

snowy hydro

NEWS

ISSUE 63 • SUMMER 2023



Pioneering tunnel technology

- ▶ Bushfire safety
- ▶ Inside Tumut 2 tailrace
- ▶ Snowy Valleys grand designs

INSIDE

- 3 CEO update
- 4 Major projects reset
- 5 Pioneering tunnel technology
- 6 Snowy 2.0 project update
- 8 Summer safety
- 9 Inside T2 tailrace
- 10 High precision assembly
- 11 Many paths to a Snowy career
- 12 Grand designs
- 13 Red Energy: A legacy in pink
- 14 Community and education

Follow us

 @snowyhydroltd
 @snowyhydroofficial

We welcome your feedback:

 1800 623 776  communityfeedback@snowyhydro.com.au

For more information, please visit our website snowyhydro.com.au.
Sign-up to our e-newsletter or follow us on Facebook.



CEO UPDATE

A message from Snowy Hydro CEO Dennis Barnes

Snowy Hydro is playing a key role in supporting the energy sector, as Australia transitions to a cleaner, low-carbon national economy.

We're building Snowy 2.0 and the Hunter Power Project and of course, we continue to provide 'firming' generation through the Snowy Scheme and our existing gas plants to ensure reliable supply for consumers in the National Electricity Market (NEM).

Energy security is a 'hot' topic at the moment. With an El Niño being declared, we are facing a dry summer and a period of likely reduced inflows into the Snowy Scheme. With our available water reserves, Snowy is very well-placed to manage our business operations, water licence requirements and to help keep the lights on.

Bushfires are an ever-present threat during summer and across the business, we are preparing our sites and people. We maintain Asset Protection Zones around critical infrastructure, work with authorities including the Rural Fire Service and conduct thorough training for members of our Emergency Response Teams, among a range of preparation activities.

Our Snowy 2.0 pumped-hydro project continues to make solid construction progress, despite previously announced challenges.

Positively, tunnel boring machine (TBM) Lady Eileen Hudson has excavated the 700 metre tailrace adit at Talbingo and is underway with excavation of the tailrace tunnel, ahead of schedule. This is the first power waterway to be tunnelled on the project. TBM Lady Eileen recently excavated over 26 metres in a single day, which is an outstanding achievement.

The project is also continuing a tradition established during the Snowy Scheme construction, with innovative and unique engineering designs. Our teams, led by contractor Future Generation Joint Venture, are developing special connectors for concrete segments that will line the steep inclined pressure shaft of the Snowy 2.0 power station, to manage the huge water pressures.

Of course, large and complex projects like Snowy 2.0 will always attract their fair share of external opposition and opinion. I am absolutely committed to being realistic and transparent about our projects and operations with all stakeholders, especially the communities in which we live and operate.

I want to assure you that we take safety and environmental matters incredibly seriously.

Safety is the number one priority for Snowy Hydro and core to our company values. High expectations for the management of all safety and environmental risks extend across Snowy 2.0 and Hunter Power Project, without compromise.

Earlier this year I unfortunately underestimated the timing for the safe restart of TBM Florence with the support of our regulators. The required work was far more complex than I had anticipated. TBM Florence is ready to recommence tunnelling, subject to receiving NSW Department of Planning and Environment approval for our modification report. A range of variable geological conditions in the headrace tunnel are expected ahead of TBM Florence, which the Snowy 2.0 team are looking at ways to de-risk. We will keep you updated as she progresses via a range of communication platforms, including this newsletter.

Finally, I would like to thank our local communities for their ongoing support and engagement with Snowy Hydro and wish you all a safe and enjoyable holiday period.

All the best

Dennis



Hunter Power Project site meeting

Snowy 2.0 and HPP reset

Following the review and reset of the Hunter Power Project and Snowy 2.0, both projects are powering ahead, with teams implementing agreed changes to ensure better alignment across workgroups, efficiencies in production and logistics, and continued progress on-site.

The Snowy Hydro and Future Generation teams are now a single team, working in close collaboration to achieve full Snowy 2.0 commercial operation by December 2028.

A new service provider, Sodexo is managing the on-site worker messes and retail shops. The remote location of Snowy 2.0's four main construction sites means the accommodation camps need to operate like small villages in the mountains, providing home away from home facilities for workers.

