

## A SNAPSHOT OF

# **ENERGY IN GIPPSLAND**

2020

2030

2035

2045

Renewable Energy

25%

Emission reductions\*

15-20%



Renewable Energy 65%

Emission reductions\*

45-50%

Storage

**2.6GW** 

Renewable Energy

95%

Emission reductions\*

**75-80%** 

Storage

**6.3GW** 

NET **ZERO** 

\*below 2005 levels

Victorian energy and emissions targets

Victoria is undergoing a once-in-a-generation energy transition.

The Victorian Government has set ambitious targets for reducing emissions, increasing renewable energy generation, and improving energy storage.



success of this energy transition and the sustainable practices, and embracing new

Gippsland's existing electricity infrastructure, transmission network, and skilled workforce will be essential to ensuring the success of Victoria's energy transition.

# **MAJOR INVESTMENT**

The Gippsland region will see major investment in renewables in the coming years.

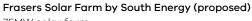




#### Solar

Fulham Solar Farm & DC Coupled Battery by Octopus Investments (proposed)

80MW and 120MW hour battery 90 jobs during construction and 10 ongoing



75MW solar farm 250 direct and indirect jobs during construction and 4 ongoing

Planning / Feasibility

Pre-Feasibility



generate 25GW

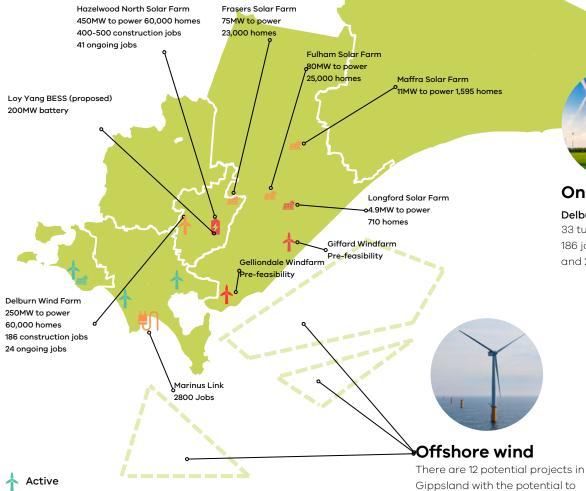
### **Storage**

Latrobe Valley Battery Energy Storage System (BESS) 100MW battery

Wooreen BESS 350MW storage capacity

**Hazelwood Battery** 150MW / 150MWh utility-scale battery

**Loy Yang BESS (proposed)** 200MW battery





## **Onshore wind**

**Delburn Wind Farm** 33 turbines generating 205MW 186 jobs during construction and 24 ongoing

## **OFFSHORE WIND**

Offshore wind will play a key role in the renewable energy transition. Gippsland has some of the best offshore wind resources in the world and has been designated as Australia's first offshore wind zone.



2035

2040

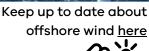
2GW

4GW

9GW

Victoria's legislated offshore wind energy targets

Powering 1.5 Million homes





Offshore Wind Energy Victoria (OWEV) was established as a gateway for industry, stakeholders and the community to support the growth of an offshore wind industry.

The Australian Government has awarded 12 feasibility licences to offshore wind projects off Gippsland's coast.



Ports such as Barry Beach **Marine Terminal and Port** Anthony are well-suited to help with the ongoing maintenance.

## hat's next:

#### Area identification

Government agencies conduct a preliminary assessment

### Area declared if suitable

After considering all submissions, the Minister will make a decision on the final declared area

#### Environmental and other approvals recieved

Community feedback

### Commercial license application

Community feedback



### **Public consultation**

Open for a minimum of 60 days. Proposal advertised so the community knows how to provide feedback.

#### Feasibility licencing

Proponents apply for feasibility licenses, which last 7 years

#### Management plans in place Community feedback

Construction, operation and decommissioning Ongoing consultation

# **ONSHORE WIND**

Gippsland stands out as a favourable location for onshore wind energy, capable of generating up to 2GW of power. That's enough to power 1.5 Million homes.



To achieve Victoria's goals for renewable energy production,

it's projected that by 2035

approximately

900

new wind turbines will be needed across Victoria.

