

September 16, 2022

JX Nippon Mining & Metals Corporation

Investment in Pangaea Ventures Impact Fund, LP

JX Nippon Mining & Metals Corporation (President: Murayama Seiichi; “the Company”) has made a limited partner investment in the Pangaea Ventures Impact Fund, LP (“Pangaea Impact Fund”), a venture capital fund managed by Pangaea Ventures (General Partner: Chris Erickson; “Pangaea”).

Pangaea is a world-leading venture capital firm with offices in Canada and the US and investment track record spanning more than 20 years, focused especially on the advanced materials and hardtech fields. The Pangaea Impact Fund has been established for the purpose of investing in startups with innovative technologies to help resolve issues facing society such as decarbonization, climate change, and water resources.

The JX Nippon Mining & Metals Group Long-Term Vision 2040 sets the direction for engaging in co-creative development with partners to constantly create new technology-based business. In line with this direction, the Company collaborates with various startups developing advanced materials in Japan and overseas.¹ To further expand the scope of its efforts, the Company also invests in venture capital funds.² In the aim of strengthening its global networks with startups, recently the Company has examined investing in overseas venture capital funds. Among many funds, Pangaea Ventures has stood out for its excellent networks of advanced materials and hardtech startups in North America and its proven record of cooperation with major materials manufacturers worldwide, including Japan. The Company decided to make this investment in the Pangaea Impact Fund because of Pangaea’s stance of seeking to resolve social issues through materials aligned with the Company’s vision. The investment will lead to collaboration with North American startups that have superior technologies. Continuation of such efforts will accelerate open innovation and new business development in North America.

The JX Nippon Metals & Mining Group will continue to take steps toward becoming a technology-based corporate group, as set out in its Long-Term Vision 2040, and will aim to be a global enterprise that contributes to social development through advanced materials and the realization of a sustainable society as targeted by the SDGs.

◆ Pangaea Ventures Impact Fund Overview (as of September 2022)

Fund name	Pangaea Ventures Impact Fund, LP
Location	Vancouver, Canada and Phoenix, USA
Unlimited partnership	Pangaea Ventures Ltd.
Period of establishment	10 years
Fund established	2022
Duration	Investment period: 5 years from establishment Continuation period: 10 years from establishment
Target companies for investment	Startups utilizing innovative technologies to resolve social issues
Target regions for investment	North America, with flexibility for global investments
Investment stage	Early growth

Notes:

1. The table below lists the Company's investments in startups to date.

Company name	Country	Outline of business activities
Material Concept, Inc.	Japan	Development and manufacture of low-resistivity sintering-type copper paste For further details, please see the news release dated June 7, 2018
Alloyed Ltd.	UK	Design and trial manufacture of metal materials for 3D printers through simulation For further details, please see the news release December 24, 2019
Novel Crystal Technology, Inc.	Japan	Development and manufacture of gallium oxide crystals and substrates for power devices For further details, please see the news release June 30, 2020
Lotus Thermal Solution Inc.	Japan	Development and manufacture of porous copper for heat sink applications For further details, please see the news release August 7, 2020
Addionics Limited	Israel	Development of smart 3D electrodes for lithium-ion batteries For further details, please see the news release February 14, 2022
NanoWired GmbH	Germany	Development and manufacture of fine metal wire less than 1 μm in diameter for semiconductors and electronic devices For further details, please see the news release July 1, 2022

2. For further details, please see the news release dated March 25, 2022, "[Investment in the Venture Capital Fund 'MIRAI SOZO 2 Limited Partnership.'](#)" In addition to this investment, the Company has also invested in the "JMTC Capital 1 Investment Limited Partnership" managed by JMTC Capital.