

Appendix D: Workshops and expert/ stakeholder engagement

The project engaged with a range of expert stakeholders through a series of workshop to check assumptions, refine focus and review outputs.

This involved:

1. A Reference Group with a governance role as a formal committee, Chaired by DAFF, and;
2. A wider group of expert stakeholders as workshop participants
3. 1:1 informal interviews and discussions with individuals in the above groups who were unable to attend workshops/ meetings or wished to provide additional information/context.

Reference Group members were also invited to participate in workshops.

This appendix provides an overview of the workshop process used. Across two rounds of workshops 76 participants signed up to to participate. Seven participants requested not to be acknowledged, while the remaining 69 are acknowledged below.

Participants were invited to workshops by DAFF through collaborative identification of the types of industry, government and research expertise sought and the use of DAFF's extensive mailing lists. Participants registered via a brief survey through which their contact details were provided to the CSIRO team, and they were able to view participant information sheets and sign ethics consent forms in an efficient and effective way.

All engagement was undertaken in accordance with ethics approvals from CSIRO's Human Research Ethics Committee and follows the guidelines set out in the [National Statement on Ethical Conduct in Human Research \(2023\)](#). The project processes also ensured participants' information was protected in accordance with the *Privacy Act 1988*

Workshop #1:

Three online workshops were held to engage with expert participants and refine and prioritise technology lists for different industries, and open up discussion about considerations relating priority technologies.

Prior to the workshop lists of prospective technologies were included and provided to participants with a short descriptions.

A pre-workshop survey was conducted, to focus attention and help frame workshop discussion on the most prospective technologies, and the reasons these were considered so.

Pre-workshop survey

For each set of industry participants, a survey link to a simple Qualtrics survey was sent out prior to the workshop, along with a list of technologies being considered.

CSIRO/DAFF low emissions agriculture prioritisation survey

This survey is a brief set of ranking questions to help focus upcoming workshops. As there are many technology options across different sectors, we can't discuss all of them in a short

APPENDIX D: Priorities for Low Emissions Agricultural Solutions Investment

workshop. This is not an exact science. For this exercise, thinking fast is good. We are interested in how consistent or divergent perspectives are. This and the overall ranking will help ensure the workshop can focus on priorities for investment and action in low-emissions agriculture. Descriptions of each technology are in the email that linked to the survey. The survey is conducted under the ethics consent and privacy arrangements you have given as part of your participation in this project

1. Drag and rank up to 5 technologies that have the best current business case for on-farm adoption. (e.g. consider costs, benefits, co-benefits, and on-farm practical implementation matters)
2. Drag and rank up to 5 technologies that have the largest potential to reduce total GHG emissions in the next 3-5 years. (e.g. consider potential emissions abatement, and scale or extent of adoption)
3. Drag and rank up to 5 technologies that are likely to have longer-term impact, with large emissions reduction potential beyond the next 5 years. (These technologies will tend to require appropriate R&D investment)
4. What, if any, technologies are missing that you would have put as a high priority in any of the above three lists? (Please provide a name, brief description, and include the list or question number you'd add this technology to)

Workshop #1

The workshop was facilitated in industry-focussed breakout groups, through discussions and participants adding comments directly to an online whiteboard. This was set up to capture perspectives on the following questions, for each technology:

1. Why is this technology a priority?
2. What are the key barriers to scaling/adoptability?
3. What is needed to develop, scale or drive adoption/adoptability for each?
4. What are the key gaps and research priorities/ uncertainties (for low TRL)?

Results of the online survey were used to focus attention on specific technologies and explore reasons why some were seen to be. At the end of the workshop feedback on the process was sought to help refine future engagement. A very small number of positive comments were received.

Synthesis of notes from the workshop were used to refine and focus attention, of the STA, and included changing the technology focus. For example, a broad category of 'enhanced efficiency fertilisers' in the proposed cropping STA was refined into more specific subset of technologies – Nitrification inhibitors, Urease inhibitors, and slow/control release fertilisers.

Workshop #2

Workshop #2 presented and received feedback on the approach to analysis proposed for undertaking the STAs, and subsequent enablers, systems analyses. A preliminary (first pass) analysis for each industry was sent to participants, prior to the workshop. The 1.5 online workshops comprised 2 sessions.