The dining halls have been upgraded, the shop stock increased and dinner food themes introduced. Along with a wider range of dining and 'grab and go' options to increase meal variety, there is a commitment to reducing food waste and phasing out single-use plastics.

The camps are expanding to meet workforce growth, with 176 beds at Marica (up from 96) and 402 at Tantangara by the end of 2023. A further 500 beds are planned for Lobs Hole, which currently has 1,220 available.

Getting to and from the camps is also being streamlined with coaches now able to travel down the widened and sealed Ravine Road to deliver workers directly to camp receptions at Lobs Hole, replacing the 4WD bus transfer service at the gatehouse.

Recruitment efforts have stepped up to ensure the project continues to attract quality experienced workers and the workforce is able to meet the expanding needs of the project.

Maintaining supply chains is also essential and changes to procurement will see more physical stock of critical equipment delivered to project warehouses to eliminate unnecessary delays.

At the Hunter Power Project, the HPP leadership team is focused on strengthening internal communications to create a 'one team, one dream' working environment.

Snowy Hydro CEO Dennis Barnes recently visited the HPP site along with the HPP Steering Committee and Doug Moss, Managing Director of HPP main contractor, UGL. Positive benefits resulting from the project reset are evident in the progress of construction and the increased level of interaction within and between teams as they work towards the safe, reliable and successful delivery of the project.

Pioneering tunnel technology

INNOVATION



Test FACS ring at the Polo Flat segment factory.

Innovation is at the heart of Snowy Hydro as the ongoing custodians of the mighty Snowy Scheme, and now through delivery of the mega pumped-hydro project Snowy 2.0.

The tunnel boring machines at work excavating Snowy 2.0's waterways and tunnels are designed to adapt to the geological conditions, and variations in tunnel design. TBM Kirsten's dual role of excavating the emergency, cable and ventilation tunnel (ECVT) as well as the inclined pressure shaft (IPS) is setting a global standard in tunnelling technology. The TBM is being modified underground to convert from regular tunnelling mode to excavate uphill at a gradient of 25 degrees. The steep slope also presents a unique engineering challenge for the concrete tunnel lining.

As excavation of the 11-metre diameter IPS progresses, the TBM will install precast concrete segments to form the giant rings that line the Snowy 2.0 waterways. The rings must be able to withstand extreme hydraulic loads caused by the pressure of the water as it rushes downhill to power the turbines, as well as huge fluctuations when water flow is turned on and off.

The tunnel lining will contain special radial drains to help balance water pressure during steady state conditions, but when the rapid changes are made (startup and shutdown of the power station) the surrounding rock and tunnel lining are put to the test.

There are a number of designs used around the world for the concrete ring connectors to cope with minor fluctuation of forces, however, the unique requirements of Snowy 2.0 called for a new solution. Hydro design experts from construction partner Webuild considered three types of coupling systems, carried out tests, made improvements and moved to prototype stage. After extensive testing and further modifications, the bespoke coupling system was ready for the next stage of testing during segment manufacture.

The Force Activated Coupling System (FACS) is made of special steel couplers that are positioned between the concrete segments along the tunnel lining. The steel couplers have pin and socket elements which are pre-stressed to keep the joint closed when the tunnel undergoes sharp increases in pressure.

FACS connections are embedded in the segment joints and have disc springs that are configured to provide a precompression force to the lining as the segments are installed by the TBM.

This coupling system innovation allows for single-pass lining of hydraulic tunnels, which means improved quality and safety, and reduced time to complete the tunnel. FACS eliminates the need for a second tunnel lining of steel or reinforced concrete.

The new coupling system will be installed in the precast concrete segments as they are manufactured at the project's Cooma factory, with final testing of FACS in the inclined pressure shaft tunnel expected to be underway by the end of the year.

