Victoria’s Investment Prospectus: Bioenergy

## Victoria is investing in world-class bioenergy innovation

Table of Contents

[Acknowledgements 2](#_Toc180404961)

[Why invest in Victoria’s bioenergy sector? 4](#_Toc180404962)

[Our legislated targets are driving investment 7](#_Toc180404963)

[Fast-tracking planning approvals 9](#_Toc180404964)

[Access to Victoria’s world-class renewable energy talent 11](#_Toc180404965)

[Supporting your project every step of the way 13](#_Toc180404966)

[The Gas Substitution Roadmap is helping our state navigate the path to net zero emissions while ensuring gas reliability 15](#_Toc180404967)

[Sustainable fuels made from biological sources can replace traditional fossil fuels 16](#_Toc180404968)

[Biomass opportunities in Victoria’s regions 18](#_Toc180404969)

[Victorian policy leading the way to a circular economy 21](#_Toc180404970)

[Victoria’s Waste to Energy Scheme 23](#_Toc180404971)

[Bioenergy projects in action 27](#_Toc180404972)

[Key Victorian Government entities 32](#_Toc180404973)

[For international investors 35](#_Toc180404974)

# Acknowledgements

**Acknowledgement of Country**

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria’s land and waters, their unique ability to care for Country and deep spiritual connection to it.

We honour Elders past and present whose knowledge and wisdom have ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria’s Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

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# Why invest in Victoria’s bioenergy sector?

#### Government initiatives driving demand

Victoria’s ambitious renewable energy targets drive investment in innovative bioenergy and sustainable fuels projects.

The Victorian Government’s *Gas Substitution Roadmap* supports our path to net zero emissions, including using sustainable gases such as biomethane and renewable hydrogen.

The *Recycling Victoria: A New Economy* policy commits the state to shifting towards a circular economy by diverting waste from landfill towards other uses such as energy recovery.

Sustainable fuels will likely play a critical but targeted role in decarbonising Victoria’s hard to abate sectors, such as heavy transport and industry.

#### Significant development opportunities available

Exciting opportunities exist for projects that:

* are co-located with other resource recovery opportunities
* provide heat and power for industries
* deliver base load and synchronous load to local networks, or
* produce sustainable fuels, such as renewable diesel, biodiesel, or green methanol which can be blended or used to replace fossil fuel use for road transport, shipping or aviation.

#### Access to biomass resources across the state

Our diverse commercial, agricultural, water and industrial sectors have biowaste streams that are ripe for development. For example, the Green Forestry Triangle region in Southwest Victoria provides access to renewable carbon sources to support green fuel projects.

#### Advanced manufacturing and supply chain capacity

Victoria’s strong manufacturing sector and established supply chains are well-positioned to support bioenergy project development.

#### Demand for sustainable fuels

Victoria boasts four deepwater ports suitable for export, and Australia’s busiest combined regional passenger and freight rail network. This infrastructure can enable key sources of demand. Heavy and long-haul rail is likely to require sustainable fuels such as renewable or bio diesel to decarbonise. Export of high value sustainable fuels is another potential longer-term source of demand.

#### Coordinated delivery of infrastructure and services

#### Transparent policymaking process

The Victorian Government is transparently developing a stable and clear policy environment to drive international investment needed to foster a thriving Victorian renewable gas sector. This was headlined by the Renewable Gas Consultation Paper released in 2023, and will be built on through the Renewable Gas Policy Directions Paper to be released in late 2024, which will outline the Victorian Government's preferred approach to scaling this important sector.

#### Traditional Owners at the centre of decision-making processes

Strong and mutually beneficial partnerships with Traditional Owners and First Peoples are imperative to the electricity transition’s success and integral to ensuring the goals and objectives of self-determination set out in the Victorian Government’s Self Determination Reform Framework and the Department of Energy, Environment and Climate Action’s (DEECA) Pupangarli Marnmarnepu ‘Owning Our Future’ Aboriginal Self-Determination Reform Strategy 2020–2025.

We will be continually guided by Traditional Owner and First Peoples’ communities – now and in the future – who have expressed a strong interest in investing in renewable energy to deliver their interests and their desire to own and manage renewable energy generation and storage technology and infrastructure to meet their communities’ cultural, spiritual and economic needs.

As part of a once-in-a-generation renewable electricity transition and transformation, there is an obligation for industry and government to create genuine partnerships with Traditional Owners and First Peoples, to ensure that their self-determining rights and interests are upheld. This will be the catalyst for historical change and reform that will see immediate and future flow-on effects. It will have a positive impact on the environment and advance the social and economic outcomes for Traditional Owners and First Peoples and all Victorians.

