Hepburn Wind
PO Box 225 Daylesford
VIC 3460 Australia
Phone + 61 3 5348 6760
info@hepburnwind.com.au
www.hepburnwind.com.au

ABN 87 572 206 200
Reg No. G0003442Y

21 August 2019

Dear Environment and Planning Committee,

Re: Parliamentary Inquiry into Tackling Climate Change in Victorian Communities

Hepburn Wind would like to thank the Environment and Planning Committee for inviting our response to the Parliamentary Inquiry into Tackling Climate Change in Victorian Communities. We welcome this opportunity to discuss our work addressing climate change, improving the resilience and adaptability of our shire and to make recommendations on future policy directions.

Terms of reference

The following submission provides an overview of Hepburn Wind and describes our actions to-date mitigating climate change and supporting our community to adapt to climate change impacts. The next section addresses the ways in which the government can support the community energy sector and communities broadly and then provides examples of best practice.

Overview

On 22 June 2011, the two turbines of the Hepburn Community Wind Farm began generating electricity into the local distribution network, almost seven years after the project was conceived by Danish-born local builder, Per Bernard. In response to our local community's initial negative response to a large commercial wind farm proposal, Per catalysed the development of Australia's first community-owned wind farm at Leonards Hill, near Daylesford in Central Victoria.

Hepburn Wind is owned by over 2000 members, the majority of whom are local to the region. With massive volunteer efforts and nearly $10m of community capital, the members of Hepburn Wind have shown that under the right conditions, regional communities will embrace the opportunities presented by renewables. In part, this is because of our commitment to sharing the benefits of the wind farm widely within the community — not just with our members. Our advanced benefit sharing model has enabled the socialisation of what was once a controversial energy source in our region.

Now eight years in we have achieved the following core climate change benefits:

- Abatement of 87,334 tonnes of CO2
- Community Fund benefit of $247,526
- 32kW of donated solar projects on community facilities

Eight years after Daylesford became the first and still the only zero-net energy town in Australia, our shire now has an ambitious community-wide target for zero-net energy by 2025 and zero-net emissions by 2030. To reach these targets, significant mid-scale generation and household generation will need to be actualised. We are positioning ourselves as a 'lighthouse' community, one where we can incubate and make real a pathway to carbon neutrality.

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Mitigating climate change

Hepburn Wind works with our co-operative and community to reduce local emissions through various activities and partnerships. As Australia's first community-owned wind farm, we generate enough energy to offset the consumption of Daylesford and much of the surrounding region. On top of this we have been partnering in impactful pilots and programs, such as the Zero-Net Emission Transition Pilot (Z-NET) which is seeking to put the Hepburn Shire on a pathway to zero-net energy by 2025 and zero-net emissions by 2030. As Z-NET partners our co-operative is working towards developing Australia's first, hybrid wind and solar farm at the Leonards Hill site. If this project goes ahead, this will add more than 3MW of solar to our existing 4.1MW wind farm.

At the community level, we have introduced our members and supporters to the Hepburn Solar Bulk-Buy, which has installed 118 new residential solar systems, adding 600kWs of local capacity in 2018. Our Energy Fund has continued to support the roll out of solar for community facilities, coordinating and donating to seven facilities across the Hepburn Shire and the Moorabool Shire. Our Energy Fund has also installed Daylesford's first EV charging station, which will be a critical step towards transitioning to electric vehicles in the near future.

Hepburn Wind also seeks to be an emblem of what is possible for community enterprises. Our work is always accessible to community groups interested or inspired to take action, using creative commons licensing for publications and encouraging sharing across the sector. We hope to strengthen community interest and knowledge around the possibilities to implement climate change mitigation strategies and learn from best practice examples elsewhere.

Adapting to climate change impacts

The Hepburn Shire holds some of Victoria's most biodiverse forests and a rich community of mid and small-scale food producers. The confluence of our deep volcanic soils and high annual rainfall makes this region one of the most ecologically and agriculturally productive areas in our state. Climate change poses a significant threat to these environmental assets and Hepburn Wind has been working to strengthen community resilience for these challenges ahead. In agricultural communities, large scale renewables are often perceived as threats to food security and traditional ways of living. To address these biophysical and social concerns, the proposed solar farm at Hepburn Wind will not only seek to mitigate local emissions, but enhance biodiversity outcomes via sensitive design.

