

11th February 2020

Via Email : enquiries@infrastructurevictoria.com.au

To whom it may concern,

RE: Infrastructure Priorities for the Regions

Thank you for the opportunity to provide comment on Infrastructure Priorities for the Regions.

The Central Victorian Greenhouse Alliance (CVGA) is a formal network of 13 regional and rural councils spread across northern and central Victoria including the cities and shires of Ararat, Ballarat, Buloke, Central Goldfields, Greater Bendigo, Loddon, Gannawarra, Hepburn, Macedon Ranges, Mildura, Mount Alexander, Pyrenees and Swan Hill. The CVGA has existed since 2000, working with its members on climate change projects, advocacy and information sharing.

The [Central Victorian Greenhouse Alliance \(CVGA\)](#) is one of seven Victorian Greenhouse Alliances, formal partnerships of local governments driving climate change action across Victoria's municipalities. Greenhouse Alliances work across our networks, communities and partners to deliver regional mitigation and adaptation programs. This includes the implementation of joint initiatives that provide economies of scale and enable projects typically beyond the reach of individual councils. Our project work is complemented by targeted advocacy, capacity building activities and regional partnerships.

The CVGA region covers three of the regions identified for analysis by Infrastructure Victoria; Loddon Campaspe, Mallee, and Central Highlands. Our submission relates to these three regions together and where necessary separates regional specific issues. As our remit is climate change, our focus is on the comparative advantages and disadvantages these regions face in responding to climate change.

We have identified the following topics for further consideration across the 3 regional reports:

1. Renewable energy

A significant industry across all 3 regions is the rapid growth of renewable energy. In the Central Highlands this growth is dominated by wind energy and for the Mallee and Loddon Campaspe this is large scale solar. This is likely to be a much higher contributor to the regions economies than the methodology in the reports have identified. The report takes the view that "A revealed comparative advantage index (CAI) assumes that the historical

economic performance of a region can serve as a good indicator of the industries which have a comparative advantage in that region.” This obviously does not account for the very rapid rate of renewable energy development in the last 5 years particularly in the Mallee. Nor is it a good basis to consider climate change and how that will impact on future economic activity in the region and the need to transition our energy system.

The CVGA has undertaken a regional renewable energy roadmap¹ for the Loddon Mallee region (covering Mallee and Loddon Campaspe) and has identified the following key points:

- The Mallee and Loddon Campaspe regions have a world class solar resource that could deliver all of the Victorian Governments Renewable Energy Target if all current pipeline projects were to be developed.
- There is more than 4000MW of large scale solar in planning stages for development for the region.
- Even if half of this were to be developed, the supply chain and local economic benefits would be in the order of \$1 billion to the region.
- Social license in these regions are strongly supportive of a renewable energy future unlike other parts of the state where the tension between land uses has been more of an issue.
- There are a range of energy opportunities beyond large scale solar for smaller towns and communities that can seek to maximise local energy supplies for greater reliability, security and resilience.
- Biomass for energy is an untapped resource across all 3 regions and likely to grow into a significant industry over the next 10 years.

The most critical infrastructure needs for the region in order to realise these benefits is the upgrade of the transmission infrastructure. This is noted in the Infrastructure Victoria report for the Mallee, but we consider this to be a very high priority across all LGAs in the 3 regions, not just Mildura. In particular it is critical that investment in upgrading the grid in NW Victoria is brought forward. Similarly, support for the upgrades from Stawell to Melbourne to utilise the full capacity of wind farm developments in Pyrenees, Ararat and Northern Grampian shires.

Recommendations:

- **Address the current gap in the reports about the role renewable energy will play in the region over the next 30 years. This should recognise renewable energy is an opportunity and infrastructure priority for all LGAs in the region for both solar (Loddon Campaspe, Mallee) and wind (central highlands)**
- **Identify the critical need for bringing forward investment in the Keranglink (renamed VNI West) and supporting upgrades from Stawell to Melbourne.**

¹ The Loddon Mallee Renewable Energy Roadmap is funded by DELWP and is currently confidential until the Victorian Government approves its release. The CVGA could provide a copy upon request for the purposes of this review.

2. Agriculture and climate change

We note that the reports identify “all agricultural industries will be exposed to the potential impacts of climate change”. We consider this point to be critical to the consideration of future infrastructure needs for the region as it can not assume that past economic advantages will continue in the region without substantial shifts in the types of agriculture in the region.

