

Horticulture Innovation Australia

Final Report

EnviroVeg Program for promoting environmental best practice in the Australian vegetable industry

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Vegetable (R&D Levy)

Project Number: VG12008

VG12008

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Summary

EnviroVeg (the Program) is a vegetable industry-specific environmental Best Management Practice (BMP) program, funded through the vegetable R&D levy. It has existed in evolving forms since 2000, with a number of resources offered to growers through the Program so that they can benchmark and improve their BMPs as well as showcase their environmental credentials. VG12008 is the latest program iteration and has been managed by AUSVEG since 2012. A one year extension was added in 2015 to develop a strategy for the Program (the strategy), conduct an evaluation of program impact over its lifetime covering all EnviroVeg projects (the evaluation), and form a formal agreement with a recognised on-farm quality assurance (QA) program. An independent review of EnviroVeg (VG15018, the review) provided the scope for this extension and included feedback that has been encompassed within the strategy.

As a long running levy funded program, EnviroVeg represents a considerable investment from the vegetable industry. This final reporting period of December 2015-December 2016 has focused on developing and implementing a strategic plan to ensure that this investment is utilised to obtain the best advantage of the Australian vegetable industry going forward.

Through extensive consultation with engaged industry members and growers, the service provider has made recommendations as to how this investment should proceed over the next five year period. The strategy is included with this report as a companion document and outlines a streamlined program, with defined program elements integrated with other industry programs that share the vision and interests of EnviroVeg. The strategy incorporates feedback from the evaluation and will streamline a number of program components moving forward, supporting long-term sustainability of the Program.

EnviroVeg has formalised an agreement with Freshcare Ltd, a recognised on-farm QA program, which will streamline environmental assurance functionality for the Australian vegetable industry. This is one of the key outcomes of VG12008 that will provide clear direction for EnviroVeg and the Australian vegetable industry. The strategy also recommends raising industry awareness of the Program through the National Vegetable Extension Network (NVEN), and increasing the amount of data gathered by using a more sophisticated online platform.

EnviroVeg has been required to reduce its emphasis on measureable outputs during this time in order to deliver outputs in line with the current contract. Previously, VG12008 has delivered a number of measureable outputs including increasing program membership and area coverage, developing tiered membership levels and audited components, communication outputs, face to face extension and workshops.

This report discusses the impact of these outputs and outlines how the continuation of EnviroVeg, through consolidating its role in the industry, will enable greater collaboration and a future focus on long-term outcomes, operating in the best interests of the Australian vegetable industry.

Keywords

Best management practice, environment, quality assurance, audit, EnviroVeg, vegetables, vegetable growers, innovation, collaboration, AUSVEG, Horticulture Innovation Australia.

Introduction

EnviroVeg is a vegetable industry-specific environmental Best Management Practice (BMP) program, funded through the vegetable research and development (R&D) levy. It has existed in evolving forms since 2000 (Table 1).

Table 1: Past EnviroVeg projects

Project	Service Provider	Project Title	Dates
VG00016	Vegetable Growers Association of Victoria - P. Ulloa & R. Richardson-Bunbury	How to demonstrate good environmental performance: a practical mechanism for vegetable growers	2000 – 2003
VG03088	AUSVEG Ltd - Helena Whitman, Sarah Hearn & Richelle Richardson-Bunbury	Developing the EnviroVeg program as a national environmental program in the vegetable industry	2003 – 2006
VG06003	AUSVEG Ltd - Helena Whitman	EnviroVeg manual new sections - hydroponic, greenhouse and organic production	2006
VG06015	AUSVEG Ltd – Richard Mulcahy, Helena Whitman	Implementation of national environmental strategy for the vegetable industry - extension to November 2009	2006 – 2009
VG08110	AUSVEG Ltd - Richard Mulcahy, Siwan Lovett & Mr Hugh Tobin	Building Partnerships with NRM Regional Bodies using EnviroVeg as a Resource Management Tool	2008 – 2009
VG08178	AUSVEG Ltd – Richard Mulcahy	Implementation of national environmental strategy for the vegetable industry - 6-month bridging project between VG6015 and VG09002	2009
VG09002	AUSVEG Ltd – Richard Mulcahy, Jordan Brooke-Barnett	Environmental Management Strategy and Program for the Australian Vegetable Industry	2009 – 2012
VG12008	AUSVEG Ltd	EnviroVeg Program for promoting environmental best practice in the Australian vegetable industry	2012 – 2016

EnviroVeg was first undertaken to provide growers with a method to benchmark and showcase their environmentally-friendly growing practices and environmental credentials. The first iteration was a Victorian program managed by the Vegetable Growers Association of Victoria (VGA Vic, now AUSVEG VIC). It has since been expanded nationally through AUSVEG and is well-established within the

Australian vegetable industry.

A number of resources are now available through the Program that are focused on assessment, environmental assurance, BMPs and BMP uptake. The Program has grower members and membership is structured through three tiers (Basic, Gold and Platinum). Basic and Gold members complete a self-assessment that is divided into nine sections. The EnviroVeg manual correlates with these sections and contains templates and links to R&D. Gold members have to achieve over 85% on the self-assessment and complete an environmental action plan before receiving an EnviroVeg gate sign and certificate.

EnviroVeg Platinum is third party-audited, and gives growers access to the EnviroVeg branding. The audit expands from the manual self-assessment and has been designed specifically for vegetable growers, with a number of materials to help them through the auditing process.

EnviroVeg also uses a website, phone application and a breadth of communication and extension material to promote both the program and BMP research. Communications include monthly and quarterly email updates to EnviroVeg members, research updates and grower profile articles in the *Vegetables Australia* magazine, face-to-face grower visits, hosting of regional workshops and raising awareness of the Program at industry events such as the National Horticulture Convention.

A full time EnviroVeg Program Coordinator (the Coordinator) reported to the EnviroVeg Steering Committee (the Committee) on program activities. The Committee is made up of growers from across the country.

VG12008 was undertaken to build on the work of previous iterations of EnviroVeg and encourage active participation in the program. In 2015, an independent review of EnviroVeg (VG15018) found that the Program suffered from a lack of defined strategy and focus on outcomes.

Following the review, funding and delivery changes were recommended, as was a one year project to investigate and deliver a forward plan that would act on the outcomes of the review. Specifically, it was asked that the Program deliver an impact assessment of EnviroVeg on grower practices, including an objective assessment of the overall success of the program. As well as developing a plan for the future, EnviroVeg was tasked with entering a formal arrangement with a recognised on-farm QA program.

A one year extension to EnviroVeg was subsequently provided to develop a future strategy (the strategy), develop a formal arrangement with a recognised on-farm QA program and conduct an evaluation of the impact of EnviroVeg over its lifetime (the evaluation).

The past year of this project has focused heavily on defining and developing these aspects through consultation with growers, industry, EnviroVeg members and other relevant parties. It is envisioned that outputs achieved will contribute to the sustainability of the Program and long-term benefits for EnviroVeg members.

Environmental best practice programs in Australian agriculture

Voluntary environmental management processes have been adopted by different agricultural industries to suit their needs and to align with industry requirements such as QA.¹ Some industries have stronger drivers for these systems, but all sectors in Australian agriculture are under increasing community pressure to demonstrate their clean, safe and sustainable credentials, due to increasing pressure from importers.

In Australia, these systems are largely based on schemes that comply with the Hazard Analysis Critical Control Point (HACCP) principles, incorporated into a code of practice. Examples of these programs include Cattlecare, Graincare, Flockcare, Entwine and Freshcare, the last being pertinent to the fresh produce industry.

For exported Australian vegetables, compliance with the GLOBALG.A.P. program has largely become essential.² This 'good agricultural practice' program has evolved out of Europe and includes environmental components.

Environmental programs are often initially driven by a need to showcase good environmental practices within the community and in regions of environmental importance. An auditable environmental stewardship system was developed to determine and provide recognition of environmental stewardship within the Murray-Darling Basin.³ It was linked to regional natural resource management (NRM) and catchment targets to deliver public and private benefits.

Around the Great Barrier Reef, scrutiny of environmental management is high. Herbicides used in sugar cane production have been particularly associated with this issue and scrutinised, with the industry addressing this challenge by incorporating environmentally conscious agricultural practices in the region.⁴ The Environmental Stewardship program was developed to improve the habitats of native, threatened species⁵ and the function of the communities they exist in.

Environmental assurance drivers have changed over time in line with the changing governmental, agricultural and environmental policies in place. This includes Landcare, which was established in 1990 to harness community spirit and catalyse greater investment from a number of sources other than government itself.⁵

Developments in environmental best practice R&D have provided the opportunity for the development of BMPs. Reduced tillage practices in Australia is an example of a BMP developed through R&D which is now widely adopted in Australia.⁶ Good R&D is important for developing BMPs as it drives the development of new practices.

EnviroVeg program drivers and history

The projects listed in Table 1 reflect the changing drivers behind the EnviroVeg program. It started in Victoria under VG00016 because of growing community expectations of environmental management on farms and a need to define an environmentally-responsible vegetable grower.

VG03088 extended the program from Victoria, taking its self-assessment system and manual to growers nationally through AUSVEG. The Horticulture For Tomorrow (HFT) guidelines were used to investigate the development of a certifiable environmental management system on-farm. HFT are guidelines for Environmental Assurance in Australian Horticulture incorporating the latest research and funded through Hort Innovation.

VG06003 was delivered as a sub-set of VG06015, which developed and implemented a national environmental strategy. The environmental strategy was developed due to increasing program uptake to direct environmental improvement in the industry, and included plans for a developed marketing advantage for certified members. A marketing advantage was developed through EnviroVeg Platinum during this project, VG12008.

VG08110 built upon the Environmental Management System Pathways Project entitled 'Building a

cooperative partnership between Regional NRM Bodies and the Vegetable Industry – a national approach', as well as the work undertaken through the Healthy Soils for Sustainable Vegetable Farms Project. It extended the project through these engaged networks and evolved to connect with a broader audience.

The last project before VG12008, VG09002 developed on the program extension developed in VG08110. It grew the membership and extended EnviroVeg to a greater number of growers and included the development of a program website and a focus on media exposure.

Methodology

The project was contracted to build on past EnviroVeg projects, with a vision of establishing the Program as the preeminent environmental management program for the vegetable industry. The Program exists to promote environmental best practice in the Australian vegetable industry. A number of objectives were outlined to achieve this, including: developing materials, improving administration process, increasing membership, leveraging publicity and web tools and maintaining and developing engaged networks and relationships with key stakeholders.

Effective rollout of the program was facilitated by the key methodology components: communications, extension, program awareness, resource development and strategy development.

Governance

EnviroVeg steering committee (appendix 4.3)

The Program Coordinator consults with the EnviroVeg steering committee on program developments and decisions. The committee is regularly updated on key program developments such as membership numbers. Committee meetings were organised around key program dates and at regular intervals (~6 monthly) to ensure the program continued to develop in the best interests of growers. Committee meetings and committee consultation have been conducted face-to-face, over teleconference and via written communication. The make-up of this committee is included in appendix 4.3.

Communications

Email Updates to members

Email updates were sent out to members at two regular intervals, monthly and quarterly. Monthly updates were restricted to a small number of articles which were generally focused on new BMP R&D, environmentally focused funding and promoting the benefits of BMP uptake. Quarterly updates contained a greater number of articles and also included program updates for EnviroVeg members.

EnviroVeg Case Studies and EnviroNews in Vegetables Australia

Three to four articles were published in each edition of the bi-monthly magazine *Vegetables Australia* to promote the program, environmental best practice techniques, research and development and the beneficial effects of BMP uptake. These articles included a grower profile or case study, in which a leading grower/EnviroVeg member was interviewed to discuss and showcase their BMP techniques and related benefits. Also included were two to three 'EnviroNews' stories, which detailed research, development, funding or otherwise beneficial and engaging environmental related stories, as well as program updates.

EnviroVeg Surveys to members and growers

Annual surveys were forwarded to EnviroVeg members to benchmark the impact, awareness and

importance of the program to growers. An initial online survey was developed with help from an external consultant, and uploaded online for members to access. The survey was extended to growers through phone interviews and EnviroVeg communication/extension activities (emails, magazine articles, face-to-face visits).

Examples of communications are included in Appendix 1.

Extension and membership sign up/tracking

Grower Workshops

EnviroVeg hosted workshops in major growing regions across the country to connect growers with industry research, development, supply chain members, suppliers and the EnviroVeg program itself. Events generally included 4-6 speakers speaking for 15-30 minutes, and were structured to include informal networking between growers and workshop participants, with refreshments provided.

On-farm grower visits by the Coordinator

The Coordinator focused heavily on visiting growers to increase program membership, resource uptake and active member participation. This was an essential part of the strategy to increase program membership at each of the program's tiers, and the majority of new program members joined as a result of these grower visits. The Coordinator developed relationships with growers through this method, which strengthened the program's engagement with and connection to the needs of Australian vegetable growers.

The Coordinator has since continued to support and communicate with growers and program members to assist them with moving through the assessment processes housed by EnviroVeg. During these communications, feedback is also received on the level of support provided through the Program.

Examples of program extension are included in Appendix 2.

Program awareness

Media Activities

The program has published a number of media releases to develop program publicity for a number of key program events and milestones including workshops, launching EnviroVeg Platinum, the smartphone application, the Vietnamese manual and program website. Coverage included magazine and online articles and interviews by the Coordinator.

Meetings with Industry Groups

The program has facilitated a number of meetings with industry suppliers, policy organisations and grower groups in order to promote the program and consolidate industry support. The program is also promoted through meetings facilitated by AUSVEG during its other industry engagement activities.

Industry Event attendance

The program developed industry support and promotion through attendance at industry events. For example, the National Horticulture Convention tradeshow featured an EnviroVeg booth over each year of this project, allowing the Coordinator to network with growers and industry at the convention.

Examples of Program awareness are included in Appendix 3.

Program and resource development

Development of Program Tiers and related membership

The program has developed a three-tiered membership structure over this project period, including a third-party audited program, EnviroVeg Platinum. The detailed membership requirements for each program tier are included in Appendix 4.1.

EnviroVeg Platinum has developed resources to assist growers through the auditing process, including a manual template, Program guidelines and assistance from the Coordinator. This tier gives growers access to EnviroVeg promotion through program name and logo use.

EnviroVeg Gold is an intermediate program tier that has been developed to encourage movement to Platinum level. It further encourages grower environmental best practice implementation through use of an environmental action plan and achieving over 85% on the self-assessment. This gives growers access to an EnviroVeg gate sign and certificate.

Biosecurity component of EnviroVeg and related resources

The importance of good on-farm biosecurity has been promoted through the development of four different sections: an online biosecurity quiz, farm gate signs, EnviroVeg manual resources and soil testing. Farm gate signs were distributed to EnviroVeg members and growers who successfully completed the Biosecurity quiz. A new section for the EnviroVeg manual was developed and includes a biosecurity checklist and action plan template. The quiz and manual resources were developed through consultation with the AUSVEG biosecurity program, and were made available on the EnviroVeg website and promoted to growers through EnviroVeg communication channels.

Soil samples collected from willing EnviroVeg workshop participants were tested through fungal culturing and fungal baiting for *Fusarium* spp., *Pythium* spp., *Rhizoctonia* spp. and *Phytophthora* spp. by the Department of Environment and Primary Industries in Victoria. The results of these anonymous tests were positive for *Fusarium* spp at 10-20% and *Pythium* spp at 80-90% and have been highlighted to members and workshop attendees through email updates.

Smartphone Application development

EnviroVeg developed a smart phone application for program members, which enables them to access program resources such as the EnviroVeg manual and self-assessment from their phone. This application is available here: <https://itunes.apple.com/au/app/enviroveg/id696519804?mt=8>.

EnviroVeg Website and content development and maintenance

The EnviroVeg website exists to deliver effective resources and information to growers about the program. It has been relaunched over this project period and includes online self-assessment tools and links to program resources such as templates and information on the program's structure.

The website has incorporated updates to provide information such as the resources page, housing of EnviroVeg updates on the site and the development of automated reminders regarding completion assessments. The website is www.enviroveg.com.

EnviroVeg Manual development including translation

The EnviroVeg manual is a central resource for the program and acts by linking assessment requirements with research material, templates and methods to improve environmental management.

Over this project period, the manual has developed a new biosecurity section and been translated into Vietnamese by an accredited translation service, with input on technical issues from Vietnamese extension officers engaged with their growing community. This manual was promoted through the media, launched at a Vietnamese growers event in Virginia, South Australia and distributed to growers within these Vietnamese communities. A number of manuals were sent to extension officers in the Northern Territory for distribution amongst local networks.

Examples of program development are included in Appendix 4.

Strategy Development

The strategy was developed through a number of feedback mechanisms. These included: a representative EnviroVeg members meeting, the review, the evaluation, a grower survey and extensive consultation with industry and growers. Letters of support for this strategy from Freshcare and the EnviroVeg committee have been included in Appendices 5.1 and 5.2.

A SWOT (strengths, weaknesses, opportunities and threats) analysis of the program was included as part of the strategy, as well as a situational analysis of the current working environment for EnviroVeg. The Program's context was used to provide background on the development of the strategy.

Strategic Consultation

In August 2015, a representative EnviroVeg member meeting, comprising EnviroVeg grower members from across different growing areas and all program membership tiers, was held in Adelaide. This meeting was a chance for program members to discuss if and how EnviroVeg should proceed into the future. Appendix 5.3 contains minutes from this meeting.

EnviroVeg spoke with key industry groups and stakeholders about its future development, including; on-farm QA programs (Freshcare, GLOBALG.A.P., SQFI), supply chain members (including Coles and Woolworths), other industry BMP programs (Entwine, Banana BMP and Hort360), marketing and export programs (the Australian Made branding scheme and the Vegetable Industry Export Development Program) – all groups provided valuable information that helped shape the strategy.

A program survey (Appendix 5.4) was extended to all interested parties through emails (EnviroVeg updates, newsletters and AUSVEG weekly updates), phone calls and face-to-face interactions with growers (including at the EnviroVeg booth during the 2016 National Horticulture Convention). The results of this survey were included in the correlated information provided to Ag-Dynamics as a part of its engagement as a consultant tasked with providing the evaluation.

At each step along the decision making process, EnviroVeg consulted with the Committee before moving forward. Growers and engaged industry members have been instrumental in ensuring that the program continues in the best interests of growers.

Investigation of program impact

A Hort Innovation-funded independent review of EnviroVeg (the review)⁶ was conducted and submitted in October 2015. The review provided a number of conclusions about the current state of EnviroVeg, including that the program suffered from a lack of clear strategy, overall effectiveness and outcome delivery. The resources, communications and number of outputs developed were highlighted as Program strengths; however, continued funding in its current format was not recommended.

The review outlined the need for harmonisation of environmental BMP programs, concluding that EnviroVeg should investigate integration with another BMP/assurance program. The lack of evidence to demonstrate the Program's effect on environmental BMP adoption and a lack of data on BMP uptake were highlighted as concerns. The Program was asked to change its methodology to improve these aspects and it was recommended that the tools available through EnviroVeg be made accessible to a wider base of growers.

The evaluation (Appendix 6) was conducted to assess the impact that the EnviroVeg program has had on growing practices over its fifteen year lifetime. It was conducted by an independent service provider, Ag-Dynamics, who was provided with a range of information from sources including the following: EnviroVeg surveys, electronic self-assessments from the EnviroVeg website, correlated physical self-assessments and environmental action plans, past program reports and milestones and direct contact with stakeholders, including members, non-members and associated key personnel.

Formal alignment with a recognised on-farm Quality Assurance system

Through this process it became clear that Freshcare was best positioned for EnviroVeg alignment, due to its position within the Australian fresh produce industry, its initial development as a levy funded program, connection to an internationally recognised standard (GLOBALG.A.P.) and industry body ownership. EnviroVeg communicated extensively with Freshcare and developed a mutually beneficial relationship. This is highlighted by the letter of support for the strategy (Appendix 5.1), collaboration on a gap analysis between Freshcare Environmental and EnviroVeg Platinum (Appendix 5.4) and culminated in a letter of intent for a MOU (Appendix 5.5). The letter of intent and level of collaboration will progress should the program continue following the project period.

The gap analysis was conducted to determine the changes required to the certification and assessment requirements of EnviroVeg Platinum for formal alignment between EnviroVeg Platinum and Freshcare Environmental. The Coordinator and Freshcare's Environmental counterpart determined criterial overlap, gaps and points where requirements were exceeded.

Through consultation with the Committee, a number of initiatives were also included in the letter of intent for a MOU to benefit and assist EnviroVeg members through this alignment. These included: auditing feedback mechanisms, reduced auditing requirements and audit-supporting program materials.

Examples of strategic program development are included in Appendix 5.

Outputs

EnviroVeg has delivered a number of defined outputs over the three year period of VG12008. These are outlined below with further detail provided in the appropriate appendices.

Improving Program structure (appendix 4.1)

The Program has developed a tiered membership structure, with each level requiring different assessment and compliance criteria. This has been a major output of the current project, enabling program flexibility for members. For Basic EnviroVeg membership, a vegetable grower completes a yearly self-assessment. To achieve Gold level a grower achieves over 85% on their self-assessment and completes an environmental action plan, which details improvements underway or planned to environmental best practice techniques. Gold members access a certificate and gate sign to showcase their credentials. Platinum level growers are independently audited and have access to EnviroVeg branding to promote their environmental best practice techniques. Exact membership requirements and details are outlined in Appendix 4.1.

The rules and requirements for EnviroVeg Platinum were developed in consultation with growers and industry to provide a pathway to certification that incorporated the common sense requirements of growers, in place of standards developed independent of grower input. The requirements were based on pre-existing industry standards, explaining the overlap seen between EnviroVeg Platinum and Freshcare Environmental criteria, as found in the gap analysis (Appendix 5.4).

EnviroVeg Platinum members are provided with a manual template, which contains templates to capture the information required to pass an audit. Annually, members need to complete either an independently verified audit, or a self audit. The number of third party audited members per year is based on a formula (the square root of n , where n is the number of platinum members), noting that these rules are able to be altered at any time. Under current membership levels, this means growers only need to complete a third party audit around once every three years. The Coordinator walks growers through the auditing requirements before their initial audit and facilitates communication about certification with platinum members. During the audit, growers can prove their compliance through physically showing their practices, instead of formally recording their compliance.

This means that growers have a vegetable specific, certified, environmental accreditation method that emphasises compliance without onerous requirements. The other tiers of the program lead into EnviroVeg Platinum, by encouraging growers to achieve greater compliance and having common sections between the self-assessment and EnviroVeg Platinum criteria.

Communications (Appendix 1)

Monthly email updates and quarterly email newsletters were supplied to EnviroVeg members over the course of VG12008. The focus on email communications was reduced over 2016 in favour of developing the strategy. Appendix 1.1 outlines the information supplied through these channels.

Each bimonthly *Vegetables Australia* magazine published over the period of VG12008 contained three to

four EnviroVeg articles, including a case study promoting growers implementing best practice growing practices. The articles also provided an update on research and current program developments. *Vegetables Australia* articles have a reach of 6,500 and can be found here: <http://www.ausveg.com.au/intranet/publications/va.htm> (Appendix 1.2).

The annual EnviroVeg survey (Appendix 1.3) has provided feedback on the governance and structure of the Program. Each year the surveys collected feedback on categories including: program delivery; industry-wide issues; environmental management issues; satisfaction with program materials and general feedback. Information collected includes feedback on areas such as the delivery of EnviroVeg, which has been rated at good to very good 85% of the time, and the importance of environmental management, which was rated as high or very high for 70-89% of respondents.

The 2016 survey (Appendix 1.4) focused on collecting pertinent information to inform the evaluation. As such, the survey had a greater focus on questions relating to all projects over the life of the program, and their impact on growing practices. Results of 2016 survey showed that EnviroVeg is well-regarded and that the resources are good. However, it found that the impact on businesses and evidence of changed practices was not strong. Members of EnviroVeg reported higher levels of environmental management under the program, with 68.4% reporting high or very high levels of management as a member, up from 43.4% before EnviroVeg.

