

MEL for National Industry-led Carbon Farming Outreach Program

Prepared for
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(Ag Ex)


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Introduction

Background

The National Industry-Led Carbon Farming Outreach Program (CFOP) was a project supported by funding through the Department of Climate Change, Energy, the Environment, and Water (DCCEEW) under the Carbon Farming Outreach Program. This program supports Australian farmers and land managers, including First Nations land managers, to explore options for managing emissions and storing carbon. The CFOP project was led by the Grower Group Alliance (GGA), working with 40 farming and land management groups across the country.

CFOP helps farmers make informed decisions by training trusted advisers and providing clear, culturally appropriate information on emissions management and carbon opportunities.

In South Australia, the project was delivered by Ag Excellence Alliance (Ag Ex) and adopted an adviser-led extension model. Trusted agronomists and consultants with established client networks across the broadacre and livestock sectors were recruited, upskilled through targeted training, and supported to deliver farmer-facing workshops. This approach leveraged existing relationships to communicate complex concepts in a practical and locally relevant way.

This model was designed to increase reach and relevance, strengthen adviser capability and confidence, and provide a scalable framework for future emissions-related extension.

The SA project commenced in June 2024 and encompassed adviser training, four regional workshops, adviser delivered farmer workshops and four wrap up workshops, concluding on 31 March 2026.

Purpose

The purpose of this report is twofold:

1. **Assess the effectiveness of a fit-for-purpose adviser-led capacity-building model**, drawing on workshop data, adviser surveys and participant feedback.
2. **Provide a snapshot of emissions readiness in South Australia**, including adviser, farmer and industry capability, confidence and preparedness for emissions-related work.

How this report was prepared

This report presents a qualitative, narrative and reflective analysis of the CFOP project in South Australia, drawing on data collected across approximately 20 months of delivery from June 2024 to March 2026. Four data sources inform the analysis: **a baseline (KASA) survey and exit survey** completed by all 29 contracted advisers (capturing knowledge, confidence, skills, networks and reflections on project experience); **workshop evaluations** collected at each delivery stage and collated via Airtable; and four **regional trainer workshops** and **four regional wrap-up workshops** held in Port Lincoln, Clare, Keith and Burra.

Where quantitative data is presented, it is drawn from the surveys (n=29 advisers unless otherwise stated) and used to illustrate direction and magnitude of change rather than to make statistically precise claims. This analysis is qualitative — what advisers said, how their thinking shifted, and what the evidence collectively suggests about emissions advisory capability in South Australia.

One methodological note: the generic project survey instrument used for all workshop evaluation, was not fully tailored to an adviser cohort at the regional and wrap-up workshops. Future programs would benefit from purpose-designed evaluation tools aligned to the specific outcomes and audience of each delivery phase.

How the CFOP project was delivered in SA

Within South Australia, Ag Ex worked specifically with established and independent advisers (agronomists and livestock consultants) who hold trusted relationships with farmers, to assist them to convey complex messages, ensuring credible and consistent transfer of knowledge and skills.

Face to face training of farm advisers provided an opportunity to grow peer connections and to share knowledge and took data dense information into discussion of practical application on farms.

This approach was used in a previous project, 'Engaging farmers in south-eastern Australia into carbon farming through trusted, independent advisers'¹, whose rationale was that:

- by actively engaging and building the interest and capacity of experienced advisers with a strong grower client base, they will proactively and effectively engage with their clients about the topic;
- the growers, because of their trusted relationship with their adviser, will become more aware, informed and more likely to incorporate this knowledge into their decision-making and management practices more quickly.

Coutts' review of the project² demonstrated that the extension approach used by the Carbon Farming Knowledge team was *well suited to developing capacity around complex and public good topics such as carbon farming* and concluded that the model could be *directly applied to other topics and rapidly develop targeted capacity gains in advisers with direct benefits to their clients.*

He also showed that this model *'effectively built capacity within the engaged advisers and to develop understanding and materials directly relevant to growers. Having the ready capacity to respond to the longer-term opportunities for practice change as other drivers emerge (price of carbon, government policy, productivity benefits) practice change can be expected to occur in a more rapid and more efficient manner.'*

Finally, he concluded that it was *'important to have commercial arrangements with private advisers as projects targeting public good outcomes require private advisers to be engaged in a commercial 'partner' arrangement to ensure that time can be allocated and commitment obtained from them.'*

For these reasons and the pre-established willingness of 30+ advisers, this model of extension delivery was used for CFOP, leveraging the legacy of this project.

Adviser recruitment

Advisers were recruited during the planning phase of the project by contacting those that had participated in the 'Engaging farmers in south-eastern Australia into carbon farming through trusted, independent advisers project', new advisers known to Ag Ex and by putting a call out through the SA Livestock Consultants and Independent Agronomists Network.

Twenty-nine advisers were contracted for a training phase and an optional delivery phase as well as remuneration for days spent attending or running workshops.

As part of the training contract, each adviser committed to attending set training events (5 days of in person training) and contributing to dialogue as to how current carbon farming and emissions reduction knowledge and tools could be applied on farm.

¹ FACILITATING CHANGE IN COMPLEX CONTEXT. A study of the extension approach used in the Carbon Farming Knowledge Project Coutts J&R / 2016

² As Above

Adviser train-the -trainer delivery model

Figure 1 outlines the timeline of activities in the delivery of this project. The format of this project changed over time as the initial DCCEEW training proved to be lacking in the technical knowledge expected³. A second event ‘Carbon Farming Adviser training’ delivered by Cam Nicholson, was convened in Adelaide to fill this gap. The regional workshops that followed helped to meet specific knowledge gaps identified by each regional group of advisers and allowed for planning of landholder workshops. Landholder workshops allowed advisers to implement their new knowledge and leverage their expanded networks of professionals to deliver quality content to their loyal client base. The final regional follow up workshops wrapped up the project and gave advisers and others attending a chance to debrief on the project and provide insights for future programs.

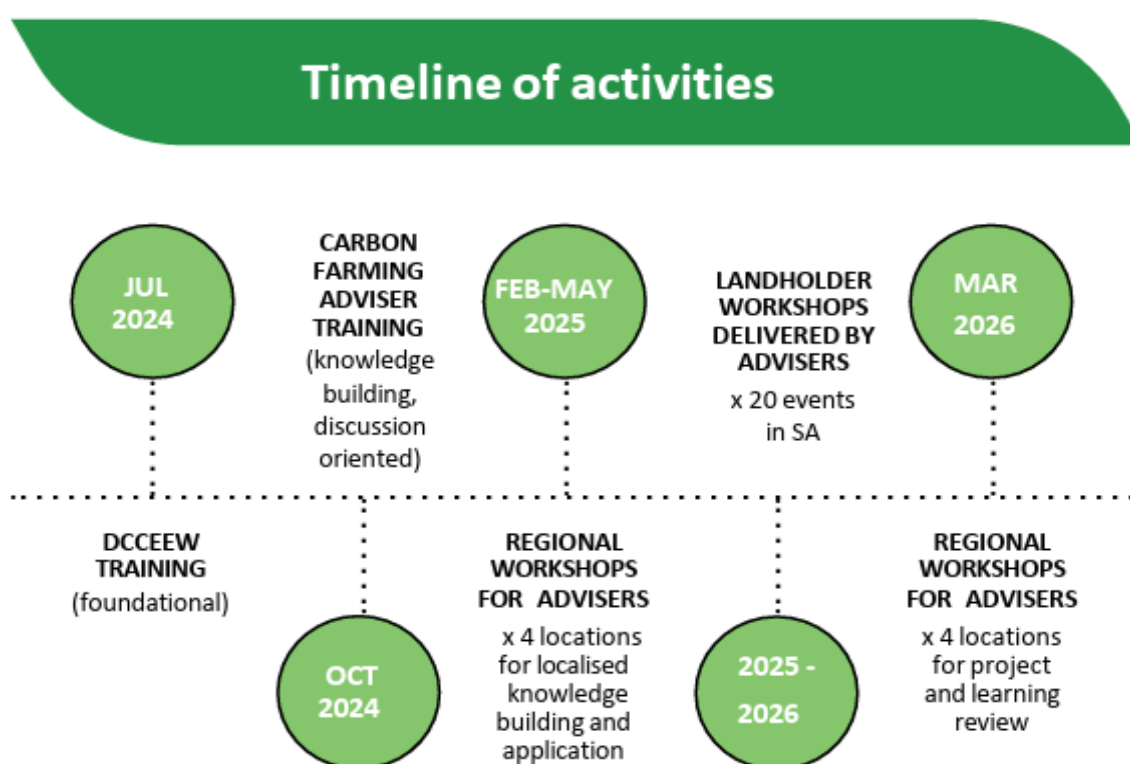


Figure 1: Timeline of activities for the CFOP project in SA.

Role of trusted relationships

Engaging advisers with a client base of farmers allowed the leveraging of trusted relationships to engage these farmers in carbon farming and on-farm emissions reduction knowledge and skill building, an area that has been a ‘hard sell’ to this segment of the farming community.

