



**STRIDER**

# SHIFTING ICE

Russia's Increasing Reliance on the Private  
Sector and the PRC in the Arctic

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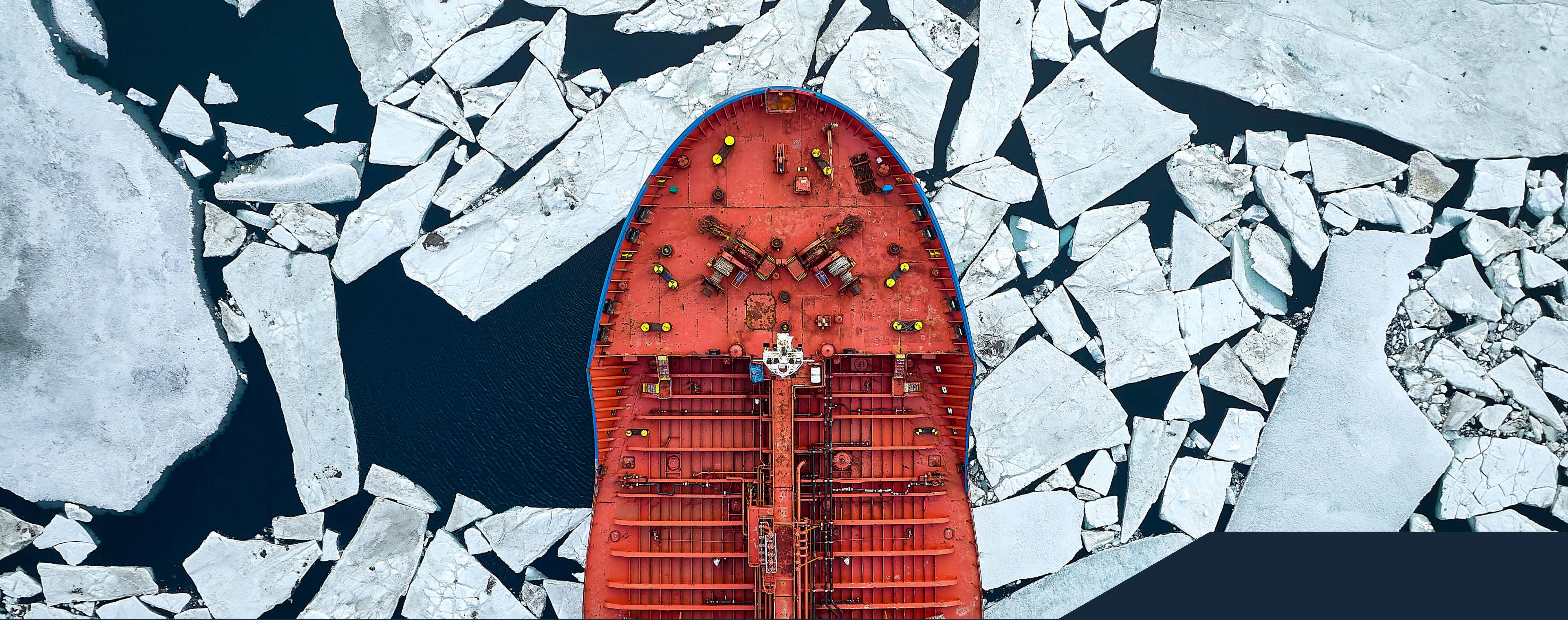
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**“At the current stage of Russian development, controlling the Arctic is one of the key priorities. The Arctic region, being extremely rich in resources and having large transportation and military significance, is considered the most important driver of the country’s economic and geopolitical expansion.”**

Russia’s Project  
Office for Arctic  
Development’s 2018  
Polar Index Report







# EXECUTIVE SUMMARY

**Once recognized as a region for global cooperation, changing geopolitical dynamics and the warming climate are turning the Arctic into an arena of strategic competition.**

Russia will soon be the only non-NATO Arctic country, and Moscow is trying to assert dominance in the region. At the same time, the self-proclaimed “near-Arctic” country, the People’s Republic of China (PRC), is maneuvering to establish a presence in the region. Meanwhile, NATO is quickly trying to make up ground and establish a unified approach to deterrence in the Arctic. At stake in this competition are more than potential security and defense advantages, but also access to immense economic benefits, such as resource extraction and control over the Northern Sea Route (NSR).

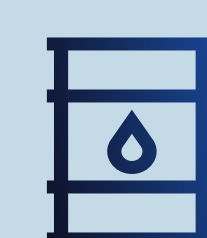
The demands of the war in Ukraine combined with Russia’s mounting economic and diplomatic isolation are forcing Moscow to shift resources and rely on the private sector and cooperation with the PRC to expand its foothold in the Arctic.

