Community renewable energy projects

PiLoR and planning issues discussion paper

VICTORIA State Government | Environment, Land, Water and Planning

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Ministers' foreword

Thank you for accessing this discussion paper about how we can help community renewable energy projects in Victoria.

Victorians are eager for clean, renewable energy. The Andrews Labor Government wants to help build and sustain the momentum of that eagerness and provide practical support for efforts to transition to a clean energy future.

Community renewable energy projects are one such effort. They can reduce emissions, create local jobs, benefit the environment, strengthen communities and give Victorians better control over their energy requirements. They can be a key feature of Victoria's future energy landscape.

In 2015, we consulted about the government's proposed renewable energy action plan for Victoria. People told us the government should set an ambitious renewable energy target and have programs to help deliver it. They also told us we should address some barriers to community renewable energy projects, namely:

- the current methodology for payment in lieu of rates [PiLoR] by energy generators
- the current planning arrangements, which prohibit community wind farms in some areas in Victoria.

This discussion paper is an important step in providing practical support for community renewable energy projects. It adds to measures we have already taken to support Victorians' passion for clean, renewable energy. The government's $20 m New Energy Jobs Fund is supporting community groups and businesses developing renewable energy projects. The *Guide to Community-Owned Renewable Energy for Victorians* has case studies of successful community projects and practical advice about the commercial, technical, governance and regulatory aspects of community renewable energy projects. The renewable energy action plan, now being developed, will outline measures to attract Victoria's share of the significant investment in renewable energy forecast to occur in Australia in coming years.

The Andrews Labor Government made an election commitment to restart the renewable energy industry and open the doors for community wind farms. We're keeping our word and working with the community about how best to do so.

We invite all Victorians with an interest in community renewable energy projects—community organisations, councils, businesses, the renewable energy industry and the wider community—to make submissions about the questions asked and issues raised in this discussion paper, and more broadly about any other issues they think relevant, via haveyoursay.delwp.vic.gov.au/community-energy

Hon. Lily D'Ambrosio
Minister for Energy, Environment and Climate Change

Hon. Richard Wynne
Minister for Planning

1 Introduction

1.1 About community renewable energy project issues

1.1.1 Victoria's Renewable Energy Roadmap

In August 2015, the Victorian Government released Victoria's Renewable Energy Roadmap: Delivering jobs and a clean energy future. The roadmap outlines the proposed direction of Victoria's renewable energy policy, which aims to accelerate renewable energy generation in Victoria to reduce emissions, create jobs and put downward pressure on energy prices.

The government consulted the community in late 2015 and received more than 1,300 submissions. The government is considering these as part of finalising Victoria's renewable energy action plan. The action plan will set long-term actions to drive renewable energy investment in Victoria and will be released later in 2016.

1.1.2 Community renewable energy project issues arising for consultation

The past decade has seen the energy industry, and particularly electricity generation, transformed. As households install solar panels and communities develop renewable energy projects, electricity generation is rapidly becoming localised.

Community renewable energy projects are an important and increasing part of this transformation. Australia's first community wind farm, Hepburn Wind, started operating in June 2011. Communities across Victoria have expressed an interest in developing renewable energy projects, including at Woodend and Mt Alexander.

The roadmap consultations identified three important issues for community renewable energy projects:

- how the government defines such projects and, if there is a distinct definition, whether it should treat them differently to other energy generation projects
- whether the current payment-in-lieu-of-rates (PiLoR) methodology for power stations adequately meets the need of small-scale and community renewable energy projects; and if not, what changes the government should make
- whether and how current planning arrangements for wind farms, including the current prohibitions, should change.

The PiLoR methodology and planning prohibitions discussed in this paper relate only to facilities of greater than 1 MW capacity used to supply electricity to the grid. The discussion does not extend to micro wind turbines, rooftop solar and other generation systems used mainly to supply power on-site or for residential purposes.

1.1.3 Other community renewable energy project issues

The government has also addressed some other matters to encourage the growth of community renewable energy projects raised in the roadmap consultations, including:

- **the need for better information about developing community projects**: in response, the government produced *Guide to Community-Owned Renewable Energy for Victorians*
- **the need for more financial support for community projects:** the government's $20 m New Energy Jobs Fund includes funding for community projects, with some successful Round 1 recipients already announced and the government to announce more later in 2016
- **possibly waiving for community projects the requirement for a Victorian licence to sell or supply energy:** the government is reviewing the general exemption order about energy licensing and considering if community projects should be listed as exempt activities
- **helping community projects with the grid connection process:** the government has recently enacted changes to the grid connection process for generators with a generating capacity less than 5 MW (which will include most community projects). The changes were adopted in Victoria on 1 July 2016 and promote fairer access to the grid for small-scale renewable energy customers.