Anecdotal and workshop feedback indicated that many of these advisers and farmers would not have engaged in CFOP if the advisers had not been given financial incentives to invest their time to up skill themselves through training or encourage their loyal clientele to attend workshops. Many farmers would not have attended if their trusted adviser had not encouraged them to do so.

³ The DCCEEW training instead focused on the process of organising workshops rather than the technical content of the latest R&D on carbon farming and on-farm emissions reduction.

"EP advisers would not have run these workshops without being involved in the CFOP project — they used up capital to get clients along, but the outcome was largely very positive in terms of engagement." — Port Lincoln wrap-up workshop

"Even if consultants did not deliver a workshop, they still had conversations with growers." — Clare wrap-up workshop

"Lots of conversations with clients that didn't attend workshops, therefore it's made us better consultants as a result." — Clare wrap-up workshop

"Connecting with advisors and having similar training — all being on the same page when approaching farmers and navigating the messaging around Carbon Farming." — Exit survey respondent

What made this approach distinct

Paying advisers to upskill their carbon farming and emissions knowledge and skills and engage them in discussion of these topics as a collective was a critical and distinct part of the model. This was in recognition that carbon farming and on-farm emissions is not core business for both advisers and farmers and therefore will be overlooked in importance as a focus area for extension events and conversations unless advisers can be motivated to upskill and run events in the area.

Previous good will established during the 'Engaging farmers in south-eastern Australia into carbon farming through trusted, independent advisers' project with a core group of advisers showed that this model worked. It also demonstrated that engagement of adviser's networks to bring together farmers that may not have engaged in carbon farming and on-farm emissions reduction allowed a different segment of the farming community to be made aware of the latest research and developments in this area⁴.

Adviser starting point (baseline insights)

Twenty-nine advisers signed contracts to participate in this project. During the project four withdrew and three joined the project equating to 28 advisers at the end.

The cohort represented a diverse cross-section of agricultural advisory professionals, with backgrounds spanning **cropping and agronomy** (the most common specialisation, cited by 93% of respondents when combined with related disciplines), **livestock** (39%), and **business advice** (25%). The majority were experienced practitioners, as evidenced by their self-assessed training and advisory skills, operating across a range of farming system contexts.

Nearly **40% described their professional network as limited** to only a handful of fellow advisers or colleagues, and a further **7% had no professional network at all** in relation to farm emissions and carbon farming. Only **14%** could draw on an extensive national or international network of peers. This structural isolation meant that many advisers lacked reliable access to peer knowledge, emerging research or specialist expertise in this rapidly evolving field, a significant gap that limits their ability to provide reliable advice in this space. Finally, carbon farming and emissions reduction are also a low priority for most advisers relative to their core business commitments.

Initial confidence, capability and concerns

Advisers' self-assessed knowledge of both **carbon farming** and **emissions reduction** returned identical mean and median scores of **3.0/6 (Developing) for carbon farming and 3.0/6 (Developing) for emissions** (Figure 2), with the largest single group in both cases (14 and 15 respondents

⁴ Other approaches used for delivery by other CFOP partners instead relied on promotion of 'public' events via a range of networks to disseminate the carbon farming and on-farm emissions messages.

respectively) clustered at this mid-range level. Only **2 respondents** rated themselves as **Proficient** in either area, while a small number (Figure 2) identified as having only **Minimal** knowledge, highlighting some variability in the cohort.

When asked specifically about their **ability to apply this knowledge in practice**, that is, their current skills to assist farmers and land managers with on-farm emissions and carbon farming advice, the group scored marginally lower at a mean of **2.9/6**, sitting at **Developing** threshold. This subtle but meaningful difference suggests that even among those with some theoretical grounding, translating knowledge into **practical advisory capability** represented an additional and distinct challenge.

In notable contrast, the cohort demonstrated considerably stronger capability as **trainers and facilitators** more broadly. Self-assessed training skills returned a mean of **4.1/6** and a median of **4 (Effective)**, with **46%** rating themselves as **Effective** and a further **29%** as **Proficient**. Only **21%** sat at the **Developing** level for training skills, and **4%** identified as **Guru/Master** level practitioners.

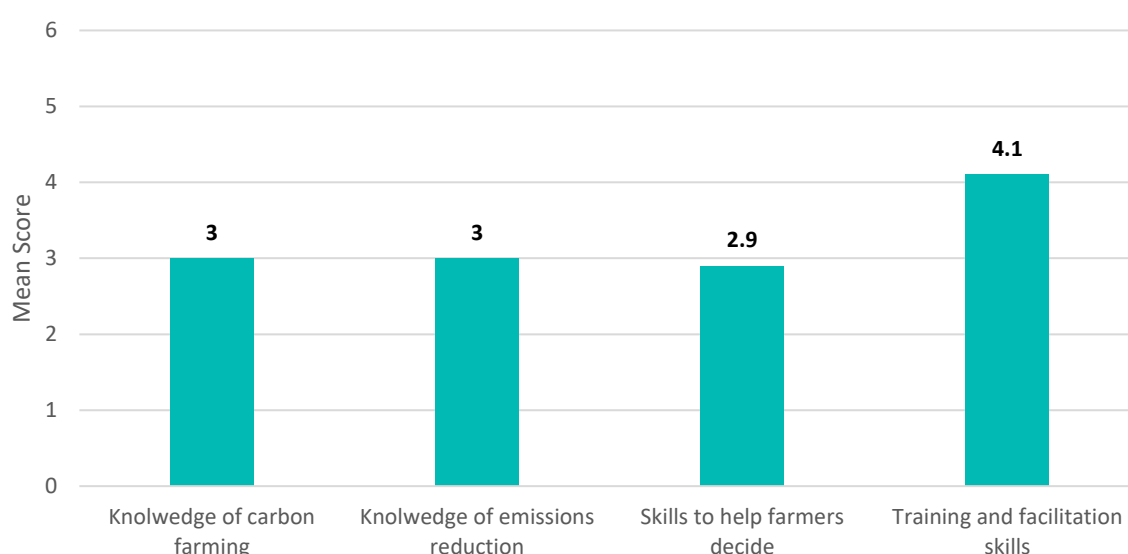


Figure 2: Adviser self-assessed capability at CFOP entry (6 = Guru/Master, 5 = Proficient, 4 = Effective, 3= Developing, 2 = Basic, 1 = Minimal)

This divergence is one of the most significant findings from the baseline data: the cohort comprised **skilled, experienced advisory professionals whose primary development need was subject-specific knowledge** rather than the ability to communicate, train or advise. This profile represented a strong foundation for rapid capability uplift, the tools for delivery were already in place, what was needed was the content to deliver through CFOP.

Confidence and current advisory activity

At CFOP entry, only **11% of advisers** were actively providing carbon farming or emissions reduction advice to farmers and land managers. A further **43% described themselves as developing** in this area — motivated and in transition, but not yet operational. Nearly half (**46%**) **were not advising in this space at all**, reflecting how early-stage the field remains within mainstream agricultural advisory practice.

Among those who were engaging with farmers on these topics, **confidence levels were mixed**. When asked about their ability to discuss and plan individual on-farm emissions actions with a client, only **11% expressed high or full confidence**. A further 11% described themselves as not very confident, while the remaining active advisers sat in mid-range categories. Similarly, confidence in the **quality of referrals** made to other experts or information sources was moderate, with no respondents expressing high confidence in the reliability of those referral pathways.

Qualitative responses added important context to these confidence ratings. One adviser acknowledged that *"there are a lot of gaps in what we can currently provide farmers"* — a candid reflection from a highly networked, experienced practitioner that speaks to the breadth of the knowledge frontier in this space. Another raised concerns about the *"consistency and repeatability of carbon measurement protocols"*, highlighting scientific uncertainty as a source of professional hesitation. A third noted that the quality of available expertise in the referral network was *"a bit of a lottery"*, underscoring the absence of curated, trusted advisory infrastructure around carbon farming at this point in time.

Adviser perceptions of emissions reduction and carbon farming at CFOP outset

Perceived Value for Farmers

Perhaps the most strategically important finding from the baseline data relates to how advisers themselves perceived the value of emissions reduction and carbon farming practices for their farmer clients. The largest single group (39%) rated this value as only **moderate**, with a further 21% attributing only **'some' value** and 7% **'minimal' value**. Only 29% believed there was significant or very significant value for farmers in adopting these practices.

This is a critical insight. Advisers who are not themselves **convinced of the value proposition** are unlikely to proactively raise these topics with clients, advocate for adoption, or invest their own time and credibility in building expertise in the area. The data suggests that at project entry, **adviser conviction lagged behind awareness**. Many understood that carbon farming was an emerging issue but had not yet been persuaded that it represented a genuine and material benefit for the farmers they serve or themselves.

Perceived Barriers

When asked to identify the two biggest barriers facing farmers in implementing emissions reduction or carbon farming practices, the leading responses were **return on investment and profit advantage** (43%) and **knowledge and skills of farmers and land managers** (43%), followed by **lack of access to specialist advisory expertise** (36%). Notably, advisers effectively **acknowledged their own profession's gap** in this space as a key systemic barrier. This is a moment of self-awareness that both validates the project's purpose and reflects the cohort's professional integrity.