Extension and membership sign up/tracking (Appendix 2)

Eighteen workshops (Appendix 2.1) have been held over this period, disseminating program information to growers in conjunction with relevant researchers and industry members.

Ongoing site visits from the EnviroVeg Coordinator throughout vegetable growing regions in Australia had the objectives of signing new members to EnviroVeg, completing member self-assessments, providing assistance to growers with moving through different program tiers and dissemination of R&D information to growers. A list of visited growing regions is included in Appendix 2.2.

By targeting major vegetable production regions containing a high density of growers, the program facilitated a high rate of membership growth, program area coverage and assessment completion. EnviroVeg membership has grown during VG12008 to correlate to EnviroVeg area coverage as shown in Figure 2. Figure 3 plots the number of self assessments completed as a percentage of total membership for each year.

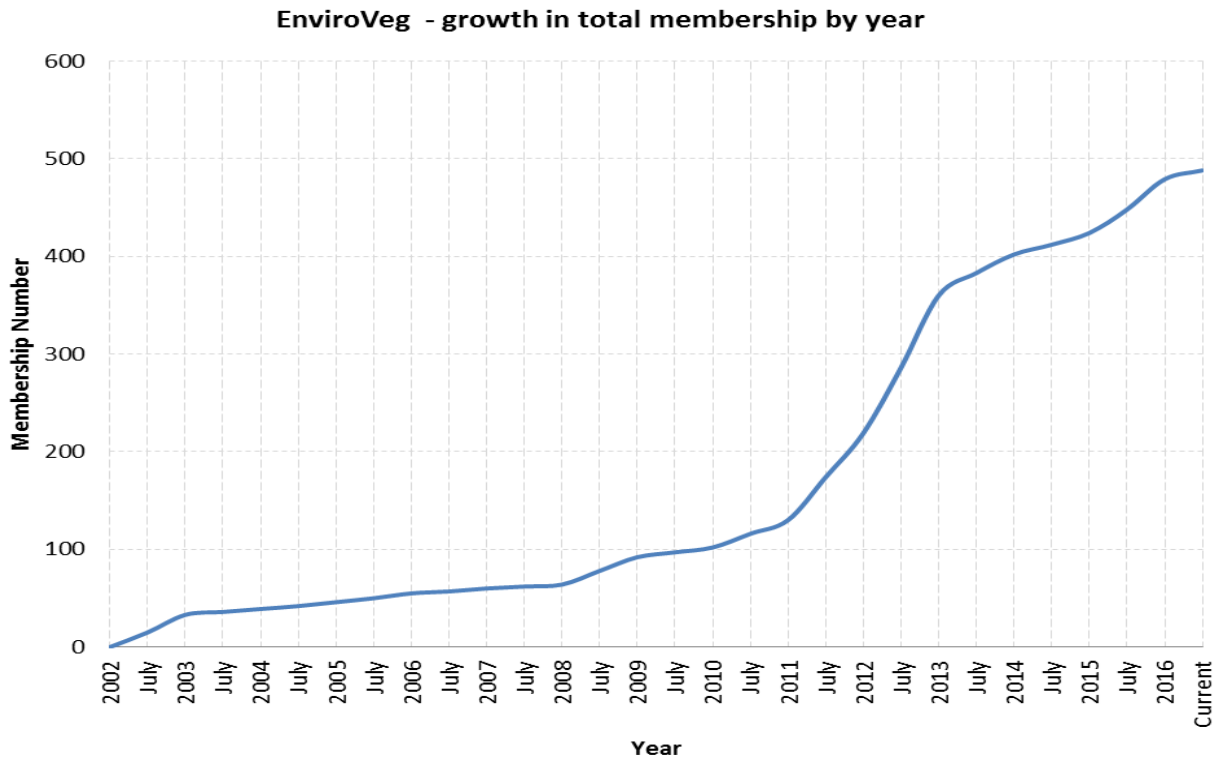


Figure 1: EnviroVeg membership

There are currently 488 members of EnviroVeg, with 14 Platinum and 82 Gold level members. The validity and value of these members is questioned in the evaluation, due to the relatively low number of members completing their annual self-assessment.

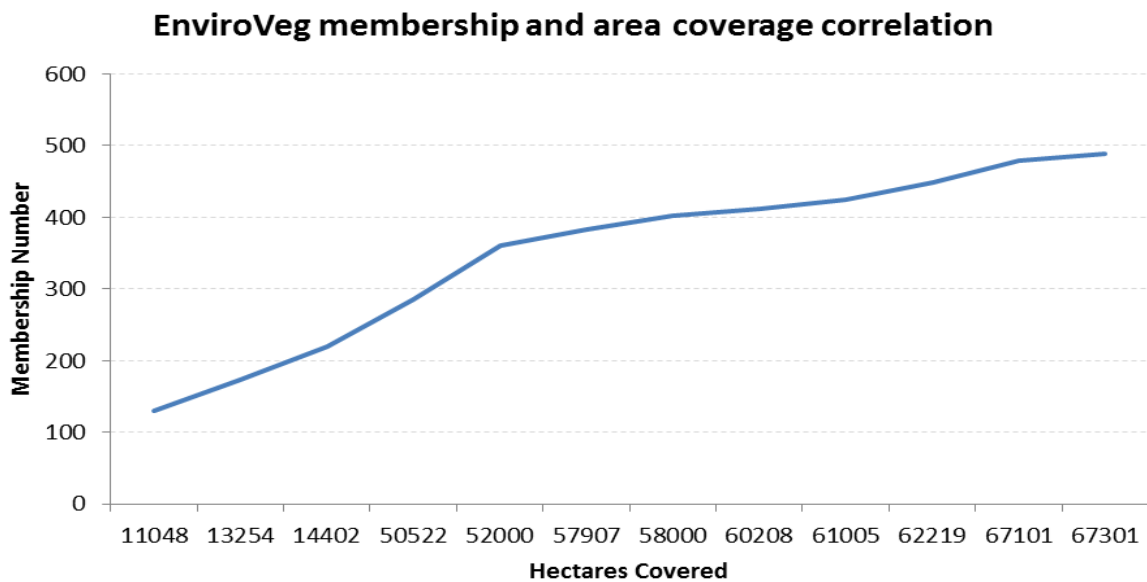


Figure 2: EnviroVeg membership correlated to area coverage, 2011 - current

EnviroVeg self assessments completed as a percentage of total membership

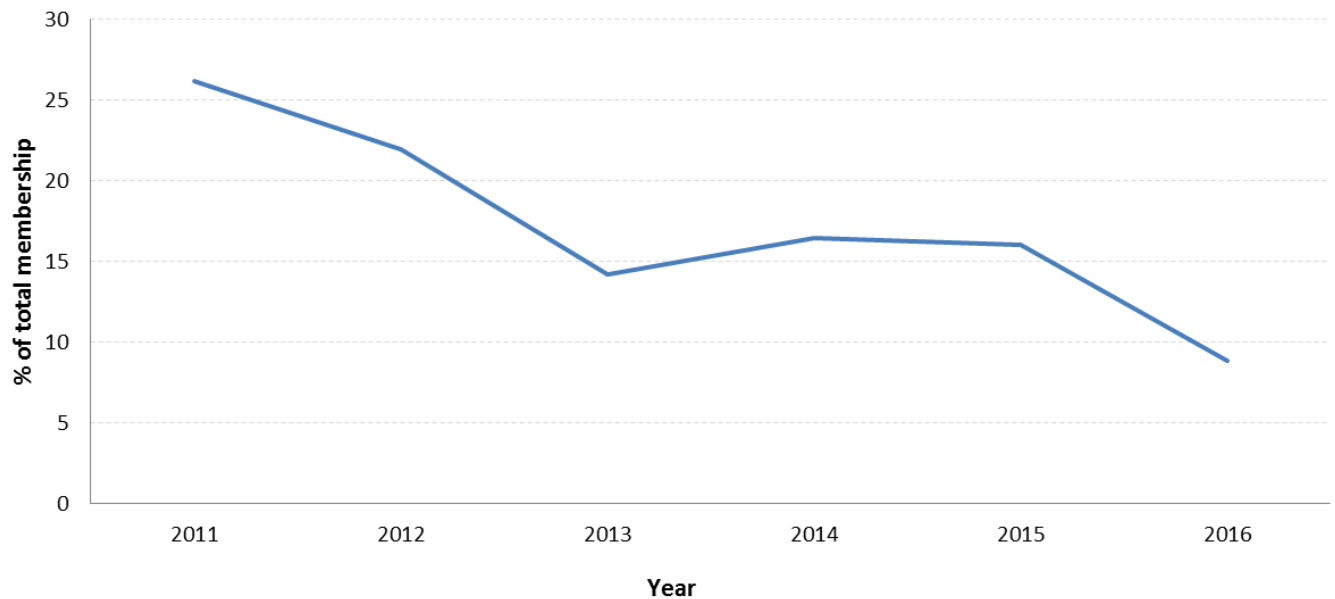


Figure 3: Yearly EnviroVeg self assessment completion percentage since 2011

Program awareness (Appendix 3) and development (Appendix 4)

EnviroVeg has undertaken a range of media activities to promote the program over the course of VG12008. These are further outlined in Appendix 3 and provided localised coverage of key program events such as workshops, as well as highlighting the program through media coverage of program material developments.

The EnviroVeg website has developed over the course of VG12008 by uploading email updates and newsletters to the site, including a 'useful links' page with additional resources, and implementing automatic assessment reminders for EnviroVeg members. The reminders drive online assessment completion and the high website access rate. The website acts as a central hub for up-to-date program information. EnviroVeg was able to promote the program and connect with industry.

A smartphone application was launched in 2013 that enables grower members to access program resources such as the manual and self-assessment from their phone. It is available from this link: <https://itunes.apple.com/au/app/enviroveg/id696519804?mt=8> and has had 223 total downloads.

A new biosecurity component of EnviroVeg has been developed over the program period. This component includes a section for the EnviroVeg manual, templates for an on-farm biosecurity checklist and farm biosecurity action plan, a quiz, distribution of biosecurity signs to growers and soil testing, and is further explained in Appendix 4.2. Growers gained an increased awareness of biosecurity practices by accessing these resources and information, including feedback about soil pathogen movement which was disseminated from the results of soil testing conducted from samples at an EnviroVeg workshop.

The EnviroVeg manual has been translated into Vietnamese so that ESL growers can access this

resource. The resources therein are suited to newly established growers, which applies to the rising number of ESL growers in some growing regions.

For example, Vietnamese growers in Western Australia account for approximately a quarter of the state's vegetable industry, where growers have a very low English literacy rate⁸ and lag significantly in adopting R&D. This resource has the greatest benefit for these growers as the information and templates are more likely to present new knowledge to them. Growers who are already adopting R&D are likely to understand and be aware of the practices outlined in the program manual.

Strategic Development (Appendix 5)

The strategy is a guide for the continued development and management of the vegetable levy and matched commonwealth funding investment provided through EnviroVeg. It contains method and reasoning for the program to continue in the best interests of growers, while minimising industry duplication across the areas of program coverage. It was developed through extensive grower and industry consultation over 2016 as outlined in the Methods section.

The operating environment of EnviroVeg is outlined, including: a situational analysis, a SWOT analysis of the current program, descriptions of opportunities, threats and challenges and the planning framework for the strategy's development.

The strategy itself contains strategic objectives and initiatives, a methodology timeline and suggested program governance, as well as ways to measure the program's performance, benefits of successful implementation of the strategy, a compilation of recommendations and example scenarios for future growers. It defines mutually beneficial cross-industry collaborations and streamlined functionality to guide the development of the Program and its established resources into the future.

A formal arrangement has been reached for EnviroVeg Platinum certification requirements to be encompassed by the Freshcare Environmental program. This will mean that certification through EnviroVeg Platinum is robust and underpinned by an accredited scheme. EnviroVeg resources will also be streamlined by outsourcing certification delivery to Freshcare.

Co-badged certificates (between Freshcare Environmental and EnviroVeg Platinum) will deliver environmental branding for vegetable growers, as well as the opportunity for new members to join this tier of the program from the ranks of pre-existing Freshcare Environmental members. EnviroVeg resources will be included and developed to make the certification process easier for its members. EnviroVeg can leverage its links to fresh produce-wide certification to investigate collaborative processes for environmental accreditation across the fresh produce sector, resulting in an accreditation that is more likely to achieve widespread recognition compared to branding tied to a single commodity group.

Over this project period EnviroVeg has established a relationship with Freshcare, culminating in the signing of a letter of intent for an MOU. Pending the continuation of the program, this can be further developed into a full MOU. The letter is included in Appendix 5, along with a letter of support for the strategy from Freshcare and a gap analysis between the certification requirements of EnviroVeg Platinum and Freshcare Environmental.

These collective documents demonstrate the scope for the program to provide environmental certification to advantage growers and the vegetable industry. They contain the framework for how this arrangement will proceed, including how the two programs will differ and collaborate in areas of

overlap. Beneficial mechanisms for EnviroVeg Platinum membership outlined in the documents are reduced auditing requirements through greater emphasis on data capturing, auditing feedback mechanisms, branding opportunities and EnviroVeg resources.

A meeting of representative EnviroVeg members was conducted in August 2015 to gather feedback to help steer the program through the incorporation of suggestions from the meeting into the development of the strategy. The meeting found that EnviroVeg should continue in some form, and provide continued grower input into environmental assurance. It was also clear that a fee-based EnviroVeg program was not popular amongst members. Different options and ideas were put forward through this meeting as to how the future would look for EnviroVeg, with growers suggesting that it should integrate and work closely with industry and community. Suggested methods included working with QA programs, other industries, local grower groups and regional areas. Another strong opinion was that branding recognition for environmental best practice should be improved as a key focus of future EnviroVeg projects.

EnviroVeg has facilitated an evaluation of the program's impact over its lifetime by hiring an independent consultant and coordinating the provision of program content to the consultant. The evaluation includes impact assessment based on grower and industry member survey results, reports from previous projects, correlated self-assessment data, interviews with industry stakeholders, the review and EnviroVeg case studies.

The evaluation highlighted points to be addressed in the future, particularly the lack of consistent data gathered on environmental/BMP implementation over the life of the program. It revealed and reiterated important points, which were subsequently incorporated into the strategy.

The main outcome was finding the impact of this program over its lifetime based on the available information, and the evaluation found it hard to attribute practice changes as a result of EnviroVeg over this time. The outcomes and comments to come from the evaluation will inform the future direction of EnviroVeg.

Outcomes

The overarching outcome of the VG12008 program has been an increase in environmental awareness through program promotion and greater program participation.

Both the review and the evaluation have provided independent definitions for the outcomes of EnviroVeg over the life of different projects that it has encompassed. The review characterised a lack of consistent, high level outcomes across the EnviroVeg projects (as per Table 1). The current EnviroVeg project, VG12008, included the below outcomes in the original project contract:

- Education and promotions, including a message strategy communicating the benefits of Program participation, a balanced focus on growing and retaining participants, using web tools, maintaining and developing relationships with stakeholders, government and industry intermediaries and improved processes for managing relationships with Program participants.
- Increasing program participation and hectare coverage.
- Continued promotion of initiatives in the area of environmental management.
- Improved grower awareness of biosecurity issues and the opportunity to transition the Biosecurity Checklist into a self-assessment and/or audited process in the future.
- Improved public perception of environmental responsibility of Australian vegetable growers.

Long term developmental outcomes have been the focus of the program during the last 12 months. These include:

- A strategic direction and plan for the future of EnviroVeg.
- Alignment between EnviroVeg and a recognised on-farm Quality Assurance program.
- Understanding and learning from the history and impact of past EnviroVeg projects.

Program education and promotion has been a major focus over this project period, and it has resulted in many growers being more aware of EnviroVeg. On-farm grower visits by the Coordinator have greatly increased program participation, enabling the Program to grow in membership and area coverage and engage current members. At visits and workshops the Coordinator has witnessed evidence of prior program knowledge, facilitated through the extensive industry communication channels developed around EnviroVeg. Growers engaged through these channels are keen and willing to join the industry-run program. The greater challenge for EnviroVeg is enabling growers to maintain and understand program requirements without the ongoing support of the Coordinator.

EnviroVeg signs, certificates and branding opportunities through EnviroVeg Platinum have been facilitated, improving the perceived environmental responsibility of individual growers, as a part of the broader outcome for improving the public perception of the environmental responsibility of Australian vegetable growers. 2015 saw a marked growth in Gold level members from 23 to 82. With each member

accessing a gate sign and certificate, the program has also greatly increased its branding coverage.

Because of its well-developed communication channels, EnviroVeg is able to effectively and continually promote environmental management initiatives. Web tools have been updated to involve active program members, and grower visits, workshops and event participation have engaged new and old members across the country.

The 2016 survey found that 70% of responses considered the resources and support provided from EnviroVeg to be good or very good. Evidence of the program's environmental management communications is provided by the responses to the question 'In what ways have you changed your approach to environmental management since becoming an EnviroVeg member'. The evaluation found that the most responses could be categorised as 'increased awareness/focus on environment'.

Biosecurity issues have been highlighted through these robust communication channels, resulting in increased uptake and awareness of on-farm biosecurity practices. The biosecurity gate signs were particularly well received, with many growers enquiring to the Coordinator about how to acquire them. Linking gate sign access to the quiz maximised grower biosecurity knowledge uptake, as well as ensuring the prominence of biosecurity signs and therefore reducing soil transfer between Australian vegetable farms.

The Program has the opportunity to integrate biosecurity practices into the assessment process of EnviroVeg, based on the templates developed for and included in the EnviroVeg manual. Soil testing results have highlighted the ease with which pathogens can transfer between farms, and with the dissemination of these results, grower awareness has been raised.

Developing ESL program materials has again expanded the scope of the program to include the Vietnamese growers of Australia. This is a significant step towards connecting the program to communities not well engaged with best practice techniques. This is a major improvement for the Program, as it can now reach a much wider pool of growers. Sections of ESL growers are developing within the Australian vegetable industry, and EnviroVeg has the resources to reach them.

The development of a future plan for EnviroVeg has provided direction for the industry investment represented by this program. The process of developing the strategy has been extensive, as described in the methodology section of this report. Subsequently, the future direction of EnviroVeg has clear support from a wide cross-section of industry.

Formal alignment of EnviroVeg with Freshcare Environmental, through the signed letter of intent for a MOU, has resulted from an increase in collaboration and communication channels facilitated by EnviroVeg. The Program has solidified its environmental assurance delivery position, aligned itself with an accredited program that is underpinned by scientific research, improved its connections and standing within the broader fresh produce assurance community and provided itself with a platform on which to represent growers in the further development of environmental assurance.

The oversight of the Committee has ensured that alignment will include definitive measures to benefit the members of EnviroVeg Platinum/Freshcare Environmental, in comparison to a grower continuing as Freshcare Environmental only member. This includes recognition of past environmental achievements, auditing feedback mechanisms, reduced auditing requirements, vegetable-specific resources encompassing certification requirements (the EnviroVeg manual, targeted auditing criteria, online self-assessment resources) and data gathering mechanisms. This outcome will continually improve over the

long term through successful implementation of the strategy. The motivations behind seeking environmental assurance are evolving and this will affect the number of growers seeking certification and channels to deliver improved public perception around the environmental responsibility of Australian vegetable growers.

The evaluation has appraised and contextualised the work carried out by previous EnviroVeg program iterations. This information has valuable lessons for the development of the program and has been included into the future plan to ensure that the program continually improves and learns from past processes.

From these initiatives, the Program has continued to improve its awareness. Growers and the larger Australian vegetable industry see the Program as a go-to for environmental improvement and best practice implementation.

Evaluation and Discussion

VG12008 has delivered an extensive number and array of outputs, from expanding program membership coverage to include the majority of Australian vegetable producing land and increasing the number of assessment completions until 2015, to the regularity of program communications. This project has built on the work of previous EnviroVeg projects in promoting environmental best practice in the vegetable industry.

Industry Assessment

A 2015 environmental assessment of the vegetable industry (VG13057) rated resource management performance across different areas for the Australian vegetable industry. Overall, biodiversity and energy use management were rated as poor, whereas management of water use and waterways, soil and nutrients and air quality were rated as good to very good. The salient recommendation from this review was the expansion of EnviroVeg to maintain and improve industry performance across these areas. This report recommended that the industry promotes the financial benefits of good environmental performance and work to address the gaps in knowledge by working with regional NRM bodies.

Australian local governments spent \$2.6 billion and \$1.9 billion on environmental management and NRM respectively in 2002-03, the most recent year for which data is available.⁹ The 2011 report *State of the Environment* stated that investment in environmental management and in research and development for the management of land environment is generally regarded as insufficient.

Regional land management is an important part of EnviroVeg. The Program may aid in developing conciliatory environmental efforts with regional groups and local councils to assist growers with the localised challenges they face. Examples of localised issues include water use and farm run-off into waterways. Through successful implementation of EnviroVeg, growers implement methods that tackle challenges such as run off and water waste, and they are recognised through the Program.

Government and Industry Priorities

The Australian government's rural research, development and extension (RD&E) priorities as announced in July 2015 are:

- Advanced technology.
- Biosecurity.
- Soil, water and managing natural resources.
- Adoption of R&D.

EnviroVeg clearly engages with soil, water and managing natural resources with the sustainable development of production areas as well as adoption of R&D. Ongoing development of the program encompasses adoption of good biosecurity practices on farm, and BMPs are associated with innovative

products, processes and practices through advanced technology.

Hort Innovation's strategic plan reflects these themes and includes sustainability as one of three cross-sectoral investment themes.

The Program has successfully engaged growers with issues of sustainable environmental management through its numerous established communication and extension methods. Ongoing emphasis on these components will continue to engage vegetable growers with rural RD&E priorities.

Strategy Development

The process of developing the strategy raised, and subsequently addressed, a number of questions and concerns about the Program and its future. The questions and concerns cover the effectiveness, impact and efficiency of past and future EnviroVeg projects.

Past projects were accounted for during the process of writing the strategy. Development of the strategy has been driven by consultation, most notably continual oversight from the EnviroVeg Committee. This systematic approach ensured all parties were engaged in steering the program through decision making processes and developed 'buy-in' from all involved, especially the Coordinator. Buy-in drives the successful implementation of the strategy and consequently the long term, positive outcomes for EnviroVeg.

Program Impact

The evaluation found it difficult to define the level of BMP awareness or practice change to occur as a result of being a member of this program, due to a lack of consistent data. The evaluation highlighted that 44% of survey responses indicated an increased awareness of the environmental aspects of business through EnviroVeg, but few examples were given to showcase this change.

It has been noted by the EnviroVeg Committee that EnviroVeg has a high number of total members; however, the exact number of active members has been questioned given the proportionally low number of submitted assessments. Membership requirements for the program dictate that assessments should be completed annually. The strategy outlines measures to deliver greater data gathering and develop active program members.

Future Development

EnviroVeg has a number of major identifiable resources, including assessment processes, the EnviroVeg manual and personnel (EnviroVeg Coordinator, Steering Committee). Going forward, it is the recommendation of the service provider that the resources remain up-to-date with quality R&D so that the Program continues to be relevant and provides the best advice for achieving sustainable farming. In the strategy, recommendations are made on this basis.

A number of recommendations were also highlighted in the review. The review stressed the need to streamline and coordinate the vast array of outputs that EnviroVeg currently delivers to ensure the best value-for-money for the levy- and tax payer-funded program. Pre-existing projects and programs for extension, certification and online resourcing are identified for collaboration in the strategy and will provide additional cross industry benefits such as knowledge sharing.

