

## Agriculture, Land and Emissions Plan

### **ENQUIRIES**

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## A. INTRODUCTION AND EXECUTIVE SUMMARY

La Trobe welcomes the draft 'Agriculture, Land and Emissions Plan' (the Plan) and the opportunity to participate in this consultation.

Home to the [La Trobe Institute for Sustainable Agriculture and Food](#) (LISAF) and to Australia's first [Climate Change Adaptation Lab](#), and with two of our five key Research Themes ([Sustainable Food and Agriculture](#) and [Resilient Environments and Communities](#)) closely aligned to this consultation, we look forward to sharing our views on this Plan and the ways in which it can be strengthened.

La Trobe broadly welcomes the draft Plan and notes the following:

- While the Plan usefully highlights incremental changes to reduce emissions such as additives to reduce rumen impacts and coatings to reduce fertiliser, these changes will not, in themselves, reduce absolute emissions. The Plan should explore broader opportunities such as non-ruminant meat production and the broader adoption of plant-based proteins or alternative production systems.
- While the technology is well demonstrated, the economic and social changes that come with the adoption of new agricultural approaches are not well canvassed and/or communicated. A greater effort is required in understanding the implications of such changes on the people engaged in farming.
- The adoption of both mitigation and adaptation measures at the farm, regional and industry level requires an in-depth and sophisticated understanding of the systems in question, notably the decision makers and their perceived options. This requires far stronger investment in social science research.
- The existing Drought Resilience and Adoption Hubs under the Future Drought Fund have a strong regional presence, local knowledge and established relationships with industry and communities which could be usefully drawn upon. Their mandate should however be extended to include climate resilience and to helping farmers and regions to respond to the full range of climate change effects. This would complement government-wide efforts to reduce emissions. There is also scope for a national expansion of the Farming for Australia program.
- There is an opportunity for government to take a stratified approach to carbon emission reporting for agriculture with a 'default' simpler option relying on other existing datasets that would reduce the administrative burden on businesses and a more burdensome 'opt-in' option for those land managers who want to participate in carbon sequestration and trading.

We believe that one element of increasing resilience to climate change is through producing "climate resilient" crops which are for instance drought, flood and/or salt tolerant, more water-efficient and less dependent on fertiliser inputs. Section C outlines the extensive work by La Trobe researchers in the agri-food sector such as the growing sector of 'protected cropping' (an approach which enables farmers to optimise harvest times, reduce nutrient and watering regimes and swiftly respond to disease) as well as industry collaborations aimed at the reduction of methane emissions in Australian dairy cattle. In parallel, it is important to consider the potential of minimising food waste and the impact that would have on overall sustainability.

In Section D we outline the aims of the [Australian Food Innovation Centre](#) – our exciting partnership with CSIRO at our Bundoora campus, which will support research innovation, (re-)skilling of the agri-food sector future workforce, commercialisation and manufacturing in the agri-food sector by providing state-of-the-art research facilities and expertise, as well as opportunities for co-location, industry collaboration and start-up incubator spaces.

Our responses to the review's Discussion Questions are included in Section B. La Trobe looks forward to working with the Department of Agriculture, Fisheries and Forestry. Further information about any of the points raised in the submission can be provided upon request.

## **B. LA TROBE RESPONSE TO THE CONSULTATION'S DISCUSSION QUESTIONS**

### **The need for higher ambition**

#### **1) What are the opportunities to reduce emissions and build carbon stores in agriculture and the land? What are the main barriers to action?**