Hepburn Wind has a long history of empowering community actions through the Hepburn Wind Community Grants program. This program has funded over 62 local projects that have delivered environmental, cultural, wellbeing and other community benefits. Many of these projects have targeted sustainability outcomes, such as regenerating bushland areas, enhancing local food production through wholefood co-operatives and improving local knowledge around biodiversity hotspots. These grants have enabled community members to drive targeted actions that are connecting local people with our landscape and building tools to monitor and respond to environmental changes.

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Hepburn Z-NET

In 2018 Hepburn Wind became a partner of the Z-NET Community Transition Pilot, an initiative of the Coalition for Community Energy and a best practice approach to community wide masterplans. This Pilot is seeking to make the Hepburn Shire the first zero-net emission shire in Australia and is supported by Sustainability Victoria's Take2 Initiative. The approach was first developed in Uralla (NSW) to offset local carbon emissions from stationary heat and electricity. The Hepburn plan sought to scale up the approach and address emissions from all sectors.

The Community Transition Pilot had two core aims:

- To provide an expanded blueprint of how rural communities can satisfy all their own energy needs with renewables and,
- Create a masterplan (The Community Transition Plan) providing approaches to reach zero-net emissions in all sectors.

In April 2019 The Community Transition Plan was launched. Co-developed with the local community and various research, industry and technical stakeholders, the plan provides a comprehensive assessment of the shires emissions through the ZNET Blueprint. This Blueprint encompasses the full emissions spectrum and the associated opportunities of stationary energy, transportation, agriculture, waste & wastewater and land use change.

How Government can support us

The State Government has taken commendable action to deliver ambitious renewable energy policies and opportunities for community energy enterprises. Policies like the Victorian Renewable Energy Target and funding for various energy pilots have fostered developments in the community energy sector, but there are still critical gaps that need to be addressed. Our sector holds great potential to quicken the transition to zero-net emissions, distribute renewable energy assets across the state and enhance adaptation opportunities. But without a stable and ongoing policy framework, the community energy sector will stagnate and decline.

We recommend that the State Government adopts a holistic policy approach to strengthen the community energy sector. This approach will provide countless benefits for communities, climate mitigation strategies and adaptation activities. The following key policies and programs are supported by Hepburn Wind.

Establish a Community Energy Target – 100MW by 2025 and mid-scale FiT of 6-7c

Renewable energy generators including Hepburn Wind, derive a significant portion of their income from the generation and sale of Large Generation Certificates (LGCs) under the federal government's Renewable Energy Target (RET). Our community made personally significant investments relying on

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assurances that all major political parties were, at the time, united in their support for pricing carbon pollution and a stable and growing Renewable Energy Target (RET).

With the end of carbon pricing and the undermining of the RET in 2013/2014, Large Scale Renewable Energy Certificates (LCG's) fell to a seven-year low of $25/MWh. This price drop forced the cutting of staff hours and the delaying of a dividend payment to our members. During this time of sovereign risk for the co-operative we had 1450 supporters write submissions to the RET Review Committee.

The Clean Energy Regulator (CER) who administers the registration and accounting of LGCs recently revised its rules. Prior to last December, the authority would publicise any retailer not supplying their certificate quota in the allocated year. Until then there were very few missed deadlines. In December the authority changed its stance and now encourages retailers to utilise a three-year window of supplying certificates. Several retailers have recently opted to pay penalties under the 2020 renewable energy target rather than meet their full liability.

This has resulted in an immediate reduction in the demand for LGCs and hence the market price has halved since December 2018. In August 2018, LGCs were over $80/MWh allowing our co-operative to pay down our accumulated losses and essentially catch up for the 3 years of devastating market conditions. Now, these certificates are trading for $38/MWh and expected to drop to $14.50/MWh by 2021. As these prices fluctuate and decrease, our cooperative is exposed to untenable risk.

In this reality of federal policy dysfunction we need state leadership. This precarious financial position affects all potential mid-scale community energy projects and will make future developments in the sector rare to impossible. Subsequently, Hepburn Wind has been engaging with other community energy organisations and renewable energy bodies, to advocate for and develop a plan for a policy mechanism that would de-risk community energy projects and enable the mid-scale community energy sector to thrive - and have landed on a State Government funded Feed in Tariff (FiT).

