



Project Update

Week ending 12 June 2020

Sustainable Energy Action Plan out for comment

8 June

The City of Stirling has set its sights on sourcing 100 per cent of its electricity from renewable sources in the next 10 years under an ambitious plan released for comment.

The Sustainable Energy Action Plan also sets the City a target to reduce its carbon emissions by 70 per cent within the same period.

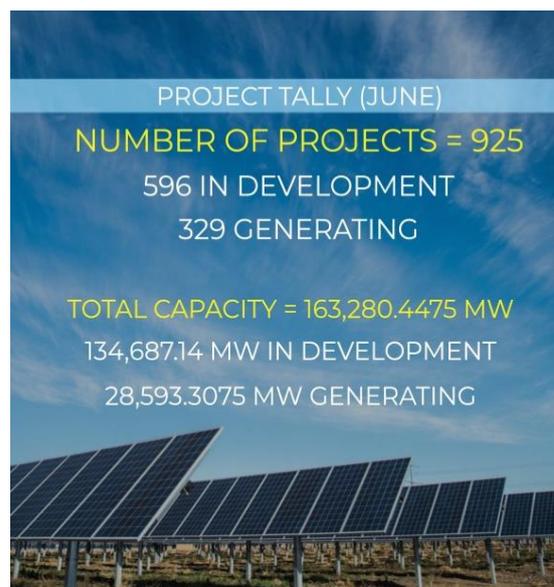
Significant changes to behaviour, maintenance and monitoring will ensure the City is well placed to achieve those targets, demonstrating its leadership role in a renewable energy future and to combat climate change.

Mayor Mark Irwin said the City's key priority was to reduce the consumption of grid-powered electricity on City infrastructure or replace it with renewable sources.

"We know that taking this type of action in City-owned buildings will decrease carbon emissions," Mayor Irwin said.

"Our targets are ambitious but by setting ourselves these important milestones in a time-bound action plan, we're making the City accountable to the community. We also aim to review the plan every three years to determine whether actions need to be reprioritised."

Under the new plan, the City would commit to annual reporting on actions and energy consumption, carbon emissions and renewable energy production.



Some of the actions outlined in the plan include:

- Increasing energy efficiency with monitoring systems to switch off energy sources when not in use
- Increase the amount of energy provided by renewable sources, like Solar Photovoltaic (PV), and purchase renewable power through a power purchase agreement from a third party
- Empower staff to reduce energy consumption and carbon emissions through day-to-day operations
- Improvements to the way we manage data and reporting.

The City's plan is underpinned by the premise that carbon emission reductions are considered 'science-based' if they comply with the Paris Agreements to limit global average temperature increase to below two degrees above the pre-industrial levels.

The plan is open for community feedback until the 19 June 2020 at www.stirling.wa.gov.au/energyplan.

Source: City of Stirling

Glenrowan West Solar Farm

Construction of [Glenrowan West Solar Farm](#) in Victoria is beginning to ramp up! Under SEA's coordination as the lead EPC, in May the site has seen work undertaken in fencing, substation preparation, roads and laydown areas. Mobilisation of mechanical contractors is underway – ready to commence piling operations in June.

Jinko Solar Co., Ltd. Solar Co have begun deliveries of the 395W and 400W photovoltaic modules which will harness the sun's energy to provide a total of 149MW-DC into the National Electricity Market, generating enough emissions free solar power for 41,000 homes whilst annually preventing 110,000 tonnes of CO2 from entering our atmosphere!

WIRSOL Australia is proud to serve as the Project Management Company for Glenrowan West Solar Farm alongside our partners Signal Energy Australia Pty Ltd and Wirtgen Invest.

Source: Wirsol

Lotus Creek Wind Farm

Federal Environment Minister Sussan Ley has refused Epuron's proposed approximately 450 MW [Lotus Creek Wind Farm](#) in Connors Range, ~20km west of St Lawrence in Queensland. The decision cited "clearly unacceptable impacts on a matter protected by Part 3 of the EPBC Act" in relation to "listed threatened species and communities (sections 18 & 18A)", including the koala and greater glider. The project consists of the installation of up to 81 wind turbines, each with a capacity of approximately 5.6 MW, with a point of connection via a proposed transmission line running through the site and substation in the eastern portion of the site.

