



## Project Update

*Week ending 26 October 2018*

### **MPower secures \$1.3m next stage of Port Pirie Solar Farm**

*22 October*

- Order book strengthens with next phase of works program booked
- Potential total contract value of more than \$8M
- Pipeline of renewable energy projects building favourably

Tag Pacific Limited (ASX: TAG) (Tag) is pleased to advise that its wholly-owned subsidiary, MPower Projects Pty Limited (MPower), a specialist renewable energy, battery storage and microgrid business, has secured the next stage of a 5MW solar farm being developed by Renew Power Group Pty Limited (RPG) in Port Pirie, South Australia, having signed a Subsequent Early Works Agreement, as first reported on 14 September 2018.

This next stage brings the total value of work for the [Port Pirie Solar Farm](#) to \$1.4 million, including the \$100K Early Works Agreement awarded in September 2018.

MPower and RPG are in the process of finalising a full Engineering, Procurement and Construction contract for the Port Pirie Solar Farm which is estimated to have an ultimate total contract value to MPower of between \$8 million to \$9 million.

The Port Pirie Solar Farm adds to MPower's committed order book which is expected to increase on the back of MPower's business development strategy to target selected renewable energy opportunities.



#### COMMENT

Tag's Chief Executive Officer Nathan Wise commented: "MPower continues to strengthen its order book and moving to the next stage on the Port Pirie Solar Farm is a welcome development.

"This is an innovative project that will showcase the latest renewable technologies, and once constructed, will deliver reliable and dependable power generation to the Port Pirie community for many years.

"MPower is benefiting from strong demand for decentralised renewable power generation projects. In addition, projects such as the recently announced Kogan Creek standby facility and other late-stage prospects are strong indicators of MPower's unique sector capabilities.

"MPower's extensive experience and track record in specialised renewable power projects is notable in the sector. The stability and dependability of power, both in standalone microgrid situations and when connected to the National Electricity Market is of critical importance. We look forward to reporting on more contract wins shortly."

Source: TAG Pacific

## Renewable, green gas, trial gets the go ahead

21 October

Sydney homes and businesses could use “green gas” in as little as five years for their cooking, heating, and hot water, thanks to a new renewable gas trial from leading energy company, Jemena.

The \$15 million trial – the largest of its kind in Australia – will use international technology to convert solar and wind power into hydrogen gas, which will then be stored for use across the Jemena Gas Network in New South Wales; Australia’s biggest gas distribution network.

Hydrogen is carbon-neutral and produces water when used as a fuel source.

Jemena’s Managing Director, Frank Tudor, said Jemena’s Project H2GO will see a 500kW electrolyser constructed in western Sydney which is able to generate enough hydrogen to power approximately 250 homes.

“In the future Australians will need to decide what to do with excess renewable energy on very windy or very sunny days. Jemena’s Project H2GO will demonstrate how existing gas pipeline technology can store excess renewable energy for weeks and months, making it more efficient than batteries which can only store excess renewable energy for minutes or hours,” said Mr Tudor.

“Our trial will also explore how hydrogen can be used to power Australians who are on the move, with a hydrogen refuelling station being developed to support the burgeoning hydrogen-vehicle industry.”

It is estimated Jemena’s New South Wales gas network – which delivers gas to 1.3 million customers – is capable of storing as much energy as 8 million Powerwall batteries without further investment or network augmentation.

Mr Tudor said Jemena’s Project H2GO lays the foundations for a renewable energy grid

which would take advantage of Australia’s abundant renewable resources.

“Australia has established solar and wind powered industries, and this trial will leverage off this as we develop a hydrogen industry. It will be very exciting to explore the benefits for customers and how these could be rolled out more broadly across our NSW gas network, and potentially, across Australia, in the future.”

Jemena’s Project H2GO will be co-funded by the Australian Renewable Energy Agency (ARENA) who has committed \$7.5 million in funding for the project.

Source: Jemena

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## Hydrogen heats up in Queensland

23 October

Energy Networks Australia has welcomed the Queensland Government’s support for the development of hydrogen as an alternative clean-energy fuel source.

In response to the paper, Advancing Queensland’s hydrogen industry, Energy Networks Australia CEO Andrew Dillon said hydrogen could play an important role as Australia moved to decarbonise gas and electricity and it was pleasing to see the Queensland Government’s interest.

