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.

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 net-zero 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, social and cultural 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 tool that support cross-sectoral communication, engagement, collaboration and investment in the growth of this important industry of the future.

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

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:

**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.

**PILLAR 2 Unlocking Finance & Investment**

- Work with project developers to develop scalable aggregation models.
- Establish policies that help 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.

**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 markets such as blue carbon, in partnership with research organisations and industry.

**PILLAR 4 Communicating Benefits & Building Capacity**

- Enhance capacity within financial organisations and corporates to understand key stakeholders and the carbon farming sector 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.

**CARBON FARMING INDUSTRY DEVELOPMENT TIMELINE**

- **2018**
  - The ERF has transitioned from a publicly funded scheme to one underpinned by private sector demand and investment.
  - State government net-zero emissions targets drive market demand in carbon farming projects.
  - The international carbon price and demand for offsets is at a sustained level high enough to drive large scale, economically viable carbon farming.

- **2020**
  - New methods linked by new aggregation models are attracting investment in land sector projects at scale.
  - New methodologies supporting a sustainable and social responsibility framework are being struck between heavy emitters and carbon project developers.

- **2025**
  - The ERF has facilitated the creation of new and expanded carbon farming sector opportunities.
  - Federal government allocates additional ERF funding until there is private sector demand from voluntary markets and the Safeguard Mechanism.
  - Federal and State governments are investing in research and development for new carbon farming methods, including for quantification of co-benefits.
  - Government engages in international discussions around opportunities for export of ACCUs.

- **2030**
  - The ERF has facilitated the creation of new and expanded carbon farming sector opportunities.
  - New private sector demand from voluntary markets and the Safeguard Mechanism.
  - Governments, directly fund carbon farming projects which lead to positive land-use change.
  - Australia is on track to meet its domestic emissions reduction targets and is playing its part in limiting global warming to below 1.5°C.
  - Australia has forged bilaterally and multilaterally linked carbon markets.

**MARKET**

- New methods are introduced, including whole of farm methods to increase participation among the broader agricultural sector.
- The international carbon price and demand for offsets is at a sustained level high enough to drive large scale, economically viable carbon farming.