The barriers identified were consistently multi-layered, with many respondents selecting four or more simultaneously, suggesting that challenges are perceived as **interconnected and systemic** rather than isolated. Financial barriers such as affordability ranked lower (18%), indicating that the primary obstacles are **informational, cultural and structural** rather than purely economic.

Future Outlook

Despite moderate current engagement and mixed confidence levels, the cohort expressed a notably **optimistic forward-looking view**. A majority (57% of advisers) anticipated that carbon farming advice would become a **high or very high** function within their role over the next five years. This contrasts sharply with current activity levels and reflects an adviser cohort that can see where the sector is heading, even if they do not yet have the tools to lead that transition.

This gap between **present reality** and **future anticipation** is perhaps the clearest expression of the project's value proposition. Advisers arrived knowing they needed to build capability in this space, recognising its growing relevance, but lacking the knowledge, confidence and network infrastructure to act on that recognition.

Key Findings from baseline data

The baseline data revealed an adviser cohort of **capable, motivated and professionally experienced advisers** at the beginning of knowledge transition. Their starting point was characterised not by

disengagement or resistance, but by a genuine **subject matter knowledge gap** set against a backdrop of strong advisory skills, growing awareness of future need, and an honest recognition of the systemic barriers (including their own profession's limitations) that stand between current practice and the widespread adoption of carbon farming by Australian farmers and land managers.

The CFOP entered at a critical moment: early enough to shape the trajectory of this advisory field, and with a cohort well-positioned to rapidly translate new knowledge into practice.

Adviser journey through the project

Learning and confidence progression

Adviser learning and confidence was measured periodically throughout the project at the completion of the following stages:

1. DCCEEW training
2. Carbon Farming Adviser training
3. Regional training workshops
4. Landholder workshops
5. Regional wrap up workshops

1. DCCEEW training

It was expected the initial training by the DCCEEW was designed to cover key aspects of the project and provide initial knowledge and information around carbon farming and emissions reduction. However, anecdotal feedback from the event showed that this missed the mark from the adviser's point of view, and many felt they were still lacking vital information and skills regarding the technical content of workshops they were contracted to deliver. Instead, it focused on using the handbook and how to use the material and deliver the training rather than understanding the content and delivering training to the participants.

Unfortunately, there is no formal record of feedback from the event that can be drawn on to monitor the progress of the advisers' knowledge and skill development.

2. Carbon adviser training

Following the feedback from the initial training, a second training day was organised in Adelaide by Ag Ex to address the advisers need for specific technical training and understanding. Cam Nicholson was engaged to deliver training face to face but due to personal injury, this training was delivered online by Cam to the assembled advisers. Despite this change of plan and many technical glitches during the day, Cam's sessions delivered a high value of information for the advisers with **approximately 70%** of adviser responses rated sessions as "**Highly Valuable**", a **strong overall result** for a technically complex training project.

The training saw **85% of participants significantly increase their knowledge** and **78% felt more confident** discussing carbon farming with clients while **93%** reported their peer network was strengthened (Figure 3). This is a big improvement on the baseline results and shows that the CFOP project was heading in the right direction.

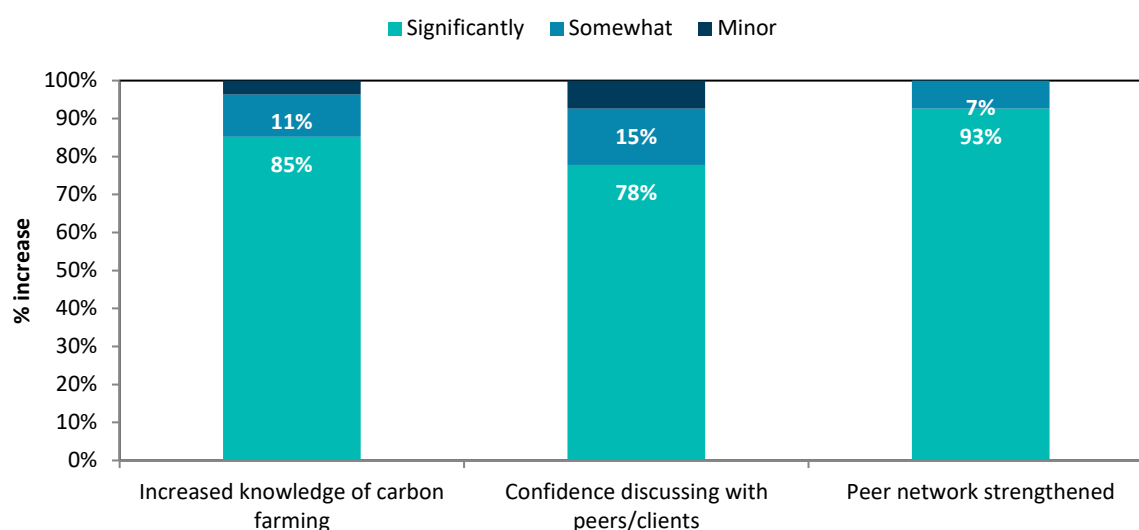


Figure 3: Feedback from advisers attending carbon adviser training showing their increase in knowledge, confidence and peer networks.

3. Regional workshops

The four regional workshops run in SA were designed to add even more detail to the adviser's need for complex information and skills in the carbon farming and emissions space. Each workshop had its own agenda to deliver on the specific needs of its localised cohort and included time for planning the workshops for the next phase of CFOP delivery. All were in person events and included the contracted advisers as well as invited leading farmers or other key advocates for carbon farming and emissions reduction from industry.

Ninety-two people in total attended the 4 regional events with **48% representing agribusiness (including the advisers), 15% farmers and land managers** and the remainder other industry representatives and stakeholders. The diversity of participants allowed the 29 contracted advisers to interact and hear other perspectives, with a high level of engagement reported by the facilitator. The discussions covered the GAF and AIA tools (and their imperfections), time requirements, and practical value for advisers and farmers.

Post workshop evaluation of the **adviser cohort** (n=44 noting that this included advisers not contracted by the CFOP project) showed **69%** had a **moderate to significant** gain in knowledge on the day and **69%** rated their confidence in their ability to make a decision to lower emissions at **4-5 stars** (Table 1).

Table 1: Summary of feedback from the advisers cohort that attended the regional workshops.

Theme	Finding
Knowledge gained	Moderate-high - 69% moderate to significant
Content relevance	High - 72% moderate to significant needs met
Intent to act	Strong - 72% likely/extremely likely to consider strategies
Materials utility	Very high - 85% likely/extremely likely to reuse
Confidence	Moderate-high - 69% rated confidence as 4-5 stars
Trainer quality	Excellent - 90% rated 4-5 stars
Barriers	Tool limitations and specialist access are primary gaps
Top resource needs	Case studies, decision tools, peer learning
Critical gaps	AIA tool completion, value proposition clarity, practical adoption support

These four workshops collectively demonstrated a maturing adviser network that was increasingly confident, pragmatic, and action-oriented around carbon farming, while remaining candid about the

significant practical barriers (tool imperfections, data management burdens, unclear policy signals, and uneven supply chain readiness). The discussion-based, locally contextualised, peer-learning model was proving to be highly effective. The clearest message across all four events was that **sustained investment in adviser capability and ongoing network support was essential**. This is not a one-off training need but a long-term capacity-building requirement in a rapidly evolving landscape.

4. Landholder workshops

Advisers were encouraged to run events and workshops to extend their new understanding of carbon farming and emissions reduction to their loyal client base. The CFOP project provided up to \$16K per event to cover adviser time, venue and catering, transport and other guest speaker costs.

Twenty-three of the 28 advisers were involved in the delivery of workshops with their clients, some were involved in multiple workshops (Table 2). Of the five that did not participate, some were new to their roles/employment and others lacked the opportunity due to tough seasonal conditions in their local area.

Table 2: Number of advisers who organised and/or delivered workshops

# workshops delivered	# advisers
0	5
1	17
2	3
3	1
5	1
7	1

Advisers delivered 19 workshops in SA to 390 participants (Figure 4).

