

ST22009 Developing a RegTech framework and applications across horticultural value chains.

Improving Compliance in Australian Horticulture through RegTech

This two-year project, funded by Department of Agriculture, Fisheries and Forestry (DAFF) and delivered by Freshcare in partnership with Hort Innovation under ST22009, explored how Regulatory Technology (RegTech) could reduce duplication in compliance requirements for horticultural growers. The project set out to better understand growers' compliance challenges and identify practical solutions that could streamline obligations across standards and regulations.



Project Purpose and Scope

The project focused on compliance activities related to the production and packing of fresh produce on-farm, from the grower's perspective. It reviewed over 220 compliance programs and regulations across food safety, environment, worker safety, biosecurity, trade, and ethics. The aim was to identify duplicative requirements and propose scalable RegTech solutions.

What the project did

1. Mapped the Compliance Landscape

2. National Grower Survey

3. Investigated 5 key compliance programs

Stakeholder Engagement

Two key working groups shaped the project: the Horticulture Community of Practice (Hort-CoP) and the Volunteer Technologist Working Group (VTWG).

These groups validated research, provided practical input, and helped co-develop the preferred approach to solving key compliance challenges.

Project Overview

This two year project aimed to streamline compliance requirements for Australian horticultural growers, who often face repeated audits, overlapping paperwork, and inconsistent program expectations.

1. Mapped the Compliance Landscape

The project reviewed over 220 compliance programs across Australia covering areas such as:

- Food safety
- Environment
- Worker safety
- Biosecurity
- Trade and ethics

This review highlighted the complexity and overlap in the compliance landscape. Table 1 provides a snapshot of the types of programs involved, illustrating the scale of requirements that growers must navigate.

Table 1. Categories of Compliance Programs Relevant to Horticulture

Category (type)	Total (count)
National legislations	69
State/territory legislations	78
Industry Standards	76
International agreements	3
Accreditation and/or certification schemes	2

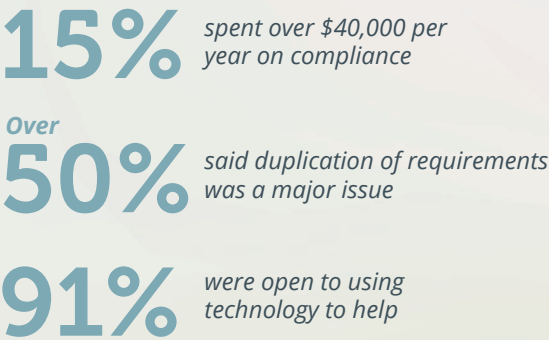
These compliance categories represent a wide range of rules spread across different programs, many of which don't align well or use consistent language. For growers, especially those who:

- Work in more than one state or territory, or
- Supply different buyers or markets,

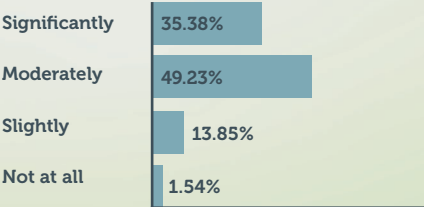
It becomes especially hard to keep up. They often face multiple audits, repetitive paperwork, and conflicting expectations, all of which add extra time, cost, and complexity to their day-to-day operations.

2. National Grower Survey

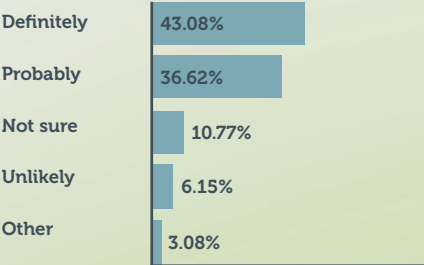
Key insights from
the grower survey:



PERCEIVED IMPACT
OF DUPLICATION



LIKELIHOOD OF ADOPTING
A REGTECH SOLUTION



With over 84% of growers identifying duplication as a moderate to significant issue, and 91% open to technology-based solutions, the survey reveals both the urgency of the problem and a strong support for RegTech solutions.

3. Investigated 5 key compliance programs

The project compared requirements across:

Freshcare
Food Safety
& Quality
(FSQ)

HARPS

ICA Scheme
(NSW)

EPA ERA
Standard (QLD)

Fair Farms

Findings

True
duplication
is rare, but
perceived
duplication is
common

Language and
document
formats
differ, causing
confusion

Growers struggle with
compliance due to
the lack of a central,
reliable source of
information, leading
to confusion and
inefficiency.

Similar
requirements
are often
written or
audited in
different ways

Why Duplication is Hard to Define

Duplication isn't always straightforward. Even when two programs require similar records, like a risk assessment or training log, they may have different purposes, levels of detail, or formats depending on the scope of activity. This creates a 'perceived' duplication even when the underlying intent is not identical.



What the project delivered

- A map of overlapping compliance systems
- A survey report showing grower challenges
- A framework for developing RegTech tools
- Recommendations for simplifying compliance

Key Opportunities

1.

Standardising Language

An agreed and shared set of terms across all compliance programs will help growers, auditors, and technology providers understand and compare requirements more easily.

2.

Cross-Recognition

- Encouraging mutual recognition between compliance programs reduces complexity for growers.
- Enabling improved efficiency in program management, and enhancing preparedness for audits.

3.

Digital Tools

Future RegTech solutions could include:

- A central Knowledge Hub to guide growers on what compliance programs or elements apply to their situation.
- A shared audit checklist across compliance programs.
- Digital forms and record-keeping tools.
- Real-time updates to compliance requirements.

Artificial Intelligence, Natural Language Processing, and Advanced Data Analytics are seen as key enablers to drive industry-wide transformation.

Preferred Path Forward

Shaped by the recommendations of the Volunteer Technologist Working Group (VTWG) the best next step is to develop a Common Language and Governance Framework, so:

- All stakeholders use the same terms
- Audits and recordkeeping can be streamlined
- Technology providers can build solutions that work across multiple compliance programs

This will:

- Cut down on time and paperwork
- Make audits more consistent
- Help growers “collect once, use many times”

For example, a grower might complete a pest monitoring log that meets the needs of both their food safety and biosecurity programs, avoiding double entry and repeating processes.

The framework will be open-source, enabling any technology provider to build tools using the standardised language, encouraging innovation while avoiding provider or technology provide bias.

Industry-wide Time Savings

If each of Freshcare’s 3,000 participating businesses saved just 2 hours per annual audit cycle through shared data and simplified audits, the industry could save over 6,000 hours annually.

Why This Matters

For Growers	Reduced complexity, consistency in interpretation, time and cost savings
For Auditors	Better tools, less confusion, consistency in approach
For the Industry	Stronger compliance, reduced complexity, better outcomes, smarter use of data

This project sets the foundation for a simpler, fairer, and more modern approach to compliance requirements in Australian horticulture - driven by growers, supported by industry, and primed for technology partners to take forward.

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- Project Steering Committee
- Hort Innovation
- Horticulture Community of Practice (Hort-CoP)
- Volunteer Technologist Working Group (VTWG)
- Monitoring and Evaluation Team (Strategic Matters)
- Freshcare RegTech Research Team & All Staff

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