The state government has implemented a raft of ambitious policy mechanisms that have facilitated growth in the renewable energy sector. The Victorian Renewable Energy Target (VRET) Auctions have enabled deployment of large scale solar and wind facilities at increasingly lower costs, which significantly drops the market price for consumers, however places and incumbent generator such as Hepburn Wind in a high-risk scenario. The recent announcement of subsidised solar for 650,000 households and the continued rollout of the Victorian Renewable Energy Target (VRET) will boost household and large scale renewables. **The next step to ensure your government legacy as a renewable energy leader would be to unlock mid-scale community energy, producing a pipeline of local jobs and delivering significant regional economic development across the state.** There is a great opportunity to enhance our nascent sector with the right policy instrument.

While the State Government has implemented programs like the Community Energy Hubs, an incentive for community energy is still critical to ensure the growth and development of this sector. In August 2018 Hepburn Wind coordinated with 16 community energy initiatives and 10 allied

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organisations to put forward a proposal that the State Government introduce a tailored policy to enable the sector to grow - A Community Energy Incentive. This document outlined both the definition of community energy that should be considered and listed key policy elements that the community energy sector would support.

In order to see this growth we want to see the state government determine a carve-out of the Victorian Renewable Energy Target (VRET) for a Community Energy Target of 100MW by 2025. To deliver this, the government must establish a Feed-in-Tariff (FiT) for mid-scale community energy projects of 6-7c premium above PPA/wholesale rate for 15 years.

The proposed criteria for the CE FiT is:

- community-led project or community/developer partnership
- local shareholding inclusive of community investment (minimum 20%), including council, water authority, etc (> 50% total)
- project scale > 1MW - 10MW
- local control and decision-making power related to the project
- local distribution of the social and economic benefits generated through the project
- project is appropriately scaled to the local environment and/or community
- project harnesses the skills and capital of the local community

Based on existing business models a FiT for mid-scale community energy projects of 6-7c will catalyse the sector.

Unlock the distribution network for mid-scale community energy

Our co-operative has a strong ambition to grow and we are in the development phase of a co-located solar farm 3MW+ which would greatly enhance our economies of scale. We have the local ambition to take our achievement of being the first zero-net energy town and become the first zero-net emissions shire, however, as we largely have 22kv and low voltage lines, that means building several mid-scale projects across the shire.

In lieu of the huge infrastructure changes that need to occur to host our transition, there is already capacity issues and likely build out delays that will occur as well as significant social license challenges. Community energy projects act as important gatekeepers to social license for the broader renewables industry and are very well suited to mid-scale (1-10MW). At this scale, they can fill up the existing distribution network and avoid costly upgrades on the transmission network. They are achievable projects for communities - both financially and from an asset management perspective.

Utilising the distribution network for mid-scale community energy project will ensure we can more rapidly transition and not wait for new large scale transmission infrastructure to meet the VRET. This will need government support to bring network distributors to the table in a collaborative and fixed cost approach.

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Deploy mid-scale development grants – why communities need grants and price certainty

To further unlock mid-scale community renewables there needs to be a funding stream for development phase milestone-based grants (~$150k per grant). In our development of the solar farm, we have unlocked $180,000 of pro bono work, this can now be supplemented by our recent successful application under the Renewable Communities Program of the state government. Most community energy groups cannot leverage this level of pro-bono expertise and all mid-scale projects need to undertake a similar level of development work as a large scale project - significantly impacting their economies of scale.

In countries where there has been a rapid build of mid-scale community energy projects, there has always been a combination of grants with FiT, particularly with the highly successful CARES program in Scotland. This creates long term security for community investors and is generally over a 20-year period.

In Australia, community energy projects have typically been supported by grants. Our investment model was tailored to strengthen our local economy, social connectivity and reduce pollution. Our original business model was supplemented by $1,650,000 in grants from Sustainability Victoria and Regional Development Victoria in order to cover the high-risk development costs and first of a kind grid connection cost. Rigorous modelling forecast reasonable dividends and a return of capital over the life of the project for our members. Grants like these are integral to the development of many community energy projects, but they do not ensure the long term financial security of these projects. As discussed in the introduction, political uncertainty can greatly influence the viability of community energy projects. Grants provided to projects, based on forecasting, may not adequately reflect the cost of policy, market and technology changes, as is certainly the case with Hepburn Wind.

Grants may also consolidate benefits within higher-income communities as organisations with greater in-kind support and financial backing may be better able to complete complex and time consuming grant application processes. Price certainty provided in conjunction with tailored application processes may greatly assist low resourced organisations to develop their projects, fostering greater equity in the distribution of community energy assets. Creating a stable price for community energy would improve the business case for community-developer partnerships and enable the development of affordable mid-scale renewable energy development ‘products’, for which there is a dearth in the Australian market. These partnerships can benefit community groups by providing technical, financial and organisational resources, while growing developers’ capacity to produce community benefits.