In the first 40 minute, **Session 1** comprised three steps, within each industry focusses breakout group, with facilitator instructions as follows:

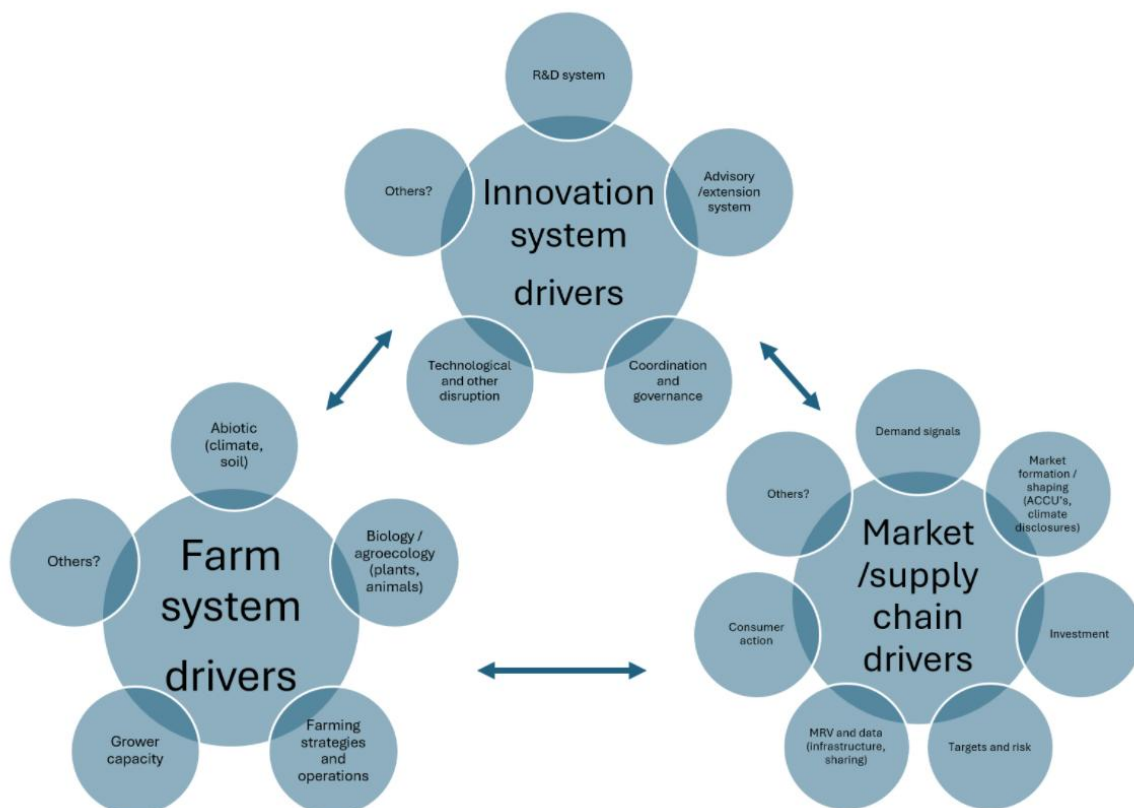
APPENDIX D: Priorities for Low Emissions Agricultural Solutions Investment

- **Step 1)** Identify a technology/practice you'd like focus on (more than 1 is fine if you've reviewed the STA prior to the workshop).
- **Step 2)** Take 10 minutes (quiet time) to review content and consider any missing, or insufficient information, or claims that you think are inaccurate, misleading, poorly made, etc. Please take notes either on your own version of the word document or on a sticky note in blue columns below and/or be ready to share thoughts.
- **Step 3)** Open out for conversation about the key points, especially areas of uncertainty / contestation.

The aim of this session was to surface and discuss issues with the preliminary analysis and draw out key issues that needed further exploration, clarification, as well as to identify issues that were not well covered in the analysis.

Session 2 (30 mins) shifted focus, and sought to gather insight about enablers and systems interactions to inform analyses about these in Chapters 4 and 5. Here discussion was framed around this question: “Over the next 10-15 years, what will be the most important systems drivers and interactions to affect the pace of tech/practice change and transitions to low-emissions agriculture? How might these interactions affect outcomes?.

To help facilitate group discussion the following heuristic was used to surface the details about the importance, effects and direction of specific drivers and the interaction among them. Notes were taken both by participants and facilitators/ note-taker in each group and a preliminary workshop report was developed to feed into more the Chapter analyses, in particular in identifying key headwinds and tailwinds within and across industries.



