

National Hydrogen Strategy Review

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About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is leading social justice law and policy centre. Established in 1982, we are an independent, non-profit organisation that works with people and communities who are marginalised and facing disadvantage.

PIAC builds a fairer, stronger society by helping to change laws, policies and practices that cause injustice and inequality. Our work combines:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change and public interest outcomes.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program works for better regulatory and policy outcomes so people's needs are met by clean, resilient and efficient energy and water systems. We ensure consumer protections and assistance limit disadvantage, and people can make meaningful choices in effective markets without experiencing detriment if they cannot participate. PIAC receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

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Public Interest Advocacy Centre



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The Public Interest Advocacy Centre office is located on the land of the Gadigal of the Eora Nation.

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Introduction

PIAC welcomes the opportunity to respond to the National Hydrogen Strategy Review: Consultation Paper.

Hydrogen will likely have a substantial role to play in decarbonisation and the transition to a prosperous renewable economy. However, the shape and scope of that role must be shaped to meet the specific needs of the Australian community and economy, and must best promote the interests of the Australian people. The Hydrogen strategy is a vital tool for shaping this role, and ensuring the development of a hydrogen industry and the implementation of hydrogen-based solutions meets and promotes the needs of the community.

In the remainder of this submission, PIAC highlights the need for robust principles to underpin the hydrogen strategy, with particular focus on ensuring hydrogen develops to enable rapid, efficient decarbonisation, and provides enduring benefits to the Australian people.

We will respond to selected questions under various sections of the consultation paper

Enabling decarbonisation through a clean hydrogen industry

Australia can best enable decarbonisation through development of a green hydrogen industry by ensuring strategic support for hydrogen is grounded in robust principles focussed on maximising impact, optimising efficiency, and prioritising actions with material impact before 2030. PIAC recommends those principles include:

- That only 100% green hydrogen is regarded as clean hydrogen.
- Actions which decarbonise existing and ongoing hydrogen (and related product) use are prioritised.
- Actions are prioritised by the materiality of their decarbonisation impact and only actions which lead to material emissions elimination or reduction are supported.
- Impact on decarbonisation by 2030 is a priority and actions which can meet the materiality threshold in this timeframe are prioritised. This should include consideration of the potential indirect impacts of clean hydrogen options on decarbonisation elsewhere (for instance in the energy system)
- Support for decarbonisation through clean hydrogen should only be pursued where it is the most efficient alternative (having regard to both materiality and timeliness).
- Decarbonisation through clean hydrogen should not involve costs and risks being carried by consumers.
- Support for decarbonisation through clean hydrogen should not undermine or distort the efficiency or fairness of other cost-recovery or regulatory systems and processes, for instance in the energy system.

2. What other actions in other sectors, will have the greatest decarbonisation impacts?

3. What sectors are best placed to be early adopters of hydrogen?

The strategy should prioritise action in sectors which already rely on hydrogen and related products derived through emissions-intensive processes. These are sectors for which hydrogen and related products (such as ammonia) are required, and which make significant contributions to

greenhouse emissions. Decarbonising these sectors can only be done through green hydrogen and their demand is a substantial and predictable foundation on which to build supply chains that may have value elsewhere. Further, early work decarbonising these sectors in Australia, presents the opportunity to build a durable competitive export advantage.

Assessment of further sectors where green hydrogen may be a material contributor to decarbonisation should be undertaken according to the principles we have outlined, creating a 'merit order' which ensures limited Government resources are most effectively employed, with the greatest likelihood of success. Importantly, Australian government decisions should not be unreasonably directed by consideration of what strategies are being employed by other jurisdictions. Australia's strategic development of a green hydrogen industry and the employment of green hydrogen for decarbonisation, should be shaped by our own circumstances and needs, and what enables rapid decarbonisation and promotes the best interests of all Australians.

Activating hydrogen and related industries

6. Should Australian governments adopt a more sector driven approach to hydrogen industry development?

Australian governments should adopt a sector driven approach to hydrogen industry development and the deployment of hydrogen in support of rapid decarbonisation. A sector driven approach is more compatible with a strategy founded on the core principles we have outlined and enables the greatest scope to focus limited economic resources in areas where the greatest impact can be derived most efficiently, with least risk to the government and least cost to consumers and taxpayers.

The Hydrogen strategy should focus on sectors with an established and enduring need for hydrogen and related products (such as ammonia), where emissions reduction will necessarily require the employment of green hydrogen and related products.

Most importantly the strategy should avoid prioritising investment and development in sectors where more effective and efficient decarbonisation alternatives exist, or where efforts to develop a green hydrogen industry will have a negative impact on, speed, and efficiency of decarbonisation elsewhere. For instance, development of green hydrogen pathways for gas networks should be actively avoided and discouraged unless it is pursued at no risk or cost to existing network gas and electricity consumers.

7. Should Australian governments adopt national hydrogen production use and/or export targets for hydrogen?

The strategy should be cautious in adopting broad targets for the production, use and export of green hydrogen. Any targets should be employed according to the principles outlined earlier in this submission and confined to sectors where hydrogen and related products are already required, and where decarbonisation will necessarily involve the employment of green hydrogen and related products. For instance a target may stipulate that X% of ammonia use in Australia would be sourced from 100% renewable means by 2030.

8. If targets are adopted, what type of activities and/or sectors should this target be tailored towards? For example, production targets, demand targets for sectors or a renewable gas target?

Targets should be sector-based and tailored towards the proportion of green hydrogen (or related products) utilised in that sector.

9. Should Australian governments use regulatory mandates to drive demand for hydrogen? If mandates were adopted, what type of activities and/or sectors could mandates be directed towards?