# Our legislated targets are driving investment

#### Victoria's changing energy market is creating investment opportunities

Victoria’s energy market is in transition, shifting from its historic fuel source of brown coal to a more diversified, renewable mix. The Victorian Government has entered into structured transition agreements with owners of 2 of the largest coal-fired generators, that will see these assets close in 2028 and 2035 respectively.

This creates unprecedented opportunities for investment, as the state will need an estimated **$35 billion** of additional investment to provide 25 GW of new renewable energy and storage capacity by 2035.

Our transition to renewable energy is supported by strong targets set by the Victorian Government, creating significant opportunities for investors.

#### Victoria’s Electricity Future

The Victorian Government has released its vision for Victoria’s future electricity system.

The Victoria Electricity Future is a four pillared plan that will enable the renewables big build, empower households and businesses to lower energy bills, manage the transition away from fossil fuels, create jobs, skills and supply chains.

#### Legislated renewable energy targets

The Victorian Government has legislated renewable energy targets of:

* 40% by 2025
* 65% by 2030
* 95% by 2035
* Net-Zero Emissions by 2045

##### Energy storage capacity targets of at least:

* 2.6 GW by 2030
* 6.3 GW by 2035

##### Offshore Wind Energy Targets:

* At least 2 GW by 2032
* 4 GW by 2035
* 9 GW by 2040

#### Further information

For more information, visit: [energy.vic.gov.au/renewable-energy/victorias-electricity-future](http://energy.vic.gov.au/renewable-energy/victorias-electricity-future)

Victoria is Australia’s largest food and fibre producing state, with significant opportunities to leverage agricultural waste as biomass to produce a variety of sustainable fuels

# Fast-tracking planning approvals

Both the Victorian Government and the Australian Government are committed to getting your project through planning approvals as quickly as possible.

#### Fast-tracked planning approvals

The Victorian Government Development Facilitation Program fast-tracks the planning permit approval process for large renewable energy facilities and utility installations. This provides certainty to investors by removing the risk of delay by third-party appeals.

For more information, visit: [planning.vic.gov.au/planning-approvals/planning-enquiries-and-requests/development-facilitation-program](http://planning.vic.gov.au/planning-approvals/planning-enquiries-and-requests/development-facilitation-program)

Furthermore, the Australian Government is providing $168 million to better prioritise approval decisions for renewable energy projects of national significance, and support faster decisions on environment, cultural heritage and planning approvals.

#### Clearer biodiversity planning guidelines

The Victorian Government is developing interactive spatial tools and guidance materials to improve upfront planning for renewable energy projects and provide clearer requirements for managing biodiversity impacts.

In 2024 two new maps have been developed: Habitat Value and the Marine Biodiversity Values (MBV). The maps combine information on thousands of species habitats to show the relative biodiversity value of habitats in Victoria.

Biodiversity values mapping provides decision-makers with an objective and comprehensive view of the relative biodiversity importance of all parts of Victoria’s land and state waters, to help prioritise areas for protection or avoid areas of high biodiversity value in development footprints. The values mapping does not highlight areas that are “no-go” zones for development. Instead, they can be used to consider the relative value of biodiversity to help design infrastructure that minimises impacts.

#### Further information

For more information, visit: [energy.vic.gov.au/about-energy/news/news-stories/better-managing-biodiversity-impacts-of-energy-projects](http://energy.vic.gov.au/about-energy/news/news-stories/better-managing-biodiversity-impacts-of-energy-projects)

For more information or to download the map datasets visit:

* Habitat Value: [environment.vic.gov.au/biodiversity/habitat\_value](http://environment.vic.gov.au/biodiversity/habitat_value)
* MBV: [marineandcoasts.vic.gov.au/marine-and-coastal-knowledge/MBV](http://marineandcoasts.vic.gov.au/marine-and-coastal-knowledge/MBV)

# Access to Victoria’s world-class renewable energy talent

Our growing, highly-skilled workforce drives project delivery and fosters industry growth. To meet the needs of the sector, the Victorian Government has committed to significant new energy skills and workforce initiatives.

#### World-class education and training

Victoria has a globally renowned education and training system, including:

* 2 global ‘Top 50’ universities. (Source: QS World University Rankings 2024 [topuniversities.com/world-university-rankings?page=2](http://topuniversities.com/world-university-rankings?page=2))
* 4 dual-sector universities (offering both tertiary and vocational education).
* 12 independent technical and further education (TAFE) locations under a single TAFE network.
* a diverse talent pool with strong growth across the broad range of occupations relevant to the renewable energy sector.
* the highest number of engineering managers of any Australian state or territory.

