

3 November 2025

ERAC Secretariat
Ngunnawal Country, 51 Allara St, Canberra ACT 2601 Australia
Department of Climate Change, Energy, the Environment and Water
By email: ACCUSecretariat@dcceew.gov.au

Dear Karen,

Re: Savanna Fire Management Methods – Avoidance & Sequestration - 2025 Consultation

Climate Friendly welcomes the opportunity to provide feedback on the two proposed savanna fire management methods:

- *Carbon Credits (Carbon Farming Initiative – Savanna Fire Management – Sequestration and Emissions Avoidance) Methodology Determination 2025* (the **savanna sequestration and avoidance method**)
- *Carbon Credits (Carbon Farming Initiative – Savanna Fire Management – Emissions Avoidance) Methodology Determination 2025* (the **savanna emissions avoidance method**)

Overall, we welcome the release of the proposed savanna fire management methods. We support key reforms in the method including:

- The addition of new carbon pools including living biomass and standing dead wood; and
- Transition of the abatement model to Savanna Carbon Accounting Model (SavCAM) built on FullCAM.

In this submission, we provide some specific comments below related to key method settings and opportunities for improvement prior to method finalisation and legislation. We believe these changes will strengthen alignment with the offsets integrity standards, and also improve method uptake and consistency of policy for some important cross sectoral elements within the broader ACCU Scheme. Some overarching comments about the new method and development process are summarised below.

Timely reform of ACCU Scheme methods is important

We support constructive and incremental reform of carbon farming methods in response to emerging technologies, scientific updates and to safeguard integrity of the ACCU Scheme. Method development and maintenance is essential to stimulate investment in carbon farming, so that the land sector can contribute to a net zero Australia. In recent years method and policy stability in the ACCU Scheme has been disrupted, creating hesitancy to act and invest in time critical practice changes. We note that the remake of the savanna burning method has been underway for several years. Taking five-plus years to reform an existing method, which had a relatively well-established body of scientific evidence and method structure, is not an acceptable timeframe. Appropriate resourcing of carbon farming method reform is of critical importance to provide a foundation of stability and integrity to the ACCU Scheme.

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Transitioning Projects: Consistency in ACCU Scheme for carbon pool accounting updates

We support the addition of the newly added living biomass and standing dead wood pools, which are affected by the project management change. However, we have some concerns with the proposed approach for upfront issuance of accumulated carbon in these newly added pools for existing projects transitioning to the new method. These include creating significant relinquishment risks for proponents due to either reversal events, or due to likely future updates to SavCAM, particularly in the context of a forced transition as is proposed. We note that we do not support a forced transition between software versions and think this is an area that needs a scheme wide policy for managed transitions. Further, the current transition mechanism is poorly aligned with ongoing operational expenditure for fire prevention and suppression, creating misaligned crediting and permanence periods and exacerbating this relinquishment risk. Upfront issuance of the accumulated carbon in the expanded carbon pools would create precedents for other methods with similar expansion of accounting, such as the Integrated Farm and Land Management Method which has been in development for a similar timeframe.

Instead, we support an alternative approach to smooth any issuance of the accumulated carbon in the expanded carbon pools from sequestered carbon over the duration of the crediting period, aligned with a typical 'avoided loss of sequestered carbon' abatement profile. We also support a new 25-year crediting period. More details are provided in the submission below.

Thank you for the opportunity to contribute and please do not hesitate to contact us if you wish to discuss our submission in further detail.

Kind regards

A handwritten signature in blue ink, appearing to read "Skye Glenday".

Skye Glenday
Co-Chief Executive Officer
Climate Friendly



Summary of recommendations & findings

Climate Friendly's recommendations and findings are provided below.

Crediting period for transitioning projects

Recommendation 1: *Projects transitioning to the new sequestration and emissions avoidance method should receive a new 25 year crediting period.*

Rationale: a new 25 year crediting period for transition projects would:

- Recognise that the projects are taking on new permanence commitments and this may involve additional project activities or revised fire planning practices;
- Reduce permanence risk by avoiding a 'revenue gap' where proponents must protect carbon stocks from wildfire without any carbon benefits from the project;
- Avoid penalising early adopters;
- Ensure equitable treatment of projects; and
- Incentivise transition.