1.1.4 Legislative context

The *Electricity Industry Act 2000*—a responsibility of the Minister for Energy, Environment and Climate Change—mandates the PiLoR methodology.

The *Planning and Environment Act 1987*—a responsibility of the Minister for Planning—established the Victoria Planning Provisions.

The government is currently reviewing the *Local Government Act 1989*. As the Electricity Industry Act mandates the PiLoR methodology, the methodology is outside the scope of the Local Government Act review.

1.2 About this discussion paper

This discussion paper provides the basis for community consultation about three key issues:

- the definition of community renewable energy projects
- the payment-in-lieu-of-rates (PiLoR) methodology
- planning arrangements for wind farms.

Throughout the discussion paper, key documents and sources of further information are highlighted in blue and underlined. If you are viewing this paper electronically and are connected to the internet, click on the blue underlined words to hyperlink to the document or information source. The hyperlinks are also in the 'References' section.

1.3 About this consultation and your submission

The government invites all Victorians with an interest in community renewable energy projects—community organisations, councils, businesses, the renewable energy industry and the wider community—to make submissions about the issues raised and questions asked in this discussion paper, and more broadly about any other issues they think are relevant.

To make a submission, please visit haveyoursay.delwp.vic.gov.au/community-energy or:

- email it to planning.systems@delwp.vic.gov.au
- post it to Community renewable energy projects consultation, Department of Environment, Land, Water and Planning, GPO Box 500, East Melbourne 8002 Victoria.

As far as possible, please respond to specific questions with reference to their numbers. This ensures the department's officers relate your response directly to the relevant question, thus maximising the effect of your input. If your response is not about a particular question, or is about multiple questions, please put it under a separate heading 'Other responses'.

Please note the department may publish your submission on its website unless you mark it confidential.

The release date for this discussion paper is 14 September 2016. The closing date for submissions is 28 November 2016.

The government will then consider the submissions received and develop options to address the issues in this discussion paper.

Case studies

Hepburn Wind – Victoria

The Hepburn Community Wind Park Co-operative (known as Hepburn Wind) is the owner and operator of Australia's first community wind farm, at Leonards Hill near Daylesford, about 100 km north-west of Melbourne. The 4.1 MW wind farm hosts two turbines that produce enough clean energy for over 2,000 homes.

The project started in 2005 when a local resident formed a steering group and went looking for a wind developer interested in the community cooperative model and prepared to build a small wind farm. The steering group found Future Energy, a niche developer of small- to medium-sized renewable energy projects. Future Energy coordinated project development, provided technical and corporate expertise and funded most of the project development stage.

The community established the cooperative to garner local support, manage the wind farm, allocate surpluses and fund community projects. It has almost 2,000 members, most of whom are Hepburn area locals. The cooperative contributed $9.8 m to the construction costs of the wind farm. The Victorian Government provided grants of $1.7 m and the Bendigo Bank a $3.1 m loan

Torrs Hydro (England)

Torrs Hydro is a community hydro scheme in New Mills, Derbyshire, England. It has been generating clean, green electricity since 2008.

The scheme has about 230 shareholders, most of whom are local people and businesses. Shareholders can receive interest on their shares, but most profits from the scheme fund a community grants program.

The scheme's turbine—'Archie', or reverse archimedes screw turbine—has a generating capacity of 4.1 MW. The scheme aims for an annual output of 240 MW.

The scheme cost £330,000 of which £125,000 was raised through a community share issue, £165,000 through grants and the remainder through loans. Torrs Hydro is run entirely by volunteers.

Flyers Creek wind farm community-developer partnership (proposed)

In 2008, Flyers Creek farmers approached Infigen Energy to investigate the feasibility of a wind farm in the area. Flyers Creek is just south of Orange, NSW and some 200 km west of Sydney. The wind farm is expected to comprise 42 turbines with a capacity of up to 145 MW, enough to supply about 45,000 homes.

Infigen Energy worked with the local community to help form the Central New South Wales Renewable Energy Co-operative (CENREC). CENREC intends to purchase one of the turbines through a community-developer partnership. It estimates this will result in benefits of:

- construction phase and ongoing jobs
- lease payments to landholders, dividends and community grants
- payments to the local government for road maintenance and other services
- increased tourism to the area.

CENREC is also drawing on the services of the Community Power Agency and Embark to link with community renewable energy groups throughout Australia.

Mureck bioenergy cycle

To supply the municipality of Mureck, Austria with energy from renewable sources, an agricultural cooperative (SEEG) and two local energy providers jointly run the Mureck bioenergy cycle, which is three co-located bioenergy projects: a biodiesel plant, a biomass district heating plant and a biogas plant that produces renewable electricity. The cooperative is made up of 530 farmer members and 70 local authorities.

