

ENVIRONMENTAL PROTECTION AUTHORITY SUBMISSION TO THE CLIMATE CHANGE ISSUES PAPER

27 November 2019

Background

The Western Australian Environmental Protection Authority (EPA) has statutory obligations to use its best endeavours to protect the environment. The EPA's role is to advise the State Government, and there is a long history of EPA advice on climate-related matters. In 2017, the EPA noted the changing Commonwealth regulatory environment, the building pressures on the environment and the increasingly serious forecasts of emissions and impacts, and called upon the Government for a fresh consideration of a state policy.

The EPA welcomes the State Government's commitment to a new state climate policy. In doing so, we also agree with the Issues Paper's premise on why such a policy is needed. There is no hiding from the fact that greenhouse gas (GHG) emissions have been rising, and that the State has a responsibility to act. A state policy will assist in ensuring our actions are appropriate, prioritised, coordinated and effective.

The EPA also notes and welcomes the State Greenhouse Gas Emissions Policy for Major Projects announced in August. This is an essential plank in a broader climate policy and is significant in two ways. First, it establishes the State's unambiguous obligation and commitment toward reducing emissions – reinforcing Australia's international commitments, but not entirely relying upon or waiting for Commonwealth actions or regulation. Secondly, the State Policy commits to the 2050 net-zero emission target aimed at keeping global warming to well below two degrees Celsius, and in doing so specifies a number of mitigation expectations on new large development proposals to help achieve that outcome. The latter is a consideration for the EPA in providing advice on such proposals.

The Issues Paper canvasses a number of potential dimensions to a new State Climate Policy. This submission focuses on a few aspects which the EPA sees as fundamental consideration for the Government.

Forecasting and informing our challenges

Policy-makers continue to benefit from the global scientific community's efforts to understand and forecast the changes to the world's climate arising from anthropogenic GHG emissions to the atmosphere, and the impacts of these changes. There are ongoing challenges, however, in translating this developing understanding from the global scale to a more local level such as Western Australia. While WA's local science community maintains the capabilities required to document what is *now* happening to our environment, WA has largely lost the collective capability to *forecast* climate at temporal and spatial scales relevant to policy and investment.

In the recent past, WA enjoyed a significant collaboration (the Indian Ocean Climate Initiative), supported by the State, the Commonwealth and our universities. IOCI delivered significant insights into the causes and direction of WA's climate, providing a link between global climate modelling and local understanding. While research institutions based in WA have maintained some limited capability in this regard, it is greatly diminished. The potential future benefits of restoring and reinvigorating coordinated capability in this regard are significant to a number of sectors including but particularly agriculture and fisheries, water and land use planning, and public health and safety.

Mitigating emissions

The State's ambitions to achieve net-zero GHG emissions by 2050 establishes a clear foundation for the State's policy. The Issues Paper canvasses opportunities to mitigate emissions from a number of sectors; it is beyond the scope of this submission to consider this breadth of opportunities. Instead, the EPA offer's thoughts on five fundamental aspects of mitigation where the State can take a lead or support: transparency, reporting, innovation, developing regulatory expertise and carbon offsetting.

Transparency

The EPA recognises the obligation and value of transparency; the significance of our assessments and advice to government is underpinned by its public nature. We note that a key feature of the State Greenhouse Gas Emissions Policy for Major Projects is public reporting of the mitigation efforts and achievements from developments. There is immense and ongoing value in making a matter of public record the commitments and achievements of industry in establishing better approaches and technologies to avoid, reduce and offset GHG emissions. Making this information widely available can both challenge and inspire businesses and the wider community to accelerate the adoption of leading practice as well as aspire to further improvements.

Reporting

By extension, a state climate policy might support a more comprehensive and regular accounting and reporting of what is being collectively achieved by the WA community and all sectors of the WA economy, against the aspiration of reducing our net emissions to zero by 2050. People understand and respond to targets, witness previous campaigns toward water-saving or recycling in a number of jurisdictions. Tracking our progress should be a key plank in the policy. The development of a climate change framework and/or action plan(s), to support implementation of the new policy, outlining targets and how they are proposed to be achieved is recommended, such as the framework developed by the Victoria State Government – Department of Environment, Land, Water and Planning.

