

10 December 2020

Premier's Economic and Social Recovery Advisory Council  
secretariat.PESRAC@treasury.tas.gov.au

Dear Secretariat,

***Re: Premier's Economic and Social Recovery Advisory Council Phase 2 consultations***

Thank you for the opportunity to contribute to the Premier's Economic and Social Recovery Advisory Council Phase 2 consultations. Farmers for Climate Action (FCA) welcomes this opportunity to contribute to the Council's deliberations and to offer our ideas for a sustainable Tasmanian COVID-19 recovery that supports farmers and builds resilience in regional communities.

Tasmania is to be congratulated for already being a world leader in renewable energy production after announcing last month that the state now produces 100% of its power from renewable sources.<sup>1</sup> The COVID-19 recovery plan offers a rare opportunity to realise the state's renewable energy potential, whilst supporting farmers and creating jobs in regional areas.

## About FCA

FCA is a movement of farmers, graziers and agricultural industry leaders focused on advancing climate solutions. Our rapidly growing network of Australian farmers and industry leaders, drawn from diverse agricultural industries and all sides of politics, is united in a common goal: to ensure that farmers, who are on the frontline of climate change, are part of the solution. Our work is evidence-based and non-partisan, drawing upon the best-available science to inform advocacy.

Earlier this year, FCA produced *[Regional Horizons](#)*—our contribution to a national conversation about the development of a climate-smart, prosperous rural and regional communities.<sup>2</sup> This document is Farmers for Climate Action's vision for a green recovery, and we wish to draw your attention to those recommendations in addition to the below.

## Introduction

The COVID-19 economic recovery presents a once-in-a-generation opportunity to further position rural and regional Tasmania at the forefront of a clean energy, low-carbon, and

---

<sup>1</sup> Guy Barnett, Minister for Energy, "Tasmania Surges to 100% Renewable Energy," November 27, 2020, [http://www.premier.tas.gov.au/site\\_resources\\_2015/additional\\_releases/mona\\_re-opening\\_welcome\\_news\\_for\\_tasmania/\\$16\\_million\\_to\\_boost\\_tasmanian\\_recycling\\_infrastructure/eat\\_it\\_tassie!\\_campaign\\_launch/additional\\_funding\\_to\\_integrate\\_mental\\_health\\_services/labors\\_tireless\\_negativity/tasmania\\_surges\\_to\\_100\\_renewable\\_energy](http://www.premier.tas.gov.au/site_resources_2015/additional_releases/mona_re-opening_welcome_news_for_tasmania/$16_million_to_boost_tasmanian_recycling_infrastructure/eat_it_tassie!_campaign_launch/additional_funding_to_integrate_mental_health_services/labors_tireless_negativity/tasmania_surges_to_100_renewable_energy).

<sup>2</sup> Farmers for Climate Action, "Regional Horizons: Farming Communities Leading the Recovery" (Canberra, 2020), [https://farmersforclimateaction.org.au/wp-content/uploads/2020/07/Regional-Horizons\\_FCA\\_July-Updated.pdf](https://farmersforclimateaction.org.au/wp-content/uploads/2020/07/Regional-Horizons_FCA_July-Updated.pdf).

climate-smart revolution. Tasmania is emerging as a national leader in the development and interstate supply of renewable energy.

Tasmania is already experiencing climate change. Tasmanian farmers will have to continue to find ways to adapt to rapidly changing. Some of the direct impacts predicted are:

- A significant change in rainfall patterns
- Rising average temperature, predicted to reach almost 3 °C by 2100
- In the near future, a rising risk of extreme events, including longer fire seasons and more days at the highest range of fire danger<sup>3</sup>

For Tasmania's agri-food sector—worth \$2.7 billion in 2017–18<sup>4</sup>—climate change risks eroding not only \$1.6 billion worth of food and fibre production, but also the state's growing food export and agri-tourism industries, and the health and wellbeing of the people who depend on them. The future of Tasmania's clean and green brand is thrown into doubt unless action is taken at all levels.

The pandemic economic recovery presents the state with an opportunity to sustainably diversify and build the adaptive capacity of rural economies and farm businesses, and to revitalise the clean and green image. With global investment in clean, low-carbon development showing no signs of abating, Tasmania can grab the world's attention becoming a national and world leader.