- There is an industry-wide opportunity to revisit and review current production approaches. The discussion paper highlights incremental changes to the sector such as additives to reduce rumen impacts, coatings to reduce fertiliser (N particularly) emissions, farming systems changes to incorporate a greater proportion of nitrogen fixing crops and forages as part of traditional production systems, as well as genetic improvement consistent with these goals. While useful, these will not reduce absolute emissions. Instead, what is required, is a permanent reduction in the national herds of all ruminant livestock and a range of interventions in the agri-food system to shift consumption to lower-emissions options and to transition ruminant livestock producers to less greenhouse-gas intensive activities.
- The paper misses the opportunity to explore a broader range of opportunities such as non-ruminant meat production, broader adoption of plant-based proteins or alternative production systems that accumulate large quantities of carbon (particularly fibrous crops such as flax and industrial hemp). A key challenge for these non-conventional systems is the lack of robust scientific Research and Development, on-farm economic analysis, as well a limited number of effective and efficient supply chains linking producers with consumers.
- In addition, there is a need to revisit the exclusion of all Scope 3 emissions from the plan, which is unnecessarily and unhelpfully restricted. As the passing mention of nitrogenous fertilisers and Section 3.4.1. on the circular economy indicate, some off-farm sources of emissions are significant and can be readily addressed in ways that offer multiple benefits. In particular, there is a need and opportunity to help farmers reduce their reliance on emissions-intensive, increasingly expensive chemical inputs. This includes prioritising scientific and economic Research and Development into alternatives and their relative profitability under more difficult market as well as climatic conditions. Long supply chains and value chains for agriculture of all sorts should also be avoided because they generate emissions and pollution (especially cold chains) and increase risk for farmers as logistics systems become less reliable.
- Another advantage of the use of alternatives (beyond the reduction in emissions) is that they help boost carbon – sequestration benefits. For example, as La Trobe research indicates bird-based bio-control of insects is an effective supplement to chemical insecticides, and this effect encourages farmers to retain and increase trees on their farms as bird habitat. Similarly, effective bio-control of agricultural pests has been demonstrated in vineyards and orchards and further research is required to expand its use in other agricultural sectors. Other alternative inputs help reduce emissions allocated to other sectors, which would assist the Commonwealth Government in reaching its wider goal of national emissions reduction. For example, as indicated in Section 3.4.1, the use of composts and other soil amendments made from wastes in other sectors (e.g. the water sector, the food sector and other elements of the agriculture sector) or 'on-farm' from other farm waste (and thus further reducing transport emissions), can provide alternative sources of nutrients as well as other soil enhancing effects.

- With regard to the use of agricultural products as fuel stocks for energy production (as outlined in Section 3.3), these options demand more research and field trials to examine their effects and feasibility in different contexts. In particular, there is a need for robust research into an emerging barrier to waste re-use on farms, which are the emerging contaminants within the waste streams. Many of these (e.g. Print. Per- and Polyfluorinated Substances (PFAS)) stem from industrial chemical production, underlining the need to reduce the large scale production of agricultural (and other) chemicals. Significant opportunities lie in alternative farm practices that:
  - replace synthetic fertilisers with organic amendments (often made on farm to further reduce transport emissions);
  - eliminate the need for fertilisers in pastures through alternative grazing systems and pasture composition; and/or
  - reduce application rates through expansion of precision agriculture and AgTech to avoid over-fertilisation
- Building carbon stores in the agriculture sector has thus far focused on soil carbon – with mixed results. Barriers to adoption include costs of monitoring, lack of confidence in the market mechanisms, and susceptibility to climatic fluctuations (soil carbon is closely related to soil moisture and thus, rainfall). Opportunities lie in rigorously testing and validating soil carbon estimates generated from remote sensing – validation of these measures will increase confidence throughout the supply chain and reduce costs of participation in the carbon market. The discussion paper rightly identifies biodiversity and conserving 30 per cent of Australia’s landmass by 2030 as an opportunity to build carbon stores. However, this will mostly be achieved through formal protection of public land and protection of existing carbon stores. Government policies should also:
  - disincentive further clearing on private land (which is required if the sequestration under the Land Use Change reporting is to be maintained) by recognising the carbon stored in remnant vegetation;
  - reward ongoing sequestration in remnant vegetation (i.e. devise a new accredited ‘method’ around standing remnant carbon).

There are also opportunities to build carbon through biodiverse plantings by further incentivising co-benefits of ‘nature positive’ actions and generating demand for co-benefits of biodiverse plantings (over and above the Nature Repair Market). Barriers currently include lack of efficient market mechanisms to generate demand and lack of industry capacity (in the revegetation industry) to supply demand at levels needed for the step-increase to address the climate crisis.

## 2) How can we progress emission reduction efforts whilst also building resilience and adapting to climate change?

- In the first instance, we would argue that the framing of this question is problematic because it implies that actions to reduce emissions are opposed to or different from actions aimed at building resilience. To the contrary, emission reduction efforts inherently build resilience and capacity to adapt to climate change. There are of course barriers such as cost-effective and agreed methods to measure natural capital<sup>1</sup> and, more importantly, the lack of clear market signals to create demand. While government programs and incentives can serve to prime the

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<sup>1</sup> La-Trobe designed **Farm-Scale Natural Capital Accounts** are one way of addressing this barrier. Natural capital accounting is a tool that enables farmers to record and manage the natural capital on their farms, both in physical and monetary terms. Like financial accounting, natural capital accounts are guided by an agreed set of standards, and are quantifiable, verifiable and repeatable.

system, ultimately the magnitude of change required will need to be driven by market forces. On the positive side, evidence of the benefits of increasing on-farm natural capital for productivity and profitability gains (i.e. private benefit to farmers) is growing, led by programs such as Farming for the Future. This should be a catalyst for widespread systems change to reduce emissions and build resilience.

