

State Prosperity PROJECT

Premier's Foreword

Right now, in South Australia, there is a once-in-a-generation economic opportunity, and I am determined to ensure we seize it.

With our unique combination of sun, wind and valuable minerals in the Upper Spencer Gulf and surrounds, we can lead the world with renewable hydrogen energy, green steel and copper production – bringing thousands of new jobs and a surging economy.

This region has the power to herald a new era of economic prosperity for our state.

But it won't just happen, we have to make it happen.

That is exactly what the *State Prosperity Project* is all about.

The State Government's Hydrogen Jobs Plan promises to put our state at the global forefront of this transformational renewable energy source.

But that is just the beginning, the State Government is also exploring Northern Water, a large-scale desalination plant and pipeline network, which would unlock Australia's largest copper deposits, critical minerals and realise the full potential of hydrogen energy in South Australia.

This project goes beyond these investments, it's also about having a plan to train up the highly-skilled workforce we'll need. That's why we are investing in bringing back technical colleges, including one in Port Augusta.

This isn't years down the track, it's happening now.

We have what the world wants, what the world demands.

Victoria had the gold rush in the 19th Century, New South Wales and Queensland had coal in the 20th Century, Western Australia has iron ore.

The 21st Century will be about renewable, hydrogen energy and valuable minerals from South Australia.

This is our moment to drive a new era of prosperity for decades to come.

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Premier of South Australia

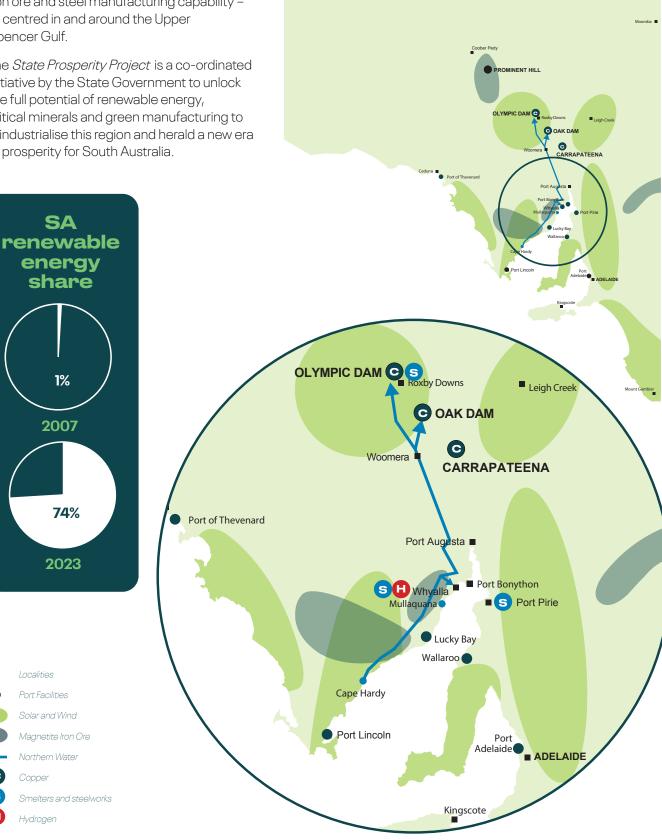


We have what the world wants

South Australia has a unique combination of plentiful solar and wind resources, valuable minerals including copper and magnetite iron ore and steel manufacturing capability all centred in and around the Upper Spencer Gulf.

The State Prosperity Project is a co-ordinated initiative by the State Government to unlock the full potential of renewable energy, critical minerals and green manufacturing to reindustrialise this region and herald a new era of prosperity for South Australia.

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The Copper Opportunity

South Australia is home to more than two-thirds of Australia's copper resource.

Demand for copper is forecast to surge to supply the materials required for the global energy transition.

"The Gawler craton in South Australia hosts the world's most richly endowed iron oxide copper-gold ore province."

Source: Prospectors & Developers Association Canada (PDAC)

Copper is an integral part of the rapidly expanding electric vehicle and renewable energy industries.

With the proximity of the supergiant Olympic Dam deposit, as well as Carrapateena and Prominent Hill and the emerging Oak Dam deposit, and an existing copper smelter, South Australia stands ready to become a Tier 1 global copper province.

This means more valuable exports. More jobs in South Australia. And importantly, more complexity in our economy.



Copper usage per car

Electric venicle	ооку
Standard car	23kg
otalidard car	ZORY
Source: Reuters	

Global demand for Copper 49Mt 31Mt 31Mt 25Mt 31Mt 2023 2025 2030 2035 Source: S&P Global

Northern Water

The Northern Water project is a proposal to build a large-scale desalination plant and pipeline network to provide a new, sustainable water source for industrial use across the Spencer Gulf, Eyre Peninsula and the far-north.

Much like the Playford era Morgan-Whyalla pipeline unlocked the post-war industrial boom, Northern Water could herald a clean industrial boom in South Australia.

The project would unlock Australia's largest copper deposits, critical minerals and full hydrogen potential, while reducing reliance on precious water resources such as the Great Artesian Basin and the River Murray.

A business case found the project would add \$5.2 billion to Gross State Product and support an additional 4,200 full-time jobs.

The State Government has now entered into agreements with BHP, Fortescue and others regarding the further development of this project. This pre-Final Investment Decision (FID) work includes procurement activities, an environmental impact statement and continued engagement with land holders, traditional owners and stakeholders ahead of a final investment decision.



Northern Water Business Case Findings

- > Triple copper production
- Deliver \$9 billion in additional royalties by 2050
- Add \$5.2 billion to GSP by 2050
- Support an extra 4,200 full-time jobs

The Green Iron Opportunity

As the world seeks to decarbonise, demand for green iron is forecast to surge.