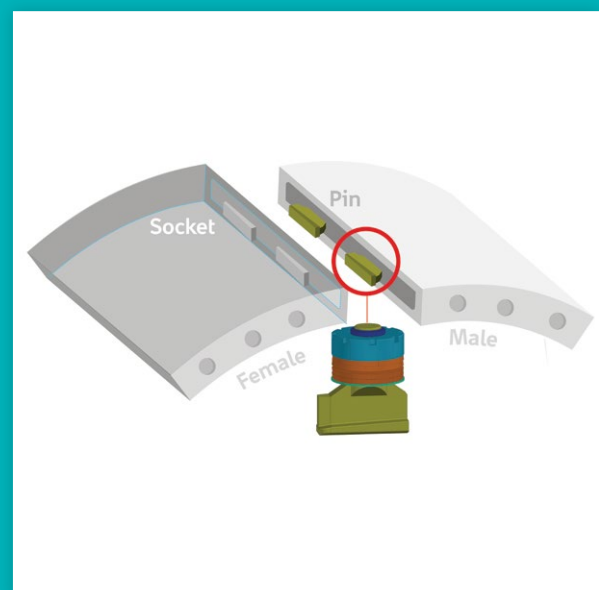


Diagram of FACS connectors between precast concrete segments

Snowy 2.0

Cavern crowns milestone

Excavation for Snowy 2.0's underground power station has reached a major milestone with the first opening of the side of the cavern crowns for the machine hall and the transformer hall.

Underground drill and blast activities have been steadily progressing at Lobs Hole with specialist subcontractor Orica successfully completing the landmark blasts that opened into the crown area. The cavern crowns will become the arched ceilings of the power station and in the machine hall, the location of overhead travelling cranes that will be used to lift and manoeuvre power station equipment.

With this type of work, the sequence of the excavation is critical as the in situ rock mass relaxes and moves inwards as the excavated void increases. These movements will be closely monitored during the process.

Ongoing geotechnical investigations will continue to monitor and review progress with geological mapping, core drilling, plate load and direct shear testing carried out to measure and confirm the geological characteristics around the power station.

The machine hall and transformer hall caverns are located about 800 metres underground and will be the equivalent height of a 20-storey building when excavation is complete.



First opening of the transformer hall cavern crown

Headrace tunnel update

The onsite slurry treatment plant at Tantangara has been completed and commissioned and TBM Florence is ready to recommence tunnelling, subject to NSW Department of Planning and Environment approval for the modification report.

With the slurry plant operational, the dual-mode TBM can switch from open excavation to a closed, pressurised mode. The closed method will enable stable excavation and efficient progress through softer ground conditions. The Snowy 2.0 team is continuing to look at ways to de-risk the variable geological conditions expected in the tunnel ahead of TBM Florence.



Minimising impacts

Elsewhere at Lobs Hole, a complex task is underway to drill boreholes for the pipes that will house power, water and fibre optic cable for communications across three of the Snowy 2.0 sites.

Horizontal directional drilling (HDD) is being used to drill 2.2km-long boreholes from Lobs Hole to Marica. The holes are initially 300 millimetres in diameter and have an elevation difference of 650 metres.

Two drilling operations are underway from top and bottom and will join up to create a 'through' borehole before being enlarged to 660 millimetres in diameter.

This type of drilling is used for service lines that cross under waterways or underground structures and requires a high level of skill to maintain directional control while operating a drill string up to 1.8km long. Snowy 2.0 has contracted HDD experts Michels for the project.

The boreholes eliminate the need to construct approximately five kilometres of roads and excavate up to 60 metre cuts in the steep terrain, helping the Snowy 2.0 project team minimise environmental impacts.

HDD techniques will also be used to take services under the Snowy Mountains Highway and waterways across the plateau through to the Tantangara worksite.

First power waterway

At Talbingo, tunnelling of the tailrace adit is complete. TBM Lady Eileen Hudson is now excavating the tailrace tunnel alignment and heading towards the power station complex. This marks the start of the first power waterway on the Snowy 2.0 project.

Excavation is ahead of schedule with more than 26 metres recently excavated in a single day. The tailrace tunnel is six kilometres in length, with TBM excavation continuing through to mid-2025.

Snowy 2.0 is being engineered to deliver clean and reliable energy storage and generation for the next 150 years. The target date for commercial operation of all units is December 2028, with first power expected in the second half of 2027.

Community information

Snowy Hydro and Snowy 2.0 principal contractor Future Generation will hold a series of community information sessions across the region, starting in November.

The sessions are an opportunity for locals to learn more about the mega project and ask questions of the team about traffic management, recreation access, jobs and business opportunities or any other areas of interest.