Knowledge Sharing and Effective Resource Usage

Knowledge sharing is an important part of developing industry knowledge and belief in agricultural techniques.¹⁰ There is a need for knowledge sharing in the agriculture industry to develop a network of practice and impact the whole of a community. Knowledge sharing between two organisations is facilitated through a shared interest, such as data gathering.

Alignment with a developed online platform, such as Growcom's Hort360, is highly valuable to EnviroVeg because of its pre-existing data gathering and report delivery services. Such a program has had the time to work through technical delivery issues and establish a well-rounded report delivery framework. Through its collaboration with Hort360, EnviroVeg is actively streamlining and reducing best management practice and assurance overlap within the industry, and promoting greater data gathering techniques.

Greater data gathering techniques have the ability to benefit the future of R&D and production efficiency. For example, Precision Livestock Farming systems utilise a suite of electronic systems to improve the efficiency of resource management in the livestock industry.¹¹ Productivity is improved in these systems through data gathering, which is essential to improve management of these farms.

Encouraging Holistic Best Practice QA Schemes

The Program has developed an independent, vegetable-specific environmental assurance verification process with EnviroVeg Platinum. There are pre-existing fresh produce assurance methods established within industry, resulting in overlapping environmental assurance options.

Overlapping assurance requirements has unwanted repercussions for any industry, and several industries overseas and domestically have moved to address this issue. Harmonising food safety assurance requirements across agricultural industries is a responsibility of Canadian federal government departments in order to ensure that Canadian produce has long term access to export markets.¹² A reduction in overlap was prioritised internally by the Australian Meat industry to increase cost efficiency on-farm.

The alignment of environmental assurance schemes pre-empts the situation currently seen in fresh produce food safety, whereby a number of private programs have developed as a separate industry. Each of the major retailers (ALDI, Coles, Costco, Metcash (IGA) and Woolworths) has different food safety requirements of their vendors. The Harmonisation of Australian Retailer Produce Scheme (HARPS) is funded by Hort Innovation and backed by the major retailers to align fresh produce safety requirements and lower the cost to industry. As this scheme is implemented, growers will not need to invest as much time or money to implement, maintain or be audited to multiple, very similar systems.

Major supply chain members will need to demand environmental assurance to drive certification uptake, which will only be possible once food safety standards are harmonised over time.

Through EnviroVeg communications with growers and the supply chain members, it is clear that environmental requirements are only going to become more prevalent and are likely to follow in the path of food safety. EnviroVeg can actively prevent environmental assurance overlap from developing by building on the formal arrangement with Freshcare Environmental to align certification requirements. Successful implementation of this alignment will highlight benefits of industry collaboration and provide a clear process for vegetable growers to achieve environmental certification.

Aiding Export Potential

Freshcare has recently revised and updated its food safety code, bringing it into line with the international Global Food Safety Initiative (GFSI). GFSI certification is a requirement for direct supply to Aldi and Costco and is likely to become a requirement of other major supply chain members. In addition, Freshcare is undergoing benchmarking against the internationally recognised GLOBALG.A.P. program, widely used in export markets.

Export markets place a high value on environmentally friendly fresh produce, and the appetite for environmental branding has been recognised by industry. An overarching industry plan, *VegVision 2020*, was developed by the Australian Vegetable Industry Development Group (AVIDG) in order to establish clear goals for the industry over a 15 year period. This plan identified market recognition as a key priority area, with *VegVision 2020* noting 'supporting sustainable vegetable production' as a strategy for securing 'international recognition of the quality, safety, reliable supply and innovation of Australian vegetables'.

Industry Ownership

Feedback from growers has consistently highlighted the need for industry ownership in environmental assurance. In the evaluation, the principle 'EnviroVeg remains grower owned' was found to be of highest relative importance for the future development of the program; this was also an ongoing theme during the representative members meeting in August 2015. The Coordinator has heard that this is driven by a fear that environmental assurance will replicate the largely privatised food safety industry, and proceed without industry input.

Vegetable growers will have input and ownership into formal environmental assurance requirements through the established links between EnviroVeg and Freshcare. Having the EnviroVeg Coordinator sitting on the Freshcare Environmental technical committee and reporting to the EnviroVeg Steering Committee formalises inter-program communications.

Side benefits to come from greater collaboration between EnviroVeg and Freshcare include AUSVEG's greater understanding, involvement and contribution to food safety in Australian fresh produce. As an industry representative body that houses the crisis management team for the vegetable industry, greater knowledge sharing leads to industry wide benefits.

Branding Recognition

The program is positioned to develop recognisable environmental branding. EnviroVeg Platinum currently offers branding with recognition from a major retailer (Coles), but has a low uptake from EnviroVeg members (2.9%). While environmental branding uptake is likely to grow with more prevalent environmental requirements through the supply chain, EnviroVeg will continue to develop forward facing branding through the co-badging of Freshcare Environmental/EnviroVeg Platinum certificates.

A fresh produce-wide environmental brand has greater chance of achieving recognition over a single commodity brand if it has cross-commodity support and is underpinned by robust mechanisms. Communications with other fresh produce industries and the supply chain present a path for the development of a fresh produce-wide environmental branding option supported by industry.

This branding option should be based on the EnviroVeg Platinum model, where it is underpinned by accreditation through Freshcare's robust accreditation mechanisms. As an intermediate to this branding's development, EnviroVeg Platinum should aim to increase its membership to prove the validity of this model. Pre-certified Freshcare Environmental growers should transition to using EnviroVeg Platinum branding after the alignment of certification requirements.

Overall VG12008 has developed a number of key growth outcomes, and the future possibilities developed and communicated within the strategy hold the greatest value for EnviroVeg and the Australian vegetable industry.

Recommendations

A number of recommendations have come out of the development of the strategy and are listed below:

Recommendation 1: *The Program Steering Committee Remains Active.*

The committee governance structure proceeds as per the suggested program governance section in section 2.4.

Recommendation 2: *The Program retains a Coordinator.*

The Coordinator role proceeds as per the job card in Appendix 5.

Sub-recommendations:

2.1: The Coordinator requests to sit on the Freshcare Environmental Technical Steering Committee, which will enable the program to proceed in the best interests of growers.

2.2: The Program Coordinator focuses on developing quality outputs and imparting practice changes of growing techniques through monitoring and data analysis. It is further recommended that fewer resources are devoted to the volume of program outputs and communications, than in past program iterations, as reflected in an updated Program Coordinator description (Appendix 5).

2.3: The Program Coordinator is tasked with ensuring the program is positioned to track changes in best practice growing techniques, including technique uptake and development.

2.4: It is recommended that this position be funded through the Vegetable Levy and possibly other levies if the program is expanded in scope.

Recommendation 3: *Program resources are to be reviewed and updated regularly to include leading BMPs.*

Recommendation 4: *Update the Program self-assessment.*

Recommendation 5: *Integration with an online horticultural program, such as Hort360, for self-assessments and data gathering.*

Recommendation 6: *Complete formal alignment of the certification component of the Program and Freshcare Environmental.*

Recommendation 7: *Use existing certification and extension vehicles to deliver services, including Freshcare training services and procedures; and industry extension projects.*

Sub-recommendations:

7.1: Utilise the National Vegetable Extension Network (NVEN) for extension purposes (raising awareness of the program and advances in BMP).

7.2: Streamline resource outputs for the Program reducing the emphasis on the quantity of email newsletters and articles and focusing on quality and producing a single handbook that showcases why the Program is beneficial to growers and important to the greater community.

7.3: Use other communication avenues such as Twitter to inform growers and Program members in real time of Program updates, breaking research and relevant news items.

7.4: Implement automated reminders for members at each tier of the Program that include exact time frames for assessment completion will give greater rigidity to compliance with the Program.

7.5: Outsource extension of auditing information to Freshcare, which has knowledge and experience in certification processes.

Recommendation 8: *A cross-horticulture environmental branding option for all Australian fresh produce is investigated as a long term goal following alignment of EnviroVeg with other sustainability schemes.*

Sub-recommendations:

8.1: Investigate this option in collaboration with other horticultural sectors as a long-term industry goal.

8.2: Fund a scoping project to investigate this option.

8.3: Explore industry benefits of a horticulture-wide brand within the scoping project, existing sustainability schemes that may underpin such a brand, and requirements for success.

Scientific Refereed Publications

None to report

Intellectual Property/Commercialisation

A license agreement between AUSVEG VIC (formally Vegetable Growers' Association of Victoria) and Hort Innovation, has been formalised for EnviroVeg intellectual property (IP) so that the EnviroVeg brand can be licensed out to growers.

Hort Innovation now has full ownership over this IP, which is a significant development allowing a direct agreement to be formed between Hort Innovation and the grower and for program branding to develop on behalf of growers.

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Appendices

See attached

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1) Communications

1.1) Email updates

Monthly Updates:

Title: EnviroVeg News Update: October	Date: 31 October 2012
Summary	
<ul style="list-style-type: none"> • Article offering assistance with self-assessments. • Update on contents of next edition of <i>Vegetables Australia</i>. • Research in the spotlight: innovative approaches to precision irrigation. 	
Title: EnviroVeg News Update: November	Date: 29 November 2012
Summary	
<ul style="list-style-type: none"> • Research in the spotlight: Controlled traffic farming improves soil structure in Tasmanian trials. • Mobile irrigation technology trials in Echuca. • AUSVEG National Convention update. • Update on Environment Coordinator grower visits to Sunraysia. 	
Title: EnviroVeg News Update: January	Date: 3 January 2013
Summary	
<ul style="list-style-type: none"> • Happy new year from AUSVEG. • Getting the most out of your soil tests. • Research in the spotlight: new IPM research to combat silverleaf whitefly. 	
Title: EnviroVeg Update: Werribee Field Walk	Date: 11 January 2013
Summary	
<ul style="list-style-type: none"> • Event notification for EnviroVeg Werribee Field Walk event. 	
Title: EnviroVeg Update: EnviroVeg Devonport	Date: 26 February 2013
Summary	
<ul style="list-style-type: none"> • Event notification for EnviroVeg Devonport event. 	
Title: EnviroVeg Update: Plant Health Study consultation	Date: 6 March 2013
Summary	
<ul style="list-style-type: none"> • Invitation for EnviroVeg members to participate in the Plant Health Study, being conducted by RMCG to determine the future direction of plant health RD&E. 	
Title: EnviroVeg Update: 2013 Grower Survey	Date: 8 April 2013
Summary	
<ul style="list-style-type: none"> • Promotion of the 2013 EnviroVeg Grower Survey to encourage member participation. 	
Title: EnviroVeg Update: Free soil webinar for growers	Date: 15 May 2013
Summary	
<ul style="list-style-type: none"> • Article advising EnviroVeg members of a free soil management webinar available through Landcare. 	
Title: EnviroVeg Update: Launch of EnviroVeg Platinum	Date: 12 July 2013
Summary	
<ul style="list-style-type: none"> • Article outlining the recent launch of the EnviroVeg Platinum scheme and notifying growers of available information resources. 	

Title: EnviroVeg Update: Gatton EnviroVeg information session	Date: 31 July 2013
Summary	
<ul style="list-style-type: none"> • Event notification for EnviroVeg Gatton event. 	
Title: EnviroVeg Update: Wanneroo EnviroVeg information session	Date: 19 August 2013
Summary	
<ul style="list-style-type: none"> • Event notification for EnviroVeg Wanneroo event. 	
Title: EnviroVeg Update: Free webinar on land regeneration from international expert	Date: 14 August 2013
Summary	
<ul style="list-style-type: none"> • Notification of a free webinar featuring Mr Allan Savory, an international authority on land regeneration. 	
Title: EnviroVeg Update: International R&D News Update	Date: 2 September 2013
Summary	
<ul style="list-style-type: none"> • An article on recent international research into nitrogen fixing bacteria, which are expected to be a solution to the problem of nitrate pollution. 	
Title: EnviroVeg News Update: October	Date: 31 October 2014
Summary	
<ul style="list-style-type: none"> • Update on the release of the EnviroVeg iPhone Application. 	
Title: EnviroVeg News Update: January	Date: 9 January 2014
Summary	
<ul style="list-style-type: none"> • Spotlight on Biosecurity – an extended article on practical initiatives growers can put in place to improve biosecurity management on their farms. 	
Title: EnviroVeg News Update: January	Date: 24 January 2014
Summary	
<ul style="list-style-type: none"> • Recognising excellence in our industry – a call for EnviroVeg growers to provide nominations for the 2014 AUSVEG National Awards for Excellence. 	
Title: EnviroVeg Update: February	Date: 10 February 2014
Summary	
<ul style="list-style-type: none"> • Email encouraging EnviroVeg members to participate in the 2014 EnviroVeg Survey. 	
Title: EnviroVeg Update: March	Date: 25 March 2014
Summary	
<ul style="list-style-type: none"> • Event notification and summary of upcoming EnviroVeg information sessions in Adelaide, Bundaberg and Bowen. 	
Title: EnviroVeg Update: April	Date: 14 April 2014
Summary	
<ul style="list-style-type: none"> • Notification that gate signs are now available for EnviroVeg members submitting self-assessments and environmental action plans. 	

Title: EnviroVeg Update: July 2014	Date: 1 July 2014
Summary <ul style="list-style-type: none"> • EnviroVeg at the AUSVEG National Convention • 2014 National Awards for Excellence Winners • Recent R&D: 'Environmental effects of vegetable production on sensitive waterways' 	
Title: EnviroVeg News Update: July 2014 – Property Management Planning PMP	Date: 30 July 2014
Summary <ul style="list-style-type: none"> • Informing growers within the Brid Catchment area that they may be eligible for resources including: Up-to-date farm layout maps; Technical information on their property's natural resources and advice on management issues; and Access to funding for environmental works. • Attachment: Brid Catchment Property Management Planning flyer. 	
Title: EnviroVeg Update for NSW Growers: August 2014	Date: 13 August 2014
Summary <ul style="list-style-type: none"> • Event notification for EnviroVeg workshop in Coffs Harbour. 	
Title: EnviroVeg Update for Victorian Growers: August 2014	Date: 13 August 2014
Summary <ul style="list-style-type: none"> • Event notification for EnviroVeg workshop in Cranbourne. 	
Title: EnviroVeg Update for South Australian Growers: August 2014	Date: 13 August 2014
Summary <ul style="list-style-type: none"> • Event notification for EnviroVeg workshop in Virginia. 	
Title: EnviroVeg News Update: Free Ute Guides Available at EnviroVeg Workshops	Date: 26 August 2014
Summary <ul style="list-style-type: none"> • Promoting grower resources: newly published ute-guides on pests, diseases and disorders on babyleaf and brassica vegetables. • Informing members about upcoming EnviroVeg workshops. 	
Title: EnviroVeg Update: December 2014 - Direct Action Legislated	Date: 11 December 2014
Summary <ul style="list-style-type: none"> • Informing growers about recent changes to the Government's Carbon Farming Initiative and how they can earn money from afforestation on their land by selling Carbon Credit Units. 	

Title: Gatton R&D Information Session: 2 March 2015	Date: 2 February 2015
Summary	
<ul style="list-style-type: none"> Informing growers about an upcoming R&D event hosted by AUSVEG at the Gatton Research Centre on 2 March 2015. 	
Title: Virginia R&D Information Session: 4 March 2015	Date: 4 February 2015
Summary	
<ul style="list-style-type: none"> Informing growers about an upcoming R&D event being hosted by AUSVEG in Virginia on 4 March 2015. 	
Title: R&D Information Sessions NT: 17 and 20 Mar 2015	Date: 2 March 2015
Summary	
<ul style="list-style-type: none"> Informing growers about the R&D events being hosted by AUSVEG in the Northern Territory during March 2015. 	
Title: EnviroVeg Update: March 2015	Date: 23 March 2015
Summary	
<ul style="list-style-type: none"> Asking growers to complete the annual EnviroVeg Survey for 2015 An article reviewing the recent workshops in Gatton and Virginia on 2 and 4 March, respectively Article on use of compost in vegetable production. 	
Title: EnviroVeg Update: April 2015	Date: 10 April 2015
Summary	
<ul style="list-style-type: none"> Article on CSIRO research into IPM. 	
Title: EnviroVeg Update: May 2015 – ICP Mega Pests Fact Sheets	Date: 30 June 2015
Summary	
<ul style="list-style-type: none"> Informing growers about a recent series of Fact sheets available from the Integrated Crop Protection (ICP) extension team on managing a range of pests and diseases including mildews, suckling pests and soil borne diseases. 	
Title: A reduction in Carbon can really SOC...: EnviroVeg update July 2015	Date: 15 July 2015

Summary	
<ul style="list-style-type: none"> Informing growers about the benefits of increased soil organic carbon, with information on an NSW Department of Primary Industries trial involving methods in to increase soil organic carbon. 	
Title: EnviroVeg Newsletter August 2015	Date: 7 August 2015
Summary	
<ul style="list-style-type: none"> Information on farm biosecurity practices including links to relevant resources and access to on farm biosecurity gate signs via the biosecurity quiz. 	
Title: New Biosecurity Section of EnviroVeg manual	Date: 7 September 2015
Summary	
<ul style="list-style-type: none"> Informing growers about the newly developed biosecurity section for the EnviroVeg manual. This insert covered developed resources for maintaining on farm biosecurity practices including a checklist and action plan template. 	
Title: Nematodes, the good and the bad, and free biosecurity resources	Date: 13 October 2015
Summary	
<ul style="list-style-type: none"> Information on nematodes and dealing with root knot disease Article on accessing available biosecurity resources from the EnviroVeg website. 	
Title: EnviroVeg Research Update: Controlled Traffic Farming	Date: 6 November 2015
Summary	
<ul style="list-style-type: none"> Article on new research from the Tasmanian Institute of Agriculture on Controlled Traffic Farming. 	
Title: EnviroVeg Update: January 2016	Date: 21 January 2016
<ul style="list-style-type: none"> EnviroVeg manual to be launched in Vietnamese: describing the availability of the EnviroVeg manual in Vietnamese. Energy and resource assessment help for Victorian growers: describing available sustainability grants for growers. 	
Title: EnviroVeg Update: February 2016	Date: 19 February 2016

<ul style="list-style-type: none"> New fertiliser programs developed for growing vegetables in sandy soils: highlighting new fertiliser programs developed from trials in Western Australia. 	
Title: EnviroVeg Update: March 2016	Date: 31 March 2016
<ul style="list-style-type: none"> <i>Biochar and soil health – What you need to know:</i> An article highlighting new and existing research in to biochar use for soil health. <i>EnviroVeg membership survey – have your say on the future of EnviroVeg:</i> reminding growers about the 2016 EnviroVeg survey 	
Title: EnviroVeg Update: April 2016	Date: 1 April 2016
<ul style="list-style-type: none"> <i>Access grants for your business:</i> Outlining loans and grants available to growers. <i>EnviroVeg membership survey:</i> Giving members access to the survey from Appendix 1. 	
Title: EnviroVeg Update: July 2016	Date: 10 July 2016
<ul style="list-style-type: none"> <i>FREE Soil quality information and tools to improve your bottom line!:</i> Highlighting a soil quality website that has free tools for growers. <i>New EnviroVeg Platinum members:</i> An article congratulating new EnviroVeg Platinum members, Sutton Farms and encouraging other growers to follow suit. 	

Quarterly Newsletters:

Title: EnviroVeg Quarterly Newsletter, February 2013	Date: 12 February 2013
Summary <ul style="list-style-type: none"> Nominations now open for Netafim Environmental Award. Significant emissions reductions from enhanced-efficiency fertilisers. Research in the spotlight: Project VG07040 – <i>Revegetation by design, Queensland: natural resource management and IPM.</i> Desert vegetables the next frontier for vegetable production (article on Sundrop Farms). New honeybee guide for growers. Report on the EnviroVeg Field Walk Werribee event. 	
Title: EnviroVeg Quarterly Newsletter, April 2013	Date: 15 April 2013
Summary <ul style="list-style-type: none"> Energy brokers: securing a better deal through wholesale negotiation. EnviroVeg Survey: a snapshot of results. Registration reminder for the 2013 AUSVEG National Convention. Report on EnviroVeg Devonport event. Article on recent <i>Vegetables Australia</i> magazine case studies. 	
Title: EnviroVeg Newsletter, August 2013	Date: 14 August 2013
Summary <ul style="list-style-type: none"> Research in the Spotlight – VG12084 – Research underway to determine consumer acceptance of IPM. Article encouraging members to contact AUSVEG to book a time to do their self-assessment. Article offering assistance in implementing EnviroVeg Platinum. 	

<ul style="list-style-type: none"> • Research in the Spotlight – Project VG09019 – Carbon sustainability trials across multiple crops show future opportunity for measuring emissions in vegetable production. • A case for change: latest EnviroVeg case studies from <i>Vegetables Australia</i> magazine. 	
Title: EnviroVeg Newsletter, September 2013	Date: 20 September 2013
Summary <ul style="list-style-type: none"> • Article on EnviroVeg information sessions in Gatton and Wanneroo. • Research in the spotlight – Project VG09070 – Managing a greenhouse capsicum crop – interactive demonstration and resource package. • International R&D news update: Californian venture aims to be the world’s largest aquaponics farm. • A case for change: latest EnviroVeg case studies from <i>Vegetables Australia</i> magazine. 	
Title: EnviroVeg Quarterly Newsletter, December 2013	Date: 17 December 2013
Summary <ul style="list-style-type: none"> • Research in the Spotlight – Project VG12084 – Enhancing Market Attitudes Towards IPM and Sustainable Production Practices. • Research in the Spotlight – Project VG12048 – Plant Health Desktop Study. • Article on a National Landcare Webinar available to growers. • Article on recent <i>Vegetables Australia</i> magazine case studies. 	
Title: EnviroVeg Quarterly Newsletter, March 2014	Date: 17 April 2014
Summary <ul style="list-style-type: none"> • Research in the Spotlight – Project VG13050 – New milestone report investigates opportunities to use vegetable waste as fish food. • Article on the vegetable industry biosecurity plan available to growers. • Research in the Spotlight – Project VG13045 – New study examines alternatives to Metham Sodium. • Article on the House of Representatives Environmental Committee inquiry into streamlining environmental regulation and how growers can participate. • Article on how the levy-funded 1800 Agronomist service can be used by growers to investigate new and sustainable approaches to growing. • Article on recent <i>Vegetables Australia</i> magazine case studies. 	
Title: EnviroVeg Quarterly Newsletter, August 2014	Date: 1 August 2014
Summary <ul style="list-style-type: none"> • Link to a survey asking growers if an Android/Windows version of the EnviroVeg App would be useful or not. • Research summary of project VG09124 – ‘<i>Increasing energy efficiency and assessing alternative energy options for Australian protected cropping</i>’. • Summary of an ongoing vegetable levy project focused on on-farm energy audits. • Encouraging growers to complete their self-assessments and increasing awareness of EnviroVeg Gold. • Promoting and informing members about the EnviroVeg Platinum program. 	
Title: EnviroVeg Quarterly Newsletter, September 2014	Date: 17 September 2014

Summary	
<ul style="list-style-type: none"> Summarising the EnviroVeg-Biosecurity workshops held throughout August and September in South Australia, New South Wales and Victoria. R&D summary: Project VG12084 - <i>'Enhancing market awareness of IPM'</i>. Reporting on Industry Leaders Breakfast in Devonport, Tasmania. Introducing 'Soil Wealth' and 'Integrated Crop Protection' projects, and providing growers with the option to subscribe for more information as the projects progress. Promoting free on-farm power generation workshop to be hosted for growers throughout September and October. Summary of latest <i>Vegetables Australia</i> magazine case study and link to magazines. 	
Title: EnviroVeg Newsletter: December 2014	Date: 11 December 2014
Summary	
<ul style="list-style-type: none"> An article summarising the benefits of undertaking an energy efficiency audit, including a comprehensive analysis and report that outlines where savings can be made. A piece about the Soil Wealth project from researcher Dr Doris Blaesing. The viability of native bees in assuming the pollination role of declining honey bees. Informing about a new high-tech greenhouse development in South Australia's arid north that uses solar-thermal energy to power the desalination of sea water. Summary of the latest <i>Vegetables Australia</i> magazine case study and link to magazines. Notification that EnviroVeg Gate signs are now available for Gold growers and encouragement for more growers to complete their self-assessments and Environmental Action Plans. 	
Title: EnviroVeg Quarterly Newsletter: February 2015	Date: 26 February 2015
Summary	
<ul style="list-style-type: none"> An article informing about the benefits of soil Mycorrhizae, how they function and what practices are needed to encourage them in a farming system A piece about Biostimulants, how they act to increase plant vigour, their differences from other crop inputs and what should be considered when choosing products An article informing growers about the viability of installing solar systems to reduce on-farm electricity costs, using a case study from the recent vegetable industry report <i>Solar on-farm power generation (VG13051) as an example</i>. Summary of the latest <i>Vegetables Australia</i> magazine case study and link to magazines. 	
Title: EnviroVeg Newsletter August 2015	Date: 7 August 2015

Summary

- An article summarising the benefits of using plant-growth promoting Rhizobacteria to improve soil health through bio fertilisers and links to scientific reviews on the subject.
- A piece about the good on farm biosecurity measures that can be easily developed, with links to relevant resources for growers.
- Information on the newly developed EnviroVeg biosecurity quiz and how to access free biosecurity gate signs through the quiz. This included a photo of the Environment Coordinator handing over a sign to EnviroVeg member Glen Favero.
- Information for growers on the upcoming workshop series involving EnviroVeg and other industry programs.

