



<b>Live Project Tally</b>		<b>Projects</b> Generating : 431 In Development : 913 Total : 1344		<b>Capacity (MW)</b> Generating: 35412.5428 In Development: 263068.795 Total : 298481.3378
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## **ALTENERGY PASSWORD RESET REQUIRED SOON**

*The launch of AltEnergy's new enhanced website is underway and will require all subscribers to reset their passwords. We are in the process of launching the new website so there may be periods when it can't be accessed. Once running smoothly, subscribers will receive an email including a temporary password to enable you to log in to the new website and personalise your password. Look out for the email which will include full details and instructions, as well as information about our new Megawatt service.*

## **Terrain Solar and Ratch Australia partner to deliver Marulan Solar Farm**

26 October

Terrain Solar is very pleased to announce the establishment of our partnership with Ratch Australia Corporation (RAC) to develop a portfolio of projects with the first being the **Marulan Solar Farm** located in the Goulburn Mulwaree Council area in regional NSW.

This project will involve a 152 MWac utility scale solar farm with an integrated battery energy storage system (BESS), to help NSW on its crucial and rapid decarbonisation transition journey to meet the State's net-zero emission targets.

Terrain Solar is an Australian owned and operated business that is developing innovative and strategically located solar farms across regional Australia. From initially locating suitable land and partnering with landowners, we take projects through engineering design, planning approval, grid connection, financing & investment stages and into construction and operation. Terrain's portfolio of developed projects includes the now operational Molong, Junee, Corowa, Warwick and Wagga Wagga Solar Farms.

Terrain brings together industry leaders with a strong track record in the development of large-scale renewable energy projects. The

team has collectively developed over 2,000 megawatts of renewable energy projects across Australia, South Africa and the Pacific Region and are specialists in the land use, planning, engineering, energy and finance sectors.

Ratch-Australia is part of the RATCH Group, a publicly-listed Thai-based global Independent Power Producer (IPP), with a vision of being a leading value-oriented energy and infrastructure company in the Asia Pacific region. RAC has developed, constructed and operated energy projects throughout Australia for more than 10 years. It currently owns and operates a portfolio of energy generation assets, including wind & solar, with a capacity of more than 1.2GW.

RAC & Terrain will work together on the development of the Marulan Solar Farm.

Given their experience in successful delivery of renewable energy projects in Australia, and their reputation as a good and considerate corporate citizen, RAC makes an ideal partner for Terrain Solar to deliver this project which will deliver benefits to a broad range of stakeholders, including local, state-wide, national, and global communities.

Source: Ratch-Australia

### **PROJECT NEWS**

## **Bango Wind Farm**

CWP Renewables reported that all 46 wind turbines at its **Bango Wind Farm** near Yass in NSW have now been assembled and testing and commissioning continues. Despite the weather of the last few months, the final lifts have been completed. Two wind turbine generators remain to reach final commissioning and are expected to be completed this month. Hold point testing with the grid authorities, AEMO and Transgrid, continues and CWP expects the final staging tests will be completed towards the end of 2022. Progressive hand-over to the operations team is in progress and this too should be completed towards the end of 2022.

## **KBR and Tractebel to help Engie deliver Australia's first industrial scale green hydrogen project**

*3 November*

KBR's Infrastructure Solutions business is excited to grow its presence in the Australian renewable hydrogen market. KBR, with Tractebel, have recently been appointed as the Owners Engineer for the **YURI Project** – a new renewable hydrogen energy facility in the Pilbara, Western Australia.

The project is being co-developed by utility company ENGIE, a leader in energy transition and Yara Pilbara Fertilisers, one of the world's leading ammonia producers. Together, they aim to deliver a green hydrogen plant that integrates with Yara's existing ammonia plant on the Burrup Peninsula in Western Australia's Pilbara region. The Pilbara is the ideal location for the project, with an abundance of sun and water – key ingredients for renewable energy-powered hydrogen production.

Partially funded by the Australian Renewable Energy Agency (ARENA), the project is one of the world's first industrial-scale renewable hydrogen operations and is pivotal for Australia's future sustainable energy landscape. The project will see the development, construction and operation of the green hydrogen plant, which includes a 10MW electrolyser powered by 18MW of solar PV plus a battery energy storage system, all operating in an islanded mode.

The new facility will support the establishment of a new industry value chain, harvesting the abundant renewable power in Western Australia to produce green hydrogen, and will be key to developing a "Pilbara Green Hydrogen Hub". The generation of renewable fuel for power generation and shipping will serve local usage and export markets, including Japan and broader Asian market.

During the initial phase of the project, the plant will produce up to 640 tonnes of

renewable hydrogen per year, that will provide a zero-carbon feedstock into Yara's existing ammonia production facility. With production from the Yuri Project production scheduled to commence in 2024.

As Owners Engineer, Tractebel-KBR will draw on our collective experience and expertise in energy solutions and project delivery to serve as ENGIE's trusted advisor to support its business objectives and provide strategic outcomes as the project progresses.

