



**Australian Grape & Wine Sector
Research, Development and
Extension Policy**

September 2019

The objective of the grape & wine sector policy position on Research Development & Extension is to enable the efficient provision of research needed to allow the Australian grape and wine sector to become the most profitable and competitive supplier of wine to the consumer.

Policy underpinnings

- Government support for agricultural research is essential to address significant market failure issues and under-investment in innovation;
- Research activities must align with the grape and wine sector's research priorities, be clearly stated and be of national and/or regional benefit to the sector across the entire supply chain;
- Research, development and extension capability within the wine sector needs to be actively built and maintained at an appropriate level to reflect industry conditions;
- A cooperative research approach between industry (commercial), researchers, funding bodies and government needs to be fostered to ensure seamless integration of grape and wine research across the whole value chain;
- International collaboration in publicly funded research activities should be undertaken only if there is a likely net benefit to the Australian grape and wine sector and/or the wider Australian community;
- Intellectual property management must give priority to the timely dissemination of research results and uptake of research by the Australian grape and wine sector;
- Dissemination and extension of the outcomes/results of Research and Development (R&D) must ensure an efficient and effective system in line with industry expectations to ensure adoption of research outcomes; and
- Feedback loops and measures in adoption of research outcomes are of great importance in assessing the value and effectiveness of R, D & E activities.

Policy principles relating to operation of Wine Australia and investment of industry levies

- Australian Grape & Wine, as the legislated representative body, are partners with Wine Australia and the Australian government in the investment and administration of research levies and the provision of policy advice to the government on R&D issues on behalf of the grape and wine sector;
- There needs to be a high level of industry participation through Australian Grape & Wine in setting the Research, Development and Extension (R, D and E) agenda and determining research priorities;
- R, D and E policy and strategy development on behalf of the wine sector remains a key role for the legislated representative body, Australian Grape & Wine;
- Wine Australia plays a key service provision role by funding, coordinating and reviewing completed research, development and extension to the grape and wine sector and ensuring that Wine Australia funded projects are managed according to stakeholder expectations and legislated responsibilities. Wine Australia does not set R, D & E policy or strategy;
- The portfolio of winegrape growing and winemaking research projects should reflect a mix of short-term, medium-term and long-term projects that is responsive to changing industry needs;
- Principles of transparency, consistency and credibility are essential in selecting research projects for funding; and
- Industry development is a legitimate use of levy funds, as is research related to the sector's social licence to operate.

Background

The Research Environment

The Australian grape and wine sector has grown and prospered through innovation and strong leadership. The sector has used two processes to drive this innovation – through the provision of new knowledge from research; and through industry led and directed activity. Innovation is driven by the companies that make up the Australian wine industry, either individually or collaboratively, and uses information from a wide variety of sources, such as in-house research and technical activity, publicly funded research, extension and education, suppliers to the industry, private companies and consulting organisations, and research bodies including CSIRO, Universities and the Australian Wine Research Institute (AWRI). AWRI is a dedicated industry focused research and development provider and as such, consideration should be given to ongoing funding in order to maintain its core activities and to harness to the maximum extent the resources of all wine industry supporting organisations.

Research and Development in the grape and wine sector is the responsibility of a large number of organisations. The primary stakeholders are the industry (grape growers, winemakers) and the government (Australian and State jurisdictions). Both groups invest directly in R, D & E as well as jointly through organisations such as Wine Australia and research providers. However, research providers and funders also have highly vested interests in the R, D & E process. Efficiency in the funding and provision of research are essential to ensure that scarce funding is effectively utilised for core R, D & E activities.

From an industry perspective, it is important to ensure that the structures in place to initiate, fund, undertake and provide extension of R, D & E, maintain capacity and capability by State and Federal providers/funders, minimise duplication and maximise efficiency in research and delivery.

