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Chinese investments in Greenland

origins, progress and actors

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A scenic landscape photograph of a mountain range with snow-capped peaks and a body of water with icebergs. The mountains are dark and rugged, with patches of snow. The water is a deep blue-green, and several large, white icebergs are floating in the foreground. The sky is a clear, bright blue with a few wispy clouds.

CHINESE INVESTMENTS IN GREENLAND

Origins, progress and actors

This report is written by Yang Jiang, senior researcher, DIIS,
and is published by DIIS.

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ABSTRACT

Greenland is important to Denmark's position in international politics, and it has become an arena of increasing competition between great powers. Of all China's shipping, investment and scientific exploration activities in the Arctic, Chinese investments in Greenland have become the most controversial issue. For Washington DC, Copenhagen, and the IA Party that won the Greenlandic general election in April 2021, China's political influence and the environmental impacts that might come with investment are a major concern. Behind the concern is the view that Chinese investments are driven and coordinated by the Chinese state for strategic purposes, but there is a lack of studies on how close state-business relations are and to what extent the domestic reforms in China have pushed Chinese companies to seek out Greenland. Therefore, this DIIS report seeks to inform debates around the role of China in Greenland by delving into the following questions: Why would Chinese companies invest in mining projects in Greenland, and how have they obtained access? How have the projects progressed? To what extent have Chinese state actors participated in these projects?

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EXECUTIVE SUMMARY

- Mineral resources in Greenland are attractive to Chinese companies with international ambitions, especially to those that feel the pressure of domestic regulation, competition, and sector restructuring. However, having all encountered setbacks in mining and infrastructure projects in Greenland, Chinese companies would be more cautious about the financial risks caused by prohibitive costs, logistical difficulties, and political uncertainties.
- After obtaining mining licenses in Greenland, Chinese private companies may later form alliances or new companies with state-owned enterprises (SOEs) for financing or processing of raw materials in China, thus giving SOEs access to the mineral resources in Greenland. At the same time, Chinese SOEs have displayed more caution about financial risks than some private companies.
- Chinese banks, in particular China Export and Import Bank and China Development Bank, are 'backstage' supporters of Chinese companies' endeavours in Greenland, but they are increasingly risk averse. The American ExIm Bank has, in contrast, become more active in supporting US initiatives in Greenland, signalling more assertiveness in Washington DC aimed at minimising Chinese presence in Greenland. More Sino-American competition in the Arctic looks set to come.
- The Chinese industrial ministries and local governments want companies to invest in overseas mining in order to obtain stable supplies as well as to have more say in global commodity prices. However, the government's wish is not always granted by Chinese companies and banks because it is high risk and reducing financial risks has become required by state asset administrators and financial regulators.

INTRODUCTION

With Greenland's parliamentary election in April and the visit of US Secretary of State Antony Blinken to the Nordic countries in late May, Greenland and Arctic affairs have once again been at the centre of public attention and policy debates in Denmark. Among Chinese shipping, investment, and science exploration activities in Greenland, it is Chinese investment that is the most contentious issue. For Washington DC, Copenhagen, and the IA Party that won the Greenlandic general election in April 2021, China's political influence and the environmental impacts that investments might entail are a major concern. Behind the concern lies the view that Chinese investments are driven and coordinated by the Chinese state for strategic purposes and that it is quite easy for China to grab resources and exert influence in Greenland with its abundant capital. But there are limited studies about specific Chinese projects, in particular about how close state-business relations are and to what extent the domestic factors in China have pushed the companies to go to Greenland. Therefore, this DIIS report seeks to provide some detailed information about Chinese mining projects in Greenland, with the aim to serve as a foundation for related debates.