Horizontal directional drilling at Lobs Hole



Inside the tailrace tunnel on TBM Lady Eileen Hudson

BUSHFIRE SEASON

Summer safety

Maintaining Asset Protection Zones (APZ) around Snowy Hydro power stations and critical equipment is a year-round effort to ensure easements remain clear of vegetation overhead and on the ground. APZs provide an essential buffer from flying embers or fast-moving grass fires around built-up areas.

A period of higher rainfall in the region has led to significant grass regrowth heading into the summer months, which are forecast to be hot and dry.

Snowy Hydro's Emergency Response Teams regularly carry out bushfire preparedness exercises such as flushing of hydrants at depots and power stations, and operational checks of vehicles and equipment.

Alongside his day job as maintenance improvement officer at Talbingo, Snowy Hydro's Andrew Symons is also Senior Deputy Captain at Tumut Rural Fire Service. Four years ago he was on the ground with the Tumut Brigade for more than seven weeks during the extreme and widespread bushfires of 2019/20, a season so catastrophic it was dubbed Black Summer. Several areas of Kosciuszko National Park where Snowy Hydro operates were impacted in the fires, including the historic town of Cabramurra.

NSW Rural Fire Service (RFS) has rolled out hundreds of new and upgraded fire trucks and vehicles across the state in recent years, including new Category 1 tankers at Khancoban, Tumut and Tumbarumba brigades. These trucks have a front-mounted water cannon that can be operated remotely from within the cabin, creating a safer option for crews when out fighting fires.

RFS-provided training and refresher courses are helping develop firefighting skills for tens of thousands of volunteers, and a location-based fire mapping app has been widely deployed. The digital app provides live information from the site of a bushfire to help fire control centres with resource prioritisation. Crews can drop a pin on a map and draw an outline of what the fire looks like in real time to help with resource allocation from fire control headquarters.

Top: Andrew Symons at Lobs Hole after the Dunns Road fire in 2020
Bottom: Maintaining asset protection zones

Plan ahead

The NSW RFS website myfireplan.com.au has a step-by-step guide to help residents decide ahead of time what to do in the event of a bushfire. The plan asks: Will you leave early? Stay and protect your property? If you do leave, where will you go? How will you get there?


The My Fire Plan tool offers different checklists based on your plan, including what to do inside and out before you leave your property. Your completed plan can be saved as a PDF ready for printing out.

Prepare now

Rural fire service organisations recommend community members take five simple steps to reduce bushfire risk to their property:

- Trim overhanging trees and shrubs.
- Mow grass and remove the cuttings. Have a cleared area around your home.
- Remove flammable material such as door mats, wood piles and mulch.
- Clear and remove all the debris and leaves from the gutters surrounding your home.
- Prepare a sturdy hose or hoses that will reach all around your home.





Inside Tumut 2 tailrace tunnel

Inside T2 tailrace tunnel

Ongoing maintenance and upgrades of Snowy Hydro's power stations, dams and waterways is essential to ensure safe and efficient operation of the Scheme and help keep the lights on for Australian households.

Scheduling essential maintenance requires detailed planning and the alignment of a number of external factors. Poor weather conditions including snow and heavy rain may inhibit movement around the assets or cause rockslides that block access. Market conditions must be also considered as taking assets offline can impact supply to the National Electricity Market.

Recent works at Tumut are just two examples that underpin the investment we continue to make in the Snowy Scheme.

In addition to the usual factors, extenuating circumstances in recent years such as bushfires and a global pandemic have impacted supply chains and staff availability. As a result, repairs at Tumut 2 Power Station (T2) that required access to the draft tube were on-hold until it was possible to access and repair the draft tube gate.

The purpose of a draft tube gate is to prevent tailrace water entering the draft tube when lowered. When the main inlet valve is closed, workers have safe access to the spiral case and draft tube for maintenance. The T2 draft tube gate is complex in design due to space restrictions and the gate cannot be lifted and held up while units are in service.

When the right conditions were present earlier this year, the regional team was able to undertake a draft tube outage and carry out a number of activities including refurbishment or reinstallation of gate components on multiple units.

The outage was successfully completed over 14 days, with 35 Snowy employees and contractors working together on day and night shifts. Weld repairs were carried out in situ, as well as machining of support brackets. In addition, all mechanical components were replaced with new ones.

Returning these gates to service enables the region to complete several routine maintenance tasks that have not been possible without internal access. Draft tube slot inspections also presented the team with a rare opportunity to recreate an historic photograph taken 64 years ago at the hump of the tailrace tunnel.

