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Department of Agriculture, Fisheries and Forestry  
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Dear Agriculture and Land Sectoral Plan team

**Submission to Agriculture, land and emissions discussion paper**

Climate Friendly welcomes the Albanese Government's commitment to develop a national net-zero plan for the agriculture and land sector. This will help align and amplify Australia's ability to deliver on its emissions reduction targets required to limit global warming to 1.5C. The recent passing of the *Nature Repair Act 2023* also provides a great opportunity for the agriculture and land sector to tackle the biodiversity crisis. We congratulate the government for its support of nature-based carbon removal solutions which can simultaneously yield other benefits like supporting improved farm financial performance and climate resilience.

As the discussion paper recognises, the agriculture sector is a large emitter at approximately 16.8%<sup>1</sup> of national emissions. While the land use, land use change, and forestry (LULUCF) sector is a net carbon sink, land clearing also currently adds an additional 5% of national emissions. Also importantly, agricultural producers manage over 50%<sup>2</sup> of Australia's land and the Indigenous Estate covers 57%<sup>3</sup> of the land. We agree that deeply listening to Indigenous Australians and integrating Indigenous Knowledge into land management practices is a significant opportunity to help transition the land sector to a more sustainable, productive, and resilient future.

It is imperative that the Albanese Government prioritises a harmonised agricultural and land sector plan. Not only does the Australian land sector have an immense opportunity to benefit from an ambitious transition to net zero by 2050, but over the same time, we have a significant role to play in feeding a growing global population that is estimated to double in the same time horizon. This occurs alongside the biodiversity crises, with aspirations to protect 30% of all ecosystems by 2030. A national plan is critical to identify where tough decisions and trade-offs are needed and planning for optimised land use that supports carbon drawdown in vegetation and soil, installation of renewables in the landscape, sustainable high productivity agriculture for food, fibre, fuel and building materials, and conservation of our unique flora and fauna.

If planned well, the amount of land managed in Australia provides huge potential to contribute to Australia's national net-zero commitment, while also helping businesses, households and other nations invest in climate solutions alongside best practice nature-positive agricultural and land management practices.

Thank you for the opportunity to contribute to the policy development process, and please do not hesitate to contact us if you require further information.

Kind regards



Skye Glenday  
Co-CEO

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<sup>1</sup> [Australia's National Greenhouse Accounts](#), Department of Climate Change, Energy, Environment and Water, Canberra, accessed 19 July 2023.

<sup>2</sup> [Snapshot of Australian Agriculture 2023](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, accessed 8 August 2023.

<sup>3</sup> [Australia's Indigenous land and forest estate \(2020\)](#), Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, accessed 8 August 2023.

## Key recommendation 1

Position the ACCU scheme as the primary policy mechanism for small-medium land sector businesses to participate in the net-zero transition, while also generating other important benefits like nature-repair and resilience to climate change.

Prioritise finalisation of the Integrated Farm and Land Management (IFLM) Method, including additional planned modules related to land clearing, and when the science is available, livestock emissions. In parallel, support research and development on technologies to reduce emissions in grazing herds and enable land managers to pilot these technologies without being penalised such as being rendered ineligible for future participation in carbon farming projects.

### *Related discussion paper questions*

- 1) What are the opportunities to reduce emissions and build carbon stores in agriculture and the land? What are the main barriers to action?
- 2) How can we progress emission reduction efforts whilst also building resilience and adapting to climate change?
- 5) What are the most important options to be further adopted or supported, looking in the short and the longer-term?
- 6) What are the practical solutions to increase uptake?

The ACCU Scheme is an effective policy to reward businesses in the sector for their land stewardship, while capitalising on the various other benefits from carbon farming including nature repair, climate resilience and adaptation. Climate Friendly is highly supportive of this positive incentive-based policy given many in the land-sector are small to medium business<sup>4</sup> with tight margins and limited access to resources.

Three big opportunities exist in the land sector to avoid emissions or drawdown carbon from the atmosphere. These are a) avoiding enteric emissions from livestock in grazing herds, b) avoiding land clearing and c) increasing drawdown through the permanent expansion of vegetation in the landscape and improved soil carbon.