Title:

EnviroVeg Newsletter December 2015

Date:

8 December 2015

- *Take care of your soil by building stable organic matter (Humus):* an article on improving soil health by increasing humus levels.
- *Complete your annual self assessment and achieve EnviroVeg Gold membership,* encouraging growers to move to EnviroVeg Gold level.
- *Focus on a sustainable future: Latest EnviroVeg Case Study:* outlining efficient practices implemented by the latest EnviroVeg case study on Sutton Farms.
- *Simplified pest checking tools available now!:* pest identification ID guides have been developed for growers.
- *Reminder – EnviroVeg manual biosecurity section now available!:* reminding growers of a free, developed resource for the EnviroVeg manual.
- *Reminder – EnviroVeg Biosecurity Quiz:* reminding growers of the free quiz available on the EnviroVeg website.

Title:

EnviroVeg Newsletter February 2016

Date:

29 February 2016

- *EnviroVeg membership survey- have your say on the future of EnviroVeg:* informing growers of the EnviroVeg survey.
- *EnviroVeg manual successfully launched in Vietnamese at VFASA event:* an article describing the Vietnamese manual launch.
- *4ways fresh to Platinum level:* congratulating the latest EnviroVeg Platinum member and encouraging other growers to join the program.
- *Know your legal requirements – Farming and national environment law:* informing growers about environmental laws that may affect their business.
- *EnviroVeg to host a vegetable industry R&D session:* informing growers of an upcoming EnviroVeg R&D session in Virginia, SA.

Title:

EnviroVeg Quarterly update: May 2016

Date:

19 May 2016

- *Visit EnviroVeg at the National Horticulture Convention:* An article highlighting that EnviroVeg will be at the National Horticulture Convention.
- *Harmonisation of produce standards – a win for growers:* An article describing the new Hort Innovation funded Harmonised Australian Retailer Produce Scheme (HARPS) and how it will affect growers.
- *EnviroVeg membership survey:* Reminding growers to have their say on the future of EnviroVeg.
- *Reach for a platinum level:* Detailing to growers the requirements to achieve EnviroVeg Platinum.

EnviroVeg Updates and Newsletters can be accessed here: <http://www.enviroveg.com/News.aspx>

1.2) *Vegetables Australia* articles

Edition	November/December 2012
EnviroNews articles	<ul style="list-style-type: none"> • Assisting Tassie growers with land management developments, p 38. • A case for change: innovative practices showcased in 'Soils for Life' Program case studies, p 38. • National Water Week puts spotlight on water issues, p 39. • Research in the spotlight: innovative approaches to precision irrigation, p 39.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Chris Millis, Flavorite, pp 40-42
Summary:	
<p>The 'EnviroNews' articles in this edition included a notice of land management planning assistance available through NRM groups in Tasmania. The article informed growers of on-the-ground support available to them to assist with property planning. An article on the 'Soils for Life' Program Case Studies Booklet informed growers about an important information resource on soil management, while the National Water Week article highlighted water conservation in Australia. The final article put the spotlight on a recent study on precision irrigation conducted in Tasmania.</p> <p>The EnviroVeg case study featured Warragul-based glasshouse grower Mr Chris Millis of Flavorite. A leader in the protected cropping industry, Chris discussed a number of important environmental management activities on his property including water recycling facilities and energy efficiency systems.</p>	
Edition	January/February 2013
EnviroNews articles	<ul style="list-style-type: none"> • EnviroVeg Committee meets to discuss future direction of EnviroVeg program, p 38. • The next frontier for protected cropping, p 38. • More growers, more hectares – a record year for EnviroVeg, p 39. • New soil app for growers, p 39.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Phuong Vo, pp 40-42.
Summary:	
<p>The 'EnviroNews' articles in this edition included an update of the EnviroVeg committee meeting in late 2012, along with a feature on new protected cropping technology which utilises plastic membranes to conserve water, developed by Dubai-based company Agricel. A recap on growth in the EnviroVeg program updated growers on the significant progress made in 2012, while the final article informed growers of a new CSIRO soil app for growers.</p> <p>The EnviroVeg case study featured South Australian greenhouse grower Phoung Vo and the challenges he faced in improving degraded soil on his Virginia property. The feature focussed on his achievements in building organic matter in the soil, as well as savings achieved on farm inputs.</p>	
Edition	March/April 2013
EnviroNews articles	<ul style="list-style-type: none"> • Nominations now open for Environmental Award,

	<p>p 38.</p> <ul style="list-style-type: none"> • EnviroVeg at the 2013 AUSVEG National Convention, p 38. • Research in the spotlight – Project VG11034 – benchmarking uptake of soil health practices, p 39.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Ms Karen Spaulding, Karis Investments pp 40-42.
<p>Summary:</p> <p>The ‘EnviroNews’ articles in this edition included a call for nominations for the Environmental Award to be presented at the 2013 AUSVEG Industry Awards for Excellence and an article highlighting the involvement of EnviroVeg at the 2013 AUSVEG National Convention. The final article highlighted a recently-finalised project to benchmark the uptake of soil health practices in Australia and its key findings.</p> <p>The EnviroVeg case study featured Tasmanian grower Ms Karen Spaulding and the innovative trial work she conducted on her property. Focus was given to results of trials in controlled traffic farming, as well as the crop rotation regime implemented on her property.</p>	
Edition	May/June 2013
EnviroNews articles	<ul style="list-style-type: none"> • Q&A: Mr Jack Milbank, p 38. • AUSVEG attends Fruit and Vegetable Waste Innovation Clinic, p 39.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Grayson White, Butler Market Gardens, pp 40-42
<p>Summary:</p> <p>The ‘EnviroNews’ articles in this edition included an extended question and answer with agronomist Jack Milbank about managing crop nutrition and planning a nutrient monitoring program. The goal of the article was to encourage growers to be more methodical about planning their nutrient programs rather than just using prior knowledge or ‘feel’. The second article detailed the Environment Coordinator’s attendance at a Fruit and Vegetable Waste Clinic in Toowoomba Queensland and opportunities discussed at the event for growers to more effectively utilise waste in vegetable production.</p> <p>The EnviroVeg case study featured Mr Grayson White from Butler Market Gardens in Heatherton Victoria. The article focussed on some of the initiatives that Butler Market Gardens have put in place to manage energy in their business operations.</p>	
Edition	July/August 2013
EnviroNews articles	<ul style="list-style-type: none"> • EnviroVeg Platinum Launch, pp 26-27
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr John McKenna, pp 28-29

Summary:

The 'EnviroNews' section of this edition featured an extended two page article detailing the launch of the EnviroVeg Platinum scheme at the 2013 AUSVEG National Convention. The article outlined the successful launch of the new scheme and provided a FAQ section for growers.

The EnviroVeg case study featured winner of the 2013 Netafim Environmental Award Mr John McKenna. John is a leader within the field of controlled-traffic farming and has been able to significantly reduce his use of fossil fuels in agricultural production. Key to John winning the award was his willingness to share his knowledge with other growers by hosting field days on his property in North West Tasmania.

Edition	September/October 2013
EnviroNews articles	<ul style="list-style-type: none"> • Sustainability: what it is and why it matters to Australian growers, p 38. • Make an appointment to do your EnviroVeg self-assessment, p 39. • Assistance with EnviroVeg Platinum, p39.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Linton Brimblecomb, pp 40-41.

Summary:

The 'EnviroNews' articles in this edition included an article on the concept of sustainability and why it is becoming increasingly important to businesses around the globe. The aim of the article was to show that large buyers of horticultural product are increasingly concerned about negative perceptions in the community, therefore environmental management is becoming a central part of business activity, not a periphery activity. Other articles included EnviroVeg Program announcements encouraging growers to make time with the AUSVEG Environment Coordinator to either complete their self-assessments or learn about implementation of the EnviroVeg Platinum scheme.

The EnviroVeg case study featured Lockyer Valley grower Mr Linton Brimblecomb, who detailed the investments in water efficiency made on property in response to a 10 year drought in the area. Mr Brimblecomb also outlined how he had accessed QLD Government programs to invest in solar energy on his property and outlined future plans to lower his costs of production.

Edition	November/December 2013
EnviroNews articles	<ul style="list-style-type: none"> • New EnviroVeg iPhone App now available, pg 18. • Chemical handling and storage: Sustainable practices for growers, pg 19.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Jamie Jurgens, Jurgens Produce, pp 20-21.

Summary:

The 'EnviroNews' articles in this edition comprised an article on the recently-released EnviroVeg iPhone Application and an article into chemical handling and storage practices. The EnviroVeg App article provided information on the new App, its key features and how it could be downloaded. The chemical handling article focussed on best practices in the selection of product, safe transportation of chemicals and the use of personal protective equipment. In addition, information was presented on the storage and disposal of products and where to access further information.

The EnviroVeg case study featured Jamie Jurgens of Bowen Queensland who has been an active participant in regional projects to protect the Great Barrier Reef from nutrient run off. In addition, investments in biodegradable plastic mulch for his capsicum crop and water recycling initiatives were examined in the article.

Aside from the 'EnviroNews' and case study articles, the edition also featured a cover article on the launch of the EnviroVeg App by Minister for the Environment, The Hon. Greg Hunt MP. The fact that EnviroVeg was featured on the cover and main news story was testament to the success of the media launch and industry interest generated by the event.

Edition	January/February 2014
EnviroNews articles	<ul style="list-style-type: none"> • Developing an Environmental Policy, pg 18. • Planning for future success; the fundamentals of environmental planning for growers, pg 18. • Chemical application and equipment calibration: Sustainable practices for growers, pg 19.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Colin Houston, Southern Fields, pp 20-21.
Summary:	
<p>The 'EnviroNews' articles in this edition included two articles on environmental planning and policy development. The goal was to provide growers with information and resources available to them to assist in these areas through the EnviroVeg Platinum scheme and encourage them to start putting plans in place. The final article highlighted issues around efficient chemical application and equipment calibration for growers, to ensure that they are applying crop protectants in an environmentally-responsible manner. The article highlighted best practices in nozzle selection, boom height and the cleaning of empty containers.</p> <p>The EnviroVeg case study featured Tasmanian grower Colin Houston and his work in using crop rotations and cover crops to build soil organic matter on his property. The article details the relationships Colin has been able to develop with local researchers and how he uses a detailed range of soil and plant nutrition tests to fine tune his nutrition program.</p>	
Edition	March/April 2014
EnviroNews articles	<ul style="list-style-type: none"> • Environmental legislation and your business: Resources for growers, pg 18. • Recognising excellence in our industry, pg 18. • Managing change in food production, pg 19.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr Frank Provenzano, Provenzano Gardens, pp 20-21

Summary:

The 'EnviroNews' articles in this edition included an article highlighting information resources available to growers to ensure they are across their requirements under environmental legislation. The second article highlighted the 2014 AUSVEG National Awards for Excellence as an opportunity for members to nominate their peers for the environmental and stewardship awards categories. The final article comprised an extended feature as to how growers could effectively manage their crop protectant use to improve sustainability outcomes and manage resistance.

The EnviroVeg case study featured Victorian grower Frank Provenzano, who has successfully implemented biosecurity practices on his property. In the article, Frank details the strategies he has in place to control the movement of organic matter and soil within his property, as well as strategies to improve pest and disease resistance such as crop rotations.

Edition	May/June 2014
EnviroNews articles	<ul style="list-style-type: none"> • Green and Gold: EnviroVeg gate signs now available to members, pg 18. • EnviroVeg workshops highlight integrated disease management and benchmarking tools for growers, pg 18. • Benchmarking and your business, pg 19.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • Mr David Ellement, Ellement Produce, pp 20-21

Summary:

The 'EnviroNews' articles in this edition included an article highlighting new resources developed for growers with EnviroVeg gate signs and how to access these by moving to EnviroVeg Gold level. The second article highlighted the EnviroVeg workshops recently held across the country and opportunities for future R&D information sessions. The final article comprised information on the benefits of reporting on Key performance indicators to improve environmental and economic outcomes

The EnviroVeg case study featured Western Australian grower David Ellement, who has successfully implemented efficient irrigation practices on his property. In the article, David details the strategies he has in place to understand the amount of water required by his crops and how to control water use efficiently.

Edition	July/August 2014
EnviroNews articles	<ul style="list-style-type: none"> • Changing faces: introducing new Environment Coordinator, p. 36. • New environmental R&D, p.36. • Hot topic: IPM in the Queensland tropics, pg. 37.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • EnviroVeg Platinum audits – Flavorite and Pitchford Produce, pp. 38-39.

Summary:

'EnviroNews' introduced the new AUSVEG Environment Coordinator; outlined research investigating the relationship between vegetable production and potential impacts on waterway health; and included an interview with crop consultant Chris Monsour, who discussed IPM as a dynamic management practice rather than a one-size-fits-all tool, and the challenge of explaining IPM to consumers.

The EnviroVeg case study featured both Chris Millis of Flavorite, and Graham Pitchford of Pitchford Produce, and their involvement with the EnviroVeg Platinum program. The interviews provided readers with a grower's perspective on EnviroVeg Platinum audits as well as the respective businesses comments on the program in general. Like the Belinda Adams EnviroVeg Platinum case-study, these interviews were designed to appeal to growers interested in EnviroVeg Platinum.

Edition	September/October 2014
EnviroNews articles	<ul style="list-style-type: none"> • Saving energy on vegetable farms: Interview with Dr John Cumming about on-farm energy audits, p. 32. • R&D summary: increasing energy efficiency and assessing an alternate energy option for Australian Protected Cropping, p. 32. • IPM and the use of biological control agents: Discussion with Mr James Altmann, of Biological Services about IPM in South Australia, and the role of beneficial insects, p. 33.
EnviroVeg Case Study feature	<ul style="list-style-type: none"> • A golden opportunity: Andrew Craigie, Craigie Bros, pp. 34-35.

Summary:

'EnviroNews' included an interview with Dr John Cumming in relation to project VG13054, *Economic evaluation of on-farm energy audits and benchmarking of energy use on vegetable farms*, a summary of R&D looking at energy efficiencies and alternate energy options for protected cropping growers, and a discussion with Mr James Altmann about the role of beneficial insects in IPM programs.

The EnviroVeg case study featured Tasmanian grower, Mr Andrew Craigie, and focused on his involvement with the EnviroVeg Gold program. The article included information about Mr Craigie's environmental management practices, such as the protection of remnant native vegetation on his property, and his farming philosophy. As a member of the Farm Productivity, Resource Use and Management Design Team, Mr Craigie's profile as an industry leader assisted EnviroVeg to promote a positive image of the EnviroVeg program.

Edition	November/December 2014
EnviroNews articles	<ul style="list-style-type: none"> • Workshops and EnviroVeg Industry Leaders Breakfast, p. 32, • Produce seconds can become number one, p. 32, • Youth Summit engages future leaders, p. 33.

EnviroVeg Case Study feature	Evaluating energy: Smart changes cut costs for grower (Kingsley Songer, 4Ways Fresh pp. 34-35.)
Summary:	
<p>'EnviroNews' included an article that summarised EnviroVeg workshops that had recently been held in Virginia, SA, Coffs Harbour, NSW and Cranbourne, VIC and outlining the Industry Leaders Breakfast held in Devonport, TAS, p. 32. The following article suggested growers think about ways to turn seconds produce into another source of income through value-adding and reprocessing. The final article provided an overview of the Youth Ag Summit even being held in Canberra later in 2015, which challenges young agriculturalists to come up with ways to feed more people in the future.</p> <p>The EnviroVeg case study featured South Australian operations manager Mr Kingsley Songer, focusing on improvements he has been making to 4Ways Fresh since an energy efficiency audit was conducted on the business as part of project VG 13054, <i>Economic evaluation of on-farm energy audits and benchmarking of energy use on vegetable farms</i>. A focus of the article was on new cool-rooms that were installed in the business, saving money on electricity bills. The article also outlined the auditing process, demonstrating to growers the unobtrusive way in which they are conducted and the benefits that growers can receive from the process.</p>	
Edition	January/February 2015
EnviroNews articles	<ul style="list-style-type: none"> • Streamlining bills can save you money, p. 32, • Plan for 2015 with EnviroVeg, p. 32, • Soil Carbon is key to crop health, p. 33.
EnviroVeg Case Study feature	Maintaining an environmental conscience (Paul Shoker, EnviroVeg Committee Member pp. 34-35.)
Summary:	
<p>'EnviroNews' contained articles on a variety of topics, that included: discussing ways that growers could save money on electricity bills by streamlining their accounts and using new account management tools, planning for 2015 with EnviroVeg by completing self-assessments and Environmental Action Plans, as well as an in-depth article on rebuilding soil carbon by using cover crops and the benefits that growers will see as a result of this change.</p> <p>The EnviroVeg case study featured Queensland Lebanese cucumber grower Mr Paul Shoker, whose family has been living in and growing vegetables in the Coffs Harbour region for decades. The article focuses on Mr Shoker's outlook on sustainability from a community responsibility perspective and about his business has made a natural progression to more efficient practices over time.</p>	
Edition	March/April 2015
EnviroNews articles	<ul style="list-style-type: none"> • Communicating efficient irrigation practices, p. 32, • Industry innovators to be awarded, p. 32, • The key to compost, p. 33.
EnviroVeg Case Study feature	Filling the potholes in Controlled Traffic Farming (David Addison pp. 34-35.)

Summary:

'EnviroNews' contained articles that included information on the recent horticulture industry report *Communicating efficient irrigation practices in the horticulture industry (HG10020)* that analysed gaps and presented important irrigation knowledge to growers, an article that called for nominations to the Netafim Environmental and DuPont Community Stewardship Awards to be presented at the National Horticulture Convention in June, and an article on the many important roles of compost, adapted with permission from an article written by Bob Schaffer, of Soil Culture USA.

The EnviroVeg case study featured Tasmanian grower David Addison who has been working with TIA researcher John McPhee to implement Controlled Traffic Farming (CTF) on his property. The article discussed the benefits of CTF and went into detail about the difficulties that arise when implementing this kind of system and how growers could avoid these issues.

Edition	May/June 2015
EnviroNews articles	<ul style="list-style-type: none"> • Visit us at the National Horticulture Convention, p. 34 • EnviroVeg roadshow visits growers in QLD, SA and NT, p. 34 • Sustainable chemical use for reduced resistance, p. 35
EnviroVeg Case Study feature	Flood plain farming: Weighing the risks (Don Ruggiero pp. 36-37.)

Summary:

'EnviroNews' contained articles that included information on the recent EnviroVeg program workshops across the country held in conjunction with other industry programs that presented important post-harvest knowledge to growers, an article that called for growers to visit the EnviroVeg booth during the trade show at the National Horticulture Convention in June, and an article on the importance of correct treatment options for best practice management systems around group 28 insecticides.

The EnviroVeg case study featured South Australian grower Don Ruggiero who has been working on reconstituting neglected dairy land along the Murray River. This article focused on the positive outcomes of Brassica trials that Don has been running and the benefits it has for the land.

Edition	July/August 2015
EnviroNews articles	<ul style="list-style-type: none"> • Complete the EnviroVeg Biosecurity Quiz for a FREE biosecurity gate sign, p. 38, • EnviroVeg could be visiting you!, p. 38, • Fact sheet snapshot, p. 38. • Biologicals: expanding options in crop protection
EnviroVeg Case Study feature	Doing your homework, reaping the rewards (Bryce Henderson, EnviroVeg Gold Member pp. 40-41.)

Summary:

'EnviroNews' contained articles on a variety of topics, that included: discussing the Integrated Crop Protection (ICP) extension programs case study on reverse tillage, The EnviroVeg biosecurity quiz and gate signs available to growers, upcoming EnviroVeg workshops and biological crop protection products.