Integrity testing

At Tumut 3 Power Station (T3), integrity testing has been completed on the top cover studs of turbine Unit 3 to ensure the studs are not loose.

Longitudinal ultrasonic testing was also carried out to ensure that the studs are not fatigued. This type of testing uses high frequency sound waves to conduct examinations and make measurements. When applied to the studs, the sound waves propagate through the stud and if there is discontinuity in the wave path (such as a crack in the stud) some of the sound wave is reflected back. This reflected wave is measured and analysed to understand the size and location of the crack.

Testing showed the Unit 3 turbine top cover studs are in good condition and similar tests are planned for the other five T3 units in coming months. Turbine top cover stud integrity testing is carried out every eight years and is a critical control to prevent plant failure leading to a major accident at the station.

HUNTER POWER PROJECT

High precision assembly



Two of the four tanks under construction

Work is progressing steadily at the Loxford site of the Hunter Power Project (HPP), with construction of four large tanks and reassembly on-site of the gas turbines.

The power station will operate with two heavy-duty open-cycle gas turbines. They will use natural gas and be hydrogen-ready, with a diesel back-up. These turbines are the largest in Australia to be reassembled on-site from the ground up. Gas-fired turbines are typically delivered fully assembled and ready for installation, however, the large size of the HPP turbines, weighing in at approximately 320 tonnes each, made this an impractical option.

Each of the turbines has around one million parts and will require specialised tools to be brought in for specific components. Large domes have been constructed to shelter the turbines during reassembly following strict regulations to avoid contamination of the parts.

The reassembly requires high precision and a fine tolerance of 0.02 millimetres, which is the smallest dimension that the human eye can resolve. The process to put together each turbine will take approximately 64 days.

When the power station is operational, each turbine will produce approximately 330 MW of power – more than 400 times the power output of one Boeing 747 aircraft engine.

Elsewhere on site, the construction of two water tanks and two diesel tanks is underway. Each tank is approximately 12 metres high, with a diameter of 14 metres and has a capacity of between 2.2 and 2.5 million litres, which is the amount of water needed to fill an Olympic-sized swimming pool.

The Service Water Tank is for potable (drinking) water used across the project, while the Water Demineralisation Tank will hold demineralised water of extremely high purity for use in the power generation process. The diesel tanks will hold the back-up fuel to keep the turbines going when gas or hydrogen are not readily available.

Each tank is constructed by joining horizontal plates, called strakes, on top of each other. This process provides the cylindrical shape, structural reinforcement and stability to the tanks.

Progress of the Hunter Power Project remains on track for completion by December 2024, with about 460 people working on the project. When operational, the power station will have the capacity to contribute 660 MW of energy to the National Electricity Market.

Community support

Kurri Kurri Town of Murals Art Show, one of the oldest art shows in NSW, made a welcome comeback in 2023 after a three-year hiatus.

Snowy Hydro's Hunter Power Project is the major sponsor of the show this year, which saw 114 entries across a number of categories including contemporary, traditional, watercolour and still life.

Dorothee Heibel was the overall winner with her painting 'Evening Shenanigans'. HPP Project Director Daryl Young presented Dorothee with her prize (pictured below) and delivered a project overview to the attendees on the opening night of the show.



CAREERS

Many paths to a Snowy career



Lachlan Marks and Max Forrest

Graduate engineer Lachlan Marks only recently started in his first full time role at Snowy Hydro yet his career journey was underway eight years ago.

As a year 10 student in 2015, Lachlan chose Snowy Hydro for a week of work experience where he was introduced to several different business units across the Engineering and Asset Management team. Lachlan's interest in electrical engineering was sparked that week when he met operational engineer Ben Hammann and travelled to Upper Tumut Switching Station (UTSS) to observe electrical work on the synchroniser relay controls.

Ben is a 13-year veteran at Snowy Hydro and says the inquisitive high school student made a lasting impression during his work experience week.

"I recall Lachlan embraced the variety of challenges planned during the week he spent with the team looking after the Snowy Hydro control systems. He asked great questions and was really interested in the answers to take them onboard."

By 2018, Lachlan had started a cadetship with Snowy Hydro while he studied electrical engineering at the University of Wollongong. He believes it was his time at Snowy in year 10 that helped provide clarity around career options.

