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ISSUE 49 • WINTER 2020

RECRUITING OUR NEXT GENERATION

COVID-19 – keeping the lights on

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We welcome your feedback: 1800 623 776 communityfeedback@snowyhydro.com.au

CEOUPDATE A message from Managing Director and CEO Paul Broad

t Snowy we have always taken pride in our critical role ensuring energy security and keeping the lights on for millions of Australian homes and businesses. In the midst of a global pandemic, we are as focused as ever on providing essential energy services and delivering water to downstream users.

Throughout COVID-19 we have remained operating at full capacity, generating and supplying energy to our wholesale and retail customers, and have continued to invest locally with projects like Snowy 2.0, supporting jobs and working with local businesses and suppliers.

Agility and teamwork, two of our core company values, have helped us respond to the challenges of business continuity. We have embraced new work arrangements, with teams working remotely, including more than 1,000 staff across Snowy Hydro and Red Energy. These measures and numerous health and safety initiatives have seen us continue to operate successfully and assist our customers through these unprecedented times.

In May, we received two key planning and environmental approvals from the NSW Government for the Polo Flat Segment Factory and the Snowy 2.0 Main Works. Main Works approval followed a rigorous 12-month assessment of our 10,000-page Environmental Impact Statement. We hope Federal Government environmental approval will follow soon.

Of course, with a stringent range of health and safety precautions and measures in place, the Snowy 2.0 Exploratory Works have continued to progress in leaps and bounds, with about 300 staff working onsite.

A massive amount of preparation has been done on the Main Access Tunnel portal, so when the first tunnel boring machine arrives later this year, it can begin excavating the tunnel that will provide access to the underground power station. The majority of road upgrades are completed, two permanent bridges are being installed and the first workers are staying down at Lobs Hole in temporary accommodation camps. In Cooma, the Snowy 2.0 concrete segment factory is under construction. There will be many job opportunities for local people at the factory so if you're interested in registering your interest, visit futuregenerationjv.com.au

Winter is here and snow is already dusting the mountain peaks. We hope much more of the white stuff falls in coming months and gives our lakes and dams an inflow boost in spring when the snowpack melts.

Despite the cooler conditions, we are mindful that the region is still recovering from the summer's terrible bushfires. Together with COVID-19, it has been an incredibly difficult 2020 so far and we know some of our Red Energy customers have been affected. To find out about our customer assistance measures, please reach out to the Red Energy customer care team on 131 806.

No matter what challenges we face, we're part of the Snowy Mountains community and our commitment to the region is unwavering. We will continue to support the community in a practical way by employing local people, investing in infrastructure projects, including Snowy 2.0, and partnering with local businesses.

Many locals and businesses are already working with us and there are increasing opportunities coming soon. This includes our 2021 apprentices and trainees program which is open now and I encourage you to read more about it in this edition of the newsletter.



COVID-19 \\\ KEEPING THE LIGHTS

s an essential service provider, Snowy Hydro continues to operate during COVID-19 to keep the lights on and provide services to our retail customers. Similar to other businesses, we have had to change the way we conduct our operations to ensure the health, wellbeing and safety of our team and the communities in which we live and work.

Among the measures put in place – many of which began prior to official government advice – all employees able to work remotely have been doing so. This includes our retail teams in Melbourne, where more than 1,000 staff have been working from home. The retail field sales team has been redeployed across five other areas of the business.

Snowy Hydro's key operational staff have split their teams over two locations, to accommodate social distancing restrictions while also allowing for business continuity (you can read more about this on page 11). All essential onsite workers have been following rigorous health and hygiene protocols.

Of course, as one of the largest employers in the Snowy Mountains region, we continue to recruit and onboard staff for both Snowy Hydro and the Snowy 2.0 project. Our human resources team has adapted to a virtual recruitment and onboarding process, which means new hires have been able to start their Snowy careers despite COVID-19 restrictions.

To check out the current opportunities at Snowy Hydro visit snowyhydro.com.au/careers and to register your interest for work on the Snowy 2.0 project visit futuregenerationjv.com.au/ job-opportunities-1

All new starters relocating from interstate must undergo a two-week self-isolation period. During this period, new starters have an opportunity to build up their knowledge of Snowy Hydro through a range of online resources before starting work onsite or in the office.

Once their isolation has been completed, new starters are encouraged to work from home where possible.

include Snapchat filters and Pokemon Go.