Mandates should be employed in conjunction with sector-based demand/usage targets. Both targets and mandates should be set in line with evidence-based emissions reductions requirements. Ensuring rapid, efficient decarbonisation of sectors which utilise hydrogen will help meet our obligations, while efficient solutions for more complicated sectors are developed.

Ensuring hydrogen industry benefits all Australians

20. What actions do you view as being critical to build and maintain community support for Australia's developing hydrogen industry?

Building and maintaining community support for a green hydrogen industry relies on ensuring the industry promotes the best interests of all consumers and communities. Robust strategic principles which reflect the interests of consumers, and the community will be crucial to shaping and developing a green hydrogen industry which promotes their interests, and is capable of clearly demonstrating its value to the community.

To build and retain the support of the community, development of the hydrogen industry must:

- Focus only on 100% 'green' hydrogen.
- Prioritise decarbonising existing and ongoing Australian hydrogen (and related product) use, ensuring that hydrogen is genuinely 100% 'green'.
- Ensure Hydrogen is utilised where it makes the most material decarbonisation contribution in Australia, and only employed where it materially eliminates or reduces greenhouse gas emissions.
- Ensure Hydrogen is employed only where it makes a material impact on decarbonisation by 2030. Any development of the hydrogen industry must not have indirect negative impacts on the ability to achieve 2030 emissions reductions requirements elsewhere (such as in the energy system).
- Pursue the use of clean hydrogen only where it is the most efficient alternative (having regard to both materiality of impact and timeliness of impact).
- Not involve costs and risks of hydrogen industry development being carried by consumers.
- Not prioritise export development over domestic needs, or to the detriment of Australian consumers.
- Not undermine or distort the efficiency or fairness of other cost-recovery or regulatory systems and processes, for instance in the energy system.

26. How can Government/s ensure that the early strong investment in the sector transitions to government revenue as the sector matures?

Government support for the development of a green hydrogen sector should promote the interests of consumers and the community. To embody the strategic principles we have outlined, and ensure the sector rapidly transitions to a beneficial source of revenue for Governments and the community, Government support must:

- Be narrowly targeted to areas where the strategic principles are best served, with clear timeframes and targets for when support will be withdrawn.
- Be clearly merit based rather than 'technology agnostic'.
- Not involve consumer subsidies or other community cross-subsidies which are inherently regressive and result in the community assuming costs and risks they have no ability to manage.
- Not involve the distortion of enduring structures or regulations which are difficult or impossible to unwind in the future. The green hydrogen sector should be subject to the same regulatory, revenue and policy structures as others, rather than being given broad, open-ended exemptions.
- Be transparent, reviewable, and founded on a reasonable expectation of tangible benefit within a reasonable and defined timeframe. This allows support to be time-bounded and assessed against expectations of growth and impact.
- Be focussed on domestic needs, drivers, and circumstances. A green hydrogen sector which meets domestic needs according to the prevailing circumstances of the Australian community will be more amenable to targeted support at a scale which will have an efficient impact.

Governments should not focus broadly on support for the 'development of export industry'. The scale of support required to compete internationally is not viable for Australian Governments and risks Australian consumers and community's interests being undermined by international rent-seekers driving competition between governments for their own interests. A strong domestic sector which meets Australian needs would serve as a more durable, solid foundation for the development of a competitive export industry which is not unreasonably reliant on Government support, and is therefore more amenable to a rapid transition to serving as a source of government revenue.

Developing infrastructure to support a hydrogen industry

29. How should the infrastructure needs of the hydrogen industry be balanced with other infrastructure users e.g electricity generation?

The needs of the hydrogen industry should not be balanced with other infrastructure users, and should not impact on the needs of the energy consumers or the cost and speed of the energy system transition. Any reliance on existing energy infrastructure should be at full cost to hydrogen industry proponents, with any support or assistance provided outside of cost recovery and regulatory structures to ensure consumers are not unreasonably impacted.

31. How can existing gas infrastructure be repurposed to address priority use cases for hydrogen?

Existing gas infrastructure should not be repurposed to facilitate potential use of green hydrogen (either in blends or as a pure product). In particular, network connections to households and small businesses should be excluded from any measures to repurpose gas networks for potential hydrogen uses. Domestic heating, water heating and cooking needs are able to be fulfilled more efficiently, now, through electrification with further energy cost reductions flowing from the eventual rationalisation of network costs (ensuring households only pay for maintenance of a single, more efficient energy network).

Any targeted repurposing of existing gas infrastructure to serve specific localised industrial needs should only be done in a way that quarantines consumers and the community from the costs and risks involved. This ensures that any employment of hydrogen is conducted on its own merits, where it is the most efficient and effective option, according to the strategic principles we have outlined.

Targeted repurposing of existing gas infrastructure for priority needs should involve:

- Identification of specific infrastructure relevant to the identified future need,
- Transparent assessment of the costs of repurposing the relevant infrastructure to serve that need, and
- Transparent demonstration that the repurposed infrastructure (including related repurposing costs) will be technically and economically viable to serve the identified need.

Any subsequent decision to proceed will then be at the risk of the proponent (and any beneficiary of the repurposed infrastructure), rather than the wider consumer base or the community. Any Government decision to support repurposing should then also be able to demonstrate the purpose and value of that support, as well as the beneficiaries, without risking further cost to consumers or impact on the community.

Continued engagement

We welcome the opportunity to meet with the Department of Climate Change, Energy, the Environment and Water to discuss these issues in more depth. Please contact Douglas McCloskey on dmccloskey@piac.asn.au regarding any further follow up.