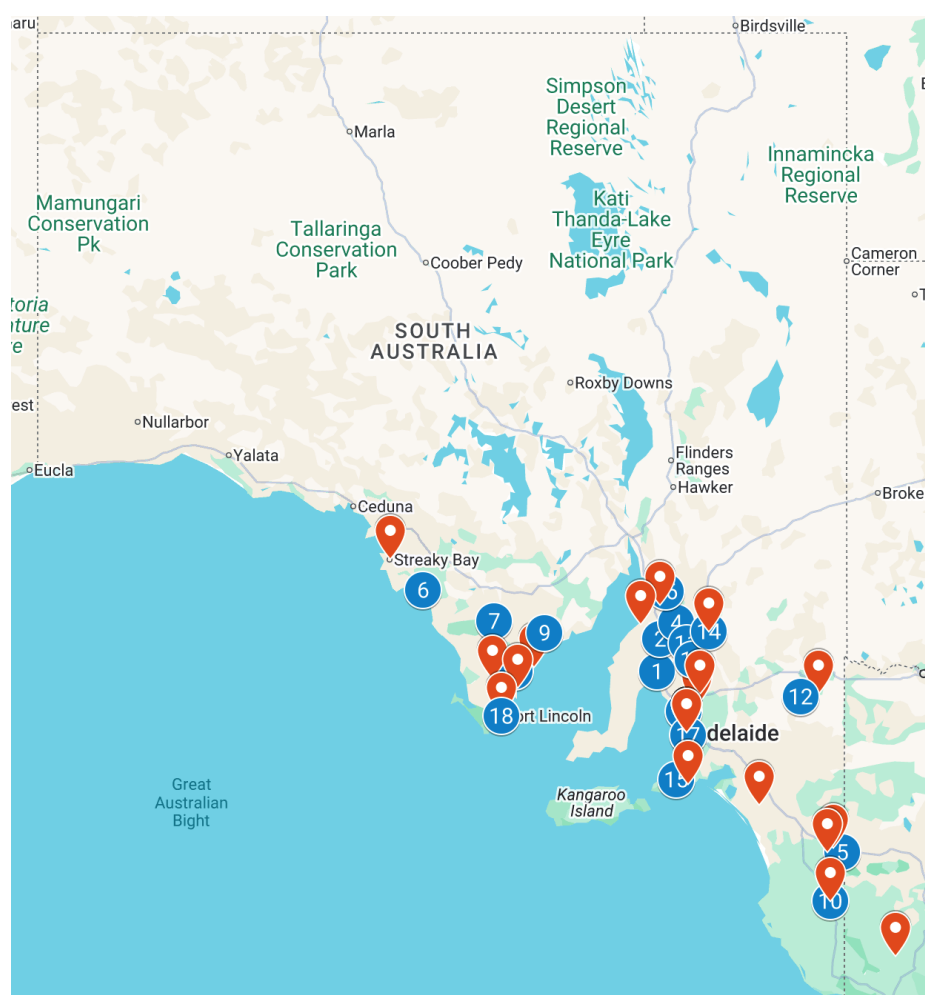


Figure 4: Location of advisers and workshops (advisers red marks, workshops blue circles)

The take home messages from these workshops were (from attendee surveys i.e. mostly farmers):

- **The workshops worked — knowledge and confidence outcomes were strong.** With **78%** of participants reporting **moderate to significant** knowledge gains, and **67%** rating their post-workshop confidence to make emissions-related decisions at **4 or 5 stars**, these results represent a successful extension of a technically complex topic. Trainer ratings reinforce this — **62%** of attendees gave a perfect **5/5** score.
- **The gap that remains is structural, not educational.** The limiting factor for on-farm action is **no longer awareness or confidence**; it is the absence of a compelling commercial case. Return on investment, business risk, and affordability dominate the barrier list. Participants understand the issue and feel capable of acting; what they cannot yet see is a clear financial pathway that makes action worthwhile relative to competing farm priorities.
- **Intended next steps are deliberative rather than decisive.** Despite strong confidence scores, the most common planned actions are discussing with peers/farm team and doing further research and were not implementing practices. This suggests participants feel informed but are still waiting for external conditions (clearer policy, better financial incentives, proven local examples) before committing. The confidence is real; the trigger to act is still missing.
- **Practical calculation tools remain the most urgent support need.** Across open-text responses, the demand for simple, accessible emissions calculators is the loudest single voice. Participants want to quantify their own baseline ('know their number') before making decisions, without that, confidence doesn't translate to action.

5. Wrap up regional workshops

The last phase of the CFOP was wrap up regional workshops with advisers to explore experiences and plan for the next project (Low Emissions Intensity Farming Systems - LEIFs).

Fifty-three people participated in these workshops with the 29 advisers. The post workshop feedback completed by 16 advisers (other participants were removed from the analysis) shows that **57% gained knowledge** at the **moderate to significant** level, **57%** were likely or extremely likely to **consider ER/CF in future planning** and **81%** said their **confidence in their ability to lower emissions** was **4/5 stars** (Table 3).

Table 3: Summary of feedback from the advisers that attended the wrap-up regional workshops.

Theme	Finding
Knowledge gained	Medium — 57% moderate to significant
Content relevance	Medium — 50% moderate to significant needs met
Intent to act	Strong — 67% likely/extremely likely to consider strategies
Materials utility	Medium — 62% likely/extremely likely to reuse
Confidence	High - 81% rated confidence as 4-5 stars
Trainer quality	Excellent — 94% rated 4–5 stars
Barriers	Return on investment, farming systems impact
Top resource needs	Case studies, decision tools, peer learning, trials and demos of practices
On-going needs	Keeping up to date in the field, more tools, resources and case studies, the latest developments

Shifts in attitudes and comfort with complexity

The most systematic way to understand attitudinal shift across the project is through the stages-of-change framework used in the wrap-up workshops, which mapped adviser and farmer movement across five stages: **Ignorance** → **Awareness** → **Intent** → **Perform** → **Maintain**.

Across all four regional wrap-up workshops (Port Lincoln, Clare, Keith and Burra), facilitators consistently reported the same pattern: **advisers** assessed themselves as having moved from the **Awareness–Intent** range at project entry to the **Intent–Perform** range by project end. **Farmers** who attended CFOP workshops were generally assessed as having moved from **Ignorance to Awareness**, a meaningful but incomplete transition, and the right expectation for a first-engagement project.

This framing is important. *CFOP was not designed to deliver on-farm practice change directly*; it was *designed to move advisers and farmers along the adoption continuum to the point where practice change becomes possible*. By that measure, the project succeeded.

The exit survey data provides further evidence of attitudinal shift. At baseline, only **29%** of advisers believed carbon farming had **significant or very significant value** for their farmer clients. By project end, the average score on this question had moved to **3.79 out of 6**, a modest but real improvement in adviser conviction. More telling, **66% of advisers at exit** described meaningful knowledge growth, and **55%** rated carbon farming as a **moderate or high future priority** for their role. This is a notable shift for a cohort that was largely disengaged from this space at project entry.

Qualitatively, attitudinal shift is most visible in the language advisers now use. Where baseline responses described **hesitation, uncertainty and avoidance**, exit survey and workshop responses consistently describe **confidence, initiation and ownership**:

"Before being involved with CFOP I was not confident at all to discuss carbon related topics with farmers. Now I am more informed, connected with industry experts and able to provide some guidance with confidence that it's helping the farmer understand and develop a plan for the future." – **Exit survey response**

"I feel more likely to have a conversation that I would have avoided before." – **Exit survey response**

"I've got my head around it now." — **Port Lincoln wrap-up workshop**

Figure 5 shows how advisers and farmers changed over the course of the CFOP project. Advisers entered at the **Awareness–Intent** stage and moved to **Intent–Perform** by program end, with some reaching Perform. Farmers who attended CFOP workshops generally moved from **Ignorance to Awareness**, with some reaching Intent. The gap between the two tracks is deliberate, the model was designed to build adviser capability first, creating the conditions for sustained farmer engagement over time.

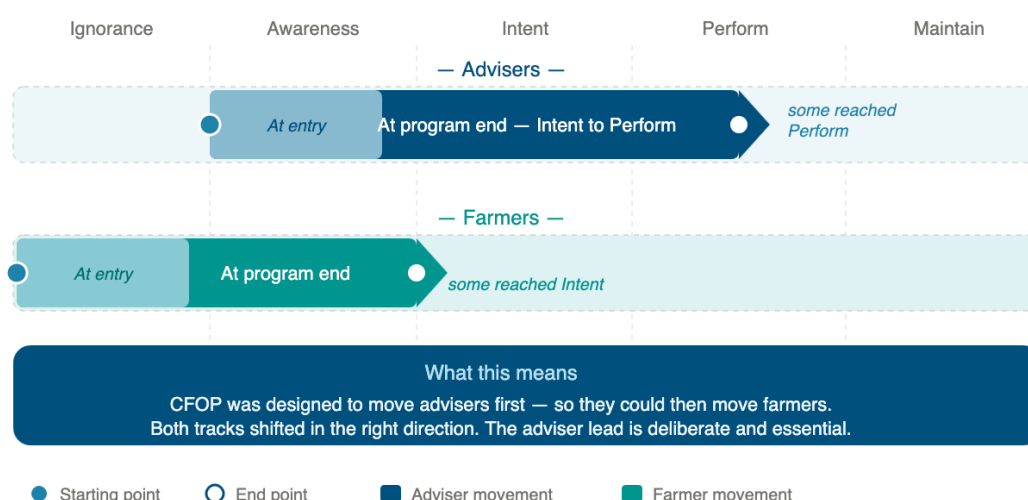


Figure 5: Adviser and farmer movement across the stages-of-change framework over the course of CFOP.

Reflections from training and delivery – adviser exit survey

The Table 4 below summarises the key themes from adviser feedback across both the advisory workshop and wrap-up events.

Table 4: Key themes from the adviser feedback across initial regional and wrap up events.