As a leader and innovator in renewable energy, Snowy Hydro uses the latest technology, which has helped us transition smoothly as we adapt to the restrictions and different ways of working. Traditionally, many jobs would be handled in-person or over the phone, however, utilising technology is making things easier.



For example, a maintenance technician can video a specific activity within a power station and add mark-ups to the screen while an offsite colleague also contributes input. Even as the camera moves around the immediate area onsite, the mark-ups stay where they were drawn in the real world.

KEEP UPDATED

Have you seen our new-look website?

We've redesigned and updated the website to make it easier for you to access content and information. Jump online to find out more about Snowy Hydro's business across generation, retail and community.

You can also connect with us on LinkedIn and Facebook for regular updates and progress on Snowy 2.0.

snowyhydro.com.au

Augmented Reality (AR) is the ability to make digital items appear as if they exist in the real world. It is not a new technology, with products like Google's Glass and Microsoft's Hololens attracting global attention in recent years. Some examples of apps that use AR technology

> At Snowy Hydro, we are making use of an AR smartphone app that allows someone onsite to collaborate and work with a colleague who is working remotely.

Snowy's AR smartphone app allows a video from the phone camera to be shown to both parties and they can both mark it up by drawing on the phone screen.



In addition to AR, we are also developing use of virtual reality (VR) technology to allow staff to 'visit' virtual models of our assets while working remotely. When put into practice, VR will be used for maintenance and job planning, along with education and training purposes.

SNOWY 2.0

PROJECT UPDATE

ONSITE AT LOBS HOLE

As part of Snowy 2.0 Exploratory Works, a range of earthworks have been underway to prepare the Main Access Tunnel portal, including several explosive blasts to help move large quantities of rock and soil. This is where a tunnel boring machine will be launched later this year to excavate the 2.6km tunnel leading to the Snowy 2.0 underground power station.

WORKER CAMP

The first small, temporary worker camp for 36 people has been established at Lobs Hole, with the main Exploratory Works camp now under construction. A number of accommodation modules have been delivered to site, so they are ready for installation. When complete later this year, it will house approximately 150 workers.

THE ROAD UPGRADES

Improved access to, and around, the worksite that have been underway for 12 months are all-but complete. A 100-strong workforce from Leed Engineering and Construction has partnered with many local subcontractors including Withers Earthmoving (Tumut), Allspec & Partners (Tumut) and Cooma Cranes during the works.

BRIDGES

Two permanent concrete and steel bridges - one over the Yarrangobilly River and the other over Wallace Creek – are close to being completed, with only the finishing touches remaining. The bridges are important for vehicle safety and to ensure the riverbanks and waterways are not impacted by traffic. They will replace the temporary 'bailey' bridges which have been used so far.

ith more than 300 people working onsite at Lobs Hole there is plenty of project activity underway. Another major milestone for Snowy 2.0 has been achieved, with the announcement of NSW Government approval for the Main Works after a rigorous

and comprehensive process which took almost 12 months. Following one last environmental approval from the Federal Government, the project Main Works, which include the major tunnels, chambers, shafts and underground pumping power station, can commence construction

TUNNEL BORING MACHINES

Also under construction are three tunnel boring machines (TBMs) that will excavate the Snowy 2.0 tunnels and line them with concrete precast segments (to be manufactured at the local Polo Flat segment factory). The TBM pictured is coming from Germany and will bore the 11m-wide headrace tunnel at depths of up to 400m.

THE TUNNELS

The headrace tunnel will connect Tantangara Reservoir to the new Snowy 2.0 underground power station, and then the tailrace tunnel will connect Talbingo Reservoir to the power station. Tunnelling for the project will be a massive engineering feat using three TBMs. Across the entire project, more than 40km of tunnels will be constructed and pass through challenging terrain and more than 30 different rock types.

SNOWY 2.0 \\\ UNDER CONSTRUCTION:

CONCRETE SEGMENT FACTORY

SNOWY 2.0 **SEGMENT FACTORY**



 \longrightarrow LOCATION: Polo Flat COST: \$55 million **STATUS: Underway** NSW Government granted planning approval in May

Once operational, the factory will:

- \longrightarrow EMPLOY: 125 people
- → ANNUAL TURNOVER: around \$115 million
- \rightarrow PRODUCE: 130,000+ concrete segments to line the 27km of Snowy 2.0 waterway tunnels

nowy Hydro fought hard to build the segment factory locally rather than import segments from overseas or interstate, because it means local jobs, opportunities and investment.