This proposal would also better align the timeframe of transitioning projects with Australia's 2050 net zero goal, incentivising long term emissions reductions and managing fire risk in Northern Australia for the duration of this period.

Issuance profile for transitioning projects

Recommendation 2: *For projects transitioning to the new sequestration and emissions avoidance method, sequestered carbon abatement covered in newly added pools should be issued over a phased period, aligned with a typical 'avoided loss of sequestered carbon' abatement profile. Ideally this should be matched to the new 25 year crediting period (refer recommendation 1). Two alternative phasing approaches are outlined below.*

Rationale: The current proposal for upfront issuance of accumulated carbon for transition projects is problematic for reasons mentioned in the cover letter. As an alternative, phased issuance would:

- Reduce the risk of relinquishment, either due to reversals, or in the event of a version-change/ parameter updates in SavCAM. Given the SavCAM model has not been widely tested on existing projects, model updates can and should be expected. The likelihood of this risk seems quite high, and since this is a government calibrated and managed model, we suggest that this risk should primarily be taken on by the government as it is outside the project proponent's control. We recommend that this should be managed as part of a broader scheme policy related to version changes in SavCAM / FullCAM is put in place (refer Recommendation 8), as we do not support a forced transition when updates to the method accounting tool are beyond the control of the proponent, and project proponents have no ability to manage this risk or improve the model with extra data. We would support the risk being borne by proponents in the context of a measure-model-measure provision where they owned and managed the model, but this is not currently available under the draft savanna method.



- Provide greater market stability, smoothing any ACCU issuance and better incentivising uptake of new projects. Providing market stability is aligned with one of the objects of the CFI Act to incentivise projects under the ACCU Scheme;
- Be better aligned with operational expenditure required for fire prevention and suppression, which occurs over the duration of the permanence period. Misalignment with operational expenditure heightens the risk of relinquishment, as proponents may be unable to fund fire management activities in the later years of the permanence period a significant disturbance event will become more likely; and
- Upfront issuance of the accumulated carbon in the expanded carbon pools would create precedents for other methods with similar expansion of accounting, such as the Integrated Farm and Land Management Method which has been in development for a similar timeframe, and a smoothed ACCU issuance profile is a more appropriate scheme precedent.

Phased issuance could be implemented via either of two proposed accounting approaches:

1. Equal issuance over the duration of the new/renewed 25 year crediting period, similar to the approach followed in the Schedule 4 of the plantation forestry method; or
2. Issuance relative to a counterfactual baseline scenario where fire frequency, extent and severity returned to historical (pre-project) levels. The difference between the carbon stock at project transition and the counterfactual would be issued over time. This is informed by modelling by CSRIO where on average, projects returned to baseline carbon stocks 14.1 years after reverting to historical fire patterns. This approach is better aligned with the likely profile of avoided emissions than the equal issuance approach, but may be. More complicated to implement.

In either alternative, abatement calculations and crediting provide incentives to preserve accumulated carbon without exposing proponents and the market to excess volatility or increased relinquishment risk.

Method and model transparency

Recommendation 3: *The source code and/or equations and technical documents supporting the SavCAM model should be made publicly available. To avoid further delays to the method, these documents could be published as soon as possible.*

Rationale: Publication of technical documentation improves verifiability and stakeholder confidence. It would enable users to independently verify the model against their project results, and to create abatement forecasts (which are needed to make business decisions) that are aligned with the model. This is particularly important given the model does not currently have any forecasting capability. It aligns with technical documentation precedents from FullCAM. Any data used in the model should be clearly identified, either via providing links to the public source or identifying any commercial data licenses.



Interaction and consistency with other methods

Recommendation 4: *There is scope to consider including this method in a future IFLM activity module, as that would allow multiple activity management where appropriate, for example to regenerate lower condition land areas and manage feral animals alongside savanna fire management.*

Rationale: At present, the method only calculates sequestration by assuming that vegetation carbon stocks are relatively intact (i.e. close to maximum aboveground biomass), but for the effect of fire. Sequestration abatement is calculated as an increase in the average carbon stock across a project after reducing the effect of fire. However, in reality some projects may see an increase in carbon stocks above baseline levels. This regeneration could either be due to a) the improved fire management regime; or b) other management activities if regeneration is suppressed by factors in addition to fire. This sequestration is eligible abatement and should be incorporated in a future expansion of IFLM. Likewise, feral animal management is a known challenge in the savanna landscapes, and inclusion in a future IFLM expansion would also enable feral animal management activities that reduce emissions to be included in one integrated project.

