

Joint venture announced for Desert Bloom (Green) Hydrogen

April 12, 2022

Osaka Gas Co., Ltd.

Osaka Gas Co., Ltd. (Osaka Gas) and Aqua Aerem (the proponent, whose majority stake is owned Sanguine Impact Investment) have agreed to jointly develop the project.

Desert Bloom Hydrogen is advanced project that will produce truly renewable hydrogen for the domestic market in Australia and export markets using only off grid renewable energy and its own water source (without any addition to environmental degradation).

Under its plan scale to 10GW once all the project stages are successfully completed, Desert Bloom Hydrogen will produce about 400,000 metric tonnes of green hydrogen per year.

The project is uniquely placed, with its geographic location providing the most cost-effective route to Asian export markets and access to some of the world's best solar resources.

Its unique patented water technology means it provides its own water supply, addressing one of the major shortcomings of many hydrogen projects.

Desert Bloom Hydrogen already has major project status in the Northern Territory as part of the Territory Government's Renewable Hydrogen Strategy.

To this point, the historic hydrogen project has been developed by Aqua Aerem with Sanguine Impact Investment. With the project aiming to launch the commercial operation of a 400-ton hydrogen plant in 2023, Osaka Gas plans to proceed with the design of the facility and the study on where to supply the hydrogen produced, in cooperation with the project partner. Osaka Gas intends to provide technological support in the plant's FEED and construction by leveraging the above-mentioned expertise to develop the project, which is an opportunity for Osaka Gas to gain new knowledge and experience on hydrogen business development.

Under the Carbon Neutral Vision announced in January 2021, the Daigas Group remains committed to developing technologies and services that contribute to achieving a carbon-neutral society and solving climate change and other social issues, to become a corporate group that powers continuous advancement in customers' lives and businesses.

1. About hydrogen production facility

Desert Bloom is an integrated power, water, and hydrogen production facility consisting of a series of modular and portable 2MW Hydrogen Production Units (HPUs) that each generate water, heat, electricity, and hydrogen.

Each HPU contains:

- Photovoltaic ("PV") solar system;
- A Concentrated Parabolic Trough ("CPT") solar thermal heater;
- A Water Producing Unit ("WPU"); and
- An electrolyser.

2. Company Overview

(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 Aqua Aerem)

Aqua Aerem is an innovative technology developer and the proponent of the 10GW Desert Bloom Hydrogen project and a subsidiary of Sanguine. 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 are limited. Renewable energy technology | Aqua Aerem (aqua-aerem.com)