#### Government investment in skills and workforce

The Victorian Government is investing in the skills and workforce requirements needed for Victoria’s transition to a renewable energy future. Major initiatives include:

The Victorian Energy Jobs Plan, which will set out actions to develop the workforce required to deliver our nation-leading target of 95 per cent renewable electricity generation by 2035 and drive investment confidence. The plan is due to be released in early 2025.

Establishing the SEC Centre of Training Excellence to attract and train a skilled renewable energy workforce, working with industry to ensure Victoria has the workers required to support the energy transition.

The Wind Worker Training Centre and Renewable Hydrogen Worker Training Centres are funded initiatives to ensure Victoria has a pipeline of skilled workers to meet workforce needs and deliver the wind and renewable hydrogen projects now and in the future.

# Supporting your project every step of the way

Sustainability Victoria and Invest Victoria provide facilitated support and guidance to investors involved or interested in Victoria’s bioenergy value chain.

Table 1: Supply

| Supply |
| --- |
| Developing a bioenergy facilityGrants and financial support Sustainability Victoria supported 24 projects through the $10 million Waste to Energy Bioenergy Fund. The Department of Energy, Environment and Climate Action (DEECA) has supported bioenergy projects through the Energy Innovation Fund. Permissions You may require permission from the Victorian Environment Protection Authority (EPA) to process organic waste by aerobic or anaerobic biological conversion and/or recover energy from waste. Biowaste and feedstocksWorking with farmers Agriculture Victoria works with the agriculture sector helping farmers to be more sustainable by reducing their emissions – including through converting agricultural residues into energy.  For more information on biomass availability, see page 7. Driving a circular economy *Recycling Victoria: A New Economy* aims to halve the volume of organic waste going to landfill by 2030. This creates opportunities to divert organic waste into appropriate uses, such as the production of biomethane.  For more information on *Recycling Victoria: A New Economy*, see page 9. |

Table 2: Demand

| Demand |
| --- |
| End useTransitioning from Victoria's dependence on fossil gas In 2023 Victoria used significantly higher gas than any other State, Victoria’s Gas Substitution Roadmap sets out a plan for households and businesses to electrify gas appliances and in industrial sectors where gas is necessary, to replace fossil gas with biomethane.  For more information on the *Gas Substitution Roadmap*, see page 15. RegulationRegulating bioenergy facilities Recycling Victoria is a regulator for the waste sector and sits within DEECA. Recycling Victoria is also responsible for administration of the Victorian Waste to Energy Scheme.  For more information on the Victorian Waste to Energy Scheme, see page 10. |

# The Gas Substitution Roadmap is helping our state navigate the path to net zero emissions while ensuring gas reliability

The Roadmap outlines how we will use energy efficiency, electrification, renewable hydrogen and biomethane to cut carbon emissions.

The Roadmap highlights the importance of developing Victoria’s renewable gas sector to meet the needs of ‘harder to electrify’ uses across the economy. Due to the scale of Victoria’s gas demand, there needs to be significant growth in the supply of biomethane and renewable hydrogen to meet Victoria’s emissions reduction targets. It sets a clear path forward to help protect consumers from rising fossil gas prices or interrupted supply, and ensure that the appropriate planning and investment is made for a smooth and coordinated transition.

As the Victorian Government delivers the actions of the Gas Substitution Roadmap Update 2023 and progresses the next stage of the fossil gas sector transition, we will continue to engage with industry and Victorians to ensure milestones are met, including regular updates to the Roadmap with the next release planned for 2024.

For more information visit:  
[energy.vic.gov.au/renewable-energy/victorias-gas-substitution-roadmap](http://energy.vic.gov.au/renewable-energy/victorias-gas-substitution-roadmap)

# Sustainable fuels made from biological sources can replace traditional fossil fuels

Using sustainable biomass, such as waste oils and vegetable oils, to produce renewable fuels will help decarbonise hard-to-abate industries by producing a suitable fossil fuel replacement.

#### Investment Opportunity

The Victorian Government is investing in green methanol projects. Green methanol can help decarbonise our heavy freight, aviation and maritime sectors. Victoria offers a unique opportunity to develop green methanol thanks to its:

* Sustainable biomass sources 4 deepwater ports
* Plentiful renewable energy resources
* Australia’s second busiest airport and one of Australia’s busiest container ports

**Sustainable fuels** are vital for reducing emissions in Victoria’s hard-to-abate sectors as we strive toward net zero by 2045. Among these, biodiesel, renewable diesel, and sustainable aviation fuel (SAF) offer immediate and long-term solutions to cut carbon emissions.

