



SUBMISSION

16 January 2024

Nadia Bouhafs
Assistant Secretary - Climate Policy Branch
Australian Government Department of Agriculture, Fisheries and Forestry
Agriculture House
70 Northbourne Avenue
CANBERRA ACT 2601
By Email: nadia.bouhafs@aff.gov.au

Dear Nadia

Re: Agriculture and Land Sectoral Plan

Thank you for the opportunity to meet with you in Adelaide. Our representative, Libby Tedstone, found it constructive and appreciated your candid responses to our sector's broad views, which will be expanded on in this submission.

Livestock SA is the peak industry organisation for South Australia's red meat and wool industries. South Australia's \$4.3 billion livestock industry is a key economic contributor to the state, supporting 21,000 South Australian jobs.

Livestock SA is a member of four national livestock peak industry councils: Sheep Producers Australia, WoolProducers Australia, Cattle Australia and Goat Industry Council of Australia. Livestock SA is also a member of Primary Producers SA (PPSA), and through PPSA and the Peak Councils, the organisation is an indirect member of the National Farmers' Federation. This submission aims to add our perspective and critical local context to the issues raised in other submissions from our member organisations.

Background

In South Australia, livestock production occurs on over 50 per cent of the state's landmass. As such, Livestock SA is vested in the opportunities available through a national Agriculture and Land Sector Plan (Plan) and will play a key role in its implementation in South Australia. If developed with robust ongoing stakeholder consultation and underpinned by science and learnings to date, the Plan can provide much-needed clarity and a shared vision of productively using Australia's land resources in the transition to a net-zero economy.

The SA Beef and Sheep Industry Blueprints 2030 both identify the development of 'pathways to carbon neutrality' as a critical target. In response to growing producer confusion and increasing pressure from our markets, Livestock SA's Carbon Focus Group has begun reviewing this 2030 target

and the broader challenge for our industry. As a result, the opportunity to contribute to the development of the Plan is timely.

Please note that this submission is purposely structured per your advice at the December 2023 meeting. Livestock SA's 'Key Points' (listed below) are supported by a table of issues with corresponding barriers, enablers and action needed ([Appendix 1](#)) and Livestock SA's draft GHG Emission Reduction Policy Framework under development ([Appendix 2](#)).

Key Points

1. Agriculture is a unique sector in relation to climate change, with the ability to remove and store atmospheric carbon and contribute to emissions. Agriculture is also beholden to a natural biological cycle (in the land and the livestock), impacted by climate change, extreme weather events and geographic location. These complex factors make it difficult for livestock producers to manage emissions reduction strategically and quantify their achievements accurately. The Plan must account for this to ensure the sector is treated equitably and appropriately.
2. Agriculture is the focal point for closely integrated and sought-after global outcomes: ecological diversity, environmental stewardship, carbon sequestration and food security for a growing global population (the other 'inconvenient truth'). It is a unique balancing act that needs to be recognised and rewarded.
3. Agriculture should not be expected to solve the carbon emission problems of industry and the community. The livestock sector will play its part, but each of us must take responsibility for reducing our emissions through practice change before looking elsewhere for assistance.
4. Given current scientific limitations, carbon neutral red meat and wool production is not feasible. However, 'climate neutral' output will soon be realised – sheep production is already there, and beef production will likely reach this significant milestone by 2026. Government and consumer expectations about food and fibre production must move beyond the current carbon myopic lens and become more holistic. Our sector has also significantly reduced net emissions, which is not appropriately recognised and rewarded. The Plan should address this.
5. Global temperature reduction targets (Paris Agreement) can be met by reducing (as opposed to eliminating) enteric methane production. Methane has a different warming potential than carbon dioxide; targets and metrics in the Plan should consider this.
6. The 'carbon-farming' environment is complex and volatile. It lacks consistency in language, methodologies, advice, and metrics. The risk of corruption and costly mistakes is high. Producers do not trust the system and lack the confidence to invest in emission-reduction management.
7. Carbon farming policy and strategies are increasingly congested, with multiple (and largely uncoordinated) initiatives being rolled out at federal, state, and local levels. As a result, the overlap of effort wastes resources, and producers need clarification.
8. The Emissions Reduction Fund and ACCUs need to recognise the complexities of livestock production adequately and need updating in line with the current scientific evidence.
9. Where agriculture is concerned, there is a vast skills and knowledge gap at every level across the decarbonising sector, particularly regarding grassroots implications, opportunities, and necessary actions. This needs to be addressed quickly and systematically using local solutions supported by a nationally consistent framework.

