

8 January 2024

Department of Agriculture, Fisheries and Forestry
GPO Box 858
Canberra ACT 2601

Re: Agriculture Sectoral Plan Discussion Paper

Thank you for the opportunity to provide feedback on the Sectoral Plan covering *Agriculture, land and emissions: discussion paper*.

AIP presents this submission to the Department of Agriculture, Fisheries and Forestry (DAFF) on behalf of AIP's core member companies:

- Ampol Limited
- BP Australia Pty Ltd
- Mobil Oil Australia Pty Ltd
- Viva Energy Australia Pty Ltd.

AIP and member company interest in the Agriculture Sectoral Plan is twofold:

- given the agriculture sector is a large fuel user and AIP member companies manufacture and supply that fuel, we have an interest in the role that low carbon fuels can play in reducing emissions across the transport task and in onsite agricultural equipment; and
- the important role that agricultural feedstocks can and will play in the manufacture of these fuels.

About AIP and Member Companies

AIP and member companies are committed to meeting society's energy needs while helping to develop and deliver solutions that contribute to reducing greenhouse gas emissions, both in their own operations and in other fuel using sectors. AIP and member companies support governments' efforts to reduce Australia's emissions, including through commitments to the Paris Agreement and to net zero by 2050.

AIP member companies operate across all or some of the liquid fuels supply chain including crude sourcing and refinery operations, petroleum product imports, fuel storage, terminal and distribution networks, marketing, sales and retail. Underpinning this supply chain is considerable industry investment in supply infrastructure, and a requirement for significant ongoing investment in maintaining existing capacity. Over the past 15 years, AIP member companies have invested over \$10 billion to maintain the reliability and efficiency of fuel supply meeting Australian quality standards.

Moreover, AIP member companies deliver most of the bulk fuel supply to the Australian market.

- In relation to conventional petroleum fuels, AIP member companies operate both petroleum refineries in Australia and supply around 90 percent of the transport fuel market with bulk petroleum fuels from both imported and locally manufactured fuels.
- In relation to gaseous fuels, AIP member companies are the major suppliers of bulk LPG to the domestic market, representing around two thirds of the market.
- In relation to biofuels, AIP member companies are the largest suppliers of ethanol and biodiesel blend fuels to the Australian market.

AIP member companies are investing in research, product and market testing, and deployment of a range of emerging fuels and technologies to support the energy transition in the transport, agriculture and broader energy use sectors. These include (but are not limited to):

- electric vehicle charging infrastructure
- hydrogen production and refuelling
- carbon neutral fuels (delivered via offsets)
- co-processing of waste and biogenic feedstocks at local refineries to produce lower carbon fuels
- renewable diesel, and
- sustainable Aviation fuel.

AIP member companies are committed to meeting their customers' needs as fuel and vehicle technologies evolve. Indeed, the industry is well placed to support the energy transition in the transport sector given its:

- strong relationship with customers across all fuel using and transport tasks, including passenger, freight, off road and industrial use, agriculture, aviation and marine
- experience with the safe, efficient, and reliable supply of fuels
- ownership and experience in operating well-established and integrated supply chain infrastructure
- technical expertise and research and development capability, and
- marketing and selling products under trusted brands.

The role of low carbon and renewable fuels

Low carbon and renewable fuels have a clear and demonstrable role in reducing emissions ahead of technology changes and adoption and through the gradual displacement of traditional petroleum fuels. Electrification provides a relatively clear pathway for light passenger and some freight vehicles which will significantly reduce these emissions over time. This will only occur at the speed in which users adopt vehicle technologies and the timeframes in which the vehicle fleet is turned over (for example, the passenger fleet turns over in around 10-12 years while heavy transport is 20-plus years). Furthermore, electrification technologies are not currently available or viable for many transport applications including long distance haulage and heavy vehicle application, such as in the agricultural and mining sectors, as well as for aviation.

In all scenarios, renewable fuels could immediately reduce the emissions intensity of the overall fuel pool particularly where those renewable fuels are drop in solutions such as Renewable Diesel or Sustainable Aviation Fuel. However, there remains some barriers to the supply of these fuels including:

- comparative higher price vs their hydrocarbon alternative
- limited policy incentives or lack of policy design to allow tracking, booking and claiming the emissions benefit from these fuels
- limited importation options given limited demand
- no current local manufacture at scale.

Policy Principles and Settings

Given these challenges, there is a clear role for government in providing the appropriate policy settings to incentivise the investment in renewable fuels, but also to drive their uptake. While there is undoubtedly an interlinkage between fuel supply and the vehicle technologies, there is significant risk in investing in new fuel technologies if they do not match customer demand. Approaches that compel investment to meet expected but not yet realised customer demand runs the risk of both compromising existing customer need for petroleum fuels while potentially over or mis-investing in future technologies.