**Biodiesel** is produced from vegetable oils and waste fats. It is typically blended with conventional diesel, offering a cost-effective way to reduce carbon emissions. In Victoria, local production from companies like Just Biodiesel supports regional jobs. Blending biodiesel at 5% with traditional diesel is a typical practice to reduce carbon emissions and promote a circular economy.

**Renewable Diesel (Hydrotreated Vegetable Oil - HVO)** is an advanced biofuel that chemically mimics traditional diesel. It can be used in existing engines without modification, providing a "drop-in" solution to decarbonise heavy transport fleets and reduce emissions from rail, heavy vehicles, and emergency services.

**Sustainable Aviation Fuel (SAF)** is a promising but still emerging fuel option made from sustainable sources like waste oils. While its production and use are in their early stages in Victoria, SAF has the potential to significantly reduce aviation emissions, positioning Victoria to lead in sustainable aviation as the industry scales.

**Green methanol** is produced from renewable hydrogen and sustainable biomass (bio-methanol) or from captured carbon dioxide (e-methanol). It is a promising replacement fuel for shipping (it has similar properties to heavy fuel oil) and to produce Sustainable Aviation Fuels (power-to-liquid production processes).

Together, these fuels will be crucial for decarbonising Victoria’s transport and aviation sectors, supporting local industries, and meeting state climate goals.

# Biomass opportunities in Victoria’s regions

As Australia’s largest food and fibre producing state, there are significant opportunities in Victoria's regions to leverage agricultural waste as biomass. Victoria’s theoretical biogas potential is estimated to be 80.6 PJ per year. (Source: Report Energy Assessment of Victorian biogas potential <https://assets.sustainability.vic.gov.au/susvic/Report-Energy-Assessment-of-Victorian-biogas-potential.pdf>) This represents 37% of the 214 PJ of gas currently consumed annually in Victoria.

#### Investment Opportunity

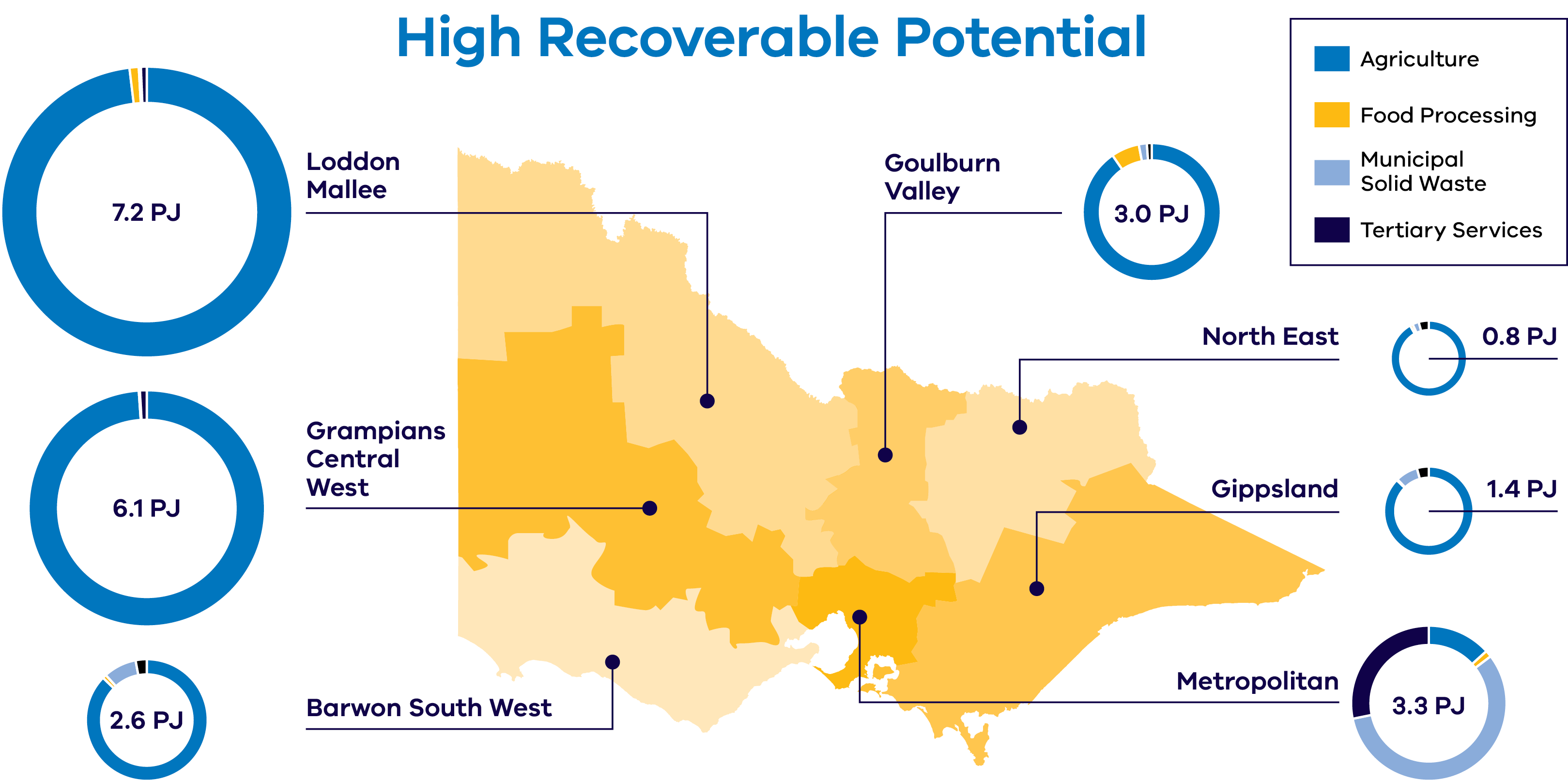
The Future Fuels Cooperative Research Centre has identified Victoria’s Northeast as a promising region for growth in biogas production.

