

Unlocking Australia's low carbon liquid fuel opportunity

Submission of The Australian Workers' Union

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Low carbon liquid fuels: A nation building opportunity

The Australian Workers' Union (AWU) is one of Australia's largest and most diverse unions. We represent over 76,000 workers across the length of the country and breadth of the economy. This includes thousands of workers in Australia's liquid fuel supply chains – from refineries to onshore and offshore extraction, agriculture workers providing the feedstocks for biofuels, and the construction workers that deliver the infrastructure the industry depends on.

This membership affords us a deep interest in the future of Australia's liquid fuel industry. We recognise the very significant challenges faced by local producers and their workers - not least in relation to climate and energy policy. Both of Australia's remaining fuel refineries are covered by the Safeguard Mechanism. As refining is a technically mature and intrinsically emissions-intensive process, achieving the ever-greater emissions reductions required by the safeguard presents a major challenge. Offsetting, too, can provide only limited respite, given the likelihood of much higher demand and increased prices for Australian Carbon Credit Units in the medium-term. The future of these sites, and the jobs of those that work in them, are far from certain.

Further downstream, liquid fuel consumption is largely responsible for Australia's high transport sector emissions and many of the country's highest-emitting companies. As Australia strains to meet emissions reduction targets, electrification and clean hydrogen offer a feasible abatement pathway for some such users. But for others – especially in aviation, but also parts of heavy ground transport – these options are likely to be viable only in the long-term and only in limited circumstances.¹ Plainly, alternative solutions are required.

In addition, liquid fuel is a matter of national security. As a large island nation, transport relying on liquid fuel is our trade, tourism and travel lifeline. It also enables a suite of key defence capabilities. But despite the basic imperative of reliable supply, Australia imports most of its liquid fuels – including nearly four times more aviation turbine fuel than it produces locally, and over seven times more diesel fuel. This reliance has risen sharply in recent decades, as demand has increased while local refineries closed their doors.²

Australia's fuel import routes are also unnervingly narrow. Around two thirds of aviation fuel is sourced from Singapore and the Republic of Korea alone.³ Moreover, nearly all refined fuels are shipped through geographic choke points and contested areas in East and Southeast Asia. Much of the upstream crude oil used to produce these products passes through similar high-risk areas in the Gulf region. Even Australian-made refined fuels are produced using nearly 80% imported crude.⁴ Conflict to Australia's north would likely have devastating impacts on both our civilian and military capabilities.⁵ Indeed, the 2023 *Defence Strategic Review* identifies improved fuel security as critical to national resilience.⁶

Amidst this combination of acute pressures, production of advanced low carbon liquid fuels⁷ (LCLF) provides real and potentially historic opportunity. LCLFs offer technically proven, safe and low emissions alternatives to conventional aviation and diesel fuels. They are largely compatible with existing vehicles and other user technologies. Some LCLFs can also be produced with modifications to existing refining infrastructure.

Australia is very strongly positioned to produce LCFC using both agricultural feedstocks and via emerging methods such as 'power-to-liquid' production. As the Commonwealth itself recognises,

our nation possesses significant comparative advantage in the form of an advanced agriculture industry and workforce, world class renewable energy resources, and a favourable climate and geography to expand agricultural output.⁸ The CSIRO's roadmap for sustainable aviation fuel (SAF) projects that Australia already has sufficient feedstock to meet nearly 60% of its aviation fuel needs.⁹

Realising Australia's LCLF potential can deliver a bright and certain future for our refinery workforce - together thousands more jobs in feedstock production, new refining operations and elsewhere. Credible estimates of the number of jobs that a mature domestic LCLF supply chain could support consistently measure in the tens of thousands by mid-century.¹⁰ Given liquid fuel's importance as an economic enabler, the industry would support tens of thousands more jobs in downstream industries – over 53,000 in aviation alone, according to one study.¹¹ Given feedstock production is heavily regional by its nature, the industry would also drive employment in country areas.