Recommendation 5: *Terminology in the method should be checked for consistency across ACCU methods. For example, the method refers to a 'project management plan' while other methods (eg soil, forthcoming IFLM) refer to a 'land management strategy'.*

Rationale: Inconsistent terminology between methods leads to market confusion. Harmonisation of terminology also lays the foundation for future modular approaches.

Method currency and future-proofing

Recommendation 6: *The future expansion to cover regenerating woody biomass (Recommendation 5) should also allow for a future measure-model-measure approach, including via validated models or enabling calibration of SavCAM using project level data.*

Rationale: We note that SavCAM was calibrated to estimate woody biomass carbon stocks in savanna ecosystems, as outlined in Paul & Roxborough (2024). However, proponents may wish to calibrate SavCAM or other models using site specific data. This would enhance integrity of the method, allowing proponents to improve the SavCAM model over time.

Recommendation 7: *Phase 3 of the Independent ACCU Review reforms should be implemented as a high priority, including the commitment to deliver a national land database to facilitate bottom-up input of data.*

Rationale: Without a national land database, there is a missed opportunity to connect project level data and improve calibration of national and public models like FullCAM and SavCAM. Under the proposed measure-model-measure

approach, there is an opportunity for project level data sets to be better connected, with appropriate privacy and data management arrangements in place. More information about the benefits of the National Land Database and how it might operate are summarised in Appendix 1.

Recommendation 8: *There should be no requirement for mandatory adoption of the latest SavCAM model in each reporting period (i.e. no forced model transitions). Instead, proponents should have the option to stay on the model that existed at the time of project registration/transition.*

Rationale: Forced transition to the latest SavCAM version could have unintended consequences at a project scale & create investment uncertainty. Whilst any updates will likely be unbiased at a national level, some projects may have substantial increases and some substantial losses at a project scale.

The map below shows the difference between the Maximum aboveground biomass layer ('MaxBio') between the FullCAM 2016 and FullCAM 2020 versions (expressed as a percentage of the 2016 layer), which shows that some regions of Australia had up to 94% lower Maxbio levels, while some regions experienced more than 1,000% uplift in Maxbio between versions. Note that much of the movement in the MaxBio layer occurred in the savanna burning zones.



Such large changes, if mandatory, could trigger retrospective ACCU relinquishment/rebalancing requirements for some projects, while some projects would get large additional issuances. The level of uncertainty from forced changes could not only impact investability, but could have perverse outcomes at a project level where the national model changes may be inaccurate.

The assumption behind the concept of forced SavCAM transition appears to be that the latest SavCAM/FullCAM version is more accurate. However, in Climate Friendly's experience, this assumption whilst potentially valid at a national scale, is not necessarily valid at the project or property level, given FullCAM is not designed for property level accuracy.

For example, Climate Friendly undertook a series of field measurements on several properties comparing FullCAM versions. Which model was more accurate was variable across different properties and regions. In some instances, the 2016 FullCAM version was more conservative and provided a more accurate, better model fit with on-ground measurements compared to the 2020 FullCAM version. The assumption that the later FullCAM or SavCAM version is more accurate at a specific property is not valid, rather it's simply a different national model.

To ensure industry stability, proponents should have the option to stay on the model that existed at the time of project registration/transition. A measure-model-measure option should also be considered for a future update to the savanna method, as this would provide an opportunity for a more locally accurate model to be applied to projects.

Recommendation 9: *There should be a requirement for consultation and ERAC advice for updates to SavCAM and/or the Technical Guidelines that materially affect abatement.*

Rationale: There are numerous parameters such as combustion, decay and mortality factors that are described in the Technical Guidance Document, and these have a material impact on abatement. We support the inclusion of technical parameters in more nimble policy instruments such as Technical Guidelines, which we expect will be updated from time to time. However, material changes could cause uncertainty and economic risk for long-term projects. Consultation will ensure changes to the model are evidence-based and transparent. Previous new model releases for the public version of FullCAM have been prepared with inadequate consultation on property level impacts. Again, while we understand that the new releases may be more nationally accurate under the inventory, this does not necessarily result in higher property level accuracy as highlighted above.