The need for a well-considered, evidence-based Plan that all stakeholders commit to and are enabled to deliver is imperative. Livestock SA looks forward to its ongoing involvement and recommends further ground-truthing as the details are developed, which we are happy to facilitate.

Please contact the Livestock SA office on (08) 8297 2299 or via email at admin@livestocksa.org.au if you would like to discuss this submission further.

Yours sincerely

Travis Tobin
Chief Executive Officer

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
<p>Livestock producers are not recognised in the global and Australian ‘conversation’ and legislative framework as critical to food security.</p>	<ul style="list-style-type: none"> • Agriculture is frequently allocated to same ‘class’ of high emitters such as transport, mining and fossil-fuel burning. • Readily available information to the community highlights red meat as being the ‘culprit’ in climate and rarely explains the differential impact of enteric methane and carbon dioxide on global warming. • Livestock producers are experiencing low morale, have become despondent and disengaged as a result (in part) from media coverage and Government targets which exert unfair (and often unrealistic) pressure on them to reduce net carbon emissions. 	<ul style="list-style-type: none"> • Alternate and accepted climate metrics such as GWP* and radiative forcing (RF) footprint more accurately recognise the different way that enteric methane produced by ruminant livestock impacts global warming c.f. carbon dioxide. <p><i>Note: current market & consumer knowledge, understanding and expectations are usually limited to the GWP100 metric.</i></p> <ul style="list-style-type: none"> • Climate change is already established in Australian school curriculum. 	<ul style="list-style-type: none"> • Formal recognition and public-facing media campaigns from Australian and State Governments of the critical role played by livestock producers in global food security and Australian GDP and way of life (e.g. main industry supporting regional towns). • Clear delineation of agriculture away from other high emitters in public information. • Recognition that biogenic methane impacts global warming in a different way than carbon dioxide and demonstrate this reduction of relative impact in publicly available education and information (refer to both GWP* and RF footprint metrics). • Amend school curriculum to reflect the juggling act required by primary producers and Governments between reducing emissions and food security/GDP.
<p>Consumer expectations for carbon neutral meat and fibre production are unrealistic.</p>	<ul style="list-style-type: none"> • Consumers are ill-informed about: <ul style="list-style-type: none"> ○ The (current) biological impossibility of producing carbon-neutral red meat and wool whilst also meeting global quality-protein and food security demands. ○ The specific challenges of sequestering carbon in many Australian landscapes due to low rainfall or soil type. ○ The fact that naturally occurring extreme weather events (e.g. fire, flood, drought) have the capacity to wipe out soil carbon, erasing the results of good land management to date. A challenge not experienced by other high emitters. 	<ul style="list-style-type: none"> • Social media influencers. • Food retailers. • Government plans and target setting. • Climate change is already established in Australian school curriculum. 	<ul style="list-style-type: none"> • Multi-faceted, national promotion and education campaign, rolled out 3 times each year for 3 years (tailored to the diverse target groups within the community) to: <ul style="list-style-type: none"> ○ combat misinformation about carbon dioxide in livestock production, and ○ recruit red meat and wool consumers as our biggest advocates. • Introduction of more rigorous meat and wool labelling rules which are accurate, trustworthy and easily understood by time-poor consumers. E.g. similar to the water and energy efficiency stars on electrical appliances.