GFG announces updated plan to transform Whyalla steel into a world leading "GREENSTEEL" facility Whyalla steelworks

10 June

- Plans revealed for a Direct Reduced Iron facility, and a new Electric Arc Furnace in addition to the heavy-section combination Rolling Mill previously announced to serve Australia's rail, mining and infrastructure projects with domestic GREENSTEEL
- Will position Whyalla to become a world-leading, carbon-neutral steel producer, utilising South Australia's abundant magnetite resources and Natural Gas, transitioning in time to green hydrogen produced from renewable energy
- GFG has established an expert global team to review Whyalla Steelworks' current performance and to identify and implement improvement opportunities

GFG Alliance (GFG) has today announced its updated Whyalla GREENSTEEL Transformation Plan in a major milestone for the business, as it seeks to secure the long-term future of its South Australian based steelworks.

This investment blueprint builds on previously-announced plans for a new Rolling Mill to be built by Danieli Group, Italy. Today's announcement reveals further plans for a sophisticated Electric Arc Furnace (EAF) – utilising cutting edge technology for energy optimisation – and a Direct Reduced Iron (DRI) facility to produce low-emission GREENSTEEL from GFG's abundant South Australian magnetite resource and domestic steel scrap.

The new DRI plant will be fed by Natural Gas, in time transitioning to green hydrogen produced from GFG's own renewable energy projects including [Cultana](#) – one of Australia's largest solar farms being built in Whyalla. Combined, these new facilities will produce advanced steel long products for the Australian construction, critical infrastructure

and mining industries for generations to come.

While there is an exciting future ahead, Whyalla's legacy primary steel making facilities remain financially challenged. To this end, leveraging GFG's international operations, an expert team has been assembled with a three-month mandate to identify and implement major cost reductions and efficiency improvements. GFG's recently-announced global CEO for primary steelmaking and integrated mining, Mr Paramjit Kahlon, will take direct responsibility for the review, working closely with GFG's Executive Chairman, Sanjeev Gupta, in leading this critical activity. Stakeholders will be invited to participate and provide valuable insights and recommendations.

The review, which will conclude in September, will build on initiatives already in place, including the first wins at Whyalla's aged Rolling Mill hitting a record production of 40,000 metric tonnes in May. The international members of the review team are already utilising communication technologies, engaging key stakeholders remotely until such time as arrangements can be made for them to travel to Whyalla given the current COVID-19 constraints. GFG has also put in place extra funding arrangements to ease pressure on the challenged business while the review undertakes the turnaround to identify savings and efficiency gains.

Commenting on GFG's GREENSTEEL Transformation plan, Mr Gupta said:

"This exciting plan will not only transform the Whyalla business into an internationally-competitive steel manufacturer, it will be our first primary steel plant to be transformed to GREENSTEEL, helping fulfil our ambition to become the world's largest carbon-neutral steel producer by 2030."

"I believe in domestic manufacturing in Australia using its abundance of natural resources. South Australia, in particular, has one of the largest deposits of magnetite ore, and some of the best conditions for

renewable energy. These are the key ingredients needed for GREENSTEEL which enable this exciting venture. We will more than double the value-added steel products we make with our new plant, capturing the growing infrastructure requirements of Australia, which are currently being covered by imports.

"We have to-date invested over \$60 million in the engineering and design work for this project and are now ready to take the next steps of finalising funding and commencing construction. We plan to start construction later this year for the mill, and next year in 2021 for the EAF and DRI facilities. With this, the Whyalla Transformation Project will finally become a reality."

Commenting on GFG investments in Whyalla and plans to undertake a three-month review, Mr Gupta said:

"Since buying the business out of administration in 2017, we have made significant investments in the Whyalla operations, completed much-needed maintenance – after years of under-investment by previous ownership – and introduced a comprehensive continuous improvement program thanks to the hard work of our employees.

"Despite the substantial improvements that have been achieved, the existing Whyalla facility – especially when faced with the additional impact from COVID-19 – remains financially-challenged.

"I am committed to taking a direct and personal role with the review team. Our global experts have experience in returning similar assets to financial viability in difficult conditions, and I am confident that with the cooperation of all our stakeholders, the existing Whyalla steel making operations will continue to operate during the three-year transition period while the new GREENSTEEL plant is built."

Commenting on GFG's commitment to its workforce, local community and suppliers, Mr Gupta said:

"It is important that we all embrace change as we drive towards financial viability of our current operations, in-turn enabling our long-term vision of a sustainable, world-class, carbon-neutral steelworks at Whyalla, supported by a vibrant and growing community," he said.

"Finalising the funding and the ultimate construction of the Transformation Project, while ensuring the immediate financial viability of the operations, will enable GFG's vision of a revitalised, world-class Whyalla operation to become a reality.

"With the continued hard work and commitment of all our employees and stakeholders, I remain confident that we will be successful in our mutual goal of creating an exciting and vibrant future for generations to come."

