



## First TERA-Award smart energy innovation competition announces winners “Liquid Sunshine Methanol” takes top prize

(30 December 2021) Organised by The Hong Kong and China Gas Company Limited (Towngas) and State Power Investment Company Limited (SPIC), the inaugural TERA-Award smart energy innovation competition held its final contest on 29 December. The “Liquid Sunshine Methanol” project from Dalian Institute of Chemical Physics, Chinese Academy of Sciences won the Gold Award with a prize of US\$1 million. Greendrogen from the United States came in at second place with its “Highly efficient and low-cost H<sub>2</sub> production using AEM Water Electrolyzers”, winning the Silver Award and US\$100,000. The “Copper-HeteroJunction with Intrinsic Thinlayer (C-HJT) Battery” project from SPIC New Energy Science and Technology Co., Ltd. and “Safe and Low-cost Flow Battery” from Hong Kong’s Luquos Energy Limited both placed third, receiving the Bronze Award and US\$50,000 each.

The winning “Liquid Sunshine Methanol” project utilises large-scale renewable energy sources such as solar, wind and hydropower to produce electricity, which in turn yields hydrogen from water through electrolysis. The green hydrogen produced from renewable energy sources reacts with carbon dioxide to produce methanol, thereby storing the energy from renewable sources in liquid methanol fuel. Going forward, Towngas will collaborate with Dalian Institute of Chemical Physics to launch application research, product research and development, as well as demonstration projects for related core technologies. By exploring the relevant technological solutions in the setting of the zero-carbon industrial park, the two parties can join hands in driving the commercial application of the synthesised product and technology from “Liquid Sunshine Methanol”.

Throughout the course of six months, the competition recruited 208 participating projects from 23 countries and regions for an exciting challenge. To ensure a fair and just outcome and facilitate the selection of quality projects based on the criteria of innovation, implementation, talent capability and commercialisation value, the 10 finalists took part in an online roadshow, where eight renowned experts from the international energy field selected the winners of Gold, Silver and Bronze Awards.

The announcement of the prizes signals the success of discovering and driving the research, development and application of innovative technology through a competition. As the host and organiser, Towngas has established its intention for strategic cooperation with Dalian Institute of Chemical Physics and SPIC New Energy Science and Technology Co., Ltd. respectively, while a preliminary intention to invest has been established with Greendrogen and Luquos Energy Limited in order to further push for the practical application of the winning projects.

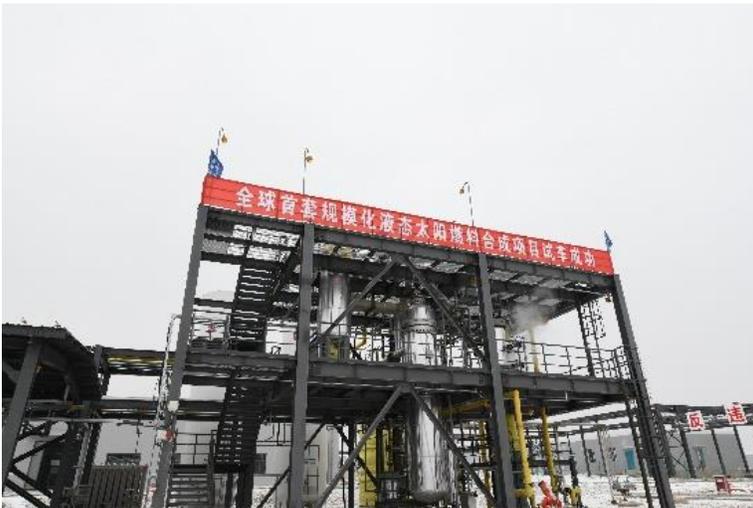
Themed “exploring zero-carbon innovations for the future”, the inaugural TERA-Award smart energy innovation competition has drawn to a close. Going forward, the competition

will aggregate broader resources to support innovative start-ups in the energy arena to foster in-depth cohesion of the industry and contribute towards the country's dual carbon goals and the resolution of the global climate crisis.

- End -

**Press photo:**

**Photo 1 & 2:**



“Liquid Sunshine Methanol” project

Photo 3 & 4:



“Copper-HeteroJunction with Intrinsic Thinlayer (C-HJT) Battery” project

Photo 5 & 6:



“Safe and Low-cost Flow Battery” project

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