In Greenland, China is primarily interested in natural resources mining and infrastructure construction in relation to the Arctic Sea routes. This has led to questions in Denmark about Beijing's influence in Greenland through 'debt traps' and potential support to the independence of the autonomous territory, even though Chinese diplomats have always been careful to include Copenhagen in their contacts with Nuuk.¹ The publication of China's first White Paper on Arctic Policy in January 2018 listing the prominent goal of establishing a 'Polar Silk Road' stirred up further anxiety in Denmark and the US. The US is alarmed about the implications of Chinese activities for their Thule air base on the island and Sino-Russian influence in the Arctic region in general.² Environmental impacts of mining and the social impact of

a potential inflow of Chinese workers are the main worries of some Greenlandic communities, although many also hope for jobs and economic growth.

The US pressured Denmark to exclude the Chinese state-owned enterprise (SOE) China Communications Construction Company (中国交通建设股份有限公司, or CCCC) from financing the three airport projects in Nuuk, Ilulissat and Qaqortoq, and CCCC eventually gave up bidding for the construction contract in June 2019.³ This report will focus on the four mining projects that Chinese companies *have* been involved in and the following sections will provide some details about each of the four, namely: the Isua iron ore mine, the Citronen base metal project, the Wegener Halvø copper mine, and the Kvanefield (Kuannersuit) rare earths mine (see map 1). The following questions were asked of each Chinese project in Greenland to provide a foundation for analysis and debate:

- How was the project initiated? Why would Chinese companies invest in this mining project in Greenland, and how have they obtained access?
- How has the project progressed so far?
- To what extent have Chinese state actors (state-owned enterprises, banks, and government agencies) participated in the process?

Map 1. Chinese mining projects in Greenland



BOX 1. CHINESE MINING PROJECTS IN GREENLAND

ISUA IRON ORE MINE

In 2015 Chinese private company General Nice bought bankrupt licence holder London Mining Greenland, but with crashing iron ore prices, the company and its managers got into serious financial trouble. The prospects of the Isua iron ore mine look quite uncertain.

CITRONEN FJORD BASE METAL PROJECT

In 2011 The licence holder Australian Ironbark Zinc Ltd signed an MOU (memorandum of understanding) with state-owned China NFC (China Nonferrous Metal) to develop the zinc and lead mine on a full turnkey basis and to facilitate funding from Chinese banks. All permits were obtained, but in November 2020 Ironbark received an offer from the US ExIm (Export-Import) Bank to finance the project and thereafter applied for loans from US ExIm.

WEGENER HALVØ COPPER PROJECT

In 2009 Chinese private company Jiangxi Zhongrun obtained a 20% share in the licence holder London-based Nordic Mining. In 2011 Jiangxi Zhongrun formed a mixed-ownership company with big, provincial, state-owned company Jiangxi Copper, thus giving the latter access to the Wegener Halvø copper mine. However, they gave up on this project in 2019 due to high financial risks, and the licence was granted to Australian Greenfields Exploration Ltd.

KVANEFJELD (OR KUANNERSUIT) RARE EARTHS PROJECT

In 2014 Chinese state-owned NFC signed an MOU with licence holder Australian GME (later called Greenland Minerals or GML) to help develop the rare earths mine. In 2016 mainly state-owned Shenghe Resources acquired a 12.5% share in GME. In 2018 Shenghe and GML signed an MOU that designated Shenghe to commercialise rare earths elements from the mine. Environmental and social impact assessments were approved by the Greenlandic government, and the public hearing phase has been completed, but the risk of radioactive pollution from the by-products uranium and thorium became a controversy in the April 2021 Greenland elections and was decisive for the win of the IA party, which is drawing up legislation to block the project.



ISUA IRON ORE MINE

The Isua iron ore mine lies 150 km north-east of Nuuk and is estimated to contain 1.1 billion tonnes of resources. One of the first to be obtained by a Chinese private company and still under its control, the project faces very uncertain prospects because of falling commodity prices and financial problems in the company, which has expanded excessively as have many Chinese mining and real estate companies.

The Isua iron ore is of unusually high purity and has previously attracted international investors like Rio Tinto and London Mining. London Mining obtained 100% ownership of the mine from Rio Tinto in 2005, and it received an exclusive 30-year exploitation license from the Greenlandic government in 2013. The project includes the mine, an on-site processing plant, as well as a road, bridges, and pipelines to connect the plant to a deep-water port 105 km away.