Regarding the first opportunity, while there are emerging feed supplement technologies, these are currently being piloted in feedlot contexts. Significant research is required to expand their application to the grazing context where most agricultural emissions occur. We commend the Australian Government for co-financing the establishment of the Net-Zero Agriculture CRC, of which Climate Friendly is a founding partner. While research investment is important, it is also critical that carbon farming policy frameworks are well aligned to encourage early innovators to participate in research trials. At present, a key barrier is that land managers who are early adopters and wish to participate in a pilot may be penalised and ineligible to later participate in carbon farming projects at scale. We ask the government to make immediate changes to the CFI Act to ensure that land managers can advise the CER of their intent to undertake pilots, which are critical to inform new method modules, and remain eligible to participate in future carbon projects based on the science generated from these pilots.

Regarding the second, at present there is not a nationally applicable carbon farming method that appropriately incentivises an end to legal land clearing practices. We ask the Australian Government to proceed with the planned development of an avoided clearing module for the Integrated Farm and Land Management Method at the earliest opportunity in 2024. This important module was part of the original IFLM Method Blueprint provided to the Australian Government by a cross section of stakeholders, and it

<sup>4</sup> See also Key Recommendation 3 for more on the unique make up of the sector which can include imbalances of power leading to risks of small-medium businesses footing an unfair share of the cost of the transition to net-zero.

critical to ensure land managers who change practice are appropriately recognised for their contribution to avoiding emissions.

Third, we note that the Integrated Farm and Land Management Method is still under co-design. We ask the Government to continue to prioritise the method finalisation in early 2024, as this will provide the first method framework to drawdown carbon in both vegetation and soil on the one piece of land. This will enable a step change in participation in carbon farming and is critical to unlocking land sector carbon storage at scale. Currently, around 2% of all farms participate in carbon farming, but this method will enable greater uptake by better aligning land management opportunities and helping overcome transaction costs of participating in carbon farming.

Other potential opportunities of future research and IFLM modules include on-farm electrification using renewables, management of emissions from farm dams, and avoided wildfires outside savanna regions.

In addition to opportunities to scale up carbon storage, there remain opportunities to streamline regulatory compliance. For example, introducing process-based audits would dramatically reduce compliance costs while maintaining integrity of the ACCU Scheme. Process based audits are a common feature of other policies, such as financial reporting regulations where financial audits assess the internal control processes of an organisation, coupled with risk-based spot checks of transactions. Auditing a service providers systems and processes on an annual basis, with spot checks of individual projects, would achieve the same or even higher outcomes compared to conducting individual project audits at regular intervals. This would also help scale the ACCU Scheme by reducing high assurance costs that can be a barrier to entry for small projects.

### Delivering resilience and native-positive benefits alongside carbon storage

Drought has a major economic impact, as well as significant wellbeing impacts and other implications for land manager. ABARES forecast that the current El Nino could result in a [loss of \\$16 billion](#) in gross value of agricultural production. This often has flow on impacts, like higher food prices across the economy. Additionally, the Howard, Rudd, Gillard and Abbott governments spent over [\\$8 billion in direct financial assistance for farmer in drought periods](#). Building climate resilience and preparing plans for dry periods can have significant economic and wellbeing benefits.

In 2021, Climate Friendly received a drought resilience grant from the Future Drought Fund. The purpose of the grant was to understand the impacts of carbon farming<sup>5</sup> on drought resilience and involved Climate Friendly working with Charles Sturt University to conduct a survey of 200 farmers from across Australia. The below table highlights some of the [research findings](#). This is a practical example of how federal policies, like the ACCU Scheme, can help realise multiple benefits in the agricultural sector and broader economy.

Multiple benefits	Example survey results
<b>Net-zero</b> – emissions reductions and carbon removals	Charles Sturt University's Emily Webster, who led the research, says the results clearly show farmers and the environment are benefiting either through projects that generate ACCUs or through land management improvements from carbon farming activities.
<b>Nature-repair</b> - including improving biodiversity	
<b>Drought and climate change resilience</b>	73.3% of respondents that had a project registered with the CER, or were engaged in carbon farming-like activities, strongly agreed that carbon farming had improved their preparedness for drought.
<b>Financial performance</b> (productivity, profitability, and resilience)	75% of carbon farming respondents indicated that the carbon farming revenue helped them meet their loan repayments during drought. Those respondents indicated they had stronger business stability

<sup>5</sup> The survey covered both participants in the ACCU Scheme, and others practicing carbon farming-like activities that were not participants in the ACCU Scheme.

Multiple benefits	Example survey results
	during drought, as compared to those engaged in carbon farming like activities that had not received carbon farming revenue.
Other: <b>personal and social wellbeing</b>	76% of respondents who had been paid for their ACCUs reported reduced stress during drought as compared to before being paid.