**Farmers for Climate Action draws the Council's attention to three key areas, development in which will have enormous benefits for Tasmanian farmers, communities, and the state economy:**

1. **Electric vehicles (EVs), including recommendations for:**
  - a. Further investment in electric vehicle infrastructure
  - b. Development of incentives for purchase of EVs
  - c. Incentives for farmers to convert on-farm machinery, utes and tools to electric (i.e. ATVs, polaris EV, tractors)
2. **Hemp growing and manufacturing, including a recommendation for:**
  - a. Investment in, and incentives for the Tasmanian hemp production and manufacturing industry
3. **Microgrids and solar battery storage on farms, including a recommendation for:**
  - a. Incentives to incorporate on-farm microgrid and solar battery systems via a no interest state government loan

---

<sup>3</sup> Department of Premier and Cabinet, "Impacts of Climate Change," Tasmanian Government, accessed December 10, 2020, [http://www.dpac.tas.gov.au/divisions/climatechange/climate\\_change\\_in\\_tasmania/impacts\\_of\\_climate\\_change](http://www.dpac.tas.gov.au/divisions/climatechange/climate_change_in_tasmania/impacts_of_climate_change).

<sup>4</sup> Dept of State Growth, Agri-Tourism Strategy (Hobart: State of Tasmania, 2019), [https://www.stategrowth.tas.gov.au/\\_\\_data/assets/pdf\\_file/0005/217472/Agri-tourism\\_Strategy\\_2019.pdf](https://www.stategrowth.tas.gov.au/__data/assets/pdf_file/0005/217472/Agri-tourism_Strategy_2019.pdf)

## 1. Electric vehicles

Transport is one of the only sectors in Tasmania with an increase in emissions since 1990.<sup>5</sup> Farmers for Climate Action fully supports the Tasmanian Government's efforts to electrify the transport system and address this issue, as identified in Tasmania's *Climate Action 21* plan.<sup>6</sup> The work already undertaken as part of this initiative provides a strong basis which can be expanded upon during the COVID-19 recovery.

One of the lessons of the pandemic is the need to become more self-reliant, avoiding problems caused by supply chain disruptions. An obvious example is transport fuel, all of which Tasmania currently imports, with much of it refined overseas. The transition of the Tasmanian transport fleet to electric vehicles would reduce reliance on imported fuel, reduce a major source of greenhouse gas emissions, and make use of home-produced, renewable electricity, with associated cost savings.

**Farmers for Climate Action recommends that immediate support be given to three key areas to ensure greater uptake of electric vehicles (EVs), while also supporting farmers and reducing state emissions:**

1. Further investment in electric vehicle infrastructure
2. Development of incentives for purchase of EVs
3. Incentives for farmers to convert on-farm machinery, utes and tools to electric (i.e. ATVs, polaris EV, tractors)

### Charging infrastructure

Farmers for Climate Action commends the work already undertaken by the Tasmanian Government through the ChargeSmart grants program. Expanding the grants program to make charging infrastructure accessible to more communities will continue to promote uptake of EVs,<sup>7</sup> while also reducing the state's reliance on fossil fuels. Already, a few vineyards and other agri-tourism businesses house charging infrastructure.

### General incentives

Farmers for Climate Action supports the development of incentives that will encourage the uptake of EVs, as being investigated by the Tasmanian Government Electric Vehicle Working Group.<sup>8</sup>

---

<sup>5</sup> Tasmanian Climate Change Office, "Tasmanian Greenhouse Gas Emissions Report 2019" (Tasmania: Tasmanian Government, 2019), [http://www.dpac.tas.gov.au/\\_\\_data/assets/pdf\\_file/0005/473774/Tasmanian\\_Greenhouse\\_Gas\\_Emissions\\_Report\\_2017.pdf](http://www.dpac.tas.gov.au/__data/assets/pdf_file/0005/473774/Tasmanian_Greenhouse_Gas_Emissions_Report_2017.pdf).

<sup>6</sup> Tasmanian Climate Change Office, "Climate Action 21: Tasmania's Climate Change Action Plan 2017–2021" (State of Tasmania, 2017).

<sup>7</sup> Tasmanian Climate Change Office, "State of Play - Electric Vehicles in Tasmania," 2018.