This is an exciting project for KBR in Australia and globally. With KBR's long-standing pedigree in ammonia, hydrogen and project delivery, it brings substantive expertise and capability to be able to play a leading role in delivering solutions for energy transition related to the hydrogen value chain.

"We couldn't be more excited to be working collaboratively with ENGIE, Mitsui and Tractebel to oversee the delivery of one of the first industrial scale green hydrogen projects in Australia." says Carey Gent, Senior Director, Water, Energy & Resources. "We look forward to collectively applying our expertise to support ENGIE in delivering this land-mark project."

Source: KBR

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## **Firming infrastructure announced for inclusion in Q2 2023 tender**

*4 November*

We are pleased to announce that a tender for firming infrastructure under the NSW Electricity Infrastructure Roadmap is expected to be included in Tender 2, commencing in the second quarter of 2023.

Tender 2 is now expected to seek the equivalent of 950MW of generation, 380MW firming and up to 600MW of long duration storage. The size of the generation and storage tenders may be altered dependent on the outcome of Tender 1.

It is anticipated that firming infrastructure in the [Sydney-Newcastle-Wollongong sub-region](#) will be eligible to participate, with an indicative size of 380 MW. Details of the eligibility criteria for the firming tender – including duration – will be released soon and made available on our website as part of our Market Briefing Series. The tender has been specifically designed to address an identified need arising from the earlier than previously scheduled retirement of Eraring Power Station, which is reflected in both its timing and the location of infrastructure to be contracted.

This announcement reflects the flexibility of the Roadmap in response to the changing environment around energy supply in New South Wales, and does not affect the inaugural tender for generation and long-duration storage currently underway.

More information on the first firming tender can be found in the Draft Firming Infrastructure Investment Objectives Report on our [website](#).

Source: AEMO Services

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## **Wirsol partners with Flow Power on 30MW PPA with Clermont Solar Farm**

*4 November*

WIRSOL Energy is pleased to announce that we have entered into a 30MW Power Purchase Agreement (PPA) with Flow Power, securing 34 per cent offtake from our project **Clermont Solar Farm** in Queensland. Clermont Solar Farm is located a few kilometres southwest of Clermont in central Queensland, on Wangan and Jagalingou Country.

“We are thrilled to partner with Flow Power for this PPA with our project, Clermont Solar Farm, and to provide Australian businesses access to supply arrangements linked to affordable, environmentally sustainable energy. Working with the team at Flow Power to finalise the PPA has been smooth and

professional. Our team at WIRSOL share Flow Power’s vision of accelerating the clean energy transition and this agreement continues our mission of creating positive impact by protecting and promoting what matters most.” commented WIRSOL Energy Managing Director, Sigi Psutka.

This 8.5-year agreement will enable Flow Power to provide Queensland’s commercial and industrial electricity users access to a low-cost, renewable energy supply, and is expected to generate close to 180,000MWh of renewable energy per annum.

Flow Power, COO, Byron Serjeantson said “Flow Power is delighted to be partnering with WIRSOL for our first PPA in Queensland. This PPA will enable us to continue providing energy users access to leading renewable energy projects while supporting our nation’s renewable energy transition. We would like to commend the WIRSOL Energy team for the quality of the Clermont Solar Farm and their excellence throughout the PPA process.”

To date over 585 construction jobs have been created at Clermont Solar Farm, including several full-time permanent positions. A benefits scheme has also been established for the local community and Traditional Owners, The Wangan and Jagalingou people.

For further information or media enquiries, contact our friendly team via [info@wirsol.com.au](mailto:info@wirsol.com.au) to be directed to the most appropriate WIRSOL representative to support.

Stay tuned for more information on the opportunities we have in our pipeline that we are looking forward to embarking over the coming months, as we continue our mission to stay in our prime position amongst those leading the clean energy transition and steps towards decarbonization of Australia and the rest of the globe.

Source: Wirsol

## ACEN Australia presses GO on Stubbo Solar Project

7 November

Renewables developer ACEN Australia has executed the key contracts and announced that a final investment decision on the 400 MW **Stubbo Solar project** has been made, allowing the project to fully proceed. This follows on from the signing of the connection agreement with Lumea and execution of a PV module supply contract this week, and the commitment of AUD800 million by the parent company ACEN CORPORATION towards the construction of the Stubbo Solar project announced last September.

The 400 MW solar project is located within the Central-West Orana Renewable Energy Zone in the Mid-Western Regional Council region and will connect to the existing 330 kV network between Wollar and Wellington. The project will produce enough clean, renewable energy to power more than 185,000 average Australian homes. The project's development approval also includes provisions for a 200 MWh battery energy storage system, allowing for the project to later on be adapted to dispatch energy when it is most needed during peak hours and provide important grid stability services.