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
	<ul style="list-style-type: none"> ○ The significant (often unrecognised) progress livestock producers have already made to reduce net carbon emissions. ○ The costs associated with transferring to low emission red meat and wool production systems. ○ Greenwashing by some brands. 		<ul style="list-style-type: none"> ● Change the public narrative by recruiting and educating key influencers. ● Work collaboratively with retailers to educate consumers in store. ● Amend school curriculum to reflect current science and a balanced view.
<p>Livestock producers are expected to shoulder the whole cost of reducing net-carbon emissions.</p>	<ul style="list-style-type: none"> ● Current indications are that consumers are not prepared to pay extra for carbon-neutral red meat and wool. ● Retailers and meat/wool processors are demonstrating a reluctance to pay the producers extra for the costs associated with supplying carbon-neutral/reduced meat/wool. ● Government incentives to reduce net carbon emissions are inconsistent across Australia and change with governments. They are onerous to apply for and are usually associated with complimentary farm activities e.g. regeneration, biodiversity credits. 	<ul style="list-style-type: none"> ● Existing tax and levy frameworks. ● Current Government review of what supermarkets pay producers. 	<ul style="list-style-type: none"> ● Explore the possible implementation of a mechanism which equitably shares the cost of reducing net carbon emissions in red meat and wool production between all parties along the value chain. ● Consider how the review of the current supermarket / producer agreements to address possible ‘price-gouging’ concerns could also address cost-sharing for carbon emission reduction. ● Review existing regeneration and biodiversity reward systems with the view of incorporating emission reduction rewards.
<p>Carbon sequestration in land is seen as the ‘silver bullet’ for other high emitters needing to buy carbon credits to offset production.</p>	<ul style="list-style-type: none"> ● Food security and agricultural land prices are increasingly impacted by companies buying productive farming land to ‘grow’ carbon credits. ● Inequity perceived by producers demotivates practice change. Consumers and other emitters appear less impacted e.g. airline carbon offset is optional, plastic products (carbon emitters) are sold and purchased with no apparent penalty for the producer, retailer or consumer. 	<ul style="list-style-type: none"> ● Existing company and consumer goods tax frameworks. <p><i>Note: the approach that was taken to exempting fresh food from the GST.</i></p>	<ul style="list-style-type: none"> ● Protect food production land through regulation. ● Raise awareness in the community and across all sectors of the role they must play to reduce global emissions. Consider introducing a star system for <u>all goods</u> sold in Australia (food and consumer) which highlights to the purchaser how much that product impacts global warming. ● Explore options of a “carbon offset fee” or similar on consumables (rate varied according to demonstrable emissions) to share the cost of combatting climate change across the community. This ‘fee’ could start

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
			<p>as an optional 'offset' (similar to airlines) then evolve over time into additional embedded costs to cover cost of change. Revenue raised could then be invested in climate change mitigation initiatives and programmes, including subsidising the practice change required by producers (and other manufacturers).</p>
<p>Malalignment across sectors and states of funding and carbon-emission reduction initiatives.</p>	<ul style="list-style-type: none"> • There has not been effective collaboration to date to maximise effectiveness of funding across sectors to reduce emissions and carbon. 	<ul style="list-style-type: none"> • There are existing and emerging initiatives which can be tapped into and learned from. • Livestock SA hosts a collaborative Carbon Focus Group (including producers, educators, researchers & Government) which works to develop sector policies, targets and plans to effect change. 	<ul style="list-style-type: none"> • Government funded climate change initiatives must demonstrate maximum collaboration and the building on previous work and learning. • Facilitate the formation and work of a national network of Carbon Focus Groups to coordinate efforts and funding against the Plan.
<p>Ruminants produce methane, contributing to emissions.</p>	<ul style="list-style-type: none"> • Current R&D has not yet identified a solution which: <ul style="list-style-type: none"> ○ Reduces enteric methane production to sufficiently low levels consistently. ○ Can be commercially adopted at scale. ○ Overcomes the challenges associated with our extensive livestock production systems (which vary dramatically from the northern hemisphere systems). • Insufficient funding and momentum for this critical R&D. 	<ul style="list-style-type: none"> • R&D teams are working on methane emissions reduction technology in Australia and globally, with some success e.g. novel feed supplements, genetics, rumen conditioning. • R&D has identified animal management practices which reduces the intensity of emissions produced per kg red meat or wool. 	<ul style="list-style-type: none"> • Significantly increase funding into R&D to address enteric methane production by ruminants quickly. • Invest in exploration of science and technology across different areas and 'blue sky' research to find ways of reducing methane. E.g. human health, space & industrial methodologies. • Increase collaboration with other countries and sectors to find solutions.