Additionally, the recent passing of the *Nature Repair Act 2023* (NRA) provides an opportunity for land managers to gain income from nature repair activities that often also improve carbon sequestration. This is timely with the 2023 release of guidance from the Taskforce on Nature-related Financial Disclosures (TNFD) and Science Based Targets Network (SBTN). Carbon farming projects provide an existing foundation of environmental data that can be utilised for a variety of non-carbon purposes, including nature-repair, natural capital accounts, and other environmental data.

As the TNFD is adopted, we urge the Government to consider from the outset opportunities to harmonise administrative requirements with the ACCU Scheme and NRA. Harmonisation will deliver efficiency as costs can be shared across carbon and nature-repair projects, and this in turn will help to ensure that eligible land managers design projects that both reduce emissions and deliver nature-positive benefits. This can enable greater participation of those previously barred by high transaction costs, and lower overall costs by delivering carbon and nature repair targets together.

## Key recommendation 2

Support education, extension, and private advisory services to build ecological literacy to integrate nature and climate into decision making capacity. This should include expertise in both whole of farm planning/management and natural capital accounting.

Prioritise integration of key Australian policies and other corporate commitments to support systems enablement.

### **Related discussion paper questions**

- 3) Are there initiatives or innovative programs underway that could be applied or expanded on at a national scale
- 4) How can the Australian Government bring together existing effort and new initiatives into one coordinated plan
- 9) How can the Australian Government better support agriculture and the land sector to:
  - a) drive innovation
  - b) build capacity
  - c) ensure the system enables emissions reductions?
- 11) What skills, knowledge and capabilities do you think producers and land managers need to implement change? What information and data would help them make decisions about emissions reductions and sustainable land management in the short and longer-term?

As outlined in section 3.4 of the discussion paper there are often extensive opportunities to improve farm production, while also improving nature and building resilience to climate change. The key barrier to unlocking these mutually beneficial outcomes is often the limits of knowledge. Education and capacity building requires a land-manager focused solution that communicates in a way that is clearly understood and able to be actioned.

Climate Friendly notes that the key skills, knowledge, and capabilities that are likely to help scale initiatives include:

- **Whole of property planning** that collectively considers environmental (including nature and climate), agricultural production (including food, fibre, fuel, and forest products), economic, cultural and social considerations. This should include First Nations knowledge and expertise related to holistic land management. Whole of property management approaches should account for the relationships between co-benefits and trade-offs and we note that holistic Land Management Strategies are a proposed requirement of the IFLM too.
- **Natural capital accounting** including ways to measure, analyse, and act on environmental data while integrating it into decision making. Natural capital accounting will also provide foundational knowledge and data useful for the nature-repair and other market-based mechanisms (e.g., sustainable finance and supply chain reporting). [State and Transition Models](#) (STMs) are high value foundational tools for collecting and analysing natural capital data. [Farming for the Future](#) is an example of how farm-scale natural capital accounting (including STMs) could be rolled out across the sector to inform relationships between nature and farm performance (productivity, profitability, and resilience).
- Compared to other sectors, the agriculture and land sector can face barriers from comparatively lower **digital literacy**. This is particularly because many of the small to medium businesses are in regional/remote communities with lower internet connectivity.
- See Appendix 1 for other skills and expertise that can build capacity and enablement across the system.

Collectively, the above will help drive uptake, innovation and build on existing initiatives. Peer to peer learning is often a preferred and effective way of learning for farmers, which can be assisted through increased rural internet and technology connectivity (for knowledge sharing), extension support, and group facilitation.

Expanding the role and resourcing of Natural Resource Management (NRM) bodies around the nation can help delivery broader outreach and education. NRM groups are well placed to build their expertise to deliver successful knowledge transfer and coordinate land-scale solutions across their respective regions.

**Beyond just educating land-managers, also encourage them to consider third party service providers who have diverse expertise that land-managers can't be expected to completely cover themselves.**

While we strongly support education programs, we also note that it is a misnomer that land managers can learn all the skills to self-manage carbon, nature and agricultural production in the most effective way. The land sector is a complex ecosystem, and it takes a package of expertise to implement best practice, high-integrity projects in a cost-effective way.