Stubbo Solar was granted development consent in June 2021 by the NSW Government's Department of Planning and Environment. With construction due to commence in late 2022, Stubbo Solar is expected to create up to 400 jobs during construction and up to 10 ongoing jobs, generating many contracting opportunities for local businesses.

As part of commencing construction, notice to proceed for the road works to site was issued last week to council.

A major step in moving to this committed stage came with the finalisation and signing of the connection agreement with Lumea.

Anton Rohner, CEO of ACEN Australia said "It was good to work with Lumea to achieve this major milestone and confirm the connection of Stubbo Solar to the 330kV Transgrid network. The ability to get the connection agreement done illustrates the value of ACEN Australia's strategy of connecting into secure and robust parts of the Transgrid Network."

"ACEN Australia is pleased to kick off the construction of the Stubbo solar farm. This will be ACEN Australia's second 400 MW solar farm following the construction of New England Solar which is currently being commissioned. Again we have been able to close and commit to a project on a merchant basis and, in the case of Stubbo, do this on our balance sheet. This announcement follows the success of securing AUD75 million of debt funding from the CEFC just last week, which increased ACEN Australia's aggregate debt facilities to AUD315 million of long-term, green loan agreements with Japanese lender MUFG, DBS Bank of Singapore, and most recently the CEFC." added Rohner.

Richard Lowe, CEO of Lumea said, "We are pleased to further our relationship with ACEN in connecting the Stubbo Solar project. It's encouraging to see the commitment of ACEN and accelerating delivering these vital renewable projects. This is an important milestone in the transition to a cleaner grid and delivering cheaper energy for consumers into the future."

Patrice Clause, COO of ACEN International said: "This recent string of successes in Australia all contribute to ACEN's goal of 20 GW of renewable energy by 2030. We are fully committed to our net zero ambition and are thankful to all our collaborators like Lumea, our local communities, our EPC contractors, module suppliers, and financing parties for joining us on this very important journey."

ACEN Australia has more than 1.5 GW of projects under construction or at an advanced stage of development, including the New England Solar, New England Battery, Stubbo

Solar and Valley of the Winds projects in the NSW New England and Central-West Orana Renewable Energy Zones, as well as the Robbins Island and Jim's Plain Wind project in North-West Tasmania.

ACEN is the listed energy platform of Philippine diversified group Ayala, with an 18 GW development portfolio throughout the Asia Pacific region. ACEN Australia will use the loan to further develop its portfolio of Australian clean energy assets.

Source: ACEN

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## **Macquarie Asset Management's Green Investment Group launches new global battery storage platform, Eku Energy**

*7 November*

- Macquarie Asset Management's Green Investment Group has today announced the launch of Eku Energy, a global battery storage platform

- Upon completion of the launch in all proposed jurisdictions, Eku Energy will have 190 MWh of flexible storage capacity under construction and a further development pipeline of more than 3 GWh across the United Kingdom, Australia, Japan, and Taiwan  
- Eku Energy will support the energy transition by helping to increase renewable energy capacity in the grid and providing the dispatchable clean power needed to ensure safe, reliable, and sustainable energy supplies

Macquarie Asset Management's Green Investment Group, via the Macquarie Green Investment Group Energy Transition Solutions (MGETS) fund, has today launched global battery storage platform Eku Energy.

The new standalone business will develop, build, and actively manage a portfolio of energy storage assets diversified across markets, revenue, and contracting structures.

Eku Energy's initial portfolio will consolidate the Green Investment Group's existing battery storage activities in the UK, Australia, Japan and Taiwan. Subject to receipt of relevant regulatory approvals, Eku will hold a pipeline of developed, acquired, or identified projects totalling over 3 GWh including a 150 MW / 150 MWh project in Australia at the site of the decommissioned Hazelwood coal-fired power station in Victoria. At launch, Eku will also hold one project under construction in the UK – a 40 MW/40 MWh facility in Essex.

Battery storage is an essential enabler of the energy transition, helping energy systems match green energy generation to demand. By capturing and storing excess clean energy produced when there is an oversupply and then dispersing energy when there is a shortage or additional demand, batteries can 'time shift' the delivery of clean, dispatchable power.

With sub-second response times, they also offer multiple additional services which help manage and balance electricity grids. This enables more renewable energy capacity to connect into the grid, supporting the digitisation, electrification and decarbonisation of economies, while helping secure supply.

An experienced global management team has been appointed so Eku Energy can harness its specialist in-house capability in the battery and flexible energy storage sectors. Based in local markets and benefitting from a data-driven understanding of global financial and energy markets, Eku Energy is well placed to identify advantageous project locations, partner with offtake clients, optimise trading and dispatch allocations, and model complex revenue layering scenarios associated with the delivery of grid services. Following receipt of relevant local regulatory approvals Eku Energy will have fast-growing teams located across London, Melbourne, Sydney, Singapore, Tokyo and Taipei.

