: *After working with MLA on this project, have you implemented a plan or strategy that provides guidance on how to respond to climate variability and/or climate change?* 3. SOW should specify the frequency with which the data is collected (see Data collection frequency section).

Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Nexus projects • NACP • Extension programs
Baseline	First year of data collection utilised to measure for change over time.
Attribution	Attribution is determined based on to what extent a climate adaptation practice was implemented as a result of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Ex-ante survey before project commencement, and ex-poste the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable Outputs (products) as listed above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with adaptability to climate change and variability environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with adaptability to climate change and variability environmental impacts.

KPI 9 – Number of climate adaptation practices implemented	
Identify product impacts	
Opportunity	Adaptability to Climate Change
Impact Pillar	Environmental
Stakeholders	Industry Wider Australian stakeholder: Environment
Intention	Climate Resilience
Output (product)	Sheep and Goat Productivity and Sustainability On-Farm products including: • Nexus projects • NACP • Extension programs
Outcome(s) KPIs	Number of climate adaptation practices implemented
Impact(s) KPIs	N/A - Outcome KPI
KPI Definition	The number of climate adaptation practices implemented by producers, for example using weather forecasting tools to make business decisions or managing pastures adapted to future climate conditions.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW). SOW should specify that data will need to be collected with the following units of measure, depending on the nature of the project: • Number of businesses implementing a climate adaptation practice [#] • Number of animals affected by an implemented climate adaptation practice [#] • Number of hectares affected by an implemented climate adaptation practice [#] • Number of climate adaptation practices implemented, where 1 property/1 business = 1 unit of adoption, regardless of area size or number of affected animals [#] SOW should specify the frequency with which the data is collected (see Data collection frequency section).

Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Nexus projects • NACP • Extension programs
Baseline	First year of data collection utilised to measure for change over time.
Attribution	Attribution is determined based on to what extent a climate adaptation practice was implemented as a result of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable Outputs (products) as listed above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with adaptability to climate change and variability environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with adaptability to climate change and variability environmental impacts.

KPI 10 – Financial implications of climate change	
Identify product impacts	
Opportunity	Adaptability to Climate Change & Variability
Impact Pillar	Environmental
Stakeholders	Industry
Intention	Climate Resilience
Output (product)	Sheep and Goat Productivity and Sustainability On-Farm practice changes which address climate adaptation and variability (extreme events), including: • Nexus projects • NACP • Extension programs
Outcome(s) KPIs	Adoption of climate change practices, as measured by businesses, animals or area impacted
Impact(s) KPIs	Financial implications of climate change and variability (extreme events)
KPI Definition	Financial implications of climate adaptation practice change are the increase in profitability or reduction in loss of productivity that occurs as a result of adopting climate adaptation practice changes developed or communicated by MLA. Although considered within the environmental pillar, this KPI leverages economic data, in line with climate adaptation and resilience measurements recommended by the Global Reporting Initiative.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW). SOW should specify that data will need to be collected with the following units of measure, depending on the nature of the project: • Increase in profitability as a result of adopting a climate adaptation practice ($) • Avoided loss in productivity as a result of adopting climate adaptation practice ($), after taking account of the potential losses from an incorrect climate event prediction

	SOW should specify the frequency with which the data is collected (see Data collection frequency section).
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Nexus projects • NACP • Extension programs
Baseline	First year of data collection.
Attribution	Attribution is determined based on to what extent a climate adaptation practice was implemented because of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with adaptability to climate change and variability environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with adaptability to climate change and variability environmental impacts.

KPI 11 – Hectares of land managed for biodiversity outcomes through active management	
Identify product impacts	
Opportunity	Biodiversity and Habitat Enhancement
Impact Pillar	Environmental
Stakeholders	Wider Australian stakeholder: Environment
Intention	Productive Ecosystems
Output (product)	Sustainability On-Farm
Outcome(s) KPIs	Hectares of land managed for biodiversity outcomes through active management
Impact(s) KPIs	Type of biodiversity impact
KPI Definition	Hectares of land managed for biodiversity outcomes through active management plans that incorporate techniques developed by MLA. This may include weeds minimisation, water availability for other wildlife, effluent management, and others.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW). SOW should specify that data will need to be collected with the following units of measure, depending on the nature of the project: • Number of businesses implementing a biodiversity management plan [#] • Number of hectares affected by an implemented a biodiversity management plan [#] • Number of biodiversity management plans implemented, where 1 property/1 business = 1 unit of adoption, regardless of area size [#] SOW should specify the frequency with which the data is collected (see Data collection frequency section).
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Trees and pastures for carbon storage • Edible shelters • Forages to avoid carbon emissions
Baseline	First year of data collection.