LCLF can also enhance Australia's trade outlook. Australia currently exports large volumes of potential LCLF feedstock as relatively low value raw materials - including around \$7 billion in oilseed, vegetable oils and fats each year.¹² Indeed, Australia recently became the world's largest exporter of tallow - a key LCLF feedstock.¹³ These materials could serve as inputs to local LCLF production, driving much greater value in a fast-growing international market. Indeed, the International Air Transport Association's net zero pathway for aviation suggests the industry will require 449 billion litres of SAF each year by 2050.¹⁴ The Asia-Pacific, especially, is home to many of the world's largest airlines.

Local LCLF production can advance Australia's workforce, climate, security and trade outlook. This potential is both clear and significant. However, this is not a future that the market is likely to deliver efficiently, if it delivers it at all. Numerous and considerable barriers to investment remain. As many of Australia's neighbours and partners are taking tangible and important steps towards large-scale production, our country is effectively stood still.

In our view, realising Australia's LCLF potential demands fast, bold and collaborative action from government. A firm regulatory hand is also required to ensure this new industry benefits the workers and communities that host it – most importantly, by providing quality jobs. The AWU strongly supports the *Future Made in Australia* (FMIA) program as providing the framework to deliver industry policy of this scale and complexity. We also acknowledge important policy groundwork completed by the Commonwealth to date, particularly development of last year's *Aviation Green Paper*.

This and other work reflects a government cognisant of opportunity and ready to seize it. It should now use this consultation as a springboard to action. Without doubt, this will entail a years-long commitment and a multibillion-dollar outlay. But delivered effectively, it can go down as a generationally significant investment: A nation building endeavour in the truest sense of the term.

The AWU is eager to help make this vision a reality. Please find our recommendations and responses to the issues raised in the consultation paper below.

Summary of recommendations

- 1:** The Commonwealth should deliver a broad package of supports to enable low carbon liquid fuels production to progress to commercial maturity as soon as practicable.
- 2:** The low carbon liquid fuels package should require every site receiving support to deliver positive workforce outcomes.
- 3:** The Commonwealth should promptly deliver a long-term strategy for low carbon liquid fuels production and related workforce outcomes, and supports to realise that vision.
- 4:** The Commonwealth should engage with fuel refineries regarding the timeline of a viable transition to low carbon liquid fuels production and related risks.
- 5:** The Commonwealth should prioritise investment in development of the power-to-liquid fuel production method, both through the *Future Made in Australia Innovation Fund* and other programs.
- 6:** The Commonwealth should deliver tax credits for capital investment in assets facilitating commercial production of low carbon liquid fuels.
- 7:** The Commonwealth should deliver a production tax credit for low carbon liquid fuels. The value of the credit should increase in inverse proportion to the emissions intensity of the fuel.
- 8:** In the near to medium term, the Commonwealth should commit to meeting a quantity of its aviation and diesel fuel purchase with Australian-made low carbon liquid fuels.
- 9:** In the medium to long term, the Commonwealth should require that private fuel providers supply low carbon liquid fuels as a minimum portion of total fuel supplied.
- 10:** The Commonwealth should promptly implement a carbon border adjustment mechanism, with provision to expand it to new products as required.
- 11:** The Commonwealth must prescribe clear, enforceable regulation that requires all projects receiving support under *Future Made in Australia* programs to deliver safe, secure, well-paid jobs and worker upskilling.
- 12:** The low carbon liquid fuels support package should provide comparable financial support as that afforded to other industries under the *Future Made in Australia* program.

Advantage Australia, but major barriers remain

Australia's resources, workforce and industry capability are the foundation that a large low carbon liquid fuels industry can be built on. Unfortunately, this latent potential promises much but guarantees nothing. Australia does not currently produce any LCLF. Only exploratory partnerships and early-stage proposals for production have transpired,¹⁵ including some that have failed to progress.¹⁶

The domestic state of play is a stark contrast to many of Australia's trade partners and neighbours. At present, 74 renewable fuel refineries are in operation worldwide. Ten of those sites are in the Asia-Pacific, where an additional two refineries are under construction.¹⁷ Total SAF production is estimated to have increased by 3 to 4.5 times since 2021 (and many hundreds of times since 2016).¹⁸ But this is likely just the tip of the iceberg: Well over 200 additional LCLF facilities have been announced or are in the early stages of construction globally.¹⁹

Much of this activity is driven by public policy. As the consultation paper acknowledges, many of the world's largest aviation markets have announced mandates or standards for low carbon fuels.²⁰ The global industry policy race sparked by the energy transition has also encompassed direct support for LCLF production. This includes production subsidies for SAF in the historic US *Inflation Reduction Act*, as well as support from several governments in East and Southeast Asia.²¹ By contrast, FMIA and other Commonwealth programs have provided very little by way of direct support for LCLF production to date.

