

# INFRASTRUCTURE SA

## Submission to the Discussion Paper on the 20-Year State Infrastructure Strategy.



**SOUTH AUSTRALIAN WINE INDUSTRY**  
ASSOCIATION INCORPORATED

**SUBMISSION OF:** SOUTH AUSTRALIAN WINE INDUSTRY  
ASSOCIATION INCORPORATED

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**DATE:** 31 July 2019

Submissions due 31 July 2019 to:  
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## **SUMMARY OF SUBMISSION**

The South Australian Wine Industry Association Incorporated (SAWIA) has prepared this submission based on the broad views of its members in response to the Infrastructure SA Discussion Paper on developing the 20-Year State Infrastructure Strategy.

The wine sector in South Australia is fundamentally reliant on the health of natural resources of water, soils and air in our regions, which must always be protected from degradation.

The wine sector also depends on infrastructure throughout the State to deliver associated utilities that it requires to produce and sell wine, in particular water, energy, transport and digital services.

The wine sector's projected growth will need to be supported by adequate infrastructure growth and additionally through relevant planning and development regulations.

SAWIA advocates for infrastructure planning focussed on the key areas of:

- Water – affordable access of suitable quantity and quality water where it is needed,
- Energy – reliable access to affordable energy through robust networks able to cope with increasing demand as the energy system decarbonises, with due consideration to the contribution of distributed energy resources and micro-grids,
- Transport – support for the capacity of roads and related services to continue to handle freight in the face of changing fuel sources for vehicles, as well as the potential for rail connections to export ports,
- Digital – significant upgrades are required, especially wireless delivery options in regional areas, in order to meet likely future needs.

SAWIA believes that all infrastructure planning should be targeted towards improving resilience through assessment of risks posed by climate change, with more extreme events occurring on top of an increasingly hotter and drier climate in South Australia. This may also require a broader support for capacity building across the entire economy for better skills in adaptation planning.

## **THE SOUTH AUSTRALIAN WINE INDUSTRY ASSOCIATION INCORPORATED**

SAWIA is an industry employer association representing the interests of wine grape growers and wine producers throughout the state of South Australia.

SAWIA is a not for profit incorporated association, funded by voluntary member subscriptions, grants and fee for service activities, whose mission is to provide leadership, advice and support to South Australian grape and wine industry businesses assisting them to prosper within a dynamic, diverse industry.

SAWIA membership represents approximately 96% of the grapes crushed in South Australia and about 40% of the land under viticulture. Each major wine region within South Australia is represented on the board governing our activities.

SAWIA has a strong track record as an industry leader and innovator in many areas. SAWIA pro-actively represents members and the greater wine industry with government and related agencies in a wide variety of aspects of business in the wine sector.

## **SUBMISSION**

### **About the South Australian wine industry**

The South Australian wine industry is worth about \$2.15 billion<sup>1</sup> to the state's economy.

South Australia has 18 distinctly named wine regions with at least three having international recognition.

South Australia has 75,488 hectares under wine grapes, representing around 55% of Australia's vineyards with 74% red wine grape varieties and 26% white varieties.

The total wine grape crush in 2019 in South Australia was 768,863 tonnes, 50% of Australia's crush. For South Australia, this was an increase of 3% when compared with the 2018 crush and was 5% above the 10-year average.

South Australian wine regions are responsible for producing about 550 million litres of wine – about 43% of Australia's wine production.

South Australia is a premium wine producer using viticultural practices leading to higher quality and lower than average yields.

In the twelve months to June 2019, South Australia exported 387 million litres for a value of \$1.796B (about 62% of Australia's total). South Australia's major export markets are China, USA, UK and Canada which also happen to be Australia's major markets.

South Australia exports about 52% in bottled format, comprising 87% of the value.

Wine is currently South Australia's largest single export sector.

South Australian wine businesses export to over 100 countries.

Domestically, Australians drink \$740m worth of South Australian wine per annum.

In South Australia there are approximately 695 wineries<sup>2</sup> (593 processing facilities, 342 cellar doors) and 3,296 lands title vineyard owners<sup>3</sup> who directly employ 8,440 persons. Taking into account other occupations, the numbers employed in connection with the wine industry would add many thousands of job occupations.