Definitions

Grape or wine research and development is defined in Section 4(1) of the *Wine Australia Act 2013* as meaning: "...systematic experimentation and analysis in any field of science, technology or economics (including the study of the social or environmental consequences of the adoption of new technology) carried out with the object of:

- a) acquiring knowledge that may be of use in obtaining or furthering an objective of the grape industry or the wine industry; or
- b) applying such knowledge for the purpose of attaining or furthering such an objective.

For this purpose, **knowledge** includes knowledge that may be of use for the purpose of improving any aspect of the production, processing, storage, transport or marketing of goods that are the produce, or that are derived from the produce, of the grape industry or the wine industry."

Grape or wine research and development activity is defined within the *Wine Australia Act 2013* as meaning:

- a) a grape or wine research and development project; or
- b) the training of persons to carry out grape or wine research and development; or
- c) the dissemination of information, or the provision of advice or assistance, to persons or organisations engaged in any aspect of:
 - i. the grape industry or the wine industry; or
 - ii. the production, processing, storage, transport or marketing of goods that are the produce, or that are derived from the produce, of the grape industry or the wine industry;for the purpose of encouraging those persons or organisations to adopt technical developments designed or adapted to improve:
 - iii. that aspect of the grape industry or the wine industry; or
 - iv. that production, processing, storage, transport or marketing; or
- d) the publication of reports, periodicals, books or papers containing information that is related to grape or wine research and development; or
- e) an activity incidental to an activity referred to in paragraph (a), (b), (c) or (d).

Publicly funded research is defined as research funding obtained partially or wholly from government sources or industry levy funds. It does not refer to research funded solely through private investment.

R&D/R, D & E In this policy R&D is defined as including research, development, extension and adoption.

Grape & Wine sector In this policy the grape & wine sector includes all aspects of grape and wine production through to the consumer.

Strategies

To efficiently provide the research needed to allow the Australian grape and wine sector to become the most profitable and competitive supplier of grape and wine products to the consumer, the sector requires strategies that will ensure that returns from R, D & E activities are maximised and driven by industry demands; that will:

- Encourage a high level of industry participation in setting the R, D & E agenda;
- provide the research needed to allow industry to innovate and become more profitable and competitive;
- guide the expenditure of the Government matched levy; will build research capability and maximise efficiency in delivery; and
- expand the funding base for R, D & E through the attraction of new investors and a broader range of research participants.

The sector has set the following strategies:

1. Maximise the return from the efficient investment of levy funds and funds from other sources in research, extension and pre-competitive technical activities
2. Ensure that clear policy advice is provided from the peak industry body to the government on R, D & E issues on behalf of the wine industry;
3. Ensure that the grape and wine sectors research priorities, including those relating to a licence to operate, are clearly stated and that they meet national and regional need across the entire supply chain;
4. Dissemination and extension of the outcomes/results of R, D & E must ensure an efficient and effective system in line with industry expectations; and
5. A cooperative research approach between industry, researchers, funding bodies and government needs to be fostered.
6. Maximise the efficiency in service delivery of the R, D & E functions of Wine Australia.

1 - Maximise the return from the efficient investment of levy funds and funds from other sources in research, extension and pre-competitive technical activities

In recent years, the government has implemented a number of improvements to the publicly funded R, D & E model with important implications for the grape and wine sector, including the ability for Wine Australia to invest non-matching funds in R, D & E; the removal of the maximum levy rate in legislation and enhanced corporate governance and accountability requirements for statutory authorities.

Australian Grape & Wine is recognised in the legislation as the representative body for Wine Australia, requiring it to be accountable to Australian Grape & Wine (and the Australian government) in strategic planning and expenditure of funds. The Australian Grape & Wine Board has committed to focusing on R, D & E activities as a key priority. Australian Grape & Wine will continue to work collaboratively with Wine Australia to ensure high level oversight of R, D & E activity and investment. The Australian Grape & Wine Research Advisory Committee (RAC) will play a critical role in guiding the activities and investment of Wine Australia. The RAC is accountable to the Australian Grape & Wine Board and will work collaboratively with Wine Australia's R&D committee to ensure industries strategic priorities are delivered through Wine Australia's investment and activities.

