

Snowy 2.0 update - Exploratory Works underway

The Snowy 2.0 Exploratory Works are well underway and there has been plenty of progress on the project.

Roads contractor Leed Engineering and Construction has forged ahead with upgrades to Lobs Hole Ravine Road, despite some periods of wild winter weather, and these are due to be completed by the end of the year. A temporary pedestrian bridge is also being installed across Wallace Creek to enable our principal contractor Future Generation access to the exploratory tunnel portal site. When access is completed, the first tunnel construction will get underway with drill and blast methodology.

This exploratory tunnel will allow further geological investigations to be carried out at the underground cavern location, with horizontal core hole drilling conducted in-situ. This work is very important as it provides us with information needed to finalise the technical design of the power station cavern, which will be located hundreds of metres below ground.

Construction of the first workers' accommodation camp is due to start in coming months and should be finished early next year. Initially, during the Exploratory Works phase, the accommodation units will be home to around 150 people. Each single bedroom unit will contain an ensuite, bed, desk, television, small refrigerator and reverse-cycle air conditioner. The Exploratory Camp will also have a gym, recreational facilities, dining area and kitchen.

Given the project's location in the Snowy Mountains, all of these buildings are built to withstand up to three metres of snow!

Snowy Hydro hosted its latest round of community consultations in July and August, with staff from Future Generation also attending. These sessions in Cooma, Adaminaby, Tumut, Talbingo, Tumbarumba and Shannons Flat were focused on providing information to the community as part of the Environmental Impact Statement process for Snowy 2.0 Main Works and the Polo Flat precast factory. The events were well-attended, with more than 400 people taking the opportunity to ask questions, learn more about the projects and speak directly to the project team.

The most popular topics raised by the local community included local jobs and business opportunities, traffic and noise impacts, road safety and road upgrades.

Future Generation is busy establishing a presence in the local community, with team members already moving into the old SMEC offices in Cooma. This will soon become the Future Generation headquarters for the project and house 80–100 staff, generating further economic activity for the area. SMEC staff working on the project have moved into the Snowy Hydro office in Cooma in their role as the owners' engineers.





Join us to celebrate 70 years - Sat 19 Oct

In October, Snowy Hydro is celebrating 70 years of the mighty Snowy Scheme.

Seven decades ago, in October 1949, the ceremonial first blast was fired at

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Adaminaby to mark the commencement of a hydro-electric construction project that would become known as one of the world's modern engineering marvels.

This historic milestone will be recognised with events in Cooma, Khancoban and Talbingo this spring. The events will focus on celebrating the incredible achievements of the construction era and many decades of successful operations. It's also a great opportunity for Snowy workers from over the decades to reconnect and share stories of their Snowy life and experiences with each other and the current Snowy staff.

A community celebration and main reunion event will be held on Saturday 19 October 2019 from 11am – 3pm in Cooma and everyone is welcome to attend.

The event will be held on the lawns outside the Snowy Hydro head office in Cooma North.

The festivities on the lawn will include speeches, live music from local performers, delicious food and more. People can move between the lawns, the Snowy Hydro Discovery Centre and the main office building, which will be open for tours during the event.

The Snowy Hydro Discovery Centre will also be open. Visitors will be able to experience our brand new, state-of-the-art immersive theatre and the proud history, engineering prowess, mateship and vision of the mighty Snowy Scheme.

A massive screen measuring 14m wide and 4m high will welcome visitors and take them on a fly-over across the Snowy Mountains, showcasing our past, present and future – a behind-the-scenes tour of one of the greatest civil engineering projects the world as ever seen.

A series of 'Snowy talks' will be held throughout the day in the main office for the community and ex-workers to hear about how Snowy Hydro is operating in today's rapidly-changing energy market and the critical role the business will continue to play in underpinning Australia's renewable energy future. The talks will also cover the company's future plans with Snowy 2.0, our new pumped-hydro expansion of the Snowy Scheme.

The events in Khancoban and Talbingo will bring the 70th celebrations to these local communities. There will be a rare opportunity to see inside Talbingo's Tumut 3 Power Station from the viewing gallery and enjoy a barbecue lunch with proceeds to be donated to a local charity. In Khancoban there will be a community picnic at the Lady Hudson Rose Garden.

For information and to keep up-to-date with activities, please register at snowyhydro.com.au



Murray region milestones

The Snowy Mountains Hydro-Electric Scheme is the most complex, multi-purpose, multi-reservoir hydro scheme in the world with 16 large dams, 80km of aqueducts, 145km of tunnels and nine power stations, two of which are underground, and one pumping station.