With a strong dairy and beef production base, Shepperton has 0.7 M wet tonnes a year in feedstock available within 10 km of the gas transmission pipeline. An estimated 3.3 PJ/year can be produced in this area. The potential biogas yield in this part of Victoria is increasing annually with new intensive dairy infrastructure operations rolling out continuously.

Figure 1: Biomass opportunities in Victoria’s regions

There are multiple opportunities to source biomass from across the state, including from agriculture, food processing, municipal solid waste and tertiary services. The expected biogas potential from the mix of these opportunities in each region is as follows:

* Loddon Mallee, 7.2 PJ
* Grampians Central West, 6.1 PJ
* Barwon South West, 2.6 PJ
* Goulbourn Valley, 3.0 PJ
* North Easy, 0.8 PJ
* Gippsland, 1.4, PJ
* Metropolitan, 3.3 PJ



# Victorian policy leading the way to a circular economy

The Victorian Government has created a comprehensive strategic policy framework for a thriving circular economy. This includes using recycled organic waste to produce renewable gas from bioenergy.

#### Building a circular economy

With a strong resource recovery framework in place, Victoria is leading the way nationally in implementing waste to energy into its circular economy plan - *Recycling Victoria: A New Economy*.

This plan includes a target to halve the volume of organic waste going to landfill by 2030. In line with this target, bioenergy is considered a priority for investment in waste to energy infrastructure.

A potential source of this feedstock could be organic waste collected from Victorian residents by councils and Alpine Resorts Victoria (ARV). The government is working with councils and ARV to roll out a new standardised 4-stream household waste and recycling system across Victoria. The 4 streams are food organics and garden organics (FOGO), glass, mixed recycling and general rubbish.

For more information visit: [vic.gov.au/building-victorias-circular-economy](http://vic.gov.au/building-victorias-circular-economy)

#### Victorian Recycling Infrastructure Plan

In late 2024, Recycling Victoria is expected to release the Victorian Recycling Infrastructure Plan (VRIP). The VRIP provides Victorian circular economy investors with information and analysis to guide decision-making on waste, recycling and resource recovery infrastructure over the next 30 years.

The VRIP outlines infrastructure needs and gaps, driving innovation and investment where it is needed most.

For more information on the VRIP, please visit: vic.gov.au/recycling-infrastructure-planning

The VRIP is supported by an online waste and resource recovery map shows the current locations of Victoria’s waste, recycling and resource recovery infrastructure facilities.

The map is part of the Recycling Victoria Data Hub, which provides data, intelligence and insights for use by Victoria's waste, recycling and resource recovery sector, businesses, government and the community.

To access the Data Hub and infrastructure map please visit: [vic.gov.au/recycling-victoria-data-hub](http://vic.gov.au/recycling-victoria-data-hub)

# Victoria’s Waste to Energy Scheme

Victoria has introduced a waste to energy scheme to promote energy recovery through thermally processing waste that would otherwise be landfilled. The scheme will change the dynamics of resource recovery and improve the economic viability of waste management in Victoria.