“Hydrogen has enormous potential and on a national level we’ve seen states, energy networks, renewable energy bodies and universities invest millions of dollars into research and development and hydrogen pilot projects,” he said.

“These investigations are looking at the production of hydrogen from off-peak renewables like solar and wind for injection into the gas network, giving us the potential for zero-emissions gas.”

Mr Dillon said the economic opportunities from hydrogen across a range of different industries were also exciting.

“Hydrogen’s potential as a new export fuel is a key focus of Dr Finkel’s report *Hydrogen for Australia’s Future* and the Australian Renewable Energy Agency has also recently committed more than \$22 million towards projects that support the export of hydrogen,” he said.

“The report found hydrogen exports from Australian resources could be worth an additional \$4.3 billion to the Australian economy by 2040.

“Hydrogen also can be used as a carbon-free fuel for transport and hydrogen fuel cell vehicles are growing in popularity in Europe, America and Asia. The opportunities are significant and Energy Networks Australia welcomes the growing interest from state governments.”

A broad strategic plan for the development of hydrogen in Australia is being developed by Dr Finkel for consideration by the COAG Energy Council in December.

Source: Energy Networks Australia

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## **A fair deal on energy**

*23 October*

Australian families and businesses will save hundreds of dollars a year off their power bills, thanks to action being taken today by the Morrison Government.

The Australian Energy Regulator (AER) will start work on a “price safety net” today.

This will stop big power companies ripping off loyal customers who don’t have time to shop around for a better deal.

However it will still allow retailers to offer more competitively-priced market offers.

The price safety net is consistent with the recommendations of the Australian Competition and Consumer Commission (ACCC) Retail Electricity Pricing Inquiry.

The Australian Energy Market Commission found that customers on standing offers could be paying up to \$832 per year more than the cheapest market offer in some regions. Small businesses could be paying up to \$3,457 per year in higher electricity costs.

The AER has been tasked with introducing default prices by 30 April 2019 with savings being passed through to families and small businesses by 1 July 2019.

Other measures announced today by the Morrison Government that will bring prices down and increase reliability are:

- Stopping price gouging by the big energy companies. This includes banning sneaky late payment penalties and making energy retailers pass on savings in wholesale prices to customers. It will increase regulator’s power to crack down on dodgy, anti-competitive practices – through fines, penalties, enforceable undertakings, structural separation and divestiture. We have already seen prices come down in Queensland, South Australia and New South Wales on 1 July 2018, and we have directed the Australian Competition and Consumer Commission (ACCC) to monitor electricity prices until 2025 to ensure prices are fairer for consumers.

- Backing investment in new power generators to improve competition. Underwriting new electricity generation will attract investment in the electricity market, increasing supply and reducing wholesale electricity prices. The Government will consult on the Underwriting New Generation Investments program, with submissions open until 9 November 2018. Based on feedback from the consultation, the Government will release initial program guidelines and invite proponents to nominate projects through an expression of interest process open from December 2018 to January 2019.

- Supporting reliable power by requiring energy companies to sign contracts guaranteeing enough energy to meet demand. We will work with state and territory governments through the COAG Energy Council to ensure these contracts are signed.

The package of measures announced today builds on the ACCC's July report, Restoring electricity affordability and Australia's competitive advantage.

The report found that the National Energy Market is not operating in the best interests of consumers and needs reform, in particular around competition and affordability.

Our plan will lower power prices, supporting Australians struggling with the cost of living, and back small businesses so they can take advantage of new opportunities and employ more people.

The Government is also developing legislation to implement a strong regime to monitor electricity prices including:

- empowering the ACCC to recommend a range of enforcement remedies;
- empowering the Treasurer to order the divestiture of assets on advice from the ACCC; and
- supporting the COAG Energy Council agenda through Commonwealth legislation if required.

We will also propose an ambitious agenda for the COAG Energy Council including:

- introducing a market cap on generation ownership;
- increasing transparency in the wholesale contract market;
- introducing higher penalties for breaches of the National Electricity Law and related laws, of up to \$10 million; and increasing the AER's powers to investigate market manipulation and impose appropriate remedies.