The projects use locally sourced crops, used cooking oil and raw plant material to produce heating, electricity and biodiesel. The biomass plant has a capacity of 7.5 MW and supplies about 250 customers, accounting for 85% of Mureck's heating requirements. The biogas plant produces 1 MW of electricity from maize, raw plant materials, liquid manure, silage and glycerine from biodiesel production, all collected from within 6 km of the plant. The electricity feeds directly into the grid.

100% Renewable: Energy Autonomy in Action has more information about this project.

2 How to define community renewable energy projects

2.1 Consultation questions

1. Should community renewable energy projects be defined differently to other types of energy generation projects?

- Should community renewable energy projects be defined differently to other types of energy generation projects? If so, what would be their defining characteristics?
- What might the benefits to your community and Victoria be if community renewable energy projects were defined differently to other renewable energy projects?
- What might the risks to your community and Victoria be if community renewable energy projects were defined differently?

2. If so, what should the definition address?

- Should the definition of a community wind farm include its capacity (MW) or its number of turbines? If so, what capacity and what number of turbines, and why? If not, what might be better characteristics for the definition?
- How important to the definition is the degree of community ownership and are there better measures to define a community renewable energy project?
- Should community-developer partnerships be considered as community renewable energy projects?
- Should the percentage of community ownership in a community-developer partnership be specified, and are there other ways to define them to ensure they are genuine community-developer partnerships?

2.2 Definition of a community renewable energy project

To provide specific support to community renewable energy projects, the starting point is to consider whether these types of projects should be treated differently to other types of energy generation projects. If so, their definition (including their defining characteristics) would be important.

A community renewable energy project is usually initiated, developed and operated by a community organisation to derive the benefits from a renewable energy resource (such as sun, wind or water) or energy efficiency initiative. A community is most often a geographic community (such as a town or suburb) but can be a community of common interest.

While any particular project has characteristics unique to its community, it is usual for:

- a community organisation to lead the project, or partner with a developer, or both
- a community organisation to share decision-making responsibility for developing and operating the project
- the project to share the financial benefits with the local community
- the scale of the project to suit the community and local environment
- the project to harness the skills and capital of the community
- a community organisation to own a portion of the project and possibly control and manage the investment vehicle.

The definition of community wind farms is also an important matter for planning schemes. The ownership of a wind farm is not a land use or development planning matter and the planning system does not distinguish between wind farms in terms of their ownership (by individuals, cooperatives or companies) or scale (the number of turbines or generating capacity).

Section 4. Community wind farms and the planning system in this discussion paper also looks at this issue.

Community renewable energy projects can provide may benefits for local communities including infrastructure, jobs and revenue. They provide community development and environmental benefits by bringing citizens together in a joint endeavour to create a renewable and sustainable energy supply and raise environmental awareness. Community renewable energy projects also help Victoria's transition to clean energy.

2.3 Degree of community ownership / community-developer partnership

The degree of community ownership of a community renewable energy project can vary widely, from full community ownership to partial ownership (in a community-developer partnership).

In a community-developer partnership, either a community organisation or a renewable energy developer initiates the project and the two deliver it in partnership. A community-developer partnership offers an investment vehicle where a renewable energy developer and possibly other entities are joint owners. The community organisation often leads community engagement and consultation activities (using community members) and the developer leads the technical studies.

To fund a large project, a community organisation may partner with an organisation that will bear some or most of the financial risk and raise some or most of the required capital. Often, the partner organisation owns most of the shares and has most of the decision-making responsibility.

Community-developer partnerships can offer communities economies of scale and access to capital markets, as well as planning, technical and management expertise; but some community-developer partnerships may offer little community control.

Torrens Hydro and the Mureck bioenergy cycle are examples of a community-developer partnership.

3 Payment in lieu of rates (PiLoR) methodology

3.1 Consultation questions

3. Should the PiLoR methodology be updated?

- Are councils and generators using the PiLoR methodology to negotiate payments in lieu of rates?
- If so, do they use it precisely or do agreements deviate from the methodology?
- Are generators and/or councils having difficulties agreeing to a payment in lieu of rates?
- Is the methodology fit-for-purpose?

4. Should there be a second methodology?

- Should there be a second PiLoR methodology for small-scale and community renewable energy projects? If so, what should it be?
- If so, should the methodology be only for community renewable energy projects or should it also be for small-scale projects regardless of their ownership structure?
- If so, should the methodology be for large-scale community renewable energy projects and community-developer partnerships (for example, wind farms above 20 MW capacity)?
- If making a distinction between small-scale and large-scale projects, what is 'small', including for projects other than wind farms?
- Would a better approach be to adjust the PiLoR methodology to account for capacity: that is, to remove the fixed ($40,000) component and base the amount only on MW capacity?

5. Are there other PiLoR methodology issues?

- Are there any more general issues with the PiLoR methodology the government should consider?