Climate Friendly has supported registration of more than 180 carbon farming projects under seven different land sector methods (human-induced regeneration, avoided deforestation, savanna burning, soil carbon, plantation forestry, environmental plantings and beef herd management). As part of our carbon farming extension services, we have obtained 300+ eligible interest holder consents (roughly a third each from banks and government, 20 native title holder consents and the remainder from other stakeholders). We have worked with partners on each of these projects to prepare property management and project permanence plans, including coverage of fire management. We conduct quarterly monitoring on each of the projects that we support to collect time-series, third party auditable data on project implementation. We have completed 130+ independent project audits with 12 different audit companies who are registered under National Greenhouse and Energy Reporting Scheme (NGERS). We submitted more than 1200 offsets reports, which include review against our internal quality assurance processes, and more than 1200 associated applications for ACCU issuance to the Clean Energy Regulator. We have submitted more than 50 first regeneration checks for human-induced regeneration projects that we support. We invest deeply in technological innovation to continuously improve precision of measurement and monitoring, while driving down costs.



Climate Friendly's role in these carbon farming collaborative partnerships is to bring together the complete package of expert skills and extension services needed to run a high integrity, high impact carbon project. Our goal is to make it easy for our partners to continue to focus on their passion and expertise in managing land for agricultural production or conservation or both, while we advise and enable them on how to participate in carbon farming and optimise their land management to deliver a suite of other environmental, cultural, agricultural productivity, economic and social benefits.

Best practice management of ecosystems and high integrity carbon farming necessarily requires expertise. Appendix 1 includes a non-exhaustive example of the package of expertise that Climate Friendly brings together for our partners. Each project we support has one main point of contact to streamline and integrate services and information for our partners. Behind the scenes, that contact person is supported by a team of people with diverse skills delivering the full package of expertise that are required. It is unrealistic and undesirable for most land managers to develop the full set of necessary capabilities outlined in Appendix 1. While it is an option to outsource specific tasks to different consultants, this requires significant project management and typically comes at a higher cost. There is also greater risk that different service providers advice will not be coordinated, leading to sub-optimal outcomes.

### **Integrating key policies and frameworks to mitigate perverse impacts**

Challenges exist to integrate policies and frameworks to mitigate perverse impacts from confusing or incongruent policies, as well as least cost implementation of the net-zero plan. In extension, the effective delivery of co-benefits (e.g., agricultural production increases, carbon removals and nature repair) requires collaboration between the private sector, academia, and governments. Climate Friendly is supporting the Nature Positive Economy CRC bid and recently approved Zero Net Emissions Agriculture CRC. The government can continue to support these CRCs to improve coordination across industry, government and academia. This can in part inform overarching guidance and communications on how all the critical policies and frameworks fit together, including across climate, nature, agricultural productivity, and renewable energy.

The non-exhaustive list below examples some mandatory and voluntary policies and commitments from both governments and corporates that could be harmonised to mitigate incongruency and/or confusion.

- Climate change mitigation
  - The Glasgow Global Methane Pledge to reduce methane by 30% by 2030. Especially since approximately two-thirds of agriculture's emissions are methane from ruminants.
  - Renewable energy commitments (e.g. COP28 commitments to triple global renewable energy capacity and corporate RE100 commitments to source 100% renewable energy by 2025). This is important given energy is another large land user that often overlaps with agricultural land.
- Food production – to understand how increasing production to feed a growing global population and supporting economic prosperity doesn't come at the cost of nature and climate.
  - Including increasing the Australian agricultural market to \$100bn by 2030 while also meeting market access for exports (e.g., see land clearing and deforestation below)
- Nature protection and repair
  - Environment protection, including reforms to the *Environment Protection and Biodiversity Conservation Act 1999*.
  - Land clearing and deforestation – for example, European Union Deforestation Regulation, corporate commitments under Science Based Targets Network (SBTN), and the Glasgow Forest and Land Use commitment<sup>6</sup>

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<sup>6</sup> This commitment was to to halt and reverse forest loss and land degradation by 2030 while delivering sustainable development and promoting an inclusive rural transformation.

- Kunming Global Biodiversity Framework – including that at least 30% of land is conserved for nature/biodiversity by 2030. The co-benefits and trade-offs between agriculture, renewable energy and nature can be challenging to coordinate without comprehensive land use planning.
- Related sustainability reporting and corporate commitments that flow into the sector
  - The proposed Treasury Climate-related Financial Disclosures mandate
  - Voluntary corporate commitments driven by frameworks and standards like the Taskforce on Nature-related Financial Disclosures (TNFD) and the SBTN
  - Developing sustainable finance requirements – particularly from EU financiers

### Key recommendation 3

Environmental information from carbon projects is broadly useful beyond carbon farming and nature-repair projects. We urge the Australian Government to accelerate establishment of a decentralised National Environment and Land Data Platform to facilitate data sharing.