The Snowy 2.0 principal contractor, Future Generation Joint Venture, will operate the factory and is looking for Snowy Mountains locals to fill a range of skilled and unskilled roles that include truck and forklift drivers, machine operators, plant operators and administration. Visit futuregenerationiv.com.au to register your interest in a job on Snowy 2.0.

We are also working with Monaro High School to pilot school-based trade training.

There's plenty of activity taking place at Polo Flat to prepare for construction of the \$55 million factory.

Site preparation works, including demolition of old buildings, have been carried out and Snowy Hydro has also invested in upgrades to Polo Flat Road.



Demolition of a building at the factory site

A new roundabout at the junction of Monaro Highway and Polo Flat Road has been designed and built by Transport for NSW, supported by funding from Snowy Hydro and a partnership with Snowy Monaro Regional Council. The new roundabout will improve access to the segment factory and allow trucks to safely transport the segments to the Snowy 2.0 construction sites.

Construction of the factory will take about five months so manufacturing of the first tunnel segments will start by about the end of 2020.

SNOWY 2.0 **LOCAL JOB OPPORTUNITIES**

nile 2020 has been an extraordinarily difficult year for the local area. Snowy 2.0 is full steam ahead and continues to provide significant and tangible benefits for the regional economy and employment.

Snowy 2.0 is not only critical for the National Electricity Market and consumers, it is a major Snowy Mountains infrastructure project, creating around 2,000 direct jobs and thousands more jobs indirectly through supply chains and services.

We want local people to have the opportunity to work on Snowy 2.0. There are already about 300 people working onsite and there will be hundreds more people hired before the end of the year for roles such as: carpenter, fitter, welder, electrician, truck drivers, general labourer, trades assistant, rigger, dogman, scaffolder, plant operator, etc.

To help make it easier for local residents to find and apply for jobs, Future Generation (the principal contractor building Snowy 2.0 on behalf of Snowy Hydro) has set up



Snowy 2.0 workers onsite at Lobs Hole

an online register for those who live in the Snowy Monaro and Snowy Valleys council areas.

Sub-contractors looking to hire staff will be provided with details of those local applicants who have expressed interest through the register and Future Generation will also have your details on-file for upcoming roles.

Snowy Hydro and Future Generation are also looking to employ workers displaced from regional industries impacted by last summer's bushfires, such as timber, farming and orchards.

Part of this work involves partnership with NSW government agencies to facilitate worker training and upskilling, if required, for roles available with Snowy 2.0.

FUTURE GENERATION ONLINE JOBS REGISTER



GO TO: Work With Us > Local Jobs **PROVIDE:** Resume and contact details

The first employment drop-in sessions have been held in Tumut, Tumbarumba and Cooma, with workers from impacted industries discovering more about available jobs, the training required and the recruiting process. These sessions - conducted in compliance with COVID-19 restrictions – attracted almost 400 people and were hosted by Future Generation and Snowy Hydro, along with agency representatives.

Further sessions will be available in coming months.

REGIONAL WORKS A RETURN TO WHITE AND BRIGHT

REMOTE CONTROL

umut 3 Power Station and its penstocks are a national icon, representing the mighty Snowy Scheme and pumped-hydro generation. Whether in the media, tourist brochures or personal photo albums, the white penstocks are a common sight.

Over the decades, the penstocks have become discoloured and blackened. The combination of cold pipes, cooled by the water flowing through them, and humid air results in surface moisture on the pipes, which attracts airborne dust and mould spores. This causes the algal growth and a blackening effect.

While the dirty pipes don't impact operations, Snowy Hydro is embarking on a big clean to remove the dirt and algae to restore the Tumut 3 penstocks to their former glory.

The last time the penstocks were cleaned was in the 1990's, when workers used hand-held, high-pressure cleaners, and needed extensive scaffolding and rope access to reach all areas of the penstocks.

With advancements in technology, Snowy has been trialling a number of cleaning devices from all over the world and has decided to use a remote-controlled, magnetic-drive robot as the safest and most efficient way to get the job done.

The machine is built around a high-pressure water cleaner similar to what you might use to clean your deck at home, and uses strong magnetic wheels to hold the machine against the pipe.

The robot, controlled from the ground, will provide a much safer alternative to the previous method of cleaning by hand, by reducing the need for people to work from heights – the top of the penstocks is approximately six metres off the ground – and it removes the operator from the direct, high-pressure water cleaning sprays.