### **SAWIA's response to the Discussion Paper**

SAWIA is pleased to provide a submission to Infrastructure SA in response to the Discussion Paper on developing the 20-Year State Infrastructure Strategy. In developing this response, SAWIA has engaged with its members and this submission represents the broad views that they have expressed. We provide below some general comments followed by responses to some of the specific questions posed in the Discussion Paper.

### **General comments**

The wine sector in South Australia is highly regional-based and makes a significant contribution to regional communities and economies. We note that the Discussion Paper

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<sup>1</sup> PIRSA Primary Industries Scorecard 2017-18

<sup>2</sup> The Australian and New Zealand Wine Industry Directory 2019

<sup>3</sup> Vinehealth Australia 2019 SA Winegrape Crush Survey, page 3

identifies the significant contribution to exports (i.e. “60-70%”) made by the non-metropolitan areas<sup>4</sup>.

Along with other sectors in South Australia, the wine industry is expected to continue to grow and it will be necessary for the infrastructure that supports it to also grow in capacity. Whilst this includes the provision for delivery of utilities and transportation services, this must also be supported more broadly by relevant planning and development regulations to allow for the necessary growth.

The wine sector encompasses a fully integrated value chain from agricultural production through to retail sales. Throughout this value chain, it is reliant on a range of resources some of which are directly provided through infrastructure or indirectly impacted by it.

Firstly, there is a fundamental requirement for environmental and climatic conditions to favour viable wine grape production, along with a need for healthy soils and water resources, that must always be protected from degradation by any infrastructure developments.

In producing wine grapes and wine there is a need for reliable provision of suitable and affordable water, energy and effective digital services.

Water is seen by many in the wine sector as the most important resource that needs adequate infrastructure planning and development in order to provide it reliably and affordably. Whilst there must be sufficient quantity available, the quality must also be suitable for use in vineyards and wineries, for example not too high in salinity. Storage of water remains a critical aspect of meeting the fluctuating demand-supply balance and there is a strong role for infrastructure planning to assist. Infrastructure planning should also include providing means for increasing the re-use of wastewater and stormwater for all uses including residential, as well as industrial process use and agricultural production.

Given the current rate of advances in technology, our members envision a future where automation and digital connectivity will be essential to their operations, and there is a strong view that the reliability and speed of current digital services in the regions are insufficient. Digital infrastructure will need to be sufficient to support a range of new services such as increased use of artificial intelligence in production and logistics as well as data management and storage.

Resilience in energy infrastructure to maintain reliable supply is seen as critical to future operations in the light of the expected increasing frequency of extreme climatic events as a result of climate change. South Australia has already experienced the impact of a complete ‘system black’ caused by extreme weather, and future infrastructure planning must protect against such a recurrence.

For many wine businesses, the cost of electricity is a significant concern and many are investing in their own generation (e.g. solar photovoltaics, diesel generators) to help meet their own needs and reduce costs. Increasingly, wine businesses are also investing in energy storage, again to reduce costs but also to improve reliability of supply. The impact and value that these investments in distributed energy resources contribute to power infrastructure should be recognised and incentivised as appropriate within the State’s infrastructure strategy.

Transport and distribution infrastructure is also fundamental to the wine sector’s value chain and its ability to effectively deliver products to domestic and global markets. Consequently,

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<sup>4</sup> 20-Year State Infrastructure Strategy Discussion Paper, Infrastructure SA, 2019, page 8

this has been a significant issue of concern for SAWIA's members encompassing the following:

- Roads in the regions – there is concern that many essential regional freight roads are insufficient (for example in terms of width and passing lane length) to handle current freight trucks and road trains, let alone be capable of supporting the longer road trains likely to appear in the future. Such limitations will exacerbate any 'first-mile last miles' Furthermore, in some regions (e.g. Barossa) there is increasing congestion on these same roads from commuters from outside the region, creating potentially dangerous situations.
- Electric vehicles – many of our members consider that it is highly likely that electric freight vehicles, perhaps of increasing road-train length, will become commonplace starting over the next few years. Adequate recharging infrastructure as well as rest stations will be required on major freight routes.
- Rail freight – in some cases where a region has a very high proportion of export through sea ports, there is a view that rail infrastructure should be given greater consideration for its potential cost-effectiveness and efficiency.