"Work experience helps you to find out if engineering is what you want to do as a job, what type of engineer you want to be and it provides a goal to work towards while going through university."

A typical day for Lachlan in his current role on the Snowy 2.0 electrical team involves reviewing electrical designs presented by the principal contractor and ensuring they align with Employer Requirements, Australian Standards and the company's interests. In parallel, he collaborates with Future Generation to ensure proposed designs are effective and efficient.

"I really enjoy the opportunity to learn as much as I can about the many different areas of electrical engineering, while utilising the knowledge I have picked up over the years working at Snowy Hydro – it's helping me become a better electrical engineer!"

Snowy Hydro recently fine-tuned the work experience program to place students directly with a graduate across mechanical, electrical or civil engineering, as well as other disciplines. Not surprisingly, Lachlan was quick to volunteer and earlier this year hosted Max Forrest from Snowy Mountains Grammar School.

"While Max was here we went through the background of Snowy Hydro, who we are and what we do, then moved to more technical aspects of our generators and some of the work I've completed in the past. He was invited to Snowy 2.0 for an overview of the project and worked with me to complete some design reviews. Max is fantastic to work with, he has good attention to detail and is eager to learn about Snowy and about engineering."

In a neat circle of work experience, Lachlan and Max spent a day with Ben Hammann, who now works as an Operational Technology Solutions Engineer at Snowy.

Snowy Hydro will host up to 14 students this year and typically offers two intakes – one in March and the second in September. Placing work experience students with graduates provides them with a perspective from an employee relatively close in age who is able to guide them through the career options specific to their part of the business.

Lachlan's key message to work experience students is to take every opportunity to gain knowledge.

"Learning is a crucial part of being an engineer. Every situation, every experience and every day is an opportunity to learn more."

Work experience: How to apply

Students interested in learning more about work experience options at Snowy Hydro are invited to complete a short survey to help identify potential placement options: www.surveymonkey.com/r/LYQ3Y78

PARTNERSHIPS

Grand designs



April Pine, 'Tidal Body', Snowy Valleys Sculpture Trail, Talbingo. Photo: Roslyn Clare

Visitors travelling through the towns of the Snowy Mountains region are often pleasantly surprised to come across striking sculptures placed throughout the landscape. These grand designs are part of the popular Snowy Valleys Sculpture Trail that will be boosted as part of a new major partnership with Snowy Hydro.

The sponsorship includes funding for seven new artworks that will be leased and installed over the next two years, adding to the 35 existing sculptures located along the 150km trail.

Another important component of the partnership is the school education program to offer artist-led sculpture workshops to 14 primary schools in the Snowy Valleys region along with two schools in Cooma and the Adaminaby Public School.

More than 1,500 school children will have the opportunity to immerse themselves in the world of art, creativity and engineering, with Snowy Hydro engineers taking part in the workshops.

The program aligns with Snowy Hydro's education focus on science, technology, engineering and maths and engaging young people in activities that spark future careers.

Large landscape sculptures are made from materials such as stone or steel, or a collection of found objects. They typically involve a combination of creativity

and engineering skill and Snowy Hydro CEO Dennis Barnes says this common ground with Snowy's hydro-electric projects makes for an important partnership.

"We believe that art and engineering go hand-in-hand, which is why they're both core parts of our Next Generation Education Academy activities. By exposing students to these artist-led workshops, we hope to inspire the next generation of engineers and artists right here in our local community."

Stretching from Adelong to Tooma, the Snowy Valleys Sculpture Trail meanders through the historic towns of Batlow, Talbingo and Tumbarumba. It features work from Australian and international artists, with each sculpture chosen in consultation with the Snowy Valleys community, a local advisory group and the Snowy Valleys Council.

Snowy Valleys Sculpture Trail Founding CEO and Artistic Director David Handley believes the collection of sculptures is a key cultural project in regional Australia.

"Snowy Hydro's sponsorship means we are able to continue to deliver what we set out to do in providing the School Education Program for free to thousands of students across the Snowy Valleys, while building on the sculpture trail to offer visitors another reason to come back again and again to enjoy this stunning part of Australia."