"As the world races towards net zero, the challenges around the energy transition are shifting. We've proven we can produce

renewable energy at low cost, now we need to deliver the smart, flexible energy system that will support the electrification of the global economy. Battery storage is critical to maximising the role for renewables in our energy mix by enabling the delivery of dispatchable clean energy. We're excited to be at the leading edge of this journey, delivering the investment and projects at scale that will be key to net zero."

Chris Morrison, Interim CEO of Eku Energy

"The energy transition demands an overhaul of our entire energy system. We've been working to accelerate the deployment of energy storage solutions for many years now and are excited by the opportunity to take this work to the next level with the launch of Eku Energy. There is a significant volume of investment required in these technologies in the years ahead. We are well positioned to support this demand – harnessing our sectoral knowledge and global presence, while leveraging learnings from around the world, to provide our investors with exposure to this defining investment theme."

Mark Dooley, Global Head of the Green Investment Group

Eku Energy has been established at a time when demand for battery storage is rapidly growing due to its role as a critical enabler of the low-carbon economy and clean grids. By 2030, it is forecast that capacity is expected to increase 15 times over from 46 GW in 2021 to 411 GW<sup>iiii</sup>. This demand is being supported by the global drive for Net Zero and declining technology costs associated with renewable energy.

i On launch, Eku Energy will commence operations in the UK and Japan with commencement of operations and transfer of seed assets in other jurisdictions to occur as relevant regulatory approvals are obtained.

ii Company estimates as at August 2022

iii Subject to Foreign Investment Review Board (FIRB) approval

iiii BNEF, Global Energy Storage Markets, October 2022

Source: Green Investment Group

## RPS to support a potential offshore wind development in New Zealand / Aotearoa

8 November

RPS is excited to be working on the first phase of a potential offshore wind farm development off the west coast of New Zealand / Aotearoa. Copenhagen Infrastructure Partners (CIP) and the New Zealand Superannuation Fund are working to bring offshore wind to **South Taranaki** and support New Zealand's renewable energy targets. The venture has identified a potential site for an offshore wind farm in the South Taranaki Bight.

Project Director Tamara Al-Hashimi says RPS will help determine whether the site is suitable for development.

"We'll be developing a marine ecology survey program that will include a review of existing data and knowledge of the region to identify potential gaps and species / habitats that could be at risk of impacts from offshore wind development," she said.

"We'll be looking at the distribution and seasonality of marine mammals, seabirds and shorebirds, fish, invertebrates and benthic habitats and communities across the proposed project area and surrounding region.

"At this early stage, it's important to work closely with local iwi and key stakeholders. We want to collaborate effectively so we can design and develop the marine ecology studies needed to undertake environmental assessments and inform an offshore wind farm's approval.

"RPS will draw on its in-country knowledge as well as its extensive global expertise in offshore wind to design the study program.

"Our local team includes Project Manager Lance Furniss, who says it will be great to work on a project in New Zealand after working in the offshore wind sector overseas.

“I spent a number of years working on offshore wind developments in the United Kingdom, including on Hornsea Project One. I’m looking forward to this opportunity to bring my knowledge and experience back home.

“And while the industry is just beginning here in New Zealand, there are positive signs about the potential of offshore wind, particularly off South Taranaki.”

Source: RPS

## **PROJECT NEWS**

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### **Gunsynd Solar Farm**

Singapore-based Metis Energy has acquired the 94 MW AC **Gunsynd Solar Farm** in Goondiwindi, south-west Queensland.

Metis Energy, which trades on the Singapore Stock Exchange, signed a conditional sale and purchase agreement to acquire a 100% equity interest in the 111 MW DC/ 94 MW AC solar farm, which it has named Project Sunshine, for AUS\$12 million through its wholly-owned subsidiary Athena Energy Holdings Pte Ltd.

The proposed transaction is expected to be completed by end December 2022 and is subject to fulfilment of conditions precedent.

The project, as originally developed by SkyLab Australia, included 20 MW of battery storage, approximately 346,000 panels and 40 inverters to be installed on a development site covering 185ha. Connection to the grid was planned via the Powerlink Bulli Creek 330/132kV Substation.

SkyLab Australia secured development approval for the project in 2019 and has “a 30-year land lease and strong support by local government, industry and the surrounding community”, according to Metis.

Metis Group general manager Alan Yau said “Metis is investing into a significantly de-risked ‘ready-to-construct’ utility-scale solar project. This sizeable project will set the

foundation for Metis growth in Australia. It will provide us the platform and catalyst to expand our renewable energy business in Australia. Leveraging on the attractive electricity market environment and positive trend in Australia, Metis will enhance its valuation by scaling up our portfolio in Australia”.

Athena Energy Holdings already has a presence in Australia developing the **Bendemeer Renewable Energy Hub** in the New England region of New South Wales.

The \$900 million project consists of a co-located 210 MW (AC) solar farm and 380 MW wind farm. Community consultation and studies are well underway leading to submission of an environmental impact statement for the solar farm by the end of the year.