6. Should the government help with grid connection issues?

- What effects do the costs of physical infrastructure, technical studies and navigating the connection process have on the viability of community renewable energy projects? What are some examples of these effects?
- If the government was to support connection processes, how could it do it?
- Should community-developer partnerships be subsidised financially?

3.2 The PiLoR methodology

Section 94 of the *Electricity Industry Act 2000* (which implemented the privatisation of the Victorian electricity industry) provides for a generator to elect to make a payment to the relevant council in lieu of rates under the *Local Government Act 1989*. If a generator elects to do so, the generator and the council must negotiate the payment amount. If they cannot agree, an arbitrator determines the amount.

The aim of the provision was to provide a degree of certainty, both in advance of negotiations and as a failsafe mechanism should the parties not agree. It also aimed to result in fair and equitable charges—considering the capital-improved land value of the generation facility—for generators as they were at time: most were large, base-load generators.

In 2004, in response to feedback from generators and councils that the Act did not offer enough guidance to determine an amount, the government sought to provide a methodology for calculating payments that was fair to councils and to generators. The intention was to maintain the flexibility of the provision (by allowing for negotiations) but also provide guidance for negotiators, and to indicate an amount if negotiations failed.

Following a public consultation, the government accepted a review panel recommendation that the provisions of the Act allowing generators and councils to agree a payment in lieu of rates continue but that a methodology—now known as the PiLoR methodology—be established to determine the amount if the parties could not agree.

The PiLoR methodology includes that the amount be:

- a fixed $40,000 per generation facility
- a (variable) additional $900 per MW of installed generation capacity, indexed annually.

For example, calculating the payment amount using the methodology a wind farm with:

- 200 MW capacity would pay about $1,100 per MW of installed capacity: as a formula, ($40,000 + $900x200) / 200 = $1,100
- 5 MW capacity would pay $8,900 per MW of installed capacity: as a formula, ($40,000 + $900x5) / 5 = $8,900.

The methodology also includes:

- discounts on the variable amount for facilities operating at reduced capacity (such as facilities only operating at peak periods and some renewable energy generators)
- provision to increase or decrease the amount considering the age of the facility and the effect of the generator on the local area
- pro rata arrangements if the facility is in more than one local government area
- some estimating and calculating considerations
- annual indexation to the Melbourne CPI.

The Order in Council implementing the methodology was in August 2005: Appendix A has an abridged version of it.

3.3 An updated methodology

It might be that the PiLoR methodology requires no change. The methodology does not mandate the amount generators must pay: the Act allows the generator and council to negotiate an amount. That is, there is nothing to prevent a community renewable energy project and a council agreeing to an amount, however small.

However, the 2004 review noted the difficulty that generators and councils had in reaching agreement, especially when the generator was small. Anecdotal evidence also suggests that most councils use the PiLoR methodology as a basis for negotiations. In today's dollars, the methodology equates to close to $52,000 plus $1175 per MW, which for a smaller generator may represent a significant proportion of its revenue.

The methodology may need revision for community-scale developments. The 2004 review did not consider community renewable energy projects when establishing the methodology: Australia's first community wind farm, Hepburn Wind, became operational in June 2011. Also, Victoria in 2004 had less than 100 MW of wind energy capacity; in 2016, there is 1,249 MW of commissioned wind energy. Wind turbine efficiency has also improved greatly.

The methodology may need to better provide for small renewable energy facilities (such as wind farms between 1–20 MW capacity), regardless of their ownership structure.

3.4 A second methodology

There may be a case for establishing a second PiLoR methodology for small-scale and community renewable energy projects that is fully adjustable according to capacity. In the 2004 review, stakeholders supported having an alternative to the $40,000 + $900 per MW methodology. The review concluded it would be fair and reasonable to do so, given the differences between generators.

The current methodology leads to a larger per MW amount as the installed capacity of a facility decreases. This raises the question of whether it is fair and equitable: it results in a much higher per MW amount for a small generator. For example (using the 2004 rate), the average payment for a 250 MW wind farm equates to $1,060 per MW, compared to $4,900 per MW for a 10 MW wind farm.

The methodology provides a generator and council with considerable flexibility to negotiate about what constitutes a fair amount. However, small-scale and community renewable energy projects may not have the time, money or expertise for lengthy or complex negotiations with their council.

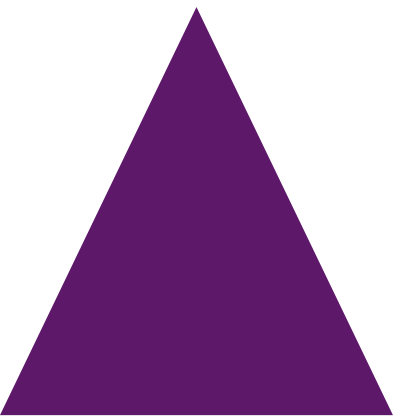
Definitions of size may also need to be clarified. Wind farm capacity is usually defined by the number of turbines or the capacity in MW. This discussion paper uses MW because the capacity of turbines has increased over time: wind turbines were once commonly less than 1 MW, whereas 2–3 MW is now common. Other ways of defining capacity may be appropriate, particularly for other renewable energy technologies. We are also interested in hearing views about how to best define non-wind renewable energy technology scales: that is, what constitutes a small grid-connected biomass or solar facility.