Keizo Ushio 'Oushi Zokei' Snowy Valleys Sculpture Trail, Tooma.
Photo: John Riddell

Norton Flavel 'And Another' Snowy Valleys Sculpture Trail, Tumba. Photo: John Riddell



A legacy in pink

For 25 years, Breast Cancer Network Australia (BCNA) volunteers, staff and supporters have worked together to raise awareness and funding for those affected by breast cancer. Their iconic Pink Lady has appeared all over the country, from the lawns of Parliament House in Canberra to Australia's most beloved sports stadium, the MCG.

This year saw the return of the 'live' Field of Women after a five-year hiatus which attracted more than 10,000 people dressed in pink ponchos gathering at the centre of the MCG to create a Pink Lady silhouette.

The moving tribute raises awareness by bringing the statistics of breast cancer to life in a way that highlights the personal impact on the community. In 2023, more than 20,640 people will be diagnosed with breast cancer.

Red Energy has partnered with BCNA since 2015 and in 2020, launched the Red BCNA Saver Plan as an opportunity for Red Energy customers to support BCNA's work. The Red BCNA Saver Plan* now has over 10,000 customer accounts contributing \$5 per electricity account and

\$5 per gas account every month. Since the plan's inception, more than \$715,000 has been paid directly to BCNA.

Red Energy CEO Iain Graham said the company's contribution to the community ranges from small, grassroots sporting sponsorships to significant support for organisations like BCNA.

"It's important we team up with like-minded people and businesses that share our values, especially that of decency," Mr Graham said. "Our goal is to raise awareness of the work BCNA does, so nobody has to go through breast cancer alone."

For every residential customer who signs up to a Red BCNA Saver plan, Red Energy will contribute up to \$10 every month to BCNA, up to the value of \$120 each year.

BCNA CEO Kirsten Pilatti says the organisation places a high value on partnering with great Australian brands who demonstrate commitment to community.

"Red Energy's ongoing support allows BCNA to continue the important work we do, ensuring all Australians have access to the very best breast cancer care, treatment, and support. Our community grows stronger when we all work together."



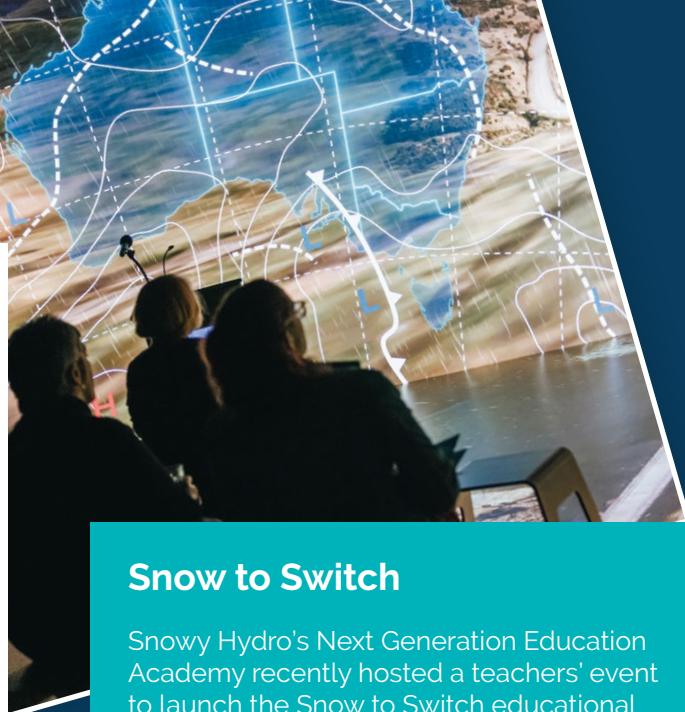
*Residential customers only. Eligibility criteria and conditions apply. Basic Plan Information Documents and Fact Sheets available at redenergy.com.au/bpid

Art meets engineering

A special event announcing Snowy Hydro's partnership with the Snowy Valleys Sculpture Trail (SVST) was the perfect opportunity for local students to showcase their creativity and innovation.

The artist-led workshop at Adelong Public School was an example of the school education program developed as part of the SVST that encourages students to explore and discuss ideas around art in the landscape.

With a little help from Snowy graduate engineers, the artists-in-the-making used paper straws, masking tape, cardboard tubes, scrap paper and foraged items to assemble their creations. More than 1,400 students from local schools have taken part in the sculpture workshop since the program's introduction in 2020.