<p>The EnviroVeg case study featured Queensland baby leaf and lettuce grower Mr Bryce Henderson, whose innovation and constant research has allowed him to expand his business significantly. This is due to the best practice environmental methods Bryce employs on his property.</p>	
Edition	September/October 2015
EnviroNews articles	<ul style="list-style-type: none"> • Progress to the next EnviroVeg level and promote good business practices, p. 32, • Simplified pest checking tools now available, p. 32, • Youth agriculture summit tackles global issues, p. 33.
EnviroVeg Case Study feature	Focusing on a sustainable future (Brock Sutton pp. 34-35.)
<p>Summary:</p> <p>‘EnviroNews’ contained articles that included information on how to progress to the next level of the EnviroVeg program for promotion of good business practices including through to EnviroVeg Platinum certification level, the Veg Pest ID application and ute guides now available through AHR.</p> <p>The EnviroVeg case study featured Queensland grower Brock Sutton whose family has been growing vegetables in the Lockyer Valley for over thirty years. This article focused on the practices implemented by his family owned business over this time including Integrated Pest Management (IPM) systems and tailored crop inputs that have allowed them to thrive.</p>	
Edition	November/December 2015
EnviroNews articles	<ul style="list-style-type: none"> • Do you know your soil types?, p. 32, • EnviroVeg Program Update, p. 32, • Regional treatment planning with IPM, p. 33.
EnviroVeg Case Study feature	Striving for innovation, market access and environmental sustainability (Mike Badcock pp. 34-35.)
<p>Summary:</p> <p>‘EnviroNews’ contained articles that included information on knowing your on farm soil types with help from the ‘SoilMapp’ application, an EnviroVeg program update with information on how to access newly developed biosecurity resources and a visit from the Environment Coordinator and the use of IPM programs in regional locations.</p> <p>The EnviroVeg case study featured Tasmanian grower Mike Badcock who has been heavily involved in the vegetable industry on a national and state level. Mike talks about the need for Australian farmers to be recognised for their commitment to environmental sustainability and the innovations this requires.</p>	
Edition	January/February 2016
EnviroNews articles	<ul style="list-style-type: none"> • Maximise the benefits of your good business practices with EnviroVeg Platinum • Take care of your soil by building stable organic matter • Residue management for export compliance

EnviroVeg Case Study feature	Total recall: improved data retention in challenging circumstances (Amo Mason pp xx)
<p>Summary: Victorian grower Amo Mason describes advanced data tracking techniques and environmental management in difficult growing conditions.</p> <p>Describing to growers how to become and EnviroVeg Platinum member. (Humus), article on improving soil health., article describing residue management in crops for export.</p>	
Edition	March/April 2016
EnviroNews articles	<ul style="list-style-type: none"> • EnviroVeg manual now available in Vietnamese! • Access grants for your business • Soil recovery from intensive cropping: methods and benefits in practice
EnviroVeg Case Study feature	Sustaining a high standard brings a golden reward:
<p>Summary: EnviroVeg Gold member Sam Taranto describes the EnviroVeg Gold process and his best practice management systems. Informing growers of the availability of this resource. informing growers of a range of sustainability grants available to businesses in Australia. : speaking to agronomist Bob Shaffer and grower Jamie Jurgen about reducing farming intensity to develop sustainability benefits.</p>	
Edition	May/June 2016
EnviroNews articles	<ul style="list-style-type: none"> • Protecting bees and wildlife • EnviroVeg wrap up, workshop and program survey • Get the facts – access relevant business information:
EnviroVeg Case Study feature	<i>Growing a sustainable model (Wayne Shields, pp xx)</i>
<p>Summary: Mornington Peninsula (Victoria) organic grower Wayne Shields speaks about his best practice techniques, employing and communicating with English as second language (ESL) managers and developing sustainable bio-fertilisers.</p> <p>An article on the importance of pollination in vegetable production, new research and tools in this area for growers.: Informing growers of recent EnviroVeg activities, including workshops. Information for growers on accessing grants and loans.</p>	
Edition	July/August 2016
EnviroNews articles	<ul style="list-style-type: none"> • QA harmonisation to benefit growers • Reducing greenhouse gas emissions through improved nitrogen management. • Using water to combat difficult growing conditions
EnviroVeg Case Study feature	Educating, connecting and growing (Chris McKenna, pp xx)

Summary: Tasmanian vegetable grower Chris McKenna describes the challenges he has faced, how he has overcome these challenges and improving industry education.	
An article describing to growers how the Hort Innovation funded Harmonised Australian Retailer Produce Scheme (HARPS) will affect growers.: An article describing research on fertiliser programs for sand soils.: An article describing research and developments in sustainable global water use.	
Edition	September/October 2016
EnviroNews articles	<ul style="list-style-type: none"> • Developing fertiliser from waste products, p 42. • EnviroVeg program update, p 42. • Beneficial Bacteria: An avenue to unlock soil health, p 43.
EnviroVeg Case Study feature	Invention borne of necessity; Innovation in practice (Petra Doust, pp 44 – 45)
Summary: EnviroNews contained information on making fertilisers from on-farm waste, including a case study, an update on the development of the EnviroVeg forward plan, a reminder about the EnviroVeg survey and research on biologics in soil. The Case study described the experiences of Patra Doust, QA manager at Houston’s farms. She highlights the changing dynamic of her work place and includes descriptions of the research underway on farm.	
Edition	November/December 2016
EnviroNews articles	<ul style="list-style-type: none"> • Region-specific resources for growers, p 36. • Product application: Increasing cost-efficiency, p 37.
EnviroVeg Case Study feature	Driving a profit: Sustainability at the wheel (Joe Mondello, pp. 38 – 39).
Summary: EnviroNews focused on the work of the Natural Resource Management (NRM) programs throughout Australia, and highlighted the available resources and upcoming events available to growers. Integrated drift management system research was discussed in-conjunction with the role of application nozzles. In the Case study, Joe Marrone of Marrone Fresh spoke about the challenges he has faced in ongoing R&D investment and building a business around long term investment.	

VA articles can be accessed from here: <http://www.ausveg.com.au/intranet/publications/va.htm>

1.3) EnviroVeg surveys

2013 survey results:

The 2013 EnviroVeg Grower Survey was implemented in April 2013 as a means to obtain feedback on the program's delivery from industry. The majority of respondents were growers and 66.7% of those were EnviroVeg members. The survey was developed electronically and distributed to industry through the EnviroVeg email database and AUSVEG Weekly Update. The survey consisted of a number of multiple choice and open-ended questions.

The survey enjoyed a much higher response rate than the previously-developed 2012 survey, due largely to the fact that it took less than five minutes to complete. The 2013 survey formed the template for future survey work completed in the program.

Program delivery

Of the respondents, 66.7% rated program information materials and communications as being of good or very good quality. Reasons for this result included that communications were meaningful and relevant to growers. Areas identified where program delivery could be improved focused on the incorporation of a third party audited component of the program, which AUSVEG was progressing at the time of the survey. Another area identified for improvement was to better inform the broader community about the environmental efforts of the industry.

Of the program communications, the *Vegetables Australia* articles were most popular with 73% of respondents reading them, while member emails were a close second with a readership of 60% of survey respondents.

Industry-wide issues

Respondents considered environmental issues to be of considerable importance, with 73% of respondents rating environmental issues as being of high or very high importance to them in running their business. Water security, rising energy costs and soil management ranked highly as concerns among respondents. Climate fluctuations and disasters such as floods also featured prominently among concerns. In regards to current regulation of environmental management for growers, concerns around water management and water security were critical, in addition to concerns regarding red tape and the slow process around gaining approvals for on-site work.

Responding to the survey

Satisfaction with program information materials and delivery is at an acceptable level, with 66.7% of respondents ranking them as good or very good. Suggestions for improvement focus on implementation of a third party audited component for the program, which AUSVEG is implementing. The Environment Coordinator will continue to refine communication, however, EnviroVeg is operating well as a communications tool for industry.

EnviroVeg has become an important tool for industry advocacy and drawing attention to the needs of the vegetable industry in national policy discussions. AUSVEG will therefore utilise this information as part of its separate Public Affairs activities.

2014 survey results:

The 2014 EnviroVeg Grower Survey was implemented in February 2014 as a means to obtain feedback on the program's delivery from industry. All respondents were growers and 82% of those were EnviroVeg members. The survey was developed electronically and distributed to industry through the EnviroVeg email database and AUSVEG Weekly Update. The survey consisted of a number of multiple choice and open-ended questions following the same format and design as the 2013 EnviroVeg Survey so that results could be compared.

Around half of the respondents were aware of the EnviroVeg Platinum scheme, demonstrating that additional promotion of the program would be worthwhile over the coming year. This may, in part, be due to the fact that mainly larger growers at this stage are interested in achieving formal environmental certification.

Environmental management and issues facing their businesses.

Over 80% of respondents rated environmental management as being of 'high' or 'very high' importance in their businesses, while the remaining respondents rated it as being of only 'moderate' importance. When asked to outline environmental issues facing their business, respondents highlighted the areas of climatic factors such as lack of rainfall and heat, weed management, energy costs, water licensing and erosion management as being their major concerns. When questioned on areas of regulation that they thought could be improved, respondents highlighted regulation of land management activities such as vegetation removal or irrigation development as being particularly onerous, as well as challenges resulting from many of the regional councils being re-classified as town/city areas.

Program delivery

Of the respondents, 25% rated the delivery of EnviroVeg as being 'very good', while almost 60% rated delivery as being 'good'. Of the program communications distributed to members, member emails were regularly accessed by almost 70% of respondents and *Vegetables Australia* articles read by 83% of respondents. These were by far the most popular means to access program information, with the response rate for emails particularly pleasing as great effort has been taken to provide engaging content over the past milestone period.

Other communications such as the EnviroVeg website (40% use by respondents), regional information sessions (25%) and the EnviroVeg smartphone application (25% were not as broadly used, however, these remain important supplementary information resources for the program.

Responding to the survey

Satisfaction with program information materials and delivery was at an acceptable level, with 85% of respondents ranking them as good or very good. Suggestions for improvement focus on further promotion and adoption of the EnviroVeg Platinum scheme and creating greater awareness of supplementary information resources such as the EnviroVeg smartphone application with program members. Insights on grower concerns regarding environmental management were used to develop content for the program through communications, such as member emails and *Vegetable Australia* articles.

2015 survey results:

The grower survey revealed that the respondents greatly valued environmental management within their business operations, with very high awareness of the EnviroVeg program with 90 % of respondents. Awareness of the EnviroVeg Platinum scheme was 60 % with respondents this year. This area could be further improved; however, significant promotion of the scheme means that this awareness will come with time with the membership base. Most of the respondents received information about the program through the *Vegetable Australia* magazine and member emails, with the quality of this information held in high regard. More traffic through the EnviroVeg website is a good target for improvement. Common general environmental concerns raised were related to awareness within the community and how to deal with sporadic weather conditions. In terms of government regulation the main issues were to do with pest control and protection of native or endangered species.

The general feedback around the program was good, with growers showing concern only that they did not have enough time to thoroughly cover all of the accessible information, and requirements for greater access to this data. This can be easily remedied by improving the knowledge about the resources available, which could be corresponded through the readily accessed mediums of email and *Vegetables Australia* magazines.

1.4) 2016 Survey

Online link: <https://www.surveymonkey.com/r/G29DDPD>

Part one – General questions regarding EnviroVeg

1) Which (one or more) of these statements relate to you?

- a) I am a vegetable grower
- a) I am aware of the EnviroVeg program
- b) I am aware of EnviroVeg Platinum
- c) I am a member of EnviroVeg
- e) None of the above

2) Do you view yourself as an active participant in the EnviroVeg program?

(Attend workshops, read email updates, comply with information in the EnviroVeg manual etc.)

- a) Yes
- b) No

2.1) What (if any) level of EnviroVeg membership are you?

- a) Basic
- b) Gold
- c) Platinum
- d) Not a member

3) Would you like to see EnviroVeg continue in the future?

- a) Yes
- b) No

3.1) Why/Why not?

(Please comment)

4) How would you like to see the EnviroVeg program develop in the future?

(Please comment)

5) Rank the following in terms of importance for the future of EnviroVeg:

(1 being least important and 5 being most important)

- ___ EnviroVeg has retailer recognition
- ___ EnviroVeg has consumer recognition
- ___ EnviroVeg integrates with other Quality Assurance programs
- ___ EnviroVeg remains grower owned
- ___ EnviroVeg expands to cover other commodities

6) Do you have any suggestions for changes within the program to better support your environmental credentials?

(Please comment)

7) How important is environmental management in your business?

- a) Very high
- b) High
- c) Moderate
- d) Low
- e) Very low

8) How important is gaining recognition for best practice techniques in your business?

- a) Very high
- b) High
- c) Moderate
- d) Low
- e) Very low

Part two - Questions for current EnviroVeg members

9) What was your level of environmental management before becoming an EnviroVeg member?

(E.g. Very Low = No thought given to environmental management, Moderate = Had an Environmental Action Plan in place and thinking about what practices to enforce, Very High = A high number of environmental management practices in place (eg. Restoring native habitat, all waste recycled and extensive sustainable practices enforced etc.)

- a) Very high
- b) High
- c) Moderate
- d) Low
- e) Very low

10) What is your level of environmental management as an EnviroVeg member?

- a) Very high
- b) High
- c) Moderate
- d) Low
- e) Very low

11) In what ways, if any, have you changed your approach to environmental management since becoming an EnviroVeg member?

(Please comment)

12) How has EnviroVeg impacted the productivity of your business?

- a) Greatly improved
- b) Improved
- c) Minimal impact
- d) No impact
- e) Negative impact

Comments:

13) Do you comply with other Best Management Practice or Quality Assurance programs, if so which ones?

(Please list)

14) Overall, how would you rate the quality of support and resources for improving your environmental credentials through EnviroVeg?

- a) Very good
- b) Good
- c) Average
- d) Poor
- e) Very poor

15) How do you see EnviroVeg benefitting your business in future?

(eg. Leverage in accessing export markets, increasing your reputation for high quality produce, benefits to yield through healthy soils etc..) Please comment.

Please provide any general feedback you have on the program:

2) Extension and member tracking

2.1) Grower workshops

Regions the 18 workshops have been held in:

- Werribee, Cranbourne, VIC
- Devonport, Forth, TAS
- Gatton, Bundaberg, Bowen, QLD
- Wanneroo, WA
- Adelaide, Virginia, SA
- Coolalinga, NT
- Coffs Harbour, NSW

2.2) On-farm grower visits

Regions visited over this project:

- Mildura and Swan Hill in Victoria
- Werribee South in Victoria
- The Mornington Peninsula and Yarra Valley in Victoria
- Devonport and Launceston in Tasmania
- Gatton, Esk in Queensland
- Warragul and South Gippsland in Victoria
- Gatton in Queensland
- Wanneroo in Western Australia
- Sydney Basin in New South Wales
- Sunshine Coast and Bundaberg in Queensland.
- Warragul and South Gippsland in Victoria
- Adelaide and Adelaide Hills regions of South Australia
- Mornington Peninsula in Victoria
- Werribee and Bacchus Marsh in Victoria
- Cambridge, La Trobe, Forth in Tasmania
- Cranbourne, Devon Meadows in Victoria
- Glen Alpin in Queensland
- White Sands in South Australia
- Coffs Harbour region in New South Wales
- Virginia in South Australia
- Wangara Baldivis in Western Australia
- Coolalinga and Marrakai in Northern Territory

3) Program awareness

3.1) Media activities

Media release	Description	Coverage
22 October 2012 – National Water Week: Save water by eating more vegetables	The first media release was developed for National Water Week.	Received considerable press and radio coverage including media mentions in the Weekly Times, FreshPlaza, Australian Food News, and the Land.
26 October 2012 – AUSVEG welcomes appointment of Major General Jeffery to top agriculture policy position	Welcoming the appointment of former Australian Governor-General, Major General Michael Jeffery AC AO (Mil) CVO MC (Retd), as the Australian Government's Soil Health Advocate.	The release achieved media coverage in the Tasmanian Farmer newspaper.
In other activities, the Environment Coordinator distributed invitations to key Tasmanian media in advance of the EnviroVeg Devonport Information Session, which resulted in an interview and full-page feature on EnviroVeg in the Advocate newspaper. March 2013.		
31 May 2013 – Industry and retailer join forces in landmark environmental program	Promoting the launch of the EnviroVeg Platinum Scheme.	Received considerable press and radio coverage including State ABC local country hour radio, the weekly times paper and Channel 9 news TV.
20 August 2013 – Leading Aussie researchers promote sustainable approaches for Gatton growers	Promoting the EnviroVeg workshop in Gatton QLD.	Covered by freshplaza online: http://www.freshplaza.com/news_detail.asp?id=112286#SlideFrame_1
20 September 2013 – Waste management and disease prevention top agenda for WA grower event	Promoting the EnviroVeg workshop in Wanneroo WA.	
25 October 2013 – Minister launches new sustainability app for farmers	Press Launch of the EnviroVeg iPhone App by Minister Hunt on the Mornington Peninsula in Victoria.	Achieved attendance of 50 industry and media members. Live feed to Canberra on ABC 24. Nightly news coverage on Channel 9. Significant rural press print coverage including Border Watch, Weekly Times, Stock and Land. Environment Coordinator gave 3 syndicated radio interviews for Macquarie Radio, 2UE and 2SM radio networks.
3 December 2013 – New study	Release into research showing	Internet coverage through rural

shows buyers will pay more for eco-friendly veggies	consumers would pay a premium for eco-labelled produce.	media, including Weekly Times and Fresh Plaza.
9 December 2013 – Vegetables the smart choice to meet global food challenges: UN report	Release highlighting the importance of environmentally sustainable vegetable growing.	
5 June 2014 – Australian vegetable growers go green for World Environment Day	Distributed on World Environment Day, this release further promoted the EnviroVeg program. The release emphasised that Australian vegetable growers are leaders in environmental stewardship, and the EnviroVeg program recognised these efforts.	
18 June 2014 – ‘Enviro’ vegetables on the way	Released at the time of the 2014 AUSVEG National Convention, this release focused on promoting the EnviroVeg Platinum program, including information about growers who had undergone audit.	
26 August 2014 – EnviroVeg & Biosecurity Information Session – Virginia, SA	Promoting the EnviroVeg workshop in Virginia, with a focus on energy saving tips based on research conducted by Dr John Cumming.	
27 August 2014 – EnviroVeg & Biosecurity Information Session – Coffs Harbour, NSW	To raise awareness about the EnviroVeg workshop in Coffs Harbour, promoting key speaker Dr Gordon Rogers in relation to on-farm power generation options.	
2 September 2014 – Energy saving focus for Cranbourne information session	Promoting the EnviroVeg workshop in Cranbourne, focusing on the topic of potential energy savings for vegetable growers.	
5 September 2014 – Environmental sustainability to meet profitability at Tasmanian Industry Leaders Breakfast	Promoting the Industry Leaders Breakfast event in Devonport, Tasmania. Outlining purpose of the event, key speakers, and EnviroVeg program.	Covered on ABC local radio in Northern Tasmania and Launceston

5 December 2014 – Recognise farmer efforts this World Soil Day	This release was aimed at promoting Australian vegetable farmers as caretakers of Australian soil health through their use of techniques made available by projects such as Soil Wealth.	
26 February 2015 – After the harvest: Vegetable growers to gain insight from R&D event	Promoting the EnviroVeg workshop held in Gatton on 2 March 2015 at the Gatton Research Station, focusing on information presented on post-harvest cases studies.	
3 March 2015 – Vegetable growers to gain a wealth of soil knowledge	This release aimed to promote the EnviroVeg field day held in Virginia on 4 March 2015	
5 June 2015 – World Environment Day celebrates excellent Aussie growers	Aimed at promoting Australian vegetable farmers as caretakers of the environment through their use of techniques made available by projects such as EnviroVeg.	
12 June 2015 – New quiz to assess farm biosecurity practices	Aimed at promoting the EnviroVeg Biosecurity Quiz and the importance of good biosecurity practices on farm.	Covered in 3MW Horsham, Sunraysia Daily and Cairns Post for a total reach of 26,586.
22 September 2015 – Vic veggie growers to learn about latest in industry R&D and on-farm management	Aimed to promote the EnviroVeg R&D Industry Information session held in Cranbourne on 24 September 2015.	
23 November 2015 – New research helps growers pick the right QA system	Talking about new research helping growers pick the right QA system.	Covered on 3WM radio Horsham
19 January 2016 – Vegetable Industry’s EnviroVeg manual to be launched in Vietnamese	Speaking about the launch of the EnviroVeg manual in Vietnamese	Good Fruit and Vegetables magazine
24 March 2016 – SA veg growers on the pulse of industry R&D and on-farm management	Aimed at promoting an EnviroVeg workshop in Virginia, South Australia	
27 May 2016 – Soil health benefits delivering a wealth of benefits to veg growers	Promoting EnviroVeg and the Soil Wealth project through an InfoVeg radio podcast	

Further to the listed Media Release titles, the Environment Coordinator responded to ad-hock media enquiries as per below:

Date	Outlet	Reach
7 August 2015	Tasmanian Country	17,953.00
13 August 2015	Tasmanian Country	17,953.00
15 August 2015	Tasmanian Country	17,953.00
20 August 2015	Burnie Advocate	17,130.00
21 August 2015	Tasmanian Country	17,953.00
31 July 2015	Tasmanian Country	17,953.00

AUSVEG media releases can be found here: <http://ausveg.com.au/news/mediareleases.htm>

3.2) Industry meetings

EnviroVeg attended a range of industry meetings over this time, a sample of meeting held in 2016 are outlined below:

Meeting members	Details of Engagement
Freshcare	A meeting on 24 June involved the representatives from EnviroVeg, including committee members, the Freshcare Executive Officer and Environment Program coordinator. This is an ongoing conversation regarding alignment of EnviroVeg and Freshcare.
Coles	A meeting with Coles was held on 27 May 2016 to discuss utilising the EnviroVeg program through a MOU and further possibilities for collaboration. This conversation is ongoing.
Woolworths	Conversations with Woolworths are ongoing and are discussing using the EnviroVeg program as a part of developing an environmental scheme for growers. A face-to-face meeting is scheduled for later this year.
GLOBALG.A.P.	A conversation with a GLOBALG.A.P. representative about the current state of play for quality assurance systems in Australia was held in May.
Growcom/Hort360	Conversations with Hort360 have been held regarding the EnviroVeg program and working together in the future. This is an ongoing discussion.
Vietnamese government	The translated EnviroVeg manual has been taken on an export mission to the Vietnamese government as a part of a delegation from 4ways Fresh. They have shown keen interest in using this resource.
Industry BMP programs	EnviroVeg has spoken to representatives from the Banana BMP and Entwine programs about how environmental best practice programs can work together.
Food safety stakeholders	EnviroVeg attended Food safety workshops on 27 July and 19 September to engage with key stakeholders about QA and BMP issues.

AHR, RMCG	EnviroVeg met with AHR and RMCG representatives on 28 July to discuss working closely to streamline grower engagement in research and development for the future.
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3.3) Event attendance

A representative attended a number of events to promote the program over this project period. Examples of event attendance are highlighted below:

- An Applied Horticultural Research Climate Change Investment Workshop in Melbourne
- A Waste Management and Innovation workshop in Toowoomba Queensland
- The 2013 Department of Primary Industries Victoria Science Awards
- The 2013 AUSVEG National Convention
- The Protected Cropping Australia Conference 2013
- EnviroVeg Smartphone Application launch in October 2013
- Launch of new packaging facilities at Alkira Organics
- 1800 Agronomist Launch in Werribee
- Soils for Life Program National Forum
- Nuffield South Australia 2014 Conference
- Industry Leaders Breakfast

In September 2014, EnviroVeg hosted an ‘Industry Leaders Breakfast’ event in Devonport for key stakeholders, including those involved in finance, agri-business, consulting and research. The purpose of the workshop was to raise the profile of EnviroVeg and EnviroVeg Platinum and provided a forum to discuss environmental sustainability within agriculture. The event attracted over 20 guests, including local vegetable growers, who heard from the following speakers:

- Young Producers Day, which was hosted by the Rice Research Australia Pty Ltd, Southern Growers and Nuffield Australia on 15 January 2015.

The Environment Coordinator has organised an EnviroVeg booth at the National Horticulture Convention each year over this project.

4) Program and Resource Development

4.1) Program tiers and membership structure

EnviroVeg Program Rules and Procedures

(Version 1.2)

The following document outlines key rules and procedures relating to the EnviroVeg Program and the membership levels available to vegetable growers.

Version update: June 2013

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This project is facilitated by HAL in partnership with AUSVEG and is funded by the National Vegetable Levy. The Australian Government provides matched funds for all HAL's R&D activities.

Glossary

Approved auditor: An auditor approved to audit the EnviroVeg Stewardship Program third party audits. Approved auditors will be published on www.enviroveg.com.

Audit: An assessment of compliance against the EnviroVeg Stewardship Program criteria undertaken by an independent third party auditor.

Audit report: A report prepared a third party auditor assessing whether or not a 'platinum' member is compliant with the EnviroVeg Stewardship Scheme criteria

Auditor's Checklist: A document which outlines the EnviroVeg Stewardship Scheme criteria, scoring system and methodology auditors must use when auditing the EnviroVeg Stewardship Scheme.

AUSVEG: National Peak Industry Body for the Australian Vegetable and Potato industries. AUSVEG is the administrator of the EnviroVeg Program and associated EnviroVeg Stewardship Scheme.

'Basic', 'Gold' and 'Platinum' membership: Membership levels in the EnviroVeg Program with different requirements and rewards.

Environmental Action Plan: A short document outlining planned environmental improvements for a year. Ongoing development of this plan is a requirement for 'platinum' members under the EnviroVeg Stewardship Program.

EnviroVeg Stewardship Scheme: A third party audited version of the EnviroVeg Program which 'Platinum' EnviroVeg must comply with.

Grower Agreement: An agreement signed between AUSVEG and 'Platinum' members in which they agree to abide by the EnviroVeg Stewardship Program rules.

Induction Package: An information package with all of the instructions, templates and policies growers require to implement the EnviroVeg Stewardship Scheme on their properties.

Record of corrective action: A statement by the auditor outlining compliance issues after an audit, the agreed timeframes for addressing the issues and any subsequent corrective action undertaken by the grower.

Self-assessment: A questionnaire which 'Gold' and 'Platinum' members must complete each year to maintain membership.

Self-audit: An additional assessment checklist (similar to the Auditor's Checklist in format) that 'Platinum' members are required to complete annually to check that they are compliant with the additional record-keeping requirements of the EnviroVeg Stewardship Program.