- Adapting to climate change requires an understanding of the impacts at a farm level. Every farm business is unique and operates in its own context. It has its own aspirations, and as such the impacts of climate change will impact each farm differently. The impacts of climate change need to be communicated in a manner that can align with those aspirations. Extension needs to recognise what change means for the viability of farming systems at a regional level, not farms per se. Landholders need to be equipped with sufficient understanding of a future climate and its far-reaching flow-on effects so that they can make their own decisions. This means extension needs to come from trusted local sources. At present, climate change adaptation and greenhouse gas mitigation in the agricultural sector is hampered by the lack of effective agricultural extension systems including a lack of resourcing for groups such as Landcare.
- There are things that can be done now to reduce agriculture's carbon footprint. These include:
  - Minimising land clearing and restoring degraded land;
  - Implementing practices that maintain ground cover, build soil carbon and sequester carbon in end-use-products;
  - Reducing reliance on fossil fuels through more efficient utilisation of vehicles and machinery (adoption of smart systems) and electrification of plant using renewable resources.
- Many of the options outlined above are being trialled and demonstrated through R,D&E programs. While the technology is well demonstrated, the economic and social changes that come with the adoption of the new approaches are not well researched or understood. A greater effort is required in understanding the implications of such change on the people engaged in farming. This includes analysis of the additional risks that more electricity and ICT-dependent systems bear, and how these risks can be reduced (e.g. through more decentralised infrastructure and services). As indicated above, reducing dependence on other existing inputs and the length of supply/value chains also hits the twin targets of reducing emissions and risk.
- As outlined above, the adoption of both mitigation and adaptation measures at the farm, regional and industry level, requires an in-depth and sophisticated understanding of the systems in question, notably the decision makers and their perceived options. This requires far greater investment in social science research.

### Building on existing effort and knowledge

#### **3) Are there initiatives or innovative programs underway that could be applied or expanded on at a national scale?**

##### Drought Resilience and Adoption Hubs

- One clear opportunity is to invest in agriculture social science to build on existing programs. For instance, the existing Drought Resilience and Adoption Hubs established around Australia under the Future Drought Fund are focused on the adoption of practice change for more resilient farm and community outcomes in the context of the significant and single hazard of

drought. They have a strong regional presence and established relationships. Importantly, these Hubs include representation from industry, Research, Development and Extension, state and federal jurisdictions that are already engaged in sharing contemporary understanding of issues and opportunities for regionally specific outcomes, while recognising and avoiding areas of conflict of outcome delivery (Federal v State).

- The activity of the Hubs cuts across the outcomes sought for carbon reduction in the sector – identifying opportunities for practice change, understanding the economic impacts of practice change, understanding the social impacts of climatic change and identifying opportunities to work with key stakeholders to identify actions that enhance resilience (e.g. mental health, connectivity, etc).
- Providing the Hubs with a clearer mandate around addressing the threat of a changing climate, and helping farmers and regions respond to the full range of climate change effects (including mitigation policy ones) rather than on a single issue that is a symptom of a changing climate would enable the government to fast track efforts in this space. This is a point that La Trobe outlined in its **response** to the recent Productivity Commission’s Inquiry into the Future Drought Fund – namely that there should be a significant widening of the scope of the Fund **to include climate resilience and to encompass all types of climate events beyond drought such as floods or cyclones**. In its response, La Trobe also stressed that, to date, the FDF has been overly-focused on sustainable agriculture as a means of underpinning economically-resilient communities. We submit that environmental impacts as well as long-term food security and nutritional quality are all mutually-dependent elements that need to be addressed to achieve sustainable agriculture and sustainable regional development/communities.