Source: GFG Alliance

NEW PROJECT

Pacific Solar Hydrogen

Location: Callide, Queensland

Capacity: 3600 MW

Developer: Austrom Hydrogen

Status: Project announced

Description: Land acquired in proximity to existing power infrastructure ready for the development of a [solar farm](#) and battery facility with a capacity of up to 3,600 MW. Environmental impact studies and irradiance monitoring initiated on site in line with the next step of the development process. This area was selected due to its proximity to Gladstone Port and robust existing grid offering low line losses. Potential to produce over 200,000 tonnes hydrogen per year.

Contact: Tonny Jorgensen

Director

Austrom Hydrogen Pty Ltd

Tel: 1300 923 391

Email: austrom@ah2.com.au

Website: <https://ah2.com.au/>

Collector Wind Farm project completion

10 June

The Civilex team has completed RATCH-Australia's Collector Wind Farm project in NSW delivering high-quality infrastructure in a duration that has brought mutual project benefit. We're proud of achieving the civil completion two months ahead of schedule and excited to see turbines being erected.

Together with RJE Smarter Engineering, Civilex was awarded the Collector Wind Farm balance of plant contract by global sustainable energy solutions provider Vestas in May 2019. The Civilex RJE Global Consortium will deliver the balance of plant work for the Collector Wind Farm, located just outside of Goulburn, NSW.

All teams on this project worked together to effectively plan and execute on a common goal. It was great to see the hard work, planning and collaboration between the entire project team result in a seamless start to the first foundation pour right through to the 54th.

Civilex Project Director Matthew Willis commends the team and said, "Big thanks to our valued subcontractors and suppliers including Divall's, Nathan's, Concrete for Goulburn, ASCT, Bereza, Coates, NARLA, iCubed and T.R.E.E.S who worked closely with the Civilex team ensuring accelerated targets were maintained. Also, thanks to the Vestas, WSP and RATCH-Australia teams both on- and off-site who supported the delivery of the civil phase of works through collaborative and open communication to achieve best project outcomes."

The consortium looks forward to the same positive outcomes on this project for the remainder of the electrical works.

Source: Civilex

PROJECT NEWS

Edenvale Solar Farm

Public comment on DPI Group's proposed [Edenvale Solar Farm](#), located 20km south of Chinchilla in Queensland, under the federal government's EPBC Act. The project will consist of installation of approximately one million solar panels on single axis tracking structures across the 392 hectare project site and building a substation to connect to the Powerlink 'Orana' transmission substation, immediately west of the project. The project is anticipated to take approximately one and a half years to construct and has been approved by Western Downs Regional Council. Battery storage of undisclosed capacity is included in the project. It is expected that the project will support up to 300 construction jobs and between 6 and 10 full time jobs during operation.

Valley of the Winds Wind Farm

UPC\AC Renewables proposed [Valley of the Winds Wind Farm](#), near Coolah in New South Wales, has been opened for public comment under the federal government's EPBC Act. The project includes construction of approximately 175 wind turbines and supporting infrastructure including a high voltage transmission line which would run approximately 65 kilometres to the existing Bayswater to Mt Piper 500 kV transmission line. The wind farm would be located close to the township of Coolah, in the Warrumbungle Local Government Area (LGA). The wind turbines will be broadly located in three areas known as the Mount Hope, Girragulang, and Leadville clusters supplying approximately 800 MW of electricity into the National Electricity Market (NEM). The turbines will be sited on ridgelines within cleared land that is currently being used for livestock grazing. The wind farm development footprint is expected to be approximately 2,100 ha in size. The transmission option footprints range from 715 – 1030 ha impact based on the current centre line.

NEW PROJECT

Windradyne Solar Farm

Location: Eglinton, NSW

Capacity: 200 MW

Developer: Neoen

Status: Early stage planning and community engagement

Description: Planned for a property in Eglinton which is a suburb in northern Bathurst. The Windradyne Solar Farm would create approximately 230 jobs during construction.

Contact: Anne Frederic

Project Manager

Neoen

Email: anne.frederic@neoen.com

PROJECT NEWS

Kiamal Solar Farm

Engineering and assembly of a large scale Synchronous Condenser for the [Kiamal Solar farm](#), located in North West Victoria, Australia.

Commissioned on the 17 February 2020, it is now ready for commercial operation.

Global climate change poses new challenges for power generation and transmission and we are delighted to have supported Total Eren with renewable energy projects and contributing to the security of the evolving National Electricity Market in Australia.

Tony Croagh, Managing Director, VINCI Energies' Omexom Australia noted: "This project is of great significance to VINCI Energies in the region as it solidifies its strategic vision of growth for its renewable energy contracting services. This project highlights the strength of bringing VINCI Energies' and Siemens' international expertise as well as local knowledge together to offer world class solutions to an increasingly international client base in the energy sector in Australia".

