Delivery partner resource

Frontiers project M&E framework

Version 1 – November 2025

Hort Innovation

Contents

Acronyms and abbreviations

M&E – Monitoring andevaluation
KPI – Key performance indicator
KEQ – Key evaluation question
R&D – Research and development
RD&E – Research, development and extension
EOI – Expression of interest
ROI – Return on investment

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1. Introduction

Hort Innovation Frontiers is Hort Innovation's flagship initiative for co-invested, transformational research development and extension (RD&E), designed to accelerate innovation and deliver long-term impact across the Australian horticulture sector.

The *Frontiers project M&E framework* (Framework) outlines Hort Innovation's approach to undertaking monitoring and evaluation (M&E) of the Frontiers program and is designed to be of use to a broad range of industry stakeholders, delivery partners and Hort Innovation's internal teams. By implementing the Framework, it reflects our commitment to rigorous evaluation of the Frontiers program, its impact and demonstrating transparency to stakeholders.

This Framework is a critical component of the Frontiers program, ensuring that the objectives are met and the impact is measured effectively, and its use is intended for those projects which are contracted from November 7, 2025 onwards. It includes a program logic model, key performance indicators (KPIs), and key evaluation questions (KEQs) at a program level and has been designed to be incorporated into ongoing Frontiers project M&E to better determinate impact of investments. Hort Innovation hopes you find the Framework of value and welcomes continuing conversations about how we can work together with the horticulture sector and wider stakeholder audience to deliver impact and value for Australian growers.

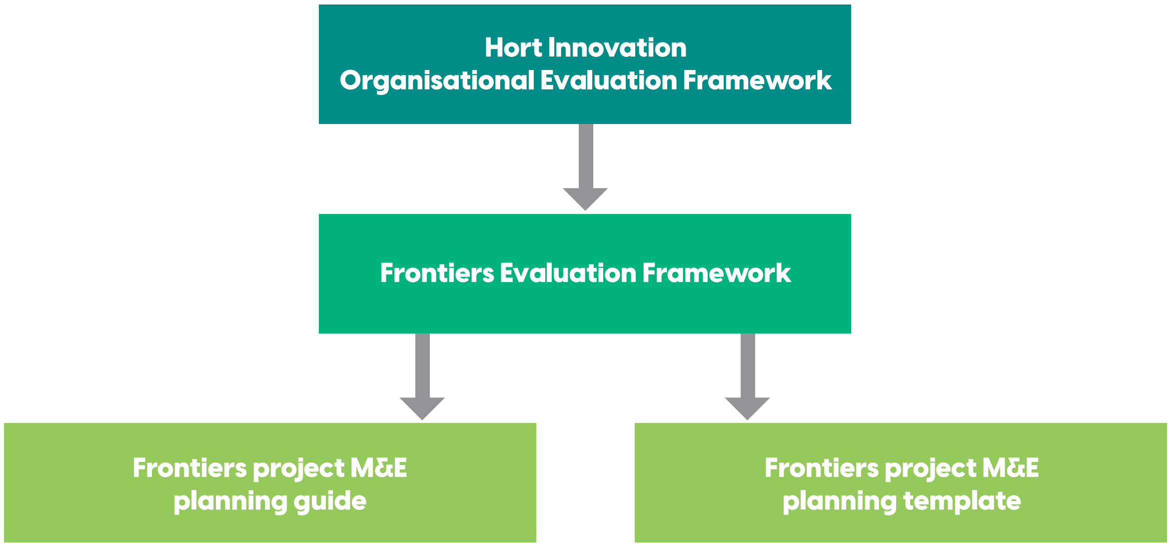
2. Scope and purpose

2.1. Why a Frontiers project M&E framework is needed

Hort Innovation has an organisational evaluation framework which outlines its approach to meeting its evaluation requirements, as outlined in the current Deed of Agreement (2020-2030), between Hort Innovation and the Australian Government (represented by the Department of Agriculture, Fisheries and Forestry). While Hort Innovation already operates under an organisational evaluation framework, this Framework is a bespoke extension (**Figure 1**) designed to:

- Support aggregated Frontiers reporting
- Demonstrate transparency and accountability to stakeholders
- Ensure rigorous evaluation of Frontiers projects and their impact
- Capture the unique nature of Frontiers projects through models such as, but not limited to:
    - Co-investment
    - Venture capital
- Align project-level evaluation with Frontiers investment pathways
- Focus on outcomes with delivery partners, enabling a shared understanding of Hort Innovation's contribution to grower objectives.
- Provide clear and consistent guidance to delivery partners and process owners for evaluation of Frontiers investments.