Since its launch under London Mining's ownership, the Isua project has attracted a lot of Chinese interest. SNC-Lavalin made a financial feasibility report with the support of big Chinese state-owned enterprises including China Communication and Construction Corporation (CCCC) and Sinosteel.⁴ London Mining wanted to find Chinese partners to cooperate on Isua and other projects and expressed this wish to the Chinese Ministry of Land and Resources.⁵

In 2012, China Development Bank organised construction and mining companies to visit Greenland, including CCCC, the Metallurgical Bureau of Sichuan Province, and Sichuan Xinye (鑫冶) Mining Investment Co., a subsidiary of the Metallurgical Bureau. They also met with London Mining and Greenlandic government representatives.⁶ Xinye was interested and carried out a feasibility study of the project for an estimated capital investment of \$2.35 billion. However, Xinye was not certain whether its technology could handle the extreme environmental and physical conditions in Greenland, and iron ore prices had fallen sharply since 2011. In the end Xinye did not sign a cooperation agreement with London Mining, against the expectations of both the governments.

Two years later, a private Chinese company registered in Hong Kong called General Nice Group (俊安) emerged to take over Isua. Headquartered in Tianjin with a subsidiary listed in Hong Kong, General Nice is a domestic giant in coal and real estate. When coal mining was curbed by the Chinese government, it began looking to divert to other sectors. In South Africa, it joined a Chinese consortium to acquire the Palabora copper mine from Rio Tinto in 2013. When London Mining went bankrupt in late 2014 due to falling steel prices and the Ebola crisis that affected its operations in Sierra Leone, General Nice was poised to acquire London Mining Greenland, including the mining license for a very low price in January 2015.⁷

General Nice is the same company that later offered to buy the abandoned Grønnedal naval base in Greenland in 2016 but was rejected by the Danish government under Prime Minister Lars Løkke Rasmussen in 2017, reportedly under pressure from the US. General Nice is broadly interested in the natural resources of the Nordic region including Greenland. The founder of General Nice Group Cai Suixin (蔡穗新) reportedly tried to set up an investment fund to boost development and infrastructure investment to tap into the potential of natural resources in the Nordic region.⁸ Cai is one of the private entrepreneurs from Shanxi province who became rich from coal mining and expanded business to iron ore and real estate, as well as overseas to South Africa, Singapore and the US.

From 2011 to 2016 iron ore prices dropped 78% and, despite a rebound afterwards, prices are predicted to fall again or stagnate towards 2030.⁹ It was therefore predicted that the project would not be able to obtain enough funding to begin production within the coming years.¹⁰ Indeed, with falling commodity prices, General Nice has got into serious financial trouble. Because of debt issues, the chairman Cai Suixin has been put on the list of 'Dishonest Persons subject to Enforcement' by the Chinese court – meaning 'those who have the ability but do not fulfil legal obligations' – and he was restrained from moving assets from Hong Kong by the Hong Kong court.¹¹

The deadlines within the mining license have been extended by the Greenland government so that the company must provide documentation of financial capacity by the end of 2021 and start exploitation of the minerals by the end of 2025. According to news dated June 2020, General Nice was working on an optimisation plan for the Isua mine and trying to attract investors and partners, which may still be challenging, considering the still-shaky global commodities market.¹²

Earlier controversies surrounding the mine when it was under London Mining ownership may also need to be addressed. An environmental impact assessment was approved in 2012, but NGOs remain dissatisfied. The issues include the possibility of importing thousands of foreign (potentially Chinese) workers for construction of the project and hundreds of foreign workers for its operation; the impacts on reindeer migration and the locals' hunting activities; and the choice of using diesel instead of hydroelectric energy to power the mine.¹³ The prospects of the Isua iron ore project remain quite uncertain.



A photograph of a mining site. In the foreground, several stacks of wooden pallets are arranged on a rocky, uneven ground. Each pallet is topped with a large, irregularly shaped rock specimen, likely mineral samples. The background features a large, rugged mountain with a brownish, rocky surface, suggesting a high-altitude or arid environment. The sky is overcast with grey clouds. A dark purple horizontal banner is overlaid across the middle of the image, containing the text 'CITRONEN BASE METAL PROJECT' in white, bold, uppercase letters.