AIP does not advocate for one fuel type or vehicle/fuel use technology over another. Rather, AIP supports an approach from governments that provides for a stable long term policy environment with national coverage, that in turns allows companies to make their own individual investment decisions to meet their customers' needs and business objectives. Establishing a level playing field to encourage multiple solutions should be a key defining principle for government policy. Similarly, government policy should aim to support identification and delivery of abatement at lowest cost.

AIP strongly supports market-based approaches for the supply of fuels in Australia which have delivered the safe, reliable and cost-effective supply of fuels for many decades. AIP considers that lower emissions fuels and transport technologies will increasingly have a place in the Australian market as long as they are:

- available at a competitive price
- reliably supplied
- provide choice for consumers and foster competition
- produced sustainably.

AIP believes that government policy in support of decarbonised fuels needs to be:

- transparent, with clear, credible and tested objectives
- applied equitably to all industry participants
- stable with regular review and clarity to enable action in desired timeframes
- based on robust and transparent data grounded in science
- complementary and consistent with other broader policy settings and commercial practices.

Low Carbon Fuel Standards (LCFS)

LCFSs, or similar market mechanisms, are becoming increasingly popular around the world to incentivise investment in low carbon and renewable fuels as a means of immediately reducing fuel related emissions.

An LCFS is a market-based policy designed to reduce the overall carbon intensity of liquid fuels over time. It does so by setting a declining target for overall average emissions/carbon intensity of the fuel pool. Liable parties generate credits for fuel supplied with emissions intensity below the target benchmark, while fuel supplied above generate debits. A well designed LCFS should be technology/fuel neutral and determined on the overall lifecycle emissions of the fuel. Because the carbon intensity is measured based on the lifecycle emissions of the fuel, an LCFS has potential to drive emission reductions right along the supply chain, including on farm for feedstock providers.

Although NSW and Qld have biofuels mandates, these are not market mechanisms, but are instead more focused on supporting producers of specific biofuels rather than incentivising overall emissions abatement. Unlike these volume-based biofuels mandates, an LCFS aims to align the emissions abatement performance of the fuel with the incentives in the scheme and consequently it more accurately reflects the abatement cost to consumers of different fuel types and their application in vehicle technologies.

There is significant experience overseas and AIP would seek to align with these schemes insofar as practicable, subject to Australian conditions. Example from overseas include:

- California's Low Carbon Fuel Standard
 - The California LCFS has been an early model for others, having commenced in 2007 and recalibrated and expanded over time.
 - Regulated parties (typically oil refineries and petroleum importers) ensure that the mix of fuel they sell in the market meets reducing targets (expressed as baselines).
 - The LCFS standards are expressed in terms of the "carbon intensity" (CI, e.g CO₂/MJ) of gasoline and diesel fuel and their respective substitutes.

- Each fuel has "life cycle" greenhouse gas emissions that include CO₂, CH₄, N₂O, and other GHG contributors.
- The carbon intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits.
- Regulated parties that have generated deficits and not enough credits themselves must then find credits to buy and satisfy their required obligation.
- The program provides several opportunities to incentivise production and use of low emissions fuels, through the generation of credits, including:
 - Fuel pathway crediting:
 - Incentives to supply as low emission fuels are provided though credits from fuels with lower CI than the baseline CI.
 - Project based crediting:
 - Credits generated from projects across the petroleum supply chain emissions reduction projects calculated on a life cycle basis, including CCS and direct air capture.
 - Zero-emissions vehicle infrastructure (capacity based) crediting:
 - The aim is to incentivise build out of infrastructure and provide a revenue stream for fuel stations until ZEVs become more competitive.
 - Installation of electric charging infrastructure (fast charging and hydrogen) can generate credits based on installed capacity.
 - Credits are essentially provided for unused capacity.
 - As more ZEVs use the station and the station utilization increases, the site will generate more LCFS fuel credits and fewer infrastructure credits.
- The EU's Low-carbon fuel standard - Renewable Energy Directive (RED)
 - RED was introduced in 2009 and is under consultation for further potential revision.
 - The existing directive sets the overarching European target for the content of renewable energy in the overall energy mix of Member States and includes rules to ensure the uptake of renewables in the transport sector and in heating and cooling.
 - In 2009, the Renewable Energy Directive (RED; 2009/28/EC) set the target for each Member State, whereby 10% of all energy used in transport should be from renewable sources by 2020. The RED also introduced sustainability criteria and, since 2011, only biofuels that comply with these criteria count towards the renewable energy share.
 - In 2018, the new RED, known as RED II, strengthened the sustainability criteria for bioenergy and set a new goal for 2030, increasing the target for the share of renewable energy used in transport to 14% by 2030.
 - There is significant lifecycle methodology underpinning the RED2. Work is underway to include Renewable Hydrogen, including legal definitions, certification etc in an updated RED3.
 - RED also provides for the market trading of green certificates to support compliance.
 - In addition, ReFuel EU Aviation Regulation includes mandatory shares of sustainable aviation fuels (SAFs) to be available at airports, starting at 2% of overall fuel supplied by 2025 and reaching 70% by 2050. Maritime FuelEU regulation has also been adopted to reduce GHG emissions from maritime energy use. Targets include 2% reduction by 2025, 6% by 2030, 14.5% by 2035, 31% by 2040, 62% by 2045, and 80% by 2050
- Other Schemes
 - Schemes similar to the California LCFS also operate in Oregon (implemented 2016), Washington State (2023) and British Columbia (2013).