Attribution	Attribution is determined based on to what extent a practice was implemented as a result of an MLA project. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report impact	
Aggregation	Aggregate across applicable outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with biodiversity and habitat enhancement environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with biodiversity and habitat enhancement environmental impacts.

KPI 12 – Hectares of land remediated or restored by the red meat industry	
Identify product impacts	
Opportunity	Biodiversity and Habitat Enhancement
Impact Pillar	Environmental
Stakeholders	Wider Australian stakeholder: Environment
Intention	Productive Ecosystems
Output (product)	Sustainability On-Farm products that target the opportunity, including: • Trees and pastures for carbon storage • Edible shelters • Forages to avoid carbon emissions
Outcome(s) KPIs	Hectares of land remediated or restored by the red meat industry
Impact(s) KPIs	Types of biodiversity remediation and restoration
KPI Definition	Hectares of land that are progressing restoration towards productive grazing land and improved habitat using techniques learned from or developed by MLA. It should be noted that achieving ecological restoration does not always require setting aside land for protection. Ecological restoration and livestock raising can take place concurrently. This KPI focuses primarily on biodiversity outcomes, while the KPIs related to Soil Health address livestock carrying capacity.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW). SOW should specify an ex-ante survey, survey throughout the project duration, and ex-post survey of project participants is to be distributed. Ex-ante survey should include the following questions: *How would you describe the current state of your land?* *Current state should be ranked according to the following definitions:* ***1- Severely degraded** – land cannot support any local flora/fauna* ***2- Degraded** – minimal local flora/fauna can be found*

	3- Minimally degraded *– some local flora/fauna can be found* The survey distributed annually and ex-post to participants should include the following questions: *Of your land being managed for biodiversity outcomes using methods applied as a result of engaging with MLA, how would you describe the state of your land? Choose one.* *Remediation should be ranked along an ecosystem restoration continuum according to the following definitions:* ***1- Reduced damage*** *– minimising practices that result in ecosystem degradation* ***2- Remediated*** *– stopping practices that resulted in ecosystem degradation* ***3- Rehabilitated*** *– enhancing native landscape* ***4- Restored*** *– positioning the land to return towards its full ecosystem productivity* Restoration will look differently in different parts of Australia, and even in different parts within states. Producers should refer to state environment authority information on bioregions to determine which native species should be considered as part of their restoration processes. SOW should specify the frequency with which the data is collected (see Data collection frequency section).
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Trees and pastures for carbon storage • Edible shelters • Forages to avoid carbon emissions
Baseline	First year of data collection. Land productivity improvement is assessed by comparing the state of the land as reported by the participant from the pre- and post-participation.
Attribution	Attribution is determined based on to what extent a climate adaptation practice was implemented because of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Ex-ante survey before project commencement, annually for the duration of the project, ex-post the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.

Report impact	
Aggregation	Aggregate across applicable outcomes (products) listed above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with biodiversity and habitat enhancement environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with biodiversity and habitat enhancement environmental impacts.