CITRONEN BASE METAL PROJECT


One project close to realisation is the Citronen Fjord base metal mine, but it has changed prospective partners from a Chinese state-owned enterprise to the US Export and Import Bank, which makes it difficult for China to still take part in the project.

The Citronen base metal mine is estimated to contain more than six million tonnes of zinc and lead. It is the only large mining project in Greenland that has received the Section 19-43 Permit – which is issued after an exploitation or mining licence.¹⁴ It was acquired by Australian Ironbark Zinc Ltd in 2007, and Ironbark asked China Nonferrous Metal Industry's Foreign Engineering and Construction Co. Ltd, (中国有色金属建设股份有限公司, or NFC, a national state-owned enterprise), to help develop the project. In 2011, Ironbark and NFC signed a non-binding MOU in Beijing that designates NFC to carry out the project on a full turnkey basis (that is to engineer, design, procure, supply, construct, test and commission the project), as well as to facilitate funding from major banks in China.¹⁵ They targeted 70% of the project financing from Chinese banks, which would provide NFC with an option to acquire up to 19.9% of the Citronen Project. The connection of NFC to Chinese banks was an important element of Ironbark going into partnership over the project.¹⁶ For China, an increasing demand for zinc for producing stainless steel has pushed Chinese companies to look for zinc resources globally.¹⁷

In 2016 Ironbark obtained an exclusive 30-year exploitation licence after gaining approval for its Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA). In December 2020, Ironbark obtained approval for the exploitation and closure permit. It completed a nine-year process of obtaining mining permits that clears the way for a final investment decision (FID) in 2021 to proceed at Citronen. With an estimated capital cost of \$514m, the profitability of the Citronen mine is based on its ability to attract the further funding needed for constructing infrastructure.

Despite having signed an MOU with China's NFC, Ironbark has, for now, picked another major partner to seek funding from in the US. In November 2020 Ironbark received a non-binding letter of interest (LOI) from the US government export credit agency the Export and Import Bank (ExIm) and afterwards applied for loans from them.¹⁸ That followed the visit of an official American delegation, led by then-American Ambassador to Denmark Carla Sands, to Greenland in October 2019 to discuss cooperation with Greenland on minerals.¹⁹ The slow progress on the financing side from China also demonstrated that Chinese state-owned enterprises and state banks had become more cautious about financial risks. Even though Ironbark is still looking for more debt financiers to enable commencement of the

project, the 'ongoing cooperation of the United States Government via the Export-Bank' with Ironbark²⁰ means that it is unlikely that China will take part in the project, with or without financing. At a Future Greenland Conference in May 2019, Carla Sands warned: China has 'enticed countries with promises of easy money and left behind nations wracked by corruption, debt, and crumbling infrastructure. With temperatures rising and the sea ice melting, their eyes have turned north. Polar routes will not be used only for commerce. The High North is a region poised for opportunity but also confronted by increasing threats'.²¹ With a US \$10 million economic package for Greenland in September 2021 on top of \$12 million in 2020, the US is sending out a clear signal that it is expanding its presence while containing China in Greenland.



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WEGENER HALVØ COPPER MINE


A third major mining project that China has engaged in is the Wegener Halvø copper mine. It was partially obtained by a Chinese private company, which later formed an alliance with provincial-level, state-owned companies but eventually gave up on the project due to China's slowing economic growth and post-2014 falling commodity prices.

The Wegener Halvø copper site is located in the Jameson Land Basin near Carlsberg Fjord in East Greenland. A London-based company, Nordic Mining, has held an exploration license since 2007, and it turned to China after unsuccessfully promoting the project to Australian miners.²² London Nordic Mining found success in a major copper-producing province Jiangxi, where it signed a framework agreement with a private mining company Jiangxi Zhongrun Mining Ltd (江西中润矿业) in August 2008. In June 2009, Zhongrun obtained a 20% share in London Nordic Mining (which changed its name to China-Nordic Mining), making Zhongrun the first Chinese company to have obtained a mining license in Greenland. It gave Zhongrun partial ownership of Wegener Halvø copper mine.