Theme	Overall finding
Knowledge building	Strong across both events
Content relevance	Higher at advisory workshop; gap at wrap-up
Intent to act	Strong at advisory level; more cautious at wrap-up
Materials utility	Consistently high — best result across both surveys
Confidence	Moderate and still developing across both cohorts
Trainer quality	Excellent across both events
Key unmet need	Completed tools, case studies and a clear value proposition
Engagement posture	Active learners at regional adviser's event; watchful waiters at wrap-up

What the delivery data tells us

Regional workshops served their purpose well in bringing together advisers to deepen their technical understanding of carbon farming and on-farm emissions reduction, and generally increasing the knowledge, skills and confidence of participants to use tools and share information with their clients.

By the end of the landholder delivery phase, 23 advisers had been involved in delivering 19 workshops to 390 farmers. This was an average of 20.5 farmers per workshop and an estimated reach equivalent to 65%⁵ of each adviser's personal client list. Given the complexity of carbon farming as an extension topic and its relatively low priority for most farm businesses, these figures reflect the clear advantage of having trusted advisers bring their own clients to a workshop rather than relying on open invitations or mailing lists. The adviser relationship was the draw card.

⁵ This figure came from dividing the number of farmers reached per adviser by the average assumed client list size of 20 per adviser.

The project did not have the resources to track individual adviser advancement in knowledge, skills, attitudes or confidence at each stage of the project. This is an acknowledged limitation. Ideally, future projects would build in a longitudinal tracking mechanism to demonstrate how individual advisers progressed and to more precisely attribute that change to specific project components. This would strengthen the evidence base for the adviser-led model and make the case for ongoing investment more compelling.

What changed in practice

How advisers are now engaging farmers

The end-of-project data reveals a **fundamental shift** in how advisers are engaging farmers on carbon and emissions topics, moving from **avoidance to initiation**. At baseline, only **11% of the cohort** (Table 5) were **actively providing carbon or emissions advice**. By project end, **79% had received farmer follow-up requests** across at least one topic area, with an estimated 200+ farmers reached through advisory contact generated directly by CFOP.

The nature of engagement has also changed. Advisers report moving beyond reactive responses to farmer questions toward proactively raising carbon and emissions topics within broader farm business conversations. Several noted they are now **"more likely to have a conversation they would have avoided before"**. This is a behavioural shift that reflects not just knowledge gain but a fundamental change in professional confidence and identity.

Engagement is most active around on-farm emissions reduction practices and general carbon farming conversations. Calculator support and local case study discussions represent an emerging middle tier, while formal carbon project advice remains limited, consistent with the broader finding that farmer demand for project-level support is minimal at this stage.

Table 5: Farmer advisory follow-up demand by topic since CFOP commencement

Topic	Never	Rarely (1–3)	Occasionally (4–10)	Moderate (11–24)	Great (25+)	Est. Farmers Reached
On-farm practices to reduce emissions	10%	34%	38%	14%	3%	~204
General CFOP follow-up	3%	38%	41%	14%	3%	~204
Carbon calculators	3%	59%	31%	7%	0%	~120
Local case studies	24%	41%	21%	14%	0%	~105
Carbon project methodologies	24%	62%	14%	0%	0%	~60
Independent consult / tailored farm plan	48%	34%	14%	0%	3%	~55

Depth and nature of emissions conversations

The depth of emissions conversations has shifted considerably. At baseline, most advisers operated at an awareness level. That is able to acknowledge carbon as an emerging issue but unable to engage with specifics. By project end, **79%** rated themselves as **Moderately Confident** or above in providing individual on-farm advice, with the majority capable of moving beyond generic information to client-specific discussions.

The most significant conceptual shift shaping these conversations is the reframing of emissions through the lens of emissions intensity rather than absolute carbon footprint. Advisers consistently report that connecting emissions performance to farm productivity and profitability has transformed the quality and receptiveness of farmer conversations. This provided a positive, business-relevant entry point into what can otherwise feel like a compliance-heavy topic:

"Linking efficiencies in farming to emissions intensity is a no brainer for recommending practices that drive increased productivity. It also allows a science and informed perspective to diffuse fears or misinformation." -exit survey respondent

Conversations now regularly cover scope 1, 2 and 3 emissions; the distinction between carbon farming practices and formal carbon projects; supply chain obligations and their implications for farmers; and the use of emissions calculators as a starting point. *"Know your number"*, establishing an emissions intensity baseline, has emerged as the **most practical and accessible first step** advisers are guiding farmers toward.

Evidence of behaviour change

While widespread farmer behaviour change was not a realistic expectation within the project's timeframe and limited project scope, there are meaningful early indicators of change at both the adviser and farm level.

At the adviser level, behaviour change is clear: advisers are initiating carbon conversations, delivering farmer workshops, using calculators with clients, and referring farmers to appropriate expertise with greater confidence than at project entry. Several have become recognised go-to contacts within their networks for carbon and emissions guidance. At Keith, one adviser described now being ***"the go to for guidance in this space to assist or provide direction for help."***

At the farm level, respondents reported early evidence of improved record keeping, increased uptake of soil organic carbon testing, and greater consideration of emissions implications in input decisions such as liming. One adviser reported successfully guiding 75% of their clients through a baseline emissions assessment with a third-party facilitator, the strongest direct evidence of on-farm impact generated through CFOP. Advisers also noted existing farmer activity in their regions around green finance and supply chain schemes, though these were not directly attributed to CFOP workshop participation.

The most honest assessment is that CFOP has successfully changed adviser behaviour, the necessary precondition for farmer behaviour change at scale. The pipeline is established; the volume flowing through it will grow as market conditions and policy settings evolve.

Figure 6: shows the progression in knowledge, understanding and confidence at each stage of CFOP highlighting the gradual increase in knowledge and confidence as the program progressed.

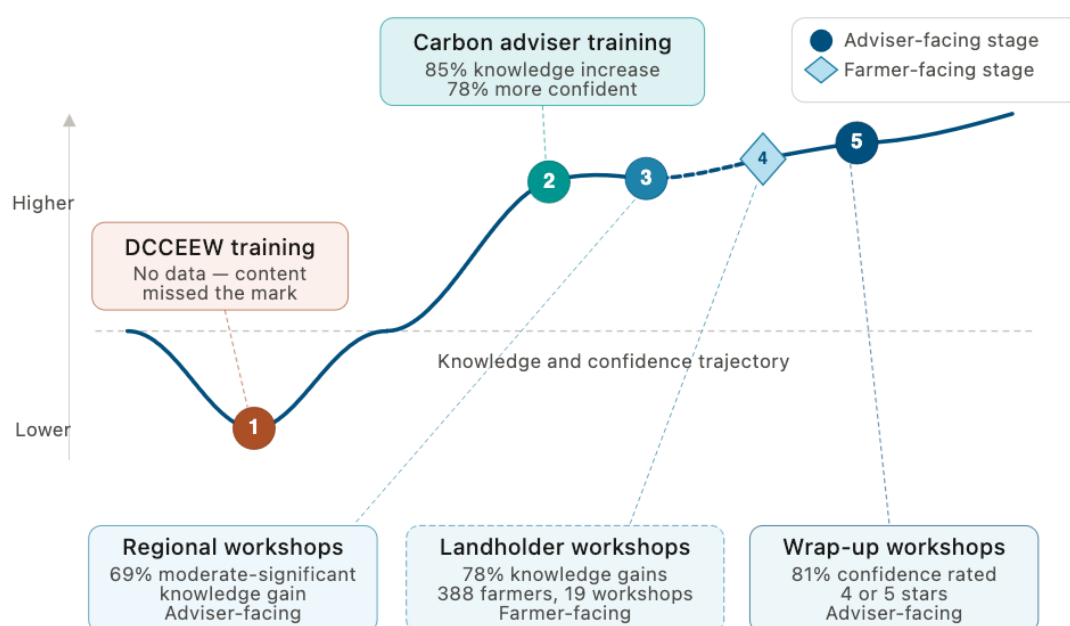


Figure 6: Adviser knowledge and confidence progression through the CFOP project stages

System-level insights

Adviser capacity across SA — snapshot and state of play

CFOP has produced a cohort of 29 advisers across South Australia whose carbon and emissions capability has improved, representing an addition to the state's agricultural advisory infrastructure. The cohort is diverse, spanning cropping and agronomy (93%), livestock (39%) and business advice (25%), providing broad farming system coverage across regions.

Self-assessed knowledge scores at project end sit at **4.3/6** for **carbon farming** and **4.4/6** for **farm emissions** — both in the **Effective to Proficient** range (Table 6).

Table 6: Key capability metrics — baseline vs end of project

Measure	Baseline (Start)	End of Project	Change
Knowledge of carbon farming	3.0/6 (Developing)	4.3/6	↑ Major gain
Knowledge of farm emissions	3.0/6 (Developing)	4.4/6	↑ Major gain
Skills to help farmers decide on CF/ER	2.9/6 (Developing)	4.3/6	↑ Meaningful gain
Confidence to advise individual clients	11% high/full confidence	44% Confident or above	↑ Major shift
Actively advising farmers on carbon/emissions	11% operational	~79% receiving farmer requests	↑ Major shift
Perceived value for farmers (GHG practices)	25% significant/very significant	28% significant value	↑ Modest improvement
Network strength	3.04/5 (pre-existing)	Moderate improvement	↑ Incremental

Advisory confidence shows **44% rate themselves Confident or Very Confident** in providing individual on-farm advice. This shows that **knowledge of carbon farming and farm emissions** and **skills to help farmers decide** are now on par with the advisers **training and facilitation** skills at **4.3-4.4/6** highlighting the success of CFOP in building capability.

