

Australian Vegetable Industry: First Environmental Assessment Brief

Brian Ramsay
Inovact Consulting P/L ATF TTF Brian Ramsay Family
Trust

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Fax: (02) 8295 2399

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Insight. Innovation. Impact.
Australian Vegetable
Industry: First Environmental
Assessment Brief

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Inovact Consulting Pty Ltd

Level 7, AMP Building

1 Hobart Place

GPO Box 2067

Canberra City ACT 2601

ABN 17 587 520 145

Project Number: VG12088

Project Leader: Brian Ramsay

P 02 6140 3900

M 0400 440 730

F 02 6262 9307

www.inovact.com.au

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Industry Brief



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Vegetable Industry Environmental Assessment – Industry Briefing

Purpose

The purposes of this paper are to:

1. provide insights on the characteristics, benefits and issues associated with investment in a vegetable industry environmental assessment
 - a. as a means of confirming the policy case and benefits for investing in such an assessment
2. provide background and context for draft terms of reference prepared by Inovact Consulting for the conduct of a vegetable industry environmental assessment.

The paper has been prepared from desktop research and selected interviews with AUSVEG and HAL staff and with the Chair and a member of the EnviroVeg committee. It also includes feedback received from HAL on a draft version.

Introduction

The horticulture industry is one of Australia's fastest growing industries, currently valued at around \$9.9 billion.¹ Within horticulture, the gross value of vegetable production is estimated to be around \$3.4 billion.² The vegetable industry is diverse and dynamic and is increasingly sophisticated in how it grows and markets its products. Rising input costs, import competition, shifting patterns of consumer demand and other factors are driving change and innovation and contributing to a trend from many small-scale family farms towards fewer medium to large scale operations.

Current Context

Along with the social and health benefits that horticulture generally and the vegetable industry specifically offers to the Australian community, the industry has also invested to continuously improve environmental safety and management in its production systems.³

Industry leaders recognise that the enviable industry growth and reputation of today has been achieved by its responsiveness to customers and productivity improvements. More specifically, industry leaders are well-aware that consumers, the wider community, governments and interest groups have an interest in ensuring that food value chains can demonstrate environmentally sustainable production.

¹ HAL Strategic Plan 2012-2015

² ABARES Australian Vegetable Growing Farms Economic Survey 2010-11 and 2011-12

³ Ibid.

In this context, environmental issues represent both threats and opportunities for vegetable growers. For example, threats might include imposition of inappropriate regulatory regimes on growers, or interest groups portraying incidents of poor environmental practice as normal industry practice. Alternatively, opportunities might be to showcase environmental innovations and world class practices that vegetable growers already have in place or to more sharply differentiate Australian produce from imported produce.

In these types of scenarios, the vegetable industry requires objective evidence of its environmental performance, such that the industry leadership is in a powerful position to defend and promote industry interests in a credible and compelling way.

Barriers to demonstrating performance

Inovact Consulting's previous research and evaluations on environmental performance on private lands shows that farmers will often be supportive of action by their industry to demonstrate good environmental stewardship. They are also typically supportive of investments in research, development, and extension (RD&E) that will improve productivity and environmental outcomes.

However, at the business level many resist the application of compulsory audit or quality-assurance programs. The rational response is based on concerns that such programs add to costs, are time consuming for farm businesses, and are perceived as just documenting what they believe they are already doing.

For industries as a whole, leaders grapple with the question of how to demonstrate to value chain firms, governments and consumers that most farmers are using sustainable practices, without imposing unnecessarily costly and duplicative audit requirements.

Agriculture response to demonstrating environmental credibility

Australia's agricultural industries have responded to market demands and governmental policies for sustainable production practices through investment in natural resource management RD&E programs to support farmers in adopting best practice.

Some industries have developed BMP (best management practice) programs, including environmental self-assessment tools for farmers to document and assess their own performance. Some extend this to voluntary audits and accreditation. However, the existence of RD&E, self-assessment, and voluntary self-assessment tools, while a foundational step, do not demonstrate actual environmental performance.

Systematic approach to Environmental Assessment

The horticulture and wider agricultural industries have been researched considerably in terms of environmental sustainability. Moving now to conduct an assessment that is sharply focused on the vegetable industry and its influence on the environment is timely, especially

given the industry's growing national scale, significance and its competitive pressures. Yet there is much complexity and competing issues for the industry and growers to balance.

For example, in 2010-11 the value of imports of vegetables was estimated to be \$786 million, with the value of exports being \$460 million.⁴ With intensifying international competition, a key challenge is to reduce the industry's impact on the environment, while not losing focus on increases in productivity. Further, the diversity of the vegetable industry (e.g. different crops, regions, markets, environmental issues) will shape assessment design.

Many challenges have arisen in recent years, stemming from drought, floods, competition for land, water, food, energy and labour, shifting consumer demand, the influence of major retailers, and new government policies related to climate change, carbon trading and water reform.