Consents

Recommendation 10: *Climate Friendly supports Recommendation 11 from the Independent ACCU Review in relation to consents on native title land, aligned with principles of Free, Prior and Informed Consent (FPIC). These reforms should be implemented as soon as possible.*

Rationale: The new method is likely to result in many transition projects switching from the emissions avoidance methods, to the new sequestration and emissions avoidance method. Consents are precondition for switching to the new method, therefore the reformed process for consents on native title land should be finalised to prepare for this influx of transition projects. We support revised consent requirements in the CFI Act that are aligned with the two-step process in the Nature Repair Act legislation.



Baselines

Recommendation 11: We support the flexible provisions in the draft method to declare the Early Dry Season and Late Dry Season dates based on seasonal conditions. However the dates should be determined by monitoring agreed environmental thresholds, such as rainfall or grassland curing indices, rather than a spatial data layer published by the Department on 30 June in the previous calendar year.

Rationale: There are significant differences in seasonal conditions across the breadth of the savanna burning zones. Having a single, hard-coded date for start of the Late Dry Season in the previous versions of the method has at times created complications for operational fire management, for example if fuel is insufficiently dry to carry an early dry season burn before the late dry season is declared. A more flexible approach is appropriate. However, publishing a map on the Department's website in the year prior is unlikely to reflect on-ground conditions in the year of reporting. In addition, this approach likely relies upon the accuracy of national climatic datasets, which may have questionable accuracy in northern Australia where official weather stations are under-represented. It would be better to use pre-agreed environmental thresholds such as rainfall data or grassland curing indices, and allow options to collect locally specific data to inform the date. This would better reflect on-ground burning conditions in real-time, while providing a balance of certainty for planning burns, and maintaining flexibility of dates.

Issuance volatility for sequestration

Recommendation 12: Volatility in the issuance of sequestration ACCUs should be moderated either by a) calculating a five-yearly rolling project average carbon stock (similar to the 2018 savanna burning method); or b) an uncertainty buffer for sequestration.

Rationale: The SavCAM method reports estimates of carbon stocks for a single year. However, it is expected that, year to year, carbon stocks could go up or down depending on whether an early dry season or late dry season fire has occurred. No abatement is credited in years where carbon stocks go backwards, even if the long-term average carbon stock has increased relative to the baseline. Such lumpy issuance profiles reduce investment certainty, and could make funding of annual fire management activities difficult. In other methods where carbon stock fluctuate and project activities aim to increase the long-term average (e.g. Plantations), abatement is calculated using rolling averages or buffers to reduce this volatility. If this is computationally too difficult to do in SavCAM, it could be done via the method equations post model output.



Permanence, reversals and buffers

Recommendation 13: *Across the whole-of-ACCU Scheme, Government should develop a process to formally ‘issue’ or ‘account for’ the permanence and risk buffers, and clarify rules on when the permanence and risk buffer can be used to deal with significant reversals due to natural disturbances vs when project proponents will be held accountable.*

Rationale: For each issuance from a sequestration offsets project, the Government deducts 5% of the total abatement for ‘risk of reversal’, and another 20% as a ‘permanence period discount’. Given project issuances have occurred regularly since 2012/13, this now represents a significant pool of carbon (including 8 million plus tonnes of abatement from the projects we service across our portfolio). If these buffers were formally issued or accounted for by the Australian Government, this risk mitigation asset would become tangible, and could potentially be used to account for significant and unmanageable reversals of ACCUs in specified force majeure events. While this recommendation applies scheme-wide, it is particularly relevant in the context of savanna burning projects where wildfires are common, and the new method will quantify the true size of the sequestration asset for the first time.

Recommendation 14: *Permanence and notification obligations should be clarified, including requirements for ‘significant reversals’ due to wildfire.*

Rationale: The CFI Act requires proponents of sequestration offsets reports to notify in the event of ‘significant reversals’ in response to natural disturbance. A significant reversal is defined as more than 5% of Project Area, or more than 50 hectares affected by a natural disturbance. Given the expected high uptake of the new sequestration and emissions avoidance method, and the high frequency and extent of wildfires in this landscape, it is reasonable to expect that the notification thresholds will be triggered quite frequently. In addition, the method inherently accounts for emissions due to late dry season and wildfires in the year of reporting. To avoid unnecessary burden on the Regulator and proponents, we suggest the definition of ‘significant reversal’ in the context of the new sequestration and emissions avoidance method should be clarified.