#### How the scheme works

The scheme is a licensing and regulatory system for thermal waste to energy facilities, and is described in the Circular Economy (Waste Reduction and Recycling) Act 2021(Vic).

The scheme operates with three main features:

* a cap that limits the amount of waste that can be processed
* restrictions on the types of waste permitted to be processed
* a fair method for allocating the cap through a competitive two-stage process.

The cap is currently set at 2 million tonnes per financial year. The Victorian Government’s Economic Growth Statement 2024 released on10 December 2024 indicated a further increase the cap limit to 2.5 million tonnes, subject to a regulatory impact statement being completed.

Recycling Victoria may issue and allocate licences up to any amended or increased cap limit.

**Cap licensing applications**

The process of allocating cap licences is designed to support a diverse and competitive waste to energy market in Victoria.

The first cap licensing process commenced on17 December 2024 with two-stages:

* The EOI stage is designed to enable operators interested in accessing the cap to put forward some basic details about their proposal.
* The full application stage assesses applicants against evaluation criteria covering resource recovery benefits, suitability of the technology, capability of the applicant, greenhouse gas impacts and the wider economic benefits for Victoria.

The EOI stage is open with EOI applications due by 17 February 2025.

Full cap applications will open in February and close on 28 April 2025. To be able to submit a full cap licence application, the applicant must first submit an EOI.

Recycling Victoria will issue cap licences by the end of June 2025 to the applicants best positioned to help Victoria to achieve its goals for diverting waste from landfill.

A cap licence is required for anyone proposing to operate a thermal waste to energy process in Victoria. For more information visit: vic.gov.au/waste-energy-scheme

**The business case for investment**

The waste to energy cap licensing scheme is designed to facilitate economic investment in the resource recovery sector and grow the Victorian economy. Having a cap licence under the scheme provides several advantages:

* Provides certainty to investors and to feedstock generators/suppliers about the number and location of facilities within Victoria. This assists investors with growing and developing a market for their products such as waste processing capacity, as well as markets for treated ash by-products.
* Provides reassurance to capital investors and financiers of the investment pathway in Victoria, lowering risk associated with investment.
* Creates a process that provides a clear and transparent entry into the Victorian market and helps to ensure that facilities will operate alongside existing infrastructure and together support an efficient waste infrastructure system.
* Positively contributes to the environmental sustainability objectives of Victoria, such as reduced methane gas emissions associated with landfills.

The waste levy in Victoria also helps to create the business case for investment in the Victorian waste to energy sector. The waste levy is imposed on every tonne of waste that is sent to landfill. From 1 July2025 this levy will increase to $167.90 per tonne. The levy will not apply to waste sent to waste to energy facilities. The increase in landfill levies in Victoria provides an economic incentive for investment in resource recovery and material reprocessing. The levy also helps to underpin the business case for waste to energy investment.

# Bioenergy projects in action

Victoria has over 35 operating bioenergy facilities harnessing a range of fuel sources to generate heat and electricity. As Australia’s largest food and fibre producing state, there are many opportunities to turn waste products into energy.

#### Financial support for organic waste projects

The Victorian Government has provided $10 million of grant funding for projects related to the recovery and reprocessing of organic waste through the Waste to Energy: Bioenergy Infrastructure Fund. This program supported early entrants into the market and facilitated the use of organic waste to produce bioenergy or provide precinct-scale energy.

For more information visit: [sustainability.vic.gov.au/grants-funding-and-investment/funded-grants/waste-to-energy-fund-bioenergy-funded-projects](https://www.sustainability.vic.gov.au/grants-funding-and-investment/funded-grants/waste-to-energy-fund-bioenergy-funded-projects)

#### Case study: Wollert food waste to energy facility

In an Australian first, Yarra Valley Water Corporation has built a facility that processes commercial food waste into renewable energy.

The 1.2 MWh facility, called ReWaste, has been operating since May 2017. Waste producers, such as markets or food manufacturers, deliver up to 33,000 tonnes of commercial food waste to the facility each year.

The facility is co-located with Yarra Valley Water’s Aurora Sewage Treatment Plant. It generates enough energy to power both the facility and the sewage treatment plant, with excess energy exported to the electricity grid.

Building on the success of this award-winning facility, Yarra Valley Water is now planning to build a second food waste to energy facility at the Lilydale Sewage Treatment Plant.

#### Case study: Melton bioenergy facility

Greater Western Water (one of Victoria’s 18 water corporations) has built a waste to energy facility at its Melton Recycled Water Plant. The first facility of its type in the region, the $3.3 million co-digestion project was made possible by securing more than $800,000 through Sustainability Victoria’s original $2.3 million Waste to Energy Infrastructure Fund.