Plainly, significant government support and existing capacity are making foreign jurisdictions more attractive than Australia for LCLF production. This carries with it a compounding risk - that Australian-grown feedstock will become tied to long-term export contracts for LCLF production abroad, further eroding our country's position. As the CSIRO's *Sustainable Aviation Fuel Roadmap* concludes, "*domestic refining capacity is lagging and failure to capitalise could lead to lost opportunities*"²²

Rising competition: Singapore

Singapore is strongly reflective of the LCLF policy and investment challenge facing Australia. Already a significant hydrocarbon fuel production hub – the second-largest source of Australia's refined fuel imports - Singapore is moving aggressively to retain its position as production gradually shifts to LCLF.

The city-state will introduce a target for the proportion of SAF used in its busy commercial airports from 2026. Concurrently, it will introduce a levy on airlines, the proceeds from which will be used to purchase SAF to supply back to those operators. Finnish refiner Neste recently opened the world's largest SAF production site in Singapore. This was assisted further by a purchase agreement with state-controlled Singapore Airlines.

Despite its ambition and flurry of activity, Singapore has very little capacity to source feedstock domestically. A major source of these inputs is none other than Australia: Our country currently exports around \$400 million in oilseed, plant oils and fats to Singapore each year. Aided by Australian feedstock, Southeast Asia's 'little red dot' is set to become a big player in LCLF.

Also of note is that development of LCLF refining infrastructure requires very large fixed capital investments. Given the scale of such commitments, facilities are highly unlikely to shift location once established. Countries that seize the advantage early will reap the benefits of incumbency in the long-term.

While the risks to Australia from hastening progress abroad are real, the potential for our country to catch up remains. LCLF production is not yet close to maturity in any market.²³ Most significantly, only around 0.1% of total aviation fuel demand is currently satisfied by SAF,²⁴ despite the heavy focus of LCLF producers on aviation and the multitude of investments made in recent years.

Additional barriers to LCLF investment exist regardless of the location of production. Most prominent is the 'green premium' – the large additional cost of all low carbon liquid fuels relative to hydrocarbon incumbents. In aviation, demand is high for the small volume of SAF produced at present.²⁵ But the product costs two to five times more than conventional turbine fuel,²⁶ making wider adoption in the fiercely competitive airline industry a fraught proposition. As the consultation paper recognises, the green premium is attributable to a range of technical and logistical factors, though it will be mitigated to a meaningful extent by achieving scale in production.²⁷

In addition, despite established production pathways for LCLF produced using agricultural feedstocks, technical barriers for other production methods remain.

These numerous barriers reflect a need for intervention from the Commonwealth at multiple stages on the industry's path to maturity. A package of supports for LCLF production is required to overcome these obstacles and turn abstract possibility into active production.

A support package reflecting Australia's potential

The merits of Australia developing its LCLF refining capacity and supply chains is clear. Equally clear is the legitimate role of government in moving boldly and quickly to help realise this potential.

The Commonwealth should deliver a broad package of complementary policies. This should support the industry's development at several points on the path to commercial maturity, enable LCLF production via different methods, and seek to maximise investment from the private sector. Furthermore, to maximise the potential of LCLF to deliver positive outcomes for workers and the community, and to ensure the package is able to retain a social licence, all sites receiving support should be required to deliver positive workforce outcomes.

While our proposal for LCLF support is unquestionably ambitious, its breadth and scale is consistent with positions taken by policymakers across industry, academia and government. Qantas, The Lowy Institute and the Australian Strategic Policy Institute have all recommended diverse and generous supports.²⁸ Per Qantas, Australia requires *"a combination of supply and demand mechanisms, with both proving vital to building a viable domestic industry."*²⁹ A broad range of policy supports for SAF is also countenanced by the Commonwealth itself in its *Aviation Green Paper*.³⁰

Recommendation 1: The Commonwealth should deliver a broad package of supports to enable low carbon liquid fuels production to progress to commercial maturity as soon as practicable.