#### Farming for the Future Program

- This is another example of an existing initiative that could be expanded to a national scale. Currently running in Victoria, New South Wales, Tasmania, South-West Western Australia, the Farming for the Future Program could be expanded further to additional jurisdictions. The program serves to build evidence underlying the business case to increase natural capital on farms, the multiple benefits of reduced emissions, increasing farm resilience (the ability of farms to withstand shocks), maintaining productivity and profitability as well as enhancing biodiversity.

#### 4) How can the Australian Government bring together existing effort and new initiatives into one coordinated plan?

- As outlined under Point 3 above, broadening the scope of the Future Drought Funds would be an important first step.
- In addition, there is a wide and diverse array of sustainable agriculture initiatives with which this plan should connect. These include the Catchment Management Authorities, Landcare and regenerative agriculture groups.
- In our view, existing research and funding settings are too narrowly focused on maximising productivity. To drive meaningful change, there is also a need to connect with the Chief Scientist, the Australian Research Council, Regional Development Corporations (RDCs) and others to align Research, Development and Extension with new agricultural objectives. This could include boosting the research capacity of AgriFutures Australia and/or developing a new version of the former ‘Land and Water Australia’.

## Opportunities to reduce emissions

### 5) What are the most important options to be further adopted or supported, looking in the short and the longer-term?

- The most important options should be determined at a regional level in consultation with industry and the communities impacted.
- The paper rightly explores the links between sustainability, carbon and nature while maintaining profitability and productivity. Increasing market access (through accreditation, incentivisation and policy) based on this triumvirate, will be the only way for market actors to lead the decarbonisation of the agricultural sector. In doing so, it will also increase resilience of individual farming enterprises, enabling them to 'level out' the fluctuations in productivity / profitability associated with climate variation between seasons.
- One area of research innovation not mentioned in the paper is the transition/return to native pastures to reduce enteric emissions. There is some evidence that the higher tannins in native grasses take longer to digest and reduce enteric emissions in livestock – this needs further research and testing. There are also biodiversity benefits to restoring large areas of exotic pastures back to native systems, where possible.

### 6) What are the practical solutions to increase uptake?

- As argued above, emission reduction opportunities need to be explored through trusted local networks – such as the Drought Hubs.
- All mitigation options need themselves to be stress-tested against escalating climate change impacts so that farmers and others are discouraged from investing in new practices, technologies and enterprises that expose them to more climate change risk. In addition, extensive analysis is required into how the impacts of climate change (including increased heat, aridity, climatic extremes and disrupted electricity and ICT services) affect the performance and emissions outcomes of different mitigation options. In summary, all mitigation options need to be modelled and monitored as they are adopted into complex farm systems to anticipate, identify, and manage unexpected consequences at multiple scales. On the other hand, there is a need to identify and prioritise measures that offer mitigation and adaptation benefits.

## Developing emissions pathways

### 7) How do you see the agriculture and land sectors contributing over the medium and longer-term? What are the opportunities to deliver emission reductions in parallel with wider goals?

- As a key part of the food and fibre supply chain, there are substantial opportunities for agriculture to make a contribution to economy-wide emission reduction objectives, direct emission reductions, carbon sequestration, fuel substitution and social change. However, this will only be realised when land managers are aware of their individual contribution and have the knowledge and experience to implement informed practice change. It is critical that the emissions (and reduction opportunities) of agriculture are recognised and accounted for. The risk of not drawing agriculture into the discussion is that our export partners will drive carbon decision making on-farm, which may impact competitiveness due to the burden of such expectations.



- There is also a need to model the extent and pace of emissions reduction possible with and without reductions in the national herd as well as factoring in transitions to non-meat protein alternatives.

### Supporting and enabling change

#### 8) How can the Australian Government better support agriculture and land sectors to:

- a) drive innovation,
- b) build capacity,
- c) ensure the system enables emissions reductions?

- Through support for existing, embedded groups such as the Drought Hubs, government can markedly influence the capacity of local decision makers to innovate and drive practice change in a meaningful way supported by trusted partners. Government's oversight of the Hubs creates the opportunity to focus deliverables and ensure accountability for action.
- As outlined in the response to Question 2, there is a need for more investment in social science research on farming and climate change responses.

#### 9) What new initiatives could the Australian Government design that would support emissions reduction and carbon storage in agriculture and land and help ensure a productive, profitable, resilient and sustainable future for the sectors?

##### A stratified approach to carbon emissions reporting

We believe that there is an opportunity for government to adopt a stratified approach to carbon emission reporting for agriculture as it is incorporated in the broader economy-wide accounting. This would entail a 'default' and 'opt-in' options as outlined below:

- Default: High-level carbon estimation approach aimed at delivering broad-based carbon information to government for reporting purposes.