There are several important pieces of academic and industry work being undertaken about the future of climate change across the 3 regions. For example, several years ago [the Future Landscapes](#) project examined how different agricultural commodities will be affected by climate change. For example it showed how hotter drier temperatures will impact the central highlands wine region and the need for careful planning. Similarly as we are seeing play out already climate change is having a direct impact on the dairy industry.

Recommendation:

- **Integrate and analyse how existing climate change and agriculture research supports or conflicts against identified infrastructure priorities**
- **Ensure that infrastructure priorities are robust against multiple climate change scenarios and can be justified on a least regrets basis.**

3. Transport Infrastructure

- **EV Charging and Hydrogen Refuelling**

As this is a 30 year strategy there is a need to consider how transport will rapidly change over that time as identified in Infrastructure Victoria's [own study](#) in 2018. As such infrastructure needs include electric charging points across the region including potentially hydrogen refuelling stations for heavy vehicle use as well as the role of autonomous vehicles.

The CVGA is currently leading a project across 55 local governments exploring investment needs in public electric vehicle charging infrastructure. The NW region of Victoria is a significant gap in the current roll out of ultra fast chargers by the Victorian government with the key route from Bendigo to Mildura having very little to no coverage for electric vehicle chargers.

Our project is partnering with DELWP and is called “[Charging the Regions](#)”. The project has identified the need for State Government and Local Governments to work together to roll out a dense network of charging points as well as facilitate private investment.

In addition, as more and more heavy vehicles move towards electrification or hydrogen fuel cell there will be an increased demand for refuelling stations to ensure the regions are not disadvantaged.

- **Climate change impacts on road infrastructure**

Climate change is already accelerating the degradation of roads through hotter drier conditions and more extreme weather events. Also road construction is a significant contributor to national greenhouse gas emissions and there is an opportunity to shift to more low carbon road materials. This will require careful planning and trials of new road materials that are both low emissions and more resilient to the climate projections for the 3 regions.

Recommendation:

- **Identify the need for a dense network of public EV charging infrastructure and key hydrogen refuelling in key locations like Mildura, Bendigo, Ballarat and Swan Hill.**
- **Ensure road infrastructure is planning for climate change projections and roll out of lower emissions road bases.**

4. Green Infrastructure and links to socio-economic disadvantage

One of the key challenges for the region is green infrastructure as the cities and towns face hotter and drier conditions. It refers to designed and natural vegetation found in urban areas, including public parks, recreation areas, remnant vegetation, residential gardens, street trees, community gardens, as well as innovative and emerging new urban greening technologies such as rain gardens, green roofs and green walls.

The CVGA councils are working together on the Cool It project to ensure green infrastructure can improve community health and wellbeing outcomes throughout the region. As part of this project we are developing a street tree database that will analyse which species will be more resilient to future climate projections.

A critical challenge across the region is ensuring our communities can stay safe, healthy and resilient despite climate impacts such as more extreme heatwaves. Councils have an important role to play in reducing this vulnerability by investing in street trees, irrigated parklands and shadeways etc. Despite councils across the region doing what they can with limited budgets and investing in urban forests and street trees additional funding will ensure that these initiatives can be expanded and coordinated across the region. A matched fund for local governments to access to support Green Infrastructure in the next 3 years would significantly improve the resilience of towns and cities going forward.

Recommendation:

- **Include green infrastructure in the consideration of infrastructure priorities**
- **Recognise the link between regions with socio-economic disadvantages and lack of green infrastructure**
- **Identify the need for greater levels of co funding to support provision of green infrastructure across the region**

5. Built infrastructure and climate change

Under climate change, there is increased potential damage to facilities across the region, leading to increased maintenance costs, reduced asset lifespan, and reduced service delivery capacity. Ensuring any new builds particularly major projects assess vulnerability to climate change is crucial. Existing buildings and other assets should be prioritised for vulnerability assessments and required upgrades particularly where they are critical assets. All major projects being designed for the region need to aim for the highest sustainability standards including zero carbon and be as resilient as possible for future climate projections.

Recommendation

- **Ensure any new assets are built to withstand future climate projections for the regions and meet highest sustainability standards**
- **Prioritise existing critical assets for vulnerability assessments and required upgrades**

Thank you for the opportunity to make a submission to this update of Infrastructure Victoria's 30 year strategy. Please do not hesitate to contact me if you require further information or would like to discuss any of these issues. We look forward to your response.

Yours sincerely,



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