Recommendation 2: The low carbon liquid fuels package should require every site receiving support to deliver positive workforce outcomes.

National strategy

An important early output for the support package should be a long-term national strategy for local LCLF refining and supply chains. This should lay out a clear vision for the industry's development and workforce outcomes, and for the supports that government will provide to realise its goals in this space. Such a strategy would assist to coordinate policymaking and engage and give confidence to workers, industry and investors. Its role would mirror that of existing industry-level strategies such as the *Future Gas Strategy*. It should also complement higher-level and related policies such as the whole-of-industry *Net Zero Plan* and the *Aviation Green Paper*.

The strategy should include timelines for progression of LCLF production from nascency through to commercial maturity. It could also include targets for output, domestic uptake and exports to 2050. Given the numerous production pathways for LCLF, and the likelihood that both current refineries and new actors will seek to produce such fuels, the strategy should be neutral as to preferred production methods. However, it could recognise the importance of retaining existing refineries in light of their advanced capabilities, large workforce and established offtake arrangements.

While the Commonwealth should seek to develop the strategy as soon as possible, it should be developed in close consultation with relevant unions and representatives from the energy and agriculture sectors.

Recommendation 3: The Commonwealth should promptly deliver a long-term strategy for low carbon liquid fuels production and related workforce outcomes, and supports to realise that vision.

Bridging support

Development of a large LCLF production industry will be much more difficult, with poorer outcomes for affected workers, if it does not include Australia's existing fuel refineries. Both the Ampol and Viva refineries face considerable headwinds, not just from the demands of the Safeguard Mechanism and energy transition, but from fierce international competition and a volatile fuel market.

We note the importance of the Commonwealth's *Fuel Security Services Payment* to ensuring these refineries remain open. By providing a payment to cover jet fuel, diesel and automotive gasoline output when produced at a loss, the scheme has delivered needed revenue certainty amid rapidly fluctuating prices.³¹ This has played an important role in preserving Australia's refining capacity. The agreement remains on foot until at least 2027, and likely until 2030.

However, investment that would enable refineries to realise a wholesale shift to production of LCLF will likely require years of planning and development, and may well not be realised before 2030.

To address this uncertainty, the Commonwealth should prioritise engagement with refineries on the timing and duration of their transition to LCLF. It should seek to ensure refineries have a viable 'bridge' to LCLF production and expeditiously seek to reach any solution that may be necessary.

Recommendation 4: The Commonwealth should engage with fuel refineries regarding the timeline of a viable transition to low carbon liquid fuels production and related risks.

Research and development

Much LCLF production using agricultural feedstocks is technically proven and ready for investment to build scale and commercial maturity. Alternative production methods, however, remain an early-stage proposition. To this end, the AWU welcomes the support for LCLF R&D and related work to be provided through the *Future Made in Australia Innovation Fund*. While the \$170 million per year allocated to the fund will be divided between a number of industries,³² it is well placed to deliver valuable work in relation to low carbon fuels.

We suggest that administration of the fund should focus on reducing the cost of power-to-liquid LCLF production. This represents a significant potential first mover opportunity for Australia. Our country is likely to possess world leading potential in power-to-liquid production; projected strengths in low-cost renewable energy generation, green hydrogen production and carbon capture are all complementary of production via this method. While fuel made through the power-to-liquid path currently has a much larger green premium than other low carbon fuels, this premium is expected to recede over time.³³ Ensuring these advances are realised in Australia represents a potentially substantial opportunity.

If power-to-liquid fuel can ultimately be produced at competitive prices, it also holds advantages over biofuels, especially in relation to inputs. While supply of agricultural feedstocks may well be stretched as LCLF demand scales, power-to-liquid fuel is subject to no such limitations. Its production potential is near-unlimited. And while biofuel production emissions are difficult to eliminate entirely, power-to-liquid offers reliably carbon neutral fuel.

