

NSW Environment Protection Authority
Email: climatechange.review@epa.nsw.gov.au
2 November 2022

Re: Public Consultation on the draft Climate Change Policy and draft Action Plan 2022-2025

Engineers Australia is the peak body for Australia's engineering profession with jurisdictional authority for engineering professional standards as Australia's signatory to the International Engineering Alliance. We have been operational for over 101 years and have over 119,000 members representing all engineering disciplines and operating in all of Australia's economic sectors.

Engineers Australia acknowledges and respects the regulatory remit of the NSW EPA; and appreciates this opportunity to provide views on the NSW Environmental Protection Agency's (EPA) draft Climate Change Policy (Policy) and draft Action Plan 2022-2025 (Plan).

In considering this submission, Engineers Australia asks NSW EPA to note its very large and broad range of members. The submission communicates a balance of views expressed by a cohort of individual members specifically from its Sydney Division and its Sustainable Engineering Society (SENG) that have voluntarily engaged in internal consultations on this matter.

Given the high-level strategic nature of the documents, Engineers Australia is pleased to provide the following general comments in response to the three questions posed in the NSW EPA's online survey. In doing so, Engineers Australia also hopes that this consultation process is the beginning of many opportunities to engage further in the EPA's climate regulatory remit.

Q1. Do you have any general comments on the EPA's draft Climate Change Policy and Action Plan?

General comments

Engineers Australia is not unsupportive of the EPA's strategic intent or Plan, but it does carry concern that the Policy document does not identify or explain what policy or regulatory failures are still needing to be addressed and nor does the Plan document identify what will actually be addressed.

It would also be appropriate for the EPA to acknowledge from an equity perspective the differentiated nature of NSW's economy, as well as recognition that often the legal burden of regulatory compliance is different to that of the economic incidence of where the associated costs are borne (generally passed to consumers where possible). And for the fairness purposes, there may be an additional need for the NSW Government to intervene with additional social policy interventions to complement mandated requirements.

For some of the substantive 'new' actions in the Plan, such as establishing sectoral emissions reduction targets (and/or any future conditions on the management of scope 3 emissions although not stipulated), it would also be useful if the documents articulated the EPA's legal authority to implement its Plan.

In this context, it is critically important that given its legislative remit, the EPA should avoid any perception of regulatory over-reach in helping the NSW Government achieve its unlegislated policy ambitions noting that the current emissions reduction targets of a 50 per cent reduction in emissions on 2005 levels by 2030 and net zero emissions by 2050 are represented in policy only.

The updated NSW Government Net Zero Plan describes the policy as a "strategy" and its net zero emissions ambition is expressed as an "emissions reduction objective"; this seems to suggest that it is more aspiration than mandate and as such is vulnerable to future amendments according to prevailing circumstances (political or otherwise).

Perhaps this might be avoided if NSW's interim and long-term climate targets were also enshrined in legislation such as the recently passed Commonwealth emissions reduction targets of 43 per cent reduction on 2005 by 2030 and net zero emissions by 2050.

And even if the Commonwealth's legislation bestows powers to all of Australia's EPAs in some manner (Engineers Australia is not commenting whether it does or does not), NSW's more ambitious 2030 target still remains misaligned.

EPA Climate Policy

Engineers Australia considers it appropriate that the EPA strongly aligns with and aims to complement and support the policy ambitions of the NSW Government as expressed through the various Cabinet approved government documents as cited in the Policy. The EPA should recognise the need for broader social policy considerations than just emissions reduction outcomes, including the fostering of a just transition of NSW's workforce (especially in regional and resource rich areas), coupled with an ability to alleviate any regressive impacts of regulatory compliance (if there are any) for the most vulnerable of our community.

This also includes the EPA supporting the NSW's 2019 stated policy ambitions for a more circular economy; which is clearly inclusive of but not limited to managing the economy and environment from just a climate change lens.

It also welcomes the EPA's intent to give effect to its 3-pillar strategy (inform, mitigate, adapt) by working closely with its regulated communities (licensees), councils and government agencies, other jurisdictions, first nations peoples, and younger civil society (among others).

It is clear that many of NSW Government policy strategies to decouple emissions growth from economic growth are of a highly technical nature, including hydrogen industry, coal innovations, EVs, electricity roadmap, net zero emissions industry and innovations, and waste and sustainable materials.

In this regard, Engineers Australia reaffirms the importance of soliciting the advice of the engineering profession, as is also explicitly identified in the Plan, and especially on the technical and economic viability and pragmatic emissions reduction and adaptation pathways that can support the EPA's regulatory remit, including for example limiting allowable levels of emissions (carbon constraints) for projects and sectors.