3.5 Grid connection and other issues

Connecting to the electricity transmission / distribution network (the grid) can be a complex and expensive process. It is possible that the costs of physical infrastructure, technical studies to meet the grid's security and reliability requirements and navigating the connection process threaten the viability of community renewable energy projects. The government is interested in ideas about how it might support community organisations navigate the connection process and possibly help with some of the costs. It is important to also consider any broader implications for other energy market participants: generally speaking, if one group of participants are subsidised, another group of electricity consumers will have to pay extra.

Were the government to offer subsidies to community renewable energy projects to connect to the grid, there would be a question of whether the subsidy should be available to community-developer partnerships, given they may be large commercial projects and that subsidies would likely be recouped by increasing electricity prices or funded from general revenue.

There may also be other more general issues the government needs to address to improve conditions for community renewable energy projects in Victoria.



4 Community wind farms and the planning system

4.1 Consultation questions

7. Should planning arrangements for wind farms be changed?

- Should wind farms continue to be prohibited in the areas listed in Table 1? If so, why?
- Should community wind farms be allowed in these areas? If so, in entire areas or specific locations within the prohibited areas? And why?
- Is there a need to differentiate in planning schemes between a community wind farm and a wind energy facility?
- Should planning arrangements for community wind farms be dealt with another way (such as on a case-by-case basis)?
- Are there other wind farm issues that could be managed more effectively through the planning system?
- Could the way technical wind farm issues are dealt with through the application process be improved? If so, how?

4.2 Current wind farm prohibitions

The *Victoria Planning Provisions* and council planning schemes currently prohibit wind farms (irrespective of ownership arrangements or the number of turbines) in some locations recognised for their conservation, landscape, amenity, environmental or tourism values, and in areas set aside for future urban growth. These prohibitions apply to wind farms but not to other types of renewable energy projects. Table 1 shows where wind farms are prohibited, and current government policy.


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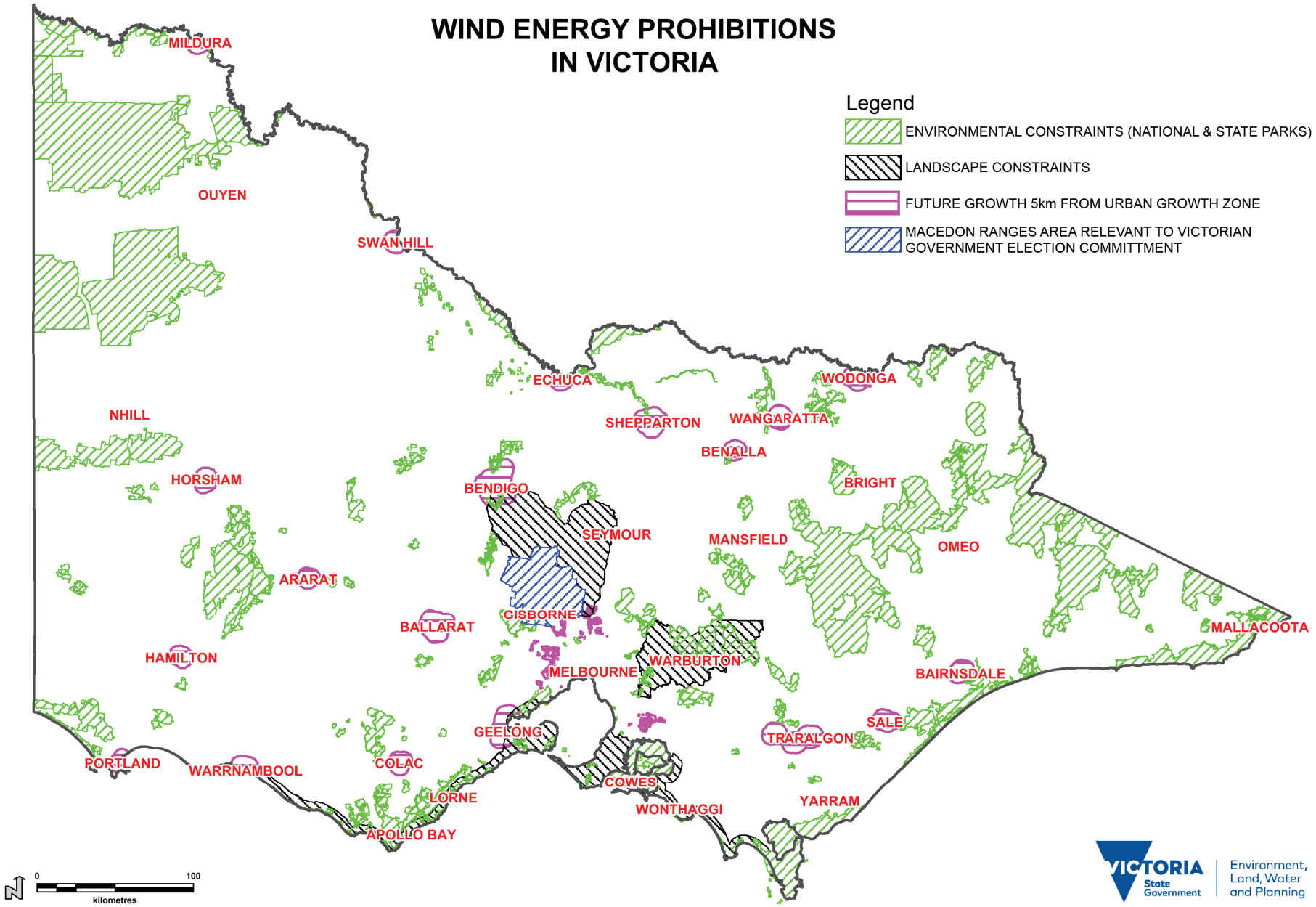
Table 1: Current wind farm prohibitions, Victoria