Beyond the *Future Made in Australia Innovation Fund*, the particular potential of power-to-liquid production means it should also be prioritised for support through other relevant programs. For instance, as fuel supply is a noted strategic priority for the Australian Defence Force, this may include support through Defence investment programs. The remit of the *Defence Innovation Hub* encompasses support for early-stage technologies that may deliver increased fuel resilience.³⁴

Recommendation 5: The Commonwealth should prioritise investment in development of the power-to-liquid fuel production method, both through the *Future Made in Australia Innovation Fund* and other programs.

Addressing the green premium

Even as the LCLF industry progresses towards maturity, low carbon fuels will still face low or uncertain demand due to the green premium relative to those made by traditional means. This premium is expected to slowly reduce across all LCLF production methods. But costs³⁵ will remain higher than conventional equivalents out to and beyond 2050.³⁶ Effectively tackling this dilemma calls for government action on the both the supply and demand sides of the market.

Investment tax credits

As regards supply, it is unavoidably the case that commercial LCLF production will require large upfront investment to retrofit existing refineries or construct new sites. For example, the mooted cost of the proposed *Project Ulysses* SAF production site is \$600 million, and its nameplate capacity would be just 1.5% of the Viva Geelong refinery.³⁷ These are the financial decisions the industry will ultimately be built on, but the financial barrier to development is obvious.

The Commonwealth should incentivise such investment by providing tax credits for investments in key assets that facilitate commercial production. The Commonwealth should devise a list of assets eligible to attract credits.

Government support for other green manufacturing industries with large upfront capital requirements suggests an appreciation of the need for subsidies to address this issue. The *Hydrogen Hubs* program will see the Commonwealth invest over \$500 million in a handful of hydrogen production sites and related infrastructure.³⁸ The government has also provided over \$600 million to date for metals producers to acquire assets enabling lower emissions production.³⁹

To ensure it drives as much investment as possible, the investment incentive should be uncapped and refundable. As the nascency of the local LCLF industry means eligible investments are likely to occur over several years, the incentive would also need to be available over several years. These attributes would be largely consistent with government's proposed approach to the *Critical Minerals Production Tax Incentive* and *Hydrogen Production Tax Incentive*.⁴⁰

Recommendation 6: The Commonwealth should deliver tax credits for capital investment in assets facilitating commercial production of low carbon liquid fuels.

Production tax credits

While subsidised investment will hasten the industry's development and help reduce the green premium, it will not eliminate it. A production subsidy is the optimum means of addressing then ongoing premium for low carbon fuels relative to hydrocarbon equivalents.

Eligibility for the credit should be determined according to the emissions intensity of the fuel produced. The Commonwealth should prescribe baselines for low carbon aviation and diesel fuels. These baselines would reflect a minimum reduction in emissions intensity, relative to equivalent fuels produced via traditional means, that must be met to qualify for the subsidy. The value of the credit provided would increase as a fuel's emissions intensity declined relative to that baseline. For

example, the scheme could provide \$0.02 per litre for every 1% reduction in emissions intensity below the baseline.

The baseline emissions intensity levels prescribed under the scheme should be sufficiently high as to support existing refineries to shift to co-production - essentially, fuels containing both biofuels and traditional fuels - en route to full LCLF production. This is a likely transition route for existing refineries. A higher baseline, combined with an incentive that scales in inverse proportion to emissions intensity, will support the transition of current refineries while incentivising all operators to produce fuel that is as low carbon as possible.

As with investment tax credits, an uncapped and refundable production credit will maximise access to the subsidy and thus the volume of output supported. As a premium for LCLF is expected to persist for the foreseeable future, it is also necessary that the incentive remains in place for at least a decade.

A production subsidy of this type can provide scaled benefits supportive of all producers, predictable revenue for investors seeking certainty, and an incentive to produce fuel with as little emissions intensity as possible. Its relative predictability should also support government to accurately model and plan for its liability under the scheme.

Recommendation 7: The Commonwealth should deliver a production tax credit for low carbon liquid fuels. The value of the credit should increase in inverse proportion to the emissions intensity of the fuel.