Sino-Russian cooperation in the Arctic began in the early 2010s, but Russia purposefully kept PRC involvement in the region limited.

Following the 2014 annexation of Crimea, Russia opened the door to more PRC involvement, and in the wake of the 2022 invasion of Ukraine, the PRC’s activities in the Arctic have hit an all-time high.<sup>1</sup> Russia’s increasing willingness to allow the PRC in the Arctic demonstrates the realness of their “no-limits” partnership<sup>2</sup> and its potential counterbalance to U.S.-led alliances.



Between January and June 2023, **123 new companies with PRC ownership registered to operate in the region; a total of 111 registered in 2022, 77 in 2021, and only 48 in 2020.** Strider data also shows increasing Russia-PRC cooperation in several Arctic and Far East projects since 2013, especially in the areas of liquified natural gas, mineral extraction, and infrastructure.



Russia-PRC trade via the NSR is also on the rise. **At least 11 ships transported Russian crude oil to the PRC via the NSR in 2023;<sup>3</sup> in 2022, only one “trial” voyage to the PRC was made.<sup>4</sup>**





**Largely due to the demands of the ongoing war in Ukraine, Moscow is redirecting conventional defense spending away from the Arctic. To sustain and expand its presence in the region, Russia is strengthening its ties with PRC and is increasingly depending on state support mechanisms to attract private investment.**

- Though Russia is maintaining its strategic nuclear forces in the Arctic,<sup>5</sup> Strider has identified a significant decrease in spending by four of five powerhouse Russian state-owned defense organizations in the Arctic. Compared with the peak spending in 2019, the cumulative spending of these five organizations declined by approximately 90% in 2021, a possible indication that Russia's attention was turned to its western border as tensions with Ukraine increased prior to the full-scale invasion in 2022.
- The budget for the government body responsible for socioeconomic development of the region, the Ministry for the Development of the Russian Far East and Arctic (MDRFEA), has increased almost 300% since 2016, according to Strider's data. Private-sector company and individual entrepreneur participation in Kremlin-backed special economic zones in the region increased from approximately 230 in 2016 to more than 4,000 in 2023.

These changes demonstrate the Arctic is still a priority for Russia's geopolitical strategy and ambitions. Thus, while Russia is adapting and balancing both a full-scale invasion of Ukraine and pursuing its Arctic ambitions, the West, NATO, and other Arctic stakeholders need to similarly adapt and balance countering Russia in both Ukraine and the Arctic. The failure to do so would result in the West falling further behind and risking Arctic security and losing economic benefits to Russia and the PRC.



Private sector company and individual entrepreneur participation in Kremlin-backed special economic zones in the region increased from approximately

**230 in 2016**

to more than

**4,000 in 2023.**





# A SUBTLE, YET REMARKABLE, SHIFT IN STRATEGY

Russia's activities in the Arctic have grabbed Western headlines in recent months. This attention has been driven in no small measure by Moscow's full-scale invasion of Ukraine and the subsequent decision by Finland and Sweden, both Arctic countries, to pursue membership in the NATO alliance.<sup>6</sup>

However, many observers have missed subtle, yet remarkable, changes in the Kremlin's Arctic strategy.



Strider data shows that Moscow is shifting conventional defense spending away from the Arctic. **To offset these cuts and maintain its foothold in the wake of increasingly political isolation, Russia is granting the PRC a larger role in developing the region and pivoting to private investment.**





# OPENING THE DOOR TO THE PRC

For decades, Russia took active steps to exclude the PRC and other non-Arctic countries from playing a role in the Arctic. Moscow prioritized collaboration with the Arctic Council nations and contended that its members alone should decide the region's future. Some Sino-Russian projects began in the early 2010s, but Russia denied PRC scientists the opportunity to conduct research in the region and opposed the participation of PRC shipyards in building icebreakers.<sup>8</sup>