Value	Wind farms are not allowed in...	Current government policy
Conservation and landscape	• National parks and other land subject to the *National Parks Act 1975* • Ramsar wetlands as defined under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*	The government does not intend to change this policy
Amenity, environmental or tourism	• Great Ocean Road area and Bass Coast (west of Wilson's Promontory) within 5 km of the high water mark • Yarra Valley and Dandenong Ranges • Bellarine and Mornington peninsulas • McHarg Ranges	These prohibitions are open for discussion
	• Macedon Ranges	The government will allow community wind farms in the Macedon Ranges area. How to implement this is open for discussion
Urban growth	Land in the urban growth zone and designated regional population corridors within 5 km of Ararat, Bairnsdale, Ballarat, Bendigo, Benalla, Colac, Echuca, Geelong, Hamilton, Horsham, Mildura, Moe, Morwell, Portland, Shepparton, Swan Hill, Traralgon, Sale, Wangaratta, Warrnambool and Wodonga.	For discussion and feedback

Figure 1 shows these locations. Appendix B provides more detail about the prohibitions.

FIGURE 1: CURRENT WIND FARM PROHIBITIONS, VICTORIA



4.3 Reviewing the current prohibitions

The government made an election commitment to allow community wind farms in the Macedon Ranges, where they are currently not allowed. It also committed to protect the iconic and historic Macedon Ranges area. And it recognises that a discussion about the location of community wind farms should extend beyond the Macedon Ranges area to include all communities interested in developing a community renewable energy project. This consultation provides an opportunity to find out if other communities also want current prohibitions reviewed.

To maintain the integrity of Victoria's national parks and Ramsar wetlands, the government will not lift the current prohibition on wind farms (including community wind farms) in these areas.

Wind energy facilities in Victoria require a planning permit. Current requirements about amenity (such as noise, turbine location and effects on animals) will continue to apply to all community wind farm developments regardless of where they are. All future projects—even in areas where they are currently prohibited—will be subject to the usual planning and environmental assessments required for permit applications. This will ensure that community wind farms are appropriate to their environments and settings.

References

The electronic version of this discussion paper includes hyperlinks to key documents and sources of further information. Table 2 below shows the word or phrase in the text and the hyperlink. While all hyperlinks were active at the time of publication, some might change over time. If a hyperlink below is broken, search for the word or phrase in text, which is likely to locate the document or information source.

Word / phrase in text	Link
100% Renewable: Energy Autonomy in Action	https://books.google.com.au/books?id=HllZW4ZSheUC&pg=PA121&lpg=PA121&dq=SEEG+Mureck&source=bl&ots=rJfh0VlQHc&sig=hblO-x2SNJJrzA5E4B5EuwB6rhY&hl=en&sa=X&ved=0ahUKEwjb2qm-_-zOAhUCFpQKHQaqA7MQ6AEIJzAC#v=onepage&q=SEEG%20Mureck&f=false
CENREC	http://www.cenrec.com.au/
Clause 52.32-2 'Use and development of land'	http://planningschemes.dpcd.vic.gov.au/schemes/vpps/52_32.pdf
Clause 74 'Land use terms'	http://planningschemes.dpcd.vic.gov.au/schemes/vpps/74.pdf
Community Power Agency	http://cpagency.org.au/
community renewable energy groups	http://www.cenrec.com.au/community/community-renewable-energy-groups/
consultation website	http://haveyoursay.delwp.vic.gov.au/community-energy
Electricity Industry Act 2000	http://www.legislation.vic.gov.au/domino/web_notes/ldms/pubstatbook.nsf/f932b66241ecf1b7ca256e92000e23be/4fc2a8645c6e1e8fca256e5b00213f45/$FILE/00-068a.pdf
Embark	http://www.embark.com.au/display/WebsiteContent/Home
Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/s17.html
Guide to Community-Owned Renewable Energy for Victorians	http://www.energyandresources.vic.gov.au/energy/sustainable-energy/community-energy
Hepburn Wind	https://www.hepburnwind.com.au/