Australian Grape & Wine is also committed to ensuring Wine Australia retains its focus on research funding and maintains the investment of research levies for research activities. The legislation establishing Wine Australia is clear in that it maintains research funds (including reserves) for R, D & E activities. However, there is a critical role for the industry representative organisations to undertake an oversight role of Wine Australia to ensure that they do not allocate funds from the R, D & E levies to cross-subsidise market development activities or administration.

1.1 - Maintain funding for R, D & E activities for the Australian wine sector

Wine industry R, D & E is funded by the grape and wine industry through levies and direct investment, by the Australian Government through levy co-investment, by State Governments (via research agencies and infrastructure grants), by the universities and by CSIRO.

The major vehicle for industry RD&E investment is Wine Australia funded by a levy of \$2 per tonne of grapes delivered and \$5 per tonne of grapes crushed matched by Australian Government (up to 0.5% of the Gross Value of Production). The total fluctuates with the harvest but is around \$25 million per annum with \$40 million in project partnerships.

In addition to the monies spent in this collaborative sense, many of our wine companies (both large and small) have active research departments or individuals working on their own 'unique value proposition'.

Australian Grape & Wine plays an active role in liaising with government on the need agricultural research for the return it provides to industry and the general economy.

(a). Support for the RDC concept

The Commonwealth Government has in the past demonstrated a commitment to Rural R&D Corporations and RD&E in the wine sector, by matching such industry contributions up to a maximum of 0.5% Gross Value of Production.

This commitment to Rural Research and Development Corporations (RRDCs) recognises the significant market failure typical in rural industries. Most rural enterprises have insufficient capacity to commission research on their own behalf, and/or are unable to exclude "free riders" from also sharing in the benefit of the research. Consequently, without Government intervention, there would be substantial under-investment in rural related research.

The benefit to Government, and the broader economy, accrues through the improved international competitiveness of Australian rural industries, and the resulting impact on trade, regional investment and taxation, as well as the social impact on regional communities and better management of Australia's natural resources.

Australian Grape & Wine continues to support investment in R, D & E through an industry levy matched by the government, with a cap on matching contributions for all statutory levies at 0.5 per cent, managed on behalf of industry by Wine Australia.

(b). Funding allocation within levy funds

The Australian grape and wine sector has a long history of providing levy funds in partnership with the Australian Government to support cooperative endeavours where market failure is occurring. These funds have been administered through Wine Australia on behalf of the industry and Government with the ultimate objective of creating a more efficient and competitive industry.

Whereas the promotional and regulatory levy funds are expended directly by Wine Australia, the research and development funds are primarily allocated to secondary service providers from a range of relevant institutions by Wine Australia through either long term strategic partnerships or on the basis of competitive bids. Wine Australia currently has 5-year strategic partnerships with the Australian Wine Research Institute, CSIRO, SARDI and the two universities involved in grape and wine education, the University of Adelaide and Charles Sturt University through the National Wine and Grape Industry Centre. These partnerships account for about 70% of the R, D & E funds. The aim of these longer-term partnerships is to provide surety so that Wine Australia's research partners can make strategic investments in the capability that the sector needs. Wine Australia is also seeking to provide its research partners with greater flexibility to pursue promising research outcomes within an overall agreed framework with agreed objectives and accountability. That said, Wine Australia is not derogating its responsibility as the decision maker regarding R, D & E investment and review.

The remaining 30% of the R, D & E funds is invested with other providers on a competitive basis or allocated to internal Wine Australia activities such as market insights.

(c). The maximisation of funding from other sources than industry levies

In real terms levy funds available for research are declining over time. Therefore, we need to encourage utilisation of resources from a much broader base.