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
<p>Further work needed to reduce emission intensity per kg red meat or wool produced.</p>	<ul style="list-style-type: none"> • Incomplete knowledge – further work needed on how best to manage livestock to increase productivity. • Funding cycles and shortfalls lead to loss of momentum and loss of expertise as contracts end. 	<ul style="list-style-type: none"> • Highly capable R&D teams exist in Australia and globally and are already working in this space. 	<ul style="list-style-type: none"> • Significant increase in funding which recognises the critical role livestock production plays in both food security and global warming for R&D to improve livestock production efficiency over their lifetime (health, welfare, nutrition, genetics & reproduction practices). • Longer funding cycles to support strategic and momentous R&D. • Investment into effective extension to translate research to uptake by livestock producers.
<p>Confusion in measurements of methane (GWP100 and GWP*, RF footprint)</p>	<ul style="list-style-type: none"> • No agreement between Governments, industry and academics on the criteria to use to best represent biogenic methane emissions from livestock and its contributions on climate change. 		<ul style="list-style-type: none"> • National agreement on what metric and methodology should be used to accurately measure carbon emissions from ruminant livestock. • Further modelling to ensure inputs into tools and methodology are as accurate as possible for species, liveweight, sex, role on farm (breeder, fatter, lactation, etc.).
<p>Livestock producers managing a biological system within a volatile and changing climate</p>	<ul style="list-style-type: none"> • Impact of floods, fire, drought, increasing temperatures. • Recovery after major weather events is slow – often due to lack of preparedness or lack of resources to implement clean up and recovery activities. 	<ul style="list-style-type: none"> • Current R&D identifying some effects and solutions of drought, increasing temperatures, etc. • Drought Innovation Hubs. • Government disaster response plans. 	<ul style="list-style-type: none"> • Recognition of this unique difference between livestock production and other contributors to emissions. • Continued and increased investment and support in R,D&E to improve resilience in changing environments in Australia.
<p>Impacts of invasive or native species on land management, vegetation / soil carbon storage ability and feed availability. e.g. rabbits, kangaroos.</p>	<ul style="list-style-type: none"> • Timely and effective strategic monitoring and management of pest populations. • Lack of skilled operators to cull kangaroos, rabbits, etc. when required. • Lack of sufficient and/or continuous funding. 	<ul style="list-style-type: none"> • R&D into best practice management of some pests and weeds is available. • Existing pest management programs. 	<ul style="list-style-type: none"> • Investment into R&D into the impacts of rabbit management on soil and plant carbon sequestration, rabbit management methods. • Creative solutions to securing a reliable source of kangaroo and deer population management. • More cohesive approach to pest animal management (e.g. kangaroos) as state