1. Introduction

The EnviroVeg Program is a highly-successful and industry-led environmental program for Australian vegetable growers. The basic annual self-assessment program is offered free to all National Vegetable Levy paying growers throughout Australia. Once growers have submitted a minimum of one self-assessment and achieved a score of 85% or greater and submitted an Environmental Action Plan to AUSVEG they can then opt to move to higher levels of membership. Moving to higher levels requires the grower to subject their operation to third party audits which require additional proof of compliance. Auditing costs are met by the grower. In return, participating growers are rewarded through increased recognition of their environmental performance and access to rewards such as use of the EnviroVeg logo in their businesses.

With considerable interest from consumers in the environmental efficacy of products they consume, environmentally-responsible growers are at an advantage in communicating to industry and supply chains that they are caring for the environment. Consumers want to know that the products they are using are sustainable and business partners want to know that the companies they deal with are ethical. EnviroVeg provides Australian growers with the ability to measure their activities against other growers and ultimately progress to auditing their performance through the Program's new 'Platinum' level scheme.

The following document outlines the rules and procedures relating to all levels of EnviroVeg membership and how the Program is managed by AUSVEG.

2. Membership rewards and progression

The following table outlines the various stages of EnviroVeg membership and the requirements and rewards that apply.

Membership level	Requirement	Reward
Basic membership	Member has signed up to the Program and received the Program Manual.	Access to Program materials such as the Program Manual and access to www.enviroveg.com
	Member is still yet to submit a self-assessment or is achieving less than 85% compliance in self-assessment.	Access to Program updates and communications.
Gold membership	Member has submitted an EnviroVeg self-assessment to AUSVEG for review.	EnviroVeg Gold membership certificate.
	Member achieves at least 85% compliance under the	Opportunity to purchase gate signage at cost.

	<p>self-assessment program.</p> <p>Member has completed and submitted an Environmental Action Plan using the template in the Program Manual or available at www.enviroveg.com</p>	
<p>Platinum membership (EnviroVeg Stewardship Scheme)</p>	<p>Member signs contract with AUSVEG agreeing to 'Platinum' membership rules (Grower Agreement).</p> <p>Member is able to demonstrate compliance with the Scheme when subject to audits.</p> <p>Member completes and submits to AUSVEG a self-audit or completes a third party audit to demonstrate compliance with the Scheme.</p>	<p>Use of EnviroVeg logo, subject to branding guidelines.</p> <p>EnviroVeg Platinum membership certificate.</p> <p>Publishing of business name and logo on EnviroVeg website www.enviroveg.com in a list recognising 'Platinum' members.</p>

3. Rules on Membership Status and Progression

The following section outlines the rules and requirements governing EnviroVeg members at different stages of membership.

3.1 - Basic membership

The self-assessment version of the Program is funded through the National Vegetable Levy and available to all levy-paying vegetable growers throughout Australia. The Program resources, including the official EnviroVeg Manual (Version 3.), are a valuable education tool for growers seeking to benchmark and improve their environmental practices.

Access to basic membership incurs no cost for the grower, with additional costs only applying to higher levels of membership in the Program.

3.2 - Submitting a Self-Assessment and moving to Gold membership

To be eligible for the 'Gold' membership a grower must first submit a self-assessment to AUSVEG for review. This can be submitted either through the online system at www.enviroveg.com or in hard copy using the self-assessment form provided with the Program Manual. Achieving 'Gold' membership requires the grower to be able to demonstrate environmental performance through achieving an 85% total score on their current EnviroVeg self-assessment. If a grower with 'Gold' membership drops below 85% on any subsequent annual self-assessments they go back to 'Basic' membership.

The grower will then need to submit an Environmental Action Plan to AUSVEG using the template provided in the Program Manual and on the EnviroVeg website in the member 'Resources' section. This document outlines planned activities and environmental improvements over the next year and will be an important reference document should the grower intend to achieve 'platinum' level membership.

Once the grower has completed and submitted the self-assessment and Environmental Action Plan, they will be sent a certificate which acknowledges their membership status. In addition, 'Gold' member growers will be eligible to purchase EnviroVeg gate signage for use on their properties at cost price.

Once the grower has achieved 'Gold' membership, they may then choose to progress to 'Platinum' level membership and subject themselves to random audits.

3.3 - Signing up to the 'Platinum' membership scheme

The first step for growers is to review the *EnviroVeg Platinum* scheme Auditor's Checklist and assess whether they are compliant under the scheme.

The next step is to prepare documentation outlined in the *EnviroVeg Platinum* Induction Package.

These resources are available to members through the 'Resources' section of www.enviroveg.com and www.ausveg.com.au.

Once the *EnviroVeg Platinum* system is in place on the property, then participating growers will then need to submit themselves to an initial Audit to gain access to the Scheme.

Eligible growers will then be required to sign a contract with AUSVEG (the Grower Agreement) agreeing to comply with the rules associated with 'Platinum' membership and additional requirements under the audited EnviroVeg Stewardship Scheme.

4. Management of the 'Platinum' level Environmental Stewardship Scheme

The following rules relate only to the management of the 'Platinum' level Environmental Stewardship Scheme.

4.1 General Rules

1. AUSVEG reserves the right to alter EnviroVeg Stewardship Scheme rules and criteria at any time.
2. The EnviroVeg Stewardship Scheme requires growers to complete an annual self-audit against the Scheme criteria where not subject to external audit.
3. Where a business has more than one production site or farm, the criteria which relate to field operations must be completed for all properties. Those criteria which relate to the management of the scheme, such as policies or training records can be kept at a main office and do not need to be duplicated.
4. Growers participating in the EnviroVeg Stewardship Scheme agree to subject themselves to periodic third party audits in accordance with the Scheme rules (refer to **Section 4.2**).
5. A random sample of member businesses is taken annually as outlined in **Section 4.2** from the full list of 'Platinum' members electing to participate in the EnviroVeg Stewardship Scheme. The sampling method will be completely random, with each participating business having the same chance of selection for third party audits.
6. All costs relating to the audits will be met by the participating members of the scheme on an individual farm basis and must be conducted with approved auditors for the scheme (see **Section 4.13** for list of approved auditors and costs).

4.2 Sampling for audits

Under the EnviroVeg Stewardship Scheme each grower will be allocated a unique membership number. Random numbers will then be generated and the corresponding members selected for audits.

The number of farms to be sampled is determined by the following rule:

- The sampling rule is the square root of N (where N= the number of eligible 'Platinum' members).
- Where the number of audits generated by the sampling rule is not a whole number, AUSVEG will round up for numbers which are .5 and above. For example, if the number of required audits is determined to be 8.5, then nine audits will be undertaken that year.

4.3 Compliance of businesses

A business counts as compliant if, after an audit, it achieves:

- 100% of 'essential criteria' requirements, as outlined in the EnviroVeg Stewardship Scheme Auditor's Checklist; or.
- 80% of 'essential criteria' and 50% of 'recommended criteria' in all sections of the Auditor's Checklist.

Auditors of the EnviroVeg Stewardship Scheme must follow the auditing methodology as set out in the Auditor's Checklist.

AUSVEG retains the right to alter the existing criteria to respond to emerging environmental issues or other factors. AUSVEG will provide advance notice to all growers as to any changes to the scheme criteria to allow sufficient time for planning and implementation.

4.4 Special considerations for pack houses and processors

Where the member business is a combined growing and pack house or processing operation special rules apply due to the fact that produce for packing and food manufacturing will be sourced from multiple properties.

Where the business is a pack house or processing operation, they will be required to ensure that they can ensure that all approved suppliers are certified under the EnviroVeg Stewardship Scheme. Under audit these operations will be required to provide internal records of produce supply and copies of 'Platinum' level certificates of approved suppliers. In addition, the packhouse and processing company will be required to undergo an audit of relevant areas of their operation.

4.5 Self-audits and self-assessments

When not subject to a third party audit, each EnviroVeg member must submit an annual self-audit against the scheme criteria. The self-audit is provided on the 'Resources' section of the EnviroVeg website. Membership may be revoked if a member is unable to submit the self-audit to AUSVEG for review or there are performance issues identified in meeting criteria as to the standards outlined in **Section 4.3** of the Program Rules.

The self-audit will outline grower compliance with the scheme, with the expectation that growers meet the same requirements as required under third party audits. Self-audits must be completed for each calendar year a member is active in the Scheme when not subject to external audit.

In addition to the self-audit, growers will still be required to submit their annual self-assessment. This is required to ensure that participating growers are still benchmarking their practices to determine areas of strength and improvement, which will assist with the ongoing development of their Environmental Action Plan (a requirement of the EnviroVeg Stewardship Program).

4.6 Submission and Audit Timeframes

'Platinum' members will be informed as to whether or not they will be audited for a calendar year by **30 April**.

Members selected for third party audits will then have until **30 April** of the next year to have arranged and completed their audit with an approved auditor. If the business does not pass the audit and has made arrangements with the auditor to implement corrective action (refer to **Section 4.7**) then the member is considered to be 'under review' until such time as they have either implemented corrective action and passed the audit or failed to implement the action and failed.

If the 'Platinum' member fails to complete an audit within the specified timeframes they will be considered to have failed the audit and membership will be revoked (refer to **Section 4.8**).

All 'Platinum' members (including those selected for third party audits) must submit a self-assessment and self-audit or audit report to AUSVEG by **30 November** each calendar year. Failure to submit the self-Audit and self-assessment by the due date each year is required to maintain 'Platinum' and failure to submit these documents will result in membership being revoked (refer to **Section 4.8**). The self-assessment can be completed either online at www.enviroveg.com or sent in hard copy to the AUSVEG offices. The self-audit will need to be submitted in hardcopy and will be available as part of the Induction Package and in the member 'Resources' section of the EnviroVeg website.

If a 'Platinum' member signs up after the **30 April** date for allocating audits, the member-business will not be required to submit themselves to random audits for that calendar year. Instead, the member-business will be included in the random sample for the following year.

If the member signs up before **30 September** they will be required to submit their self-audit and self-assessment for that calendar year by **30 November**.

Self-audits and self-assessments can be sent by post to:

The Environment Coordinator

AUSVEG

PO Box 2042

Camberwell West VIC 3146

4.6 Reporting on Program results

AUSVEG will have a yearly goal of achieving compliance from 80% of third party audited businesses.

If these performance targets are not achieved for a year AUSVEG may, at its discretion, undertake a review of the scheme and make additional resources and training available to member-growers to ensure higher levels of compliance in subsequent years.

Aggregate results of third party audits will be published annually, as well as any planned corrective activity if compliance levels are not meeting the target of 80% compliance with the Scheme.

4.7 Addressing compliance issues

Timeframes for addressing non-compliance will be agreed upon between the member business and the auditor, although be addressed within a maximum of 6 months of discovery. A record of corrective action must then be kept and provided to AUSVEG. At this stage the audit will be

considered 'under review' and the grower must rectify any issues then arrange another audit to check that corrective action has been actioned. The grower will be responsible for all costs in arranging additional audit(s), with the fee to be negotiated between the grower and auditor directly, as costs are expected to vary depending on the corrective action required.

4.8 Revocation of membership

If a member-business is determined through audit to be non-compliant with the Scheme, and issues outlined within the audit are not rectified within 6 months, the 'Platinum' membership of the member-business will be revoked along with all associated benefits.

4.9 Re-applying for 'Platinum' membership

If membership for a 'Platinum' member is revoked, a grower will not be eligible to apply for 'Platinum' membership for 12 months. In order to be eligible for 'Platinum' membership again the member must submit themselves to a compulsory third party audit for that year and will be required to pass the audit to regain 'Platinum' membership. If compliant, the grower will regain 'Platinum' membership and will be subject to the random audit process as outlined in **Section 4.2**.

4.10 Record keeping

1. Copies of all audit reports and any records of subsequent corrective action will be provided to AUSVEG by the auditor within 10 business days of issue.
2. If a grower member would like to dispute the findings of an auditor this can be provided to AUSVEG in writing. At AUSVEG's sole discretion, the grower may have the opportunity to have the audit report or corrective action independently-reviewed through a second AUSVEG approved auditing company at the member's own cost.

4.11 Managing Auditors

1. AUSVEG maintains a list of approved auditors, who are authorised to audit the EnviroVeg EnviroVeg Stewardship Scheme. The full list is available at www.enviroveg.com and is updated as required.
2. AUSVEG will reserve the right to revoke the status of auditors to conduct EnviroVeg Stewardship Program audits.
3. All complaints against auditors must be submitted to AUSVEG in writing.
4. All auditors under the EnviroVeg Stewardship Scheme will be subject to periodic reviews of their performance.

4.12 Complaints resolution

EnviroVeg 'Platinum' members' names will be openly published on the EnviroVeg website.

Complaints against a member business will need to be provided to AUSVEG in writing and signed and dated. Anonymous complaints will not be accepted.

If a complaint indicates non-compliance with aspects of the EnviroVeg Stewardship Scheme criteria, the member-business will be required to respond to the complaint and verify its compliance. To confirm compliance, an audit may be required at the member's expense.

4.13 Approved Auditing Companies and Audit Costs

If you have been selected for an audit you must complete it within one calendar year of receiving notice from AUSVEG. This is to allow flexibility for you to organise the environmental audit at the same time as your scheduled QA audit. This has the benefits of reducing costs as a combined QA and EnviroVeg Stewardship Scheme (*EnviroVeg Platinum*) audit will cost around \$400-\$500 as a standalone audit, or less when combined with a QA audit, depending on the distance the auditor has to travel and complexity of the operation. It is more cost-effective both in cost and time for you to schedule both your QA and EnviroVeg audits at the same time, as there are areas which crossover between schemes and the fact that the auditor is already on-property minimises costs such as travel.

The following national audit companies are authorised to audit the EnviroVeg Stewardship Scheme in conjunction with either a Freshcare or SQF2000 QA audit:

- NCS International
- SGS
- AUSQUAL Ltd
- SciQUAL International
- Silliker

5. Reporting and transparency

AUSVEG is committed to maintaining the integrity of the EnviroVeg Stewardship Scheme through the transparent reporting of aggregate audit results each year at www.enviroveg.com.

5.1 Reporting measures

AUSVEG will prepare and release a report each year outlining the number of growers audited and their aggregate compliance results. Individual scores and corrective action reports will not be released due to privacy reasons.

This report will be prepared and released by **31 January** each year.

'Platinum' members who are still implementing corrective action at the time of reporting (refer to **Section 4.7**) will be considered to be 'under review' and will not be included in the results showing the percentage pass rate for that year. Once the timeframes for corrective action have expired and the grower has either passed or failed the audit then these results will be published in the report for the following year as part of the percentage pass rate.

5.2 Transparency measures

AUSVEG will publish all rules pertaining to the EnviroVeg Stewardship Scheme on the EnviroVeg website, including the assessment criteria growers are expected to meet.

In addition, growers who have achieved 'Platinum' EnviroVeg membership will be listed on the website for transparency, as well as approved auditors for the scheme.

All aggregate figures relating to compliance with the Scheme will be published in an annual report each calendar year and made available on the EnviroVeg website.

6. Use of EnviroVeg logo

EnviroVeg members reaching 'Platinum' membership will be rewarded with use the EnviroVeg logo. This provides a highly-visible recognition of the environmental commitment of the business and may be used on marketing collateral such as website, packaging and promotional materials.

Each grower agrees to the conditions for use of the EnviroVeg logo as outlined in the EnviroVeg contract signed as part of reaching 'platinum' membership.

If a grower's 'platinum' membership is revoked then listing of the grower will be removed from the website and use of the EnviroVeg logo no longer permitted. AUSVEG will be in no way liable for any costs associated with removing the EnviroVeg branding from marketing collateral and produce packaging.

1.1 Brand guidelines

EnviroVeg 'platinum' members are required to follow the guidelines below in using the EnviroVeg logo. The EnviroVeg logo will be supplied to 'platinum' members in a number of formats appropriate for web and print reproduction as part of the Scheme Induction Pack.

Specifications

1. The EnviroVeg logo is supplied in correct dimensions, which must not be altered when reproducing the logo.
2. The logo must be reproduced at no smaller than 35mm in width.
3. When reproduced for print, the .eps or design format of logo provided must be used to ensure sufficient quality reproduction. The use of .jpgs is suitable for website or other electronic communications.
4. The logo must appear at all times on a white background.

7. Document Control and Recordkeeping

The following policy outlines the records to be kept as part of Program administration.

Documentation	Records required	Location	Retention
Member documentation	Approved membership list.	Electronic and hard copy file. Membership status to be managed through www.enviroveg.com	Retain for 7 years from cessation of membership.
	Membership status.	Electronic and hard copy file.	Retain for 7 years from cessation of membership.
Compliance documentation	Corrective Action Records.	Electronic and hard copy file.	Retain for 7 years from cessation of membership.
	Self-audit records.	Electronic and hard copy file. Membership status to be managed through www.enviroveg.com .	Retain for 7 years from cessation of membership.
	Individual member audit reports.	Electronic and hard copy file.	Retain for 7 years.
	Annual compliance report.	Publicly available through www.enviroveg.com .	Indefinite.
Complaints	Provided in writing, signed and dated.	Electronic and hard copy file.	Retain for 7 years from resolution of dispute (successful audit).
Membership status	Notice of revocation of membership.	Electronic and hard copy file.	Retain for 7 years from revocation of membership.
Auditor records	List of approved auditors	Electronic and hard copy file. Publicly available through www.enviroveg.com	Update as needed.
	Records of auditor complaints and dispute resolution.	Electronic and hard copy file.	Indefinite

Information on EnviroVeg Platinum can be found here: <http://www.enviroveg.com/EnviroVeg-Program/EnviroVeg-Platinum.aspx>

4.2) Biosecurity component of EnviroVeg

Biosecurity component of EnviroVeg

AUSVEG have established a series of activities for the biosecurity component of the EnviroVeg program to promote good on-farm biosecurity practices. This is broken up into four segments:

- Farm gate signs
- Online biosecurity quiz
- Manual resources
- Soil testing

Farm gate signs are obtained by growers and new members through successful completion (over 80% correct) of the biosecurity quiz, these signs have been sent out to 60 growers and EnviroVeg members.

See below for an image of the sign.

The online quiz was developed to improve on farm biosecurity knowledge and contains 29 questions. The biosecurity quiz can be found by a link on the home page of the EnviroVeg website and has had 72 participants. See Appendix 4 for images of the quiz.

The new section for the EnviroVeg manual has resources including a biosecurity checklist and farm biosecurity action plan template that has been sent out to 88 members as well as being included in manuals sent to new members.

Soil samples were collected from the car tyres of willing participants at a 2015 EnviroVeg workshop and tested through fungal culturing and fungal baiting for *Fusarium* spp., *Pythium* spp., *Rhizoctonia* spp. and *Phytophthora* spp. by the Department of Environment and Primary Industries in Victoria. The results of these anonymous tests were positive for *Fusarium* spp at 10-20% and *Pythium* spp at 80-90% and have been highlighted to members and workshop attendees through an email update.

Gate sign:



EnviroVeg Quiz screenshot:

Home About Us EnviroVeg Members News Resources My Profile Contact Us

Biosecurity Quiz for the Vegetable Industry

Biosecurity Quiz

Question 4 of 28

Biosecurity is:

- A) Biological weapon development
- B) Continued development of the Australian healthcare system
- C) Artificially intelligent security systems
- D) Measures put in place to reduce the risks from pests and disease

[◀ Previous](#) [Next ▶](#)

Display previously viewed questions ▾

4.3) EnviroVeg Steering Committee makeup

Members:

Chair – Mr David Anderson (WA)
Mr Graeme Pichford (SA)
Ms Belinda Adams (QLD)
Mr Paul Shoker (NSW)
Mr Nathan Free (VIC)
Mr Daryl Lohery (TAS)
Dr Doris Blaesing (TAS, industry member)

Ex-officio meeting attendees:

Dr Brenda Kranz (Hort Innovation)
Dr Jessica Lye (AUSVEG)
Mr Andrew Shaw (AUSVEG)

5) Strategic Development

5.1) Freshcare letter of support



Andrew Shaw
Environment Coordinator
AUSVEG Limited
PO Box 138
Camberwell VIC 3124

30 August 2016

Dear Andrew

Freshcare is pleased to have the opportunity to work with the team at AUSVEG in facilitating the future direction of the EnviroVeg Program.

We continue to actively encourage Freshcare trainers and vegetable growers participating in Freshcare environmental training to utilise the EnviroVeg best management practice (BMP) resources in developing their on-farm environmental programs; adding a vegetable specific focus to more general fresh produce environmental resources and training.

Freshcare currently has 312 businesses participating in the Environmental Program, of whom 234 (75%) have achieved third party certification. Whilst customer drivers in the fresh sector continue to be mixed, we have in recent years seen an increasing push for environmental training, implementation and certification in the processing sector.

As discussed as/when participating EnviroVeg businesses need independent recognition of their environmental compliance through a third party audit process, Freshcare would be happy to explore in collaboration with AUSVEG the options for co-certification under the existing Freshcare certification framework.

From a personal perspective, having seen EnviroVeg grow and develop as a key vegetable industry initiative since its launch (like Freshcare) in 2000, I hope I can in some way, assist in ensuring an appropriately secure future for the program.

We look forward to continuing to work with AUSVEG and the EnviroVeg Committee in achieving the best outcomes for industry.

Kind Regards,

A handwritten signature in black ink that reads "Clare Hamilton-Bate".

Clare Hamilton-Bate
Executive Officer
Freshcare Ltd
clare@freshcare.com.au

5.2) EnviroVeg Steering committee letter of support

Vegetable Strategic Investment Advisory Panel
care of Horticulture Innovation Australia Ltd

Email: Brenda.Kranz@horticulture.com.au

Letter of support for the EnviroVeg Forward Strategy

Overview

The EnviroVeg Program has been owned by the Australian vegetable industry since 2000. Its main aim has always been to enable vegetable growers to demonstrate their good practices, and support continuous improvement.

An important aspect of EnviroVeg is to support growers who become EnviroVeg members through a dedicated Program Coordinator, training opportunities and the EnviroVeg technical manual.

Currently the EnviroVeg program covers 485 growers, which is 60,745 hectares and represents more than 60% of Australia's vegetable production area.

This means the penetration into vegetable growers and area grown is very high, because progressive growers foresee that having proof of sustainable management practices will become increasingly important and may be demanded by markets in the future. An independent review of the program found that EnviroVeg suffered from the lack of a clear strategy. Therefore, the current service provider AUSVEG Ltd has prepared a forward strategy for EnviroVeg.

I am writing to you in support of this strategy as a grower and EnviroVeg committee chair.

Program structure

Since its creation, the Program has been funded 100% by the vegetable levy. It has constantly evolved from being a purely self-assessment program to a 3-tiered system;

1. Basic level members subscribe to EnviroVeg, receive the Manual, Newsletter, website access and take part in EnviroVeg events; they are encouraged to complete annual self-assessments and move up to the Gold level.
2. EnviroVeg Gold members- complete annual self-assessments, changes in practices are recorded and benchmarked (anonymously), the EnviroVeg logo is used on a gate sign
3. EnviroVeg Platinum – involves a customised third party audited system based on the current self-assessment themes and existing sustainability systems (e.g. Freshcare Environmental, Global GAP, Unilever)

Growers have been encouraged and supported by the Coordinator to move from Basic to Gold and Platinum levels; this should continue.

A downside of the greatly voluntary nature of the Program is that only a small number of members have moved to the Gold and Platinum levels. This is mainly due to the fact that there is (not yet) a strong enough market pull or push by industry to promote EnviroVeg Brand.