Further guidance on inseting frameworks and consideration of a Native-Active framework, akin to Climate Active, would help incentivise scaled up investment in emissions reduction and nature positive actions in the land sector. These would also protect smaller family farming enterprises who do not have the same influence and control as larger downstream actors in the agricultural supply chain.

#### ***Related discussion paper questions***

9) What new initiatives could the Australian Government design that would support emissions reduction and carbon storage in agriculture and land emissions reductions and help ensure a productive, profitable, resilient and sustainable future for agriculture and land sectors?

10) A consistent and trusted approach for assessing and reporting emissions is often raised as a barrier to reducing emissions. Is there a role for the Australian Government in addressing this concern, and how can producers and land managers be supported?

Climate Friendly views consistent, trusted, and clearly understood approaches to emissions avoidance and removals as a key enabler for a) improved reporting, b) understanding of climate and nature risks and opportunities for at property, regional, supply chain and national scales, and c) basis for verification of integrity of ACCUs from carbon projects, and d) basis for verification of decarbonisation claims, including corporate claims and NDCs.

As highlighted in the previous section, there are a number of intersecting government policies and programs, as well as mandatory and voluntary corporate frameworks and standards related to carbon accounting and reporting, climate risk exposure, and natural capital assets. The array of policies and frameworks can create confusion and complexity, becoming a barrier to participation. At times, the different standards and frameworks are also open to interpretation which can lead to incongruity. It would be useful if the government could articulate a coherent and integrated strategy of how Australian Government policies and programs fit together and complement one another, link with relevant voluntary frameworks and standards, and where possible streamline requirements.

Part of a coherent national approach should include prioritising the establishment of a decentralised, federally coordinated National Environment and Land Data Platform. More information is provided in Appendix 2. Shared data will drive down the costs of reporting for all participants, while enhancing consistency between different levels of reporting at the property, regional, supply chain and national scale. Without shared data, some of the planned reporting requirements under TCFD/IFRS-S2 and TNFD may be extremely challenging, particularly if reporting or information requests flow into smaller scale organisations.

We note the parallel consultation process on Climate Active. Climate Friendly has also made a submission to this consultation which highlights some points around the need for a consistent approach to emissions reporting and accounting, and the need for clearer guidance on insetting, particularly within agricultural supply chains.

The ACCU Scheme and NRA are not the only ways to invest in land stewardship that sequesters carbon and helps ensure a productive, profitable, and resilient future. It is likely large corporates will seek to deliver nature improvements through influencing their value chains, such as sustainable finance and supply chain incentivisation. These represent market-based mechanism rather than necessarily new markets themselves.

Standardisation of market-based mechanisms and clear guidelines on insetting will support increased investment and avoid confusion and risks of greenwashing. Key areas to consider is the role of a sustainable finance standard, as well as consumer focused labelling of nature-positive products. The latter may benefit in the government facilitating an equivalent of 'Climate Active' for nature (e.g., Nature-Active). This could provide confidence to the market for how corporations can claim a verified 'nature active' status while mitigating concerns of greenwashing. Similarly, international commitments on 'no land clearing or land use conversion' are beginning to impact the agricultural supply chain. Government is likely to have a role in defining and potentially certifying agricultural activities that are 'land clearing and land use conversion free'.



## Appendix 1: Expertise & Services required to support a high integrity carbon farming and/or nature repair projects

The below is an expansion of Key Recommendation 2 which talks to the diverse expertise required of Climate Friendly when helping our clients with carbon farming projects.