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
			borders are generally irrelevant (the Dog Fence being the exception).
High reliability on inputs from overseas – high carbon footprint e.g. fertilizers, pharmaceuticals.	<ul style="list-style-type: none"> • Australian-produced inputs not always available. • Accurate information on Scope 3 emissions not always available for calculating net emissions on farm. 		<ul style="list-style-type: none"> • Investment into the feasibility of manufacturing farm inputs in Australia (lower carbon emissions, continued supply during pandemics, regional employment opportunities). • Labelling of inputs to state Scope 3 emissions.
Carbon accounting tools and resources not easily applicable to SA conditions.	<ul style="list-style-type: none"> • Tools available to producers are focused on the eastern states and are not applicable to other regions with different climate and soil conditions. 	<ul style="list-style-type: none"> • Good tools already exist (e.g. MLA, Climate Active) 	<ul style="list-style-type: none"> • Contextualise existing tools to regionally specific conditions and make them easy to use.
Lack of integration between carbon accounting and environmental custodianship initiatives and rewards.	<ul style="list-style-type: none"> • Historic implementation of regeneration practices on farm are not recognised or rewarded appropriately in carbon accounting methodologies. • Most current biodiversity and regeneration initiatives do not incorporate carbon accounting, which is calculated separately. 	<ul style="list-style-type: none"> • Multiple existing regeneration and biodiversity programmes and reward initiatives. 	<ul style="list-style-type: none"> • Integration of carbon accounting into associated natural capital initiatives to save administrative time. • Correction of existing carbon accounting methodologies to appropriately recognise historic regeneration and biodiversity projects on farm.
Low adoption of emission-reduction technologies and practice, and carbon accounting by livestock producers.	<ul style="list-style-type: none"> • Many producers having insufficient capital to allocate to ‘green’ initiatives. • Producers do not trust the current carbon accounting system or understand the conflicting standards and metrics enough to risk investing. • Lack of easily accessible support, credible information and trusted advisors. • Currently no trusted or recommended tool for producers to use to baseline their current carbon stores and farm emissions. • Widespread knowledge gap. • Nascent market with opportunistic players that lacks sufficient regulation. 	<ul style="list-style-type: none"> • Proven models of support in existence (e.g. Ag Vic producer mentoring pilot) • Various carbon accounting tools. 	<ul style="list-style-type: none"> • Expand the carbon farming advisory network by funding PIRSA to provide free, trusted advisors to mentor producers/farm through emission reduction planning/accounting process. • Increase availability of cost-effective carbon education & training for on-farm advisors and others along the value chain. • Introduce a single, nationally consistent standard which carbon calculators and reporting tools must meet, which supports transparency and transferability, while reducing the administrative burden for all involved.

APPENDIX 1 – Table of issues with corresponding barriers, existing enablers and action needed

Issue	Barriers	Enablers	Action needed
			<ul style="list-style-type: none"> • Develop national standards and metrics. • Consider introducing a national, two-tiered carbon advisor accreditation scheme, where level one provides general advice and support (e.g. independent and PIRSA advisors), and level 2 are financially competent to advice on the sale and purchase of carbon credits. • Assign the responsibility for ensuring the quality and integrity of advice to a single national body.

APPENDIX 2 – Draft Livestock SA GHG emission reduction policy framework

EXTERNAL FACING POLICY	INTERNAL INDUSTRY MESSAGING
1 - RESPONSIBLE & ACCOUNTABLE PURSUIT OF SHARED TARGETS	
<p>1.1. Livestock SA embraces our industry’s responsibility to reduce the carbon emissions intensity of the food and fibre it produces and is committed to supporting our industry in being transparent and accountable. It works collaboratively to proactively pursue strategies which will realise our industry’s positive contribution to the achievement of SA Government and industry Cn30 and GHG emission reduction targets, the Australian Government’s global-warming reduction commitments and consumer expectations.</p>	<ul style="list-style-type: none"> - LSA will proactively educate & advocate to Government decision-makers on the progress the SA red meat & wool industry is making in reducing the intensity of GHG emissions (whilst simultaneously increasing its contribution to the SA economy via the production of the highest quality red meat & wool for the global markets). - LSA believes that market forces and producer integrity will drive the necessary practice change to reduce carbon emission intensity; we oppose the imposition of Government regulation on producers to meet GHG emission targets. - LSA fosters a collaborative approach to meeting our sector’s carbon targets, where all stakeholders along the value chain support and encourage each other to pursue opportunities, drive co-investment in net GHG emission reduction projects, share ideas & break throughs, and celebrate our successes. - Meeting and demonstrating carbon-emission reduction targets are essential to retaining access to the most lucrative markets. - All producers and participants along the value chain should play their part to the best of their (informed and educated) ability. - Some producers are limited in their carbon sequestration options by their farm’s soil type and regional climate. Producers should be recognised and rewarded for maximising the potential for net-carbon emission reduction within their property and business’ scope.
<p>1.2. Livestock SA advocates for the prioritisation of R&D which pursues enteric methane emission mitigation solutions and carbon sequestration acceleration techniques.</p>	<ul style="list-style-type: none"> - R&D should learn from success overseas / other sectors, actively seeking opportunities to collaborate and test emerging methodologies or technologies under unique SA conditions. - Funding bodies should support more creative R&D in pursuit of novel solutions, with long-term (vs funding cycle) impact. - Global high-emitting industries are increasingly looking to land managers (including producers) to sequester carbon and provide purchasable carbon credits to off-set their own emissions. This applies additional external pressure to on-farm decision-making. -