Source: Omexom Australia

Carnegie participating in four awarded BECRC projects

11 June

Carnegie is pleased to announce its involvement in four short-term scoping projects recently awarded funding by the Blue Economy Cooperative Research Centre (BECRC). The BECRC is coordinating a \$300m+ programme to advance Australia's blue economy in the areas of seafood production, marine renewable energy and offshore engineering. These projects involve collaboration over the next 6 months between industry and academia and will serve to guide the BECRC's future work programme and funding allocations.

Carnegie is a partner in the following projects:

- o Offshore/High Energy Sustainable Hybrid Power Systems
- o Operational modelling for offshore aquaculture & energy
- o Blue Economy Biofouling Challenges and Possible Solutions
- o Integrating Blue Economy Governance Integrity Research

Over the next 6 months, Carnegie's team will contribute expertise to the projects through a modest amount of staff time which will help guide the direction of future BECRC research.

Carnegie has no obligation to pay BECRC for the projects and will not be paid for its work.

Carnegie expects the research outcomes from these projects to deliver increased knowledge in relation to integration of wave energy in the blue economy.

Further information can be found on the BECRC website.

Source: Carnegie Clean Energy

NEW PROJECT

Ledcourt Solar Farm

Location: Ledcourt, Victoria

Capacity 4.95 MW

Developer: ACenergy

Description: Located at 4785 Western Highway, the [Ledcourt Solar Farm](#) will contain the following specifications:

Fenced Compound Area: 10 ha (approx.)

Proposed Tenure: 30-year Lease

Project AC Size: Sub-5 MW

Total number panels: Approx. 19,000 x 400 W panels (DC)

Connection Type: 22 kV Tee (Powercor to extend into land)

Mounting Kit: PEG Design

Contact: Rodd Zhang

Principal Engineer

Tel: (03) 9813 2307

Email: admin@acenergy.com.au

Solgen awarded further cairns regional council solar contracts

11 June

Construction is underway on four mini solar farms, and additional roof-mounted solar panels, at five of the Cairns Region's Waste Water Treatment Plants (WWTP).

The mini solar farms will generate an estimated 2.92 gigawatt hours of energy each year, which will provide 25 per cent of the total energy requirements of the wastewater treatment plants and feed some power back into the grid.

Cairns Mayor Bob Manning said the development would make a significant contribution to Council's emissions reduction.

"The solar farms will reduce Council's overall emissions by an additional 7 per cent, and increase our solar capacity to 2784 kilowatts," Cr Manning said.

"This is a significant project, especially when you consider that once complete there will be a total of 4200 panels installed across five

sites; the average house has 20-30 panels on its roof.”

Installation is close to completion at the Marlin Coast WWTP, where 756 ground-mounted panels have been installed, and work has started on one of larger solar farms, the Northern WWTP in Aeroglen, where 1484 panels will be installed.

The remaining works at the Southern WWTP (1,484 ground mounted panels), Edmonton WWTP (combination of 392 ground and roof panels) and Gordonvale WWTP (84 roof panels), are expected to be completed in July.

Solgen Energy Group were awarded the \$3 million contract to build the mini solar farms.

David Naismith our Chief Commercial Officer, said “We are working with local businesses to construct the mini solar farms, which will provide over 1.7 megawatts of solar power systems across Council’s wastewater treatment plants.”

“The systems have been designed around existing infrastructure and use bifacial solar panels made entirely of glass for longevity.”

Mr Naismith said this system maximises solar production through converting the sun’s rays and reflections to electricity across both sides of the panel.

“Cairns Regional Council’s solar initiatives are an outstanding example of reducing costs and reducing emissions while utilising redundant space such as rooftops and reclaimed land,” he said.

Source: Solgen

Infratil announces opening of NZ\$50 million Share Purchase Plan

12 June

Letter from the Chair

Dear Fellow Shareholder

On behalf of the Infratil Board of Directors, it is my pleasure to offer Eligible Shareholders the opportunity to subscribe for new ordinary shares in Infratil through this Share Purchase Plan ("SPP"). This opportunity gives all Eligible Shareholders the chance to purchase up to NZ\$50,000 / A\$47,000 of new Infratil shares without incurring brokerage or other transaction costs. Eligible Shareholders are all persons who were recorded in Infratil's share register as being a holder of Infratil shares and having an address in New Zealand or Australia as at 5:00pm Sydney time on 5 June 2020 (in respect of shareholders on the Australian sub-register) or 5.00pm New Zealand time on 8 June 2020 (in respect of all other shareholders).