#	Services & Expertise	Typical services provided by Climate Friendly as part of carbon project
1	Ecology	Carbon projects require considerable knowledge of the environment and how it will respond to changes in land management. This requires extensive environmental expertise that is combined with knowledge of the evidence required by auditors and the Clean Energy Regulator (CER). Without understanding the ecology, a land manager will have limited ability to identify suitable land management practice changes that will lead to carbon storage or avoidance of emissions.
2	Agronomy & Forestry	Carbon projects are often operated on productive agricultural properties. To deliver the ecological and carbon benefits without adversely impacting agricultural production requires expertise in agronomy to be combined with ecology and carbon expertise. Climate Friendly has a team of people with grazing, cropping and forestry expertise that is applied in tandem with ecological expertise. This enables better choices on how to optimise agricultural productivity as part of carbon farming management changes, or informs land managers where trades offs might be required.
3	Modelling & data science	Operating a carbon project requires carbon, environmental and financial modelling expertise. Climate Friendly has a team of modelling and data science experts that manage complex timeseries datasets and model carbon abatement and other scenarios. This skill is necessary to pass project audits and submit applications for ACCUs, as well as informing initial decisions about whether or not a project is feasible to implement for a carbon, environmental and commercial perspective.
4	Geospatial mapping	Most land based carbon methods require substantial mapping expertise to determine eligibility and monitor project impact. Climate Friendly has a team of GIS experts for these tasks and has invested deeply in emerging technologies and automated mapping systems, which would not be feasible to invest in at an individual project scale. This includes both the acquisition of suitable remote sensing data from satellites, planes, drones, and advance technology that enables us to integrate this with field data sets.
5	Regulatory compliance & other legal services	Operating a carbon project is generally a once in a lifetime process for land managers. To do so successfully requires compliance with a broad range of complex laws including: CFI Act, CFI Rule, CFI Regulations, Methods, Technical Guidelines, Native Title Act, national tax laws, financial services legislation, multiple state and territory laws relating to land management. And the legal requirements often change through time, such as after government reviews. An in depth and current understanding of all these requirements, and how they apply to a specific property is required to deliver a carbon project that is eligible to access carbon credits over time. The ability of individuals to consistently meet these legal requirements, without expert advice, is likely low.
6	Traditional Owner partnerships	Establishing a carbon project can often involve the need to establish and maintain a partnership with Native Title holders or other Traditional Owner partners. In our experience, new relationships with a Native Title or Traditional Owner group can take 2-4 years to establish and follow best practice consultation, consent and partnership establishment processes while observing cultural protocols. These partnerships commonly require significant ongoing engagement to maintain productive, two-way relationships. Many projects would not be able to proceed without successful establishment of such partnerships, and this is commonly outside of the expertise of most land managers, many of whom have limited time to invest in these partnerships at conception. These partnerships also provide important opportunities for two-way learning, sharing of Traditional knowledge and furthering reconciliation.
7	Audit and assurance	Carbon projects require extensive pre-feasibility assessments prior to registration to ensure they are viable for all partners, and once registered they require multiple audits across their life and ongoing quality assurance. This is a key integrity requirement. These audits are expensive and time-consuming processes to manage. Climate Friendly undertakes full feasibility assessments on each prospective project to determine its viability, or inform land managers that their property does not meet eligibility requirements. These assessments are screened by an internal

#	Services & Expertise	Typical services provided by Climate Friendly as part of carbon project
		Technical Review committee before we recommend a project is eligible to proceed to registration. Further, we pre-audit land management records, compile audit packs and manage independent auditor's information requests throughout each external audit, which typically involve detailed technical questions and responses.
8	Project management	Operating a carbon project is a substantial logistical and project management exercise. The coordination of the range of expertise required to achieve a successful carbon project is substantial. Climate Friendly have a team of project managers who ensure each land manager's project meets required milestones and underpinning data requirements. This is delivered in a seamless fashion through each carbon project having a dedicated project manager that is their primary point of contact.
9	Financial services	Australian Carbon Credit Units (ACCUs) are financial products. This means that land managers require advice to inform their decisions to trade, hold or voluntarily retire ACCUs generated from their projects. Climate Friendly holds an Australian Financial Services Licence (AFSL) which enables us to provide market advice to our clients.
10	Research & development (R&D)	Climate Friendly is constantly investing in R&D, to improve project services for our partners and ensure they are informed by the latest science, advance industry best practice, accelerate climate action and optimise land management. This includes through key partnerships with CSIRO, Bush Heritage Australia, WWF Australia, The Mulloon Institute, NSW Government, QLD Government, UNSW and Charles Sturt University among others. Examples of our R&D investment include piloting a holistic approach to carbon farming with Bush Heritage Australia which is now informing the design of a new Integrated Farm Management (IFM) method, development of an Integrated Native Vegetation Condition (IVC) method that has been approved by Accounting for Nature. The IVC enables dual monitoring of carbon and biodiversity when coupled with IFM. We are also well progressed in the development of a drought resilience standard. Over 15% of Climate Friendly's expert staff have a dedicated focus on R&D, with all staff having opportunities to participate in specific R&D projects.
11	Government relations	Climate Friendly manages the relationships with the Clean Energy Regulator and a wide array of other government bodies at the state and federal levels. This includes day to day project management, as well as broader engagement on government policies that relate directly and indirectly to carbon farming, including government reviews and submissions such as this one. A part of the focus of this engagement is expanding opportunities to deliver climate impact on the ground and ensuring government policies are "implementation-ready" and address existing barriers to implementation and participation.
12	Capital investment	Climate Friendly provides significant upfront investment to get carbon projects up and running. Our standard model is that we don't get paid until our project partners generate ACCUs. The time between initial feasibility assessment to first issuance of ACCUs is typically a minimum of 18+ months. It requires significant investment in field work, mapping and data collection such as drone plots or aerial lidar, preparation of various applications, obtaining consents and payment of audit fees, among other costs. This all comes at substantial cost and is an at-risk investment in the project by Climate Friendly. Many land managers would not have the capital available to design and implement the projects without this investment. We also support mobilisation of capital (directly and indirectly) to fund other capital intensive land management practice changes, such as upfront planting costs.