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### **Kidston Pumped Storage Hydro - construction update**

*8 November*

Genex Power Limited (ASX: GNX) (Genex or the Company) provides the following update on the construction activities for the 250MW/2,000MWh Kidston Pumped Storage Hydro Project (K2-Hydro or the Project).

Background – Water Ingress Event

As announced by Genex in its Quarterly Activities Report on 14 October 2022, on 24 September 2022, whilst conducting drilling in the Main Access Tunnel (MAT) face, an unexpected geological feature was encountered which resulted in a substantial inflow of water into the MAT. Importantly, no injuries occurred, the MAT was subsequently fully dewatered and the drill holes were successfully plugged.

In its announcement on 14 October 2022, Genex advised of its expectations (which were based on the information available to Genex at the time of that announcement) that, while there had been some modest delay to



underground works, the Project remained on schedule for energisation in 2H CY2024 and, at the time of that announcement, it was not anticipated that there would be an increase in the project cost, with adequate contingency funds held in the overall project budget.

Since this time, critical path underground excavation activities have resumed on Construction Adit 1, which are necessary to enable the commencement of the underground powerhouse excavation works.

Genex also commenced a program to determine the extent of the feature and plan for the MAT excavation activities to resume, including the mobilisation of a diamond core drill rig underground to conduct investigatory works.

#### Results of Drilling Program & MAT Re-alignment

Genex and the EPC contractor, being a joint venture between McConnell Dowell Constructors (Aust.) Pty Ltd and John Holland Group Pty Ltd (MDJH JV), have since been analysing the initial results of the underground drilling program to determine the way forward for the MAT excavation works to resume.

The drilling results have identified a significant zone of high quality but fractured rock in front of the MAT face which is charged with high pressure water. While it is technically feasible to continue to progress the MAT on its current alignment through this zone, Genex and MDJH JV have assessed that this would have a significant impact on tunnelling productivity and therefore the overall cost of the Project. In conjunction with MDJH JV, Genex has therefore considered its options and has determined that the realignment of the MAT to avoid this zone and continuing excavation within known geology is the most efficient option from a time, risk and cost perspective. The parties are working to expeditiously conclude the final design of the re-aligned MAT, which is expected to allow MAT excavation works to recommence in the coming weeks.

While the overall impact of the realignment of the MAT will cause a modest delay to the underground construction works, Genex still expects that energisation of the Project will occur on schedule in 2H CY 2024. However it is now expected that the additional cost of the MAT realignment will result in Genex further utilising the remaining project contingency and, as a result, based on the information available to Genex at the time of this announcement, the total cost of the Project is estimated to exceed the financial close budget for the Project by \$10 million to \$15 million. Notwithstanding this, Genex currently has adequate cash resources available to it to top-up the project contingency commensurate with this estimated additional cost.

Genex will continue to keep the market informed as the final MAT design is confirmed and the MAT excavation works recommence as expected in coming weeks, in accordance with its continuous disclosure obligations.

Source: Genex Power

#### **PROJECT NEWS**

### **Darlington Wind Farm**

Global Power Generation has submitted a referral for its proposed **Darlington Wind Farm**, approximately 3.2km west of Darlington in Victoria, to the state government planning authority. The up to 400 MW capacity project will include up to 61 wind turbines on a site covering approximately 7600ha comprised of 12 different land holdings. In addition to the turbines, the project will also include an onsite substation and compound, 1 x 132/500kV Power Transformer (420 MVA), and 3 x 33/132kV Power Transformers (140MVA). Connection to the electricity grid will be via the existing Haunted Gully Terminal Station - Tarrone Terminal Station 500kV transmission line.

#### **NEW PROJECT**

### **Panorama BESS**

Location: Evans Plains, 5.8km south-west of the City of Bathurst in NSW

Capacity: 100 MW / 200 MWh

Developer: Canadian Solar

Status: Scoping report submitted to state planning authority

Description: The Panorama BESS involves the construction, operation, and decommissioning of a Battery Energy Storage System with a capacity of 100 MW / 200 MWh and associated ancillary infrastructure. The BESS will connect to an adjacent existing TransGrid 132kV substation via approximately 100m of 33kV underground cable. The key elements of the project include installation and operation of a SolBank BESS including battery enclosures, inverters, and transformers. Construction of the Project is anticipated to take approximately 14 to 15 months.

Contact: Chelsea Milles

Project Development Manager

Canadian Solar

Email: [chelsea.milles@canadiansolar.com](mailto:chelsea.milles@canadiansolar.com)

## **Australian battery project supplied and commissioned by Ingeteam**

*8 November*

- 10 MW/20 MWh project associated with a wind farm.

- Ingeteam supplied the battery containers, the power conversion systems, the control system, the commissioning of the array and the operation and maintenance services.