The Jiangxi provincial government hailed the achievement of a private Chinese company in obtaining the license. It believed that diversifying the sources of copper would benefit the key industries in the province and that participating in the world's mining hotspot, Greenland, had high commercial and political value. The provincial government was also optimistic about the investment environment in Greenland and Denmark because bilateral relations between China and Denmark were good and Chinese mining investment was not discriminated against.²³

In 2011 Jiangxi Zhongrun and a provincial state-owned enterprise called Jiangxi Copper (江西铜业), together with the provincial state-owned asset investment company Jiangxi Hengmao Real Estate Company and private investors, established a company called Jiangxi Union Mining (江西联合矿业). In this manner, the state-owned Jiangxi Copper obtained access to the Wegener Halvø mine. Although Jiangxi Copper is a provincial-level state-owned enterprise (SOE), it is one of the biggest copper mining and production companies in the world and it is listed on the Fortune 500. Setting up mixed-ownership companies is typical of China's latest wave of SOE reforms, whereby SOEs invite private companies or investors to join so that SOEs can benefit from the strategic assets or managerial skills of the private partners.²⁴ Records show that Jiangxi Union Mining sent exploration teams to Greenland in 2011 and 2012. The exploration team in 2011 included staff from Jiangxi Nonferrous

Metals Exploration Bureau. The commercial attaché from the Chinese embassy in Denmark visited the exploration team together with officials from the Jiangxi State-owned Assets Supervision and Administration Commission (SASAC).²⁵



The chairman of Jiangxi Copper, Li Baomin, said in 2016 that they would not seek scale but profitability, and that they would control risks in the 'going out' (that is 'overseas') endeavours.

In spite of the strong backing of their capital and technology, the Chinese companies have given up on this project. China's slowing economic growth and the fall in commodity prices have made it generally difficult for the mining sector. The chairman of Jiangxi Copper, Li Baomin, said in 2016 that they would not seek scale but profitability, and that they would control risks in the 'going out' (that is 'overseas') endeavours.²⁶ The exploration license for Wegener Halvø mine was renewed in 2013 by China-Nordic Mining,²⁷ but data from the Greenlandic Mineral Resources Authority shows that the license was cancelled with an expiry date in January 2019. The exploration license for Wegener Halvø was granted to an Australian mining company called Greenfields Exploration Ltd in December 2017.²⁸ According to the company registration information database of the Hong Kong SAR, China-Nordic Mining Ltd was dissolved in January 2020.²⁹





KVANEFJELD RARE EARTHS MINE

The Kvanefjeld (or Kuannersuit) rare earth mine has been the most controversial of the Chinese-invested projects and was a focal point of the Greenlandic parliamentary election on 6 April 2021. The environmental, immigration and strategic implications of China's involvement are thorny issues, and the new Greenlandic government led by the IA Party is taking steps to halt the project. The story of the Chinese company Shenghe's participation in Kvanefjeld is both about its international ambitions encountering local realities, as well as about the increasingly tough regulatory and market conditions within China, which hosts 90% of the world's rare earth separation capacity.

China's involvement in Kvanefjeld began in 2014 when Chinese state-owned NFC (also involved, as we have seen, in the Citronen base metal project) signed an MOU with Australian company Greenland Minerals and Energy (GME) to help develop the Kvanefjeld mine. This MOU agreed to establish cooperation between GME and NFC's subsidiary Guangdong Zhujiang Rare Earths Company (广东珠江稀土有限公司) to develop an integrated, global, rare earth supply business.³⁰ In a more substantial deal in 2016, Shenghe Resources (盛和资源), a majority state-owned, mixed ownership company, acquired 12.5% of GME (company name changed to GML in 2018, and Shenghe currently holds a 9.7% interest in GML). GME wished to obtain Shenghe's expertise in rare earth mining and processing as well as an extensive international customer base,³¹ while Shenghe was seeking overseas resources.