1.2 Maintain research capability and capacity

There is a critical decline in viticulture capability in our research institutions. State Governments have also significantly pulled out of publicly funded agricultural extension. In addition, declining funding in 'real terms' to through matched industry levies has meant increased pressure on funding to key research agencies. It is important that sufficient funding is available to maintain research capability in key areas.

2. Ensure that clear policy advice is provided to the government on R, D & E issues on behalf of the wine industry

A peak industry advisory committee – The Research Advisory Committee (RAC) has been created to provide recommendations and advice that will enable Australian Grape & Wine, on behalf of the sector, to state and promote clear policy and strategy. The Committee is expertise-based and undertakes a broad role in consideration of the Australian wine sector R, D & E interests.

3. Ensure that the wine industry's research priorities are clearly stated and that they meet national and regional needs

Australian Grape & Wine has an active involvement in setting research priorities for the sector through the development and ongoing monitoring of the Wine Australia Five Year Plan. The current plan, the [Wine Australia Strategic Plan 2015-2020](#), is in its fifth and final year.

Consultation will begin shortly to develop the next Wine Australia five-year Strategic Plan for 2020–25. As detailed in the [Consultation Plan](#), consultation will be wide in order to:

- allow key stakeholder groups to have input into Wine Australia's strategic direction
- facilitate discussion about current performance and possible future states for Australian grape and wine production and wine export
- align strategic planning to pursue shared aspirations
- ensure a targeted and balanced investment portfolio approach during 2020–25 across issues of critical national importance as well as sectoral or jurisdictional stakeholder priorities.

In addition, a concurrent process is also underway to develop a high level "Whole of Sector Strategy 2020-2050" which will be developed in conjunction with the Wine Australia Strategic Plan. The RD&E priorities identified in this process will form an important component for the broader long-term sector strategy.

In developing the Plan Wine Australia must also take into account the Australian Government's Science and Research Priorities and Rural R&D Priorities

Key stakeholders involve the funding providers, namely the Australian Government and the Australian grape and wine sector. There is broad consultation with levy payers with a view to gaining what they see as priorities and researchable questions for the coming Five Year R, D & E Plan. The consultation process recognises the special relationship of the peak industry body Australian Grape & Wine. It is important that research priorities from publically funded research maintain a focus on national priorities, although it should be recognised that regional priorities cannot be ignored.

3.1 The need for research relevant to the sector's 'licence to operate'

Corporate Social Responsibility (CSR) represents an important dimension in contemporary business practices. The wine sector, both internationally and in Australia, is subject to intense public debate on its social licence to operate due to concerns regarding alcohol related harm. For the wine industry, this has manifested itself in; increasing levels of scrutiny on the corporate social responsibility commitments of individual companies; pressure from some quarters for increased regulation including taxes; and, increased expectations from governments that the industry will proactively self-regulate and pursue voluntary activities aimed at reducing levels of harm.

The whole innovation process should therefore take into consideration the social contribution.

4. Dissemination and extension of the outcomes/results of R, D & E must ensure an efficient and effective system in line with industry expectations;

Research uptake is a priority area in the management and delivery of R, D & E to the wine industry. There is a wide variety of investment in current programs designed to achieve research uptake.

Key issues surrounding extension include:

1. the importance of having the primary researcher directly involved in extension and research uptake, recognising that some are very good at it whilst others are not.
2. the need to acknowledge "not one size fits all" in terms of extension programs, i.e. what works well in a workshop for one project might work better for another project via a field trial etc.
3. although user-pays has some advantages, will such a policy help to promote research uptake or inhibit dissemination?
4. commercial partnerships have a key role in both dissemination and extension. Early collaboration between the researchers and commercial partner will ensure a more relevant extension to industry.
5. Ensuring mechanisms for feedback, review and measurement of adoption of extension activities.
6. Intellectual Property rights and ownership.