These schemes have provided many benefits as an LCFS:

- incentivises supply of lower emissions fuels to meet national, sectoral and corporate emission targets and objectives
- reduces emissions from the current vehicle fleet as it progressively turns over to new, low and zero emission vehicle technologies
- uses a life cycle approach which can reflect the true cost and performance of an abatement policy, providing for innovation and competition between fuels and technologies
- provides an appropriate price signal to consumers/end users and provides a level playing field (so individual customers are not disadvantaged by having to pay for higher priced lower carbon fuels)
- is technology neutral and fuel agnostic
- incentivises consumer choice and fuel innovation
- can enable faster, potentially lower cost abatement solutions than policies that rely on a single replacement technology – especially when some replacement technologies are less mature or not at commercial scale
- provides flexibility for individual entities to best meet their obligations in a manner consistent with their own business and supply strategies and commercial interests
- allows the market to determine the lowest cost abatement pathway in the supply of fuels and minimises Government opportunities to pick winners (like volumetric mandates in NSW/Qld)
- provides increased certainty over the long-term policy and abatement trajectory
- can sit alongside other policy measures such as grants to assist projects which will manufacture lower carbon fuels and Fuel Efficiency Standards (FES) which target the fleet make-up and incentivises lower or zero emission vehicle technology uptake.

Based on this experience and their success in supporting low carbon fuels, AIP supports the introduction of a LCFS as the best policy mechanism to underpin the supply and uptake of low carbon fuels in Australia.

Importance of Feedstocks

The availability of cost-effective and sustainable feedstocks will be critical to the supply of lower emission fuels to support emissions abatement through an LCFS.

Like traditional fuels, the renewable fuels that replace them in a low-carbon economy will be part of an international supply chain. Unlike traditional fuels derived from abundant crude petroleum oil, first and second generation renewable fuels will be made from currently constrained feedstocks. Already, there is strong international demand for feedstock supplies, with the few established renewable fuels refineries sourcing tallow, waste oils, vegetable oils and other feedstocks from across the globe – often with financial incentives to attract these feedstocks.

Australia has a narrow window of opportunity to secure its future supply of renewable fuels. Australia will need a stable, long-term policy framework to attract investment in importing and manufacturing renewable fuels. This framework will need to take account of numerous factors in the international market, including the substantial incentives available in other countries, feedstock competition and a tight global investment environment.

Australia is already a significant feedstock provider to export markets and has great potential for expanding supply to both local and export markets, using feedstocks derived from agricultural residues, purpose-grown Cover Crops, and Novel Crops such as Carinata. Carinata is a non-edible, high yield oilseed plant with high tolerance to diverse climates and growing conditions. Another, yet-to-be commercially grown candidate is Pongamia, which is similar in yield and growth. Such Novel Crops are opportunities to expand and diversify feedstock supply. Non-edible oilseeds do not compete with food markets and can be grown on marginal or degraded land.

The technical and economic viability of different feedstocks will need to be monitored over time as the energy transition changes our understanding of efficient land use, sustainability and cross-sectoral decarbonisation benefits.

AIP believes governments should identify ways to support commercial scale feedstock supplies and work with the agriculture sector to realise the opportunity for these crops to become part of Australia's agriculture landscape, supporting abatement, local manufacturing and export opportunities.

AIP considers that a key action for the Agriculture Sector Plan is a thorough assessment of Australia's existing and future feedstock capacity. Such an analysis will be important for informing the investment decisions of producers and fuel suppliers. It is also likely to reveal policy opportunities for improving sustainable supply.

Conclusion

Thank you for the opportunity to comment on the Discussion Paper. AIP considers there are promising opportunities to manufacture and import low carbon and renewable fuels into the Australian market, as part of Australia's energy transition. Importantly, renewable fuels can reduce emissions immediately, through the displacement of existing petroleum fuels, and can work in tandem with other transport policies, such as support for electrification.

Feedstocks are a critical component for underpinning investment in local manufacture of these lower carbon fuels. We therefore strongly encourage DAFF to further investigate Australia's feedstock capabilities, barriers to supply and policies that could boost feedstock supply.

AIP is keen to engage further with DAFF on these issues and looks forward to the opportunity to meet in the near future.

Do not hesitate to contact me on aip@aip.com.au or on (02) 6247 3044.

Yours sincerely

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