Readiness to support emissions reporting and planning

The cohort is broadly ready to support farmers through the early stages of emissions engagement — awareness raising, emissions intensity conversations, calculator use and basic baselining. Readiness is strongest across five dimensions:

- **Capability** has been significantly lifted, with knowledge scores moving from Developing (3.0 & 3.0/6) to between Effective and Proficient (4.3 & 4.4/6)
- **Confidence** has shifted dramatically, with 44% now Confident or Very Confident at individual advisory level
- **Preparedness** is evident in advisers initiating emissions conversations without waiting for farmer-led demand
- **Linkages** are stronger, with a well-connected peer network and clearer pathways to specialist expertise
- **On-ground support** is emerging, with advisers actively delivering workshops and guiding farmers through calculator processes

Readiness is more limited for advanced emissions reporting, carbon project development and tailored farm-level carbon planning, areas that require deeper technical expertise and more established market demand than currently exists.

Current ability of advisers to assist landholders

The cohort's current ability to assist landholders can be mapped across a practical spectrum as shown in Figure 7. The key insight is how advisers have developed their skills and knowledge throughout CFOP and where they are headed to as the next frontier.

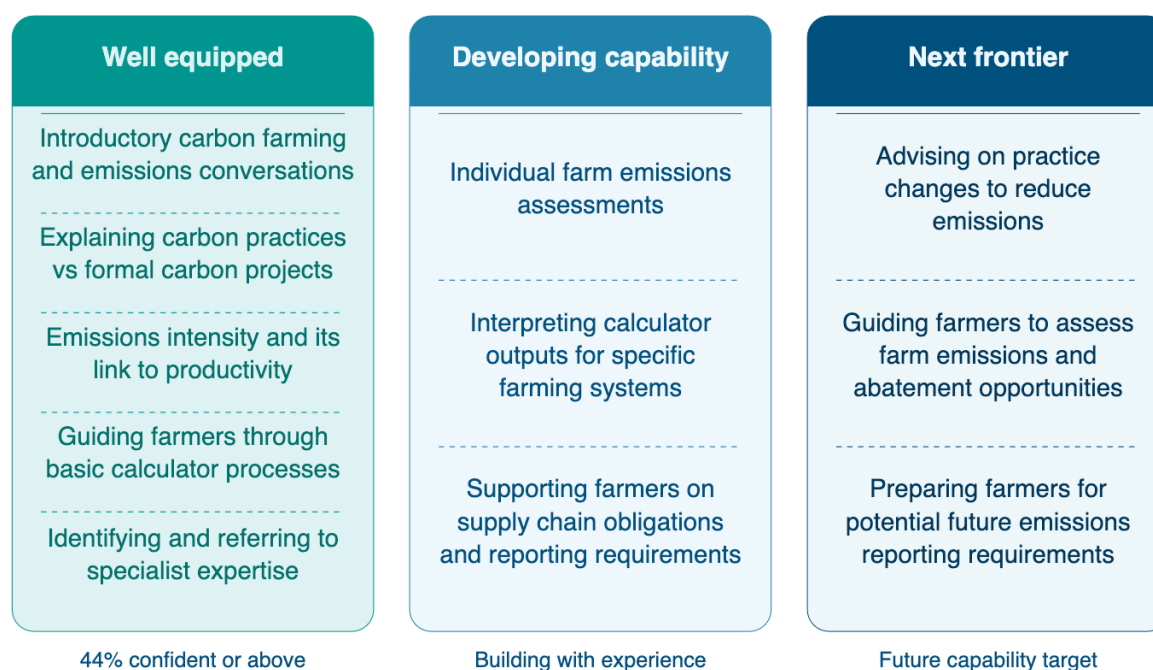


Figure 7: Current adviser capability – what advisers can do now and where they need to go

The extent to which advisers understand emissions concepts, tools and pathways

Understanding across the cohort spans a wide spectrum and is strongest in the conceptual middle ground.

Foundational carbon farming/emissions reduction literacy is now near universal. All advisers understand basic principles of farm emissions, the distinction between sequestration and abatement, and the relevance of scope 1, 2 and 3 emissions to farm businesses.

Applied tool knowledge —use of carbon accounting calculators such as G-GAF is solid but not yet deep. Most advisers can guide farmers through basic calculator processes, but many acknowledge remaining questions about assumptions, data inputs and the interpretation of outputs. Calculator confidence is functional rather than expert. The proliferation of competing tools (GAF, AIA and others) was consistently identified across wrap-up workshops as a source of confusion for both advisers and farmers, and the livestock calculator was specifically flagged as significantly more complex than the cropping equivalent.

Pathway knowledge — understanding the full landscape of carbon project methodologies, ERF mechanisms, legal requirements and market access, remains the weakest area. This is both appropriate given the project's scope and honest given the complexity of the space and was not the end goal of CFOP. Most advisers are clear about the boundaries of their current knowledge and being able to refer farmers to the relevant expertise is more important than knowing the system themselves. Advisers are now have specialist insight into making business decisions and the application of emissions actions on farm. They are positioned to support farmers to make practice change as new data and evidence emerge.

Strengths and pressure points in the advisory system

Figure 8 shows the strengths and pressure points in the advisory system. Skills in developing livestock emissions accounts is an important gap. Advisers and farmers working in mixed farming and livestock systems consistently found the livestock calculator more complex, the science is still evolving, and the pathway to value less clear than in broadacre cropping contexts.

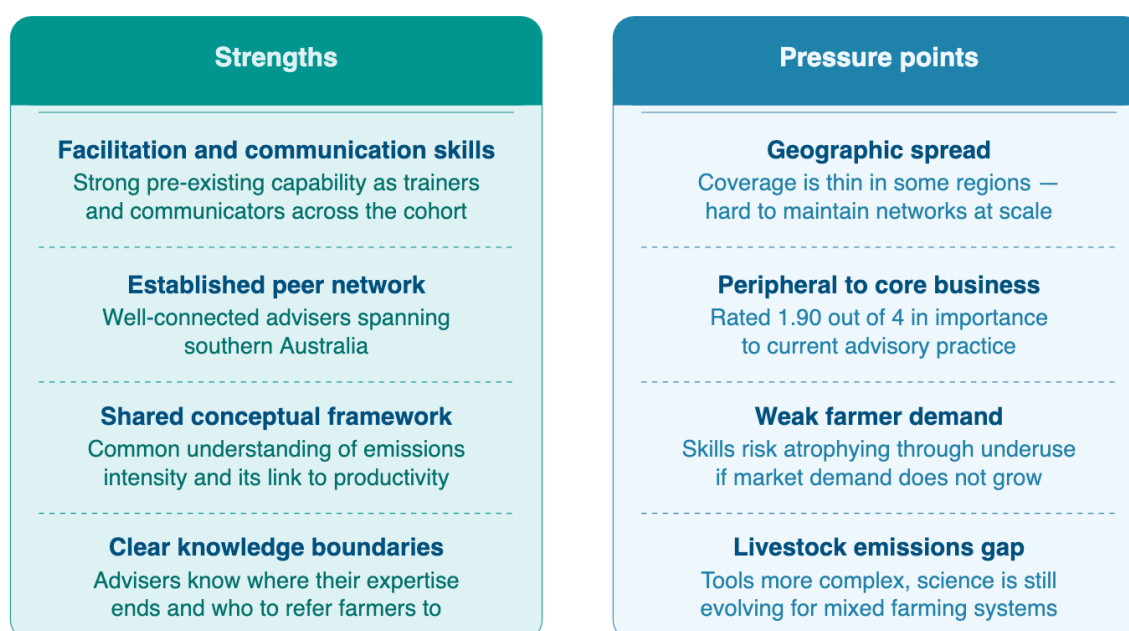


Figure 8: Strengths and pressure points in the advisory system

Networks, linkages and knowledge flow

How connections formed and strengthened

Improved networks and **peer connection** was the most valued project outcome, cited by **76% of exit survey respondents as a key benefit of CFOP**, ahead of knowledge gain (69%) and confidence building (48%). This is reinforced strongly across all four regional wrap-up workshops, where peer connection was independently described as one of the project's defining achievements.

Network improvement was rated at 3.0 out of 5, a moderate gain. The baseline data told a more specific story: while advisers were **well-connected as practitioners**, **nearly 40% had limited peer networks specifically in the carbon farming and emissions space**, and **7% had none at all**. CFOP directly addressed this gap, building a functioning professional community around a topic where most advisers had previously been working in isolation. For those who came in most isolated from carbon-specific expertise and peer knowledge, the network gain was possibly greater than the aggregate score suggests.