#### What infrastructure investment would make the biggest impact to unlocking economic growth in South Australia in the next 0-5, 5-10 and 10-20 years?

Many wine businesses consider that the cost of power is a major handbrake on investment growth in South Australia. Since almost half of the cost of electricity is in distribution network costs, improvement in infrastructure costs could have a significant and material impact in supporting growth for the future.

Access to adequate and affordable water of appropriate quality for irrigating grapevines also remains a significant concern for wine businesses. Whilst some issues around supply extend beyond the border (e.g. the Murray Darling Basin Plan), there may still be opportunities for South Australia to develop infrastructure to support more effective supply.

#### How can South Australia best prepare its infrastructure to be able to adapt to and embrace future technological disruptions?

Planning and developing adequate and affordable digital services are seen to be critical for a range of areas along the wine sector value chain. Many of our members consider that the current systems do not adequately serve the regions in which they operate, and identify a need for much better wireless technology that goes well beyond what the NBN is currently providing.

#### How should infrastructure be planned in increasingly urban environments with ageing populations?

Many of our members are concerned about urban sprawl, especially in the areas that are just outside the traditional Greater Adelaide metropolitan region. These are also areas of high agricultural value and further encroachment should be prevented by providing robust infrastructure for high density population within the existing urban boundaries.

#### How can infrastructure provide resilience against bushfires, drought, flooding, sea level rises and the like?

As identified earlier, infrastructure should be planned to provide resilience from the impacts of climate change, especially extreme events. In the case of power, this could include undergrounding of supply lines, or policy to encourage ongoing investment in energy storage and regional micro-grids.

Whilst it is recognised that businesses need to make their own plans regarding the development of private infrastructure in order to adapt to climate change, it is, however, considered that there is still an opportunity for government to support capacity building in adaptation planning. This could allow wine businesses to better understand the options available to them rather than considering relocation or cessation.

For example, in vineyards, which grape varieties are better suited to a drier and hotter climate with more extreme events, and how do wineries maintain their markets for their product mix in the face of changing consumer preference that can also be driven in part by climate change.

#### What opportunities are there to better leverage private investment to drive public infrastructure development?

Where private companies are seeking to upgrade their own infrastructure within the 'factory gate' for say increased production to meet export demand growth, there can often be a role for government to develop public infrastructure, such as roads, to support such growth. This is particularly the case when the private development provides broader benefits to the regional community as well as the State economy.

#### What services are we likely to use in the future that will require supporting digital infrastructure?

There are numerous services that the wine sector is likely to use in the future that will require effective digital services infrastructure. These include: logistics scheduling, smart vineyard and winery technologies, remote monitoring and control of production processes, on-line shopfronts, communications with global customers, workforce management, data management and storage, transport automation, electric vehicle (including freight) power docking stations, electricity micro-grids, and energy demand response etc.

There is a strong view from wine businesses that the technology will need to be wireless in order to meet their needs in the vineyards and in wineries.

#### How will technology change the transport system in South Australia?

Energy technology developments in battery storage and alternative energy sources are expected to change the transport system, including freight services for the wine sector. Road freight trucks may become larger, and the energy source used to drive them may also change, to include electric and then later possibly hydrogen fuel. Furthermore, artificial intelligence and machine learning developments are expected to provide opportunities for improvements in logistics and scheduling, driverless-options, and expanded retail delivery options (e.g. drones).

#### What options are there to establish a reliable, affordable, decarbonised energy system in South Australia?

There is a global move to decarbonise energy production and it is likely that the same will continue to occur in South Australia. Already there is significant infrastructure on solar power generation and wind power, along with grid-scale batteries and community virtual power plants. Clearly, alternative fuel sources for producing decarbonised electricity require consideration for their infrastructure needs, and it is understood some of this is underway, including hydrogen fuel. It would appear that electricity grids will need to be made robust to the potential impacts caused by high demand loads that might result from increasing electrification of transport systems.

**End of submission**