Recommendation 15: *Consider whether offering a 100 year permanence period is appropriate, given the permanence risks in savanna ecosystems, and the fact that crediting periods only last for 25 years.*

Rationale: Given the greater risk of fire in savanna ecosystems, and that without ongoing project financing fire management practices may not continue beyond the project period, the policy rationale for offering 100 year projects in this considerably higher risk context is unclear.

Recommendation 16: *The method should specify a process to quarantine emissions avoidance ACCUs from sequestration reversals, aligned with the CER posture on this issue.*

Rationale: The Regulator’s posture on relinquishment for emissions avoidance and sequestration projects specifies that only the sequestration component of abatement would be subject to relinquishment due to reversal of

sequestration¹. The method equations should be restructured to give effect to this posture. This would involve separately accounting for sequestration and avoided emissions in both the method and SavCAM outputs.

Mapping of weed-infested areas

Recommendation 17: *Weed infested areas should be mapped as exclusion areas, rather than removed from the project area.*

Rationale: The proposed process to exclude weed-infested areas from the project area is impractical. It would involve regular revisions to the project area, which is an administratively time consuming process for both proponents and the Regulator. It could disincentivise proactive monitoring and reporting of weed infestations. A more practical approach is to re-map infested areas as ineligible vegetation.

Grazing management

Recommendation 18: *Carry-over of the grazing restrictions from previous savanna burning methods is inappropriate. These restrictions should be removed, or else replacement by a requirement to disclose any material risks and mitigation requirements in Land Management Strategy.*

Rationale: There is no evidence to suggest this is a material leakage risk. It could unnecessarily disincentivise proponents from undertaking other carbon farming activities, or other productive business activities for fear of breaching this requirement. A Land Management Strategy is the appropriate place to disclose this potential risk, and to articulate a risk mitigation plan if applicable.

Results of SavCAM modelling

Recommendation 19: *Prior to release of the method, the Department should undertake a further review of the SavCAM model, particularly in locations where emissions avoidance abatement has significantly increased under the new method, to test model accuracy.*

¹ Available at: <https://cer.gov.au/document/relinquishment-accus-under-joint-emissions-avoidance-and-sequestration-methods>



Rationale: Our testing of the current release of SavCAM shows that abatement from the emissions avoidance component has increased significantly under the new method, more than doubling in some locations. Industry colleagues have reported of up to a five-fold increase. This seems aligned with the addition of two new pools, which are included in both the sequestration and emissions avoidance component of the abatement calculation. Close inspection of any outlier locations or model settings is recommended to ensure that abatement results are fit for purpose. Parameters such as combustion factors, mortality assumptions, and the appropriateness of the M layer in shrubby ecosystems might be particular focal areas for the outlier assessment.

Recommendation 20: *The Department should specifically review model settings in the Low Rainfall Zone.*

Rationale: Our testing shows that abatement can become negative in low rainfall zones in response to early dry season burning. This does not necessarily align with ecological observations of vegetation response to early dry season burning. A more detailed review of modelling parameters in the low rainfall zone may be warranted.

Alignment with the national inventory

Recommendation 21: *The method activities and abatement accounting approach are generally aligned with the national inventory. However, efforts to require exact symmetry between projects and the national inventory are not appropriate and would reduce project accuracy and integrity. For example, project proponents are required to develop a validated vegetation fuel type map, which will differ from unvalidated national maps. The desire for greater alignment between projects and the national inventory is best dealt with as an integrated national land database (refer Recommendation 7). For more information on this issue, Climate Friendly has prepared an explainer to demonstrate the problem of why national mapping products can be problematic when applied at project level.²*

² Available at: https://www.linkedin.com/posts/climate-friendly_carbonfarming-climatefriendly-guide-activity-7194478998800769024-oA4I/?utm_source=share&utm_medium=member_desktop&rcm=ACoAABoxQS4BtyR11q-AhWHxwKS2CsUDjnfOYm0