Figure 1. Frontiers M&E framework



Application of the Framework will apply to Frontiers investments which are contracted from November 2025 onwards and does not apply to active or completed projects prior to this date. To support the usage of this Framework, the *Frontiers project M&E planning guide* and *Frontiers project M&E planning template* have been developed to guide and develop robust Frontiers M&E.

The Framework is iterative in nature and will continue to be reviewed and updated as the Frontiers program evolves. The implementation and delivery of this Framework will be supported by the Frontiers and Industry Insights teams within Hort Innovation.

2.2. Framework audience, roles and responsibilities

The Framework is designed to support strategic evaluation across co-investment, transformational RD&E initiatives. Its audience comprises two distinct groups:

Primary audience

The primary audience includes those who directly interact with the Framework's tools, processes, and outputs. These include:

- Hort Innovation team members
- Delivery partners
- Co-investors and collaborator
- Governance and advisory stakeholders.

Beneficiaries

Beneficiaries are individuals or entities who are impacted by the outcomes of Frontiers investments. These include:

- Growers and levy payers who benefit from innovation and commercial outcomes across the horticulture sector
- Co-investors, including commercial businesses, supply chain stakeholders, research agencies, government departments and educational institutions, whose contributions shape and enable the program
- Innovation ecosystem partners, such as venture capital networks, start-ups and technology providers, who engage with Frontiers to accelerate adoption and scale impact
- The broader horticulture industry, which gains from cross-sectoral solutions and long-term capability uplift.

Evaluation of the Frontiers program is a shared responsibility between delivery partners and Hort Innovation, according to the scope and requirements of the investment. The Frontiers and Industry Insights teams within Hort Innovation will play a supporting role in providing advice and guidance to ensure evaluations are well-informed, align with decision-makers' needs, and articulate outcomes and impact.

2.3. Framework purpose

The Framework has been developed to support the evaluation of strategic, co-invested RD&E initiatives that drive transformational change across the horticulture sector.

In addition to meeting reporting and accountability requirements, the Framework is designed to foster a culture of continuous improvement and learning across the Frontiers investment pathways. By systemically analysing investment performance, identifying gaps and opportunities, and sharing insights, this framework enables stakeholders to adapt, refine and enhance project evaluation. This commitment to ongoing learning ensures that Frontiers investments remain responsive to emerging industry needs, drive innovation, and maximise long-term impact for growers, levy payers and co-investors.

The purpose is operationalised through a Frontiers program logic, a set of KEQs and KPIs that guide data collection and analysis. These elements ensure that evaluation is rigorous, consistent and aligned with the bespoke nature of Frontiers investments and dynamic investment pathways.

3. Program logic model

Program logic is a thinking tool used by Hort Innovation to:

- Consider the causal chain or impact pathway by which outcomes can be achieved through investment
- Guide and inform investment prioritisation
- Monitor, evaluate and report on progress and achievements.

Frontiers invests under three dynamic pathways:

1. Innovation Partnerships

A collaborative investment pathway where Hort Innovation co-invests alongside research bodies, industry groups, and businesses to tackle big challenges from across the horticulture sector and deliver sector-wide innovation.

2. Australian-Grown Innovation

An incubator program that supports Australian growers and supply chain stakeholders to turn their own ideas into market-ready products or services.

3. Hort Innovation Venture Fund

A venture capital fund that invests in startups and breakthrough technologies to accelerate innovation and sustainability in Australia's horticulture sector.

The program logic model at **Figure 2** is guided by the Frontiers vision of empowering great ideas for tomorrow's horticulture and supports the programs desired impact of transformative innovation and economic growth, and increased sustainable practices and stronger industry partnerships. The vision and impacts are supported by the dynamic investment pathways and are focused on growers and levy payers, and guide Frontiers investment and decision-making.

The end-of-strategy, intermediate outcomes, outputs and activities align with each dynamic investment pathways mandate and influences strategic co-investment for the Frontiers program.