There is a strong argument for government to provide economy wide carbon reporting at a scale that is **focused on national accounts rather than adding to the administrative burden of business**. If the aim is emission reduction at the national level, then the relative granularity of data required should be considered in that context. This is quite distinct from the precise accounting required for the accreditation of carbon reduction units. This suggests that accounting for agriculture carbon emissions at the national level should be managed at sector level, based on heuristics that provide sufficient comfort for reporting. In agriculture, for instance, livestock populations can be estimated via the National Livestock Identification System (NLIS) system, while in terms of cropping, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), conducts annual surveys of the grain harvest. There are sufficiently large data sets to drive a relative understanding of the national footprint, which would have an economy-wide impact of reducing the administrative burden for business.

- Opt-in: For those land managers that wish to participate in carbon sequestration and trading as an alternative income stream, there would be an option to opt in to in a more burdensome program, necessitated by the more stringent accounting required. This would integrate with existing approaches but place the administrative burden with informed and interested



participants, rather than seeking to mandate and burden a disparate industry with of varying value.

**10) A consistent and trusted approach for assessing and reporting emissions is often raised as a barrier to reducing emissions. Is there a role for the Australian Government in addressing this concern, and how can producers and land managers be supported?**

See response to Question 9 on ways to manage this burden through a stratified approach.

**11) What skills, knowledge and capabilities do you think producers and land managers need to implement change? What information and data would help them make decisions about emissions reductions and sustainable land management in the short and longer-term?**

Overhauling the agriculture and food manufacturing industries in the way we propose, would place an increased reliance on technology-based solutions to deliver the efficiencies and precise growing conditions required to produce high quality crops and value-added food products. It would also require a significant upskilling in both the agricultural and food processing workforce, with many opportunities to retrain and expand career paths in this sector. Of necessity, this would need a cross-disciplinary (from biology to computing and beyond) workforce.

The Plan should therefore canvas ways of building the workforce needed to support this sector.

### **C. LA TROBE RESEARCH AND INDUSTRY PARTNERSHIPS IN SUSTAINABLE FOOD AND AGRICULTURE, “CLIMATE-RESILIENT” CROPS, REDUCING EMISSIONS AND MINIMISING FOOD WASTE**

La Trobe has long-standing expertise in agri-food, supported by our network of regional campuses across central and northern Victoria and our world-class AgriBio facility, located at our Melbourne Bundoora campus. The 10-yr old AgriBio Building houses world-leading research facilities and personnel made possible through our partnership with the Victorian State Government (AgVic).

Researchers at AgriBio are developing novel approaches to key issues like increasing farm and livestock productivity, developing drought tolerant crops, sustainable and nutritious grains and food products, and protecting crops and animals from pests and disease as well as workforce development.

Located within AgriBio is the La Trobe Institute for Sustainable Agriculture and Food, with multimillion dollar investments by the University over the next five years to deliver solutions for sustainable and nutritious food production. These are some of the ongoing research projects:

- **Generating “fit for purpose grains”**

Generating “fit for purpose grains” means manipulating plant biology to engineer seeds and plants that are hardier and more nutritious than common varieties, while delivering on yield and processing attributes. Just last year, La Trobe researchers completed a new oat transcriptome, revealing 2,000 previously unmapped genes in the oat genome. This will have wide ranging impact in breeding new and resilient oat varieties, which are fibre-rich, nutrient dense and less susceptible to disease.

Australia’s oat industry is worth \$400 million each year to the national economy and feeds thousands of people in Australia and overseas every day. By breeding better varieties of key crops that need less inputs in terms of fertilisers, water and pest control, we are also safeguarding against future resource shortages and climatic variation.

Our researchers are also investigating way to improve key legume varieties, which will be an important raw ingredient in plant-based foods in the future. In the past, the emphasis has been on quantity, but in

a world with increased pressure on resources, crops need to deliver quality as well, especially given the depleted state of Australian soils.

- **Protected cropping/Green-house horticulture**

La Trobe researchers are pioneering projects in the field of protected cropping – or greenhouse horticulture. This approach enables farmers to optimise harvest times, reduce nutrient and watering regimes and respond quickly to pathogens, viruses and insects. The result is a healthier, more sustainable, and productive crop. The protected cropping industry is the fastest growing food producing sector in Australia, with a ‘farm-gate’ value of \$1.3 billion and currently employs more than 10,000 people.