Snow to Switch

Snowy Hydro's Next Generation Education Academy recently hosted a teachers' event to launch the Snow to Switch educational experience at the Discovery Centre in Cooma.

Snow to Switch follows the journey of electricity from its source as snowfall in the Snowy Mountains all the way to the light switch at home. The program covers a range of topics, including weather, water, renewable energy and electromagnetism.

Teachers from across the region attended the launch to learn how and why the resource was created and provide feedback. Snowy Hydro Senior Climate Scientist Dr Johanna Speirs, one of the Snowy experts who contributed to Snow to Switch, was at the launch and spoke about the development of the program.

Snowy Hydro's Next Generation Education Academy Hub is continually adding to its interactive learning modules, with fact sheets, lesson plans and hands-on activities available for teachers, parents and students to access.





74 years of Snowy

300 local school students enjoyed an activity-packed event to celebrate 74 years of the Snowy Scheme in October. The Discovery Centre took on a festival atmosphere, with a collection of pop-up stalls for students to wander through and get involved with whatever captured their interest.

A crowd favourite was the dress-up space, where students could pull on real-life Snowy Hydro PPE and uniforms including hard hats and other protective clothing. There was also a mock-up construction site, outdoor games and plenty of ways for kids to express their imagination and creativity by making Snowy-inspired headbands, puzzles and puppets.

Another popular venue was the flag-making marquee which celebrated the Snowy Scheme's unique multicultural history. Members of the community volunteered to come along and help students create their own personal flag of meaning.

The event was a new way for teachers and students to learn more about Snowy Hydro's STEM learning activities and gain insights to possible career opportunities.

Acknowledging the Ngarigo People

Snowy Hydro has unveiled new signage for its Acknowledgement of Country at the Discovery Centre in Cooma, acknowledging the Ngarigo People, the Traditional Custodians of the land, waterways and community of the Cooma region. The official Welcome at the event was delivered by Ngarigo Elder Aunty Therese.

The Acknowledgement of Country is a small symbol of Snowy's commitment to reconciliation, respect, and a shared future. It's an opportunity to deepen Snowy's connection with First Nations peoples to better understand their enduring culture and continue to share their history, culture and traditions.

As part of the celebrations, a number of Ngarigo Elders took part in a discussion to provide a deeper understanding of local Indigenous heritage and culture. Ngarigo Elders Uncle Joe, Uncle Craig, Uncle John and Aunty Therese shared personal stories about connection and culture.



Summer holiday fun

Snowy Hydro's H2O holiday program runs locally through Out of School Hours (OOSH) providers each school holiday period. Themes vary from season to season and are geared around the STEM subjects of science, technology, engineering and maths.

In the September holiday program, students took a closer look at geometrical shapes by creating various 3D constructions and identifying shapes in the world around them.

Students were challenged to consider town planning using their shapes and then dress up their 'towns' by adding water, trees and other lifestyle features. The exercise was a fun and collaborative way to think about design, planning and building with shapes.

For more information about the H2O holiday program, visit the Next Generation Education Hub at snowyhydro.com.au

Another great way to support Breast Cancer Network Australia



Red Energy has partnered with Breast Cancer Network Australia (BCNA) since 2015 to help support Australians affected by breast cancer. Our partnership enables us to contribute, support and collaborate with BCNA on what is a very personal cause to many Australians.

How we will contribute to BCNA on your behalf

When you sign up as a residential customer to a Red BCNA Saver plan, we will contribute up to \$10 every month to BCNA. That's \$5 for electricity and \$5 for gas accounts for every month that you remain on the Red BCNA Saver plan up to the value of \$120 each year.*

We're here to help

To find out more or switch to the Red BCNA Saver plan visit redenergy.com.au/bcna/offer or call us **131 806**.




**Online
signup!**



Proudly
supporting

Breast
Cancer
Network
Australia



*Offer available to residential customers signing up to the Red BCNA Saver plan. Red Energy will contribute \$5 per fuel to Breast Cancer Network Australia (ABN 16 087 937 531) for each calendar month you are on the Red BCNA Saver electricity and/or gas plan, starting from and including the date Red Energy becomes responsible for your electricity and/or gas supply. Eligibility criteria and conditions apply. Basic Plan Information Documents and Fact Sheets available at redenergy.com.au/bpid.