Source: Federal Government

## Zenith Energy to install solar capacity at IGO's Nova operation

24 October

Highlights

- Zenith Energy has executed an amendment to the Power Purchase Agreement (PPA) with Independence Group NL to incorporate a solar photovoltaic (Solar PV) facility at the Nova Operation with a forecast 12.5GWh annual yield
- Supply from the facility is expected to commence in the first quarter of FY20
- Zenith's contracted Build Own Operate (BOO) capacity will be maintained at circa 195MW following completion of the facility

Remote power generation specialist Zenith Energy Limited (ASX: ZEN) (Zenith) is pleased to announce that its wholly-owned subsidiary, Zenith Pacific (SIR) Pty Ltd, has executed an amendment to the Power Purchase Agreement (PPA) with Independence Group NL (ASX: IGO) (IGO) to incorporate a Solar PV facility at the Nova Operation, with a forecast 12.5GWh annual yield.

Under the proposed amended terms of the PPA, Zenith will build, own and operate (BOO) a hybrid diesel/Solar PV power station of approximately 26MW in installed capacity to reliably and efficiently service the power needs of the Nova Operation.

The Solar PV facility will complement the existing Nova Diesel Power Station designed, owned, and operated by Zenith. The Solar PV will include new state-of-the-art PV modules, single axis tracking, inverters, communications and control system technology. The installation will take total generating capacity to 26MW at Nova.

The hybrid power station will incorporate high efficiency diesel fuelled generators and solar PV generation, providing the Nova Operation with highly efficient, cost effective and environmentally responsible power generation into the future. The integrated Solar PV facility is expected to have a supply

commencement date from Q1 FY20 with an initial supply period of six years and an option for IGO to extend for a further two years, aligned with the existing PPA.

Completion of the integrated Solar PV facility is expected within Q1 FY20, and will positively impact Zenith's FY20 earnings.

Zenith Energy's Managing Director, Hamish Moffat commented:

"We are delighted to sign this PPA amendment with IGO, which again demonstrates Zenith Energy's ability to provide dynamic, innovative solutions for our clients in a safe, reliable, highly efficient and cost-effective manner. This development represents the first fully integrated commercial hybrid diesel/Solar PV facility in Australia and is a step forward in future renewable energy solutions. We look forward to continuing our work with the team at IGO to deliver effective power supply solutions to their Nova Operation."

IGO's Managing Director, Peter Bradford commented:

"At IGO we believe in the green energy future and are committed to renewable energy sources as we strive to reduce our carbon footprint. The development of this innovative hybrid energy solution will also improve our cost structure with targeted renewable power insertion of up to 50% of demand via the Solar PV facility."

The Nova Operation is located in the Fraser Range, approximately 160km east-northeast of Norseman, 360km southeast of Kalgoorlie and 380km from the port of Esperance in Western Australia.

Source: Zenith Energy

## **NEW PROJECT**

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### **Bluewater Solar Farm**

Location: 7km north of Bluewater and approximately 38km north-west of Townsville in northern Queensland

Capacity: 102 MW

Developer: FRV Services

LGA: Townsville

Description: The proposed action relates to the construction of a solar farm located at 42272 Bruce Highway, Bluewater, Queensland. The proposed project site is a 278ha area within the 985ha lot, which will be cleared of all vegetation to facilitate the installation of the solar farm. The development will involve construction of the following on-site infrastructure:

- PV array – The PV array will cover the majority of the Impact Area. The number of rows of PV panels within the array depends on the specific module model chosen, and the detailed design and configuration of the sub-arrays or "blocks".
- Tracking System
- Inverters - The exact type and number of inverters that will be required for the Project will not be finalised until the detailed design phase, which will determine the electricity generating capacity of the facility.
- Control Building
- Site Substation - The Project may be connected to the existing Powerlink transmission line on the western boundary via an on-site substation.
- Battery Energy Storage System (BESS)

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## Investment confidence fragile in face of further policy change

24 October

The federal government's latest energy policy statement has further raised anxiety among investors about the future appetite for clean energy investment in Australia, the industry's peak body says.

Clean Energy Council Chief Executive Kane Thornton said that yesterday's announcement foreshadows some substantial market interventions - including the prospect of government underwriting new generation - which he said threatens investor confidence.