These turbines together are expected to provide over

**5.4GW** 

of new power.

In 2022-2023 wind farms generated approximately

20% of Victoria's electricity.





## What's next:

The Delburn Wind Farm has planning approval and is likely to commence construction in early 2025 with completion scheduled for 2026. Two other onshore wind farms are currently in pre-feasibility stage at Gifford and Gelliondale.



## **SOLAR**

Victoria is moving towards using more renewable energy sources like solar power to produce energy that is both affordable and sustainable. In Gippsland, we're seeing more and more rooftop solar systems being used, as well as bigger solar projects being developed.





Gippsland Water has officially launched a

## 350kW

floating solar system at the Drouin wastewater treatment plant.
At peak capacity, the solar array can fully power the treatment plant, producing enough kilowatts to power nearly

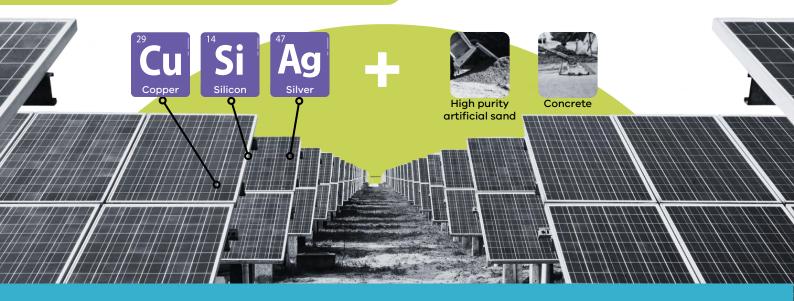
90 homes per day.

The Victorian Government is also investing more than

## \$200,000

to install a floating solar array on a dam at Lardner Park. This provides power to the park, while serving as a demonstration on the benefits of floating solar in agriculture at Farm World events.

The Victorian Government backed Elecsome plant in Kilmany will be one of Australia's first solar panel upcycling plants. It will convert used solar panels into:



## What's next:

In addition to the proposed Fulham Solar Farm and Frasers Solar Farm there are 4 other large scale solar projects at pre-feasibility stage in Gippsland with the combined potential to generate over 750MW and create 500+ jobs.

# **BIOENERGY**

Gippsland has strong agricultural, forestry, and industrial industries, which offer great potential for bioenergy and energy-from-waste initiatives. These sectors apply a range of pathways and technologies to convert raw biomass feedstock into heat, power and fuels.





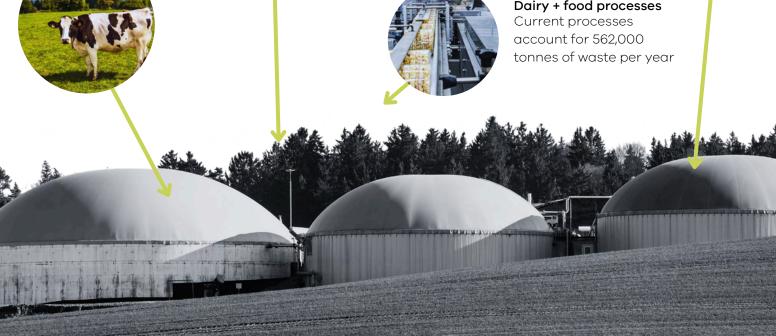


Forestry 1.5m tonnes of forestry residue per year









## What's next:

The Victorian Government's **Energy Innovation Fund will** provide \$10 million of funding for the installation of a 2.2MW bioenergy facility for onsite electricity generation at an existing dairy processing plant in Gippsland.

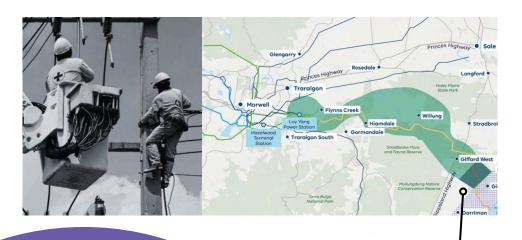
**Opal Australian Paper's** Maryvale Mill is a major Victorian generator of baseload bioenergy through its pulping process.

