

# Dragoman Digest

## Beijing tightens export controls on vaguely defined dual-use technology

*The proposed regulations may hit rare earth exports*

China's Ministry of Commerce plans to expand the list of items covered by its 2020 Export Control Law to include dual-use items that have potential military applications. The export control regulations are underpinned by President **Xi Jinping's** expansive "total national security" concept which includes 11 broad areas, from culture to technology and resources – i.e., effectively anything. Under these recent changes, exporters of dual-use products will need to provide documentation of the intended use of the buyers – in a move that Beijing claims is to prevent the militarisation of sensitive technology.

The controls are reminiscent of the **US'** Department of Commerce's "Entity List", which has been used since 1997 to restrict the exports to entities seen to pose a risk to the US' "national security or foreign policy interests". In December 2021 alone, over 20 Chinese companies were added to the Entity List and restricted from accessing certain commodities, and technologies.

China's recent regulatory push, combined with threats in February this year to sanction Raytheon over the selling of arms to **Taiwan**, has re-ignited fears that rare earths could be subject to export controls. Despite efforts to shore up stockpiles of rare earths and efforts to redirect mineral imports to countries such as **Australia**, the US remains vulnerable to the impact of potential export controls. Even if China never actively uses the export control law, it still equips Beijing with a clear source of potential leverage in geopolitical disputes.

## Kishida moves to direct Public Pension funds into domestic start-ups

*So far, it remains unclear how effective the new funding arrangements will be*

On April 12, **Prime Minister Fumio Kishida** announced his intent to bolster **Japan's** start-up sector by making additional funds available through the country's Government Pension Investment Fund (GPIF). Kishida has also flagged a review of Japan's complex IPO process to ensure that start-ups have sufficient access to capital. Both initiatives are part of Kishida's signature, yet so far mostly vague, 'new capitalism' policy, which places strong emphasis on wage growth.

Japan has lagged its neighbours in incubating start-ups. In 2021, Japan had just six 'tech unicorns,' compared to **India's** 54. Tellingly, in 2021, Japan's SoftBank, that propels major venture capital investment into start-ups, made zero investments in Japan through its Vision Fund – although it is actively pursuing new domestic investment opportunities.

Observers have flagged that the GPIF already has the ability to allocate a portion of its funds to the venture capital sector. The GPIF holds approximately ¥200 trillion (US\$1.6 trillion) in assets – 5 percent of which can be held in 'alternative investments' (such as venture capital). However, in December 2021, such investment accounted for less than 1 percent of its holdings. There are likely broader structural challenges at play within Japan preventing the emergence of more suitable start-up investment candidates. The country is behind peers in global ICT rankings, and continues to favour in-house development over open innovation. Whether Kishida's new capitalism will address these more fundamental concerns remains to be seen.

## Details emerge of Washington's plan to restrict Beijing's access to cutting-edge chipmaking tools

*Restrictions on the horizon for the most innovative manufacturing tools, while less advanced equipment set to avoid controls*

The **US** is formulating a strategy to restrict **China** from accessing key chipmaking tools, while also allowing American companies to maintain access to the highly profitable Chinese market. US toolmakers with large China exposures, including Applied Materials, Lam Research, and KLA formed the Coalition of Semiconductor Equipment Manufacturers (SEMI) late last year to advocate for this policy compromise. In the last fiscal year, 30 percent (US\$7.5 billion) of Applied Material's sales, and over of 33 percent Lam Research's US\$14.6 revenue came from China. The toolmakers are working alongside the **Biden** administration to craft workable export controls – under which the most innovative manufacturing tools are restricted, but less advanced pieces of equipment can still be exported to China.