Ingeteam was selected as a technology partner by Global Power Generation (GPG), the international generation subsidiary of the Naturgy group, to equip an electricity storage project in Australia. The 10 MW, 20 MWh capacity battery system is associated with the 109 MW Berrybank 2 wind farm in Victoria, which GPG will start operating in the coming months. The battery storage facility, located in the Australian Capital Territory (ACT), will

support ACT's distribution network at the Queanbeyan substation, in partnership with the region's transmission grid service provider, TransGrid.

This project represents a milestone for Ingeteam, as it is the first large-scale storage project in Australia for which the company has provided a comprehensive supply. In this regard, José Antonio Unanue, Director of Ingeteam's BESS (Battery Energy Storage Systems) business, stated that "this project has been a real challenge for us, as it involved the comprehensive supply (power stations, battery containers, control system, etc.) for a project developed in the antipodes, in a very complicated context due to the numerous restrictions posed by the pandemic. The project could not have been completed without the essential contribution of our subsidiary in Australia. Which is why we in the BESS business are very pleased and proud to have successfully brought it to fruition".

Ingeteam supplied two power conversion systems (all-in-one electricity substations integrating battery inverters, transformers, medium voltage cells, etc.), four 2.5 MW/5 MWh battery storage containers and the control system to manage the operation of the entire storage plant. Ingeteam conducted the commissioning of the plant and will also be responsible for operation and maintenance via its local subsidiary.

This is the second large-scale storage project in Australia that Ingeteam is involved with and the third in Oceania. Ingeteam had previously supplied power conversion systems for projects on the continent.

Global Power Generation (GPG), a joint venture between Naturgy Energy Group, SA (75%) and Kuwait Investment Authority (25%), manages a total installed capacity of more than 4 GW in 8 countries.

Source: Ingeteam

## **ACCIONA Energía signs PPA to supply renewable energy to Stanwell Corporation**

*9 November*

ACCIONA Energía has signed an agreement for the supply of 150MW of 100% renewable energy to Queensland's publicly owned energy generator Stanwell Corporation. The energy will come from ACCIONA Energía's new project under construction, the **MacIntyre Wind Farm**, which is part of the MacIntyre Wind Precinct (1,026MW). The Precinct is the largest wind farm in the southern hemisphere, and when completed will generate enough electricity to power the equivalent of 700,000 homes.

The 15-year agreement will accelerate Queensland's decarbonisation plans by securing access to affordable, renewable energy for major commercial and industrial businesses. The Power Purchase Agreement (PPA) will come into effect from 2025 to 2040.

The PPA with Stanwell Corporation follows another deal between ACCIONA Energía and state-owned utility CleanCo for 400MW, also from MacIntyre, for ten years. ACCIONA Energía will cover both contracts with the production that corresponds to its 70% stake in the MacIntyre Wind Farm. The remaining 30% is owned by Ark Energy, a subsidiary of Korea Zinc. In addition, CleanCo will own and operate the Karara Wind Farm (108MW) within the MacIntyre Wind Precinct.

With a total investment of around AU\$2 billion (€1.2 billion) the MacIntyre Wind Precinct is a key project to decarbonise Queensland's energy supply. Construction began in May 2022, with the first foundations being poured in September, and is expected to be operational in 2025.

Source: ACCIONA

## **Brookfield Renewable announces participation in proposal for Origin's energy markets business**

*9 November*

Brookfield Renewable (NYSE: BEP, BEPC; TSX: BEP.UN, BEPC) alongside MidOcean Energy ("MidOcean"), an LNG company formed and managed by EIG, (collectively, the "Consortium") announced today that following the submission of a non-binding privatization proposal (the "Proposal"), that we have entered into an exclusivity agreement with Origin Energy Limited ("Origin") to conduct due diligence to submit a binding proposal.

Under the proposed transaction, Brookfield Renewable and its institutional partners would acquire Origin's energy markets business, Australia's largest integrated generation and retail company, and MidOcean would acquire Origin's Integrated Gas division. The Consortium's Proposal is at a price of A\$9.00 per share which values Origin at an enterprise value of A\$18.4 billion.

Brookfield Renewable would pursue this transaction through the Brookfield Global Transition Fund I, which is the largest fund in the world focused on the energy transition, alongside institutional partners.

The proposed privatization is consistent with Brookfield Renewable's strategy of investing in opportunities where we can generate a meaningful contribution to the energy transition, including the responsible decommissioning of existing thermal assets and build out new clean generation for the benefit of all stakeholders. Origin's energy markets business is well positioned to play a leading role in Australia's energy transition. The business has a high-quality energy platform with a strong in-place management team that is focused on the transition. The capabilities of Brookfield Renewable will be critical to ensure a responsible and sustainable transition of the business, with a focus on ensuring long-term grid reliability

and power pricing affordability for consumers.

Subject to completing due diligence and providing a binding proposal which is accepted by Origin, the Consortium will enter into a binding scheme implementation agreement on mutually agreed terms with Origin. The Proposal is subject to shareholder, regulatory and Origin board approvals. Regulatory approvals include the Foreign Investment Review Board (FIRB) and Australian Competition & Consumer Commission (ACCC) merger clearance.