In response, the vegetable industry has laid the groundwork for monitoring and improving its environmental performance using a number of resources, such as Regional EnviroVeg Guides, Carbon Footprint calculators, Freshcare Codes of Practice, and R&D investments. While these resources are an effective method for raising awareness and providing pathways to improving on-farm environmental sustainability on a regional and individual level, the industry needs a strategic approach at a national level to measure, monitor and improve environmental performance. The approach proposed here involves three steps that are repeated every five years. They are shown in the table below and include:

1. Conducting the first independent industry environmental assessment to establish a baseline
2. Industry follow-up in the form a response to the recommendations of the first assessment and
3. Repeating the independent industry environmental assessment in five years' time to measure progress, achievements and recommendations for further improvement.

The first vegetable industry environmental assessment is essentially an evaluation of the environmental credentials of vegetable farming. The project aims to publicly document, through an independent assessment, the industry's environmental performance. It will identify what has been done and achieved, opportunities to leverage, emerging issues to address and recommendations for industry action.

⁴ ABARES: Agricultural Commodity Statistics 2011, Table 134



The above overall process represents a systematic approach for the industry to demonstrate what it is doing and achieving and be well-informed in how it can maximise the value of its investments for improving environmental performance. The industry itself will hold and manage the system for directing, monitoring, reporting and continuously improving. It strategically positions and enables the industry to defend and promote the vegetable industry's interests on environmental issues with authority.

What is a baseline?

The first environmental assessment is very important, because it provides an objective starting point against which future progress can be measured. The intent is to establish what the average practices are across the industry. Our experience is that assessing industry performance relative to 'best practice' is most meaningful and achievable for single crops grown in similar ways in similar regions (e.g. cotton)⁵.

Given the vegetable industry characteristics of complexity and diversity (crops, regions, markets, production systems, and environmental issues), best practice for the vegetable industry is better viewed as a long term aspirational goal at this stage. The knowledge and practices defined by the Enviroveg program provide practical guidance for vegetable growers. For the purpose of the vegetable environmental assessment, we propose that average practices will provide a meaningful starting point as a baseline.

⁵ Australian Cotton Industry: Third Environmental Assessment <http://www.crdc.com.au/index.cfm?pageID=101>

Drivers of an environmental assessment

The vegetable industry’s Strategic Investment Plan (SIP) is the product of comprehensive industry consultation and analysis and outlines the industry vision and priorities for action. Environmental sustainability is central to the SIP, with the industry vision being:

“To be a cohesive, financially and environmentally sustainable, and highly efficient industry focussed on growing demand profitably”

Thus, the industry itself is a driver for improvement of environmental outcomes and the SIP represents a key reference point for the conduct of an environmental assessment. Importantly, the drivers for an environmental assessment can be directly linked with the key industry strategies for R&D investment and how this might be done is shown in table 1.

Table 1: Key drivers of an environmental assessment of the vegetable industry based on industry Strategic Priorities and the Australian Government National and Rural R&D Priorities

Strategy	How Assessment May Inform
Consumer alignment 45% allocation	Consumer satisfaction & Market intelligence Consumer preferences and demands are the most fundamental drivers on vegetable industry success. Evidence from an environmental assessment can be used to: <ul style="list-style-type: none"> • inform consumers and the community at large of what the industry is doing and achieving with its environmental practices • inform consumer education about vegetable growing and raise awareness of what goes into vegetable growing • inform consumers of the extent that sustainable practices are applied and how they distinguish Australia’s vegetable industry from others and • inform industry efforts to defend and promote the reputation of the industry domestically and internationally.
Market & value chain development 20% allocation	Supply chain and markets Supply chain and market analysis is a specific Australian Government National Rural R&D priority. Findings from industry environmental assessments will contribute to understanding and responding to domestic and international market and consumer requirements, while also improving the flow of information on environmental performance through the whole supply chain. The environmental assessment will: <ul style="list-style-type: none"> • Provide evidence to strengthen reporting to government and industry investors and in communicating what the industry and doing and achieving with other stakeholders. • Inform R&D priorities and investment decisions.
Farm productivity, resource use & management 35% allocation	Innovation and collaboration Productivity and adding value are specific Australian Government National and Rural R&D priorities. A vegetable industry environmental assessment would analyse

current innovations in environmental sustainability that coincide with improved productivity and profitability. The key to greater adoption of good management practices by growers is demonstrating that environmentally sustainable practices do not have to be a burden, and can actually contribute to a farm's output. The objective is to yield a greater output with a decreased input, demonstrating that environmental sustainability can be beneficial not only to the environment, but to the growers' profitability.

Climate

Climate variability and climate change is a specific Australian Government National and Rural R&D priority.

The environmental assessment will:

- provide evidence of industry practices and progress to mitigate climate change and build resilience to climate variability in the vegetable industry. This would be used in reporting to government and industry investors and in communicating what the industry is doing and achieving with other stakeholders.
- Inform R&D priorities and investment decisions relating to climate change.

Natural Resource Management

Natural Resource Management and Biosecurity are specific Australian Government National and Rural R&D priorities.