Government purchasing mandate

On the demand side, a purchase mandate is widely recognised as important to ensuring a reliable market for producers, as the wide spectrum of industry stakeholders that advocate for such a mandate reflects.⁴¹

However, the high to very high green premium on all LCLF fuels at the present time imbues any mandate for private businesses with obvious downside and social licence risk. Such costs will be passed on to customers in a relatively direct manner - driving up prices for products such as airline tickets and foods transported by diesel trucks during a cost of living crisis. We note also the expert suggestion that demand supports are best deployed for technologies that have already achieved a level of maturity.⁴²

We suggest a government purchase mandate is more appropriate than a mandate for private purchasers in the near to medium-term. The Commonwealth consumes large volumes of fuels that could be supplanted with LCLF, including over 200 million litres of aviation turbine fuel for the Australian Defence Force each year.⁴³ A mandate could require the government to purchase LCLF to cover a portion of its consumption - increasing in conjunction with industry's capability to produce low carbon fuels.

A government mandate is also appropriate because fuel security is of particular concern to the Commonwealth in light of its importance to Australia's defence capabilities. Such a commitment

can facilitate earlier-stage development of the industry and help deliver the energy security that the Australian Defence Force requires.

As with the recommended tax incentives, the mandate should specify a minimum emissions intensity for eligible fuel. In its early incarnation, this commitment should be designed to accommodate co-production of fuel as refineries transition from traditional fuel production. However, to incentivise both current and new operators, the Commonwealth would ideally commit from the outset to purchase at least some fuel from operators providing very low emissions LCLF.

The mandate must specify that LCLF fuel is to be procured from Australian producers. A LCLF purchasing mandate without a local sourcing requirement may satisfying emissions reduction objectives, but would fail to speak to Australia's economic opportunity and strategic risk.

Such a commitment appears a highly durable form of demand side support in the near to medium-term. Of course, the cost premium associated with a mandate applied to government would still need to be covered by the taxpayer. However, as it would not directly impact on common and highly visible consumer costs, it is unlikely to carry the same social licence risk as a private incentive. Moreover, given the clear national security significance of fuel production and supply to the defence force, such a mandate appears unlikely to fall foul of Australia's trade obligations. Protection of the nation's essential security interests is widely prescribed as an exemption to public procurement rules in Australia's trade agreements.

Recommendation 8: In the near to medium term, the Commonwealth should commit to meeting a quantity of its aviation and diesel fuel purchase with Australian-made low carbon liquid fuels.

Private sector mandate

As production matures and the green premium begins to meaningfully subside, a private sector mandate is appropriate in the medium to long term. This would require specified fuel suppliers to provide LCLF as a minimum portion of total fuel supplied.

This mechanism should be designed to drive uptake of LCLF as broadly as practicable and ensure its costs are spread as evenly as possible. A mandate requiring major airports to supply SAF as a prescribed portion of total fuel supplied appears to be an effective means of supporting these outcomes in relation to aviation fuel. A mandate covering Australia's major city airports would be sufficient to cover nearly all demand in the aviation sector. This route is also favoured by the European Union and Singapore - two large aviation markets that have moved on a mandate ahead of Australia.

The private sector purchase mandate should have many of the same key features as the recommended tax incentives and government purchase mandate:

- To deliver economic and strategic benefits, it should specify that entities covered by the mandate must procure Australian-made LCLF.

- For alignment with emissions abatement objectives, the Commonwealth should specify a maximum emissions intensity for eligible fuels under the mandate.
- To ensure refineries' capacity to deliver, and to support alignment with Australia's decarbonisation imperatives, the rules around the minimum proportion of LCLF supplied and its maximum emissions intensity should ratchet up over time.
- Noting the green premium makes widespread compliance with any form of voluntary scheme highly unlikely, compliance must be genuinely mandatory.

Recommendation 9: In the medium to long term, the Commonwealth should require that private fuel providers supply low carbon liquid fuels as a minimum portion of total fuel supplied.

Level playing field

Even with broad government support, the demands of the Safeguard Mechanism mean Australia will need to ensure a level playing field for refineries producing LCLF. In engaging with the Carbon Leakage Review, the AWU has advocated the prompt implementation of a carbon border adjustment mechanism (CBAM) to ensure fair treatment of Australian-made steel, cement and aluminium in the face of imports from jurisdictions with less onerous carbon pricing arrangements. We also recommend the government monitor the market for other emissions intensive, trade exposed products for potential expansion of the CBAM.⁴⁴

The recent addition of renewable aviation kerosene and diesel to the list of 'trade-exposed production variables' under the Safeguard Mechanism suggests an appreciation of the risk of potential import exposure for LCLF. Large-scale production of these products would strengthen the need to consider their coverage under a future CBAM.

