1. EXECUTIVE **SUMMARY**

2030 INDUSTRY VISION

A vibrant domestic carbon farming industry that contributes significantly to Australia's economy, community and climate repair. By 2030 the sector will:

- create jobs and revenue for regional communities;
- contribute significantly to Australia's net-zero emissions trajectory; and
- enable a range environmental, social and cultural benefits.

THE 2°C SCENARIO

Through research, deep consultation with industry, and analysis conducted for the development of this Roadmap, a series of future carbon farming industry scenarios consistent with a 2°C goal were developed.

Under the 'ambitious' scenario, Australia exceeds our current Nationally Determined Contribution (NDC) under the Paris Agreement and becomes more aligned with a 1.5°C trajectory. Under this scenario the carbon farming sector is expected to continue to grow to deliver significant volumes of abatement, generate new revenue for the regions, and create jobs and additional co-benefits for regional communities in the process.

WHAT WE **CAN ACHIEVE**

360 - 480 MtCO2-e carbon abatement delivered

\$10.8 - \$24 billion revenue from carbon projects

10,500 -21,000 direct and indirect jobs



Background to the Carbon Farming Industry Roadmap

In 2015 the world came together to create the Paris Agreement, a global treaty that set a goal of limiting global temperature increases to 2°C above pre-industrial levels, towards 1.5°C by the second half of the century. In recent years, the world has seen a dramatic surge in political, community, consumer and investor pressure for governments and business to take more urgent action on the climate crisis, and reach netzero emissions by 2050.

Strengthened by the long-term market signal sent by the 2015 Paris Agreement, Australia's carbon farming industry is entering a period of rapid growth. Carbon farming activities, also known internationally as 'nature-based solutions', are now seen by governments, businesses, and communities alike, as a critical source of negative emissions solutions that can be deployed at scale across Australia, whilst also generating a range of other environmental, social, economic and cultural benefits.

Initially launched in November 2017 with support from the Queensland Government, the Roadmap was developed as a national strategic framework that outlines how Australia's carbon farming industry can reach its full economic, environmental and social potential, highlighting the primary actions of key industry stakeholders out to 2030.

Developed initially via consultation with hundreds of stakeholders across the carbon farming supply chain; industry engagement at the 2017 Queensland Carbon Farming

Industry Summit; and a comprehensive industry-wide survey, the Roadmap is now a key foundation for both national and emerging national carbon farming sectors.

As it expands, the carbon farming industry is creating new opportunities to supply high quality abatement to both compliance and voluntary carbon markets, as well as stimulating innovation and investment in the much-needed technologies, services and financial products that will enable these solutions to become low-cost, scalable, and mainstream.

With regular updates and industry progress tracked by CMI, the Australian Carbon Farming Industry Roadmap remains a live and active tool that support cross-sectoral communication, engagement, collaboration and investment in the growth of this important industry of the future.

CARBON FARMING PROJECTS ARE DELIVERING CO-BENEFITS

Co-benefits are positive outcomes associated with carbon farming projects that are additional to the emissions avoided or carbon stored. These social, cultural, economic and environmental benefits occur as a direct result of a project, and where demonstrated, can be attached to, and increase the value of carbon credits generated from the project.



Environmental

- · Improved Air Quality
- Improved Water Quality
- · Improved Soil-Quality
- Emissions Reductions
- Biodiversity Conservation
- Sustainable Pest & Weed Management
- Sustainable Land Use & Management

Social & Cultural

- Increased Social Capital
- Indigenous Community Empowerment
- Knowledge Sharing & Education
- Better Livelihoods and Community Cohesion
- Improved Physical & Mental Health
- Protection of Sacred Sites

Economic

- Economic Co-Benefits
- Increased Farm Productivity
- Diversified Revenue Streams for Farmers & Landholders
- New Skills & Career **Development Opportunities**
- Investment in Regions & Rural Communities
- · Generating Jobs on the Land

Independent analysis by Energetics¹ for the Queensland Government Department of Environment and Heritage Protection, also found that the amount of carbon abatement could be higher under certain conditions such as increased voluntary demand for offsets as well as stronger policy settings driving a domestic compliance market.