The Maryvale Energy from Waste project is being developed by a consortium of partners and has been

awarded a licence to develop an Energy from Waste facility co-located to the Mill. The facility will combust nonrecyclable residual waste to produce steam and electricity to supply energy to the Mill for its manufacturing process.

# TRANSMISSION INFRASTRUCTURE

New infrastructure is needed to connect new renewable energy sources to the grid.











# New community benefits introduced feature:

- Community energy funds
- Payments for host landholders
- Payments for impacted neighbours
- New benefits for Traditional Owners

VicGrid has identified a study area for new overhead transmission lines, stretching from a new connection hub for offshore wind generators near Giffard to a grid connection point near the Loy Yang Power Station.

## What's next:

VicGrid will continue to engage with landholders, farmers, residents, and First Peoples to refine the study area and minimise negative impacts on communities.



# WORKFORCE, EDUCATION & TRAINING

The energy transition is an opportunity to create more secure, long-term jobs.

Gippsland is well placed to benefit, particularly from the thousands of jobs that will be required in the new offshore wind industry.



*፟*ኯ፟፟፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟ኯ፟



The Victorian Skills Authority (VSA) projects that 11,700 new workers will be required across Gippsland by 2026, with even greater demand beyond that to support renewable energy projects.

Government, industry, and the education and training sector are working together to maximise the benefits of this opportunity in Gippsland.



## What's happening:

#### **Victorian Government**

The Clean Economy Workforce Development Strategy 2023-2033 provides a foundation for the training pathways.

The <u>Victorian Energy Jobs Plan</u> will support Victoria to develop the workforce required to deliver Victoria's nation-leading target of 95% renewable electricity generation by 2035, and to drive investment confidence to enable the energy transition.

Senior secondary schooling pathway reforms has introduced Clean Energy and Engineering as one of 6 priority Vocational Education and Training pathways delivered to school students.

#### Industry

At Loy Yang B, apprentices are completing the Global Wind Organisation Standard, a globally-recognised accreditation for wind turbine technicians, through Federation University.

#### Education

Federation University is collaborating with industry to develop courses that meet the evolving needs of the energy sector.

TAFE Gippsland offers programs tailored to the clean economy, from introductory courses to advanced diplomas.

# HOMES, BUSINESS & COMMUNITIES

A shift toward electrification and away from gas, is resulting in more comfortable and environmentally friendly homes while helping Victorians save money.





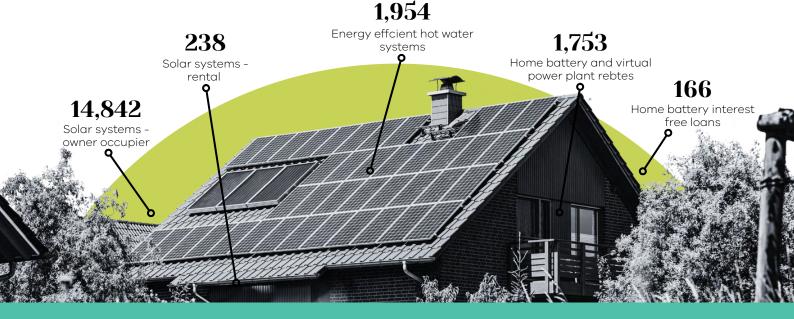
Residents of new homes who opt for all-electric solutions can save around

\$1,000 annually on energy bills.

Which can increase to over \$2,200 per year with solar installation.

Businesses can potentially save between \$1,500 and \$9,000 annually.

To date, Solar Victoria has provided nearly 19,000 rebates and loans to help households and businesses in Gippsland improve their energy efficiency.



# What's happening:

As of 2024, all new residential buildings and subdivisions requiring a planning permit must meet all-electric standards, and will no longer be able to connect to the gas network.

From 1 May 2024, the Victorian Government mandates a minimum 7-star efficiency rating for building shells, such as insulation and window glazing, and requires the use of the 'Whole of Home' tool for selecting efficient appliances. The State Electricity Commission (SEC) is piloting a new digital platform for households that takes the guesswork out of switching to electric. The SEC is also holding online information sessions in 2024 to show people how they can go electric.