Moving forward

The all of horticulture industry owned agency Freshcare and EnviroVeg are currently working on a Memorandum of Understanding (MOU) to harmonise the EnviroVeg Program's Platinum auditing requirements with those of Freshcare Environmental. The harmonisation will streamline auditing requirements so that Food Safety and EnviroVeg audits can occur concurrently. This should reduce costs and efforts by growers. Many food safety requirements are identical with environmental management requirements so that farm records can cover both systems. We also expect that this will encourage growers to move towards the Platinum level.

The program requires resources to ensure the EnviroVeg Manual remains up-to-date, including new technologies and R&D outcomes and is technically and scientifically sound. It also requires a dedicated Coordinator who continues to encourage and assist growers to incorporate best practice techniques, therefore moving to high levels of the Program. Having growers involved in a vegetable specific best practice program that is connected to an accredited environmental assurance program means that, should environmental assurance be demanded by retailers or overseas markets, vegetable growers would easily comply under their own system by moving to the audited level.

As mentioned, the current service provider AUSVEG Ltd has prepared a foreword strategy for EnviroVeg that explains the above in detail. AUSVEG is well placed to implement the new strategy over the coming 5 years provided that resources are made available.

The EnviroVeg Committee, which is endorsing this strategy, is mainly made up of state representatives (vegetable growers) and is regularly overhauled using good governance principles; I am the appointed independent chair. If the Program was to continue, I would consider remaining as Chair to oversee, with the committee, the successful implementation of the next 5-year Strategy and operations in the vegetable industry.

I therefore support the strategy in its current form and recommend providing funding from the vegetable levy for the next 5 years.



David Anderson

Independent Chair, EnviroVeg Committee

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7 October 2016

5.3) Representative EnviroVeg members meeting summary

EnviroVeg Meeting

Meeting Minutes – Thursday 27 August 2015

Venue: Fullarton Room
Arkaba Hotel
150 Glen Osmond Road
Fullerton SA 5063

Date: Thursday 27 August 2015

1. Welcome and Housekeeping

- The Chair commenced the meeting and invited attendees to introduce themselves.
- AUSVEG highlighted the importance of the EnviroVeg Program in the vegetable industry and outlined the outcomes that were to be achieved from the meeting.

2. Presentation from AUSVEG Environment Coordinator

- The AUSVEG Environment Coordinator provided an overview of the EnviroVeg Program, including the tiered system of membership for EnviroVeg, activities run through the Program and possible future directions of the Program.
- It was noted that the Biosecurity gate signs received by completing the Biosecurity Quiz with a score of over 80 per cent were well received, but that one sign was not enough.

Recommendation (1): Offer growers who score more than 80 per cent on the Biosecurity Quiz multiple gate signs.

3. Discussion of proposed directions for EnviroVeg

- The option for increasing EnviroVeg members into the Platinum level was outlined by AUSVEG.
- It was noted that the vegetable growing land area covered under the EnviroVeg program was large and there was a need to move more members higher in the tiered system.
- It was noted that an increase in Platinum membership would provide increased opportunities for promotion of the Program, and provide more 'industry champions' to promote the environmental credentials of the vegetable industry.
- It was noted that the future success of the EnviroVeg Program relied on increased recognition of the EnviroVeg brand from growers, consumers and retailers, and the accreditation that comes with being a member.

Recommendation (2): The recognition of the EnviroVeg brand and the accreditation that comes with it needs to increase. This needs to be targeted to growers, consumers and retailers.

- It was noted that the achievement criteria for becoming a Platinum EnviroVeg member needed to be achievable and realistic.
- It was noted that showing involvement in the EnviroVeg Program has been valuable for growers to show local councils and neighbours that they were operating in an environmentally sustainable manner.
- It was suggested that there were opportunities to expand the commercial components of the Program, including cost recovery. It was noted, however, that charging vegetable growers to be a part of the Program should not be considered as a future option as growers were already contributing for it through levies.
- It was suggested that incorporating other industries in the Program could ensure its longevity.

Recommendation (3): Introduce other industries in the EnviroVeg Program.

- It was suggested that if other industries want to become involved in the program then they should be made to pay, considering the EnviroVeg Program is paid for by the vegetable industry with the National Vegetable Levy.
- The ownership of the Intellectual Property (IP) of EnviroVeg was discussed, with ongoing discussions underway for Hort Innovation to completely own the IP.
- It was noted that a cost was imposed on growers to become Platinum membership of EnviroVeg for the independent auditing, but it could be minimised if it was completed in conjunction with other Quality Assurance (QA) systems.
- It was noted that consumer awareness of the Program was relatively low, and the Program needed to raise awareness to ensure that retailers do not implement their own environmental sustainability programs and make EnviroVeg irrelevant.
- It was noted that consumers in Asian markets are demanding 'organic' produce, which loosely translates into sustainable produce in these markets, and the EnviroVeg Program could be used to aid its promotion.
- It was suggested that retailers could be more interested to adopt the Program more vigorously if there was more consumer awareness, which would require more growers being involved at the Program's Platinum level.
- It was noted that international buyers had visited some farms belonging to meeting attendees and were more willing to investigate produce that had earned some form of environmental accreditation. It was also noted that international buyers and consumers were paranoid with produce grown in their home countries and saw Australian produce as a clean and safe option.
- It was noted that the most effective method of signing growers to the Program was through face-to-face meetings with growers, but this was labour and time intensive, and more resourcing could be required.

Recommendation (4): More resources to be provided for the EnviroVeg Program to ensure it can maintain an effective level of face-to-face interactions with growers.

- It was noted that if there was support from retailers for the Program, it could create a financial incentive for growers to be involved in the Platinum level of the Program.
- It was noted that vegetable growers need to retain ownership of the Program and be proactive in terms of raising awareness of the Program, so as to not rely on retailers to generate interest.
- It was suggested that the Program could be used to help promote regional areas with local councils.

Recommendation (5): Liaise with regional areas and local governments to offer the EnviroVeg Program as a way of promoting regional areas.

- It was noted that if other sectors industries want to be involved in the program, changing the name to be more inclusive needs of other industries to be considered, as other industries may not want to sign up to the Program if it highlights vegetables in the name, with examples of EnviroHort, EnviroFarm and EnviroAus suggested.

Recommendation (6): Investigate the possibility of changing the name of EnviroVeg to incorporate more industries.

- It was noted that marketing to children could be a more effective method of promoting EnviroVeg than targeting adults.
- It was suggested that AUSVEG could market the program more aggressively, in particular by creating free media opportunities for its promotion. However, the restrictions of marketing using the National Vegetable Levy were raised and needed to be taken into consideration with future Program activities.
- It was noted that if a name change was to occur, this would need to be done before more aggressive promotion occurred.
- It was noted that a key component of the EnviroVeg Program going forward could be to consolidate QA systems to make it cheaper and easier for growers.

Recommendation (7): Investigate the use of EnviroVeg audits to consolidate the mandatory auditing requirements for growers.

- It was explained that the EnviroVeg Program relayed research and development (R&D) to growers through a monthly R&D newsletter and through meeting with growers face-

to-face. It was suggested that the EnviroVeg Program could be used as an official vehicle to raise awareness and promote levy-funded R&D.

Recommendation (8): Investigate the potential for EnviroVeg to become a vehicle to promote levy-funded R&D.

- It was noted that the InfoVeg database was a good resource for growers, but there was a large amount of research that was un-communicated.
- It was suggested that the EnviroVeg Program, and AUSVEG seminars, could be more formally outlined in project contracts as potential avenues for R&D extension.
- It was noted that Hort Innovation was in the process of establishing a monitoring and evaluation framework to monitor adoption of R&D, including in-house staff training, as part of compliance with its new Statutory Funding Agreement.
- It was asked whether there were any metrics available or established to measure grower-adoption of R&D.
- It was suggested that growers and industry should be involved in any consultation on how to increase R&D adoption among growers.
- It was noted that successful extension of R&D could eliminate duplication of research in the vegetable industry.
- It was noted that extension of R&D is often targeted at the top 25 per cent of growers, who often do not need the R&D as much as the mid-tier growers, who are often not informed of industry R&D and will often become embarrassed if they do not understand the science. It was suggested that a mechanism to measure adoption of R&D for these mid-tier growers was required.

Recommendation (9): Investigate opportunities to extend industry R&D to a greater population of growers, particularly those who do not go to industry information sessions, through the Program.

- It was suggested that growers could more likely become involved with EnviroVeg if it is simpler than other environmental sustainability systems, and if it is seen as beneficial.
- It was suggested that EnviroVeg needed to be proactive in its promotion and in gaining retailer recognition if it is to become the industry standard environment and QA program recognised by retailers.
- It was suggested that EnviroVeg could be used as the environmental QA component of an already existing program, such as FreshCare, for it to become an industry standard.

Recommendation (10): Investigate incorporating EnviroVeg as the environmental QA system standard in existing QA systems, including FreshCare.

- It was suggested that getting EnviroVeg audits in line with State and local government legislation could be a method of encouraging growers to sign up to EnviroVeg.

Recommendation (11): Investigate getting the accreditation of EnviroVeg in line with local and State legislation.

- It was raised that auditing processes in the vegetable industry were a frustrating process for many growers, and simplifying them could be welcomed.
- It was noted that resources were important to host face-to-face meetings with growers, as this was the most effective method of signing up members.
- It was noted that while other avenue streams were identified for alternative funding methods, the resources allocated for the program needed to increase.
- It was suggested that if the EnviroVeg manual outlines the mandatory requirements for an auditor, it could entice growers to sign up as EnviroVeg members.
- It was noted that growers needed to be visited regularly for the Program to have any long-term impact, and resources needed to be allocated for this reason.

4. Compilation of meeting outcomes

- **Recommendation (1):** Offer growers who score more than 80 per cent on the Biosecurity Quiz multiple gate signs.
- **Recommendation (2):** The recognition of the EnviroVeg brand and the accreditation that comes with it needs to increase. This needs to be targeted to growers, consumers and retailers.
- **Recommendation (3):** Introduce other industries in the EnviroVeg Program.
- **Recommendation (4):** More resources to be provided for the EnviroVeg Program to ensure it can maintain an effective level of face-to-face interactions with growers.
- **Recommendation (5):** Liaise with regional areas and local governments to offer the EnviroVeg Program as a way of promoting regional areas.
- **Recommendation (6):** Investigate the possibility of changing the name of EnviroVeg to incorporate more industries.
- **Recommendation (7):** Investigate the use of EnviroVeg audits to consolidate the mandatory auditing requirements for growers.
- **Recommendation (8):** Investigate the potential for EnviroVeg to become a vehicle to promote levy-funded R&D.
- **Recommendation (9):** investigate the opportunities to extend industry R&D to a greater population of growers, particularly those who do not go to industry information sessions, through the program.
- **Recommendation (10):** Investigate incorporating EnviroVeg as the environmental QA system standard in existing QA systems, including FreshCare.
- **Recommendation (11):** Investigate getting the accreditation of EnviroVeg in line with local and State legislation.

5.4) Gap analysis between Freshcare Environmental and EnviroVeg Platinum auditing criteria

Freshcare ENV3 Code – Management

Key:

FCS = Freshcare Specific RC = Recommended criteria ES = Essential Criteria NSC = Not specifically covered Code Element	Freshcare ENV3 Compliance Criteria	Examples of EnviroVeg requirements	What needs to be done to align EnviroVeg Platinum?
M1	Scope and commitment		
M1.1	Define the business scope and the scope of Freshcare certification.		
M1.1.1 [Major]	The scope of Freshcare certification is defined by the owner or appropriate senior manager.	FCS	FCS forms available
M1.1.2 [Major]	All business enterprises and activities undertaken are recorded.	Conducting the Audit and Overarching Documentation, Documentation, ES	FCS forms available
M1.1.3 [Major]	Flowcharts are completed to document the crops and activities for which Freshcare certification is required.	FCS	FCS forms available
M1.2	Identify property areas, infrastructure and surrounds on a property map.		
M1.2.1 [Major]	A property map is documented and maintained. The map identifies: <ul style="list-style-type: none"> a) property boundaries, roads and surrounds (farming, school, sports fields, residential, etc.) b) sensitive areas adjacent to the property boundary such as National Parks, World Heritage-listed areas, Ramsar-listed 	EnviroVeg Platinum Item number, related areas covered: <ul style="list-style-type: none"> a) 1.3 – RC b) 1.2 – RC covers “any 	Update property map to include all areas covered in ENV3

	<p>wetland areas, wildlife sanctuaries/corridors or other specified conservation areas</p> <p>c) production areas and growing sites</p> <p>d) farm houses, buildings, sheds, on-farm roads and access points</p> <p>e) toilet facilities, septic tanks and seepage pads</p> <p>f) worker accommodation and facilities</p> <p>g) bulk fuel storage, including underground tanks</p> <p>h) chemical storage areas, mixing areas, equipment clean-down areas, dip sites (postharvest, livestock) and disposal trenches/evaporation ponds</p> <p>i) storage sites for waste, including controlled wastes (empty chemical containers awaiting collection, tyres)</p> <p>j) fertiliser and soil additive storage areas, composting/ageing and mixing/loading areas</p> <p>k) water sources, extraction points and delivery infrastructure</p> <p>l) drainage lines and discharge points</p> <p>m) natural waterways, wetlands, riparian areas and lakes</p> <p>n) areas that are, or are at risk of being, highly degraded, eroded or contaminated</p> <p>o) significant stands of remnant native vegetation</p> <p>p) threatened species</p> <p>q) other sensitive areas with high conservation value.</p>	<p>sensitive areas including biodiversity areas”</p> <p>1.3 covers NMR map of area</p> <p>c) 1.2 – covers farm paddocks, production areas</p> <p>d) 1.2 – all associated areas</p> <p>e) 1.2</p> <p>f) 1.2</p> <p>g) 1.2 NSC</p> <p>h) 1.2 NSC</p> <p>i) 1.2 NSC</p> <p>j) 1.2 NSC</p> <p>k) 1.2 NSC</p> <p>l) 1.2</p> <p>m) 1.3 – NMR map facilities</p> <p>n) 1.3</p> <p>o) 1.3</p> <p>p) 1.3</p> <p>q) 1.3</p>	
M1.3	Define the business organisational structure.		
M1.3.1 [Major]	<p>The organisational structure of the business is documented and must include:</p> <ul style="list-style-type: none"> workers responsible for the management of environmental compliance reporting relationships of all workers whose roles may affect environmental compliance. 	1.4 EC	Formalising a management structure (org chart) - FCS example forms available

M1.4	Document the business commitment to the Freshcare Code of Practice.		
M1.4.1 [Major]	The owner or appropriate senior manager signs a commitment statement to support and comply with the Freshcare Code of Practice Environmental, Freshcare Rules, Environmental Action Plan (E1) and all legislative requirements.	0.1 Documentation 0.3 Commitments	Formalising a commitment statement as specified in ENV3 - FCS example/forms available
M1.4.2 [Minor]	The commitment statement is communicated to all workers.	0.1 1.4 1.5	Communication to workers (includes contractors)
M1.4.3 [Major]	The commitment statement is reviewed annually in conjunction with the Environmental Action Plan (E1).	1.1 – EC, Environmental action plan	Update and review annually.

M2		Documentation	
M2.1	Verify compliance with the Freshcare Code of Practice through relevant documents and records.		
M2.1.1 [Major]	The current editions of the Freshcare Code of Practice Environmental and the Freshcare Rules are kept.	FCS	To be provided by FC
M2.1.2 [Minor]	All records and documents required to verify compliance to this Code of Practice are legible and must include: <ul style="list-style-type: none"> • title • date of issue or version number • business name • name of the person completing the record, and date of completion. 	0.1, EC - Documentation	Documentation to include: <ul style="list-style-type: none"> • business name • name of the person completing the record, and date of completion.
M2.1.3 [Minor]	As documents and records change, out-of-date versions are replaced.	0.1 EC - Documentation	To add specific reference to currency of documents
M2.1.4 [Minor]	All records are kept for a minimum of two years (or longer if required by legislation, customers or this Code of Practice).	0.2 EC - Records	
M3		Training	
M3.1	Complete Freshcare training.		
M3.1.1 [Major]	A management representative completes approved Freshcare Environmental training. Evidence is kept.	FCS – 1.4 EC	Current requirement for FC training – would need to consider an exemption for current platinum member. Potential for update to be facilitated by EnviroVeg coordinator. Need to look at ongoing training prerequisites for EnviroVeg members moving to ENV3.
M3.2	Train all workers who complete tasks relevant to this Code of Practice to ensure a base level of environmental awareness.		
M3.2.1 [Major]	Training is provided for workers who complete tasks relevant to this Code of	FCS – 1.4 EC	

	Practice.		
M3.2.2 [Major]	Training is provided in the relevant language for workers, or pictorially.	FCS - 1.4 EC	To include specific reference to language and training aids as required.
M3.2.3 [Major]	A record of internal and external training is kept and must include: <ul style="list-style-type: none"> • name and signature of trainee • name of trainer or training provider • title or topic of the training • date of training and expiry date (when applicable). 	FCS – 1.4 EC	Training records to include specific criteria as specified in ENV3.
M3.2.4 [Minor]	A review of training is conducted at least annually or when tasks and/or workers change.	FCS	New inclusion to ENV3
M4 Internal audit and corrective action			
M4.1	Conduct internal audits to verify ongoing compliance with this Code of Practice.		
M4.1.1 [Major]	An internal audit of all activities and records relevant to the Freshcare Code of Practice Environmental is conducted at least annually. A record is kept.	FCS 0.2 – Records 1.6 ES	Internal audit required FCS forms available
M4.1.2 [Minor]	Workers responsible for completing sections of the internal audit are identified and, where possible, are independent of the practices being assessed.	FCS 1.4 -	As above
M4.2	Complete corrective actions for any non-compliance.		
M4.2.1 [Major]	A Corrective Action Record (CAR) must be completed when the requirements of the Freshcare Code of Practice Environmental, Freshcare Rules or legislation are not being met, as identified by: <ul style="list-style-type: none"> • routine activities • annual internal audits • annual external audits • a valid complaint received from a neighbour, customer or regulatory authority • environmental harm has 	FCS	FCS forms available Refer to Factsheet M4 Internal audit and corrective action

	occurred/may occur as a result of property activity, neighbouring activity or a natural event.		
M4.2.2 [Major]	A Corrective Action Record must include: <ul style="list-style-type: none"> • description of the problem • cause of the problem • whether or not the problem has occurred before • short term fix (action taken to fix the problem) • long term fix (action taken to prevent the problem recurring) • date action completed and the name of the person responsible • review and verify that short term and long term actions are complete and effective • name of the person completing the review and date of review. 	FCS	FCS forms available Refer to Factsheet M4 Internal audit and corrective action
M4.2.3 [Minor]	Reoccurrences of non-compliance are reviewed by the owner or appropriate senior manager.	FCS	FCS
M4.2.4 [Minor]	Corrective Action Records are retained for a minimum period of five years (or longer if required by legislation or customers).	FCS	FCS
M5 Customer requirements			
M5.1	Comply with customer requirements.		
M5.1.1 [Minor]	Where a customer requires compliance with specific environmental, sustainable agriculture or greenhouse gas emission practices not covered in this Code, a written copy of these practices is kept.	FCS	New addition to ENV3 Refer to Factsheet M45 Customer requirements. Only required where/when customers specify compliance with specific environmental, sustainable agriculture or greenhouse gas emission practices.
M5.1.2 [Minor]	These practices are complied with and included in M4 Internal audits.	FCS	As above.

Freshcare ENV3 Code – Environmental

Code Element	Freshcare ENV3 Compliance Criteria	Examples of EnviroVeg requirements	What needs to be done to align EnviroVeg Platinum?
E1	Environmental action planning		
E1.1	Establish an Environmental Action Plan to identify planned future actions to manage environmental issues and improve the property’s environmental values.		
E1.1.1 [Major]	Conduct an assessment of the property and business operations to identify any environmental issues and assess environmental values.	FCS	New inclusion to ENV3
E1.1.2 [Major]	Establish an Environmental Action Plan (EAP) that documents the actions planned to address the environmental issues and improve the environmental values of the property. The EAP must include: <ul style="list-style-type: none"> • date of plan development • environmental issue/value being addressed • location on the property of environmental issue/value • actions planned to address the issue and/or improve the value • worker(s) responsible • target date of completion for each action • evaluation of action(s) undertaken • date, name and signature of the person verifying action has been completed. 	1.1 – EC, some aspects NSC	Extend on criteria specific to ENV3 i.e. workers responsible, target dates for completion, evaluation.
E1.1.3 [Major]	Evidence of progress towards and/or changes to planned actions is kept.	1.1 EC, NSC	Maintain evidence of progress/changes
E1.1.4 [Major]	The Environmental Action Plan is reviewed and updated at least annually. The name of the person completing the review and the date of the review are documented.	1.1 EC, 1.6 EC - NSC	Add annual review requirement

E2 Land and soil			
E2.1	Manage land and soil, and minimise degradation, erosion compaction and contamination.		
E2.2.1 [Major]	<p>Soil conservation and crop production practices are chosen to:</p> <ul style="list-style-type: none"> • minimise soil degradation, erosion, compaction and contamination • optimise soil organic matter and fertility relevant to the particular business enterprise. <p>For identified areas, applicable records of these practices are kept.</p>	<p>1.6 EC 3.1 EC 3.3 3.4 3.5 3.6 3.7</p>	<p>3.1, 3.5, 3.6, 3.7 capture ENV3 criteria More specific practices provided in EnviroVeg guidelines</p>
E2.2	Manage areas with highly degraded, eroded or contaminated soil.		
E2.2.1 [Major]	<p>Areas identified as being highly degraded, eroded or contaminated are:</p> <ul style="list-style-type: none"> • managed to minimise further degradation, erosion or contamination • for contaminated soil, contained to minimise movement on and off-site. 	<p>1.6 EC 3.1 EC 3.6 5.1 (contaminated soil)</p>	<p>3.6 requirements applicable when areas identified as being highly degraded, eroded... Dot point 2 Controlled under 5.1</p>
E2.2.2 [Minor]	Remediation activities for areas identified in E2.2.1 are documented in the Environmental Action Plan.	3.1 NSC	If undertaking 3.6 include details as part of EAP

E3		Biosecurity	
E3.1	Manage biosecurity on the property.		
E3.1.1 [Major]	A Biosecurity Management Program is documented and must include: <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • biosecurity threats related to crops grown • strategies/practices to minimise risk (including quarantine regulations and requirements) • worker(s) responsible. 	Incorporates 4.1 NSC	New inclusion to ENV3 Can adapt from AUSVEG resources
E3.1.2 [Major]	Access to the property and growing sites is restricted to authorised persons.	NSC	New inclusion to ENV3 also part of FSQ4 (F10). Example compliance – signage
E3.2	Monitor and report unusual findings.		
E3.2.1 [Major]	Any unusual plant pest, disease or weed identified on the property must be reported to the local department of agriculture or Plant Health Australia.	4.2 EC 6.2 EC	May need to include specific wording

E4 Chemicals			
E4.1	Select pest and disease control strategies to minimise risk to the environment.		
E4.1.1 [Major]	Consideration is given to all available methods of pest and disease control (for example biological, chemical, cultural, mechanical and technological) before a control program is chosen. A record of control methods used is kept.	4.4 RC	Required to demonstrate consideration of all pest management options. A record of chosen application to be kept.
E4.1.2 [Major]	When necessary to apply agricultural chemicals, those which are less hazardous to beneficial organisms and/or have a lower environmental impact must be considered.	Referenced in 4.4 (Reduce the use of hazardous crop protection products) 5.3 – RC 5.7 – EC	
E4.1.3 [Major]	The decision to use agricultural chemicals is based on <u>one or more</u> of the following: <ul style="list-style-type: none"> • Crop and/or weather monitoring for pest and disease pressure. Records must include: <ul style="list-style-type: none"> ○ date ○ area/crop and/or weather parameters monitored ○ monitoring result and action recommended ○ name of the person who carried out the monitoring activity. • External agency pest and disease alerts. Records must include: <ul style="list-style-type: none"> ○ evidence of subscription alerts ○ date of alert ○ pest or disease the alert is issued for ○ source/agency that issued the alert. • Documented preventive pest and disease control programs. Records must include: <ul style="list-style-type: none"> ○ date the program was documented ○ crop or area to be treated ○ target pest/disease/weed ○ chemical to be used ○ frequency of use (including any limitations on the frequency of 	5.7 EC	More specific details of record requirements to be added as specified in ENV3 to be included in 5.7 justification.

