

Submission to the Productivity Commission inquiry into Rural Research & Development Corporations

Introduction

The Winemakers Federation of Australia (WFA) is the national peak body for the wine industry with voluntary membership representing more than 95% of the wine produced in Australia. It develops policies and programs for the whole industry on a range of political, social, environmental, trade and technical issues with both a national and international dimension.

Background

Research, development, extension and Innovation are a fundamental to a successful Australian wine sector. The sector has historically been well served with world class research institutions. Although there are too many to list here, they include the Australian Wine Research Institute (AWRI) which was established in 1955 by the Australian wine sector to supply cutting edge oenological research; CSIRO which is the premier viticulture research agency in Australia; State government research agencies and a very vibrant University sector.

The sector's R, D & E is funded by the grape and wine sector 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 the CSIRO. The money raised by levy varies each year, based on the number of tonnes crushed. For 2007-08 the estimated annual investment in recurrent wine R, D & E from these sources was \$59m with the estimated capital investment in R, D & E of \$25m for that year.

The GWRDC is a critical plank in the R&D framework for the wine sector. Not only does it determines which R, D & E projects will be funded based on the priorities of the sector and of the Australian Government (through its Rural, Research and Development program) it is a key coordinating body for research. It plans and funds collective research and development programs, and then facilitates the dissemination, adoption and commercialisation of the results throughout the sector. It does not undertake research and development itself but purchases it from existing providers on behalf of the Australian grape and wine sector.

Additional research is funded by private companies, particularly wine companies and supplier companies; some of the sector research funded by suppliers and wine companies is conducted overseas; government innovation; major research bodies such as the University sector and CSIRO and through regional association levies; Australian Wine and Brandy Corporation (AWBC) levies and the Phylloxera and Grape Industry Board of South Australia.

The Wine Sector is taking an active role in determining the research directions to maximize the short, medium and long term objectives for the sector. *Innovation driving sustainable success – a Research Prospectus for the Australian Grape and Wine Sector* released in December 2009 has been developed to inform investment decisions about the research, development and extension that are needed for the sector for 2010-2012.

The research themes identified by the Strategic Directions Group were influenced by the Australian Government Rural research and development priorities, the Innovation Policy of the Winemakers' Federation of Australia (WFA) and the Wine Grape

Growers' Australia (WGGA) and obviously colored by the current state of the sector. The Wine Restructuring Action Agenda announced in November 2009 outlines a plan to address the difficult position the sector now finds itself in. Robust and practical research is needed to assist the sector manage in this new era and the areas identified within the prospectus will enable the sector to rebuild itself and prosper in the new environment.

The Primary Industries Ministerial Council comprising the Australian Government and State Government ministers with responsibilities for primary industries has called for the development of a national strategic framework for primary industries R, D & E. The aim of this initiative is to ensure Australia's research, development and extension capacities are aligned nationally with future sector needs, to initiate collaboration that strengthens Australia's position in international markets and to ensure that R, D & E delivery is both more efficient and effective. These strategic frameworks are being developed for each of Australia's major primary industries and for cross-sectorial collaboration.

The driving forces behind this initiative have been a decision made by State jurisdictions that they will not directly invest as much in research and extension as previously may have been the case and that they needed to invest in sectors which offer maximum returns to their jurisdictions.

The other aspect of the national RD&E initiative is that the Australian Government has been keen for agricultural industries to collaborate on research projects so that limited research dollars can have maximum effect in rural industries. Many of the issues we face in the wine sector are shared in other industries: understanding and serving international consumers, managing our environment in a responsible manner for future generations, knowledge about the value chain and consumer preferences, and adding value wherever possible to ensure a positive farm gate return. Meaningful collaboration would be a sensible and effective approach in these areas. Cross-sectorial collaboration in areas such as climate change, water usage and bio-security are good examples of where synergies can be made.

The development of the Wine Sector Strategy has been led by the GWRDC, WFA and Primary Industries and Resources South Australia (PIRSA) with support from CSIRO and the State Governments of New South Wales and Victoria.

This structure is not intended to be another piece of bureaucratic nonsense that simply adds to the meeting time of industry, researchers and government. It is meant to allow a better flow of communication between the industry who decide the priority areas of research and use the research in their business, funding bodies including the GWRDC, State and Federal Agencies, CSIRO universities etc and research and extension providers including the AWRI, University sector and CSIRO.