Innovation

The Issues Paper identifies a number of existing initiatives already supported by the State Government that promote industry innovation mitigating climate change. The State Greenhouse Gas Emissions Policy for Major Projects also invites and

accommodates innovation as part of the commitments expected from proponents in helping to meet reduction targets. The scale and urgency in meeting technical challenges implicit in the State's emissions target cannot be overstated. The State has a lead role to play in further fostering and supporting effective collaborations among universities, research agencies and industry. The State can also support the celebration and promotion of their achievements.

It can be argued that regulatory requirements on GHG mitigation have stimulated industry technological innovation and adoption, not stifled it. A significant example of this is the requirement for the Gorgon project on Barrow Island to geosequester emissions, resulting in the construction and operation of "the largest CO₂ Injection Project is of its kind in the world, and the largest greenhouse gas abatement project undertaken by industry." There are many other innovations in emissions reductions incorporated into WA developments driven not only by cost-savings but also compliance with government and public expectations to reduce emissions.

Developing regulatory expertise

A climate policy should also support the capability of regulators to stay abreast of emerging international best practice in GHG mitigation. Effective capability in this regard is currently limited, and needs to extend into areas of significant technical complexity (e.g., fugitive emissions reduction, technologies to reduce flaring, micro-grid innovations, carbon accounting, etc). Without such regulator competency and currency, it becomes difficult for the Government to assess or consider "best practice" or the plausibility of commitments to achieve reduction targets associated with a specific development proposal.

Carbon offsetting

Offsetting the emissions remaining after all reasonable and practicable efforts at avoidance and reduction remains a complex and contentious aspect of any climate policy. The State has a history of requiring some degree of offsetting on major proposals and it remains a feature of the State Emissions Policy, including the potential for such offsets to be acquired outside of WA or even Australia.

Carbon offsets projects offer clear opportunities not only to help achieve emission reduction targets, but also to create employment and income through the businesses that provide them as well as associated environment benefits. Ideally, these benefits would be captured in WA. The EPA encourages the initiatives of the State Government in this regard and suggests that the state climate policy promote and reinforce these initiatives.

Adapting to Climate Change

The Issues Paper recognises that regardless of global efforts to reduce emissions, there will be ongoing and even accelerating impacts. It is appropriate and essential that a state climate policy has a significant focus on adaptation. Without commenting in detail on the possibilities for each sector discussed in the Issues Paper, the EPA offers views on a few key aspects.

Two of the sectors identified as at significant climate risk in this State, water and agriculture, have benefited from long-term industry and government leadership in their anticipation, innovation and adoption of technologies, infrastructure and practices to respond to our changing climate. In this regard and for these sectors, WA has led other jurisdictions and the challenge for the state climate policy is to help these sectors remain at the forefront.

As articulated above under *Forecasting and informing our challenges*, improving the resolution of climate forecasting would be invaluable for strengthening adaptation capacity. Acquiring accurate information on the projected impacts from climate change will improve security for all sectors including the water and primary industry sectors.

As our climate continues to change, so will our landscape and its ecosystems, and the benefits and hazards it presents to our community. These changes are likely to be (in some cases, already are) profound, and will impact the availability or sustainability of resources such as water, fisheries and forestry. Two examples are immediate and challenging. The ecosystems of our coastal waters are already showing significant changes due to warming waters (loss of seagrass and kelp, coral bleaching, mass deaths of shellfish, shifting fish distributions). Our southwest forests are changing as a result of a drying climate, with corresponding loss of streamflow and aquatic habitat, and an increased fire hazard to South-west communities.

Most of these changes are happening at a scale that limits our ability to effectively mitigate impacts or to ensure the protection of biodiversity. However, there may be places where interventions could be effective and justified. There may also be environments which we may have to accept will change with a resulting loss of natural heritage. Our choices to bear the expense of interventions, or bear the loss of biodiversity, will be difficult to make but they will be made either consciously or through inaction. These choices present scientific, ethical and practical challenges not anticipated by our historic conservation or environmental statutes or traditions. A state climate policy would ideally provide a framework or forum to acknowledge and address these challenges, or at least anticipate the need to entertain difficult conversations with the community on how and when we can facilitate ecosystem adaptation.

Conclusion

The EPA strongly supports the development of a state climate policy directed at both emissions mitigation as well as adaptation. The EPA also looks forward to continuing to play a positive role in advising the State Government and informing the WA public on the challenges and opportunities presented by climate change and the protection of our environment, and contributing to the development of the necessary roadmap and associated priorities.