	<p>chemical use per crop/season) or the stage of crop development</p> <ul style="list-style-type: none"> ○ name of the worker/person/organisation that documented the control program. ● Industry preventive control programs or phytosanitary specifications. Records must include: <ul style="list-style-type: none"> ○ An up-to-date copy of the industry program or phytosanitary specification. 		
E4.2	Obtain, check and record chemicals.		
E4.2.1 [Major]	Chemicals are purchased from approved suppliers. (See Appendix A-E4).	5.2 EC	Need to define accredited suppliers to ensure consistency with ENV3 'approved suppliers'.
E4.2.2 [Major]	Chemical containers are adequately labelled and in acceptable condition on receipt.	5.2 EC	No specific reference to chemical containers are adequately labelled and in acceptable condition on receipt.
E4.2.3 [Major]	<p>All chemicals purchased are recorded in a chemical inventory. A record is kept and must include:</p> <ul style="list-style-type: none"> ● date purchased/received ● place of purchase ● name of chemical ● batch number (where available) ● expiry date or date of manufacture ● quantity. 	5.4 EC 5.8 EC	Review chemical inventory requirements.
E4.3	Store, manage and dispose of chemicals to minimise the risk of environmental harm.		
E4.3.1 [Major]	<p>Chemical storage areas must be:</p> <ul style="list-style-type: none"> ● located and constructed to minimise the risk of contaminating the site and surrounding environment ● structurally sound, adequately lit and constructed to protect chemicals from direct sunlight and weather exposure ● equipped with a spill kit to contain and manage chemical spills ● secure, with access restricted to 	5.5 EC 5.4 EC (spill kit)	<p>Specifics detailed in 5.5 cover ENV3 requirements addition of:</p> <ul style="list-style-type: none"> ● located and constructed to minimise the risk of contaminating the site and surrounding environment

	authorised workers.		Note bunding reference in 5.5 Freshcare provides options for bunding as it may not be possible for the whole chemical storage area to be banded. See Factsheet E4 - Chemicals
E4.3.2 [Major]	Chemicals are stored in designated separate areas for each category of chemical, and for chemicals awaiting disposal.	5.5 EC	
E4.3.3 [Minor]	A current Safety Data Sheet (SDS) is kept for all chemicals stored in the chemical storage area.	5.4 EC	5.4 references MSDS requirements for all chemicals used on property need to define chemicals, does this include Fert & soil additives, fuels etc. This could be above ENV3 requirements.
E4.3.4 [Major]	Chemicals are stored in original containers according to directions on the container label. If a chemical is transferred to another container for storage purposes, the new container is a clean chemical container and a copy of the chemical label is transferred to the new container.	5.4 EC 5.8 EC – NSC	Add requirements for transferring chemicals and labels.
E4.3.5 [Major]	Deteriorating chemical labels are replaced immediately with a legible copy.	5.4 EC - NSC	Add requirements label replacement.
E4.3.6 [Major]	Stored chemicals are checked at least annually to identify and segregate chemicals for disposal that have: <ul style="list-style-type: none"> exceeded the label expiry date 	5.4 EC NSC	Add requirement for check to be conducted annually.

	<ul style="list-style-type: none"> exceeded the permit expiry date had their registration withdrawn containers that are leaking or corroded or have illegible labels. 		
E4.3.7 [Major]	<p>A record of the check is kept and must include:</p> <ul style="list-style-type: none"> date of the check name and quantity of chemicals awaiting disposal name of the authorised person conducting the check. 	5.4 EC NSC	Add requirement for record of check including specific reference to ENV3 requirements.
E4.3.8 [Major]	Unusable chemicals and empty chemical containers are legally disposed of through registered collection agencies, or in approved off-farm disposal areas. A record of disposal is kept.	5.4 EC	Maintain disposal records.
E4.4	Train and authorise workers who store, handle, apply and/or dispose of chemicals.		
E4.4.1 [Major]	<p>Workers involved in the supervision of storage, handling, application and disposal of chemicals must:</p> <ul style="list-style-type: none"> have successfully completed a recognised chemical users course or equivalent (<i>See Appendix A-E4</i>). be competent in chemical storage, handling, application and disposal as specified by the Freshcare Code of Practice Environmental. 	5.4 EC 1. 4 EC 5.3	5.4 define recognised chemical users course
E4.4.2 [Major]	Workers authorised to store, handle, apply and/or dispose of chemicals are trained in practices that minimise the risk of environmental contamination from chemicals and in actions to be taken in the event of chemical spills, leakage or spray drift.	5.3 5.4	Not specific to actions to be taken in the event of chemical spills, leakage or spray drift
E4.4.3 [Major]	A register of workers authorised to store, handle, apply and/or dispose of chemicals is maintained and displayed in the chemical storage area.	5.3 RC	Extend on 'use' of chemicals to include: store, handle, apply and/or dispose
E4.5	Use chemicals according to regulatory, label and customer requirements.		

E4.5.1 [Major]	Chemicals are used and applied: <ul style="list-style-type: none"> • according to label directions, or • under 'off-label permits' issued by the Australian Pesticides and Veterinary Medicines Authority (APVMA), with a current copy of the permit kept, or • according to relevant state legislation for 'off-label use', and • according to specific customer and/or destination market requirements. 	5.2 EC – legal requirements 5.7 EC	Reference to specific requirements in ENV3
E4.6	Avoid potential for spray drift.		
E4.6.1 [Major]	Chemicals are not applied when the risk of contaminating off-target areas with spray drift is high.	5.7 EC	
E4.6.2 [Major]	Spray drift incidents are identified. A record is kept.	NSC – 5.7	New addition to ENV3, requirement for record if/when applicable.
E4.7	Maintain and calibrate chemical application equipment.		
E4.7.1 [Major]	Chemical application equipment is maintained and checked for effective operation before and during each use.	5.6 EC 3.10 EC	
E4.7.2 [Major]	Equipment is calibrated at least annually or as per manufacturer's instructions and immediately after spray nozzles are replaced.	5.6 EC	Review wording differences 'label recommendation' compared to 'manufacturer's instructions'.
E4.7.3 [Major]	Equipment is calibrated using a recognised method. A record of calibration is kept and must include: <ul style="list-style-type: none"> • description of method and calibration results • date of calibration • name of the person calibrating the equipment 	5.6 EC	Specific record requirements to be added: <ul style="list-style-type: none"> • description of method and calibration results • date of calibration • name of the person calibrating the equipment
E4.8	Manage mixing and disposal of chemical solutions to minimise risk to the environment.		

E4.8.1 [Major]	Chemical mixing areas are located, constructed and maintained to minimise the risk of contaminating the site and surrounding environment.	5.6 EC	5.6 minimum requirements exceed ENV3 requirements (i.e. reference to concrete floor).
E4.9	Record all chemical applications.		
E4.9.1 [Major]	Records of all preharvest chemical applications are kept and must include: <ul style="list-style-type: none"> • application date • start and finish times • location and crop • chemical used (including batch number if available) • rate of application and quantity applied • equipment and/or method used to apply the chemical • wind speed and direction • withholding period (WHP) or earliest harvest date (EHD) • method of disposal of leftover chemical solutions • name and signature of the person who applied the chemical. 	5.8 EC	Current record requirements under 5.8 contain all ENV3 criteria except for start and finish times.
E4.9.2 [Major]	Records of all postharvest chemical treatments are kept and must include: <ul style="list-style-type: none"> • treatment date • chemical used (including batch number if available) • rate of application and/or the quantity applied • equipment and/or method used to apply the chemical • method of disposal of leftover chemical solutions • name and signature of the person who carried out the chemical treatment. 	5.8 EC	Current record requirements under 5.8 contain all ENV3 criteria.

E5 Fertilisers and soil additives			
E5.1	Select fertilisers and soil additives to minimise risk to the environment.		
E5.1.1 [Major]	The decision to use fertilisers and soil additives is based on one or more of the following: <ul style="list-style-type: none"> • results of soil/plant tissue/sap testing • crop monitoring with monitoring records kept • a recognised nutrition program. 	3.2 – EC 3.8 3.9 – RC 3.10 – EC	Justification for use included in 3.10 application records
E5.1.2 [Major]	Fertilisers and soil additives used comply with heavy metal limits specified in AS4454-2012 Composts, soil conditioners and mulches. <i>(See Appendix A-E5).</i>	3.3 EC	ENV3 appendix: AE5 – Limits for heavy metal contaminants in fertilisers and soil additives comply with those specified in AS4454-2012: <ul style="list-style-type: none"> • Cadmium <1mg/kg (dry weight basis) • Lead <150mg/kg (dry weight basis).
E5.1.3 [Minor]	Workers responsible for crop nutrition are competent to make recommendations relevant to the crops under their management.	3.10 - EC 3.5 RC	
E5.2	Store and manage fertilisers and soil additives to minimise risk to the environment.		
E5.2.1 [Major]	Storage sites for fertilisers and soil additives are located, constructed and maintained to minimise harm to off-target and sensitive areas from nutrient runoff or leaching.	3.10 - EC 3.13 EC	
E5.2.2 [Minor]	A current Safety Data Sheet (SDS) (where available) is kept for fertilisers and soil additives stored on the property.	5.4 – EC covered if fert & soil additives included in definition of 'chemical'.	Could be included as an addition to 3.3 – requirement to be kept only where/when available.

E5.2.3 [Major]	Workers are trained in practices that minimise the risk of environmental contamination from fertilisers and soil additives.	3.10 EC	
E5.3	Maintain and calibrate fertiliser and soil additive application equipment.		
E5.3.1 [Major]	Equipment used to apply fertilisers and soil additives is maintained and checked for effective operation before and during each use.	3.11 EC	
E5.3.2 [Major]	Equipment used to apply fertilisers and soil additives is calibrated at least annually or as per manufacturer's instructions. A record of calibration is kept and must include: <ul style="list-style-type: none"> • description of method and calibration results • date of calibration • name of the person calibrating the equipment. 	3.11 EC 3.10 EC (date of calibration & name of the person calibrating the equipment.)	
E5.4	Record all fertiliser and soil additive applications.		
E5.4.1 [Major]	Records of all fertiliser and soil additive applications are kept and must include: <ul style="list-style-type: none"> • application date • location and crop • product used • rate of application • wind speed and direction • method of application/incorporation • name and signature of the person applying the fertilisers and soil additives. 	3.10 EC Inclusions not in ENV3: Temperature, precipitation, product composition	Additional requirements in ENV3: <ul style="list-style-type: none"> • wind speed and direction • name and signature of the person applying
E5.4.2 [Major]	A record of hydroponic nutrient solution monitoring is kept and must include: <ul style="list-style-type: none"> • monitoring date • location and crop • pH and electrical conductivity (EC) of the feed solution • pH and electrical conductivity (EC) of the drainage solution • quantity of drainage solution • name and signature of the person conducting the monitoring activity. 	3.12 RC review nutrient requirements 2.5 EC monitoring 2.5 RC	Addition of monitoring records as per ENV3 when required.

E6 Water			
E6.1	Manage water use on the property.		
E6.1.1 [Major]	A Water Management Program is documented and must include: <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • water resources available • crop water requirements • water budget • irrigation method • irrigation program including justification and schedule • contingency plans if water resources are unavailable. 	2.1 EC 2.3 NSC	Extension on 2.1/2.3 to include documenting Water Management Program including: <ul style="list-style-type: none"> • crop water requirements • water budget • irrigation method • irrigation program including justification and schedule • contingency plans if water resources are unavailable. ENV3 template available
E6.1.2 [Major]	Irrigation requirements are determined using soil/growing medium, crop or weather monitoring methods, or a combination thereof.	2.4 EC	Covers weather monitoring – may need to extend on other areas i.e. soil/growing medium.
E6.1.3 [Major]	Irrigation systems are checked and maintained for operational efficiency.	2.4 EC	
E6.1.4 [Major]	Water efficiency must be considered in the selection and design of new irrigation systems and water storages.	2.1	
E6.1.5 [Major]	The Water Management Program is reviewed and updated at least annually. The name of the person completing the review and the date of the review are documented.	2.1 EC some NSP	Review annually instead of every 2 years.
E6.2	Water is harvested, extracted, stored, used and discharged in accordance with licences and permits.		
E6.2.1 [Major]	Applicable licences and permits for infrastructure and activities in water harvesting, extraction, storage, use and discharge are current.	2.2	Include specific reference to licences and permits

E6.2.2 [Major]	Water licences and permits are adhered to.	2.2	Evidence of compliance
E6.3	Manage water to minimise environmental harm.		
E6.3.1 [Major]	Water used for irrigation is assessed for risk of causing soil degradation by increasing soil salinity, soil acidity, soil alkalinity or soil sodicity.	2.4 EC? 2.7 EC	Need to extend on assessment of risk for increasing soil salinity, soil acidity, soil alkalinity or soil sodicity.
E6.3.2 [Major]	Water that may cause soil degradation is, where possible, treated before use or managed to avoid soil degradation.	2.7 EC?	Appropriate measure to be added - treatment process when/where required
E6.3.3 [Major]	Water runoff or water discharge from property activities is managed or treated to minimise environmental harm on and off-site.	2.7 EC 2.9	Covered in 2.7
E6.3.4 [Major]	Strategies are implemented to prevent contamination and sedimentation of water sources.	2.9 EC	Covered in 2.9

E7 Biodiversity			
E7.1	Manage biodiversity on the property.		
E7.1.1 [Major]	A Biodiversity Management Program is established using strategies and practices to: <ul style="list-style-type: none"> • protect areas of biodiversity identified on the property map • reduce threatening processes • manage feral animals, invasive species, pests, environmental weeds and diseases on the property. 	5.3 RC 1.3 – specific to 6.4 6.1 EC 6.2	
E7.1.2 [Major]	The Biodiversity Management Program is documented and must include: <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • biodiversity issues or values • strategies/practices • worker(s) responsible. 	6.1 NSC Specific details included in audit template* 6.4	Modification to *audit template to include reference to regional priorities – see ENV3 biodiversity management program form.
E7.1.3 [Major]	The Biodiversity Management Program is reviewed and updated annually. The name of the person completing the review and the date of the review are documented.	6.4 RC NSC	Add annual review requirement
E7.2	Develop strategies to protect and improve biodiversity.		
E7.2.1 [Major]	Biodiversity protection and improvement strategies are developed with consideration of regional biodiversity priorities.	6.3 NMR Stuff 6.4 RC	Reference to regional biodiversity priorities to be included

E8 Waste			
E8.1	Manage waste on the property.		
E8.1.1 [Major]	<p>A Waste Management Program is documented and must include:</p> <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • waste type and location • management methods • worker(s) responsible. 	7.1 EC NSC	<p>Requirements included in platinum Waste management plan template.</p> <p>Update audit template to reference:</p> <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • waste type and location • management methods • worker(s) responsible. <p>Review in comparison to ENV3 Form template – look at inclusion of processes for waste: Minimised, reused, recycled, stored, disposed.</p>
E8.1.2 [Major]	Waste that cannot be avoided, reused or recycled, is disposed of in approved off-site facilities.	7.2 EC 7.3 RC	Emphasis on avoiding, reuse, recycling prior to disposal/storage.
E8.1.3 [Major]	Records of waste transport and disposal of controlled wastes are kept.	7.2 EC	Compliance covered in 7.2 – records of disposal to be added.
E8.1.4 [Major]	All stored waste is managed to minimise the risk of contaminating onsite and off-site areas.	7.2 EC	
E8.1.5 [Major]	The Waste Management Program is reviewed and updated annually. The name of the person completing the review and the date of the review are documented.	7.1 EC NSC	Annual review required under 7.1 - addition of person completing review and date needed.

E8.2			
E8.2.1 [Major]	Raw material inputs, size, quantity/weight, the potential for reuse or recycling, and the residual waste product must be considered in the selection of input materials.	Referenced in 7.3	Extend on 7.3 to reference raw material inputs....

E9		Air		
E9.1	Manage air quality.			
E9.1.1 [Major]	An Air Quality Management Program is documented and must include: <ul style="list-style-type: none"> • date developed • name of the person documenting the Program • issue(s) to be addressed • area/location • management methods • worker(s) responsible. 	8.1 EC some NSC 8.2 EC 8.3 8.4		
E9.1.2 [Major]	The Air Quality Management Program is reviewed and updated annually. The name of the person completing the review and the date of the review are documented.	8.1 8.2 EC NSC	Update to minimum annual review and date + name of person completing review.	

E10 Energy and fuel			
E10.1	Energy and fuel efficiency is optimised throughout the production system.		
E10.1.1 [Major]	Electricity and fuel consumption is reviewed at least annually.	9.1 EC	Update to minimum annual review
E10.1.2 [Major]	Efficient operating practices for premises, vehicles, machinery and equipment are identified and implemented.	9.1 EC 9.4 RC 9.5 9.6	Covered in Energy management review and plan
E10.1.3 [Major]	Servicing and maintenance records are kept for vehicles, machinery and equipment.	9.7 RC 9.6	
E10.1.4 [Major]	Energy and fuel efficiency must be considered in the selection and/or design of new premises, vehicles, machinery and equipment.	9.1 EC	Specify new equipment to include: design of new premises, vehicles, machinery and equipment.
E10.2	Bulk fuel is stored to minimise environmental harm.		
E10.2.1 [Major]	Bulk fuel storages are located, constructed and maintained to minimise the risk of environmental contamination and contain spillage.	5.4 EC	Specific reference to 'Bulk Fuel' storage required. (Note: ENV3 does not require bunding of Bulk fuel storage although construction and spill response should be considered and maintained to avoid the risk of environmental contamination).
E10.2.2 [Minor]	A current Safety Data Sheet (SDS) is kept for all bulk fuel stored on the property.	5.4 – covers SDS** requirements for chemicals, look at whether definition of chemicals includes fuel.	ENV3 required SDS for bulk fuel only.

		<p><i>**Also known as Material Safety Data Sheet, in 2012, the term 'material' was removed with a 5 year transition period for naming change.</i></p>	
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Appendix

Reference	Compliance Criteria
A-M3	<p>Approved Freshcare training includes:</p> <ul style="list-style-type: none"> • Freshcare Environmental Edition 3 Code of Practice training • Freshcare Environmental 2nd Edition Code of Practice training • Freshcare Environmental 1st Edition Code of Practice training • Freshcare Environmental Viticulture 2nd Edition Code of Practice training • Freshcare Environmental Viticulture 1st Edition Code of Practice training.
A-E4	<p>Approved suppliers for chemical purchases can be demonstrated by:</p> <ul style="list-style-type: none"> • AgSafe accreditation. • supplier listed as a Freshcare Recognised Supplier. • establishing a supplier agreement that ensures: <ul style="list-style-type: none"> ○ all chemicals provided are adequately labelled and in acceptable condition ○ all chemicals provided are within Use By dates.
	<p>Freshcare requires the following national competencies are included in all farm chemical user training qualifications:</p> <ul style="list-style-type: none"> • Level 3 – AHCCHM303A – Prepare and apply chemicals • Level 3 – AHCCHM304A – Transport, handle and store chemicals.
A-E5	<p>Limits for heavy metal contaminants in fertilisers and soil additives comply with those specified in AS4454-2012:</p> <ul style="list-style-type: none"> • Cadmium <1mg/kg (dry weight basis) • Lead <150mg/kg (dry weight basis).

5.5) Letter of intent for an MOU between Freshcare and EnviroVeg

Letter of intent for a Memorandum of Understanding

Between

EnviroVeg (EV)

and

Freshcare Limited ABN 45 092 879 082

Background

EV is owned by Horticulture Innovation Australia Limited ABN 71 602 100 149 (**Hort Innovation**) and managed through AUSVEG Limited ABN 25 107 507 559 on behalf of the Australian Vegetable Industry. EnviroVeg's mission is to promote good agricultural practice through the safe, sustainable and responsible production of Australian grown crops. EV is a vegetable specific program providing guidance on best management practices.

Freshcare is the Australian Fresh Produce Industry's on-farm assurance program. It is a national, industry led, not for profit program suitable for all fresh produce growers and grower-packers of fresh produce and provides certification options to the Freshcare standards including food safety & quality and environmental. Freshcare has approximately 5000 participating grower businesses nationally, and the Freshcare member organisations comprise of national and state-based horticultural peak industry bodies.

Purpose

This letter outlines the intent to develop a Memorandum of Understanding (**MOU**) establishing a framework for EV and the Freshcare Environmental program to coordinate their respective activities and work programs to the benefit of both the Australian vegetable industry and the broader Freshcare network.

The framework is based on several principles, where both organisations:

- desire an engaging and transparent relationship;
- strive to produce synergetic outcomes around environmental assurance and wider aspects of on farm assurance for the vegetable industry and wider fresh produce sector in Australia;
- inform their respective constituencies about relevant vegetable environmental assurance and wider aspects of on-farm assurance issues and activities.

In establishing this letter of intent and a subsequent MOU, EV and Freshcare agree to:

- work towards common objectives for the safe, sustainable and responsible production of Australian vegetables;
- recognise and support each other's good agricultural and best management practice programs;
- seek opportunities to cooperate on projects and initiatives;
- discuss issues of mutual interest including new research and knowledge;
- make the other party aware of information or matters that may be of interest to them.

Specifically, it is intended that when agreement on the MOU is reached:

- Freshcare will provide vegetable growers implementing Freshcare environmental with information on the EV resources available;
- EV will provide information on Freshcare Certification options to both existing EV members and the wider vegetable industry;
- Freshcare will work with EV to provide an environmental certification option for existing and future EV members;
- EV and Freshcare will provide appropriate resources to enable the above;
- EV members will have an avenue to resolve auditing conflicts through a joint dispute resolution process;
- EV members will have the opportunity to provide feedback on this arrangement.

Meetings

The parties will meet at least once per annum to review the general intent of the MOU and its effectiveness in delivering outcomes that are beneficial to their respective constituencies.

Reporting

Outcomes of the collaborative activity between Freshcare environmental and EV will be reported to the Freshcare and EV Boards annually, as well as to Hort Innovation.

Good faith

The parties will conduct their dealings pursuant to this letter in good faith.

Conflicts of Interest

Freshcare and EV recognise that a conflict of interest (**COI**) may arise in their dealings with each other. The parties commit to disclose and openly address any COI, or the appearance of a COI, they may have in relation to the other party immediately.

Duration & right to terminate

This letter of intent for an MOU, effective upon signature by the authorised officials from EV and Freshcare, provides the parameters for the proposed MOU that will be reviewed annually by the parties.

It will be at the sole discretion of the EV and Freshcare Boards to identify whether to renew the MOU each year. If one party does not wish to renew the MOU, the MOU will lapse.

Either party may terminate their involvement by giving the other party 10 business day's prior written notice.

Contact Information

Freshcare Limited Attention: Clare Hamilton-Bate Executive Officer Suite B30, Level 1 Market Plaza Building, Sydney Markets Homebush West NSW 2140 Telephone: 1300 853 508 E-mail: info@freshcare.com.au	EnviroVeg Attention: David Anderson Committee Chair Level 2, 273 Camberwell Road Camberwell, VIC, 3124 PO Box 138, Camberwell, VIC, 3124 Telephone: (03) 9882 0277 E-mail: david@supafresh.com.au
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Clare Hamilton-Bate
Executive Officer
Freshcare Limited



David Anderson
Chairman
EnviroVeg Program

Date 22 November 2016

Date 23 November 2016

6) The evaluation

See attachment 1 – EnviroVeg Evaluation of Impact