"New investment in energy generation is critical to increasing competition and supply, and driving down wholesale power prices," Mr Thornton said. "But providing debt or equity for specific new projects and technologies could be disastrous for investment confidence."

He said government support for corporate offtake agreements was worthy of further consideration but warned it must be carefully designed to ensure it doesn't undermine investment.

"Private investors have put a record \$15 billion into large wind and solar in the last 12 months, which will help in bringing down wholesale power prices," he said.

"These investments have been driven by the Renewable Energy Target, which has been achieved ahead of schedule. While new investment no longer requires subsidy, it does need policy certainty and stability to attract the ongoing capital investment necessary to replace coal generation and secure a reliable and affordable power supply."

"While we recognise this is a politically challenging task, ignoring it - while also avoiding mechanisms which deliver emissions reduction - will simply see investment slow and drive power prices higher," he said.

Mr Thornton welcomed confirmation from Minister Taylor that the Small-scale Renewable Energy Scheme (SRES) will remain unchanged.

"Rooftop solar, backed by the SRES, plays an important role in reducing household and business exposure to higher energy prices," he said. "It has delivered many significant benefits, including more than \$10 billion of consumer investment in the last five years, and it plays a vital contribution to safety and consumer protection by mandating product standards and installation practices."

Source: Clean Energy Council

### NEW PROJECT

#### Moyhall Solar Farm

Location: Moyhall, 9km south-west of Naracoorte in South Australia

Capacity: 4.9 MW

Developer: Terregra Renewables

Description: The site is unused agricultural land and contains an easement through which there is a 33kV SAPN line and a 132kV Electranet line. The Moyhall Solar Farm will be connected to the Kincaig/Coonawarra 33kV feeder and will consist of:

- 2 x SMA Inverters
- ATI Duratrack mounting systems
- JA Solar 365w solar panels

An application has been made for a generation licence.

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Director

Terregra Renewables

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## Joint statement: addressing all parts of the energy trilemma is essential

25 October

Ahead of the Council of Australian Governments Energy Council meeting this week, representatives of Australia's small and large businesses; conservation groups; energy network, supply and services sectors; investors; property sector; and social services sector have together agreed that driving down electricity costs is urgent, and that addressing emissions and reliability are not only critical in their own right but are essential parts of achieving cost reduction.

Electricity costs are a key part of the "energy trilemma", together with reliability and emissions reductions. Reducing electricity costs requires investment in electricity supply and unlocking this investment requires credible and stable policy. Investors will only view policy as durable if it effectively addresses all parts of the trilemma, including meeting emissions reduction commitments.

We support Australia's full participation in the Paris Agreement and deployment of effective, efficient and equitable plans in energy and the rest of the economy to deliver on Australia's Paris commitments. Continuing bipartisan commitment to Paris sends a clear long-term signal to investors and contributes to the global solution needed to minimise climate change.

A major global transition towards lower emissions and ultimately net zero emissions is both necessary and inevitable, and in Australia's electricity sector a low emissions transition is already underway.

We believe this transition will benefit Australians overall. But we note that it could also have uneven impacts on some groups such as low income households; displaced workers and their communities; and emissions-intensive trade-exposed industries (EITE) and their employees. These groups will

likely require specific measures as we address the energy trilemma.

Durable agreement on sound policy frameworks and the direction of change can deliver a smoother, fairer and even more prosperous transition. We call on all sides of politics to deliver stable policy and investment certainty by addressing all parts of the energy trilemma—cost, reliability and emissions reduction.

Source: Australian Energy Council

### PROJECT NEWS

#### Hills of Gold Wind Farm

Wind Energy Partners submits a preliminary environmental assessment to the NSW government for its proposed [Hills of Gold Energy Project Wind Farm](#) on the ridgeline between Hanging Rock and Crawney Pass, 60km south-east of Tamworth. The proposed wind farm will have a capacity of up to 410 MW and will supply electricity directly into the national electricity grid through a connection into the TransGrid Liddell to Tamworth transmission line.