Recommendation 10: The Commonwealth should promptly implement a carbon border adjustment mechanism, with provision to expand it to new products as required.

Quality jobs and skills as a condition of support

It is critical that the LCLF support package maximises returns to the workers whose labour will deliver it and the communities that will host and help pay for it. This must be reflected not only in the above programs and incentives to support the industry's development, but through regulation requiring producers to deliver safe, secure, highly paid jobs and worker development.

To this end, the AWU applauds the Commonwealth's high-level goal of promoting 'safe, secure, well-paid jobs and more skilled and inclusive workforces' through all FMIA programs. However, the provisions of the *Future Made in Australia Bill 2024* intended to underpin these outcomes⁴⁵ appear

unclear and difficult to effectively apply and enforce. This is especially so as regards the conduct of employers after financial support has been provided.

Rather than lenient guidance, firm regulation is needed to realise intended benefits pertaining to quality jobs and workforce development. Such rules should be developed and implemented as a matter of priority.

The AWU sees particular merit in a 'two gate' system similar to the tendering models implemented by the ACT and Victoria governments in recent years.⁴⁶ Ideally, this would take the form of the planned *Secure Australian Jobs Code* and apply broadly across all LCLF supports and other FMIA programs (as well as other investments made through Specialist Investment Vehicles).

The system would require firms to demonstrate a commitment to positive worker outcomes as a threshold requirement to be considered for support under a particular program, including an LCLF support program. Businesses would be required to obtain and hold a certificate verifying their commitment to such outcomes. This would be issued by an independent authority following an assessment of the firm. The assessment would verify the business' commitment to quality jobs and skills outcomes, including:

- The existence of an enterprise agreement with a relevant union, or a willingness to enter into such an agreement;
- The firm's history of compliance with industrial law, workplace health and safety standards and other legal obligations to its workforce;
- Its commitment to engaging staff on a permanent basis wherever possible;
- Efforts to engage trainees and apprentices; and
- Where subcontractors are engaged, the use of firms that also hold such a certificate.

After demonstrating it held a current certificate, a business could be assessed for support against the discrete criteria of the program or investment vehicle.

Moreover, we suggest this system could support 'yes-no' assessment of eligibility for supports provided through the tax system as current taxation law requires. The relevant assessment would be whether or not the business claiming support held the requisite certificate during the period for which the benefit was claimed.

Recommendation 11: The Commonwealth should prescribe clear, enforceable regulation that requires all projects receiving support under *Future Made in Australia* programs to deliver safe, secure, well-paid jobs and worker upskilling.

Support befitting the opportunity

The scale of public support required to deliver the package advocated above is difficult to calculate with precision. This uncertainty partly reflects Australia's potential in LCLF production; The maximum or optimum level of output that the nation might seek to achieve is not entirely clear. It also reflects uncertainty as to the evolving strategic landscape in the Indo-Pacific, and the extent to which it may exacerbate the imperative for local fuel production. Moreover, some supports we advocate would be uncapped and thus subject only to projected rather than maximum costs. The point at which an industry reaches commercial maturity is also to some extent a function of government support itself. Greater state support drives additional investment, delivering faster development and ultimately an expedited path to commercial maturity.

The AWU's vision, comprehensive as it is, trends toward greater ambition. This is, we suggest, a fair reflection of the promising combination of workforce, environmental and strategic benefits promised by the development of a large LCLF industry and supply chain. We suggest a package comparable to that provided to other industries under FMIA to date - that is, a multi-billion dollar package - is warranted.

Recommendation 12: The low carbon liquid fuels support package should provide comparable financial support as that afforded to other industries under the *Future Made in Australia* program.

More information

The Australian Workers' Union is strongly committed to assisting the Commonwealth in fostering a successful and worker-positive low carbon liquid fuels production industry and supply chain.

We would welcome the opportunity to contribute further to this consultation and to respond to queries regarding this submission.

