

NSW Renewable Fuel Scheme: Discussion Paper

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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 NSW Renewable Fuel Scheme (the scheme): Discussion Paper (the paper).

PIAC does not support expansion of the scheme and has serious concerns regarding its fundamental purpose and structure. The scheme in its current form does not support or promote the interests of NSW households. We do not consider the scheme as it is currently structured to be an effective contributor to emissions reduction in NSW. We strongly recommend the NSW Government pause this consultation process, and the commencement of the scheme in its current form and undertake a more fundamental review to consider the objective and structure of the scheme itself.

An effective review of the Renewable Fuel Scheme should commence with a thorough assessment of the NSW Hydrogen Strategy and the overarching architecture of climate and energy policies of which it is a part. The scheme must have objectives which are aligned with and derived from the legislated emissions reductions targets for NSW and embody robust principles which ensure effective climate action and promote efficient and affordable energy for NSW consumers.

The current iteration of the scheme does not support the interests of NSW consumers, particularly household consumers. The NSW Hydrogen strategy (the strategy), and by extension the Renewable Fuel Scheme, has flaws of structure and principle which must be addressed before any expansion is considered. Neither the strategy nor the scheme includes any scope for merit assessment in the production and use of fuels to drive the most efficient (and impactful) use of green hydrogen or other genuinely sustainable gases. That is, they do nothing to support the most significant, most rapid and best value emissions reduction for NSW consumers. They are not founded on a principle that the beneficiary pays, and they do not protect consumers from risks and costs related to the development of a fuel production industry that they are unlikely to benefit from.

The paper commences from the premise that the existing scheme is valid, appropriate and effective, a contention which has not been tested or demonstrated. The scheme should not be expanded, and indeed should not be implemented without a comprehensive review to ensure its structure and implementation embodies and promotes key objectives for emissions reduction, and principles of efficiency and the fair sharing of cost and risk.

Renewable fuels

A comprehensive review of the scheme should commence with a robust definition of appropriate renewable fuels. The implied definition of renewable fuels in the paper is not robust and is an insufficient basis for a scheme which could effectively contribute to efficient emissions reduction. The definition of renewable must be related to the emissions intensity of the fuel and its practical capability to be verifiably zero emissions (or net zero emissions over a short timeframe). As the paper demonstrates 'renewable' may cover wide range of fuels with a significant variability in emissions. It is important to recognise that the ability to 'replenish' fuels (ie that they are

renewable) is not the defining factor for a scheme aimed at emissions reduction and should not be the qualifying factor for eligibility. For instance many 'renewable fuels' canvassed in the paper:

- Involve continued high-intensity carbon emissions which may exceed or be equivalent to existing fossil fuels. In any case, many of these fuels involve insufficient or immaterial reductions in carbon emissions related to their use.
- Rely on long re-growth periods to offset the emissions associated with their use. These long periods introduce significant risk to the assumed emissions reduction value of the fuels because:
 - there is likely to be a material difference between the ongoing emissions associated with the use of the fuel and the emissions drawn down each year through 'regrowth'.
 - the assumed regrowth is subject to bushfires, slower than predicted growth or other losses or uncertainties.
- Still involve the use and combustion of methane, which is:
 - subject to leaks and other losses which contribute to methane emissions which are a high priority for emissions reduction policy.
 - combusted and contributes to carbon dioxide emissions, with difficulty in reliably calculating the actual 'saved' emissions.
- Are inherently less efficient and more emissions-intensive than the electric equivalent. Where emissions reduction is the overarching objective, the employment of emissions-producing fuels must be minimised and regarded as a 'last resort option'.
- Introduce perverse incentives to increase waste products (such as forest and agricultural waste and landfill), and in any case undermine the incentive to minimise these waste sources. This is crucial where the capacity to offset residual emissions is limited, meaning waste sources must be minimised before any other processes are implemented.

As a result of these factors, a meaningful definition of renewable fuels must be narrow and restricted to those fuels which can be verifiably zero emissions, or verifiably net-zero emissions over a defined short timeframe. When considering fuels to subsidise through the scheme, this should be further limited to those which are verifiably zero emissions.

PIAC strongly recommends this process strictly limit the fuels which are considered in any renewable fuels scheme and, in the short term only considers genuinely green hydrogen (and its derivatives) as eligible. Any future inclusion of biomethane or other similar fuels should only involve sources of biomethane or biofuels which cannot otherwise be avoided – that is where the biomethane (or other fuel) is a waste product from a process that has already been reduced to its minimum and cannot yet be avoided. For instance, methane from landfill that is subject to robust structural limitations, and cannot be re-used, re-cycled or re-processed in any other way.

