SUNTORY

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Suntory Spirits succeeds in a world-first*1 direct-fired distillation trial using 100% hydrogen*2 for whisky production

- Achieved at Yamazaki Distillery's pilot distillery, the milestone marks positive progress in the company's journey to decarbonize whisky manufacturing while maintaining the quality craftsmanship of its whiskies -





This high-resolution image has been posted on https://www.suntory.com/news/index.html

Tokyo, Japan (April 11, 2024) — Suntory Spirits Ltd. proudly announces that it has succeeded in a world-first*1 direct-fired distillation trial using 100% hydrogen*2 for whisky production at Yamazaki Distillery in Japan. Suntory Spirits proved that the new make spirits distilled at this trial has the same quality and taste as those produced by conventional natural gas. This is a milestone moment in the company's journey to decarbonize its whisky manufacturing while maintaining the quality craftsmanship of its whiskies. The company aims to verify this technology at a commercial scale at its Hakushu Distillery in Japan, where it announced to install the country's largest 16 megawatt-size "Yamanashi Model Power-to-Gas (P2G) System" and produce green hydrogen (News Release No. 14225).

'Direct firing' is regarded as a traditional method of distilling, by which a direct flame is used to heat the still at significantly higher temperatures compared to indirect heating by steam coils. This can enhance spirit quality and depth of character, and for this reason, the company places this method as an essential process for quality craftsmanship in whisky making and uses it for the first distillation at Yamazaki and Hakushu distilleries to produce rich and strong new make spirits.

Replacing conventional natural gas with 100% hydrogen in this direct-fired distilling process has been a challenging step in decarbonizing whisky manufacturing while maintaining the quality of the new make spirits. After conducting technical verification with Tokyo Gas Group that has technical expertise in hydrogen and industrial furnace manufacturer SRC, the trial was carried out at the pilot distillery in Yamazaki Distillery, a small-scale distilling facility specifically designed to enhance such innovative research and development. With necessary safety measures put in place and the combustion equipment adjusted specifically for hydrogen use, the trial succeeded in distilling new make spirits with the same quality and taste as those produced by conventional natural gas.

"Ever since we began whisky making at the Yamazaki Distillery in 1923, we have been striving to craft with a relentless pursuit of perfection and persistent innovation," shares Katsunori Kurihara, COO of Spirits, Wine Development & Production Division at Suntory Spirits Ltd. "The whisky business embodies Suntory's philosophy 'to inspire the brilliance of life by creating rich experiences for people, in harmony with nature'. To coexist with people and nature around the world, and to aspire to produce Suntory Whisky beloved by all, we will work towards a net-zero goal while maintaining the quality craftsmanship of our whiskies."

Within Suntory Group, Beam Suntory also aims to decarbonize its whisky manufacturing in Scotland using green hydrogen in partnership with Supercritical Solutions, with support from UK government funding*3. This hydrogen direct-fired distilling trial at Yamazaki Distillery was partially funded by the same UK government funds as the Group collaborates and works towards a common net-zero goal while maintaining the quality craftsmanship of its whiskies. A part of the distilled spirit produced at this trial will be exported to the Group's Glen Garioch distillery in Scotland to be casked and quality assessed as it matures.

^{*1:} Direct-fired distillation on a scale of pot still over 1KL for whisky production (based on its own research).

^{*2:} For safety reasons, conventional natural gas was used to start and end the burning.

^{*3:} The <u>Green Distilleries Competition</u> is delivered through the UK Government Department for Energy Security & Net Zero.

About Suntory Group

As a global leader in the beverage industry, Suntory Group offers a uniquely diverse portfolio of products, from premium spirits, beer, wine, ready-to-drink alcohol beverages, to brewed teas, bottled water, still and carbonated soft drinks, ready-to-drink coffee and energy drinks, along with health and wellness products. Suntory is home to award-winning Japanese whiskies *Yamazaki*, *Hibiki* and *Hakushu*, as well as iconic American spirits *Jim Beam* and *Maker's Mark*. Suntory also fascinates the taste buds with *The Premium Malt's* beer, and owns the exceptional Japanese wine, *Tomi*, and the world-famous *Château Lagrange*. Its brand collection includes *Sauza Tequila*, non-alcoholic favorites *Orangina*, *Lucozade*, *Ribena*, *BOSS* coffee, *Iyemon* green tea, *Suntory Tennensui* water, *TEA+ Oolong Tea*, *V* and *BRAND'S*, as well as popular health and wellness product *Sesamin EX*.

Founded as a family-owned business in 1899 in Osaka, Japan, Suntory Group has grown into a global company operating throughout the Americas, Europe, Africa, Asia and Oceania, with an annual revenue (excluding excise taxes) of \$20.9 billion in 2023. Its 41,511 employees worldwide draw upon the unique blend of Japanese artisanship and global tastes to explore new product categories and markets.

As a corporation sustained by the gifts of nature and water, Suntory Group will always protect the ecosystems that deliver water. Because its ecosystem is the wellspring, not only of its business and the rich experiences the group creates for people's lives, but also of human life itself. Suntory Group will continue to be a company where everyone is empowered with the freedom and flexibility to innovate. Through all of its corporate pursuits, Suntory seeks to inspire the brilliance of life.

Learn more about Suntory Group, its brands, and its commitment to social responsibility and sustainability at www.suntory.com, on Facebook, X, Instagram, LinkedIn, and YouTube.