

# Star of the South

ICN Victoria 2022 Australian Grand  
Prix Breakfast Event

9 April 2022

We acknowledge the Traditional Owners of the lands on which we meet today, the Wurundjeri people of the Kulin Nation and pay our respects to their elders past, present and future.



# About Star of the South



# Project overview



See how Star of the South could benefit the region



# Building an Australian offshore wind industry



## Wind farm blows hot

Heatwaves generate high hopes

**EXCLUSIVE**  
**TOM MINEAR**  
NATIONAL POLITICAL EDITOR

EVERY heatwave in Melbourne over the past three decades also brought strong winds in the evening at the proposed site of Australia's first offshore wind farm.

The team behind the Star of the South project say this means the wind farm would be perfectly positioned to pump power into Victoria's energy grid when it is stretched to the limit by Melbourne's turning on their air conditioners on sweltering days.

A detailed analysis of weather bureau records found weather patterns which caused heatwaves in Melbourne were accompanied by a high pressure system that brought strong winds in Bass Strait.

Last summer, wind monitors in place to assess the project's viability found that on four of the hottest evenings, the site's capacity factor was nearly 70 per cent — well above the 20-40 per cent capacity of a typical wind farm.

Wind speeds at those times averaged 47km/h, compared to a summer average of 13km/h.

Victorians have had their power switched off in recent years as energy authorities have battled keep the grid operating during heatwaves.

Ageing coal-fired power stations have experienced reliability issues and onshore solar and wind generators have slowed down during peak afternoons.

Star of the South Project chief Casper Frost Thorhauge, who has developed offshore wind farms in Asia and Europe, said the project would complement other renewables "to make a more reliable and diverse system".

"We analysed data over nearly 30 years and found a unique weather pattern on hot days that sees Bass Strait winds build up in the evening, creating strong offshore winds when demand for power is high," he said.

The analysis of weather bureau records looked at conditions at the Star of the South site — and renewable energy zones in Victoria's west and south west — on days above 35C in Melbourne.

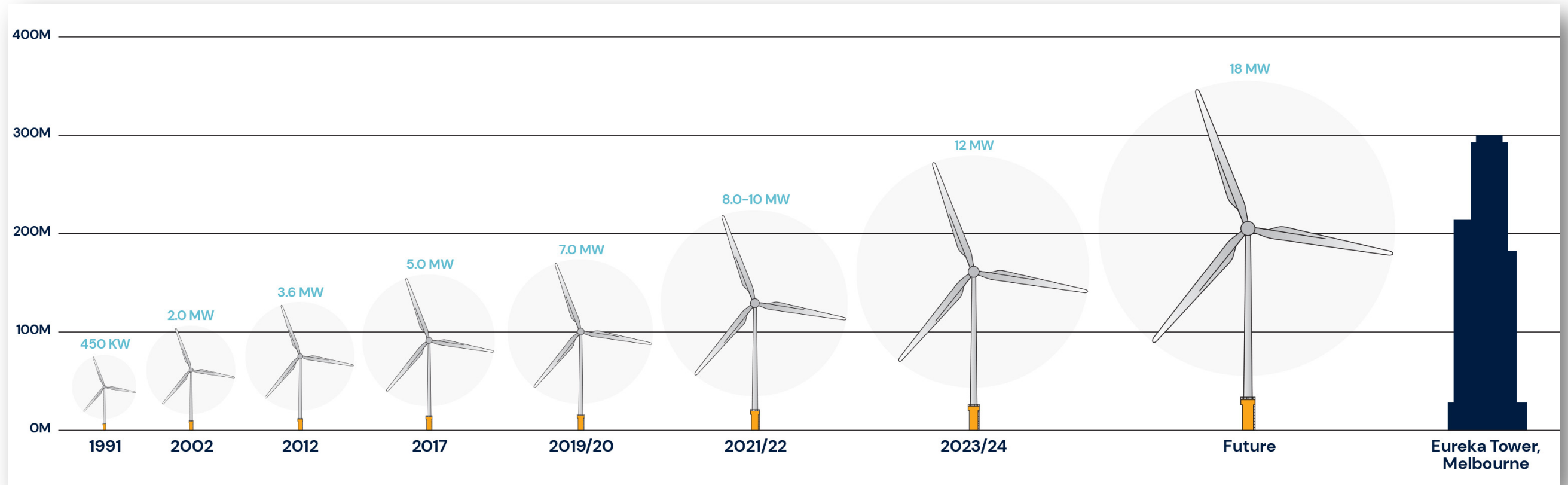
There were good wind conditions in at least one of the three sites during 85 per cent of hot hours.

The federal government is developing a regulatory framework to enable offshore wind projects.

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# Evolving technology



Offshore turbines have become more efficient, cost-effective and sustainable over the past 30 years



# Typical offshore wind farm components



## Wind turbine generators

- Nacelle
- Blades
- Tower



## Foundations

- Monopile
- Transition piece



## Cables

- Offshore array cables
- Optical-fibre data cables



- Offshore export cables
- Onshore transmission cables



## Offshore substations

- Topside
- Substructure



## Onshore substations

- Switchgear
- Transformers

Highly skilled workers are deployed on a wide variety of vessels to transport, install and commission the components



# Jobs and investment

Up to 2,000 Victorian jobs and \$8.7 bn direct investment in Victoria across the project's life



We're committed to supporting Australian industry and will seek to fully harness local development



# A new opportunity for regional Australia

We're working to understand opportunities and build Australia's offshore wind capabilities.

- 1  Gippsland
- 2  Rest of Victoria
- 3  Rest of Australia and New Zealand
- 4  International



Businesses wanting to express interest in the project can register on our ICN Gateway and receive industry updates throughout project planning.  
Search: ICN gateway – Star of the South

We want to see regional communities benefit from an offshore wind industry



# Working with Traditional Owners, landholders and local communities in Gippsland



We've had thousands of conversations to gain input into the project's development



# Timing



We are working towards approvals and a financial decision in the middle of the decade with full power by 2030



# Thank you

Follow us for project updates:

- LinkedIn: @Star of the South
- Facebook: @Star of the South Project
- Website: [starofthesouth.com.au](http://starofthesouth.com.au)

Do you want to support offshore wind? Join our supporter list.