Word / phrase in text	Link
Local Government Act 1989	http://www.legislation.vic.gov.au/domino/web_notes/ldms/ltobject_store/ltobjst6.nsf/dde300b846eed9c7ca257616000a3571/32807739dafb424aca2578db001b8014/$file/89-11aa109a%20authorised.pdf
National Parks Act 1975	http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/LTObject_Store/LTObjSt3.nsf/DDE300B846EED9C7CA257616000A3571/644DBBBD726E88D6CA2577610027A1BC/$FILE/75-8702a117.pdf
New Energy Jobs Fund	http://www.business.vic.gov.au/support-for-your-business/future-industries/new-energy-technologies
Planning and Environment Act 1987	http://www.legislation.vic.gov.au/Domino/Web_Notes/LDMS/LTObject_Store/LTObjSt7.nsf/07c00f1b6c5c4afbca25776700219570/4d5c8a5d22cc9998ca257a3000028d7a/$FILE/87-45aa102%20authorised.pdf
relevant local government planning schemes	http://planning-schemes.delwp.vic.gov.au/
require a planning permit	http://www.dtpli.vic.gov.au/planning/planning-applications/more-information-on-permits/wind-energy-facilities
Review of Energy Market Frameworks in Light of Climate Change Policies Final Report	http://www.aemc.gov.au/Media/docs/Review%20Final%20Report-9f02959f-0446-48ba-89a1-5882d58e11fd-0.PDF
reviewing	http://www.yourcouncilyourcommunity.vic.gov.au/
rule change for scale-efficient network extensions for clusters of new, distributed energy projects	
section 17	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/s17.html
Torrs Hydro	http://www.torrshydro.org/
Victoria Government Gazette	http://www.gazette.vic.gov.au/gazette/Gazettes2005/GG2005G034.pdf#page=42
Victoria Planning Provisions	http://planningschemes.dpcd.vic.gov.au/schemes/vpps
Victoria's Renewable Energy Roadmap: Delivering jobs and a clean energy future	http://www.energyandresources.vic.gov.au/__data/assets/pdf_file/0007/1193281/9057-DEDJTR-ESD-Renewable-Energy-Roadmap-20150820.PDF

Appendix A – PiLoR Methodology Order in Council

This is an abridged version of the Order in Council that established the PiLoR methodology in 2005. The *Victoria Government Gazette* has the full version of the Order in Council on pages 1897–98.

Electricity Industry Act 2000

ORDER UNDER SECTION 94

Order in Council

The Governor in Council, acting under section 94(6A) of the *Electricity Industry Act 2000* (the "Act") makes the following Order:

1. Objective

The objective of this Order is to prescribe a methodology for determining amounts payable under section 94(5) of the Act by a generation company or associated entity of a generation company to a relevant council in respect of land used for generation functions.

2. Commencement

This Order commences on the date on which it is published in the Government Gazette.

3. Prescribed Methodology

For the purposes of section 94(6A) of the Act, the prescribed methodology for determining amounts required to be paid under section 94(5) of the Act by a generation company or an associated entity of a generation company to a relevant council in respect of land used for generation functions, is as follows:

(a) the generation company or associated entity of the generation company shall pay to the relevant council in respect of each financial year:

(1) for each power station of the generation company located on the land used for generation functions and within the municipal district of the relevant council, $40,000, as escalated; and

(2) for each MW of the nameplate rating for each generating unit comprising the power station, $900, as escalated;

(b) where, in any financial year, the power station operates at an average capacity factor of:

(1) less than 10%, the amount otherwise payable under paragraph 3(a), shall be reduced by 50%;

(2) between 10% and 20%, the amount otherwise payable under paragraph 3(a), shall be reduced by 25%;

(c) the amount otherwise payable under paragraphs 3(a) and (b) may be further increased or decreased with the parties' agreement, having regard to other factors presented by the parties and which the arbitrator considers relevant, which may include:

(1) the age of the power station, where this may be shown to have a demonstrated effect on the efficiency of the output of the power station; and

(2) the impact of the generation company or associated entity on the local area;

(d) where the land used for generation functions lies within more than one municipal district, the amount determined in accordance with paragraph 3 is payable to more than one relevant council and payments shall be apportioned between the relevant council on a pro rata basis, having regard to the proportion of the nameplate rating of the power station located in each municipal district; and

(e) the amounts referred to in paragraph 3 may be estimated by the relevant council at the commencement of the financial year, using an estimate of the average capacity factor of the power station for the financial year, and the generation company or associated entity shall pay this estimated amount to the relevant council during the financial year. If at the end of the financial year the amount estimated by the relevant council is different to the amounts referred to in paragraph 3 calculated using the actual average capacity factor of the power station for the year, then this difference shall be paid by the generation company or associated entity to the relevant council, or by the relevant council to the generation company or associated entity, as appropriate.