Please find attached a detailed response to the questions posed by the Productivity Commission (attached). I would be glad to elaborate on any of the issues raised in the submission or on any additional issues if desired.

Yours sincerely

Tony Battaglione
General Manager
Strategy & International Affairs

Why should government provide funding support for rural R&D?

There are several reasons why the government should continue to provide support for R&D in the wine sector and should continue with the RDC model.

The wine sector consists of a large number of small to medium sized enterprises involved in grape growing, winemaking, marketing, distribution and suppliers. Each of these sectors are interdependent, but in many cases because of the diverse nature of the sector information is not available to make informed R&D decisions. Consequently, in our opinion there is an underinvestment in wine sector related research.

The sector is a very important employer in an otherwise declining regional sector and provides a very valuable export industry for Australia. The key rationales for government investment include:

- The large number of SMEs leading to market failure
- The importance of the sector to rural and regional Australia in both social and economic terms
- The importance of the sector to the national economy and export sector
- The large potential for growth that exists by innovation to value add the product
- Economic benefits from the wine sector are spread throughout the economy and do not accrue to a couple of major firms

The RDC model is unique in it allows a focal point where industry and government can identify their respective R&D priorities and fund them accordingly. This partnership approach has worked well in the past, but there are some potential areas of improvement. One of the advantage of RDCs is that they fund research that is designed to be extended (and fund those extension programs), adopted and used for innovation. CSIRO and the universities, while vital to our research effort, have an incentive to lock up intellectual property in the form of patents and proprietary products to earn income to fund further research.

History shows that increases in private contributions to the levy base are very difficult in 'tough' economic conditions.

One of the big advantage of public funding and levy based funding for agricultural research is that it smoothes out variations in the production cycle that may occur due to climatic, market or other external forces. This means that in the bad times agricultural research will maintain its funding base, thereby keeping in place the skills base of researchers and maintaining programs that can provide a springboard to recovery in better times.

In our experience, levy based funds and government funding according to the GWRDC model is a very effective model in leveraging funds from individual producers. We believe that giving more latitude to RDCs (under the appropriate corporate governance models) could be even more effective in leveraging funds. We would like to see the GWRDC be in a stronger position to provide funds for innovation.

How important is it that government contributes to the cost of maintaining core rural research skills and infrastructure? Without that support, how specifically would the capacity to adapt overseas technologies to meet the particular requirements of Australia's rural sector be compromised? What role do RDCs play in maintaining core rural R&D capacities?

This is a critical set of questions. I believe that the government needs to do more to provide core research capacity and infrastructure. If it wasn't for the GWRDC, it is likely that most of the major research providers would have exited from grape and wine research and refocused their resources in other sectors. Australia has world class researchers in grape and wine, but they are under continual pressure by their organisations to keep funding coming in. This has discriminated against longer term 'blue sky' research and has also diverted capacity from traditional industries to 'new' industries. The reality is that all rural industries require continual innovation to maintain their place in the market.

What importance should be placed on outcomes-based rationales for government funding support for rural R&D, such as enabling Australia's rural industries to meet increased global competition; facilitating adjustment to climate change; furthering food and bio-security objectives; and fostering regional development? Is there a risk that seeking to use government funding to drive specific outcomes such as these could distort the pattern of R&D investment and thereby reduce the overall returns to the community?

One of the great advantages of the national RD&E initiative is that it enable all research funders, providers and industry to work under a common framework. There is always a risk that when government/s seek to provide funding for broad policy issues that there will be a rush to secure the funding by providers to the detriment of existing research and that it may be spent in an *ad hoc* fashion involving duplication and inefficient use of resources. The national RD&E initiative provides the mechanism to come up with a research plan both within industry and between industries (in a collaborative framework) to maximise the use of funds.

Should the level of public funding have any regard to government support for rural industries in other countries?

This is an interesting point. Fundamentally, there is no point in trying to implant additional support measures because your competitors have them. However, it is always useful to have regard to the efforts of your competitors to position their industries with a competitive advantage.

Is the RDC model fundamentally sound?

Like most industries we looked at this very closely in our development of the national RD&E initiative. Our conclusion is that the system is basically sound, but there are a number of ways to improve it.

How effective is the current rural R&D and extension framework, and is the role of the RDCs within that framework appropriate and clearly defined?