Purpose of the offer

The SPP is part of Infratil's equity raising initiative announced on 9 June 2020, whereby Infratil announced a NZ\$250 million underwritten placement of shares ("Placement"), and a SPP of approximately NZ\$50 million (with the ability to accept oversubscriptions at Infratil’s discretion). The Placement was completed on 10 June 2020 and successfully raised \$250 million.

The equity raising proceeds will provide additional balance sheet flexibility to fund growth investments across our existing portfolio companies and take advantage of new opportunities that may arise as a result of current market conditions.

Our diversified portfolio of businesses with strong long term fundamentals has proved resilient to the impact of COVID-19. We have a long track record of delivering strong returns to shareholders and maintain a ten year total shareholder return target of 11-15%.

Infratil maintains an attractive pipeline of growth opportunities across its portfolio and we continue to evaluate new opportunities in key growth sectors and new geographies. Infratil will continue to apply a disciplined approach to allocating capital when assessing potential investments.

Source: Infratil

NEW PROJECT

Toolern Vale Solar Farm

Location: 1375-1415 Holden Road, Toolern Vale, Victoria
Capacity: 14.5 MW AC
Developer: Tetris Energy
Status: Seeking development approval
Description: Connecting to Powercor grid.
Contact: Frank Boland
Director
Tetris Energy
Tel: (03) 9448 9400
Email: info@tetriscapital.com

State backs Barcaldine as Queensland’s new renewables powerhouse

12 June

The sunny central-west could soon be supplying more power to Queensland homes and businesses with the Palaszczuk Government investing \$300,000 towards the development of the Barcaldine Renewable Energy Hub.

Studies into the hub’s development will be conducted by the government’s Central Western Queensland Remote Area Planning and Development Board in partnership with leading renewable energy company Sunshot Energy.

Treasurer and Minister for Infrastructure and Planning Cameron Dick said the proposed hub, which would feature a new solar farm, has the potential to turbo-charge economic growth in the region.

“Figures provided by Sunshot indicate the Barcaldine Renewable Energy Hub could create 200 local jobs and attract up to \$500 million of new investment to the central-west,” Mr Dick said.

“It would also help put further downward pressure on power prices while strengthening our state’s push towards a cleaner energy future.

“We’re eager to continue harnessing Queensland’s natural advantages by investing in more large-scale renewable energy projects.

“With the support of local councils, all of which are represented on our Remote Area Planning and Development Board (RAPAD), we’ll now investigate the proposed hub and how it can be best delivered for Queensland.”

Energy Minister Anthony Lynham said Queensland was undergoing a renewable energy revolution with \$6.6 billion invested in or committed to large scale renewable energy projects under the Palaszczuk Government.

“Renewable energy projects have brought thousands of construction jobs to regional Queensland,” Dr Lynham said.

“Our new publicly-owned generator CleanCo will also continue to drive renewables with its remit to bring on another 1000 megawatts of renewable generation over the next five years.”

Other renewable initiatives to be analysed as part of the Barcaldine Renewable Energy Hub include construction of a biosteam turbine generator and a 50-megawatt commercial battery for storage.

Longreach Regional Council Mayor and RAPAD Chair Tony Rayner said the board fully supported the development of inexpensive renewable energy initiatives in the region.

“One of RAPAD’s guiding principles is exploring opportunities where inexpensive local renewable energy can become a key enabler for the region’s economic development,” Cr Rayner said.

“This is being backed at a local level too, with Barcaldine Regional Council committing \$100,000 towards the proposal.”

Barcaldine Regional Council Mayor Sean Dillon said Barcaldine’s competitiveness for renewable energy and status as a central-northern transport hub provided an outstanding foundation on which to deliver the hub.

“This project is more than building wind and solar farms – it’s about using this green power to attract new businesses, investment and jobs into the region,” Cr Dillon said.

Mr Dick said maximising Queensland’s unique resources mix was critical to the state’s post-COVID recovery.

“Queensland is blessed with a blend of natural resources unlike anywhere in the world,” he said.

“The time is right to take advantage of this to drive a new era of investment and growth.”

Source: Queensland Government

PROJECT NEWS

Gregadoo Solar Farm

The federal Department of Agriculture, Water and the Environment declared [Gregadoo Solar Farm](#) in NSW not a controlled action so it won’t require further assessment under the EPBC Act. The proposed 47 MW solar farm involves the installation of around 122,000 solar panels mounted on single axis tracking system, 8 inverter units and an electrical substation. The solar farm would connect into TransGrid’s Gregadoo substation. Construction is expected to take up to 9 months. The project was acquired from original project developer Green Switch Australia by Hanwha.