Appendix B –Wind energy facility definition and prohibitions

Definition

Clause 74 'Land use terms' of the Victoria Planning Provisions defines the land-use term 'wind energy facility' as, 'Land used to generate electricity by wind force. This includes land used for a) any turbine, building or other structure or thing used in or in connection with the generation of electricity by wind force b) an anemometer. It does not include turbines principally used to supply electricity for domestic or rural use of the land.' Importantly, the current definition of a wind energy facility does not differentiate between wind farms in terms of ownership, the capacity or number of turbines.

Prohibitions

This appendix combines information from the *Victoria Planning Provisions* with relevant local government planning schemes to provide an overview of current prohibitions of wind energy facilities. For further details about particular locations, see the relevant planning scheme.

A wind energy facility is prohibited in the following circumstances and locations.

Areas with high conservation and landscape values:

- national, state and coastal parks described in a schedule to the *National Parks Act 1975*
- Ramsar wetlands as defined under section 17 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Locations that feature a high degree of amenity, environmental value, or are a significant tourist destination:

- Yarra Valley and Dandenong Ranges and Mornington Peninsula, being all land in the Yarra Ranges and Mornington Peninsula planning schemes
- Bellarine Peninsula, being all land in the Queenscliff Planning Scheme and that area in the Greater Geelong Planning Scheme east of the Surf Coast Highway and south of the Princes Highway
- Macedon Ranges and McHarg Ranges, being all land in the Macedon Ranges Planning Scheme; all land west of the Hume Freeway and the Goulburn Valley Highway in the Mitchell Planning Scheme; and all land within the area bounded by the McIvor Highway and the Calder Highway and Calder Freeway in the Greater Bendigo and Mount Alexander planning schemes
- Bass Coast, being all land within 5 km of the coast in the Bass Coast Planning Scheme and South Gippsland Planning Scheme, west of Wilson's Promontory
- Great Ocean Road region, being land within 5 km of the high water mark of the coast in the Colac Otway, Corangamite, Greater Geelong, Moyne, Surf Coast and Warrnambool planning schemes between the Surf Coast Highway in the east and Warrnambool in the west.

Locations identified for future urban growth:

- land in an urban growth zone that applies to metropolitan growth areas and some regional growth areas like Armstrong Creek in Geelong, and Ballarat
- designated regional population growth corridors, being land within 5 km of major regional cities and regional centres specified in the Regional Victoria Settlement Framework Plan in the State Planning Policy Framework (Ararat, Bairnsdale, Ballarat,

Benalla, Bendigo, Colac, Echuca, Geelong, Hamilton, Horsham, Mildura, Moe, Morwell, Portland, Sale, Shepparton, Swan Hill, Traralgon, Wangaratta, Warrnambool and Wodonga); the 5 km exclusion area will be replaced with defined locations as growth planning for each centre is completed.

The prohibited areas can be found at Clause 52.32-2 'Use and development of land' and in a schedule attached to this clause of planning schemes.

Table 3 summarises exceptions to the above prohibitions. The exceptions are in the table to Clause 52.32 -2 'Use and development of land' of planning schemes.

Table 3: Exceptions

Prohibited location / circumstance	Exception to the prohibition
National parks	• Where the wind energy facility is principally used to supply electricity to a facility used in conjunction with a conservation, recreation, administration or accommodation use of the land
Mornington Peninsula, Yarra Ranges, McHarg Ranges, Bellarine Peninsula	• Where the wind energy facility is on land in an urban zone[1] and is integrated as part of developing the land
Land within five kilometres of an urban zone[1] in a regional settlement identified in the schedule to Clause 52.32 in the planning scheme	• Where the wind energy facility is on land in an urban zone[1] and is integrated as part of developing the land
Land within 5 km of the high water mark of the Bass Coast–Great Ocean Road coast	• Where the wind energy facility is on land in an urban zone[1] and is integrated as part of developing the land
Turbines located within 1 km of an existing dwelling	• Where the owner of the dwelling consents to the turbine • Where the turbine is on land in an urban zone[1]: turbines in an urban zone are not subject to the consent requirement, even if they are located within 1 km of a dwelling

Note 1: An urban zone means a residential zone, an industrial zone, a business zone or a special purpose zone.