Across the Keith wrap-up workshop, advisers rated how well connected they felt to others at 6–7 out of 7, with comments including:

"Got me out of my comfort zone,"

"Advisers work on their own so it was good to come together, now comfortable picking up the phone to each other,"

"Good statewide networking opportunity."

Qualitatively, the connections formed through CFOP are **durable, cross-disciplinary** and **future-oriented**, a practical, functioning professional community rather than a passive contact list. Several specifically noted that connections have extended beyond carbon farming into broader agronomy, soil management and farm consulting:

"The connections I have made will be long lasting and ongoing well into the future. These connections are not only within the carbon farming areas but cross over to general agronomy, soil management and farm consulting." – exit survey respondent

"I now know where to go and who to ask regarding the latest developments in this space." – exit survey respondent

"It's a network we can now lean on as carbon accounting becomes more mainstream and implemented into local businesses over the next decade." – exit survey respondent

Whether farmers now have clearer pathways to access emissions tools, calculators and support

At the Keith wrap-up workshop, **advisers rated farmer pathway clarity at 5–6 out of 7**, with the consistent qualification that awareness of pathways does not yet equal uptake:

"They have a clearer path, but (most) haven't stepped on the path." – Keith wrap-up workshop

At Burra, scores ranged more widely (2–6 out of 7), with advisers noting fragmented messaging, too many competing tools, and the absence of a clear "why" as ongoing barriers to farmer action.

The evidence from both the exit survey and wrap-up workshops suggests that farmer pathways to emissions support have improved, primarily through the improved capability of their trusted advisers. Farmers who work with CFOP-trained advisers now have access to professionals who can guide them through calculator processes, explain emissions concepts in farm business terms, connect them to specialist expertise, and help them interpret emissions information.

That said, awareness of pathways does not yet equal access to support. Demand for calculator support and tailored planning remains low, and across all four wrap-up workshops advisers noted that while farmers who attended workshops were aware of the tools available to them, the adviser capacity to support them through the next steps is still developing. For farmers in regions or farming systems less represented in the CFOP cohort, access to capable emissions advisory support remains limited.

Role of Ag Ex and CFOP in enabling collaboration

CFOP and the Ag Excellence Alliance **played a clear enabling role** in bringing together an adviser cohort that would not otherwise have had regular structured opportunities to connect, learn and collaborate. The project brought advisers together through shared training, regional workshops and expert presentations, creating structured peer collaboration that many described as valuable in a field where most practitioners work independently.

The Ag Ex coordination role was specifically acknowledged across multiple workshops:

"Great support from AgEx in running local workshop" (Keith)

"Emma and Paige's organisational skills" and "AgEx support team" (Clare)

"Good to see CFOP took us from awareness to actions and great support from AgEx, so thanks Paige and Emma." (Burra).

A collaborative infrastructure built through CFOP of the peer network, shared frameworks and mutual familiarity, **now exists independently of the project itself**, representing a lasting contribution to SA's agricultural advisory network. This is most concretely demonstrated by the direct seeding of the LEIFS Action Research Network, which in each of the four regions is drawing on the CFOP adviser cohort as its foundation.

What worked, what didn't, what's missing

Enablers of success

The following enablers (Figure 9) were consistently identified by trainers across the exit survey and all four regional wrap-up workshops:

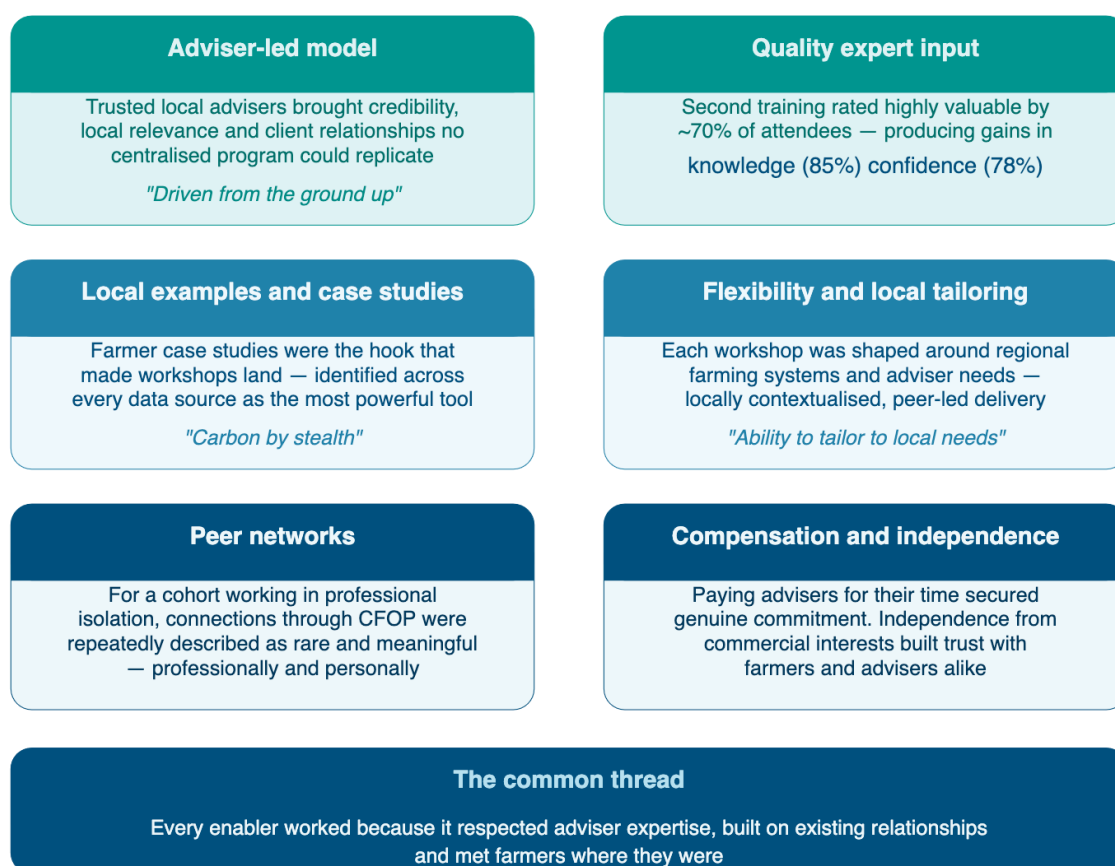


Figure 9: What made CFOP work – the enablers of success

Constraints and challenges

There were several constraints and challenges faced during the CFOP project identified from the exit surveys and wrap-up workshops:

DCCEEW training: The most consistent criticism (7 out of 10 negative comments from the exit survey and mentioned in all wrap-up workshops) was about the initial training.

"The worst two days of my career"

"A complete waste of time and resources"

"Advisers were ready to walk out"

"No knowledge of content, subject or farming"

Wrap-up workshop responses

Outputs over outcomes: Advisers commented that the model focused on incentivising running workshops and attendance numbers rather than building skills. This limited the program to awareness raising only and prioritised delivery over depth. It is an acknowledged limitation of the program that was never intended to be more than awareness raising but was a frustration for the advisers who wanted more.

"Focussed on 'bums on seats' and not 'achieving outcomes and impact' - this meant activities could only ever be 'awareness raising'" Exit survey response

Program name as liability: "Carbon farming" created persistent confusion, limiting audience reach and requiring advisers to correct misconceptions before delivering content. The workshops were heavily reliant on adviser networks to get farmers in the room.

Cultural competency training: raised at Clare and Burra as alienating and disconnected from the project's purpose. Advisers felt it was imposed rather than integrated, a compliance add-on that

disrupted the flow and caused some participants to mentally check out before the technical content began.

"Divorced from the project" Wrap-up workshops

Calculator confusion: Competing tools (GAF, AIA and others), each promoted by a different organisation, created confusion about which to use when. The livestock calculator is significantly more complex, a gap for SA's mixed farming systems

No follow-up mechanism: No structured one-on-one or small group follow-up (unlike the previous CFOP iteration) limiting the depth of capability transfer workshops alone could achieve and a model that was handed to Ag Ex to deliver.

The key lesson is that much was achieved despite these challenges and is evidence of the model's strength. With these addressed, any future projects start from a far stronger position.

Unmet needs identified by advisers

Figure 10 shows the main needs of the advisers as identified from the exit survey and regional wrap up workshops. The positives are that adviser commitment isn't lacking, they just need support to go further.