APPENDIX D: Priorities for Low Emissions Agricultural Solutions Investment

Acknowledgements

The following participants are acknowledged for their highly valued contributions through workshops, 1:1 discussions associated with workshops and provision of written feedback and materials:

Noel Ainsworth - Queensland Department of Primary Industries
 Cathy Ashby - Dairy Australia Limited
 Warwick Badgery - New South Wales Department of Primary Industries and Regional Development
 Ralph Behrendt - Agriculture Victoria, Department of Energy, Environment and Climate Action
 Michael Bell - The University of Queensland
 Brooke Bruning - Grains Research and Development Corporation
 Mariana Caetano - The University of Adelaide
 Mark Callow - Grains Research and Development Corporation
 Karen Christie-Whitehead - Tasmanian Institute of Agriculture, University of Tasmania
 Simon Clarke - Sugar Research Australia Limited
 Tory Clarke - Tasmanian Institute of Agriculture, University of Tasmania
 Mary-Frances Copley - Integrity Ag Pty Ltd
 Nicola Cottee - Cotton Research and Development Corporation
 Annette Cowie - New South Wales Department of Primary Industries and Regional Development
 Fran Cowley - University of New England
 Janine Croser - South Australian Research and Development Institute
 Brendan Cullen - The University of Melbourne
 Christophe d'Abbadie - Department of Primary Industries and Regional Development, Government of Western Australia
 Nadine Davis - Australian Eggs Limited
 Stuart Denman - Commonwealth Scientific and Industrial Research Organisation
 Darryl D'Souza - SunPork Group Pty Ltd
 Mark Dunlop - Department of Primary Industries, Queensland Government
 Zoey Durmic - The University of Western Australia
 Richard Eckard - Zero Net Emissions Agriculture Cooperative Research Centre and The University of Melbourne
 Edward Fernie - Australian Wool Innovation Limited
 Kevin Foster - Department of Primary Industries and Regional Development, Government of Western Australia
 Luciano Gonzalez - The University of Sydney
 Peter Grace - Queensland University of Technology
 Matthew Harrison - Tasmanian Institute of Agriculture, University of Tasmania
 Ben Hayes - Zero Net Emissions Agriculture Cooperative Research Centre
 Jack Holden - Ridge Road Advisory Pty Ltd
 Rebecca Hurst - GrainGrowers Limited
 Angus Ireland - Australian Wool Innovation Limited
 Joe Jacobs - Agriculture Victoria, Department of Energy, Environment and Climate Action
 Michele Jolliffe - Agriculture Victoria, Department of Energy, Environment and Climate Action
 Alison Kelly - Agriculture Victoria, Department of Energy, Environment and Climate Action
 Umair Khan - Department of Primary Industries and Regional Development, Government of Western Australia

APPENDIX D: Priorities for Low Emissions Agricultural Solutions Investment

Elizabeth King - Department of Primary Industries, Queensland Government
Jeff Kraak - Fertilizer Australia Limited
Marit Kragt - The University of Western Australia and Zero Net Emissions Agriculture Cooperative Research Centre
Vicki Lane - Zero Net Emissions Agriculture Cooperative Research Centre
Teagan Lawrence - Queensland Department of Primary Industries
Mardi Longbottom - Australian Wine Research Institute
Lynne Macdonald - Commonwealth Scientific and Industrial Research Organisation
Julian Marchant - Wine Australia Corporation
Cristina Martinez - Grains Research and Development Corporation
Gonzalo Martinez Fernandez - Commonwealth Scientific and Industrial Research Organisation
Kate McCormack - Department of Primary Industries and Regional Development, Government of Western Australia
Joe McMeniman - Meat and Livestock Australia Limited
Elissa McNamara - Dairy Australia Limited
Penny Measham - Cherry Growers Australia Incorporated
Timothy Morley-Sattler - Australian Pork Limited
Cathy Mylrea - Sugar Research Australia Limited
Rebecca Paine - Department of Primary Industries
Tony Parker - Meat and Livestock Australia Limited
Tichaona Pfumayaramba - AgriFutures Australia
Jennie Pryce - Department of Energy, Environment and Climate Action, Agriculture Victoria
Clinton Revell - Department of Primary Industries and Regional Development, Government of Western Australia
David Rowlings - Queensland University of Technology
Maartje Sevenster - Commonwealth Scientific and Industrial Research Organisation
Daniel Sitienei - University of New England
Liam Southam-Rogers - Applied Horticultural Research Pty Ltd
Melissa Wales - Cattle Australia Limited
Scott Wallace - Queensland Fruit and Vegetable Growers Limited
Alice Weaver - South Australian Research and Development Institute
Steve Wiedemann - Integrity Ag Pty Ltd
Sara Willis - Queensland Department of Primary Industries
Kathryn Young - Horticulture Innovation Australia Limited