APPENDIX 2 – Draft Livestock SA GHG emission reduction policy framework

EXTERNAL FACING POLICY	INTERNAL INDUSTRY MESSAGING
2 - A NATIONALLY CONSISTENT, INCLUSIVE & TRUSTED CARBON FARMING FRAMEWORK	
<p>2.1 Livestock SA applauds the progress our producers and value-chain participants have made to date in reducing the carbon intensity of SA red meat and wool and advocate for accounting methodologies which recognise this.</p> <p>2.2 Livestock SA champions livestock producer & value chain participant access to free, user-friendly, evidence-based carbon-accounting calculation and reporting tools with supporting benchmarks which recognise climatic, geographic and species variations.</p> <p>2.3 Livestock SA a national independent body being assigned responsibility for ensuring the quality and integrity of advice provided to producers and value-chain participants on carbon-farming.</p> <p>2.4 Livestock SA advocates for a single, nationally consistent standard which carbon calculators and reporting proformas must meet, which supports transparency and transferability, while reducing the administrative burden for everyone involved.</p>	<ul style="list-style-type: none"> - There are multiple carbon-accounting tools in this highly volatile and rapidly evolving space. Livestock SA does <u>not</u> recommend one tool over another. - We advocate for all carbon accounting tools to be required to meet a national standard and for producers to be provided with a ‘selection map’ to support their easy comparison of the tools available and their applicability to their business needs. - The diversity of existing and emerging carbon accounting tools and reporting requirements is so onerous that it creates a barrier to producers entering the carbon-farming space, increases the risk of uninformed decision-making and prevents producers from being nimble in the marketplace. Government (or peak industry bodies) need to implement a unification process as a matter of urgency. - We advocate for collaboration between agencies and organisations at all levels to: <ul style="list-style-type: none"> ▪ Adopt a consistent message to producers & value-chain participants; ▪ Resolve the current fragmentation of this space in SA and nationally. ▪ Align carbon framing credentialling with existing credentialling and broader ESG frameworks emerging in the marketplace. - We advocate for the collection of all carbon-farming related data from SA agricultural enterprises, R&D projects, etc. (deidentified and collated behind the scenes) to increase the accuracy and relevance of FREE regional benchmarks for end users. (PIRSA could be the logical home for this.) - The SA Government should continue to fund the maintenance of the SA Soil Carbon Benchmarks and Data Analysis. - There needs to be clarification around the ownership of IP of the data collected by producers and managed by carbon-accounting businesses, as well as the on-selling of this data to 3rd parties.

APPENDIX 2 – Draft Livestock SA GHG emission reduction policy framework

EXTERNAL FACING POLICY	INTERNAL INDUSTRY MESSAGING
3 - CONFIDENT PRODUCERS MAKING INFORMED DECISIONS	
<p>3.1 Livestock SA alerts producers to the fact that carbon-farming is complex, volatile and evolving; there are significant financial risks associated with making <u>uninformed</u> decisions about how carbon-farming should be integrated into a farming enterprise.</p> <p>3.2 Value-chain participants should have free and easy access to trusted carbon-farming information, advice, education and extension which is evidence-based, relevant to their geographic and climatic location and easily tailored to their business circumstances.</p> <p>3.3 Livestock SA supports the urgent expansion of an appropriately skilled, nationally accredited carbon-farming advisory workforce.</p> <p><u>ACTION</u></p> <p><i>Explore the possibility of developing a two-tier carbon-farming advisory accreditation system (similar to the farm management advisor / licensed financial advisor relationship) which clarifies that farm advisors (with e.g. a level 1 accreditation) can provide generic carbon farming information and advice, but that only 'level 2' carbon farming advisors can provide</i></p>	<ul style="list-style-type: none"> - Before making decisions whether to inset or sell, livestock producers should: <ul style="list-style-type: none"> ▪ Seek advice from carbon-farming advisors who: <ul style="list-style-type: none"> ○ demonstrate their compliance with the Carbon Market Institute Carbon Industry Code of Conduct (if wanting to earn ACCUs), or ○ have Climate Active Certification (if wanting to have carbon-in-setting on farm via the ledger system formally recognised). ▪ Recognise that what is best for their neighbour may not be best for them. Decisions should reflect business and personal goals and circumstances. - Livestock producers may benefit from: <ul style="list-style-type: none"> ▪ recording their carbon-farming results via the Climate Active Balance Sheet method (which is auditable, credible, transparent and capable of demonstrating carbon-credentials when required); or ▪ Accruing Australian Carbon Credit Units for sale now or later. - Livestock producers will be enabled and empowered to select targets, metrics and accounting tools which are credible and most appropriate to their business goals, the land they farm and the red meat and wool markets they are aiming to access. They should: <ul style="list-style-type: none"> ▪ Align with the Sheep & Beef Greenhouse Accounting Framework; ▪ Account for mixed farming businesses in a single tool; ▪ Be able to be tailored to local SA conditions; ▪ Demonstrate a business' carbon status to markets in a metric and format they understand; ▪ Enable bench marking against other producers, industry expectations and local capacity. ▪ Allow the testing of practice change on competing co-benefits. - Livestock SA will work collaboratively to bridge gaps to service delivery.

