



PRESS RELEASE

12 April 2022 (EMBARGO LIFTS 4PM EST)

Japanese energy giant to partner in ground-breaking green hydrogen project

Northern Territory, Australia: Aqua Aerem, the proponent of the \$US10.75 billion 10GW Desert Bloom Hydrogen project, and Japan's Osaka Gas have entered into a historic joint development agreement that will position the venture at the forefront of Australia's renewable hydrogen ambitions.

Desert Bloom Hydrogen is a world-first project that will produce truly renewable hydrogen for domestic and export markets using only off-grid renewable energy and its own atmospheric water source (which will produce water for the project without environmental degradation).

The agreement, which was ratified at a signing ceremony held jointly in Australia and Japan in the presence of the Northern Territory Chief Minister Michael Gunner on Tuesday, will see the two companies jointly develop the project, which will produce ~410,000 metric tonnes of green hydrogen per year when at full scale.

Details of the agreement are confidential but will involve Osaka Gas contributing to the following in conjunction with Aqua Aerem:

- project management, engineering and technical support for the project;
- identifying customers and negotiating the sale of hydrogen from the project; and
- identifying, evaluating, and negotiating with equipment manufacturers.

Aqua Aerem Chief Executive Officer Gerard Reiter said the company was looking forward to working closely with Osaka Gas, which, in addition to being one of the world's largest gas buyers and distributors, has an extensive global portfolio of energy projects, including LNG terminals, pipelines and independent power projects.

"We are pleased to be collaborating with Osaka Gas on the further development of Desert Bloom Hydrogen, which is the most advanced, shovel-ready green hydrogen project in Australia," Mr Reiter said.

"This deal is a strong endorsement of the massive value of the project and Aqua Aerem's innovative air-to-water technology, which is opening the door for green hydrogen projects to be located where the best renewable power sources are available, which is generally in the driest areas of the planet."

Northern Territory Chief Minister Michael Gunner welcomed Osaka Gas's contribution to the development of a green hydrogen sector in the region, which is set to play a key role in meeting the NT's ambitious economic targets.

"The project, which features pioneering technology to capture water from the atmosphere in arid environments, has been awarded Major Project Status by the Northern Territory Government.

“Today’s announcement is great news for the Northern Territory, for Australia and for Japan, as we strive to reach our shared destination of net-zero emissions by 2050.

“This major project is also providing a big boost to our economy, with around 1,000 jobs to be created during construction and a further 120 once it is operational, and we look forward to marking many more important milestones along the way.”

Strategically based in Central Australia to take advantage of high solar irradiation levels and proximity to Asian markets, Desert Bloom Hydrogen comprises a large-scale, off-grid system producing renewable hydrogen that does not require a ground based, riverine, aquifer or a sea water source.

The project consists of a series of modular 2MW Hydrogen Production Units (HPUs) capable of generating water from the atmosphere, as well as producing heat, renewable electricity, and green hydrogen.

The venture is backed by Sanguine Impact Investment.

Aqua Aerem Chairman and Sanguine Managing Director, David Green, said Osaka Gas was an ideal partner to jointly develop the Desert Bloom Hydrogen project.

Existing close ties with and proximity to Japan make the location of a major green hydrogen in the NT strategically beneficial to Japan and Australia as Japan implements its hydrogen roadmap to “Beyond-Zero” Carbon,” said Mr Green.

“Desert Bloom Hydrogen will produce revenue from the installation of the first module and does not require large upfront expenditure, including investment in large infrastructure that may become stranded or suffer from technological obsolescence.

“As a result of these substantial savings, Desert Bloom will be on track to produce green hydrogen at an export price international customers want to pay – less than \$US2/kg within five years.”

Desert Bloom Hydrogen will create more than 1,000 jobs during the construction phase and 120 ongoing jobs. It has Major Project Status with the NT Government and is finalising an offtake agreement with Territory Generation.

Aqua Aerem is also in discussions with other potential partners regarding the purchase of its green hydrogen as well as joint-venture opportunities spanning the energy, chemical, mining, transport, and aviation industries.

Mr Green said Sanguine was in the process of increasing the scale of the Project to 20GW to meet the quickly developing demand for green hydrogen as companies position to deliver on their international commitments.

“An equitable global energy transition and water security are the key challenges of this generation and Aqua Aerem is well-placed to assist with the expected surging demand for reliable, affordable, green energy and provision of security water supplies,” he said.

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About Aqua Aerem

Aqua Aerem is an innovative technology developer and the proponent of the 10GW Desert Bloom Hydrogen project. Aqua Aerem innovates and commercialises critical technology solutions to assist with the energy transition and responses to climate change.

It is also the developer of the patented *Water Maker*, a propriety water-making technology which extracts water from the atmosphere in low humidity environments without any environmental degradation. Powered fully by renewable solar energy, the *Water Maker* provides a much-needed solution to the water stressed regions, communities and the quandary that has so far curtailed the production of large volumes of green hydrogen required for the energy transition. Aqua Aerem's *Water Maker* technology will allow the wide potential of green hydrogen to be produced in regions that offer the best solar irradiation that are also in water stress regions or where the water for producing hydrogen is limited.

Aqua Aerem is a subsidiary of Sanguine Impact Investment

[Renewable energy technology | Aqua Aerem \(aqua-aerem.com\)](https://www.aqua-aerem.com)

About Sanguine

The Sanguine Impact Investment group originates, develops, owns, operates, and finances sustainable infrastructure and energy transition projects in selected emerging markets and developed economies.

Sanguine focuses on projects that solve real sustainability and community problems and naturally align with the UN Sustainable Development Goals.

Sanguine's team of in-house developers and asset managers have a deep understanding of the markets and sectors in which we invest so we can successfully develop and operate bankable projects while applying the International Finance Corporation's Sustainability Framework and Environmental and Social Performance Standards.

The Luxembourg Finance Labelling Agency (LuxFLAG) has granted the LuxFLAG AFS ESG Label to the Sanguine Asia Pacific Renewable Energy Fund S.L.P. and granted LuxFLAG Associate Membership to Sanguine Asia Pacific Services.

Sanguine Securities' DBH Green Hydrogen Project bond has received Climate Bond Standards certification. (Sanguine Impact Investment).

About Osaka Gas

Osaka Gas is a major natural gas and energy service provider, serving 7 million customers in central Japan. The Company accounts for approximately 25 per cent of the entire natural gas market in Japan. Osaka Gas is also engaged in upstream, midstream and downstream energy projects throughout the world, including LNG terminals, pipelines and independent power projects, particularly in Southeast Asia, Australia and North America.