NGK INSULATORS, LTD. (hereinafter, “NGK”) and Sustech, Inc. (hereinafter, “Sustech”) have agreed to launch an initiative aimed at maximizing the profitability of an energy storage plant business using NGK’s NAS® batteries for large-capacity storage*1 and ELIC*2, a distributed energy resource management platform developed by Sustech.

This initiative aims to maximize the profitability of energy storage plant business by controlling grid storage batteries using ELIC, AI-based distributed energy resource management platform developed by Sustech, and combining various market transaction such as the wholesale electricity markets, capacity markets, and balancing markets. Following a successful preliminary feasibility study that demonstrated significant profitability enhancements with ELIC, NGK and Sustech have made the decision to commence the operation of a grid storage power plant utilizing NGK’s large-capacity NAS batteries in Japan by the end of FY2024. This project represents their first large-scale endeavor in this field. Moving forward, NGK and Sustech will work on maximizing profitability for the hybrid management of NAS batteries and Li-ion batteries, as well as storage management combined with renewable energy resources.

In pursuit of carbon neutrality, the implementation of a feed-in tariff (FIT) system*3 in Japan has facilitated the proliferation of renewable energy sources. In April 2022, feed-in-premium (FIP) system*4 was introduced as a replacement for the FIT system, and it is anticipated that renewable energy generation by power producers will continue to expand in the coming years. Nevertheless, the production of renewable energy is subject to fluctuations based on weather conditions and time of day, posing challenges related to output curtailment during periods of low energy demand. To tackle these issues, grid storage batteries are gaining prominence as a capacity balancing power source, recharging during electricity surpluses and discharging during high demand periods.

NGK and Sustech will continue to collaborate to help solve all issues to achieve carbon neutrality.
NAS batteries for large-capacity storage

NAS batteries are a megawatt class large-capacity storage battery, implemented practically for the first time in the world by NGK. The batteries feature large capacity, high energy density (compact), and long life, and can provide a stable supply of electric power with a high output over long periods of time. They are used for various applications, including peak cutting through load balancing and emergency power supply, as well as stabilization of renewable energy and construction of smart grids, thereby contributing to reduced environmental load and realization of carbon neutrality. https://www.ngk-insulators.com/en/product/nas-about.html

NAS and the NAS logo are trademarks of NGK INSULATORS, LTD., registered in the U.S. and other countries.

ELIC, developed by Sustech, is a versatile platform designed to provide comprehensive support for the oversight and governance of decentralized power resources, including renewable energy and energy storage batteries. This platform efficiently manages generated renewable energy and offers various operational options, including on-site consumption, surplus power sales, and market trading of environmental value, in combination with storage batteries. https://global.sustech-inc.co.jp/

FIT system
A feed-in tariff system for renewable electricity introduced to promote renewable energy

FIP system
A system to promote renewable energy by adding a premium on top of market-linked wholesale prices

< Company Overview >

● NGK INSULATORS, LTD.
  President : Shigeru Kobayashi
  Address : 2-56, Suda-cho, Mizuho-ku, Nagoya, Aichi
  Establishment : May 1919
  Capital : 70.0 billion yen
  Corporate Website: https://www.ngk-insulators.com/en/

● Sustech Inc.
  Representatives : Yusuke Tanno, Yuichiro Iida
  Address : Shibakoen Hanshin Bldg. 5F, 3-1-14 Shiba, Minato-ku, Tokyo
  Establishment : June 2021
  Capital : 2.7 billion yen (includes capital reserves)
  Corporate Website: https://global.sustech-inc.co.jp/