References

- ¹ See for example, <https://www.qantas.com/content/dam/qantas/pdfs/qantas-group/icf-report-australia-saf-policy-analysis-nov23.pdf>, p. 1
- ² <https://www.energy.gov.au/sites/default/files/Australian%20Petroleum%20Statistics%20-%20Data%20Extract%20May%202024.xlsx>
- ³ <https://www.energy.gov.au/sites/default/files/Australian%20Petroleum%20Statistics%20-%20Data%20Extract%20May%202024.xlsx>
- ⁴ https://www.energy.gov.au/sites/default/files/australian_petroleum_statistics_-_issue_275_june_2019.pdf, pp. 10-11
- ⁵ <https://www.aspistrategist.org.au/australia-must-boost-investment-to-ensure-strategic-fuel-security/>
- ⁶ <https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review>, pp. 38, 77
- ⁷ We use the term 'low carbon liquid fuels' in the same manner as the Department of Infrastructure, Transport, Regional Development, Communications and the Arts in the Low Carbon Liquid Fuels consultation paper
- ⁸ Consultation paper, pp. 7, 15
- ⁹ <https://www.csiro.au/-/media/Energy/Sustainable-Aviation-Fuel/Sustainable-Aviation-Fuel-Roadmap.pdf>, p. 8
- ¹⁰ See for example, <https://www.qantas.com/content/dam/qantas/pdfs/qantas-group/icf-report-australia-saf-policy-analysis-nov23.pdf>, p. 2;
- https://www.infrastructure.gov.au/sites/default/files/documents/aviation_green_paper.pdf, p. 67
- ¹¹ <https://www.qantas.com/content/dam/qantas/pdfs/qantas-group/icf-report-australia-saf-policy-analysis-nov23.pdf>, p. 11
- ¹² <https://www.dfat.gov.au/sites/default/files/country-sitc-pivot-table-calendar-years.xlsx>
- ¹³ <https://www.abc.net.au/news/rural/2024-02-04/tallow-exports-have-exceeded-one-billion-dollars/103408312>
- ¹⁴ <https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet----iata-net-zero-resolution/>
- ¹⁵ See for example, https://www.ifminvestors.com/siteassets/shared-media/media-release-pdfs/media-release_federal-budget-measures-have-local-sustainable-aviation-fuel-industry-ready-for-take-off.pdf;
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- ¹⁶ <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/agriculture/071624-oceania-biofuels-scraps-a500-million-australia-saf-and-rd-project-epbc>
- ¹⁷ <https://www.icao.int/environmental-protection/GFAAF/Pages/Production-Facilities.aspx>
- ¹⁸ https://www.infrastructure.gov.au/sites/default/files/documents/aviation_green_paper.pdf, p. 82
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²⁰ Consultation paper, p. 23

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²⁴ https://www.infrastructure.gov.au/sites/default/files/documents/aviation_green_paper.pdf, p. 82

²⁵ https://www.infrastructure.gov.au/sites/default/files/documents/aviation_green_paper.pdf, p. 81

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²⁷ Consultation paper, p. 9

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³⁰ https://www.infrastructure.gov.au/sites/default/files/documents/aviation_green_paper.pdf, pp. 84-86

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³³ <https://www.csiro.au/-/media/Energy/Sustainable-Aviation-Fuel/Sustainable-Aviation-Fuel-Roadmap.pdf>, p. 64

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³⁶ <https://www.csiro.au/-/media/Energy/Sustainable-Aviation-Fuel/Sustainable-Aviation-Fuel-Roadmap.pdf>, p. 64

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³⁸ <https://www.dcceew.gov.au/energy/hydrogen/building-regional-hydrogen-hubs>

³⁹ <https://www.minister.industry.gov.au/ministers/husic/media-releases/200-million-help-future-proof-regional-steel-manufacturing>;

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⁴⁴ <https://awu.net.au/wp-content/uploads/2024/02/231218-Carbon-Leakage-Review-consultation-AWU-submission.pdf>

⁴⁵ *Future Made in Australia Bill 2024* (Cth), s10(2)-(3)

⁴⁶ That is, the ACT's *Secure Local Jobs Code* and Victoria's *Fair Jobs Code*