

Department of Agriculture, Fisheries and Forestry
GPO Box 858
Canberra ACT 2601

13 December 2023

To whom it may concern,

Soils for Life submission to the Agriculture and Land Sector Decarbonisation Plan

We welcome the opportunity to make a submission to this process, and thank you for the opportunity to be involved in the consultation workshop in Canberra on the 28th of November. Our comments in this short submission complement those we made in the workshop.

Soils for Life is an organisation that works primarily on the ground with farmers who are seeking to manage their soils and landscapes for improved resilience, ecological health, business profitability and social wellbeing. Our submission is provided below, and draws upon these on-ground experiences, including contributions from our Farmer Advisory Panel.

I would be very happy to discuss any of these matters further or connect the Department with farmers in our network who can speak further to their experience and perspectives on these matters, including the challenges and barriers they have encountered and the solutions that they believe would work to support them. I would also be very happy to facilitate opportunities for Departmental staff to visit farmers in our network who are trying to implement positive changes on the ground.

Please do not hesitate to contact me via [REDACTED]
[REDACTED].

Yours sincerely,

Eli Court

Agriculture need not be a zero-sum game

There is a growing evidence base from Australia and around the world demonstrating that with 'regenerative' management, farming land can be productive, nature-positive

and climate-positive. Our experience through producing more than 50 case studies (soilsforlife.org.au/case-studies/) and working with hundreds of farmers around Australia is that, unlike other sectors of the economy, we should stop thinking of agricultural production and environmental/climate outcomes as mutually exclusive or a zero-sum game. Policy development should lean away from solutions that require one outcome at the expense of another. For example, 'locking up' land is a questionable strategy for lasting carbon storage, removes critically important stewards from the landscape who are needed to manage that land (especially in the face of accelerating climate impacts), and risks creating perverse outcomes for communities, food security and biodiversity.

Multiple outcomes need to be targeted together

Building carbon in agricultural landscapes is a good idea for many reasons, one of which is storing carbon to mitigate climate change, however we caution against a singular focus on carbon as part of this plan and related policies and programs. On a landscape scale, building healthy soils through increased plant diversity, grazing management and waterway repair can lead to increases in soil carbon, but can also enable the soils to absorb more water during heavy rain events, preventing erosion and flood damage, and can store that moisture, protected from evaporation by ground cover, so it can be slowly released during drier periods (see, for example, our Jillamatong case study via soilsforlife.org.au/observing-resilience-at-jillamatong/). A singular focus on carbon could miss opportunities to capture these broader benefits, instead incentivising solutions that may store carbon but have limited or even negative impacts on water, biodiversity, or agricultural production.

Importantly, given the multiple pressures on food and farming systems, food security and food system resilience should be given strong consideration alongside carbon. The core question asked in this paper could be reframed to avoid 'carbon tunnel vision', along the lines of: *What opportunities exist to reduce emissions and sequester carbon while also building resilience and improving food security, social, environmental, health and economic outcomes for farmers and the community?*

There are no recipes, but diversity and local adaptation are critical

While there is an increasing amount of information and evidence about which practices work in which contexts to build overall landscape health (including increases in carbon storage and reduced emissions), there's no single recipe. There are as many ways as there are different farmers and farms, but diversity and local adaptation are key. This approach (often referred to as 'regenerative agriculture'¹) aims to move away from an industrial approach to agriculture which has led to monocultures and simplification of agricultural landscapes, and instead mimics nature's tendency towards diversification. Diversification builds resilience into the landscape, because the more variety of living plants and animals in a system, the more likely that system will be to be able to cope with and respond to disruption.

¹ See soilsforlife.org.au/faq-regenerative-agriculture/ for details on how we define 'regenerative agriculture'.

Rather than picking individual practice or technology ‘winners’, we believe that a ‘no regrets’ policy response is investment in farmer capability to understand the ecological processes taking place in their own unique context, which enables them to diagnose issues, make informed decisions about management practices, observe the changing landscape, and adapt accordingly. For the same reason, top-down regulatory approaches should be treated with caution, as they risk imposing solutions that do not work on a local level.

We need to support high quality, locally relevant information and capacity building

Because there are no silver bullet solutions, it is critical to provide farmers with locally relevant, high quality, independent information from trusted sources. This can be provided by on-ground networks such as Landcare groups, NRMs and local/regional producer groups (e.g. Vic No Till, MacIntyre Ag Alliance), often in partnership with specialist organisations such as Soils for Life, The Mulloon Institute and Open Food Network to name a few. Locally-based groups perform a unique role in establishing lasting and trusting relationships with local producers, while specialist organisations can bring additional resources, capabilities, and networks - the combination is in our experience highly effective and efficient. Supporting these kinds of initiatives has the added benefit of not being dependent on the completion of further research into the effectiveness or otherwise of particular technologies, practices or strategies, which may take many years. Farmers are making decisions about how to manage their land today, and improving their skills and access to information will ensure those decisions are the best they can be, taking into account the most up-to-date research and evidence.

Farmer-to-farmer learning and networks are key to supporting practice change

Tools, frameworks, information and other resources are important, but providing tools and frameworks is not enough; what we all need - and farmers are no different - is community around us to share what we're observing, to bounce ideas and learnings off each other. In our experience, supporting the establishment and maintenance of strong networks around new approaches to land management is key to achieving lasting practice change. Government can support this through programs that invest in this ‘social infrastructure’.

Agricultural methane emissions are complex

The methane cycle is complex, and there are large uncertainties around both sources and sinks, especially natural sources and sinks. Given the important role that free ranging animals (as opposed to animals raised in intensive confinement and fed on inputs grown elsewhere) play in healthy ecological systems (e.g. cycling nutrients), we should be extremely cautious about regulating agricultural methane. We should in particular pay close attention to the risk of perverse outcomes that penalise free range, ‘regenerative’ systems and push producers towards intensive, industrial systems, or towards industrially produced synthetic alternatives to animal products, many of which have questionable environmental impacts and (as highly processed foods) potential adverse impacts for human health.

Opportunities to reduce scope 3 emissions need to be considered

If farmers reduce scope 3 emissions by reducing input use (with all the flow-on benefits for soil, water and biodiversity), that emissions reduction should be recognised and incentivised in some way.

Excessive reliance on land sector sequestration to offset other sectors' emissions is risky

While the potential to sequester carbon in agricultural lands is likely very large, relying on this to address emissions from other sectors involves myriad risks. For one, regulation within or outside Australia could at some stage require producers to target carbon neutrality of their own produce, which may limit the availability of land-based carbon credits for other sectors. Secondly, while some farmers in our network do participate in the carbon market and take advantage of the financial incentives it provides to implement positive management changes, there are risks associated with relying upon land-based carbon credits to offset expansion or establishment of highly emissions-intensive projects such as new fossil fuel developments. Several of our Advisory Panel expressed the view that other sectors (particularly new or expanded fossil fuel projects) should be required to reduce their own emissions and should be highly limited in their use of offsets. Farmers are already feeling the impacts of climate change, and new fossil fuel developments (even if offset with high-integrity credits) risk locking in emissions that could accelerate these impacts, and potentially unwind the positive changes in land management that the offsets from those developments helped to pay for.