

Better Regulatory Practice
Department of Water Environmental Regulation
Joondalup WA 6919

Feedback on the WA Climate Change Issues Paper

At the outset, Ramboll would like to congratulate the Government of Western Australia for initiating the climate change issues paper.

Date 29/11/2019

Ramboll's feedback on some of the key areas identified are detailed in the enclosed attachment. These comments are provided on the basis of Ramboll's global experience in providing advice to the public and private sectors on energy transition and our track record in successfully implementing clean energy technologies. We believe that a strong policy direction coupled with providing the appropriate resources and incentives will help WA transition into a low carbon economy. Further, we recommend that a cost benefit analysis be undertaken to identify the priority areas on the climate mitigation and climate adaptation to identify priority actions.

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If you have any questions regarding our comments, please don't hesitate to contact the undersigned.

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Yours sincerely



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Transforming energy generation

- Ramboll supports the use of renewable energy generation and renewable hydrogen as a strategy for transition into a low carbon economy.
- Opportunities for integrated solar battery microgrids should be pursued. Western Australia's sprawling suburbia presents a unique opportunity for trialling microgrids. This could be of interest in regional areas where transmission costs are significantly high.
- Ramboll is of the opinion that imposing higher pro-rata costs on the power generation sector doesn't help in addressing the problem at hand. Rather incentives for uptake of clean energy generation could be considered.

Industry Innovation and Liveable towns and cities

- Ramboll supports the use of less energy intensive alternatives such as LNG (compared to black coal)
- Large regional infrastructure projects (subject to a project value threshold) should be required to achieve an agreed Infrastructure Sustainability Rating.
- Appropriate incentives should be brought in to support the implementation of policy surrounding the uptake of sustainable alternatives. An example is the Sustainability Advantage Program in New South Wales which provides financial incentives to enable businesses undertake energy efficiency upgrades.
- The World Green Building Council has identified that the top drivers for sustainable buildings include client demand and environmental regulation (World Green Building Trends 2018, Smart Market Report). Therefore, these legislative instruments should be considered to increase the uptake of sustainable buildings.

Future mobility

- Barriers for purchasing low emission vehicles should be addressed. These include:
 - Price;
 - Lack of knowledge; and
 - Appropriate infrastructure (charging stations).
- Tax and/or registration fee incentives should be provided on e-vehicles or low emission vehicles in line with polluter pays principles.
- With an increasing emission trend related to passenger vehicle emissions, fuel efficiency standards that limit carbon should be implemented in Australia.
- To encourage the use of public transport a combination of the following options must be considered:
 - Investment into accessible bicycle and pedestrian infrastructure;
 - Conscious urban development considering travel by public transport, bike or foot; and
 - Additional options to incentivise the use of public transport should be considered. These could include discounts for kilometres travelled on public transport.

Waste Reduction

- It is recommended that the State create a circular economy roadmap.
- Emphasis should be placed on promoting circular economy in the market. Options that could be considered include:
 - Legislative instruments should be brought in to require material reuse/recycling. For example, the European Union has a waste directive with a goal of diverting a minimum 70% construction waste into material reuse/ recycling (excludes waste to energy);
 - Increased emphasis on producer responsibility for recycling. This may be applicable for electrical and electronic items, batteries etc; and
 - Introduce a tiered step-down target for waste that ends up in landfill.
- Ramboll agrees the waste hierarchy is the preferred approach. However, opportunities of recovering energy from waste should be considered for waste that is currently landfilled.

- Ramboll has been heavily involved in helping members of the European Union in their transition towards a circular economy. Based on our expertise:
 - Circular economy in the food, mobility and built environment sectors is estimated to generate a 48% reduction in GHG by 2030 and 83% by 2050 (compared to 2012) levels in EU; and
 - The European Commission's impact assessment on a legislative proposal on waste found that increased recycling/preparing for reuse targets for municipal and packaging wastes in combination with reduced landfill could result in the creation of 178,000 new direct jobs by 2030.