KPI 13 – Hectares of land under soil health management regimes	
Identify product impacts	
Opportunity	Soil Health
Impact Pillar	Environmental
Stakeholders	Wider Australian stakeholder: Environment
Intention	Productive Ecosystems
Output (product)	Sustainability On-Farm products which seek to address soil health.
Outcome(s) KPIs	Hectares of land under soil health management regimes
Impact(s) KPIs	Types of soil health improvements
KPI Definition	Hectares of land under soil health management regimes using techniques to manage soil health that were developed or communicated by MLA. Soil health management includes water retention, minimisation of erosion, carbon storage capacity, and livestock carrying capacity.
Collect and measure data	
Methodology/ calculation	Data collection: 1. Product Managers are responsible for building provisions around data collection into the statement of work (SOW). 2. SOW should specify that data will need to be collected with the following units of measure, depending on the nature of the project: • Number of businesses implementing a biodiversity management plan [#] • Number of hectares affected by an implemented a biodiversity management plan [#] • Number of biodiversity management plans implemented, where 1 property/1 business = 1 unit of adoption, regardless of area size [#] 3. SOW should specify the frequency with which the data is collected (see Data collection frequency section).
Data source	Data collected as part of Statement of Work provisions for the following projects and any future projects relevant to the KPI: • Trees and pastures • Dung beetles • Soil health • Soils management knowledge

	• Rangeland grazing systems and management
Baseline	First year of data collection.
Attribution	Attribution is determined based on to what extent a climate adaptation practice was implemented because of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report impact	
Aggregation	Aggregate across applicable outcomes (products) listed above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with soil health environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with soil health environmental impacts.

KPI 14 – Fractional vegetation coverage	
Identify product impacts	
Opportunity	Soil Health
Impact Pillar	Environmental
Stakeholders	Wider Australian stakeholder: Environment
Intention	Productive Ecosystems
Output (product)	Sustainability On-Farm products which seek to address soil health.
Outcome(s) KPIs	Hectares of land under each coverage type
Impact(s) KPIs	Fractional vegetation coverage improvements
KPI Definition	The fraction of green land (with vegetation) to brown land (hay, branches, leaf litter) to bare land (exposed soil or rock).
Collect and measure data	
Methodology/ calculation	Data collection: 1. Product Manager should work with a spatial data analytics provider to build a fractional vegetation dashboard similar to the dashboard built for the Australian Beef and Sheep Sustainability Frameworks. Key features should include the ability to compare areas achieving various percentages of ground cover (for example, 50%, 70%, and 80% - as in the ABSF/ASSF dashboard) and compare fractional vegetation coverage of different areas implementing different types of soil health management methods. 2. As soil health management practices are implemented as a result of MLA's activities, Product Managers are expected to gather geographic location data as part of their SOW provisions (see KPI hectares of land under soil health management regimes). Product Managers should submit this geographic location data to spatial data analytics provider to inform the dashboard. In collaboration with spatial data analytics provider, Product Managers should build up a database of land managed using the soil health management regimes developed with MLA. Calculation:

	The dashboard will be able to calculate fractional vegetation coverage, similarly to how it currently does in the Vegetation Trends Dashboard for the ABSF and ASSF.
Data source	Spatial data analytics provider, such as CIBO Labs who have an existing relationship via the Australian Beef Sustainability Framework and Australian Sheep Sustainability Framework
Baseline	First year of data collection.
Attribution	Attribution is determined based on to what extent a vegetation coverage type change was implemented because of engaging with MLA. This information should be gathered as part of the data collection process.
Data collection frequency	Annually
Report impact	
Aggregation	Aggregate across applicable outcomes (products) listed above.
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with soil health environmental impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with soil health environmental impacts.

KPI 15 – Industry profitability	
Identify product impacts	
Opportunity	Ensuring the ongoing profitability of the red meat industry
Impact Pillar	Economic
Stakeholders	Industry
Intention	Industry Profitability
Output (product)	All products that have productivity and/or cost saving impacts
Outcome(s) KPIs	Adoption of products via either commercialisation or extension pathways
Impact(s) KPIs	Per unit annual productivity and/or cost saving impact of adoption, measured in financial dollar terms
KPI Definition	Economic implication is the annual change in productivity and/or cost saving impact per unit of adoption
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection into the statement of work (SOW) or as a related evaluation project. The SOW or evaluation project should specify that data will need to be collected (ex-post) and/or estimated (ex-ante) with the following units of measure, depending on the nature of the project: • Annual adoption # (per head, per hectare, per unit etc) • Productivity and/or cost saving benefits per adoption # • Additional net profit margins (value adding) The SOW should specify the frequency with which the data is collected (see Data collection frequency section), and may also include setting of baselines, inclusion of an MER plan and reporting timeframes. Detailed evaluation guidelines are available for producer extension type products via a separate document.
Data source	Data collected as part of SOW provisions and/or separate evaluation projects for products primarily derived from R&D or producer adoption sub-programs.