Several challenges are facing the group's initiative. The US is aware that an effective export control regime depends on coordination with allies. When it placed SMIC, China's leading chipmaker, on an export blacklist in December 2020, tools continued to reach the firm from other exporters. A coordinated effort from companies occupying key market positions, such as **Japan's** Toyota Electron and the **Netherlands'** ASML would have greater impact. Further, any solution that is perceived as too lenient would likely raise the ire of China hawks pushing for more stringent restrictions. There is also the obvious risk that stronger export controls would push China to be even more vigorous in its self-sufficiency efforts. This has already begun to occur after comprehensive restrictions were placed on Huawei in 2020. Finding a workable solution that threads the needle between these competing agendas will be no simple task.

## Lithium shortage threatens to stall electric vehicle supply

*There continues to be a disconnect between planned global lithium-ion production and access to raw inputs*

Investment in the electric vehicle (EV) sector reached US\$273 billion last year, up 77 percent year-on-year. Over half of that investment was spent on gigafactories – predominantly in the **EU**, which is on track to have nearly 30 such facilities by 2030. Yet, downstream investment has far outpaced upstream and midstream investment. Amid a lack of capital, raw inputs now account for approximately 80 percent of the cost of batteries, compared with 40 percent in 2015. The issue is particularly acute for lithium. Planned battery capacity is currently growing at twice the rate of available lithium supply. Prices have risen by over 700 percent since January 2020. Cost blowouts may deepen. According to Benchmark Minerals Intelligence, 5 million tonnes of lithium per year will be required to meet an estimated global lithium-ion battery production capacity of over 6,000 GWh by 2030. Global production of lithium last year was less than 500,000 tonnes.

Companies and governments are beginning to take steps to address shortages. **Indonesia** is shifting to limit the export of its raw materials, instead looking to bolster its own domestic downstream industries. On Monday, **US President Biden** announced a US\$3.1 billion funding package to support the supply chain for lithium-ion batteries. However, it remains to be seen how successful these piecemeal measures will be in addressing lithium shortages. Streamlining permitting remains a key challenge – the average lead time for lithium mines is estimated to be between eight to 12 years.

## Tough choices loom for companies divesting from Russia

*Amid sanctions, ESG pressures, and an escalating invasion, companies are struggling to remove themselves from the country*

Over 750 companies have curtailed their operations in Russia so far, with businesses facing few good exit options. Divestment is proving to be costly, with scarce potential buyers and reputational risks involved with selling to willing Russian purchasers.

The corollary of this is that companies are facing major write-offs. **Belgium** multinational beverage company Anheuser-Busch Inbev is facing a €1 billion write-off while in discussions to sell its **Russian** and **Ukrainian** operations to its partner, **Turkey's** Anadolu Efes. For its part, **France's** Societe Generale has copped a €3.1 billion write-off. To make matters worse, the bank faced backlash after announcing on April 11 that it will sell its operations to Rosbank, an investment company founded by Russian billionaire Vladimir Potanin. One senior bank executive labelled the deal as a “gift” to Potanin.

**Japanese** companies invested in Russian projects, such as Mitsui & Co, and Mitsubishi Corp were (until Tokyo ruled out divestment) under pressure to follow **US** and **EU** companies in exiting Russia. These companies expressed concern that exiting the country would open the door up to **Chinese** competitors to snap up assets on the cheap. These concerns are valid – with Chinese companies, including CNPC, CNOOC and Sinopec, in the box seat to purchase Shell's Russian assets.

Overall, these complicated variables are leading many companies to adopt a wait-and-see' approach after initially announcing plans to withdraw. Whether this will fly with ESG-conscious investors remains to be seen.

### Estimated write down of companies exiting Russia

As of 29 April 2022

Company	Estimated write-down (€bn)
<b>BP</b>	23.0
<b>Shell</b>	4.7
<b>TotalEnergies</b>	3.9
<b>Societe Generale</b>	3.1
<b>Renault</b>	2.2
<b>Carlsberg</b>	1.3
<b>Anheuser-Busch InBev</b>	1.0
<b>Heineken</b>	0.4
<b>Imperial Brands</b>	0.2

Source: Financial Times, 2022