What expansion options are being considered?

We do not agree with the premise of the paper and do not support any expansion of the current scheme. Instead, this process should be altered and involve a fundamental review of the scheme,

its purpose and objectives, principles and mechanisms. No expansion should occur before such a process has been undertaken.

PIAC does not consider the current scheme is in the interests of NSW households and does not regard it as an effective contributor to NSW's legislated emission reduction targets. As it is currently constituted, the scheme involves the likelihood of unreasonable additional costs and risks being borne by NSW households.

What the Renewable Fuel Scheme is

The paper explains the role and function of the scheme by making an equivalence with the Renewable Energy Target (RET) and other NSW certificate schemes aimed at improving energy efficiency and demand management. This misrepresents the renewable fuel scheme and demonstrates a failure to recognise the inherent differences between electricity and gases and fuels.

Electricity is essential. All consumers (household, commercial and industrial) need it and must use it. This allows a universality of liability which limits unreasonable burdens and scope for unintended market distortions. Additionally, electricity is universal and homogenous. All sources of electricity create identical electrons, and all electrons have identical characteristics and applications. This means that a certificate scheme applied to electricity can draw on all consumers as liable parties, with all liable parties able to benefit equally from the resulting renewably generated electricity. This ensures the scheme involves minimum distortions to the market and is relatively efficient and 'fair'. It also means the scheme is subject to market forces, determining that the most cost efficient and effective means of renewable generation are encouraged because all sources are directly comparable and able to be applied to all uses.

None of these characteristics are true of gases and fuels. Accordingly, the renewable fuel scheme as it is currently constituted (and arguably any possible renewable fuel scheme that is based on retail consumption) cannot be compared to the RET because:

- gas fuels are not essential for most consumers, and all consumers do not rely on them equally,
- gas fuels are inherently less efficient than electric alternatives, which are preferable wherever they exist,
- gas fuels are not consistently zero emissions and have a wide range of emissions intensity, with that emissions intensity not correlated with cost,
- gas fuels are not interchangeable and in many cases cannot replace the fossil equivalent without a total switch of system for all consumers,
- many gas fuel replacements would involve substantial (costly) changes to the supply chain,
- many gas fuel replacements would have performance, reliability and safety implications for many or all consumers if blended with existing fossil fuels, and many would have these implications even with 100% replacement, and
- different gas fuels will be relevant to different future use and will need to be applied to those uses according to their merit. For instance, green hydrogen will be required to replace existing hydrogen (and its derivatives) sourced from fossil fuels, and biomethane will be required to replace fossil methane as a feedstock, whereas household energy applications

will be efficiently electrified. Not all gases have equal utility and 'merit'.

The paper asserts the aim of the current scheme is to support affordability, reliability and sustainability. PIAC contends that, due to the factors detailed above and the absence of a robust emissions reduction and efficiency framework to underpin the scheme, in fact the scheme makes no positive contribution to these aims. Indeed, we consider the current scheme will:

- materially worsen affordability by increasing costs to all gas consumers. This is regardless of whether they can 'benefit' from any replacement fuel produced as a result, and regardless of their limited ability to mitigate that cost increase through electrifying.
- introduce potential risks to reliability, through impacting the quality and consistency of gas fuel products where replacement gases are used (or inefficient blending undertaken), and
- have minimal or no impacts on sustainability, due to having no robust mechanisms to ensure a focus on developing zero emissions options which can be applied where they are most effective and efficient.

Given these factors PIAC does not support the scheme as currently constructed. A comprehensive review of the scheme and its objective and structure should consider how to address the fundamental issues we have outlined. It is likely this will require changes to the liable parties, which fuels are eligible, as well as merit-based mechanisms to ensure any fuels produced are utilised in their most effective and appropriate purposes.

Why expansion options are being considered

PIAC considers the paper presents inaccurate reasoning for expansion and has 'defined the problem' incorrectly. While it is true there will be a need to replace fossil fuels in applications where a more efficient, zero-emission electric alternative is not possible. The problem should more accurately be defined as

Some fossil fuel applications which cannot be efficiently electrified (ie zero emissions) within an acceptable timeframe will require an appropriate zero emissions /meaningfully net zero alternative fuel, in order for NSW to meet its emissions targets.

Accurately defining the problem is crucial in order to appropriately frame the purpose of a renewable fuel scheme and ensure a more effective framework of objectives, principles and structures.