It is currently proposed that the wind farm would include development of the following infrastructure:

- Up to 97 wind turbines, mounted on tubular steel towers. It is currently proposed that each turbine will have a maximum tip height of 220m above ground level.
- Construction compound and temporary construction infrastructure, potentially including concrete batching facilities.
- Electrical connections between wind turbines and the substations (likely to be underground, subject to constructability).
- Internal access tracks and upgrades to existing access roads, where required.
- Up to two substations and control room.
- Approximately 23km of high voltage, overhead powerline, connecting the wind farm site to the TransGrid Liddell to Tamworth transmission line.
- Connection infrastructure including a switching station and battery storage.

## **PROJECT NEWS**

### **Kiamal Solar Farm**

VINCI Energies' Electrix Pty Ltd has been awarded the contract by Total Eren to engineer, procure and install a Synchronous Condenser of 129 MVA (>600 MVA peak) to provide short circuit protection for its 256 MWp [Kiamal Solar Farm](#) located near Ouyen in the North West of Victoria. Mobilisation will commence in December with practical completion by Q3 2019.

## **COAG Energy Council 20th Meeting Communiqué**

*26 October*

Energy Ministers met today in Sydney for the twentieth COAG Energy Council meeting.

Ministers discussed the importance of bringing power prices down and reducing emissions while ensuring the reliability of the grid. The new Commonwealth Minister for Energy, and Chair of the COAG Energy Council, the Hon Angus Taylor MP, was welcomed by the council. The council also acknowledged the significant contribution of the previous Commonwealth Energy Minister the Hon Josh Frydenberg MP.

Ministers noted state and territories' support for an integrated national approach to emissions reduction across the economy.

### **Retailer Reliability Obligation**

Ministers agreed that the Energy Security Board will progress development of draft National Electricity Law amendments that would give effect to a Retailer Reliability Obligation, including undertaking any further necessary stakeholder engagement. ESB will return to Council with a final draft Bill for decision in December 2018.

The Retailer Reliability Obligation will ensure enough of the right resources will be available to meet demand in the National Electricity Market (NEM) particularly in regions with limited access to dispatchable generation. If

the right investment does not come forward to address forecast supply shortfalls, this would trigger an obligation on electricity retailers to demonstrate they can meet their share of peak demand.

Ministers noted the need for final design of the Retailer Reliability Obligation to ensure South Australia can manage its reliability concerns through the transition to the new mechanism and noted Western Australia's approach to reliability delivered through its reserve capacity mechanism.

Ministers discussed the ongoing work by market bodies to implement Finkel recommendations on reliability and system security in the NEM. Ministers also asked the ESB to provide advice on a long-term, fit-for-purpose market framework to support reliability that could apply from the mid 2020's as the market transitions. The ESB will report back to Council in December 2018 on a forward work program for endorsement.

### **ACCC's Retail Electricity Pricing Inquiry**

Ministers discussed the importance of bringing power prices down, while increasing competition and the need to act on this issue. The Commonwealth advised Ministers of its determination to have a default market offer in relevant jurisdictions, as recommended by the ACCC in the Retail Electricity Pricing Inquiry, in place by 1 July 2019.

Ministers agreed on the need to develop a reference point/comparison rate against which all offers could be measured, for consideration at the December Council meeting. Western Australia, Victoria, Tasmania and the Northern Territory noted that this would not apply in their jurisdictions. Ministers also agreed that the AEMC undertake work on the impacts of the Commonwealth's proposed default tariff on competition issues and customer impacts including price for both standard and market customers in relevant jurisdictions.

#### Energy market updates

Ms Audrey Zibelman, Chief Executive Officer, AEMO, briefed Ministers on AEMO's preparations for security of supply in the National Electricity Market this summer. Ministers noted that AEMO have a strong plan in place for summer and noted advice from AEMO that additional measures are required to support future reliability including further transmission and interconnection.

As agreed by the COAG Energy Council in August, Ministers noted the need for ongoing focus on the Integrated System Plan and ESB will come back to Energy Council in December 2018 with an implementation plan and clear

recommendations for action including any rule changes required.

Dr Kerry Schott AO and Ms Clare Savage, Chair and Deputy Chair of the Energy Security Board, briefed Ministers on a draft Strategic Energy Plan, which will provide overarching guidance on the operation and evolution of energy markets in Australia. The ESB is developing this Plan on behalf of Council, as recommended in the Finkel Review. Ministers will consider a final draft Plan in December 2018.

Source: COAG Energy Council