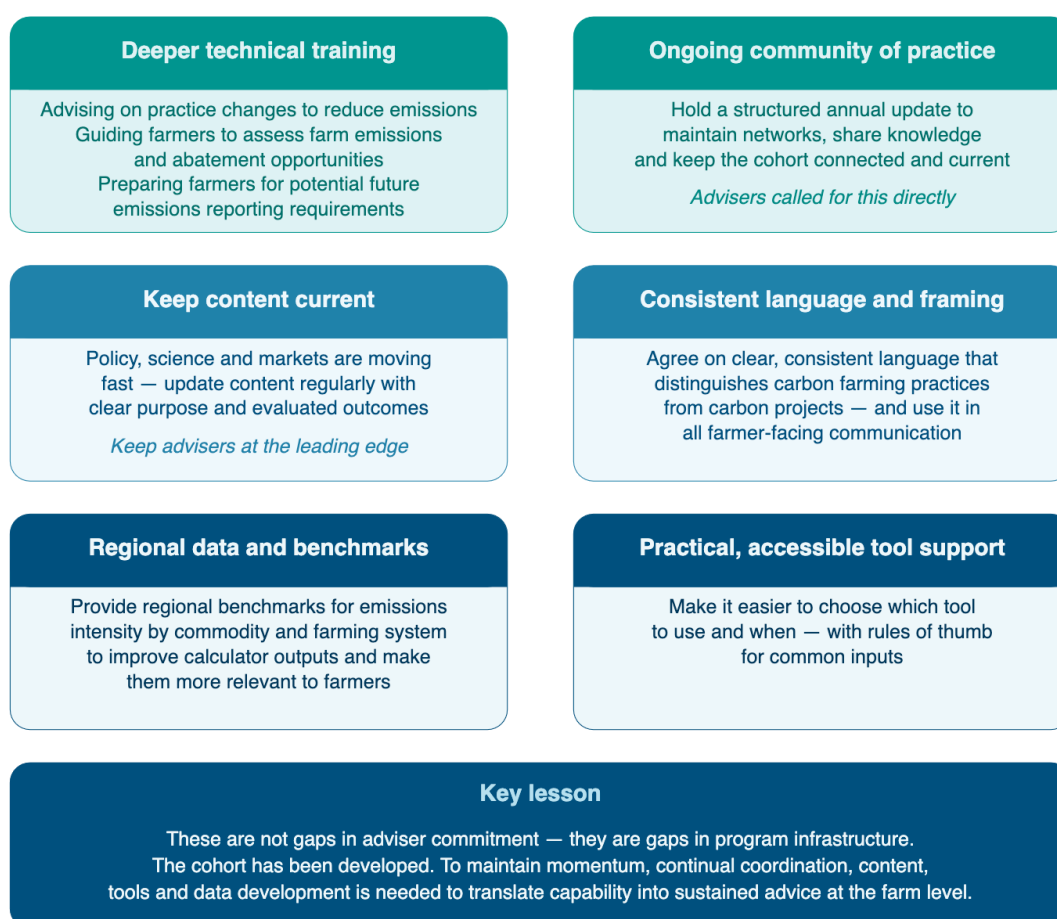


Figure 10: Unmet needs of advisers at the end of the CFOP project.

Future directions

What advisers need next

Three categories of future need emerge clearly from the data:

1. **Deeper technical content.** Advisers have built solid foundational and intermediate knowledge but identified clear areas where they want to go further. Priority topics are livestock-specific emissions accounting (raised across all four regional workshops as more complex than cropping equivalents) advanced calculator interpretation, and a better understanding of the financial implications of practice change for farm businesses. Advisers were clear that carbon project development and legal advice on carbon markets sit outside their role. They instead need enough knowledge to have an informed conversation with farmers and be able to confidently refer them to the right independent expertise when projects are available.
2. **Ongoing connection and knowledge updating.** The peer network built through CFOP is valued and functional but needs a coordination mechanism to sustain it. Structured peer learning opportunities, regular content updates as policy and science evolve, and curated access to emerging research and case studies would maintain and extend the project's value. At Keith, advisers specifically called for *"an adviser update once annually, with a clear purpose and outcomes that are evaluated against (paid would be good too!)"*.
3. **Better farmer engagement tools.** Advisers would benefit from clearer farmer-facing communication resources: language frameworks that distinguish carbon practices from carbon projects, local case studies relevant to SA farming systems, and simple decision-support tools that help farmers understand their emissions position without being overwhelmed by complexity. Regional benchmarks for emissions intensity (by commodity and farming system) were specifically identified as the most urgently needed resource at both the Burra and Port Lincoln workshops.

Opportunities to strengthen and scale the model

There are five opportunities identified to strengthen and scale the model:

1. **Fund a model to deliver on its promise.** The clearest lesson from CFOP is that deliver training quality is foundational to enabling on-training with farmers. Future projects need credible, technically expert, farming-literate content from day one, a genuine Train the Trainer model that equips advisers to deliver with confidence. CFOP recovered from a poor start, but the cost to credibility and trust was real and avoidable.
2. **Design for outcomes, not outputs.** Counting workshop attendance measures activity, not impact. Future projects should measure adviser capability gains and farmer behaviour change and fund accordingly. This shift in how success is defined would unlock the deeper skills and capacity building that awareness-raising events alone cannot achieve.
3. **Build a tiered capability pathway.** Advisers need a clear progression (from foundational literacy through to more advanced practice) with formal recognition at each stage. Several advisers specifically named the University of Melbourne Carbon Neutral course as a model worth building on. Credentialing would strengthen adviser confidence and credibility with clients.

4. **Target the gaps in the advisory network deliberately.** This project worked with independent advisers, a deliberate choice that impacted everything that followed. Advisers were remunerated at commercial rates, which secured their genuine professional attention rather than adding CFOP to an already stretched workload. This built adviser conviction in the content first, which in turn built farmer trust in the workshops. It also reached a segment of the farming community unlikely to attend a public event, farmers who came because their trusted adviser invited them, not because they had heard about CFOP. This approach was distinct from other CFOP partners, who trained in-house farming systems group staff to deliver regional events. This is a model with different reach and different trade-offs.
5. **Build in structured one-on-one and small group learning.** The absence of individual follow-up with farmers was a repeatedly identified gap by deliverers. Future projects could resource and require structured interactions between advisers and their clients, as was the case in the earlier Carbon Farming Knowledge Project, to enable the depth of capability transfer that group workshops alone cannot achieve.

Implications for future emissions extension — where the sector is heading

The end-of-project data points to a sector that is well-positioned but not yet fully prepared for the next phase of emissions-related demand.

The CFOP cohort can credibly support farmers through the early stages of emissions engagement, awareness, basic baselining, emissions intensity conversations and introductory calculator use. This is the right capability for current farmer demand, which remains predominantly at the awareness and curiosity stage.

The CFOP cohort itself anticipates growing relevance, 57% expected carbon farming advice to become a high or very high function in their role over the next five years. Whether that anticipation translates into demand will depend on factors outside what can be controlled by future programs: policy settings, supply chain requirements and market conditions. What future programs can control is ensuring advisers are ready when that demand arrives.

The roll out of LEIFS is the most concrete expression of this demand. Industry and or Government funded projects will continue to play a role in the future transition to reduced emissions in agricultural production. This CFOP cohort offers a natural base for maintaining trusted influence and is the human infrastructure on which the next phase of SA's emissions extension effort can be constructed.

"CFOP has created a stronger foundation of knowledge and capability across the agricultural advisory network... Over the long term, CFOP contributes to better informed farm decision making, where emissions, productivity and profitability are considered together rather than as separate issues." Exit survey respondent

"The legacy is a large chunk of the industry now has a strong handle on carbon accounting and emissions intensity and we can guide farmers and start at least considering the long-term consequences of our decisions as it relates to carbon." Exit survey respondent

"Great that there's been investment in the 'influencers' (not just farmers) — don't underestimate what you do in the community." Burra wrap-up workshop closing comment

The critical question for future emissions extension is whether the advisory system can build that deeper capability ahead of demand, as CFOP has done at the foundational level, or whether it will find itself scrambling to catch up when farmers begin asking more complex and consequential questions on the back of changes to government policy or industry initiatives. The evidence from this project suggests that proactive, structured investment in adviser capability is both effective and

essential. The 29 advisers trained through CFOP are ready to lead the next phase of this transition. The sector's task is to ensure they are not left to do so alone.

Conclusion

CFOP has demonstrated that the adviser-led extension model is an effective and scalable approach to building emissions literacy and advisory capability within South Australia's agricultural sector.

The project entered at a critical moment, early in the development of an advisory field that most practitioners recognised as important but were not yet equipped to navigate. What it found was a cohort of experienced, skilled and motivated advisers who had the tools for delivery but not the content to deliver. What it built, over 20 months, was a more knowledgeable, more confident and better-connected professional community capable of guiding farmers through a significant transition in contemporary agriculture.

The project's clearest successes were in confidence building (a near-quadrupling of high-confidence advisers), network development (valued by 76% as the project's top benefit), and the normalisation of carbon and emissions conversations within everyday advisory practice. It also produced a direct and tangible legacy in the LEIFS Action Research Network, where the CFOP cohort is able to contribute human infrastructure for the next phase of SA's emissions extension effort.

The project's honest limitations were in early DCCEEW training, the structural constraints of an output-focused model, and the persistent absence of a clear value proposition for farmers that would translate advisory capability into widespread farm-level action. These are fixable, and the data in this report provides clear guidance on how.

The hard work has been done. The network exists. The trust has been built. The fear has been reduced. The next investment in deeper capability, better tools, ongoing connection and a clear farmer value proposition, will find a cohort ready to receive and deploy it. That is the most important thing this project has achieved: not just capability in the present, but readiness for what comes next.