Extension and innovation are always the most difficult role within the R&D framework. I think the GWRDC has recognised its weakness in the extension area, and in the last two years has made some radical improvements. These issues will be dealt with in their submission. The industry has also recognised that there are some real problems in translating research into innovation and has provided considerable guidance on this issue over the past couple of years through the development of its innovation policy.

The wine industry has used two processes to drive innovation – through the provision of new knowledge from research and through industry led and directed activity. In the

R, D, E & I (Research, Development, Extension & Implementation) model the R and E is driven through largely one culture and the D and I largely through another.

The Australian grape and wine industry has a long history of successful innovation by which it produces a range of wines of interest to the global consumer, has become internationally competitive and supports a significant number of regional communities.

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 its own research organisation, The Australian Wine Research Institute (AWRI). The Australian wine industry supports the established role of the AWRI as a world class research institution.

There is a strong need for improved collaborative relationships between research providers, to deliver research, education and extension across the whole wine production and marketing chain, including its social and economic impacts.

Since 1986 the Australian grape and wine industry has formed a partnership with the Australian Government by which levy funds collected from industry on a per tonne basis are matched by Government up to 0.5% gross value of production to invest in research and extension activities.

These levy funds have been invested in research and extension projects undertaken by the AWRI, by publicly funded organisations, such as the CSIRO, State Departments of Agriculture/Primary Industries, universities, and by organizations that are publicly funded. The investment of levy funds is managed by the Grape and Wine Research and Development Corporation (GWRDC), an Australian Government statutory organisation.

In recent times the operating environment for the Australian grape and wine industry has changed with a prolonged drought, concerns over the global financial crisis, the future impacts of climate change, increased competition in global markets, customer aggregation, and a highly variable currency.

Such changes drive the need for intensified innovation by the industry. As a result, all research providers should review their forward plans and ensure adequate flexibility to accommodate the changing environment.

The Innovation Policy Committee, with representation from the Winemakers' Federation of Australia and Wine Grape Growers' Australia, recommends a set of industry innovation priorities through the work of the Strategic Directions Group that takes into account the needs and aspirations of the mix of companies within the industry.

Individual members of the Australian wine industry, suppliers to the industry, private companies and consulting organisations are responsible for their innovation activities; however, the Australian grape and wine industry seeks to maximise the return from the efficient investment of levy funds and funds from other sources in research, extension and pre-competitive technical activities. To this end the IPC recommended the implementation of the following policies which were adopted by WFA and WGGA in 2009. In effect the industry:

- encourages a range of institutions, public and private, Australian and international, to compete for levy funds;
- encourages these institutions to seek co-investment from sources other than that of the levy funds, provided that the priorities and interests of the industry are met;
- encourages institutions to develop an area/s of expertise, particularly those relying on levy funds for core activities, to reduce duplication and to increase efficient use of scarce levy funds;
- encourages institutions to collaborate, e.g. utilising the Wine Innovation Cluster on the Waite Campus of The University of Adelaide, to integrate research across the entire supply/value chain from the environment to the consumer;
- recommends the investment of up to 30% of total GWRDC revenue in knowledge generation activities in areas of long term interest to the industry;
- supports, wherever possible, a strong nexus between research and education activities to maintain the intellectual capacity of the industry;
- supports targeted extension activities to ensure that research information is made available quickly and efficiently to levy payers;
- supports pre-competitive technical collaborative activities against industry priorities by organisations other than those publicly funded;
- recommends the allocation of up to 30% of total GWRDC revenue to entities, such as the AWRI and the National Wine and Grape Industry Centre (NWGIC), for core activities; and
- supports the industry's own research organisation, the AWRI, with sufficient funds to undertake core activities and to harness to maximum extent the resources of all wine industry supportive organisations, including CSIRO, the universities and Departments of Agriculture/Primary Industries, by collaborative and non-duplicative endeavor

Does the significant number of entities, research programs and funding pools cause problems? For example, are there areas of major R&D overlap or gaps? Does any focus on 'leveraging' contributions across the various funding pools cause inefficiencies or perverse outcomes, or does it incentivise desirable behaviour? Is there sufficient oversight of, and coordination and collaboration between, the different components of the framework? Are there any particular difficulties created for the RDCs by the current arrangements?