Brookfield Asia Pacific CEO Stewart Upson said: "The global energy transition is a once-in-a-generation investment opportunity. Through this transaction, we can leverage our access to capital and clean energy capabilities to support the transition from carbon-intensive generation sources to additional renewable energy. This would represent a significant contribution towards Australia's net-zero transition objectives, all while generating attractive risk-adjusted returns for our investors."

The Consortium sent its Proposal to Origin on November 10th by means of a letter.

Source: Brookfield Asset Management

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## More than 230 companies answer SuperGrid call

*10 November*

Queensland is ready for a SuperGrid manufacturing and jobs boom after more than 230 companies registered interest in local renewable-energy supply-chain opportunities.

Deputy Premier and Minister for State Development Steven Miles said companies from Queensland, interstate and overseas had quickly recognised the potential of Queensland's energy-system transformation.

"It's only about a month since the Queensland Government announced our Queensland Energy and Jobs Plan and launched our Energy Manufacturing Opportunity Prospectus," Mr Miles said.

"Already, more than 230 companies have responded to the prospectus, answering our call to explore the many opportunities ahead.

"Around half of these, more than 100 companies, are manufacturers wanting to consider the possibilities for building energy equipment and other assets here in Queensland.

"These are the companies who will potentially build our new wind turbines, solar panels, batteries, green hydrogen systems, pumped-hydro facilities and energy transmission networks right here in Queensland.

"Investment in new renewable energy projects over the next 15 years is expected to exceed \$62 billion, so it's an incredible economic opportunity.

"Because so much of this investment will be procured by Queensland Government Owned Corporations, we will have the chance to direct our purchasing power into local manufacturing and local jobs.

Through until 2035, Queensland's energy transformation will need:

1. more than 2,000 wind towers and nacelles
2. more than 7,000 wind tower blades
3. almost 25 million solar PV modules
4. nearly 7,000 batteries.

Energy Minister Mick de Brenni said companies had shown great interest in building the manufacturing capacity in Queensland to deliver the SuperGrid.

"Companies of all sizes, areas of expertise, and global reach have told us they want to be part of the energy transformation," Mr de Brenni said.

“We are bringing back manufacturing to Queensland – from companies in the state looking to expand, to overseas companies looking to move here, there are hundreds of businesses who want to help build the Queensland SuperGrid.

“That includes the supply of raw materials and components needed by manufacturers as well as the goods and services required to assemble, install, operate and maintain energy assets.

The prospectus remains open for [registrations of interest](#).

Source: Queensland Government

*The full announcement is available at <https://statements.qld.gov.au/statements/96540>*

#### **PROJECT NEWS**

### **New England Solar Farm**

ACEN Australia is seeking to modify the development approval for its **New England Solar Farm** project to increase the project’s storage capacity from up to 200 MW AC / 400 MWh by approximately 1200 MW AC to approximately 1400 MW AC / 2800 MWh. ACEN Australia has made the request “Due to a shift in Australia’s energy market needs, the accelerating retirement of large-scale coal fired power generation assets in NSW, the anticipated introduction of a capacity market mechanism, continuous improvements in BESS technology and associated capital cost reductions since the time of submitting the original development application”. The modifications, if approved, would also allow for additional land to be utilised for adding direct current (DC) solar PV capacity, which could also be used to charge the BESS, without changing the solar component of the project’s total generating capacity of 720 MW AC. The project was originally approved by the NSW state planning authority in March 2020.

## **Breaking ground at Broken Hill for AGL’s new battery**

*10 November*

AGL has taken the first step towards the construction of its new \$41 million grid-scale battery-based energy storage system (BESS) at **Broken Hill**.

The 50-megawatt (MW), 50-megawatt hour (MWh) lithium-ion battery will be operational in mid-2023, providing the Broken Hill community with greater energy stability.

In partnership with the Australian Renewable Energy Agency (ARENA), the Broken Hill battery includes inverter technology, capable of providing system strength services in weak parts of the grid, as well as adding to the stability of the wider electricity network.

Speaking at an official sod turning ceremony in Broken Hill, AGL General Manager Energy Hubs, Travis Hughes said construction of the Broken Hill battery is important progress towards AGL achieving its 5GW target of wind, battery, pumped hydro and other low carbon firming projects by 2030.

“The new Broken Hill battery is another exciting step for AGL, with the battery playing a crucial role in supporting renewable energy supply and ensuring communities in western New South Wales have access to reliable energy,” Mr Hughes said.

“AGL has been part of the Broken Hill community since 2015 through the Silverton Wind Farm and Broken Hill Solar Plant and we are proud to continue to deliver renewable power to households and businesses in the area.”

ARENA CEO Darren Miller praised the commencement of construction of the battery and the benefits it will bring to the grid.