The environmental assessment will:

- Provide evidence of how industry practices are contributing to effective management of Australia's natural resources. This would be used in reporting on progress to government and industry R&D investors and in communications with industry stakeholders. It would also identify the role and relationship of NRM bodies and other relevant NGO bodies with the vegetable industry
- Inform R&D priorities and investment decisions relating to NRM.

For growers, these strategic drivers link to very specific drivers related to environmental issues at the business level. For example:

- **Cost-reduction.** The costs of complying with regulatory requirements and the costs of purchasing farm inputs (energy, water).
- **Community attitudes.** The attitudes of the broader community towards vegetable growing impacts on industry reputation. However, the attitudes of communities in peri-urban areas can impact directly on vegetable growing businesses.
- **Access to markets.** Demonstration of environmentally sustainable growing practices is increasingly part of the requirements of major retailers in Australia and overseas.

The strategic priorities listed in the above table are directly linked with drivers for industry wide evidence of environmental performance. This approach to evaluating the overall environmental performance is beneficial not only in its multifaceted nature, but also because

it provides evidence and information about the vegetable industry that would be of interest to different groups of stakeholders. One key group is the investors: industry and the government; that invest industry research and development and environmental programs and initiatives.

An environmental assessment of the vegetable industry is valuable to investors because it provides evidence of return on their investments. Value for money is important to industry and government investors, meaning that demonstrating this value in the form of outcomes and improved environmental sustainability provide the basis for continued investments.

The benchmark assessment will provide a set of objectives and metrics for outcomes that will analyse current trends and practices in environmental sustainability. Additionally, these metrics will be able to be used again in the future in order to evaluate changes and improvements in sustainable practices, therefore demonstrating to investors exactly where their funds are going and what they are achieving.

In addition to validating the value of investments, the assessment would also provide a set of recommendations and objectives that would advise future R&D investments. This information would provide guidance towards the direction of future funding by identifying gaps in R&D, voiced by stakeholders, which would serve as a benefit for achieving greater sustainability in the future.

Project Design

An industry-wide environmental assessment requires a clear process that appropriately evaluates specific factors and drivers and links with overarching strategic priorities of the industry and government. Outlined below is a project design that incorporates best practices for an effective assessment that will inform decisions by industry leaders.

Define clear objectives

Complex projects such as an environmental assessment need clear objectives to ensure the work is properly focused and the outputs are useful to industry. The vegetable industry has multiple uses for an industry-wide environmental assessment and likely objectives include:

1. To produce baseline evidence of current practices and enable future measurement of industry progress with environmental performance;
2. To identify and prioritise current and emerging environmental issues facing the vegetable industry;
3. To gather evidence and illustrative examples of good practice by Australian growers;
4. To understand best management practices and their adoption rates among growers;
5. To inform communications with key stakeholders about what the industry is doing and achieving with environmental management;
6. To recommend priorities for future R&D investments and risk management.

Link to industry and government strategic priorities

The Australian Government has taken a strong position on the importance of improving the sustainability of Australian agriculture and invested on a large scale through major initiatives to support environmental sustainability. Good examples are the Caring for our Country initiative, Carbon Farming Futures, Landcare and the Biodiversity Fund.

Additionally, the industry has been proactive in developing and rolling out the EnviroVeg Program, the scope of that initiative is focused on assisting farms become more environmentally sustainable. However, this does not demonstrate the overall progress that the vegetable industry has made in achieving environmentally sound management practices. That will be the focus of the proposed environmental assessment.

An environmental assessment of the vegetable industry will hold greater weight and importance if it recognises and draws from current industry and governmental strategies and investment plans. Linking back to strategic priorities contributes to the establishment of legitimacy in the eyes of stakeholders and investors in the industry and government, while also supporting and defining the overall objectives of the assessment.

Develop outcome hierarchies to enable assessment

An outcomes hierarchy is a method of characterising outcomes against which to measure the performance of a program or group of programs. These outcomes are developed and shaped based on industry and government priorities, and are used as a qualitative measurement of performance. Each priority area as expressed in the industry's strategic plans should have its own outcomes hierarchy, outlining specific measurements that contribute to overall performance in each area of investment. This enables the vegetable industry to gather relevant evidence and assess progress. Note that most of the information needed to construct the hierarchies is contained in the industry Strategic Investment Plan.

The vegetable industry is making investments across the environment spectrum and there are a series of short, medium and longer term outcomes that are being sought. This presents a challenge for industry leaders and for assessors. It requires a common understanding of how these outcomes work together to achieve industry objectives over the longer term.