The current RDC model does not create problems because of the number of RDCs, but there could be more collaboration between RDCs. However, Government initiatives to encourage the RDCs to undertake cross-sectoral or so-called 'cross cutting' R&D of benefit beyond the industry are not always effective, as collaboration for collaboration's sake is not necessarily a good use of funds.

Broadly speaking the same principles that apply to international collaboration also apply within Australia and between Australian research institutions. Principally, collaboration should only be undertaken if there is a net benefit to Australian grape and wine industry and/or the Australian people. Collaboration shouldn't be undertaken if it is only beneficial to research institutions and if the benefits do not outweigh the transaction costs.

It is acknowledged that *ex ante* it is difficult to measure the potential costs and benefits of collaboration. However, if researchers consider collaboration could lead to future gains and they can (or even if they can't) get funding then such collaboration could be considered. Collaboration may not lead to immediate gains, but the development of strategic partnerships may have long term benefits

What is collaboration?

Proponents of research collaboration include the following benefits:

- Reduced unnecessary duplication of research efforts;
- Enhanced economies of scale and scope in research teams;
- An improved ability to exploit synergies between different capabilities, types of instrumentation and natural circumstances;
- Improved knowledge transfer;
- Enhanced skills development and recruitment;
- More effective work addressing challenges; and
- Facilitating access to research infrastructure.

Given the limited (and in real terms diminishing) funds available for wine sector research in Australia, domestic and international collaboration is particularly important because 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.

In addition, to permit the most effective use of research collaboration being transferred into commercial application it requires the integration of the wine sector into the process.

Unfortunately most of the definitions of collaboration and measurement indices revolve around publications data or research projects. These measurement indices do not provide a good measurement of effective or productive collaboration.

Increase the capability to use knowledge generated elsewhere

A frequently quoted statistic is that Australia generates only 2 per cent of the world's knowledge, so must seek the remaining 98 per cent overseas. Many countries, particularly in Europe, are making major investments to strengthen their access to international knowledge, through a variety of programs, such as: enabling students to move between universities in many countries during their degree studies (the Barcelona Agreement), supporting students to study abroad for a semester or year, international exchange programs, funding for researchers to participate in international research programs and funding for the interchange of personnel between Research Institutions and industry. The same level of investment for similar programs does not exist in Australia.

This is one area where Australian wine researchers (and perhaps more significantly Australian wine innovators outside the institutionalized research community) have significant opportunities to establish an "Innovation Clusters" in Australia that link the knowledge base with appropriate organizations. This process will also help to develop collaborations that will be of long-term benefit to the process of innovation.

Wine Industry Cluster

The Australian wine sector has already set up a number of collaborative ventures. The launch of the Wine Innovation Cluster (WIC) and the opening of its new \$28 million building at the Waite Campus of the University of Adelaide in November 2008 was a prime example of the establishment of a physical collaborative venture, although there are many examples of collaborative activities being undertaken by researchers from different institutions.

The WIC brings together the resources of The Australian Wine Research Institute (AWRI), CSIRO Plant Industry, South Australian Research and Development Institute (SARDI) and The University of Adelaide. Benefits include sharing of facilities, and the bringing together of people with a wide range of skills to provide a capability to carry out research and deliver information to the wine industry across the whole wine value chain, from grape to wine to consumer. It may be appropriate that the WIC look at collaborative opportunities across areas of the value chain where they do not have expertise.

The WIC is strongly supported by the wine sector and is seen as a development that needs to be supported and encouraged. One option is to ensure that the WIC is funded to maintain core capability across key priority areas for the Australian wine sector through a block funding mechanism. However, a component of contestable funding is essential to ensure competition, continuous improvement and new entrants. Governance linkage to the funder and the industry is also required to be improved if this approach is taken.

National RD & E Framework

The Primary Industries Ministerial Council comprising the Australian Government and State Government ministers with responsibilities for primary industries has called for the development of a national strategic framework for primary industries RD & E. The aim of this initiative is to ensure Australia's research, development and extension capacities are aligned nationally with future sector needs, to initiate collaboration that strengthens Australia's position in international markets and to ensure that RD & E delivery is both more efficient and effective.

The development of the Wine Sector Strategy has been led by the GWRDC, WFA and Primary Industries and Resources South Australia (PIRSA) with support from CSIRO and the State Governments of New South Wales and Victoria.

The strategy has been developed by key stakeholders from the wine sector, research organizations, universities and government agencies. The centrepiece of the strategy is a proposed structure and system that includes:

- A National Wine Research Network
- A National Wine Extension and Innovation Network
- A National Research Coordination Forum.