Scaling up the Z-NET Community Transition Pilot for lighthouse communities

The Z-NET project was a resounding success and the team has been able to leverage the Sustainability Victoria pilot funding significantly, bringing on new partners, contributing cash as well as in-kind support. It is estimated that a 3-1 leverage of state government funding was achieved. This funding ran out on delivery of the Plan and no further funding has been allocated for an extension to

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Sustainability Victoria. Given the significant local support and momentum being built, it is fundamental that a baseline of funding be established to guide the project forward. Importantly Council has allocated some staff resource to the Z-NET delivery, however there is no funding currently available that could support this necessary facilitation role.

What would enable the next phase of delivery is funding to facilitate the implementation of years 1-4 of the Community Transition Plan and track and monitor the progress towards the zero-net energy and zero-net emission targets. To best catalyse innovation and action in this way, we propose that the state government should support the scaling up of the Z-NET Community Transition Pilot to enable five lighthouse communities (inclusive of Hepburn Shire) to deploy zero-net emission masterplans and programs over 4 years to the total value of $5m.

Solar for All Program
A Virtual Solar (or Solar Gardens) model provides community members with remote access to renewable energy sourcing through investment in generation assets that can be located anywhere and distributing electricity through virtual solutions. This model is subscription based rather than contract based and can be traded between subscribers. Throughout America this model has had success through tax incentives, the removal of regulatory barriers (such as virtual net metering) and/or subsidising access.

We see a significant opportunity in the application of this model to our proposed solar farm. Hypothetically, it could allow 1000 households not able to install solar on their rooftops to directly benefit from solar by owning or subscribing to PV panels in the solar farm, financially assisted by Solar Victoria rebate and receive households financial savings via their retail electricity bill. This would also enable a flow of equity into CAPEX for the project. To prove this model we support the development of a Solar For All Pilot and the creation of a Solar for All Rebate. This would involve expanding the Renters Solar Rebate program delivered by Solar Victoria to ensure locked-out energy users across Victoria can access solar at scale via a Solar For All Rebate.

What else government can deliver?

We believe the following high level objectives would frame the sector based recommendations in the previous section:

- Set ambitious science-based emissions reduction targets: aim to keep global warming below 1.5°C. In addition, ensure the VRET is aligned with the ERTs - currently the VRET does not account for the rapid transition to EVs in its 50% renewable by 2030 target. We need 'true targets' that account for this properly.
- Bipartisan support for the Climate Act to ensure the good work of communities is not undone in future years.
- Establish a dedicated Victorian Climate Change Action Fund, to ensure projects like Hepburn Z-NET can have secure long term funding to deliver our ambitious masterplan.
- Deliver Victoria's first Climate Budget.

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Interstate and overseas best practice

Community-wide masterplans

I was lucky enough to be awarded a Churchill Fellowship in 2017 with the topic of 'How to transition regional Australian villages to 100% renewables by learning from European examples'.

My Fellowship focused on visiting regional towns in Europe to understand the interconnected political, social, technical and financial factors that enable communities to successfully transition, be zero-net energy or even energy exporters. It included speaking with over 80 thought leaders, municipalities, community members, industry experts, federal politicians and policy-makers about how different frameworks can stimulate a successful transition. It also included over 60 distinct site visits to operating projects to understand the different combinations of models and technologies that have been developed and the institutes that are coordinating this transition. This Fellowship aimed to explore future scenarios that can be implemented within the Australian context.

Pivotal to what I learnt was the importance of community and council partnerships in quickening local climate change actions. How these partnerships best utilised their local resources and acted strategically was by developing local community energy masterplans, either at a village or municipality scale. Many of the villages I visited had been deploying activities to reach their ambition of 100% renewable for over a decade and most had been successful. They were now seeking further goals, most common was 'fossil free' and focusing on transport. Very few were considering the full emissions spectrum, but many intended to in the near future. Their message was clear - we don't have time to wait, we need to look holistically at the whole problem now. These learnings strongly informed the model that was built for the Hepburn Z-NET Pilot.

Feed in Tariffs

The FiT has exclusively been applied to small-scale projects in Australia and paid by retailers, except in 2018 with the first community energy FiT applied for a community solar farm in the ACT and paid by the state government.