In nearly all primary industries, there are those who want to continually update and upgrade sources of information and intelligence that assists their operations to perform better. These individuals/companies endeavour to be plugged into all the key intelligence available through many sources these days, most notably through email and the internet – in relation to R, D & E, they will always be on the lookout for outcomes which might benefit their businesses. On the other hand, there are those who are less inclined to help themselves – many of these individuals/companies see Wine Australia or other research agencies as having an "obligation" to "hand feed" them, and even then, there can be no certainty that the R&D information supplied will be put to the best use.

In the education sector it should be recognised that there are training institutions that play a critical role in promoting a "learning and innovation" culture in the industry as well as incorporating new R&D outcomes into external education and training courses and materials.

4.1 Intellectual property (IP) management must give priority to the timely dissemination of research results and uptake of research by the Australian grape and wine sector.

The following policy principles surrounding IP in R, D & E have been adopted:

1. The protection and commercial exploitation of IP from publicly funded research will only be pursued if there is a net benefit to the Australian grape and wine sector and a partner willing to take the risk and fund commercialisation is identified.
2. Any intellectual property management must give priority to the timely dissemination of research results and uptake of research by the Australian grape and wine sector.
3. Ownership of IP should be assigned by an appropriate contractual arrangement between the research funders and the providers, in association with a commercialisation partner.
4. The pre-condition for international participation in publicly funded research is that all research results will be made available as a priority to the Australian industry. IP ownership will be on the basis of the negotiated contractual arrangement between the partners.
5. Where financial benefits accrue to a public funder (Wine Australia) from the commercialisation of intellectual property developed through research it has funded, these should be returned for further industry R, D & E.

6. Research agencies and other key providers should be encouraged to maintain a focus on R&D and leave commercialisation activities to industry or commercial organisations.

5. Cooperative research approach between industry, researchers, funding bodies and government needs to be fostered

Each institution, especially those relying on levy funds for core infrastructure, needs to identify its key capabilities with an aim to reduce duplication and to increase efficiency of the use of scarce research funds. There is a need for collaboration between institutions to seamlessly integrate the grape and wine research and education endeavour from the environment to the vineyard, winery, market and society.

Broadly speaking the same principles that apply to international collaboration also apply within Australia and between Australian research institutions. Principally, collaboration should be undertaken only if there is a net benefit to the Australian grape and wine sector and/or to the Australian people.

It is acknowledged that ex ante it is difficult to measure the potential costs and benefits of collaboration. Collaboration may not lead to immediate gains, but the development of strategic partnerships may have long term benefits.

Given the limited (and in real terms diminishing) funds available for wine sector research in Australia, domestic and international collaboration is particularly important. It allows participation in, and access to, activities from which scientific and technological innovation largely derive, especially where the cost of major research facilities and associated research projects are prohibitive when spread across Australia's research institutions.

The most effective transfer of the benefits of research collaboration into commercial application requires the integration of the wine sector into the process. The nature of the wine industry does mean that the practical results of research diffuse quickly to other producing countries, either through formal company links, flying winemakers and viticulturists or through researcher interaction.

Commercialisation of IP is not the key driver for wine industry research. From the industry perspective, the critical issue surrounding R&D is to make sure that any policy does not prevent the timely dissemination of research results. It is critical that potential IP be identified at the beginning of the research project and that the owners of such IP also are identified and that that IP be available to Australian industry.

It should also be recognised that the ability to collaborate internationally can add to the skills base of Australian researchers and add to their incentives to remain in Australia. Multiple vintages per year can also prove an advantageous aspect of international collaboration in grape and wine studies.

Policy principles surrounding collaboration are:

1. International collaboration from publicly funded research will only be pursued if there is a net benefit to the Australian grape and wine sector. To achieve these following tests must be met:
 - a) there must be clear justification of why research is done in a particular country, a particular institution, with a particular investigator, with a particular participant and in a particular community.
 - b) the pre-condition for any international collaboration must give priority to the timely dissemination of research results and uptake of research by the Australian grape and wine sector.
2. Research by Australian research institutions on behalf of overseas (non-levy payer) interests should only be undertaken if there is a net gain to the Australian grape and wine sector. To achieve these the following tests must be met:
 - a) Researchers cannot be taken off research if it will impact on meeting project outcomes or the undertaking of new priority research.