The National Wine Research Network will be a forum for wine research and development providers to share research and information, to encourage consultation, coordination and communication amongst research and development providers and to be a point of contact for sector bodies.

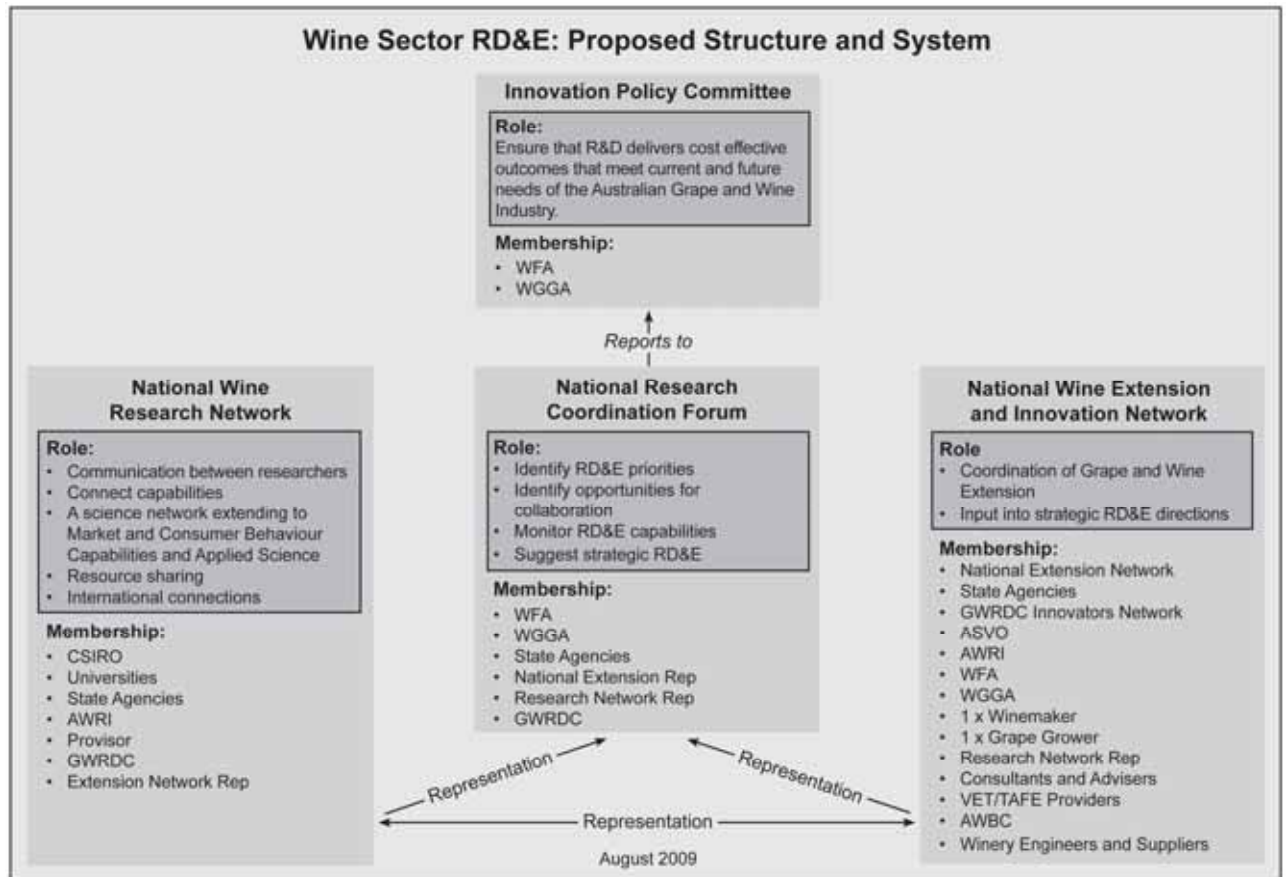
The National Wine Extension and Innovation Network will coordinate wine sector extension and innovation services to ensure those services are delivered in the most timely, client-focused and cost effective manner.

The National Research Coordination Forum will lead, coordinate and link the parts of the system. It will provide a regular high-level forum of wine sector leaders, researchers, funders, government agencies, regions and extension service providers to ensure that wine RD & E is responsive to sector requirements and is conducted and delivered in the most efficient and effective manner.