In 2008 COAG issued the National Principals for Feed-in Tariff Schemes which gave small-scale solar generators the right to export electricity to the grid and receive payment. In 2013 this was expanded to all renewable energy generators. FiT schemes currently vary from state to state, typically incentivising small renewable energy systems, except for the ACT which also supports large scale renewables (for more information read the 2017-18 Annual Feed-in Tariff Report). FiT rates for small-scale solar vary between roughly 6 cents per kWh to an upper time-variable rate in Victoria of 29 cents per kWh. These rates vary depending on state legislation as well as retailer willingness.

In 2011 the ACT legislated the Electricity Feed-in (Large-scale Renewable Energy Generation) Act which provides FIT entitlements to large scale renewables generating above 200kW when granted by the ACT Government. The Large-scale FiT uses a hybrid model, utilising auctions with Contracts of Difference (CoD) to allocate the FiT. The community energy project, Solar Share was granted a FiT from the ACT Government. This tariff is locked in at a price of 19.56c/kWh over a 20 year period,

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providing the project the long term certainty needed for such project development. This is coupled with their ability to have a PPA with an electricity retailer for the power - at a reasonable market price of 6c/kWh.

Globally, the huge uptake of mid-scale community energy projects in countries such as in Denmark, Scotland, Germany have all been deployed through a Feed in Tariff. Internationally FiT's have been used for decades to provide targeted incentives to boost renewable energy investment. These policies have typically worked in conjunction with other policies that respond to the unique benefits and hurdles for community energy projects, such as planning approvals, start-up capital and securing PPA's. Below are two case studies that delve further into how FIT's have been used to boost renewables and community energy development.

Case study: Germany

Most notably, Germany's FiT became a best practice example of how countries could expand renewable energy capacity. The "Energiewende" involved a number of policies designed to increase the share of renewable energy generation as a response to climate change. The FiT was the central mechanism of Energiewende and came into effect in 2000. The FiT (known as the EEG) was adapted over time to effectively respond to changing technologies and their costs. The EEG initially provided generators a tariff for 20 years that decreased in value over the lifespan of the project. The tariff enabled a large amount of community and civic participation in the energy market, making many projects of different scales financially viable. The EEG is credited with tripling installations for wind generation in the 2000's as compared to the 1990's.

Germany has also developed high levels of community ownership, with 40% of renewable energy generators being owned by individuals and 11% by farmers. Another 6.5% is owned by large market incumbents and 7% by other utilities. In 2016-17 Germany wound down the EEG and moved to an auction model to reduce costs. Since then, community energy projects have stagnated.

Successes	Failures
Increased decentralised generation	Increasing market liberalisation caused policy to fall from favour
Greater community ownership	Expensive tool when compared to auctions

Case study: United Kingdom

The United Kingdom also introduced a FiT to aid the deployment of small-medium (max 5MW) scale renewable energy. The FiT reduced the risk associated with developing these projects and provided community investors with stable returns. The FiT was eligible for generators for 20 years and covered a number of technologies, ranging from solar, biomass, wind, hydro and geothermal technologies. The FiT value was also dependent on the type of technology and the scale of the project. Newer technologies were incentivized with higher tariffs, recognising their greater cost. While larger projects using conventional technologies received smaller tariffs, due to the lower risk associated with these technologies and capital outlay needed.

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Over the duration of the FiT, prices were dropped in response to reducing technology costs. In 2016, after yearly reductions in FiT rates, the UK government announced that they were looking to end the policy. The amount provided has dropped significantly which has caused a reduction in new community energy projects. According to a new report published by the Green Alliance, 66 community projects have subsequently stalled or failed since the decision to remove the feed-in tariff. The rate of new project proposals has dropped dramatically from 33 new proposals in 2014 to one in 2017.

Successes	Failures
Broad range of technologies covered	Political changes caused great fluctuation on FiT pricing
Tailored pricing for technologies and scales	Killing the policy suddenly caused rapid decrease in community energy projects
Responding to reduced costs of technologies over time	
Provided certainty for a 20 year period	

Conclusion

Hepburn Wind is but one of many community energy enterprises in Victoria taking action because of the significant threats posed by climate change. Our work to date has demonstrated the capacity of communities to drive climate mitigation strategies, enable adaptation and build community resilience. By providing a more holistic policy framework community energy projects like our own, will thrive and quicken Victoria's transition to zero-net emissions.

We thank you for this opportunity to make a submission and look forward to hosting the committee at our wind farm and in our community in the coming months.

Yours sincerely,

Taryn Lane
General Manager