

16th May 2023

GREEN GRAVITY TO BUILD WORLD LEADING RESEARCH FACILITY

Green Gravity has announced the construction of the Gravity Lab, a world leading research and development facility. The Gravity Lab will be a purpose-built gravitational research facility designed to obtain high resolution performance data from the proprietary gravitational energy storage system. The Gravity Lab will commence construction in May 2023 and will be located in the industrial precinct in Port Kembla, NSW Australia.

Green Gravity and BlueScope Steel will partner in the deployment and operation of the Gravity Lab. Extensive collaboration between the two organisations has enabled this important R&D step.

According to Mark Swinnerton, Founder and CEO of Green Gravity, the partnership with BlueScope demonstrates the power of large and small enterprises working in collaboration to achieve a clean energy future.

The Gravity Lab will be co-commissioned with its digital twin. Developed in partnership with AI specialist xAmplify and with support from NVIDIA, the digital twin of the Gravity Lab will operate within the NVIDIA Omniverse framework and will be calibrated from physical experimentation. The introduction of digital assets to the Gravity Lab will rapidly enable acquired data to validate commercial-scale energy storage systems.

Mark Swinnerton, Founder and CEO of Green Gravity said:

“The capital investment committed to the Gravity Lab will enable some of the most advanced gravitational energy storage research in the world. The purpose-built facility, to be located at the Port Kembla Steelworks, will be capable of moving 16 separate weighted objects in a sequence to test the capabilities of our technology.”

“The important research that will be undertaken at the Gravity Lab will enable power generation capacity and efficiency to be validated in addition to data that will support Green Gravity technology to connect to the power grid at large-scale.”

“Recent escalating power prices demonstrate how important it is for innovative Australian companies to commercialise new technology quickly. Green Gravity’s energy storage technology provides an important option for Australia to take on the energy transition using home-grown technology and home-grown circular economic thinking. Solving the power pricing challenge requires collaboration across sectors, innovation, and determination. We are up for the challenge.”

MEDIA RELEASE



“Green Gravity’s energy storage technology represents a breakthrough in the search for economic long-duration storage of renewable energy. By re-using mining assets, costs can be kept low. By using gravity as the fuel, we dispense with consuming the critical water, land, and chemicals which other storage technologies rely on.”

Michael Reay, Head of Corporate Affairs for BlueScope Australia, said, “the synergies with this project are enormous. BlueScope has its own goal of net zero emissions by 2050 and has a pathway to the decarbonisation of steelmaking. We recognise that we are going to need an enormous amount green renewable energy in the transition and are proud to be supporting Green Gravity in helping to bring their innovative solution to life.

As we fast approach our 100-year anniversary of steelmaking here at Port Kembla, we are busy planning for the next 100 years and are currently developing a Masterplan for rejuvenating 200 Hectares of surplus land adjacent to the steelworks. We are very excited that Green Gravity chose to establish its Gravity Lab here on our site by repurposing one of our industrial-size buildings. It’s a great fit and a tangible example of what we are trying to create, a modern hi-tech R&D precinct that builds upon our strengths in advanced manufacturing.”

Wayne Gowland, CEO of xAmplify said, “Leveraging smart technology to enable and optimise Green Gravity’s gravitational energy system is a real market differentiator and key in scaling commercial operations. Not only has the digital twin facilitated rapid optimisation of the design, but it has established a continuous learning system where data and AI can drive tangible benefits.”

END

About Green Gravity

At Green Gravity, we develop and operate cutting edge gravitational energy storage systems. We aim to become the world's lowest cost and most sustainable provider of energy storage technology.

Green Gravity's energy storage system moves heavy weights vertically in legacy mine shafts to capture and release the gravitational potential energy of the weights. By simply using proven mechanical parts and disused mine shafts, Green Gravity's energy storage technology is low-cost, long life and environmentally compelling.

Decarbonisation of the energy system needs rapid deployment of renewable energy. To manage the inherent variability of renewables, energy storage must be added to our electricity grids. Our technology solution utilises conventional mechanical components to enable low-cost energy storage to be installed at legacy mine sites.

Based in Wollongong Australia, we are working with global miners, energy companies and research institutes to scale up our innovative energy storage technology.

About BlueScope Steel

BlueScope is a provider of innovative steel materials, products, systems and technologies, headquartered in Australia with operations spread across North America, Australia, New Zealand, Pacific Islands and throughout Asia.

We are one of the world's leading manufacturers of painted and coated steel products, and with our strong expertise in steel we provide vital components for houses, buildings, structures, automotive and more.

Over many years, BlueScope has built a strong foundation for growth with a diverse portfolio of businesses in some of the largest and fastest growing economies of the world.

Our track record of successful global partnerships enables us to prosper in widely diverse markets. In India, we have established the Tata BlueScope joint venture with the highly respected Tata conglomerate, and our joint venture with Nippon Steel – NS BlueScope - has opened exciting new markets and opportunities across Southeast Asia and on the West Coast of the United States.

Our global networks are another great strength at BlueScope. With more than 160 operations and sales offices across 16 countries, we employ over 15,000 people and serve thousands of customers every day.

Our strong partnerships and networks are built on BlueScope's most loved and recognised product brands, such as COLORBOND® and ZINCALUME® steels, COLORSTEEL®, BlueScope Zacs®, LYSAGHT® steel building products, Butler® and Varco Pruden® engineered buildings.

Find out more about us at [Home - BlueScope Corporate](#)

MEDIA RELEASE



About xAmplify

Since forming in 2018, xAmplify has grown into Australia's leading AI and Automation Integrator. We understand and enable the journey to an automated and technology enabled future backed by the world's largest and most innovative AI and technology companies including NVIDIA and Vast Data. A local Australian company, with local people and local leadership, supported by the global leaders in innovation and technology.

For more information, please contact the xAmplify team:

xAmplify team: info@xamplify.com.au

Further Information

Media Relations: media@greengravity.com

Further information on Green Gravity can be found at www.greengravity.com

Trading office: Suite 1, Ground Floor, Enterprise 1, Innovation Campus, Squires Way, North Wollongong, NSW, Australia 2500

ABN 48 652 56 9661 Registered in Australia