Figure 2. Frontiers project logic model

Impact	**Transformative innovation and economic growth**		**Increased sustainable practices and stronger industry partnerships**
Vision	**Empowering great ideas for tommorow's horticulture**		
Investment pathway	**Innovation Partnerships**	**Australian-Grown Innovation**	**Hort Innovation Venture Fund**
End-of-investment pathway outcomes	Strategic partnerships formed with stakeholders to accelerate innovation in horticulture	Growers enabled to take a paddock idea to the R&D phase or pressure test a new business model	High-growth early-stage startup companies invested in delivery of innovative products and services to horticulture
Intermediate outcomes	Diversified innovation ecosystem established with new and non-traditional partners Adoption of new technologies and practices accelerated Commercial outcomes met Understanding of which technologies/products are novel and transformative is increased	Awareness and pool of potential collaborators increased Economic benefits for growers increased Sakeholder satisfaction and sentiment improved Grower network increased	Investment in high-growth early-stage startups increased Investment impacts increased Relationships and support from industry stakeholders is stronger Increased collaboration between growers and start-ups
Outputs	Commercial partnerships established Co-investment secured Technology Readiness Level and Commercial Readiness Level established Novelty and transformative potential validated	EOIs received Business plans developed Feedback from stakeholder sessions Grower networks established	Investments in high-growth early-stage startups Regular impact reports Stakeholder feedback scores Growers participating in trials
Activities	Non-traditional and traditional partners ecosystem established Co-investment opportunities developed and promoted Commercial and technical readiness supported Evaluate novelty and tranformatitve potential of technology/product	EOIs promoted Best practice information disseminated Stakeholder satisfaction sessions undertaken Growers engaged	High-growth early-stage startups engaged Impact reporting established Hort Innovation Venture Fund promoted Support and resources provided

Foundational inputs	**Stakeholder engagement**	**Research and development**	**Capacity building**	**Innovation and technology integration**	**Monitoring and evaluation**	**Communi-cations**	**Funding and resources**

4. Performance indicators

While the Frontiers program logic outlines the pathways through which change is expected to occur, it does not prescribe the magnitude of change required to deliver benefits to growers, levy payers, and co-investors. To support this, quantitative and qualitative KPIs have been tailored to each dynamic investment pathways to better aggregate Frontiers program reporting and understand impact.

Core KPIs in **Table 1** are expected to be embedded across relevant Frontiers M&E to collectively demonstrate impact of investments across the Frontiers portfolio. Hort Innovation will use these core KPIs to inform Frontiers performance analyses and contribute to the annual reporting process and requirements. The dynamic Investment pathway KPIs in **Table 2** provide delivery partners, co-investors and Hort Innovation process owners a selection of bespoke KPIs to consider for inclusion when formulating the investments' M&E plan, ensuring alignment with the appropriate dynamic investment pathway. It is important to note that project specific KPIs will also need to be drafted, and the KPIs at Table 1 are to be used should they be appropriate to the investment corresponding pathway. Given that KPIs will be built in at the commencement of the investment, it is imperative that data sources to support reporting are identified and established to facilitate reporting.

4.1 Key performance indicators

Table 1. Core key performance indicators to be collected across all relevant investments

	Core key performance indicators
1	Number/per cent of growers engaged (Knowledge, Attitudes, Skills and Aspirations)
2	Number/per cent of partners engaged (Knowledge, Attitudes, Skills and Aspirations)
3	Number of R&D trials
4	Number/per cent of hectares covered/engaged
5	Number of new products or services available to growers
6	Number of new products or services with anticipated environmental benefits
7	Number/per cent of improvements in environmental sustainability
8	Number of of new products or services with anticipated social benefits
9	For all investments with a Technology Readiness Level of 6 or above, what is the expected ROI?

Table 2. Dynamic investment pathway key performance indicators

Key performance indicators by each Frontiers investment pathway
Innovation Partnerships
Number of collaborations by geography: Partnerships formed with local (Australian) and global innovators, including growers
Number of collaborations by partner type: Partnerships with traditional (industry players) and non-traditional partners (start-ups, commercial companies, big tech)
Project success rate: Percentage of projects meeting prescribed project outcomes (intermediate and end-of-project)
Innovation adoption rate: Number of new innovations (adoption of new ideas, technologies, practices or business models) adopted by the industry or innovation intended to be adopted
Funding leveraged: Amount of partner co-investment ($) contributed to the Frontiers project
Time to market: Average time taken for innovations to reach the market
Stakeholder satisfaction: Feedback from partners on collaboration effectiveness
Economic benefits: Increase in on-farm revenue or projected cost savings from practice adoption
Knowledge transfer: Number of engagements from awareness of project, upskilling of workforce and/or confidence in making a decision
Australian-Grown Innovation
Number of EOIs: Number of EOIs received
Economic benefits: Increase in on-farm revenue or projected cost savings from practice adoption
Innovation: Number of industry growers and supply chain participants with increased innovation capacity
Participant endorsement: Participant endorsement NPS score
Networks: Number of networks formed between growers, innovators and stakeholders
Ideas: Number of ideas progressing through the incubation program
Development: Number of growers who would recommend to other growers as a personal development opportunity.
Commercial pathway: Number of commercial pathways identified
Minimum viable product: Number of minimal viable products built through the incubator program

Continued

Table 2. Dynamic investment pathway key performance indicators (continued)