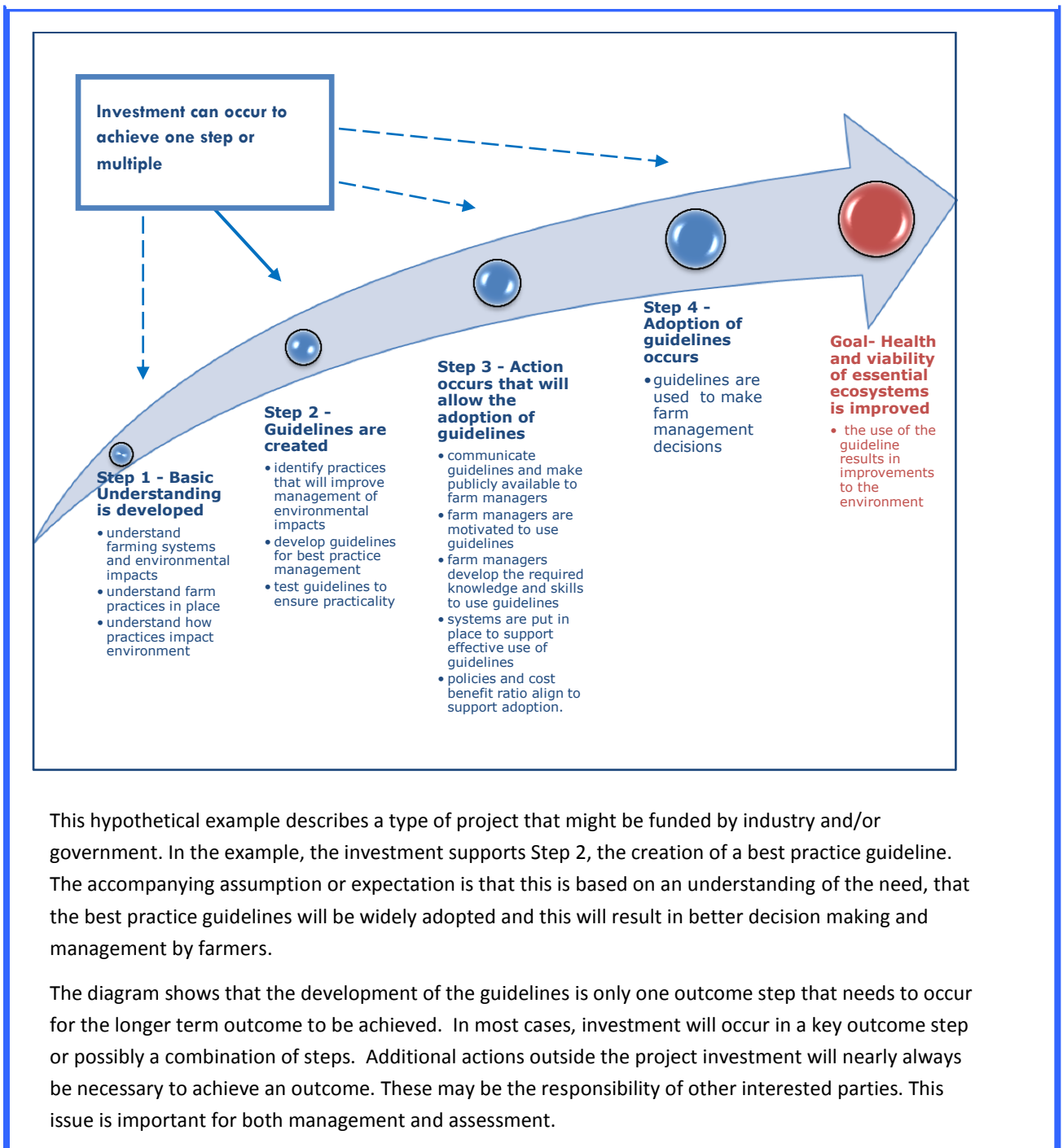
Examining the initiative from the perspective of the type of changes the industry might set out to achieve across the outcomes provides a strategic view of the assessment task and a common way of examining achievements. An overarching 'stages of change' figure can be constructed to describe the type of steps required for success in the longer term. These encompass:

- Foundational activities;
- Common 'Assessment Focus Areas' that are shared across 5 year outcomes;
- Long term National Industry Environmental Outcomes (5-20 years), along with the higher level strategy aspiration.

Note that the ‘assessment focus areas’ identified represent a strategic tool for assessors to use in gathering evidence to inform progress towards specific 5-year outcomes.

A complication to take account of in the assessment is that as the management of natural resources is primarily a decision of individual landholders, the industry has a catalysing or facilitative contribution. Thus, it creates value by contributing to the achievement of outcome steps that will assist or drive other outcomes to occur. This means that an investment will contribute in part towards overall success, but may not carry full responsibility for outcomes as others are involved. See Box 1 for an illustrative example.

Figure 1: Project interactions with external initiatives to produce longer term outcomes



This hypothetical example describes a type of project that might be funded by industry and/or government. In the example, the investment supports Step 2, the creation of a best practice guideline. The accompanying assumption or expectation is that this is based on an understanding of the need, that the best practice guidelines will be widely adopted and this will result in better decision making and management by farmers.

The diagram shows that the development of the guidelines is only one outcome step that needs to occur for the longer term outcome to be achieved. In most cases, investment will occur in a key outcome step or possibly a combination of steps. Additional actions outside the project investment will nearly always be necessary to achieve an outcome. These may be the responsibility of other interested parties. This issue is important for both management and assessment.