The key outcomes, once the strategy is fully implemented, are an Australian wine sector development and extension system that:

- Has clear, market-driven priorities that cover the whole of the value chain and are updated regularly
- Comprehensively meets the needs of the sector
- Is integrated, independent and specialised, with large critical mass and less fragmentation across the nation
- Funds research on the basis of programs requiring collaboration rather than on the basis of projects
- Has a high level of collaboration and exploitation of synergies through strategic partnerships and sharing of expertise and research infrastructure
- Is efficient and effective including in its use of infrastructure
- Retains and builds capability in areas strategically important to participants
- Has national centres of research excellence supported by well-linked development and extension systems so that wine sector research developed in one location will be available nationally for the whole sector
- Has a high level of sector access to international and Australian RD & E capabilities with faster and more effective 'concept to application'.

The proposed structure and system is shown diagrammatically in the chart below.



This structure has been adopted by the States and Australian governments and endorsed by the wine sector. Resource allocation issues will be addressed by the National Research Coordination Forum, while the National Wine Research Network and National Wine Extension and Innovation Network are well placed to identify collaborative opportunities.

Australian government view of collaboration

The Australian government is a key funder of research through several institutions and via the GWRDC. In recent years, the government has taken an approach that collaboration on research projects by different institutions is desirable, and this has directly or indirectly influenced funding decisions by government agencies and consequently the form of applications by research providers.

While collaboration can bring about significant advantages through bringing together of top class researchers and multi-disciplinary research, collaboration for collaboration's sake can also build in mediocrity and increase transaction costs that can slow down research and even reduce its effectiveness. What is necessary is to develop guidelines on when to collaborate and when not to.

One of the advantages of collaboration is that individual institutions are not required to develop their own expertise and capability across all research areas, but can concentrate in their particular areas of strength. This becomes more akin to a commercial model where particular skills are brought in as required. Long term collaborative agreements and relationships as per the WIC can assist this process.

Are there other major changes required to the role of the RDCs? For example: Do the current levy payment and governance arrangements for the RDCs lead to an excessive focus on R&D effort within the 'farm gate' and, if so, how might this be addressed? If there are prospective, high payoff, research opportunities further down the value chain, why are these not being taken up by processors and other downstream stakeholders?

This is not the case within the GWRDC. The sector, through its identification of sectoral priorities through the strategic Directions Group and the government through its national and regional priorities appear to have helped the GWRDC get the right mix of research within its funding constraints.

From a governance perspective it is very important that quality directors are selected that can provide an appropriate mix of skills. From a strict governance perspective, it might be more appropriate for the government to nominate one or more directors rather than have Ministerial approval of the final Board. The presence of departmental representatives on RDCs was very useful in the past.

What are the particular benefits and costs of combining R&D and industry representation responsibilities within a single entity?

WFA continues to support the creation of an industry-owned company (working title, Wine Australia Inc) as the entity to take on a range of core functions on behalf of industry. In essence, these functions would include all of the functions of WFA except advocacy, all the functions of the GWRDC, and all of the functions of the AWBC except compliance.

The key benefits of establishing Wine Australia Inc are:

- The body is industry-owned, with critical links to the peak bodies and directly to industry
- It aligns all of the industry's core national functions into one strategy-setting and implementing body
- It will provide efficiencies of at least \$500,000 per annum
- It will improve communication channels between the industry functions and ultimately to industry and wider stakeholders
- It provides the capacity to review governance models
- It provides better links and consideration of the full supply-chain in its structure and activities (ie grapegrowers)
- Its industry-owned status would give it greater capacity to forge more meaningful strategic relationships with state associations, as per the WFA structure

The business case in favour of the inclusion of the GWRDC in Wine Australia Inc is sound. It will:

- Align R&D with marketing, knowledge development and key policy development, therefore supporting the objective of strengthening the strategic capability of the industry by aligning functions in one organization;
- Provide savings by avoiding duplication, particularly back-of-house administrative, board and communication functions; and
- Increase efficiency and flexibility in the allocation of funds

Are the arrangements for collecting the levy and channelling these collections to the RDCs administratively efficient? Does the (variable) levy collection charge closely reflect the costs incurred by the Department of Agriculture, Fisheries and Forestry in collecting and distributing levy funds?

Currently it is very difficult to amend levy rates.