In China, the government has tightened quotas and control over exploitation and refining of domestic rare earths due to environmental and safety concerns, especially since 2012. The government also urged big, state-owned enterprises to absorb smaller mines and consolidate into several industrial groups. Compared with the big rare-earth companies in China, Shenghe had relatively limited resources, although its technology was advanced. Therefore, in 2014 Shenghe became an ally of China Rare Earth Co. Ltd (中国稀有稀土股份有限公司), a subsidiary of Chinalco (Aluminium Corporation of China 中国铝业, China's biggest alumina producer) in the domestic competition among the big corporate mining groups. Chinalco gained access to rare earth elements (REEs) in Shenghe's home base in Sichuan province, the second-richest province in REE reserves in China, (after Inner Mongolia), while Shenghe acquired an annual quota for rare earth refining and separation through Chinalco, (although the amount has not been publicly disclosed).³² Shenghe has now become one of the biggest producers of rare earths in China, it operates rare earth mines in Sichuan, Jiangxi and Hainan provinces, and the holding company is listed on the Shanghai Stock Exchange.

Obviously, Shenghe seeks to expand beyond the constraints of the domestic quota on REE raw materials. It started to actively look for overseas resources in 2016 because it was not included in the Chinese Ministry of Industry and Information Technology (MIIT)'s *Rare Earth Industry Development Plan 2016–2020*, which gave all exploitation, refining and utilisation rights of domestic rare earths to six big national corporate groups.³³ It was in 2016, when Shenghe acquired shares in GME, set up a subsidiary in Singapore and acquired 90% of Vietnam Rare Earth Co. Ltd that Shenghe also invested in 9.99% of Mountain Pass Material Operations LLC in 2017 (currently 8%), the only operating rare earths mine in the US.³⁴

In other words, Shenghe invested in the Kvanefjeld rare earth mine for commercial reasons. Somewhat rhetorically, its largest shareholder Chengdu Institute for the Multipurpose Utilisation of Mineral Resources (IMUMR, a local public research institute under the Ministry of Land and Resources), said that the investment in Greenland was implementing the country's 'going out' strategy and was the fruit of the meeting between Chinese Minister of Land and Resources Jiang Daming and Greenlandic officials in 2015.³⁵ However, even though IMUMR is the largest shareholder of Shenghe, its shareholding is relatively small at around 14%, and Shenghe is a listed company on the Shanghai Stock Exchange. Commercial interests are undoubtedly important for Shenghe, especially for survival in the fierce competition of the domestic market.

In August 2018 Shenghe and GML signed a non-binding MOU that designated Shenghe to commercialise (i.e. import, process, export and trade) REE from the Kvanefjeld mine. As 90% of the world's rare earth separation is located in China because of China's technology and other countries' environmental policies, it is not surprising that GME had assumed that processing of REE would take place in China and had pursued this strategy.³⁶ In January 2019 Shenghe formed a joint venture company called China Nuclear Hua Sheng Mining Ltd (中国核工业华盛矿业公司 Huasheng) with a central, Chinese, state-owned enterprise called China National Nuclear Corporation (中国核工业集团公司CNNC), in which Shenghe holds a 45% interest. Huasheng would be the designated entity to implement the MOU on processing and trading REE from Kvanefjeld, including radioactive elements uranium and thorium. The GML announcement of this joint venture also stated that the trade and processing activities would be authorised by the Chinese government,³⁷ something CNNC was well positioned to guarantee. In January 2019 Danish political parties did not react upon hearing the news of the export and processing agreement, but the issue arose again in the Danish media and public debates ahead of the Greenlandic election, leading GML to emphasise that it would also target the European market.³⁸