Review of industry documentation and consultation with HAL and AUSVEG suggests that there are some commonalities with environmental issues across the industry. The project should provide evidence on industry progress towards short, medium and long term environmental outcomes. For example:

- **Foundational Outcomes:** These priorities relate to the industry’s current strategy and government priorities.
- **Short and Medium term Outcomes:** The short to medium term outcomes relate to the main areas where focussed effort is required to make progress on environmental issue (e.g.: stakeholder engagement and increased awareness of best practice environmental management, access to skills and knowledge, increased adoption of good environmental practices).
- **Long term Outcome:** Identify the overall national environmental outcome that the industry aims for in the next 5-20 years. This outcome relates to the vision from the industry’s strategic investment plan.

Collect information against outcome hierarchies

Within each outcome hierarchy will be a set of outcomes that are relevant to each strategic priority. Therefore, when collecting information, it is important to assess environmental performance based on qualitative measurements against the specific outcomes. The collection of this information is dependent on what the specific outcome dictates, meaning that certain information will be found either through desktop or primary research.

Note: Below is a table of the products that fall under the vegetable levy. This defines the scope of the assessment to inform those within and outside of the industry as to which products are included in the assessment.

Table 2: Summary list of Vegetables included and excluded from the Levy

Leviable Vegetables	Vegetables Excluded from Levy
Carrots	Potatoes
Pumpkins	Potatoes – frozen
Sweet corn	Onions
Peas and beans	Tomatoes – processing
Lettuce	Tomatoes – fresh
Broccoli	Tomatoes – canned
Cauliflower	Asparagus
Capsicums	Mushrooms
Other vegetables	Other processed vegetables

Source: AusVeg Strategic Investment Plan

Analyse the information collected

Once information is collected and the industry environmental practices have been evaluated based on specified desirable outcomes, this data is analysed to produce results. This is where meaning is drawn from the research, and where insights about overall environmental performance will begin to emerge.

Produce findings and recommendations based on the analysis

The findings and recommendations produced at the end of the assessment present the conclusions and future priorities of the assessment. The findings should include an unbiased presentation of a comprehensive analysis of the industry based on each strategic priority, and present the strengths and weaknesses of the industry in terms of environmental performance. The recommendations will then summarise any gaps in research or areas of improvement, providing a baseline for future investment and a benchmark off of which to base future assessments of the vegetable industry.

Continue monitoring against the evaluation framework

This assessment is not simply an informative evaluation for stakeholders. It is a benchmark assessment that will set the stage for subsequent assessments in the future. This means that even after the assessment has been completed, the industry is responsible for releasing a response to any significant findings that were reported. The plan of action once the assessment has been completed is as follows:

1. An independent contractor will conduct the baseline assessment.
2. The industry will review the assessment.
3. The assessment will be released to the public as an independent evaluation.
4. The industry will issue a response to assessment recommendations.
5. Another assessment will take place in 5 years in order to evaluate the success of the industry's response.

Project Logistics

This briefing also identifies issues for industry consideration prior to investing.

Time involved

An industry wide environmental assessment of this size and complexity will generally take up to eight months to complete.

	Task	Time frame
Phase 1: Project Initiation	Project plan, collection of information, development of outcomes hierarchy used to assess environmental performance	4-6 weeks
Phase 2: Data Collection	Desktop and primary research, survey design and test, compilation of sample lists and content	8-10 weeks

Phase 3: Survey Release	Survey is released to sample list, interviews conducted	3 weeks
Phase 4: Data Analysis	Survey closing, compilation of results, data analysis	2 weeks
Phase 5: Reporting	Draft Report	5-7 weeks
Phase 6: Project Conclusion	Final Report	2 weeks

Investment cost

Evaluations of large government environmental programs of similar complexity involve investments in the range of \$120,000 to \$160,000. However, because preliminary work has been done for this assessment, we consider that it is achievable for the vegetable industry in the range of \$100,000 to \$130,000. Primary costs are associated with the gathering of primary research, such as interviews and survey work. The main proviso is the depth of sampling applied in the primary research activity. The above indicative costs are based on a valid sample to draw conclusions at a whole of industry level, with some narrative around major regions and crops. Deeper comparative analysis between regions and crops would require a larger sample.

Project Risk Plan

Risk Mitigation Plan

A risk mitigation plan is needed to address potential issues which could impact on the completion of the project. These issues might include risks relating to decision-making, strategy implementation and scope, political support for the project and governance.

Overview of the types of risk for the project

Decision Risk

This type is related to the need for final decision making to proceed with implementation.

Key sources of risk in this project include:

- *AUSVEG and HAL expectations and uncertainty:*
 - maintaining clarity and agreement about what the project can and will deliver
 - retaining flexibility, particularly in the first 2 months as data is collected.

Delivery Risk

This relates to the effective delivery of the implementation project. It includes the scope of the work undertaken during delivery, transitional issues, the skills and resources applied, the quality of the outputs or processes and the timing and coordination of activities. Key sources of risk in this project include:

- *Lack of clarity in scope:*
 - there is potential for ambiguity about the boundaries of each output
- *Data ambiguity and insufficiency:*
 - information may be unavailable, incompatible, or of insufficient quality, meaning that the service provider cannot produce outputs in the way it anticipated would be possible.