We disagree with the contention expressed in the paper that the scheme and need for expansion is grounded in the need to 'improve the commercial viability of renewable fuel production'. The commercial viability of production of 'renewable fuels' could be improved without having any meaningful impact on actual emissions reduction. As proposed the scheme would inefficiently subsidise the production of fuels with little or no potential emissions reduction value, and provide no incentive to employ the most efficient, effective alternative to existing fossil fuel use. PIAC strongly recommend against the implementation or expansion of the scheme before a fundamental review of the scheme.

Who should be liable

PIAC does not support the current scheme, which effectively makes consumers liable for subsidising the production of fuels they will not 'benefit' from. This involves exposing consumers to costs and risks which they are not in a position to manage effectively. Regardless of our disagreement with the other aspects of the scheme, making consumers (particularly household consumers) liable for the costs of the scheme is not efficient or appropriate. As we have outlined, there are fundamental aspects of gas fuels which undermine the scope for consumers to benefit from the scheme. In any case, the current liability structure of the scheme does not place liability with the parties best able to manage the costs and risks associated. Arguably, gas producers themselves may be a more appropriate liable entity because:

- Their production directly contributes to the 'problem' of emissions which needs to be addressed.
- It is their production (and product) which needs to be replaced. Given that the replacement product will vary according to the application, it is reasonable to assume that multiple products will be required. Gas producers are best placed to manage their exposure to the costs and risks associated with their liability either through developing the most efficient and effective alternatives to their existing production, or by funding the development of those alternatives through their liability to the scheme.
- The cost of gas producer liability will be subject to competition with all other available sources, ensuring only efficient costs are reflected in the costs of their end product.

PIAC recommends this process reconsider the schemes current arrangement for liability, and assess alternatives which can more effectively incentivise the efficient development of alternatives to fossil fuels without exposing NSW households to unreasonable costs and risk.

Consultation question responses

- 1. What renewable fuels do we need to produce at scale to achieve net zero?**
As a scheme which subsidises production at cost to consumers, the scheme should only consider fuels which are verifiably zero emissions. However, an equally important factor in contribution to actual emissions reduction (and the net zero targets) is what the resulting fuels are utilised for, and ensuring that fuels are applied to the uses they are most suitable for (where they offer the greatest impact most efficiently). Simply producing fuels at scale is not sufficient to ensure their application results in an effective emissions reduction contribution.
- 2. Of these fuels, which need incentives under the scheme to be commercially viable and for how long?**
N/A
- 3. Which fuels or production pathways should not receive incentives under the scheme? For example should methane generated from landfill be excluded?**
Strict zero emissions criteria must be applied to the scheme. Only those fuels which are verifiably zero emissions should be eligible for incentives. This should mean that many bio-fuels and bio-methane sources are not considered for the scheme. Including these fuels is likely to undermine the emissions-reduction impact of the scheme and introduces

unacceptable risks of creating perverse incentives as the paper notes.

4. If biogenic fuels are included in the scheme, what controls should be in place to safeguard environmental outcomes and avoid competing with food production?

Biogenic fuels should not be included.

5. If the scheme is expanded to include other renewable fuels who should be the liable parties and why?

PIAC does not support any expansion of the scheme in its current form. In any case we strongly disagree with the current liability for the scheme which effectively leaves household consumers unacceptably bearing costs and risks they are not in a position to manage effectively. Liable parties should be those capable of benefiting from the zero emissions fuels created as a result, and those parties able to make effective decisions to ensure the efficient and effective application of the fuels to reduce emissions. We do not consider gas retailers, (and by extension household consumers) to meet this criteria. This process should consider whether existing gas producers would be a more appropriate liable party for a reformed scheme

If any consumers are to be liable, they should only be consumers for whom gas is an ongoing essential requirement, and so consumers who can be assured to benefit from the new gas produced.

6. Are there any other liable parties or principles for choosing liable parties that we should consider?

As outlined earlier, PIAC supports reconsideration of the structure of the scheme and the parties liable for the scheme. This process should consider whether existing gas producers would be more appropriate liable entities.

7. If there are multiple categories of liable parties, how should liability be apportioned between them?

N/A

8. What target levels are appropriate beyond 2030 to develop the scale of renewable fuel production needed for net zero in NSW by 2050?

N/A

9. How can the scheme best provide targeted support for hydrogen and e-fuels until these fuels are commercially mature? Is it more effective to have a separate target for hydrogen or a certificate multiplier and why?

N/A

10. If Hydrogen and e-fuels do not have targeted support under the scheme, what support outside of the scheme should Government provide to help establish supply chains now?

N/A

11. Should the target for an expanded scheme be a production volume in GJ or an increasing percentage of liable fuel sales, and why?

A reformed scheme should express targets as an increasing percentage of liable fuel sales.

Continued engagement

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