	As a special case, the High Value Frontier Foods (value adding) sub-program is evaluated by the additional net profit margin as compared to a net profit base line for the commodity product.
Baseline	First year of data collection.
Attribution	Attribution is determined based on the counterfactual or 'business as usual' i.e., what would have happened if MLA had not invested. This information should be gathered as part of the data collection process.
Data collection frequency	Annually for the duration of the project, and participant willing, annually into the future following completion of the project. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for products with economic impacts.
Responsible Project Manager(s)	All sub-program managers investing in category 1 projects that have products with economic impacts.

KPI 16 – Global Competitiveness	
Identify product impacts	
Opportunity	Enabling our producers to be market leaders in red meat production.
Impact Pillar	Economic
Stakeholders	Industry
Intention	Global Competitiveness
Output (product)	All product value propositions and scenarios that have marketing-based supply or demand impacts.
Outcome(s) KPIs	Changes in supply or demand that can be converted to a second round impact via the GMI/IF model.
Impact(s) KPIs	Changes in industry sector income (2nd round benefit) arising from changes in supply or demand
KPI Definition	Economic implication is the annual change in demand or supply, against a counterfactual of no MLA investment.
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection either directly (e.g. via case studies) or as a related evaluation project. A typical approach might be to assess demand or supply changes expressed against a counterfactual of MLA not investing in a supply or demand based activity. This impact can be expressed either as an increase in demand or reducing the downside of decreasing demand.
Data source	Data sources include 'top' down sub-programs where only a second-round benefit can be calculated. These include: • International/Domestic Marketing • Market Access • Livestock Export
Baseline	Counterfactual of no further MLA investment in the next 5-years reporting period, noting that there may be some carry over benefit from the previous reporting period.
Attribution	Attribution is determined based on the counterfactual or 'business as usual' i.e., what would have happened if MLA had not invested. This information should be gathered as part of the data collection process.

Data collection frequency	Annual updates of evaluation assumptions. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for product value propositions or scenarios with supply or demand-based impacts.
Responsible Project Manager(s)	All sub-program managers investing in demand or supply based projects.

KPI 17 – Trust Along the Value Chain	
Identify product impacts	
Opportunity	Ensure customers are confident in the Australian red meat products they purchase.
Impact Pillar	Economic
Stakeholders	Industry
Intention	Enhance Trust
Output (product)	All product value propositions and scenarios that have supply or demand impacts based on market trust or integrity
Outcome(s) KPIs	Changes in supply or demand that can be converted to a second round impact via the GMI/IF model
Impact(s) KPIs	Changes in industry sector income (2nd round benefit) arising from changes in supply or demand
KPI Definition	Economic implication is the annual change in demand or supply, against a counterfactual of no MLA investment
Collect and measure data	
Methodology/ calculation	Data collection: Product Managers are responsible for building provisions around data collection either directly (e.g. via case studies) or as a related evaluation project. A typical approach might be to assess demand or supply changes expressed against a counterfactual of MLA not investing in a supply or demand-based activity. This impact can be expressed either as an increase in demand or reducing the downside of decreasing demand, with this related to modelling the downside risks of specific events such as disease outbreaks or food safety issues.
Data source	Data sources include 'top' down sub-programs where only a second-round benefit can be calculated. These include: • Integrity Systems • Market Access Science
Baseline	Counterfactual of no further MLA investment in the next 5-years reporting period, noting that there may be some carry over benefit from the previous reporting period.
Attribution	Attribution is determined based on the counterfactual or 'business as usual' i.e., what would have happened if MLA had

	not invested. This information should be gathered as part of the data collection process.
Data collection frequency	Annual updates of evaluation assumptions. Data collection should occur at the end of each financial year and be reported to Product Managers by 30 June.
Report Impact	
Aggregation	Aggregated across applicable outputs (products).
Reporting frequency	Annually
Responsible Product Manager(s)	All sub-program managers responsible for product value propositions or scenarios with market trust or integrity impacts.
Responsible Project Manager(s)	All sub-program managers investing in demand or supply based projects relating to market trust and integrity.