Political Risk

This relates to the need for support and engagement in the project by people outside of the project team and any issues relating to the client and its responsibilities as an organisation.

Key sources of risk in this project include:

- *Lack of support from external parties such as farmers and key stakeholders*
- *Industry or Government policy changes significantly during the project*

Governance Risk

This relates to meeting organisational requirements and expenditure for conducting business and expending project money. Key sources of risk in this project include:

- *Changes in staff over project period:*
 - Potential risk of governance gaps due to changes in AUSVEG, HAL, service provider, and sub-contractor staff over project period.

Risk management associated with completing the project

After considering the terms of reference and our proposed approach, project timing and methodology, the following table provides a brief outline of the major risks for the project and proposed mitigation strategies.

Project Risks		
Top 5 Risks	Impacts	Mitigation Strategies
1. Project design not customised sufficiently for Vegetable Industry	The results will not be valued and used by the vegetable industry. Mis-allocation of scarce resources.	<ul style="list-style-type: none"> Ensure that the approach developed by the service provider is consistent with the terms of reference and the policy imperative developed specifically for the Vegetable industry.
2. Lack of awareness about the project amongst important stakeholders	Reduced participation by key stakeholders Reduced commitment to implement findings.	<ul style="list-style-type: none"> Develop and implement communication plan to raise awareness and participation before, during and after the first assessment. Establish industry steering committee to provide guidance to the consultant at critical points during the project.
3. Lack of clarity in scope	Stakeholder confusion Misallocation of resources Findings not valued by industry	<ul style="list-style-type: none"> Clear, written and agreed scope definitions for all aspects of project Project planning Process for scope clarification in early phases of the Program
4. Unavailability of key stakeholders for interviews and poor response rates.	Delays in meeting project milestones Industry not effectively engaged Quality of data, findings and final report diminished	<ul style="list-style-type: none"> Industry steering committee to provide guidance. Identification of key stakeholders to interview with alternates if the primary contact is not available. Efficient process for arranging interviews with sufficient notice given. Clear communication of the purpose of the project and the importance of the stakeholder interviews with any pre-reading material provided in sufficient time before the scheduled interview. Structured interview questions prepared and tested, interviewers given clear briefing and any required training. If stakeholders are not available for face to face or telephone interviews seek possibility of online/written or alternative responses to the questions.

5. Low response rate for grower survey	Statistical significance and reliability of the data and findings compromised	<ul style="list-style-type: none"> • Take advice from industry steering committee on timing of survey. • Use of best practice process and quality assured survey methodology (eg. CATI) to mitigate against low response rate. • Use of trained and skilled interviewers experienced in rural and regional industry research.
6. Data ambiguity and sufficiency	Inability to produce credible baseline outputs	<ul style="list-style-type: none"> • Prioritise data collection early in the project. • Seek AUSVEG/HAL support in obtaining access to best available data on environmental issues across priority issues such as water, energy, etc. • Review data and identify best approach to output development
7. Absence of key consulting personnel.	Failure to meet milestones and final reporting date	<ul style="list-style-type: none"> • Provider to identify back up consultants if any of the team is unavailable or absent during the project. • Sub-contractors have substitute staff if allocated staff is unavailable.
8. Poor quality analysis and reports.	Lack of acceptance of the project findings and recommendations by stakeholders and growers resulting in limited project outcomes	<ul style="list-style-type: none"> • Service Provider and the Steering Committee to work closely throughout the project with regular work in progress reports. • Develop a shared view of expectations from the outset. • Regular communication between Service Provider and the Project Coordinator on progress and issues emerging. • Timely and detailed feedback of the Steering Committee to the draft reports. • Robust validation methodology that is followed.

Implications for Internal and External Communications



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Communications

This section outlines some of the implications, priorities and issues to consider in designing and implementing communications about the vegetable Industry Environmental Assessment.

Raising awareness

Raising awareness of the environmental assessment should involve communicating the drivers that make it important and the benefits to the industry and growers.

The effort involved to raise awareness could be considerable given the scale and diversity of the industry, along with the competing priorities being managed by industry participants.

Engaging industry to enlist support and build relationships

Industry input to the environmental assessment is critical to producing a quality output that is valued by the industry.

Engaging with industry will help with awareness and with support for acting on the assessment recommendations.

The communications plan will need to identify, prioritise and target key stakeholder groups within and outside the industry, using a variety of communication channels.

Communicate assessment scope

Communication about the assessment could be complicated where people external to the industry may not be aware of the different levies relating to vegetables.

In particular, people external to the industry could assume that this vegetable industry assessment covers all vegetables (including those covered by different levies).

AUSVEG and HAL should consider how they communicate and engage with the other industries so that they are aware of the scope and purpose of this assessment.

Tools

AUSVEG has an existing, sophisticated approach to industry communication. These existing tools, networks and communication channels should guide all project communications.