Robot that will be used to clean T3 penstocks

The Tumut 3 Penstock Cleaning project is planned to commence in the coming months and will take about 12 weeks to complete.



One of our remote control rooms that have been set up as part of our response to the COVID-19 pandemic

he COVID-19 pandemic has impacted the Australian energy sector, like all global energy markets, resulting in a drop nationally of 7% in energy consumption

during April.

This significant fall in demand comes from reduced commercial sector consumption, although it has been offset, to an extent, by a lift in household demand. This commercial downturn comes primarily as industry pauses in response to government restrictions for non-essential services, while domestic demand has increased, with more people staying indoors and working from home.

Our Red Energy customer base is largely household customers, rather than industry, so the impact of the commercial energy consumption drop for our business has been a lot lower when compared with other energy retailers. Snowy Hydro's operations, retail and trading teams have, and continue to, navigate the business through these unprecedented events.

Together, the teams carefully balance the availability of our water, gas, wind and solar supplies with market demands and changes and the availability of our assets for generation. It is a combination of knowledge, experience and agility that ensures that our customers are looked after, our market and contract positions are solid and that our business is in a good position.

Of course, as an essential service providing energy to south-eastern Australia, Snowy is doing everything it can to ensure that our people and business are as protected as possible from COVID-19 and this has resulted in significant changes to the way we work.

Our 24/7 Cooma-based operations team, who effectively monitor and operate our assets according to market demands, has been split and an additional two control rooms have been established, with full-time video running between the three sites.

This allows us to physically separate the people on-shift, limiting the number of people that would need to self-isolate if a member of the team was affected by COVID-19. The trading team in Sydney has also been able to adapt, with traders now working remotely from various locations across the city.

While it is impossible to predict what else 2020 will deliver, we are still working hard to keep the lights on and to support our people, customers and communities.

TECHNOLOGY UPDATE

MODERNISING MAPPING

CAREER PATHWAYS **RECRUITING OUR NEXT GENERATION**

ir William Hudson and those working on the construction of the Snowy Scheme understood the importance of good geographic information. The history of the Scheme (and our archives) is papered with a plethora of maps, providing key contextual information, and shaping its design and construction.

These days, geographic information is just as important for the operation, maintenance and evolution of the Scheme as it ever was. But some things are different.

Now, geographic information is almost entirely digital. We expect it to keep up with the pace of change and to be available as, where and how we need it. Most significantly, we expect our geographic information to be intelligent, to deliver insights to support our decisions and uncover new opportunities.

In order to better meet these modern demands, Snowy Hydro is investing in a major upgrade to its Geographic Information Systems (GIS).

No longer the sole domain of geographic information experts, this upgrade will provide every Snowy worker with on-demand access to relevant geographic data and mapping tools, even on their mobiles in the remotest part of the Kosciuszko National Park.

It will help us work smarter and will contribute to keeping us safer by delivering relevant information to our desktop, so that staff don't need to go into the field unnecessarily.

The upgrade will help Snowy make the most out of other technology investments, such as drones, Remotely Operated Vehicles (ROV), LiDAR (remotely sensed data captured using lasers), aerial photography and even 3D models.

The new GIS provides mechanisms that allows users to see and play with data from all of these sources, either in isolation or 'mashed up' with other geographic information to provide a rich, multilayered and interactive common operating picture.

The benefits aren't limited to Snowy workers. Eventually we anticipate that GIS will provide avenues for our community to interact virtually with the Scheme, and be a key part of sharing our ongoing story with you.

nowy Hydro believes in providing locals with career pathways right here in the Snowy Mountains. We are currently looking for the next generation to join our team through our 2021 traineeships and apprenticeships programs.

For decades Snowy Hydro has been providing opportunities for local employees to build a successful career while maintaining a regional lifestyle.

Our Snowy entry-level development programs are open for applications for 2021. This is a unique opportunity for school-leavers to combine completing a TAFE qualification while gaining real world, on-the-job experience.

To apply please visit: snowyhydro.com.au/careers and search for traineeship or apprenticeship.

APPRENTICESHIPS

The Snowy Hydro apprenticeship program fosters and supports excellence in both electrical and mechanical trades, with school-leavers working alongside experienced tradespeople and on major engineering assets.

As a Snowy Hydro apprentice, you will work and live in a different operational region every 12 months. The delivery of the program allows you to gain exposure to different skills and teaching styles across Snowy's diverse operations.