5.2 Glossary

Term	Definition
Stakeholders	TBL Evaluation Framework defines stakeholders as those who are impacted by MLA's investments and products, this includes those who are impacted both positively and negatively by a potential investment. MLA's stakeholders are grouped into industry and wider Australian stakeholders (Australian community in general). Stakeholders are grouped as below: Industry stakeholders: • Industry: Those who work within the red meat industry, and benefit from MLA's investments including where investments are into animal and environmental outcomes. These include red meat producers (sheep, cattle, goats) and other participants down the supply chain from production including feedlotters, processors and value adders if part of a processing operation. Wider Australian stakeholders: • Customers, consumers and communities: The consumers of Australian red meat, government, trade partners, customers, rural communities, MLA's peer RDCs and the general Australian society. • Livestock: The livestock animals (goats, sheep and cattle) which are within the red meat industry who are impacted by on farm treatment and conditions, transportation, and processing, and whose welfare is dependent on the red meat producers within the industry. • Environment: The impacts on the environment, both positive and negative, from MLA industry including impacts on the climate, waterways, air quality and ecosystems.
Evaluation Groups	Evaluation groups represent MLA's primary unit of social, environmental and economic impact evaluation. An evaluation group is defined as the lowest level of aggregation that describes how one or more of MLA's sub programs generate a specific industry impact and how this impact translates into impact for the red meat industry. In most instances, this is the product level. As a guiding principle, sub-programs are linked to those evaluation groups where impact from their investments can be measured. Evaluation groups have been selected based on: • Their ability to measure attributable impact (requiring in some cases for programs and sub-programs to be grouped together). • Their ability to be compared to previous MLA 5-year impact assessments.

Term	Definition
	• A consistent evaluation methodology for estimating supply, demand, or adoption changes and impact within that evaluation group. While an evaluation group will often relate to measuring impact from just one sub-program, in other cases this is not possible because: • Some sub-programs contribute to multiple evaluation groups, e.g., Animal Wellbeing and Nutrition sub-programs contribute to supporting red meat consumption within the Domestic Marketing sub-program. • Some sub-programs support all of MLA activities e.g., Corporate Services or Communication (stakeholder) sub-programs. • Some programs are combined under one evaluation group since supply, demand, or adoption changes or impact data is not always able to be allocated to one sub-program. For e.g., Digital Agriculture and Livestock Genetics are included under Productivity (On Farm). In a social and environmental context, MLA utilises theme groupings which allow social and environmental impacts to be aggregated across multiple sub-programs, where these may all contribute to a similar theme such as sustainability, emissions reduction, capability building etc. These are not directly aligned with MLA's sub-program evaluation groupings, which only focus on economic impact. This is because TBL social and environmental impacts may be derived from multiple sub-programs which are not always aligned to the economic impacts measured via MLA's economic evaluation framework. However, themes can still be mapped to those sub-programs that have contributed to those TBL social, environmental and economic impacts.
Ex-ante and ex-post evaluation	Ex-ante and ex-post analysis refers to the timing of TBL evaluations either before or after a product is developed. The key difference between ex-ante and ex-post analysis is: • Ex-ante refers to TBL impact evaluations, using best estimates and assumptions available to MLA, before a program occurs. • Ex-post refers to evaluations after a program occurs and includes confirmation of the expected impacts, having collected data and measured the program impacts using the TBL Evaluation Framework. Given that MLA extrapolates supply, demand, or adoption changes profiles up to 2045, most evaluations will contain some ex-ante projections, however MLA considers that any evaluation made using impact data as per the TBL Evaluation Framework is classified as an ex-post evaluation. It is expected that over time, ex-ante analysis will be updated with actual data to become ex-post evaluation.
Externalities	Externalities are the positive and negative impacts caused by the red meat industry that are not financially accounted for.
Sub-program(s)	Sub-programs represent the lowest level of MLA structure for business planning and financial reporting. MLA staff and business units are mapped to these 31

Term	Definition
	sub-programs, and changes in business unit structures do not affect evaluation, business planning or reporting at the sub-program level. Sub-program investments are aggregated into programs or further disaggregated into projects, each of which represents a single funding amount and one or multiple contractual deliverables. Investment funding decisions are primarily made on a project-by-project basis. Sub-programs have one or more designated senior managers reporting to the business unit general manager.
Responsible Product Manager(s)	A Product Manager is responsible for measuring supply, demand, or adoption changes as well as impact.
Responsible Project Manager(s)	A Project Manager is responsible for the technical success of an investment. This includes contracting and delivery of milestones as well as any evaluation related deliverables within that project. They may or may not be also in charge of the product related to that investment.