<sup>8</sup> Tasmanian Climate Change Office, "Climate Action 21: Report Card 2019" (Tasmania: Tasmanian Government, 2019), [http://www.dpac.tas.gov.au/\\_\\_data/assets/pdf\\_file/0009/490365/TCCO\\_Climate\\_Action\\_Report\\_Card\\_2019\\_Web\\_20\\_Nov\\_2019.pdf](http://www.dpac.tas.gov.au/__data/assets/pdf_file/0009/490365/TCCO_Climate_Action_Report_Card_2019_Web_20_Nov_2019.pdf).

Farmers for Climate Action urges the Tasmanian Government to avoid taxing electric vehicles, as some other states have done recently. This will only hinder uptake.<sup>9</sup> It would be a mistake to pull the handbrake just as the transition is getting moving. Instead, Tasmania should do whatever it can to make the state a centre for investment in leading edge technology.

#### **On-farm uptake**

There is great potential to use electric power on farms for vehicles and equipment. Some manufacturers already offer this option, such as the recently released Polaris Ranger EV buggy, a number of two wheeled motorbikes, and a wide variety of electric chainsaws and other tools. A number of electric utes will soon be released worldwide and government encouragement of the electric vehicle sector would drive uptake among Tasmanian farmers. Electric tractors are under development by companies including John Deere and Kubota. Farmers for Climate Action urges the Tasmanian Government to provide tax incentives to farmers to encourage the uptake of these technologies.

#### **Farmer support: Rob and Sally McCreath**

Deloraine cattle farmers Rob and Sally McCreath are enthusiastic about the potential for electrifying farm vehicles and equipment. "We move cattle regularly under a rotational grazing system, so we spend a lot of time on a petrol ATV and diesel side-by-side buggy. Electric versions of these vehicles would be quieter and much cheaper to run", said Rob. "What about an electric ute? There are plenty of electric cars on the market now, so surely electric utes can't be far away."

Rob believes there are other important benefits to be gained from an on-farm transition to electric vehicles. "The early adoption of such machines would set off a quiet revolution in the Tasmanian countryside. Many older farmers suffer from hearing loss, due to hours spent on noisy tractors. This illness will be virtually eliminated with the widespread adoption of electric farm machinery, giving further incentive to young people to get involved in our vibrant agricultural sector."

## **2. Hemp growing and manufacturing**

Farmers for Climate Action would like to see heightened support for sustainable and renewable agriculture such as hemp which can be grown for food, fibre, fodder and extracts. Hemp plants are not competitive in carbon sequestration compared to trees. However, hemp can be used as an efficient energy crop or in concrete, both of which have positive carbon sequestration effects.<sup>10</sup>

---

<sup>9</sup> Michael Mazengarb, "Leaked Reports Show Governments Were Warned EV Taxes Will Hurt Uptake," The Driven, December 9, 2020,  
<https://thedriven.io/2020/12/09/leaked-reports-show-governments-were-warned-ev-taxes-will-hurt-uptake/>.

<sup>10</sup> Sebastian Leuzinger, "Climate Explained: How Different Crops or Trees Help Strip Carbon Dioxide from the Air," The Conversation, accessed December 10, 2020,  
<http://theconversation.com/climate-explained-how-different-crops-or-trees-help-strip-carbon-dioxide-from-the-air-123590>.

## Manufacturing

It is exciting to see that, at least in-principle, there is tri-partisan political support for a stubble processing plant, as this will lead directly to the rapid development of the HempCrete manufacturing industry.

The scope and opportunity for hemp growing and manufacturing, however, is much broader. Tasmania could be a leader in manufacturing fibrous hemp into an array of bio-composite packaging that can replace most plastics.

While Tasmania already grows around 80% of Australian hemp seed,<sup>11</sup> the industry needs support to develop and purchase manufacturing equipment required to properly establish this sector.

### **Farmer support: Anthony Houston**

Tasmanian vegetable grower, Anthony Houston is supportive of a transition away from plastics and believes hemp could provide this opportunity.

"The vegetable growing industry currently uses plastic packaging as there is no other viable option, however hemp packaging could provide a sustainable alternative. I would welcome any government incentives for the emerging hemp industry to invest in research and/or development that could make this product available"

If this emerging industry was able to scale up to manufacture these products in addition to our expert farmers growing this multi-use crop for food, medicine and building materials production, it would mean expanding opportunities for hemp-growing farmers and creating jobs in regional areas.