In 2019, the Chinese government further reorganised rare earths production in China to have more control over REE supply and environmental standards, to crack down on illegal operations, and to have more influence in the 'global rare earths war'.³⁹ One focus of this reorganisation is a strict quota on the capacity and standards of exploitation, processing, and separation, and it became very difficult to open new mines. Shenghe designed a strategy to acquire some sub-standard mines that had not yet been acquired by the six big corporate groups and improve their production standards in order to get them approved by the government.⁴⁰ Against this background, overseas resources remain important to Shenghe because raw materials obtained from overseas are not limited by the national quota.⁴¹ In February 2021 Shenghe signed a non-binding MOU with Australian company RareX to form a joint venture (with Shenghe having 51% initial equity) for purchasing global REE for processing at Shenghe's refineries as well as investing in the Cummings Range rare earths project in Western Australia. Notably, it took place amid heightened diplomatic tensions between China and Australia, which indicates the high degree of autonomy of Australian mining companies.




In 2019, the Chinese government further reorganised rare earths production in China to have more control over REE supply and environmental standards, to crack down on illegal operations, and to have more influence in the 'global rare earths war'.

At Kvanefjeld, GML has worked with international and Danish experts to produce five environmental impact assessment reports and the fifth version was approved by the authorities in 2020. The social impact assessment was also approved. However, some local residents living close to the Kvanefjeld mine in southern Greenland are still worried that the radioactive by-product uranium from this open-pit mine, and the plan to store waste in a lake, would pollute the land and nearby waters, thus affecting their living environment as well as the major sources of livelihoods – farming and fishing. Even though a study in 2018 found that the majority of the Greenlandic population were positive about mining, radioactive elements remain sensitive, and the environmental concern has had a decisive impact on Greenlandic politics.⁴²

As it turned out in the 2021 parliamentary election, the left-wing opposition party, the Inuit Ataqatigiit (IA) party that was strongly against the mine won the election and vowed to block the project.⁴³ The new prime minister, Múte Bourup Egede, said upon winning: 'We have something that money can't buy. We will do everything we can to stop the Kvanefjeld project'.⁴⁴ The new Greenlandic government has adopted a zero-

tolerance policy on uranium mining and is preparing legislature to ban exploration of deposits with a uranium concentration higher than 100 parts per minute (ppm), which is considered very low-grade by the World Nuclear Association,⁴⁵ and it would result in the banning of the Kvanefjeld project. GML has completed the public consultation process and is trying to engage with the new Greenland government over the mine, partly by downplaying the importance of uranium and focusing on rare earth elements and partly by insisting on its legal right to exploit rare earths in Greenland. Shenghe has told domestic shareholders that the new IA government has so far only put restrictions on uranium mining.



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DISCUSSION: THE ROLE OF CHINESE STATE ACTORS

In the following concluding discussion of the stories told above, some observations will be made on the role of Chinese state actors in Chinese investments in Greenland so far, including state-owned enterprises, state banks and government agencies.

State-owned enterprises (SOEs) have been among the vanguard of China's exploration in Greenland, although they are not alone and neither have they necessarily been the most active. Mineral resources in Greenland are attractive to Chinese companies with international ambitions, and Western companies with mining licenses in Greenland approach Chinese companies for partnership, regardless of their ownership type, and sometimes assisted by the Greenlandic and Chinese governments. However, mining in Greenland requires technology, substantial capital and willingness to take financial risks because of the tough natural conditions, high costs, long-term horizons as well as an uncertain policy environment involved. As we have seen in this study, SOEs have displayed more caution than some of the private companies in their Arctic adventures. SOEs such as NFC have signed non-binding MOUs with license-holding Western companies but they have not materialised, either because of falling commodity prices or because the US came along with alternative financing. China Communications Construction Company (CCCC), a major Chinese construction SOE, has been interested in infrastructure projects in Greenland too, but infrastructure has been more strategically sensitive to Denmark and the US than mining projects, as evidenced by the airports contract incident, leaving not much space for Chinese companies to finance or even to contract construction.