Key performance indicators by each Frontiers investment pathway
Hort Innovation Venture Fund
Number of investments: Number of investments in early-stage startups
Return on investment (ROI): Number of investments with a positive ROI of the Hort Innovation Venture Fund portfolio annually
Innovation impact: Measured improvements in productivity, sustainability, or profitability due to funded innovations
Grower engagement: Number of growers engaging with start-ups in the form of trials, for advice, or field walks

5. Key evaluation questions

Key evaluation questions (KEQs) are a strategic tool to guide evaluative enquiry into the performance of projects across multiple dimensions, including effectiveness, impact, relevance, process appropriateness, value for money and efficiency. They help Hort Innovation and delivery partners not only determine whether change has occurred, but also whether it is meaningful and aligned with the strategic goals of a project. While KEQs define the evaluation focus, KPIs operationalise these questions, ensuring that measurement and reporting are directly linked to outcomes.

The KEQs in **Table 3** serve as a framework to guide data collection, analysis, and reporting. They can be adapted to suit the specific context and objectives of each investment:

- **Effectiveness:** the extent to which a project has attained (or is expected to attain) its intended outcomes
- **Relevance:** the extent to which the expected outcomes of a project are consistent with the beneficiaries' needs and strategic priorities
- **Appropriateness (process):** the extent to which a project is operating as intended
- Efficiency: the extent to which a project produces outputs and outcomes optimally, without wasting time, money, effort or other resources
- **Value for money:** the extent to which benefits of a project are commensurate with the investment
- **Impact:** the extent to which significant change has resulted from the project.

Different projects will likely emphasise different KEQs, and bespoke questions may be developed to reflect relevant outcomes or contexts of the investment. For further guidance on tailoring KEQs and their application, please see the *Frontiers project M&E planning guide*.

Table 3. Key evaluation questions

Key evaluation questions by theme
Effectiveness
To what extent have the Frontiers program's objectives been achieved?
How effective are the new technologies, information and practices developed through the Frontiers program in contributing to intended outcomes?
Are the capacity-building activities enhancing industry skills and knowledge?
How well are the partnerships and collaborations contributing to goals?
How effective has the Frontiers program been in attracting commercial co-investment?
Has the co-investment supported levy-funded outcomes and/or SIPs?
Does the co-investment address market challenges and enable innovation beyond traditional mechanisms?
Does the panel of co-investors represent the diversity of the industry?
Impact
Have stakeholders seen measurable benefits resulting from the program?
How has the program influenced public health metrics?
What improvements in community wellbeing and engagement can be attributed to Frontiers Investments?
What long-term environmental benefits have been observed (or could be attributed to) due to the adoption of sustainable practices?
How has the Frontiers program contributed to the economic growth of the horticulture sector, whole industries or individual operations/businesses/growers?
How successful has the Frontiers program been in supporting and fostering innovation in the horticulture sector?
On average, what increase in TRLs have occurred for technologies during the investment period.

Continued

Table 3. Key evaluation questions (continued)

Key evaluation questions by theme
Relevance
How well do the Frontiers program's activities align with the current needs and priorities of the horticulture industry, or individual business needs?
Are investments addressing the most pressing challenges faced by growers and supply chain participants, or preparing them for future scenarios?
How relevant are the Frontiers program's outputs to the target audience, including growers, supply chain stakeholders, community groups and consumers?
To what extent has the Frontiers program prepared end users to adapt to emerging trends and changes in the horticulture sector?
What is the balance of foundational, incremental and transformational investments for the horticulture sector?
Process appropriateness
How effective are the Frontiers program's governance and management structures in supporting its implementation?
Have monitoring and evaluation processes been incorporated into Frontiers investments for tracking progress and outcomes?
What is the level of awareness of Frontiers investment with horticulture industry stakeholders?
Are the project selection and funding allocation processes in line with government procurement practices?
Value for money
How efficiently are resources being allocated and utilised across different Frontiers program components?
What is the cost-benefit ratio of the Frontiers pathways?
How does the Frontiers program contribute to the long-term financial sustainability and value creation of the horticulture sector?
Has the horticulture sector continued to show positive growth for the GVP during the period of investment?
Efficiency
Has continuous improvement been implemented to streamline processes for Frontiers investment during the allocated timeframe?
How well were the Frontiers program's resources managed to maximise productivity?
What gaps/opportunities have been addressed through the Frontiers program to create efficiencies?
How well does the Frontiers program leverage technology and innovation to improve efficiency across the horticulture sector?

Share your thoughts

We strive to provide the best experience possible for our delivery partners. Please share your feedback on how we can improve this document for you and other delivery partners in the future by emailing us at communications@horticulture.com.au

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