## Appendix 2: Decentralised data sharing | A National Environment & Land Data Platform

Data sharing is expected to be increasingly needed for carbon and nature-repair markets (including development and improvement of methods), market-based mechanisms (e.g., sustainable finance and supply chain incentivisation), research, monitoring systems; and to aid land managers private decision making. In Climate Friendly's experience, the biggest hurdle with data sharing is currently the limited underlying data infrastructure. As such, we suggest the design and establishment of a National Environment & Land Data Platform to facilitate this while enhancing transparency for market confidence. Current methods of data publication are often not user friendly.

Climate Friendly and our carbon farming and nature repair partners collect an enormous amount of environmental, carbon and land management data, as part of our rigorous feasibility assessments when planning and implementing projects that can span 35-year contracts.

Integrating private and public data collections requires good governance and strong controls given some data sets are tightly linked to privacy laws and the livelihoods of individual land managers. Therefore, there are careful legal, ethical and technological considerations around levels of access. Aggregated insights and/or de-identification of data can balance the need for transparency while protecting privacy and security.

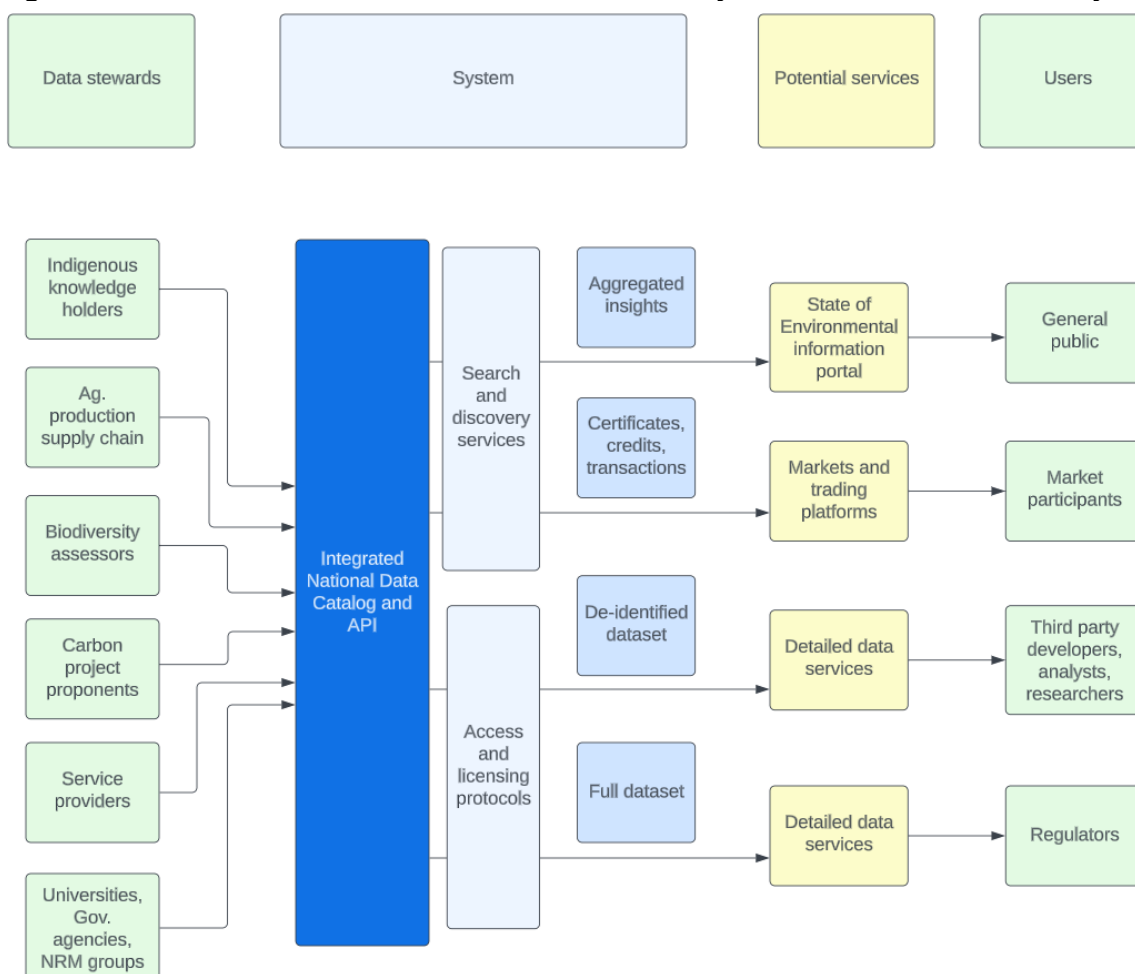
The Australian Research Data Commons provide FAIR principles that data should be findable, accessible, interoperable and re-usable. Tracing and verifying the provenance of a data sets is also important as using incorrectly sourced data can lead to incongruous results. Moreover, the provenance of data underpinning carbon and nature projects must be maintained over the lifetime of the credit.