- b) The results of the research must be made available to Australian levy payers in a timely fashion.
3. Before submission of a collaborative research proposal, there shall be clear agreements on all aspects of the research. These include intellectual property sharing, management of the research process, division of responsibilities, finances, spreading of benefits and burdens, and any other appropriate aspects.
4. Ownership of IP should be assigned by an appropriate contractual arrangement between the research funders and the providers, (and if applicable, in association with a commercialization partner), but must not restrict access by the Australian grape and wine sector to the IP. IP ownership will be on the basis of the negotiated contractual arrangement between the partners.
5. Collaboration cannot be forced and should not be a pre-condition of funding.
6. It is recognised that transaction costs from collaboration can be high and it is important that these be taken into account when establishing collaborative ventures.
7. There are many different forms of collaboration and measurement on the basis of shared publications and joint projects is not always an appropriate measure.

6. Maximise the efficiency in service delivery of the R&D functions of Wine Australia

Wine Australia combines the dual responsibilities of funding marketing and promotion activities on behalf of the Australian wine sector and investing research levies on behalf of the funders –Australian grape growers, winemakers and the Australian government.

The Australian government has acknowledged that Research and Development Corporation (RDC) investment decisions are guided by a both industry and government priorities and as a jointly funded body, Wine Australia needs to be accountable to both levy payers through the representative body (Australian Grape & Wine) and the Australian government.

Under the legislation establishing the Authority and the Statutory Funding Agreement which will guide its activities, performance and accountability protocols and measures will be established. Statutory authorities have strong governance requirements imposed by legislation and the government and industry are increasingly demanding improved performance measurement. Key areas of performance surround:

1. Delivering of objectives in the Strategic plan;
2. Efficient and cost-effective provision of services;
3. Meeting legislated objectives and obligations;
4. Communication with the industry bodies on the development of strategy, priorities and operational issues (primarily, but not limited to, Australian Grape & Wine) to be undertaken in an effective manner;
5. The communication process with Australian Grape & Wine (and other interested stakeholders) to discuss the outcomes of the Annual Operational Plan (AOP); and
6. The communication process that correlates to the Annual Report period so that stakeholders are aware of performance against the KPIs established for the AOP and Five-Year plans.

The Australian government has stated it would monitor RDC performance in a way that enables ready assessment of outcomes for the whole program, and identification of specific performance problems.

Annex 1: Research Advisory Committee Terms of Reference

Australian Grape & Wine RESEARCH ADVISORY COMMITTEE Terms of Reference

The Research Advisory Committee (RAC) will comprise Australian wine grape growers and wine makers. It will meet at least twice each year, and when required to assess project proposals.

The Research Advisory Committee will provide recommendations and advice to Australian Grape & Wine executive with regard to research, development, extension and innovation for the Australian wine industry, and other related matters, which may arise from time to time.

Observers – The Research Advisory Committee will include a standing list of observers who may be called-upon to attend meetings to provide specialist expertise. These observers will not be present or participate in assessment of project proposals

This advice will, inter alia, and as required, address:

1. Identifying research priorities for the Australian wine industry.
2. Policy issues related to R,D&E raised by the Australian government
3. Funding arrangements for grape and wine research in Australia.
4. Promoting the uptake of research outcomes by the Australian wine industry.
5. National and international, institutional and corporate collaboration to achieve optimal results for the Australian industry.
6. Oversight of the Wine Sector R,D&E Strategy
7. Support for Wine Australia's R,D&E activities, as required including:
 - Advice on industry relevance of project proposals
 - Input into strategic planning and gaps analysis
 - Input into 3 year review of projects in bilateral agreements
 - Provide advice to the Boards on the Wine Australia 5 year-plan
8. Any other R, D & E related issue that requires a policy position from the wine sector.