The first Chinese companies to actually invest in Greenland were private companies Jiangxi Zhongrun and General Nice. However, private companies may later form alliances or new companies with SOEs for financing or processing of raw materials

in China, thus giving SOEs access to the mines in Greenland. The other two companies that have invested in Greenland are provincial-level state-backed companies Shenghe Resources and Jiangxi Copper. Shenghe needed to seek overseas resources because it is not one of the six big mining SOE groups that were designated by the Chinese government to consolidate domestic rare earths production in China, even though it obtains quota from one of them. Jiangxi Copper has given up on the Wegener Halvø copper project for commercial reasons due to high costs, fallen prices and tough environmental conditions in Greenland. Moreover, they all face fierce domestic competition in China under more stringent government regulations over price, production capacity and environmental standards in the mining sector.

Chinese banks, in particular the policy banks China ExIm Bank and China Development Bank (CDB), are often 'backstage' supporters of Chinese companies' endeavours in Greenland, not least because mining and infrastructure projects in Greenland demand substantial capital and Chinese banks can often shoulder longer-term risks than Western commercial banks can. China ExIm was a possible partner for the three airports expansion project, and CDB has organised Chinese construction and mining companies to visit Greenland to meet with Greenlandic officials and companies there. The prospect of NFC obtaining debt financing from Chinese banks is an important element of Ironbark forming a partnership over the Citronen base metal project, although the slow progress of that project indicates the bank's growing caution around financial risks. It gave a chance to other strategic players, as Ironbark later switched to the US because of the US ExIm Bank's offer of financing. The US-China competition in Greenland infrastructure and natural resource projects looks set to continue, but so far the US has been more assertive. China ExIm, CDB and China's Silk Road Fund have been the major supporters of the Yamal LNG plant and supporting infrastructure in Russia,⁴⁶ and Bank of China and China Investment Corporation (a sovereign wealth fund) have been participating in an Alaskan LNG project, both located in the Arctic. It would not be surprising if these Chinese financial institutions became supporters of Chinese projects in Greenland and the Arctic in the future if given the chance, and also if they consider the financial risks manageable.

Among Chinese government agencies, the Ministry of Land and Resources has been the most active in bridging Greenlandic and Chinese interests, receiving Greenlandic delegations and leading Chinese delegations to visit Greenland. However, their efforts do not always succeed in 'match-making', as we have seen with the case of the Isua mine when a Chinese provincial SOE decided not to invest. In comparison, the Ministry of Industry and Information Technology (MIIT) is more focused on the regulation of the domestic production and market in order to ensure orderly and

stable supply of natural resources and contain pollution. MIIT said in 2017 that Chinese companies' involvement in overseas rare earths projects constitutes company behaviour, which 'the government neither supports nor opposes', and that the government might make regulations encompassing REE imports.⁴⁷ Both ministries, and the Chinese government in general, hope that China can have more say in commodity prices on the international market, rather than relying on imports from international metal giants that China perceives as being manipulative. Apart from improving the sustainability of domestic supply, another major strategy for achieving that is through domestic consolidation and mixed-ownership reforms to create Chinese metal giant groups, as well as through obtaining rights and equity in overseas mining through international collaboration and investment.



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China's White Paper on Arctic Policy published in January 2018 stated that the government would support companies to invest in natural resources in the Arctic and to explore Arctic shipping routes, but how efficiently that can be implemented remains to be seen. So far, it has not been a smooth ride for China in the four mining projects in Greenland: the Isua iron ore mine is stalled due to financial challenges; the Citronen base metal project has welcomed and switched to the offer from a new, American, financier; the license of the Wegener Halvø copper mine expired amid financial uncertainty and went to an Australian company; and the Kvanefjeld rare earth mine has met strong opposition from the new Greenlandic government. High costs and tough environmental conditions in Greenland, commodity price fluctuations, more stringent domestic regulation in China, potential opposition from the US and Denmark, as well as possible local resistance in Greenland are all risks that Chinese banks and companies have learned about from experience. Controlling financial risks in particular is increasingly important for Chinese state-owned entities. Although Denmark's new law for screening foreign investment does not apply to Greenland (or the Faroe Islands), and the autonomous territory may change ruling parties, high risks will certainly be weighed by Chinese companies before they consider setting foot in Greenland again.

NOTES

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