

Hakuhodo DY Holdings and Pangaea Ventures publish *Hard Tech Report 2026*, a research report on the Semiconductor and AI Infrastructure Stack

Connecting cutting-edge semiconductor and AI infrastructure technologies with business opportunities for Japanese companies and *sei-katsu-sha* experiences using *Sei-katsu-sha* Centric Mindset

Tokyo—June 23, 2026—Hakuhodo DY Holdings Inc. is pleased to announce the publication, on June 23, 2026, of *Hard Tech Report 2026*, a research report on the semiconductor and AI infrastructure stack, produced jointly with Pangaea Ventures Ltd., a hard tech venture capital firm based with offices in Phoenix, Arizona, Vancouver, Canada, and Tokyo, Japan.

The report is the first output of joint research conducted under the comprehensive partnership agreement that Hakuhodo Inc. signed with Pangaea Ventures in December 2025. It combines the global perspective Pangaea Ventures has developed over more than 25 years of hard tech investment with Hakuhodo DY Holdings' *Sei-katsu-sha* Centric Mindset (people-first mindset) and business design capabilities. The result is a report that highlights where Japanese companies can enter, partner, or invest across the semiconductor and AI infrastructure stack and map out their next strategic moves.

Background

Against the backdrop of the rapid spread of generative AI, the semiconductor and AI infrastructure stack is entering an unprecedented phase of investment and technological innovation. At the same time, these technologies are highly advanced and multi-layered, making it difficult for Japanese companies to determine where opportunities are emerging, and in what form.

Hakuhodo DY Holdings works to support the open innovation and new business creation of Japanese companies and to connect them with the global innovation ecosystem. As part of that effort, this report translates the technological currents unfolding at the world's leading edge into terms relevant to the business perspective of Japanese companies.

Key contents of *Hard Tech Report 2026*

- Maps the semiconductor and AI infrastructure stack across six sectors, broken down into 26 segments
- Evaluates each segment using Pangaea Ventures' proprietary Transformation Potential framework
- Identifies the early signs of business opportunities that lie beyond current technology trends, together with the moves Japanese companies can make and entry points for collaboration
- Draws on Hakuhodo's unique *Sei-katsu-sha* Centric Mindset-based framing of the touchpoints between companies and people as "*sei-katsu-sha* interfaces." From a vision of a future in which the things people wear, the places they stay, and the ways they move around in the world all become such interfaces, this perspective highlights how semiconductors and AI infrastructure will shape *sei-katsu-sha*'s experiences

Hakuhodo DY Holdings' role in the report

For this report, Hakuhodo DY Holdings, working through HCAI Professionals, the cross-Group AI expert initiative within the Hakuhodo DY Group, brought a *Sei-katsu-sha* Centric Mindset and business design lens to Pangaea Ventures' research and data. It reframed a hard tech field that tends to be discussed in purely technical terms into the context of changing *sei-katsu-sha* experiences and business opportunities for Japanese companies, editing and visualizing the material so that it speaks intuitively to non-specialists as well. The Hakuhodo DY Group sees people not as mere consumers or data points, but as whole human beings, with their own contradictions and inner conflicts—what we call “*sei-katsu-sha*.”

Going forward, Hakuhodo DY Holdings will continue to serve as a hub connecting Japanese companies with the global deep tech and hard tech arena, strengthening its support through report publication, seminars, joint business development, and more.

Looking ahead

To mark the publication, an online launch seminar will be held featuring the report's author, Andrew Haughian of Pangaea Ventures. He will speak directly to the report's key takeaways and the moves Japanese companies can make. Participation is free and open to all who register in advance.

Global Deep Tech VC Seminar, Special Edition: Opportunities for Japanese Corporates in the Semiconductor and AI Infrastructure Stack

- Date and time: 8:00 to 9:30 a.m., Thursday, June 25, 2026 (Japan Standard Time)
- Format: Streamed live online (Zoom webinar)
- Featured speaker: Andrew Haughian (Partner, Pangaea Ventures Ltd.)
- Participation: Free (advance registration required)
- Where to sign up: https://us06web.zoom.us/webinar/register/WN_boyCKdr-QFKSDg36-17x5g

PLEASE NOTE:

- Depending on your security settings or system configuration, you may be unable to view the seminar.
- The seminar program is subject to change without notice.

Hard Tech Report 2026 at a glance

- Title: Hard Tech Report 2026
- Published by: Hakuhodo DY Holdings Inc. and Pangaea Ventures Ltd.
- Release date: Tuesday, June 23, 2026
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- Format: PDF (URL: <https://www.pangaeaventures.com/hard-tech-report>)
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https://docs.google.com/forms/d/e/1FAIpQLSdTZtoNUBXji78kD_-9WZjHmc8Bi2B5sSA60NNrJzdWyDf4xA/viewform

About Pangaea Ventures Ltd.

Pangaea Ventures is a venture capital firm that invests in hard tech companies scaling novel technologies in advanced materials, chemistry, and biology to transform industries while solving our planet's greatest challenges. Founded in 2000, it is a global leader in hard tech investing and previously *The Hard Tech Report (2025)*. Pangaea has offices in Vancouver, Canada, Phoenix, USA and Tokyo, Japan.

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