As you can imagine, a Scheme of this scale has a lot of moving parts, with many large pieces of infrastructure strategically connected together. The longevity of the infrastructure not only highlights the original design and construction of the assets, but also the expertise of Snowy Hydro maintenance staff, past and present.

This year we are celebrating 70 years since the first ceremonial blast in Adaminaby to signal the start of construction of the mighty Snowy Scheme. In addition to these major celebrations there are other milestones to recognise in 2019 – specifically on the Snowy-Murray Development side of the Scheme.

Construction of the Murray 2 Power Station was completed 50 years ago in 1969. Located near Khancoban, water flows westward from the central storage area of Lake Eucumbene and other smaller dams, through Murray 1 Power Station, onto Murray 2 and out into the Murray River for irrigation and environmental releases. Four generating units at Murray 2 provide a total of 550MW.

This year a significant replacement of the control and electrical systems is underway at Murray 2. After 50 years of service, some of the electrical equipment fundamental to the operation of the plant is reaching the end of its life and is no longer able to meet the demands of today's electrical generation network.

The control system replacement is planned for the next 18 months and will be followed by mechanical overhauls and turbine upgrades that, together, will see the plant renewed to continue it's reliable operation for decades to come.

The two-unit Jindabyne Pumping Station also began operations in 1969 and forms

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an important part of the Snowy-Murray Development portion of the Scheme. The Jindabyne pumping station pumps water from Lake Jindabyne (normally at off peak times such as nights and on weekends) into Geehi Reservoir.

Another of the Snowy-Murray Development storages, Island Bend Dam, is 54 years young this year. Constructed between 1962 and 1965, its purpose is to divert water from the Snowy River, below Guthega Power Station, into two trans-mountain tunnels.

The Eucumbene-Snowy tunnel takes water into Lake Eucumbene for long-term storage while the Snowy-Geehi tunnel moves water into Geehi Dam, where it makes its way westward via Murray 1 and Murray 2 Power Stations and eventually into the Murray River.

Flows down the Snowy River can change quite dramatically. In the last 10 years, there have been two significant rain events resulting in the level rising nearly nine metres per hour, resulting in flows in excess of 500 cubic metres per second going over the Island Bend spillway.

The four spillway gates need to respond quickly to the changing water levels and automatically open to protect the integrity of the dam. That's why it is imperative that upgrades take place from time to time to ensure the ongoing reliability of the dam and its spillway.

This year we completed a major upgrade of the spillway gate control systems. The new controls utilise modern electronic control technology, and in some cases they are now duplicated to ensure that the gates will respond under the most adverse of conditions. They can now be operated automatically without human intervention, either remotely from the Snowy Mountains Control Centre or locally from the site.



New renewable energy contracts

Did you know Snowy Hydro's retailer Red Energy is now powering all of Thredbo's

major resort operations with clean, renewable energy?

This is just one of several landmark contracts Snowy Hydro has signed with commercial customers to supply reliable, round-the-clock energy from 100% renewable sources like wind, solar and hydro.

To provide energy on-demand, when a customer needs it, Snowy uses its hydro power station assets in combination with intermittent wind and solar to create 'firm' reliable energy. This firmed, on-demand renewable energy is vital for the rapidly-changing National Electricity Market to meet current and future energy demands at the lowest cost.

The 'firming' product is a fast-growing part of Snowy Hydro's business and one which holds significant promise given our unique fast-start hydro assets and integrated portfolio of renewable energy sources.

With more customers seeking renewable energy to power their operations, there is significant commercial interest Snowy's energy products.

New contracts signed with commercial and industrial customers will be underpinned by renewable energy produced from the eight wind and solar projects built under long-term offtake contracts from Snowy Hydro's successful 2018 Renewable Energy Procurement Program (REP-P).

The REP-P secured 888 megawatts (MW) of wind and solar projects across New South Wales and Victoria with offtake contracts of up to 15 years. This new energy allows Snowy Hydro to offer very competitive, firm, renewable energy prices to customers.

The Snowy 2.0 pumped-hydro project will further strengthen Snowy's existing ability to firm vast amounts of renewable energy. Snowy Hydro can release water to generate at times of peak demand and use excess energy for pumping to top up water supplies – for example, when the sun is shining in the middle of the day producing solar energy at a time when energy demand across the system is relatively low.

Aside from Thredbo Ski Resort, Snowy has also signed long-term contracts with the University of Newcastle and with Dexus, a large property investment group. These commercial customers all have a commitment to environmental sustainability, along with a desire for long-term price certainty, which aligns well with the product Snowy is able to offer.



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