Before commencing onsite training, you will complete an eight-week onboarding program at Wollongong TAFE to give you the skills to be job ready.

Upon successful completion of your four-year apprenticeship, you will receive a Certificate III in your chosen trade and opportunities for career development.

TRAINEESHIPS

A Snowy Hydro traineeship gives school-leavers full-time employment and vocational training in their first year out of school. Our trainees work with experts in their field, who teach, mentor and support them.

Traineeships are available across information and technology, energy generation and asset management, community relations, human resources, finance, Snowy 2.0 and procurement. The program gives trainees wide exposure to an innovative work environment. They can explore their aspirations, while refining their employability skills.

The traineeship program at Snowy Hydro is a 12-month paid position and all trainees undertake a Certificate III and IV in Business Administration, or Certificate III in Information Technology through TAFE. At the completion of their traineeship, trainees also have the opportunity to apply for our cadetship program where Snowy Hydro sponsors cadets to study at the University of Wollongong.

SUPPORTING OUR COMMUNITY

KEEPING CLONTARF CONNECTED



Senior students Iziah Ford and Jamie Hibbens

nowy Hydro has been a very proud partner of the Clontarf Foundation since 2017 and our commitment to assisting students with learning and employment opportunities, mentoring and work experience is ongoing.

With the education system rapidly changing to a more remote and online learning environment through COVID-19, Snowy Hydro has provided laptops to 34 students at the Clontarf Academy in Tumut, ensuring that every student can have use of a device to continue their education online.

Most of the Clontarf students don't have their own laptop, or have to share household devices with multiple siblings. This small gesture from Snowy will make a big difference in supporting their education and it will help to strengthen the existing relationships we have with the Clontarf team at Tumut.

The Clontarf partnership is extremely important to Snowy and we are delighted to announce we have extended it for another three years.

We're extremely proud to be part of the Clontarf journey and are counting down the days until we can properly interact with academy students again.

We've had to get a little creative in finding ways to stay connected with the boys during this period of isolation. The Clontarf boys have been brushing up on their Snowy knowledge before being put to the test with a fun and interactive online trivia event, hosted with the help of some keen Snowy staff. This replaces a touch football game that was postponed due to the COVID-19 restrictions. When it is safe to do so, all will be ready for the muchanticipated game.

The Clontarf Foundation is an organisation improving the education, discipline, life skills, self-esteem and employment prospects of young Aboriginal and Torres Strait Islander men, equipping them to participate more meaningfully in society. Starting its operation with only 25 boys in 2000, Clontarf has grown significantly to have more than 9,000 students enrolled in the program across the country.

The Tumut Clontarf Academy was officially launched in September 2019.

RETAIL

RENEWABLE RED ENERGY FOR MACQUARIE UNI



ed Energy has signed a seven-year contract with Macquarie University to provide 100% renewable sourced electricity for its North Ryde campus.

Starting from next month, Macquarie University will purchase approximately 54,422 MWh of energy from Red each year, helping to reduce the university's total greenhouse gas emissions by 92 per cent.

Snowy Hydro's contracted wind and solar generation enables Red to supply Macquarie University with reliable, matched renewable energy.

In addition to helping Macquarie University reduce its environmental footprint, the Red deal also gives Macquarie University students the opportunity to work with experts

ed Energy now is offering electric vehicle owners free electricity usage charges at their home between 12 noon and 2pm every Saturday and Sunday.

The new Red EV Saver electricity plan also includes Red's renewable matching promise, which guarantees that for every unit of electricity customers use, Snowy Hydro will match it by generating one unit from a renewable source.

Charging an electric vehicle is estimated to add approximately 35% to an average customer's annual consumption, so Red



from Snowy Hydro's trading team on research and energy forecasting projects.

The Macquarie University contract follows numerous other deals to provide 100% renewable energy to commercial customers such as Newcastle University, commercial property investment group Dexus and Thredbo Ski Resort.

These large customers all have a commitment to environmental sustainability, along with a desire for long-term price certainty, which aligns well with the product Snowy Hydro and Red Energy is able to offer.

Energy's offer will help minimise the cost of 'fuel'.

Customers need a smart meter or an interval meter and Red Energy can assist with the installation of a smart meter if required. For more information or to sign up go to:

redenergy.com.au/products/ new-south-wales

Energy Fact Sheets and Basic Plan Information Documents for the Red EV Saver plan are available at:

redenergy.com.au/bpid.



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