## **3. Microgrids and solar battery storage on farms**

Renewable energy empowers communities by providing a greater range of energy choices, saving long-term costs, involving people in local development, reducing dependence on the grid, and returning profits directly to the community. Community-based large-scale renewable energy, microgrids, and new, cheaper battery storage all have great potential to contribute to Tasmania's RET. Further support of renewable energy technology would enable farming communities to share benefits and co-invest with the private sector.

Farmers for Climate Action supports government incentives to incorporate on-farm microgrid and solar battery systems which support agriculture and diversify incomes, building resilience into farming communities.

### **What is a Microgrid?**

A microgrid can be defined as an independent power network that uses local, distributed energy resources to provide grid backup or independent power to meet local electricity

---

<sup>11</sup> "Tasmanian Farmers Cash in as Hemp Hits New High," March 18, 2019, <https://www.abc.net.au/news/rural/2019-03-18/demand-for-hemp-seed-drives-new-crop-of-growers-in-tasmania/10910702>.

---

needs. At the most basic level, microgrids are "micro" (small) and offer a "grid" (an interconnecting system of links) typically connected but independent of the existing grid.

Tasmanian farmers want to be empowered to participate in achieving 200% renewables by 2020. In order to do this we need to transition away from centralised old-style generation to a diverse and decentralised grid which includes microgrids.

### **Microgrids and batteries to aid recovery**

As part of Tasmania's COVID-19 recovery farmers and farming communities can benefit from the roll-out of microgrids in various ways:

- They give farmers energy independence by utilising the energy asset they have invested in
- Allows farmers to store energy and distribute it at the times it is needed most, thereby taking pressure off the existing network
- Microgrids generate new low-risk income streams, allowing farmers to employ locals.

Microgrids can drive work and productivity in regional areas which don't otherwise get that investment and keeps money in the local economy. They also have the benefit of operating in areas of the grid which are the most expensive for the network to maintain.

Farmers that have already installed solar panels could also benefit from back-up solar batteries. Solar batteries have numerous added benefits, including allowing them to leverage their existing investment to continue operating during power outages, lower their power bills and add further energy from renewables into the grid. This will particularly benefit dairy farmers and irrigators, further leveraging the significant government funds already invested in water infrastructure.

The solar + battery storage + microgrid model can bolster hydro's resources. This will increase revenue and keep Tasmania on track to reach the RET.

### **Potential program to support farmers: *Solar + Battery Storage + On-farm Microgrid model***

Farmers for Climate Action suggests the following model be adopted to allow farmers to employ microgrid technology on-farm.

*4-year, no-interest state government loan.*

*Capital to be repaid in equal quarterly payments per year for 4 years from the first quarter of the fifth anniversary of the loan*

*Maximum loan amount: \$200,000 on the basis of a dollar-for-dollar minimum farmer contribution.*

*Government to forego any network costs for the period of the loan where energy is distributed within the on-farm microgrid.*

*Billing to be managed by the incumbent retailer (most likely Aurora).*

*Loan to be available to fund a minimum of two components of the below:*

- 99kws of solar
- Battery storage
- On-farm microgrid

### **Farmer support: Owen Powell**

Dairy farmer Owen Powell believes it is a win for all to encourage further uptake of solar, microgrids and battery storage.

"I am a second-generation dairy farmer from Scottsdale, north east Tasmania. Developing local power networks and opportunities for on-farm power generation would be a real boost for farmers. Running a farm, whether it be a dairy or other enterprise requires reliable energy, so it makes sense to make the electricity grid more resilient. Also, given the uncertainty around climate, international trade and the pace of recovery, on-farm power generation could offer an alternative income stream to help us through the tough times."

### **Final thoughts**

The world has a window to act on climate, but that window is fast closing. Tasmania has the opportunity to lead Australia and the world as a renewable energy superpower, and to move to a clean, sustainable economy—one inclusive of rural and regional communities. The COVID-19 recovery positions Tasmania to take advantage of this window and to realise the full potential of farmers to benefit.

FCA stands ready to assist the Council should it require any further advice.

Yours sincerely,



Fiona Davis  
Deputy Director  
Farmers for Climate Action  
[fiona@farmersforclimateaction.org.au](mailto:fiona@farmersforclimateaction.org.au)