Advances in data infrastructure technology mean it is now possible to develop a decentralised national land data platform with a data discovery portal. This would give access to agreements and usage licenses with private organisations or individuals who are able to opt-into data sharing. Our proposed structure is to consider an adaptation of the National Water Data Hub<sup>7</sup> design. Figure 1 below outlines a potential structure for such a data sharing system for environmental and land data.

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<sup>7</sup> Being implemented by the Bureau of Meteorology.

**Figure 1: Environment and land information in a Federally coordinated decentralised system.**



While previous attempts have been made to create national systems, these have typically relied on traditional data sharing systems and structures which aim to centralise data within a single location and IT system. Modern data sharing systems can be decentralised with data housed on multiple interconnected IT systems.

This [short video](#) helps explain how the database could work and how governments, conservation organisations and agricultural producers might all contribute information and obtain benefits.

An information supply chain 'Custodian' for environmental data was recommended in the Independent Review of the EPBC Act as well as the Independent ACCU Review. This Custodian role could set these Federal standards for a common framework and standards for exchanging information and build search and discovery capability. The Custodian could also deliver access and licensing protocols for a variety of common users and use cases. Given similar functions currently performed by the ABS/ABARES, the ABS could be a good candidate to take on this function.

The newly created "Environment Information Australia" entity may appropriately take on this role and fit within the Australian Bureau of Statistics functions, with support from Office of the Australian Information Commissioner. Administration of this function requires an agency that has powers to coordinate across line agencies and functions, including coordinating across the following portfolios:

- Climate Change & Energy
- Environment & Water

- Indigenous Australians
- Agriculture, Fisheries & Forestry
- Various other economic and regional development portfolios.

Climate Friendly is not in a position to assess the costs of developing or administering the proposed data sharing approach at a national scale. We do however note that the recent Federal Budget included over \$150 million for delivery of programs that include relevant data system improvements:

- Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) - \$38.3 million over 4 years from 2023-24 and \$7.6 million per year ongoing from 2027-28 to strengthen the Department of Agriculture, Fisheries and Forestry's capability, particularly through the ABARES.
- Bureau Of Meteorology - \$32.7 million to support strong, efficient and transparent water market
- National Greenhouse Accounts - \$21.8 million has been committed to enhancing the emissions-tracking capability of the National Greenhouse Accounts
- Environment Information Australia - \$51.5 million towards up-to-date and reliable environmental data to support the Nature Positive Plan.

We believe that if coordinated the more than \$150 million included in these budget allocations, along with other related budget allocations across various agencies, present the opportunity to develop the proposed environment and land data system that Climate Friendly has outlined above.