

ispace Applauds Japan's Passage of Space Resources Law

The Law Concerning the Promotion of Business Activities Related to the Exploration and Development of Space Resources was passed by the National Diet of Japan

Tokyo, Japan, June 15 – ispace, inc. (ispace) issued the following statement regarding the passage of the Law Concerning the Promotion of Business Activities Related to the Exploration and Development of Space Resources by the National Diet of Japan on June 15, 2021.

Statement by Takeshi Hakamada, Founder & CEO, ispace:

We enthusiastically support the passage of Japan's space resources law and applaud the nonpartisan parliamentary group of diet members for taking a swift action to lead the world in this endeavor, alongside other nations who have recently passed similar legislation or who may be in preparations to do so. I am very certain that this rule making effort will bring opportunities and order to commercial activities and should offer a strong sense of the future growth of our industry, as well as the sustainable future of humanity, to many stakeholders worldwide.

The law provides that Japanese private business operators shall be permitted to engage in the exploration and development of space resources, such as water, minerals, and other non-living resources in outer space, on the Moon and other celestial bodies. This means that companies of Japanese nationality may operate continuously in a fixed location on the Moon for the purposes of mining or extraction, storage, processing, and other operations necessary for the development of space resources, as well as to freely use space resources.

To conduct such activities, a Japanese company must obtain permission from the government in accordance with the Space Activities Act. The government will also provide technical advice, information, consultation, and other assistance to private business operators engaged in the exploration or development of space resources. Furthermore, the law calls on the government to consider strengthening the international competitiveness of space-related industries while aiming to build a system that is consistent with each country.

Japan is the fourth country to pass legislation permitting its private sector to engage in space resources utilization, joining the United States, Luxembourg, and the United Arab Emirates. Countries such as Canada, Australia, and New Zealand are also currently considering similar legislation. Japan is also one of 11 signatories of the US-led Artemis Accords, an internationally shared framework on civil space exploration activities and the use of outer space.

ispace is a Japanese lunar exploration company with a vision to utilize space resources, such as water resources on the Moon, to expand human presence into outer space and create a sustainable future for humankind. The company believes that utilizing resources on the Moon will enable the development of a cislunar economy, providing benefit to our lives on Earth, while establishing a launch pad to access deeper space, such as Mars and beyond.

Water molecules extracted from the lunar surface can be split into hydrogen and oxygen, which can be used as propellant for spacecraft traveling into deeper space, as well as for those operating on and around the Moon. Many companies and organizations, in addition to ispace, are studying methods to explore and extract water resources from the Moon. For example, ispace has signed a HAKUTO-R corporate partnership with Takasago Thermal Engineering, a Japanese company developing water electrolysis equipment. Takasago Thermal Engineering has successfully developed an integrated water electrolysis and fuel cell unit in-house, which is [considering](#) conducting a mission to produce hydrogen and oxygen on the Moon by utilizing ispace's upcoming lunar missions.

ispace's Recent Activities Related to Space Resources

- In 2020, NASA [awarded](#) contracts to both ispace and the company's subsidiary, ispace Europe S.A., to acquire regolith from the lunar surface to be purchased by the space agency.
- In 2019, ispace Europe was [selected](#) by ESA to be part of the Science Team for PROSPECT, a program which seeks to extract water on the Moon.
- In 2017, ispace opened a subsidiary office in Luxembourg and [signed](#) an MoU with the country for cooperation within the context of its SpaceResources.lu initiative that aims to increase the commercial use of space resources.
- In 2016, ispace, [signed](#) a Memorandum of Understanding (MoU) with the Japan Aerospace Exploration Agency (JAXA) to jointly create a roadmap for lunar resource development.
- ispace is a member of The Hague International Space Resources Governance Working Group, an international consortium working to prepare the basis for an international framework for space resource activities; in 2019, the group published its findings [here](#).

■ About ispace, inc. (<https://ispace-inc.com/>)

ispace is a lunar exploration company with over 130 staff and offices in Japan, Europe and the United States. Founded in 2010, ispace managed Team HAKUTO, one of the 5 finalists in the Google Lunar XPRIZE competition. The company is building a small commercial lunar lander, which aims to provide a high-frequency, low-cost delivery service to the Moon, as well as a lunar rover for surface exploration. Aspiring to be a gateway for the private sector to bring their business to the Moon, ispace has also launched a lunar data business concept to support companies with lunar market entry. ispace is part of a team led by Draper, which was selected by NASA to compete in its Commercial Lunar Payload Services (CLPS) Program, and ispace Europe was selected by ESA to be part of the Science Team for PROSPECT, a program which seeks to extract water on the Moon.

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