EPA Climate Action Plan

Engineers Australia considers this document the most impactful in its signalling to fundamentally impose new approval requirements and constraints on projects and sectors. It strongly welcomes and supports the Plan's explicit intention to consult the expert advice of the NSW Chief Scientist and Engineer on all related matters. And indeed, the EPA is encouraged to work closely with Australia's engineering profession of competent and informed applied scientists.

There is little doubt that the *NSW Protection of the Environment Administration Act 1991 No 60* bestows on the EPA substantial powers to prevent the degradation of the environment (specifically including "air" and "any layer of the atmosphere") by (among others):

- Adopting minimum environmental standards prescribed by complementary Commonwealth and State legislation and advising the Government to prescribe more stringent standards where appropriate
- Setting mandatory targets for environmental improvement

And while this is somewhat articulated in the Policy document, there is little guidance provided or indeed within the legislation itself on how the EPA might give effect to these 'means' in a manner that can complement the NSW Government's overarching climate change objectives including "to maximise the economic, social and environmental wellbeing of NSW in the context of a changing climate and current and emerging international and national policy settings and actions to address climate change."

Some other observations follow:

- Setting the scene/Our climate change policy (page 6, paragraph 1): the impacts of climate change are not confined to just NSW, and so the EPA's policy could better detail how its strategic Plan fits within and interacts with the broader suite of national policies on climate change and/or how it proposes to lead national policy settings on climate change; perhaps the EPA could further consider linkages/assistance
- Setting the scene/Objectives (page 6, 3rd bullet point): the paragraph seems to infer that the economy is priority to the other objectives; EPA might reconsider the implications of the order of objectives as listed
- Setting the scene/Objectives (page 6, 8th bullet point): there seems to be a typographical error where "certainly" is used but suggest it should be "certainty"

- Setting the scene/Implementation (page 7, *How we'll report and review*): Would be useful to know when the annual report is expected to be publicly published?
- Setting the scene/Implementation (page 7, *We'll engage with stakeholders*): While listing an exhaustive list of stakeholders is not practical, it should be recognised that along with young people, senior Australians also have extensive and valuable views and experiences to contribute to EPA consultations
- Reading our action plan (page 8, *Our action plan is structured around the three key pillars of the policy*): EPA should also consider adding carbon sequestration or increasing the capacity of ecosystems (including soils) to capture carbon.

Q2. Are there any other initiatives or actions that should be included in the plan? If yes, what are the initiatives or action and why?

Both draft documents could explore in more detail what the expected or desired impact of these measures are and when those impacts might be expected to be realised especially in regard to the new measures proposed.

For example, how does the EPA plan to assist liable entities (businesses, facilities, projects) to reasonably manage their associated uncertainties and carbon risks, challenges and/or opportunities as strongly signalled in these documents. There is a need for the EPA's Plan in particular to avoid any unintended or perverse consequences in the consultation and regulatory development phases through the stagnating of private sector economic decision-making, and especially in regard to current and future critical 'clean' investments in greenfield and brownfield infrastructures.

It is also unclear as to whether the EPA intends to make any of its regulatory conditioning retrospective which could unintentionally discriminate and or disadvantage legacy asset owners and/or new entrants. Also, whether by imposing sectoral emissions reduction targets, the EPA could generate legal interest in 'just' compensation claims for so-called stranded assets of otherwise economically productive infrastructures.

The EPA could also better outline how it intends to assist the necessary enhancements to institutional compliance capacity, especially in regard to best-practice disclosures.

Compliance with EPA's conditions and requirements is a critically important element that is not discussed in the draft documents. In regard to best-practices for example, what might be the EPA's views on adopting related standards disclosures such as the Task Force on Climate-related Financial Disclosures (TCFD), Task Force on Nature-related Financial Disclosures (TNFD), the International Sustainability Standards Board (ISSB), the work of the International Standards Organisation (via its London Declaration and Our 2050 World initiative) and many others (i.e., Global ESG Benchmark for Real Assets).

This will be especially important to support the EPA's requirements as signalled in the Plan document for the preparation and reporting of mitigation, adaptation and resilience plans as well as any other mandated governance, disclosure and transparency arrangements.

Engineers Australia suggests that these should be made as complementary and as harmonised as can be to existing reporting requirements at the international, federal and state and territory levels, including but not limited to National Greenhouse and Energy Reporting scheme (NGERs), Safeguard Mechanism, Emissions Reduction Fund, and *Environment Protection and Biodiversity Conservation Act* (both existing and future bilateral agreements).

In addition, the EPA could indicate what it considers to be "best-practice"; and simply to note that this should be largely informed by the applied scientific inputs and knowledge of the engineering profession.