5.3 Social, Environmental and Economic Themes

This section is included for reference and background purposes only, especially when new KPIs are to be developed for product impacts that are not included under *Section 2: Selecting a KPI* and *Appendix 5.1*: *KPI Table Lookup*

The material investment themes in this section have been identified through a desktop materiality process, that has highlighted the evaluation areas for MLA's TBL Evaluation Framework.

This involved a review of relevant industry standards and existing industry materiality assessments, including the Australian Sheep Sustainability Framework, Australian Beef Sustainability Framework, and the Australian Agricultural Sustainability Framework, amongst others listed in the *Appendix 5.5 References*. The result of this review is *Table 4 – Social, environmental and economic themes with current investments* and *Table 5 – Social, environmental and economic investment gaps*.

These contain a list of all social, environmental and economic material themes uncovered during the desktop materiality assessment separated by where MLA has current investments, and where gaps in investments have been identified.

It should be noted that, as a complete materiality assessment has not been completed, this list is a starting point for identifying future potential material themes that may be added to MLA's evaluation framework and guidelines.

5.3.1 Current Investment Themes

6. **The table below details each of the material themes into which MLA currently invests. For each area where MLA invests, an evaluation methodology has been developed in Selecting a KPI**

(*Section 2: Selecting a KPI* and *Appendix 5.1: KPI Table Lookup*). MLA's existing investment areas were also further refined to 'Our Intentions' listed in the Triple Bottom Line Framework in *Section 1.4: Triple Bottom Line Evaluation Framework.* The Framework summarises the material social, environmental and economic themes into intentions against each 2020-25 Strategic Plan Industry Priority.

Key	
	Our People
	Our customers, consumers and community
	Our Livestock
	Our environment

Table 4 – **Social, environmental and** economic themes with current **investments**

Material Theme	Definition	Industry Priority
Capability building of workforce	Those in the red meat industry do not have access to educational opportunities to develop the skills required to remain relevant in the industry resulting in job loss, career stagnation, income loss, business stagnation and/or business failure	
Access to talent and labour	Those living in rural areas who want to enter the red meat industry face a range of barriers and challenges that often results in job loss and/or high unemployment rates	
Human health and nutrition	Consumers are not aware of how much red meat to eat which has detrimental effects on their health and wellbeing, as well as resulting in high wastage.	
Animal husbandry, animal wellbeing and welfare	Animals involved in the red meat industry are often subjected to harsh living conditions and practices which have a detrimental effect on their welfare.	
Net emissions reduction	Greenhouse gas emissions are causing climate change and a warming world. A reduction in scope 1, 2 and 3 emissions through carbon storage and through minimising emissions generated can contribute to mitigating climate change.	
Climate adaption and resilience	Producers' ability to respond to climate change and continue to participate in the red meat industry despite climate impacts.	
Biodiversity and ecosystem productivity	Ensuring the conservation and enhancement of native plant and animal species, genetic diversity, ecosystem services, ecosystem connectivity, and natural ecosystems, including controlling and minimising the spread of invasive non-native species.	
Land management and ecological impacts	Changes in ecological systems and vegetation types, such as change in composition, function and structure through impacts from the red meat industry.	
Soil health and ground cover	Pasture management, soil erosion, ground cover, degradation, soil nutrients, capacity for soil to retain water and carbon, maintenance of high-quality topsoil	
Biosecurity	Efforts to prevent contamination, outbreaks of exotic diseases and ensure food safety, which concern the production, primary processing, storage and transportation of food and feed products, through adherence to food safety regulations, voluntary codes and biosecurity laws.	