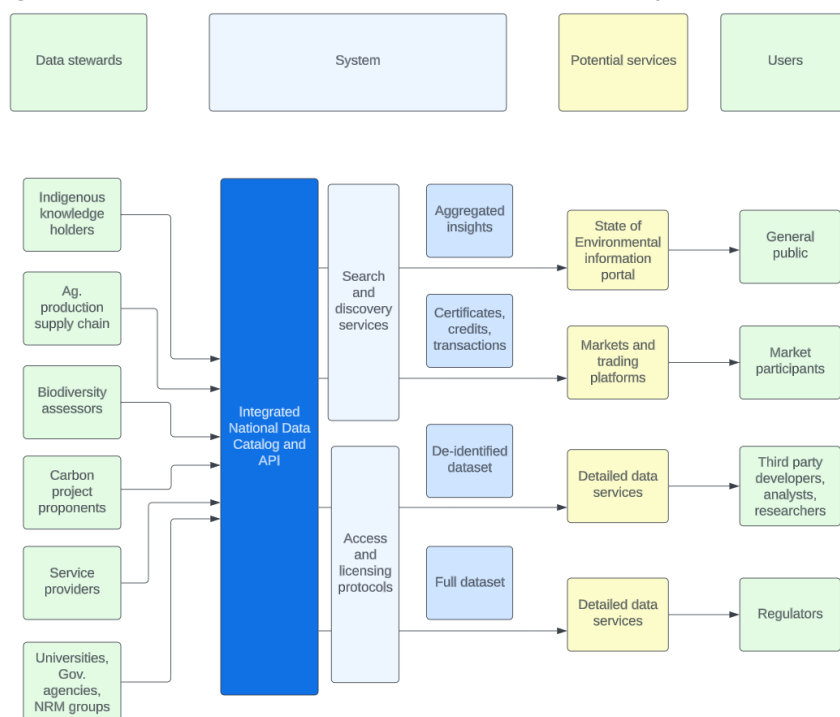
Appendix 1: The need for a national land database

Climate Friendly and our carbon farming partners collect an enormous amount of environmental, carbon and land management data, as part of our rigorous feasibility assessments when planning and implementing a land-based carbon farming project which can span a 35-year period. There is a significant opportunity to share this data to support ongoing research, continuous improvements of national carbon, environmental and agricultural monitoring systems; and to provide information to land managers to aid decisions on managing their property.

In the case of carbon farming projects, this data is tightly linked to privacy laws and the livelihoods of individual land managers. Therefore, there are careful legal, ethical and technological considerations in enabling access to this information which would provide multiple benefits while also protecting confidentiality.

Advances in data infrastructure technology mean it is now possible to develop a national land data platform with a data discovery portal. This would give access to agreements and usage licenses with private organisations or individuals able to opt-into sharing their information to achieve multiple environmental, carbon and agricultural benefits. Our proposed structure is to consider an adaptation of the National Water Data Hub³ design. Figure 1 below outlines a potential structure for such a data sharing system for environmental and land data.

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



³ Figure 5, *Water Market Reform Roadmap* (2022), Department of Climate Change, Energy, Environment & Water, accessible here: <https://www.dcceew.gov.au/sites/default/files/documents/water-market-reform-final-roadmap-report.pdf>

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 central location and IT system. Traditional systems have limitations and are unlikely to facilitate data sharing of the exponentially increasing volumes of environmental and land related data sources that are being collected by a wide range of stakeholders, including business, conservation organisations, universities, peak bodies and governments, on carbon, nature repair, water and agriculture production. Modern data sharing systems can be decentralised with data housed on multiple connected IT systems. A decentralised system provides a more flexible way of sharing information across multiple information sources. A decentralised system covering the proposed range of environment and land related information sources would enable information and analysis that could not be achieved within separate disconnected systems or using traditional data sharing approaches.

As environmental and land data systems in both the private and public sectors are proliferating, it is important to establish a common framework, standards and integrated technology platform for exchanging information. A decentralised environmental and land data sharing system will require strong Federal governance and interoperable standards to ensure data integrity and appropriate use. It will also be important to develop central Federal oversight of search and discovery capability, as opposed to the government building a large centralised traditional data repository. 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 would be a good candidate to take on this function.

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.