¹ Energetics, 15 September 2017, Unlocking value for the Queensland economy with Land and Agriculture offsets

STAKEHOLDER ACTION PLAN The Roadmap outlines below a range of clear and defined actions for the carbon farming industry's primary stakeholder groups, which will help to catalyse four critical pillars of industry development.



Government

Federal, State and Local Government Policy Leaders, Departments, Agencies and Statutory Bodies



Finance & Industry

and Corporate Entities with carbon neutral products/services or targets



Land Sector



Carbon Service

PILLAR 1 Optimising Policy Frameworks & Market Design

- Ensure the ERF is adequately funded until there is a sustainable source of private sector demand.
- Implement a national market-based approach to emissions reduction covering the electricity sector and heavy emitters to drive private sector demand
- Provide more funding for research and development for new methods.
- Open up export opportunities for ACCUs.
- Align and integrate regulatory frameworks for competing environmental markets.

- Engage constructively with government on market design and evolution.
- Participate in the development of a viable secondary market for offsets.
- Agricultural industry bodies provide evidence base for method development and prioritisation.
- Australian First Nations groups are specifically included in policy and market design, to ensure changes do not adversely impact communities, livelihoods, access to land, or culture.
- Engage constructively with government on method development and market design to drive market activity
- Develop and administer a voluntary industry code of conduct.
- Engage with Australian First Nations communities in an early and meaningful way to ensure Native Title Holder consent can be appropriately sought, and if granted, maintained over the life of the project.

PILLAR 2 Unlocking Finance & Investment

- Work with project developers to develop scalable aggregation models.
- Establish policy that helps stimulate a viable secondary market for offsets.
- Map the strategic opportunities for investment in land sector. including for blue carbon projects.
- Developing verifiable methods for valuing co-benefits associated with offsets and market participation.
- Heavy emitters offset emissions liabilities by establishing long term supply contracts for land sector
- Banks and insurers to introduce new financial products to de-risk carbon farming investment and incentivise positive land management practices.
- Land valuations to incorporate benefits from carbon farming projects into capital asset values.
- Agricultural industry & NRM groups articulate the value proposition for investment
- Farmers investigate the opportunity for diversifying revenue streams and investing in land productivity.
- · Build market integrity through best practice implementation.
- Make the business case for investment to finance and investment stakeholders.

PILLAR 3 Quantifying Co-Benefits & Creating New Markets

- Work with the sector to develop metrics for quantification of co-benefits.
- Undertake a feasibility study for the creation of new potential environmental markets.
- Progress development of new methods such as blue carbon, in partnership with research organisations and industry.
- Investors fund pilot projects for quantifying co-benefits.
- Finance and industry stakeholders support the development of new metrics to quantify co-benefits.
- Industry to partner with government and carbon service providers to develop standards and branding for premium carbon offsets (carbon plus co-benefits).
- Agricultural industry to raise awareness around the value of co-benefits for land based activities/systems.
- NRM groups and industry engage in the development of new environmental markets.
- Project developers articulate the value of co-benefits.
- Develop best practice metrics and MRV for co-benefit quantification.

PILLAR 4 Communicating Benefits & Building Capacity

- Develop and undertake targeted national outreach and education program for land based stakeholders to participate in the ERF.
- Allocate funding for the continued development of tools and technology that will mainstream environmental and agricultural data, increasing participation through reduced transaction costs.
- Identify skills needs and develop training programs to support
- Enhance capacity within financial organisations and corporates to understand key stakeholders and the carbon farming investment opportunity.
- Investors to implement new tools and decision-making frameworks to support informed decisions about the risks and opportunities of carbon farming projects.
- Industry to invest in marketing of products.
- Heavy emitters build expertise on carbon trading and hedging strategies.

- Agricultural industry to develop outreach and education programs for farmers.
- Agricultural industry & NRM groups incorporate new tools and technology to better integrate and analyse environmental data.
- All land sector groups develop new models for peer to peer knowledge sharing and project development.
- Agricultural industry to invest in marketing of products.
- Australian First Nations groups to leverage other stakeholder networks to educate on right-way engagement.

- Align market education of land sector stakeholders with government and agricultural industry initiatives.
- Create a clear understanding for other stakeholders about the different roles and responsibilities of carbon service providers and clients in project activities, contracts, and transactions