Material Theme	Definition	Industry Priority
Industry profitability	Profitability and productivity of the red meat industry	
Global competitiveness	Global market demand for Australian red meat as a quality and desirable product.	
Environmental education and leadership	Serving as an environmental leader who shares knowledge and provides environmental education to the red meat industry.	
Chemical pollution	Impacts of chemical use in the red meat industry such as pesticides, antibiotics, fertilisers and their impact of toxicity to target and non-target organisms, human health and ecosystems.	
Noise and odour pollution and visual amenity	Localised air and noise pollution from feedlotting, animal rearing, organic waste, production and other operations resulting in unpleasant odours, poor air quality, excessive noise and visual pollution which can induce higher stress levels and negative health effects in local communities.	
Workplace health and safety	Prevention or mitigation of physical and mental harm to workers in the red meat industry, as well as how workers' health is promoted	
Food safety and quality	Procedures and processes concerning the production, primary processing, storage and transportation of red meat and red meat production feed inputs that prevent food-borne illness	
Traceability	Ability of industry to trace source, origin, or production conditions of raw materials and production inputs purchased. Provides a way to identify and avoid potential negative impacts associated with red meat products, as well as demonstrate adherence to industry's sustainability commitments	

5.3.2 Investment gaps

The remaining themes listed below are themes which MLA does not currently have investments. These demonstrate potential opportunities for future investment, where an unaddressed social, environmental or economic opportunity exists. This table may also be used by Product Managers to identify relevant themes when developing a new KPI.

Table 5 – Social, environmental and economic investment gaps

Material Theme	Definition	Industry Priority
Water quality and quantity	Amount of water withdrawn and consumed by the red meat industry as well as the management of wastewater, thus ensuring the quality of discharges do not have impacts on ecosystems and people.	
Air pollution	Emissions such as nitrogen oxides (NOX) and sulphur oxides (SOX), and other air emissions that can have negative impacts on air quality, ecosystems, and human and animal health.	
Waste reduction	Reduction of the amount of waste generated and discarded including food waste; organic by-products, such as animal waste and manure, animal carcasses, crop waste; inorganic waste, such as plastics and toxic waste such as pesticides and their containers and materials from animal health products.	
Energy use	The use of electricity and fossil fuels in red meat industry operations, both purchased fuels, electricity and the use of alternative fuels and on-site generation of electricity.	
Resource consumption	Impacts of the use of land and natural resources on human rights, indigenous rights, and land rights. Competition for resources with other groups and ecosystems.	
Inclusion and diversity	Issues related to discriminatory practices in the red meat industry on the bases of race, gender, ethnicity, religion and sexual orientation, among other factors	
Indigenous employment	Inclusion of Indigenous staff in the red meat industry, particularly in areas near remote communities.	
Human Rights	Ensuring the red meat industry upholds rights inherent to all human beings, as set out in the *United Nations International Bill of Human Rights* and the principles concerning fundamental rights, as set out in the *International Labour Organization [sic] Declaration on Fundamental Principles and Rights at Work*	

Material Theme	Definition	Industry Priority
Mental health and wellbeing (including resilience)	Creation of a work environment conducive to maintaining and facilitating optimal physical and mental health as well as the red meat industry's ability to adapt to the capabilities of its workers in light of their state of physical and mental health	
Responsible sourcing	Social and environmental impacts of the red meat industry's supply chain include those related to deforestation, land use and waste management, water withdrawals, animal welfare, antibiotic use and food safety. Responsible sourcing refers to how the red meat industry minimises its impact along its supply chain.	
Labour standards	Red meat industry workers are typically self-employed, informally employed and may be exposed to job insecurity. Informal employment refers to those working within the red meat industry without a formal contract or documented work arrangement. Red meat industry workers often lack adequate labour standards and face discrimination.	
Rural communities' livelihoods	Impact the red meat industry has on employment in rural communities	
Rural community's health	Impact on health, positive or negative, that the red meat industry has on individuals or groups of individuals living or working in rural areas of operation	
Rural communities remote learning and digital literacy	Rural communities have limited access to technology and may face challenges confidently using technology, which can negatively impact access to jobs, social connection, and ability to stay up to date with information that is distributed electronically.	
Indigenous engagement	Whether and how the red meat industry engages with Indigenous people affects how they may be negatively or positively impacted by the red meat industry.	