“As Australia’s electricity system switches to higher rates of renewables it will be increasingly important to deliver storage solutions that have the capabilities to stabilise the grid,” Mr Miller said.

“AGL’s Broken Hill Battery allows us to test advanced inverter technology in some of the most challenging conditions for the grid, while also improving system security and stability in the region.”

To be constructed by global energy storage technology provider Fluence and its consortium partner Valmec, the battery is the latest-generation technology and represents AGL’s dedication to investing in battery-based energy storage in Australia.

Fluence General Manager of Australia and Vice President Growth APAC Achal Sondhi was in Broken Hill for the sod turning ceremony and said the Broken Hill battery is a pioneering project for Fluence, AGL, ARENA and the whole industry. “We are excited to bring our latest product, proven technology and more than 14 years of global deployment experience to support the energy transition in Australia.”

The project is expected to provide up to 50 jobs for engineers, tradespeople and other contractors during construction.

Source: AGL Energy

#### **PROJECT NEWS**

### **Waddi Wind Farm**

Tilt Renewables is proposing changes to planning approvals for its **Waddi Wind Farm** project in Badgingarra, Western Australia, to take advantage of recent improvements in wind energy technology. The wind farm’s indicative capacity of 108 MW will remain the same, however the number of turbines will be reduced from 57 to 18. In addition, refinements to the 132 kV transmission line alignment have been made around Brand Highway to ensure longer term stability of power supply and further reduce impacts to native vegetation. Tilt is working towards a Financial Investment Decision to proceed with the project in Q3 2023. The preferred turbine for the project is Vestas’ V162-6.0 EnVentus Turbine (6.0 MW rated power).

## **Major investment planned to develop South Auckland-Waikato Offshore Wind industry**

*11 November*

The consortium formed by BlueFloat Energy, Energy Estate and Elemental Group is announcing today its plans for a multibillion-dollar investment in offshore wind projects in South Auckland and West Waikato, Aotearoa. The South Auckland-Waikato offshore wind project is the second investment to be announced by the partnership in New Zealand as part of a nation-wide programme to develop up to 5GW of offshore wind.

The project, currently named Waikato Offshore Wind project, is intended to be developed in phases to generate capacity of up to 1.4 GW of power using both fixed and floating foundation technology and capable of powering around 700,000 homes.

Phase 1 of the project is for a ~250 MW development using fixed bottom technology 22 kilometres off the West Waikato coast. The initial phase would create around 300 jobs in construction, operations and maintenance.

Options for Phase 2 utilise floating foundations and include the potential for an 800-1,150 MW development positioned to the west or north of Phase 1. Conservatively Phase 2 will create an additional 800 jobs with the potential for additional jobs dependent on the size of the project.

The consortium has completed its initial site selection and the project is now in the feasibility stage with construction expected to commence before 2030. The lifecycle of offshore wind farms is around 35-40 years at which point they would be decommissioned or re-furbished – providing decades of enduring employment opportunities and a secure supply of renewable generation to the Waikato and Auckland regions.

“We believe that offshore wind energy can help achieve 600% renewable energy in Aotearoa creating security of supply for the country, meeting increased demands for electrification and decarbonisation.” said Carlos Martin, Chief Executive Officer of BlueFloat Energy who visited New Zealand in July to meet with iwi and hapū groups, government and industry.

“Overbuilding of renewables capacity and increasing energy storage was recently described by Energy Minister Megan Woods as “mission critical” and we are keen to support the Government in achieving their energy ambitions. We welcome the announcement of a regulatory framework for offshore wind by mid-2024 and are pleased this is a key focus for the Government.” added Martin.

The partnership has been engaging with iwi and key stakeholders to determine the feasibility of offshore wind projects in New Zealand. The partnership is committed to honouring Te Tiriti o Waitangi and are engaging in ongoing discussions with iwi and hapū in South Auckland and Waikato about potential partnership models, including co-design.

“We are committed to the development of the offshore wind energy sector in Aotearoa

in a way that is inclusive and future facing and delivers enduring benefits to communities, regions and Aotearoa as a whole. We have a real opportunity to build the sector in a way where the offshore wind industry collaborates and doesn’t just compete. Our partnership wants to build an industry - not just projects,” said Energy Estate Co-Founder Simon Currie.

Offshore wind in the South Auckland-Waikato region will benefit from close proximity to the Huntly power station and the Glenbrook substation in South Auckland, next door to NZ Steel’s operations, offering a direct route to the grid and the potential to provide new supplies of clean energy to consumers and industry in the Waikato and greater Auckland area.

Subject to further successful engagement with iwi and stakeholders and obtaining all necessary government and regulatory approvals the consortium hopes to see the first turbines in the water before the end of the decade.

For more information please visit our website: [www.waikatooffshorewindproject.com](http://www.waikatooffshorewindproject.com)

Source: BlueFloat Energy, Energy Estate and Elemental Group