Possible tools include:

1. Fact Sheet and FAQ
2. Media release/s
3. Content for industry publications
4. Case studies of individual/business success
5. Presentations at conferences and events where appropriate

Mapping out the communication strategy and actions from the outset and implementing it systematically will represent an important success factor for the project.

Draft Tender Brief

The Australian Vegetable Industry: First Industry-Wide Environmental Assessment

Introduction

Horticulture Australia Limited (HAL) is a national research, development and marketing organisation that works in partnership with the horticulture sector to invest in programs that provide benefit to Australian horticultural industries.

HAL is responsible for the coordination and management of industry and publicly-funded R&D and marketing for Australia's horticultural industries. These industries include fruit, vegetables, nuts, nursery, turf, cut flowers and extractive crops.

HAL invests over \$80 million annually in projects in partnership with the horticulture sector. During the year HAL runs more than 1200 research, development and marketing projects covering a diversity of topics including: market access, market research, export marketing, domestic marketing, supply chain management, quality assurance, food safety, skills development, industry communication, biotechnology, biosecurity, breeding, plant health, pesticide regulation, agronomy, crop regulation, physiology, irrigation and sustainable practises.

These investments are funded partly by industry levies and partly by public funds.

Background

The Australian vegetable industry is a multifaceted and diverse industry which is represented across every state and territory in Australia. The geographic spread and range of crops grown presents unique opportunities and challenges to the industry, particularly across environmental sustainability. The Federal Government recognises and encourages the need for Australia's primary industries, including the vegetable industry, to take action in environmental sustainability.

New initiatives, policy, and legislation changes, together with funding programs, have been and will continue to be rolled out to provide a basis for long term resiliency of the vegetable industry. Additionally, drivers such as market expectations, pressures on resources, public and government pressures, and regulatory requirements are steadily increasing, compelling the vegetable industry to demonstrate its accountability to environmental management.

Australia's vegetable industry has responded to market demands and governmental policies for sustainable production practices through investment in natural resource management research, development and extension (RD&E) programs, best management practise resources, and environmental self-assessment tools to support farmers in adopting best practice.

However, the existence of RD&E, self-assessment, and voluntary audit tools only provide a foundation for environmental sustainability measures. An industry-wide environmental assessment,

which pieces together previous research, surveys and audits, is a critical step the industry must take in order to demonstrate the overall performance of the vegetable industry.

The vegetable industry will actively seek to work collaboratively and in alignment with other industry and government funder programs in order to leverage and increase the effectiveness of its own investments in this area.

Terms of Reference

HAL is seeking concise tender submissions from selected organisations, with the capability and capacity to undertake an industry-wide environmental assessment of the vegetable industry.

This assessment should identify key environmental issues and policies facing the vegetable industry, and the actions the industry has taken in order to remain sustainable, compliant, and profitable. The assessment report will inform future priorities for action and strategies both on the ground and through research and development. It will also inform industry communications with growers, governments, the media and the community.

The terms of reference for the Australian Vegetable Industry Environmental Assessment are:

1. Identify and prioritise the environmental issues currently facing the vegetable industry.
2. Collect and assess evidence of the industry's performance in responding to the identified environmental issues.
3. Conduct desktop and stakeholder research to identify and prioritise emerging environmental issues.
4. Produce an environmental assessment report that provides baseline information on what the industry has done and achieved to date, along with supporting evidence
5. Provide recommendations of specific areas for future industry action to improve environmental performance and industry risk management.

Proposed Methodology

The following is a possible process to conduct the Australia Vegetable Industry Environmental Assessment. Suitable methodologies will need to be defined to conduct the assessment and the consultant is encouraged to provide their own methodologies and procedures.

1. A comprehensive desktop review of documentation and research evidence relevant to vegetable industry environmental issues and performance.
2. Representative research on the perspectives of key stakeholder groups (e.g. vegetable growers, state and federal government personnel, industry organisations and relevant consumer and environmental interest groups).
3. Analysis of the data and information collected.
4. Preparation of a draft assessment report with baseline information and recommendations.
5. A supporting briefing paper and risk management plan for the vegetable industry leadership to consider in responding to the findings and recommendations.

Note that HAL envisages the main element of the representative research would involve a survey of vegetable growers.

Scope of Assessment

Given the industry's diversity (e.g. by crop, region, farm size), challenges will arise in conducting a whole of industry assessment. The project will take a strategic approach and focus on common issues that affect the majority of the broader industry.

The scope of this assessment is limited to those crops that are included in the vegetable levy. Thus, it excludes crops such as onions, tomatoes, potatoes and mushrooms.

The project will assess environmental performance based on those core issues that are most significant across all crops (and possibly regions). Thus, it will encompass water management, chemical management, energy efficiency, etc.

Draft Timetable

The project will commence in xx-xxxx and completion is expected by xx-xx-xxx.

Task	Finalised by
1. Project Commencement	TBA
2. Project Plan	TBA
3. Draft Report	TBA
4. Final Report	TBA

Project outputs

1. Project plan
2. Draft baseline report
3. Final report
4. Briefing and risk management plan to support industry decision makers in implementing recommendations

Project Budget

The total budget for this project is a range of \$100,000 - \$130,000 (excluding GST).