APPENDIX 2 – Draft Livestock SA GHG emission reduction policy framework

EXTERNAL FACING POLICY	INTERNAL INDUSTRY MESSAGING
<i>advice on buying and selling credits, the value of 'ledger' credits, etc.</i>	
3.4 All livestock production related education and training will enable participants to actively engage with the Cn30 conversation.	<ul style="list-style-type: none"> - We will drive inclusion of carbon-farming and co-benefit management practices in school, VET and tertiary curriculum and teaching resources. - All extension activities will reference the topics' impact on carbon footprints so that the awareness that good farming is carbon farming is raised and producers increase their understanding of the pros and cons of farm management practices on carbon farming.
4 - CARBON FARMING IS GOOD FARMING WITH REPORTING	
4.1. Livestock SA recommends our producers measure the carbon baseline for their enterprise as a matter of urgency.	<ul style="list-style-type: none"> - Producers need to 'baseline' their properties and businesses using a credible tool and then continue to farm well. They can decide whether to inset carbon benefits for on-farm carbon neutral credentialing and/or sell carbon credits for others to use as off-sets at a later date, once the environment has settled. - Advice on the current preferred baselining method is pending from experts in this space. - The sooner producers can secure a baseline, the greater the potential carbon benefits they can accrue and provide evidence for.
4.2. Livestock SA's priority is to support producers to grow quality red meat and fibre as efficiently, profitably & sustainably as possible using evidence-based best-practice; concurrently, we enable producers to realise, measure and demonstrate any carbon-farming co-benefit potential of the management choices they make.	<ul style="list-style-type: none"> - There are huge (production, profit, time-saving, market-access) benefits to be gained by the consistent and widespread adoption of existing management methodologies and technologies. The majority of these also have the potential to decrease carbon emission intensities on farm and the co-benefits of carbon farming from these 'best practice' farming techniques should also be realised. - Adoption continues to be poor across the vast majority of producers and the roll-out of proven adoption methods for proven management should be expanded as a priority. - Most current adoption techniques are ineffective and inefficient. Novel R&D to investigate successful marketing and behavioural change in other sectors and Government needs to be completed and piloted. The vast majority of the producer bell curve are missing out. - Our livestock farming advisory network and producer groups needs expanding and fortifying to reach all producers.

APPENDIX 2 – Draft Livestock SA GHG emission reduction policy framework

EXTERNAL FACING POLICY	INTERNAL INDUSTRY MESSAGING
4.3. Carbon farming presents producers with an opportunity to be recognised for their improvement of the land they farm, the natural environment they manage & the native species they protect.	<ul style="list-style-type: none">- Many producers have taken care of the land they farm for decades (a) because it reflects good (and profitable) farming practice and (b) because they are attached to their land. Carbon farming is a way that producers can be recognised and rewarded for the environmental work they have completed and continue to perform. Carbon farming frameworks need to recognise this.

DRAFT