Other suggestions follow:

- There is no mention of involvement and/or sharing with and assisting councils
 - Given the large possible contributions to decarbonisation by everyday citizens and farmers, more sharing of informative resources should be targeted such that councils can inform their own decision processes.
- Each project and activity should be considered and measured on a whole of life carbon basis
- In addition to the development of renewable energy zones (REZs), support for remote communities' electricity independence could go a long way in achieving emissions reduction (i.e., less transmission and distribution infrastructure needed) and enhancing resilience to climate change impacts (extreme weather-related events)

- There seem to be no new actions relating to Agriculture
 - Given the high current and projected emissions, much more should be done in the agriculture sector to support farmers adopt near zero and zero emissions technologies (regenerative agriculture, planting on edge of waterways, roadways etc)
- Greater assistance could be sought by the CSIRO and other institutions (NSW equivalent, NSW universities) to research mitigation technologies and net zero emissions pathways for each sector
- Plastics recycling is not discussed; while recognising the NSW Government's ban announced on 1 November 2022 on single-use plastic items such as plastic straws, stirrers, cutlery, plates, bowls and cotton buds, what is the EPA's strategy to reduce emissions from landfill plastics? Relevant initiatives should be included/discussed in the action plan.

Q3. The draft Climate Change Policy and Action Plan complements, supports and builds on the NSW Government's robust climate change policy frameworks, including the Net Zero Plan, Coal Innovation Fund and Electricity Infrastructure Roadmap. Do you think the actions appropriately complement the range of climate change initiatives being delivered by the NSW Government including under the Net Zero Plan, Coal Innovation Fund and Electricity Infrastructure Roadmap? If no, what other changes should be included?

Pillar 2 (mitigation of methane)

Engineers Australia notes that the Plan document's Pillar 2 (mitigation) indicates an intention to regulate short-lived pollutants. This will necessarily include methane (CH₄) which is a high Global Warming Potential (GWP) gas and a major emission of Australia's gas industry and agriculture.

Engineers Australia appreciates that the EPA will deeply consult with all affected sectors on how to enable their optimal pathways to a net zero emissions future within the appropriate social licences to operate (i.e., carbon capture and storage where applicable, anti-methanogenic compounds, CH₄ reducing cattle-feed additive including asparagopsis) to not only ensure affordable, reliable and secure energy and food supply, but also the long-term economic viability of regional communities where these sectors are mostly located.

It is worth noting that on 23 October 2022 the Australian Government joined the Global Methane Pledge as part of multilateral efforts to reduce global methane emissions. This means that the Commonwealth has committed to reducing CH₄ emissions by 30 per cent by 2030. At the moment it is arguable whether many agricultural businesses can achieve such a reduction in a commercially feasible manner without either substantial policy and financial assistance and/or an ability to offset using nature-based solutions.

Engineers Australia strongly advocates for the need to foster a just transition of these workforces and regional communities; and questions whether this responsibility falls within the EPA's regulatory remit. Nevertheless, all arms of the NSW Government need to work together on this agenda on a whole of government basis.

Closing observations

Engineers Australia considers that the EPA's ability to efficiently and effectively achieve its Plan will depend on it coordinating in particular with the NSW and Australian Government's as well as other Australian governments in support of Australia's continued electrification of its economy in an effort to decarbonise. And in particular its transport system (commercialisation of EVs and hydrogen fuel-cells) which so clearly needs a range of additional incentives and regulations to drive the critical-related infrastructure (such as repowering stations for battery and hydrogen fuel-cells, and digitisation platforms including blockchain technology) needed as well as to facilitate innovative supply chain management of globally sourced materials, consumer-products and professional services which are currently heavily constrained by a variety of global headwinds.

Engineers Australia is supportive of all environmentally positive and cost-effective climate policies and regulations, and remains particularly interested in Australia establishing an economy-wide carbon pricing mechanism. The national climate policy landscape needs to and is changing, and all states and territory governments and regulators should try and ensure that their settings are as well coordinated, harmonised and complementary as much as is possible in order to safeguard Australia's national interests.

The EPA's Plan seems to be a well thought out and complementary approach to ensuring NSW and Australia can and will reach net zero emissions by 2050, while also giving effect to broader non-CO₂ environmental benefits. And given the current high risk of the world exceeding 2 degrees Celsius of global warming let alone 1.5 degrees Celsius,

Engineers Australia advocates that what can be done to avoid such scenarios should be done with urgency, agency and at scale.

For further information on Engineers Australia's public positioning on climate change, please refer to its [Climate Position Statement \(2021\)](#).

Yours sincerely

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