Resource Allocation to the Project

Applicants will provide their own administrative support, including word processing and printing requirements. Applicants will be responsible for the research and collation of data and presentation to HAL in the requested format.

The HAL contract allows for the provision of assistance in accessing relevant HAL documents and appropriate HAL and industry representatives as may be agreed to. HAL will provide reference material upon request or direct the consultant to the relevant information sources. It is expected the consultant will liaise with growers, researchers, external stakeholders, and industry people as appropriate.

Consultants Proposal

The applicant's response to the brief must address:

1. Methodology
 - a. Demonstrate a clear understanding of project requirements
 - b. A description of the proposed methodology to address the specific project terms of reference and strict associated timeframes.
2. Costing and payment
 - a. A total job cost with breakdown of anticipated costs for each major phase or milestone of the project, including allocation of the consultant's time, material and other costs.
 - b. A detailed outline of when payments are due.
3. Qualifications of consultants
 - a. A statement of the name, role, qualifications and experience of person to be allocated to the project must be provided.
 - b. Current references, which would demonstrate the experience of both the organisation and personnel nominated for this project, must also be provided.
 - c. Contact details for the person nominated for involvement in the project.
 - d. Clearly identify the main contact for correspondence.
 - e. Clearly identify the company or business involved in the proposal lodgement.

Criteria for Selection

The criteria for selection include:

- Proven experience and capability in conducting complex environmental evaluations, particularly relating to agricultural industry environmental assessments.
- Relevant knowledge and expertise of service provider personnel.
- Appropriateness of methodology and demonstrated understanding of the issues and project requirements.
- Capacity to meet the project milestones.
- Value for money.

Resource Materials

Reports

- AusVeg Australian Vegetable Industry Strategic Investment Plan 2012-2015
- AusVeg Australian Vegetable Industry Environmental Strategy 2010-12
- HAL Vegetable Industry Annual and Final Reports
- HAL Strategic Plan 2012-2015
- ABARES Vegetable Growing Farms – An Economic Survey 2010-11 and 2011-12
- State of Environment Report 2011 (DSEWPaC)
- National Water Quality Assessment 2011 (DSEWPaC)
- EnviroVeg Program Case Studies 2010-11
- Growcom Horticulture Environmental Desk Audit
- HAL Environment Portfolio
- Regional EnviroVeg Guides - <http://www.enviroveg.com/Resources/Regional-EnviroVeg-guides-now-available.aspx>

Codes of Practise/State Specific Resources

- *Code of Practice for Environmentally Sustainable Vegetable and Potato Production in Western Australia* - <http://www.water.wa.gov.au/PublicationStore/first/84273.pdf>
- QFVG - *The Farmcare Code of Practice for Sustainable Fruit & Vegetable Production in Queensland* - <http://www.growcom.com.au/uploads/24441Farmcare.pdf>
- South Australian Research and Development Institute (SARDI) – www.sardi.sa.gov.au
- NSW Primary Industries – Agriculture; National Vegetable Industry Centre, Yanco <http://www.dpi.nsw.gov.au/agriculture/horticulture/vegetables/services/research-centres/nvic-yanco>
- Vegetables Victoria - <http://www.vgavic.org.au/environment>
- Fruit and Vegetable Roundtable Summary: Addressing the barriers to a viable Victorian fruit and vegetable industry 2011 - <http://www.foodalliance.org.au/Submissions/Fruit%20and%20Vegetable%20Roundtable%20Report.pdf>
- Victoria Department of Environment and Primary Industries – Vegetable Growing
 - <http://www.dpi.vic.gov.au/agriculture/horticulture/vegetables/vegetable-growing-and-management/vegetable-growing>
 - <http://www.dpi.vic.gov.au/agriculture/horticulture/vegetables/victorias-vegetable-industry>
- Tasmanian Vegetable Industry Facilitator report and Strategic Plan 2007-2012 - <http://www.dpiw.tas.gov.au/inter.nsf/WebPages/JBAS-96S6CQ?open>
- Vegetable Industry Situation Analysis 2011 (Tasmania) - http://www.tfga.com.au/index.php/download_file/view/155/242/VEG_-_Situation_Analysis-040111.pdf?file=VEG_-_Situation_Analysis-040111.pdf

Additional Resources

- Greenhouse gas accounting – carbon foot print calculators¹
 - **Grains Greenhouse Calculator** (DPI Victoria)
 - **CarboNZero** (New Zealand Crown Research Institute)
 - **FullCAM** (Australian Department of Environment and Heritage)
 - **APSIM** (Agricultural Production Systems Research Unit)
 - **Vegetable Carbon Calculator** (South Australian Research and Development Institute)²

DRAFT

1

http://www.vgavic.org.au/research_and_development/Researchers_PDFs/vg08107_carbon_footprint_part_3_calculators.htm

2

http://www.sardi.sa.gov.au/information_and_news/2011_media_releases/green_boost_for_australias_vegetable_industry