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Supporting South Australia's increasing trade

South Australia is among the nation's leaders when it comes to mining and renewable energy projects – second only to Victoria when it comes to wind, solar and battery projects* - as a state rich in resources and abundant in wind and sunshine.

South Australia has 24 wind farms, five solar farms, six grid scale batteries and Australia's largest hydrogen electrolyser in operation, with 56 renewable energy projects in the development pipeline totalling \$21 billion in investment.**

With significant projects operational and many in the pipeline, the majority of the massive wind turbines and their components, the thousands of kilometres of copper cabling, battery parts and other infrastructure required have been arriving through Flinders Ports.

It's a logistical jigsaw, with the sheer size of the infrastructure taking up thousands of square metres of space at any one time, as it's unloaded and dispatched to projects across the state.

Wind turbine tower sections and blades, which can be up to 65 metres long; along with an array of renewable energy equipment and plant, which can weigh up to 200 tonnes each, need to be unloaded, stored and moved to projects, some remaining on-site for up to 12 months.

The 11-ship Goyder Wind Farm project's cargo, for example, began importing turbines from China in March 2023, with two ships still to come and cargo to be transported to South Australia's Mid North over the coming six months.

Logistic preparations begin months in advance including anticipated heavy load permits, liaison with transport and utility providers, and applications for police escort permits to ensure that extra-long, wide or high loads can be transported safely from the docks to sites far afield.

The Flinders Ports team provides assistance to these logistical challenges, by working with transport companies, freight forwarders and shipping companies to name a few. Other large pieces of infrastructure passing through Port Adelaide include nacelle blocks and nose cones, solar transformers and panels, batteries for storage, power generators, electricity substation materials and kilometres of cabling.

Flinders Ports has seen locomotives and rail wagons, tunnel borers, cement mixers, dump trucks and other equipment shipped through Port Adelaide, mostly heading to mining and

defence projects across the state. And some have been exported as well, including plant and equipment shipped recently from the Cairn Hill mine to Cameroon.

Along with transactional energy and mining projects' cargo, Flinders Ports must also manage regular two-way shipments of resources. Monthly break bulking shipments of steel frames, coils and plates; sulphur coming in for BHP from Canada; zinc and copper concentrates as well as mineral sands are exported; and petroleum ships arrive each week through Port Adelaide and Port Lincoln.

Mineral sands and concentrates are also stored at Flinders Logistics in purpose-built containers before being shipped out, using dedicated wharf cranes that have the ability to lift and rotate the container 360 degrees, tipping the product into a ship's hold and then the empty container is returned to the mining sites via road or rail direct from the Port.

With mining and agriculture, renewable energy projects have in-part driven an increase in two-way trade through Flinders Ports over the past financial year.

In the year ending 30 June 2023, total cargo tonnage increased by 7.7 per cent from 23.9 million tonnes to 25.7 million tonnes.

Major non containerised exports included mineral sands, concentrates and gypsum, while key imports included petroleum, vehicles, cement clinker, fertiliser and infrastructure.

More than 2,000 ships called - including cargo ships transporting grain and other agricultural products, aquaculture, wine and other food and beverages.

Total container numbers increased by 2.9 per cent, from 328,537 TEU (twenty-foot equivalent units) to 337,959 TEU.

In late January, CommSec ranked the South Australian economy as the best-performing in the nation. While much of that might have been driven by housing, population growth and low unemployment, government investment in construction and infrastructure has also played a role. South Australia's Gross State Product – which measures economic output - has also increased significantly and leads the nation.

More than 90 per cent of South Australia's exports and imports pass through the state's ports. Flinders Ports has been instrumental in contributing to the state's economic growth, particularly through its support of the energy, mining and resources industries.

*The Australian Energy Regulator has an annual "state of the energy market" report – generation capacity comparing states as at 30 June 2023

** According to the Office of Hydrogen Power SA, October, 2023