Iron and steel manufacturing is the single most carbon-intensive industry in the world – two tonnes of carbon dioxide are emitted for every tonne of steel produced.

In simple terms, green iron involves turning iron ore into iron without the use of fossil fuels.

South Australia already has plentiful magnetite iron ore and a large-scale steelworks at Whyalla.

The Whyalla Steelworks is transforming from a coal-based steelmaker to a low-carbon, green steel producer. The first phase is Steelworks' decision to close its coke ovens, as part of a transition to a new low carbon electric arc furnace and the installation of a Direct Reduction Iron (DRI) Plant.

The key to transitioning to a fullyfledged green steel manufacturer will be hydrogen energy.

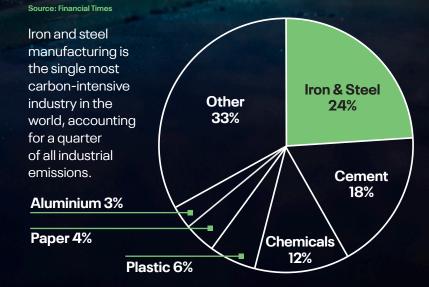
Once the steelworks has a hydrogen energy supply, there is potential to produce up to 1.5 million tonnes of green steel per annum - a 50 per cent increase - fuelling a third of Australia's domestic demand and achieving export at scale, with scope for further growth.





Potential for production of 1.5m tonnes of green steel

Industry CO2 emissions



What do you need to make green iron?

- > Magnetite Iron Ore 🗸
- > A steelworks 🗸
- A clean fuel source that replaces metallurgical coal eg green hydrogen



Hydrogen Jobs Plan

The State Government's Hydrogen Jobs Plan features the world's biggest hydrogen production facility, power plant and storage at Whyalla in the Upper Spencer Gulf.

Hydrogen is a sought-after energy source of the future – and our vast expanses of available land and high-quality wind speeds and solar capacity, combining progressive regulation and targeted investment, means South Australia is primed to become a first-mover, low-cost hydrogen supplier.

A consortium comprising ATCO Australia and BOC, a Linde company, is the preferred hydrogen delivery partner.

This will provide a new source of flexible power, providing additional grid stability for homes and businesses around the state by utilising excess renewable energy generated from large-scale wind and solar farms to provide a consistent output of supply.

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The Government has also entered an agreement with South Australian energyinfrastructure company EPIC Energy to develop an integrated pipeline and hydrogen storage solution.

The project is set to be in operation early 2026.



Port Bonython Hydrogen Export Hub

Port Bonython is well positioned to become South Australia's first largescale export terminal for hydrogen.

Both state and federal governments have committed \$100 million, and industry a further \$40 million, to developing common user infrastructure, such as upgrades to the port, common user last mile pipelines, storage and access roads.

The full scale of projects at Port Bonython represent significant private sector investment in South Australia's emerging hydrogen industry and could generate over a million tonnes of hydrogen by 2030.

Hydrogen Jobs Plan specifications

- 250Mwe of electrolysers
- > 200MW of power generation
- Renewable hydrogen storage facility



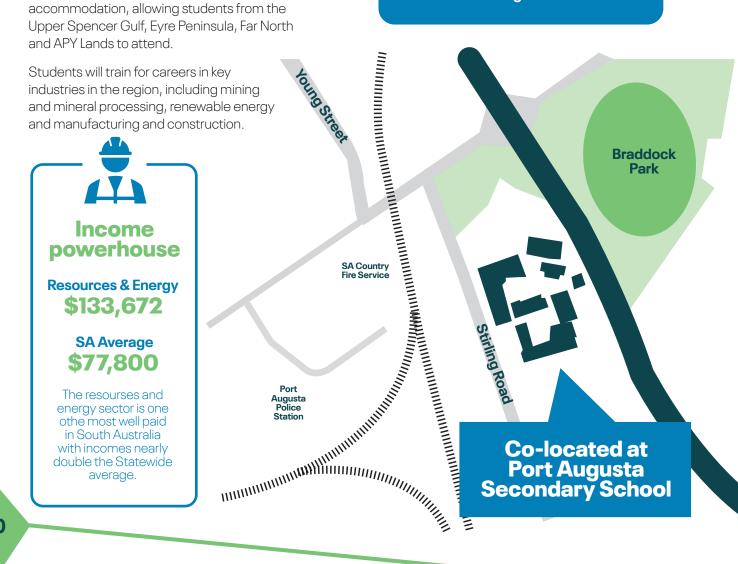
Port Augusta Technical College

Port Augusta Technical College will be co-located with Port Augusta Secondary School and is set to open in 2025.

The Technical College will also have on-site accommodation, allowing students from the Upper Spencer Gulf, Eyre Peninsula, Far North and APY Lands to attend.

Specialising in:

- mining and mineral processing >
- renewable energy >
- manufacturing and construction >



Hydrogen and Renewable Energy Act

The State Government has legislated the *Hydrogen and Renewable Energy Act 2023*, the world's first legislative framework designed to provide a coordinated approach to the burgeoning hydrogen and renewable energy industries.

The Act streamlines the process for companies wanting to invest in large-scale hydrogen and renewable energy projects in South Australia, bringing issues such as land access, environmental impacts and native title rights into a single regulatory process.

The Act also introduces the concept of release areas where developers and investors can compete to access some of the world's best wind and solar resources on government-owned land, ensuring the most appropriate projects are selected that address the social, economic and environmental needs of the region and the state.

The State Government will be auctioning the rights to develop renewable projects on Crown Land for the first time ever in Australia later this year.



56 renewable energy projects

in the development pipeline totalling









Government of South Australia