We believe there is significant opportunity for protected cropping across Australia and particularly in the Victorian food bowl incorporating Shepparton, Bendigo, Mildura and Swan Hill. La Trobe is uniquely placed to help deliver these innovations with its regional campuses primarily placed within the Victorian food bowl. From a government perspective, this will have the additional advantage of stimulating regional economies and developing a regional skilled workforce.

- **Genetic reduction of methane emissions in Australian dairy cattle**

In Australia, livestock emissions account for 70 per cent of greenhouse gas emissions in the agricultural sector. Up to 44 per cent of livestock emissions are methane and 65 per cent of these emissions come from cattle. In partnership with DataGene, Agriculture Victoria Research, Dairy Australia and the Gardiner Dairy Foundation, La Trobe researchers have developed an index that includes predictors of methane. It is now implemented in the Australian national breeding program. This allows for farmers to make a conscious breeding decision, reducing the environmental impact of dairy cattle while balancing genetic progress in other valuable traits such as production, health and fertility. The sustainability index released by DataGene provides Australian dairy farmers with a breeding tool to add into their mix of management practices to reduce their system's emissions intensity. Work is now underway to measure and predict methane traits.

- **Minimising food waste**

In addition to looking at ways of reducing emissions via more sustainable agriculture practices, we believe that there are opportunities to improve sustainability through the minimisation of food waste. The Plan should consider the potential of ‘food waste’ and the potential of the “circular economy”. This includes ways of creating value from food waste such as using food and mixed organic waste to create energy, composts, fertilisers and higher value insect protein.

By focusing efforts to minimise loss and by creating new products from waste, significant benefits can be gained including by improving global food security, improving return to growers, increasing productivity and economic growth, reducing greenhouse gas emissions and more efficient use of resources required to grow, manufacture and transport food.

Food waste currently accounts for approximately 30 per cent of post-farm gate food production in developed countries and pre-farm gate in developing countries. In fact, if food waste were a country, it would be the third highest CO<sub>2</sub> emitter after the USA and China, according to the United Nations Food and Agriculture Organisation (FAO).

In the short term, we must stop wasting the food we work so hard to produce and look at innovative ways to make use of waste (and waste streams for food processing), such as repurposing into other products such as fertiliser, animal food or packaging to name a few.

In the long term, consumers need to be incentivised and educated to change their behaviour. We believe that governments/public health departments have a role to play in this regard.

## **D. THE AUSTRALIAN FOOD INNOVATION CENTRE (AFIC): A LA TROBE-CSIRO PARTNERSHIP – SUSTAINABLE AGRICULTURE**

La Trobe is strengthening its research expertise and infrastructure in the agri-food sector by forming a partnership with the CSIRO to create the Australian Food Innovation Centre (AFIC).

As part of our Research and Innovation Precinct, AFIC will be a core component of La Trobe's University City of the Future, a \$5 billion transformation project at our Bundoora campus in Melbourne's north.

AFIC will combine the knowledge and experience of the University and CSIRO to support research innovation, commercialisation, manufacturing and organisation by providing state-of-the-art research facilities and expertise, as well as opportunities for co-location, industry collaboration and start-up incubator spaces.

It will support industry partners to develop, test, scale and commercialise new food and beverage products to access emerging markets and build on Australia's position as a food innovator of the future.

AFIC will focus on six interconnected domain areas across the agri-food value chain namely **sustainable agriculture**, manufacturing for the future of food, food for health, sustainable and trusted, agri-digital ecosystem and the circular economy of food. AFIC will enable large and small companies, agriculture producers, food start-ups and inventors from anywhere in Australia to rapidly access the R&D required to move from concept to new food products or services, as well as cutting edge facilities like PC2 and wet labs, digital technology spaces and pilot scale development.

Importantly, it will provide an end-to-end service for food innovation right across the supply chain as well as an ecosystem which encourages and supports new ideas, innovation, collaborations, and start-ups. It will also provide training and development opportunities to address the skills gap and create a pipeline of highly qualified technicians, scientists, and entrepreneurs to support this growing sector.

Business planning for AFIC is complete, supported by a \$1.5M Victorian Government Budget commitment in 2021. We would welcome the opportunity to brief the Department on AFIC, its current status and the ways in which we are building support among industry and governments.