6.1 KPI Reference Sources

The below table also provides sources of KPIs for the agriculture sector which can be used to address product impacts which do not fit within the existing list of KPIs. Please note that this list is non-exhaustive, so other sources of relevant material topics may also be considered.

Table 6 – Reference sources for KPIs

Source	Description	Source
Global Reporting Initiative (GRI) Agriculture Sector Standard	GRI recently released its Agriculture Sector Standard, which identifies the relevant GRI Material Topics in addition to several supplementary metrics specific to the agriculture sector (Global Reporting Initiative, 2021).	https://www.globalreporting.org/media/tnlemh31/item-03-gri-sector-standards-project-for-agriculture-and-fishing-exposure-draft.pdf
Sustainability Accounting Standards Board (SASB) Materiality Finder and Agriculture Materiality Map	SASB's Materiality Finder enables users to look up companies and industries to identify material topics, as well as compare industries side-by-side (Sustainability Accounting Standards Board, 2022). SASB has an agriculture-specific material themes with industry topics and metrics. SASB also has an agriculture-specific Materiality Map that visually shows how sustainability themes manifest across the agriculture industry (Sustainability Accounting Standards Board, 2022).	https://www.sasb.org/standards/materiality-map/
IRIS+	IRIS+ has a catalogue of metrics designed specifically to measure, manage, and optimise impact. Metrics are grouped by themes as well as by industries, including the agriculture industry (IRIS+, 2022).	https://iris.thegiin.org/metrics/
Australian Agricultural Sustainability Framework (AASF)	Funded by the Australian Government Department of Agriculture, Water, and the Environment (DAWE), the AASF has several themes and indicators developed with industry and farmer participation (Australian Farm Institute, 2022).	https://www.farminstitute.org.au/product/aasf-australian-agricultural-sustainability-framework/

Source	Description	Source
BetterEvaluation	BetterEvaluation has extensive resources for impact evaluation, methods, and approaches, including those specific to the agriculture sector (BetterEvaluation, 2018). BetterEvaluation has recently been migrated to The World Bank.	https://www.betterevaluation.org/en/themes_overview
United Nations Sustainable Development Goals (UN SDGs)	The UN SDGs offer a globally agreed upon set of themes and indicators to guide sustainable development for the prosperity of people and planet (United Nations Department of Economic and Social Affairs, 2022).	https://sdgs.un.org/goals
Taskforce on Climate-Related Financial Disclosures (TCFD)	The TCFD recommends how organisations should report on their climate-related risks and opportunities, including the metrics and targets used to track impact. The Guidance on Metrics, Targets, and Transition Plans provides a suite of examples of climate-related metrics (Task Force on Climate-related Financial Disclosures, 2021).	https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf
Taskforce on Nature-Related Financial Disclosures (TNFD)	The TNFD's beta framework was released in early 2022 and is expected to be finalised in the second half of 2023. The TNFD recommends how organisations should report on their nature-related risks and opportunities, including the metrics and targets used to track impact. Although not yet published, guidance on nature-related metrics and targets is expected to be released along with finalised framework in 2023.	https://tnfd.global/
International Financial Reporting Standards Foundation (IFRS)	IFRS develops global accounting and sustainability disclosure standards and has issued an agriculture-specific standard (International Financial Reporting Standards Foundation, 2022)	https://www.ifrs.org/issued-standards/list-of-standards/ias-41-agriculture.html/content/dam/ifrs/publications/html-standards/english/2022/issued/ias41/#about

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7. Revision history

Version	Description/Reasons for amendment	Date Approved	Approved by
1	Initial development	August 2022	KPMG
2	Formatting and content revision	October 2022	MLA/KPMG
2.04	Minor changes and signoff for release	7 October 2022	MLA
3	Updated GHG KPI for modelling, formatted for external use, changed references to sub programs rather than specific individuals	16 May 2023	MLA
3.01	Minor updates	25 May 2023	MLA
3.02	Updated content for external use	29 May 2023	MLA
3.03	Fixed links and minor updates to content	22 November 2023	MLA