The facility will receive up to 5,000 kilolitres of liquid organic waste each year from local businesses and support the Victorian Government’s goal to halve the amount of organic material going to landfill by 2030.

This waste is then treated through an anaerobic digester where it is converted into biogas. Renewable energy produced from the biogas and existing on-site solar array will provide up to 100% of the plant’s energy needs during the day and is expected to reduce Greater Western Water’s greenhouse gas emissions by 900 tonnes per year.

#### Case study: Katunga Fresh

The Katunga Fresh farm is a 2,000-hectare property that grows wheat and glasshouse tomatoes.

The farm sought to reduce carbon emissions from the common practice of burning wheat straw after harvest, which releases smoke and greenhouse gases including carbon dioxide (CO2) into the atmosphere. At the same time, the farm’s glasshouse uses natural gas for heating and horticultural CO2.

Katunga Fresh received $1 million in funding from Sustainability Victoria’s Waste to Energy Bioenergy Fund to install an automated ECHO2 pyrolysis system to convert large square bales of wheat straw into valuable glasshouse heating, horticultural CO2, and rich carbon biochar for use on the farm. Clean syngas produced by ECHO2 is used to reduce natural gas consumption, while also generating Victorian Energy Efficiency Certificate (VEECS). Each VEEC represents one tonne of CO2-e saved.

ECHO2 biochar sequesters atmospheric carbon, increasing soil and crop health, improving drought resistance, and reducing soil compaction and greenhouse gas emissions.

The Australian-owned and developed ECHO2 is manufactured in Victoria by Rainbow Bee Eater.

#### Case Study: Just Biodiesel

Just Biodiesel is a key contributor to Victoria’s commitment to renewable fuels, specialising in biodiesel production. The company operates a state-of-the-art biodiesel manufacturing facility located in Barnawartha, Victoria. This facility, which was constructed in 2006 at a cost of approximately $70 million, contributes to Victoria’s growing commitment to sustainable fuels. The feedstock for making Biodiesel is a combination of Tallow and Used Cooking Oil (UCO). The Tallow is sourced from regional rendering facilities, and the UCO is collected from restaurants across the country.

Just Biodiesel is a supplier to Viva Energy and Refuelling Solutions, supplying biodiesel that is blended with mineral diesel at a ratio of around 5%. This blend is currently used in various sectors, showcasing the practical application of biodiesel in reducing carbon emissions.

There is significant potential for biodiesel expansion across Victorian fleets. Just Biodiesel’s product could play a crucial role in decarbonising major fleet operations, including emergency vehicles, public transport services like V/Line, and the Department of Transport’s truck fleet. Increased biodiesel use could also stimulate job creation in the renewable energy sector, benefiting the local Victorian economy.

#### Meredith Dairy

In 2016, Meredith Dairy commissioned Dragon NRG to install a 240 kW Moderator woodchip-fuelled boiler system to reduce LPG use for heating the large amount of hot water the dairy uses daily. Fuel for the system is composed of timber construction waste (diverted from landfill) and chipped trees from the owner’s property. An LPG steam boiler was also installed to provide supplementary heating during peak loads.

The boiler is now the main source of heat for the site, running continuously to provide approximately 70% of the site’s heating load and saving the business more than $120,000 annually.

Over recent years, the dairy has added further hot water storage to allow the boiler to run at full capacity 24/7, further reducing the reliance on LPG and improving the business case for the boiler.

Meredith Dairy has since installed a woodchip-fuelled generator, which generates the site’s baseload electricity at all times (68 kWe), with a further 120 kW heat output which reduces LPG consumption.

#### Victorian Bioenergy Network

The Victorian Bioenergy Network (VBN) is a membership organisation and a coalition of experts, advocates, and professionals committed to promoting bioenergy as a sustainable source of renewable energy in Victoria. Working in partnership with state and local governments, industry leaders, and various sectors, VBN aims to enhance biomass utilization for energy production as part of Victoria's transition to a low-carbon circular economy.

VBN's efforts focus on fostering collaboration among stakeholders to share knowledge, spur innovation, and build networks essential for advancing bioenergy development. The network organizes various events such as workshops, conferences, and seminars to facilitate dialogue and showcase the latest advancements in bioenergy.

For more details on VBN's activities and how to get involved, visit [vicbioenergy.com.au](http://vicbioenergy.com.au/).

#### Gaia EnviroTech

Gaia EnviroTech is working closely with Sustainability Victoria (SV) on growing the bioenergy sector within the Victorian food manufacturing and intensive agriculture industries.

Funding provided by SV as part of the Waste to Energy Fund will contribute towards a commercial demonstration of onsite organic waste treatment via anaerobic digestion within the food industry, as well as determining the feasibility of establishing bioenergy hubs within regional Victoria.

In this project, Gaia EnviroTech's proprietary biodigester systems will facilitate the conversion of organic material into a vital energy resource. The technology will support businesses and industries in sustainable organic waste management and contribute to decarbonisation through the displacement of fossil fuels.

# Key Victorian Government entities

We can help facilitate connections with key Victorian Government entities and industry members across our renewable energy sector.

#### Department of Energy, Environment and Climate Action (DEECA)

DEECA works with industry and the community to develop Victoria's secure and sustainable energy future.

For information on Victoria’s energy policy landscape and facilitated connections across the Victorian Government and renewable energy sector, contact the Business and Industry Engagement team at: [BIE@deeca.vic.gov.au](mailto:BIE@deeca.vic.gov.au)

[energy.vic.gov.au](http://energy.vic.gov.au/)  
[energy.vic.gov.au/ forindustry/investment-opportunities](http://energy.vic.gov.au/%20forindustry/investment-opportunities)

#### Breakthrough Victoria

Breakthrough Victoria is an independent investment management company established in 2021 to manage the Victorian Government’s landmark $2 billion Breakthrough Victoria Fund.

Visit the website of Breakthrough Victoria at: [breakthroughvictoria.com](http://breakthroughvictoria.com/)

#### Invest Victoria

Invest Victoria is the Victorian Government’s investment attraction agency. Services include:

* market regulatory information
* statutory approvals coordination
* site location services
* identification of infrastructure and utility requirements
* advocacy within government.

Visit the website of Invest Victoria at: [invest.vic.gov.au](http://invest.vic.gov.au/)

#### Offshore Wind Energy Victoria

Offshore Wind Energy Victoria (OWEV) was established as the single point of entry for industry and community engagement on offshore wind.

Visit the website of Offshore Wind Energy Victoria at:   
[energy.vic.gov.au/renewable-energy/offshore- wind-energy](http://energy.vic.gov.au/renewable-energy/offshore-%20wind-energy)

#### SEC

The SEC is a Victorian Government-owned renewable energy company. It is partnering with the private sector to deliver 4.5 GW of new renewable energy and storage projects with an initial investment of $1 billion.

Visit the SEC website at: [vic.gov.au/state-electricity-commission-Victoria](http://vic.gov.au/state-electricity-commission-Victoria)

#### Solar Victoria

Solar Victoria is responsible for the delivery of the Victorian Government’s $1.3 billion Solar Homes Program – one of the most ambitious and transformative renewable energy programs in Australia.

Visit the Solar Victoria website at: [solar.vic.gov.au](http://solar.vic.gov.au/)

#### Sustainability Victoria

Sustainability Victoria empowers Victorians to live sustainably by taking action on climate change and using our precious resources wisely – to deliver a sustainable future for us all.

Visit the Sustainability Victoria website at: [sustainability.vic.gov.au](http://sustainability.vic.gov.au/)

#### VicGrid

VicGrid coordinates the planning and development of Victorian Renewable Energy Zones (REZs). It also oversees the $540 million REZ fund that will be used to strengthen the grid and develop each REZ.

Visit the VicGrid website at: [energy.vic.gov.au/renewable- energy/renewable-energy-zones](http://energy.vic.gov.au/renewable-%20energy/renewable-energy-zones)

# For international investors

Contact a local Victorian Government Trade and Investment Office to help you:

* navigate investment opportunities in Victoria’s new energy technology sector
* set up a briefing with energy specialists
* arrange inbound market visits
* introduce you to the Victorian Government’s Energy Business and Industry Engagement team and Invest Victoria.

For more information, visit: [global.vic.gov.au/meet-our-global-team/all-office-locations](http://global.vic.gov.au/meet-our-global-team/all-office-locations)

Figure 3: Victorian Government Trade and Investment office locations

* Melbourne, Australia
* Kuala Lumpur
* Jakarta
* Singapore
* Vietnam
* Tokyo
* Seoul
* Bengaluru
* Mumbai
* Shanghai
* Nanjing
* Chengdu
* Beijing
* Hong Kong
* London
* Paris
* Frankfurt
* Dubai
* Tel Aviv
* New York
* Washington DC
* Boston
* San Francisco
* Santiago



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