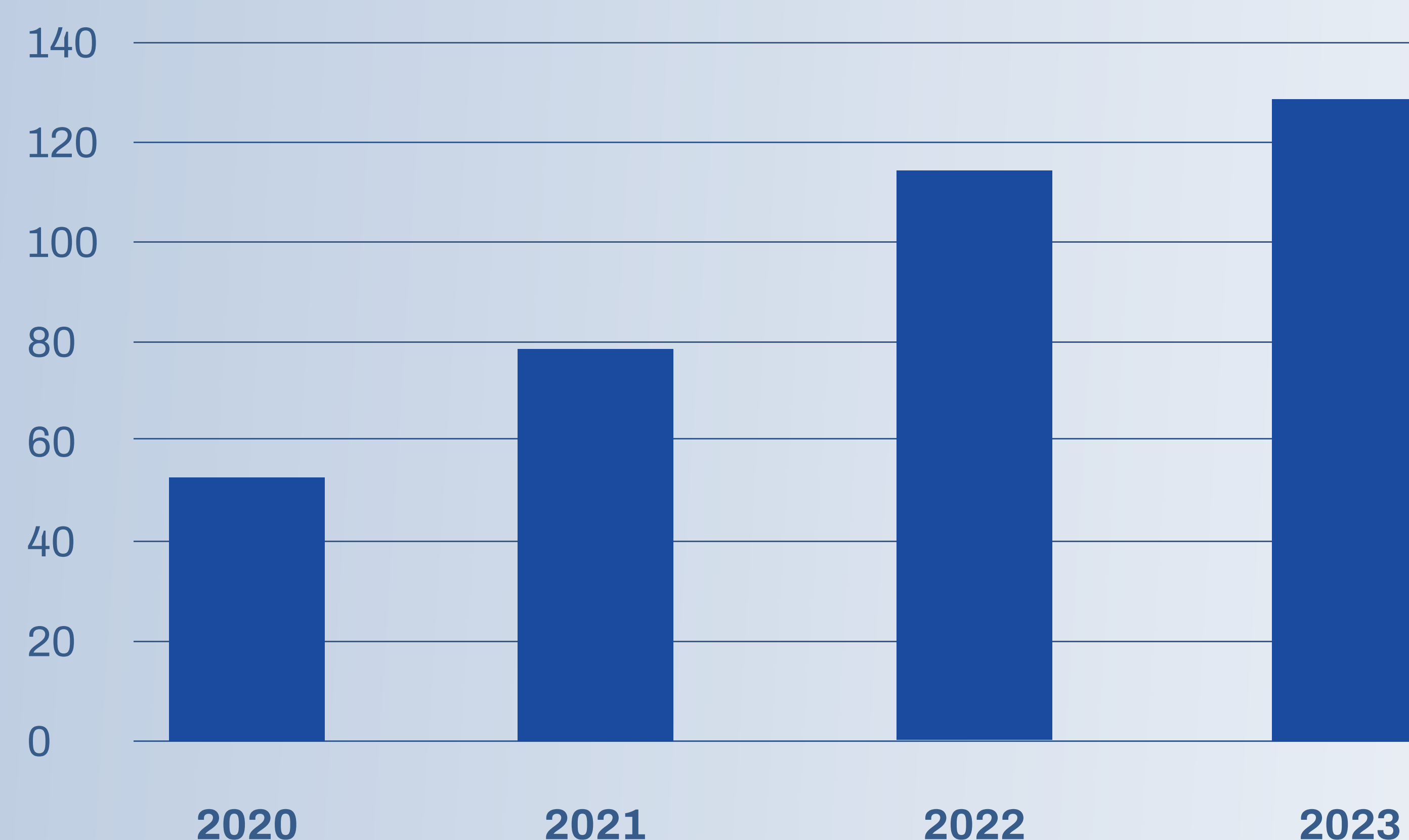
But Russia's increasing economic and diplomatic isolation is forcing the Kremlin to change its approach. Other Arctic Council members have suspended their cooperation with Russia,<sup>9</sup> forcing it to seek partnerships with the PRC that would have previously been unthinkable. **Russia opened the door to more PRC involvement in the region after the 2014 annexation of Crimea and, following the invasion of Ukraine in 2022, the PRC's activities in the Arctic have hit an all-time high.**<sup>10</sup>

The past three years have seen a dramatic increase in the number of companies with PRC ownership operating in the Arctic and Far East. Strider data shows that 48 new companies with PRC ownership registered to operate in the Arctic- and NSR-adjacent regions in 2020. The following year, 77 registered. In 2022, the number grew to 111. Through just the first six months of 2023, the number increased to 123, bringing the total number of companies with PRC ownership registering to operate in the region to 359 between January 2020 and June 2023.<sup>11</sup>

“We see cooperation with Chinese partners in developing the transit potential of the Northern Sea Route as promising.”

**VLADIMIR PUTIN, MARCH 2023**<sup>7</sup>

## New PRC-Owned Companies Registering in the Arctic Each Year



Note: 2023 includes only data from January through June.





**Strider data also shows increasing PRC participation in Russian development projects in the region since 2013,<sup>12</sup> especially in the areas of liquified natural gas, mineral extraction, and infrastructure.<sup>13</sup>**

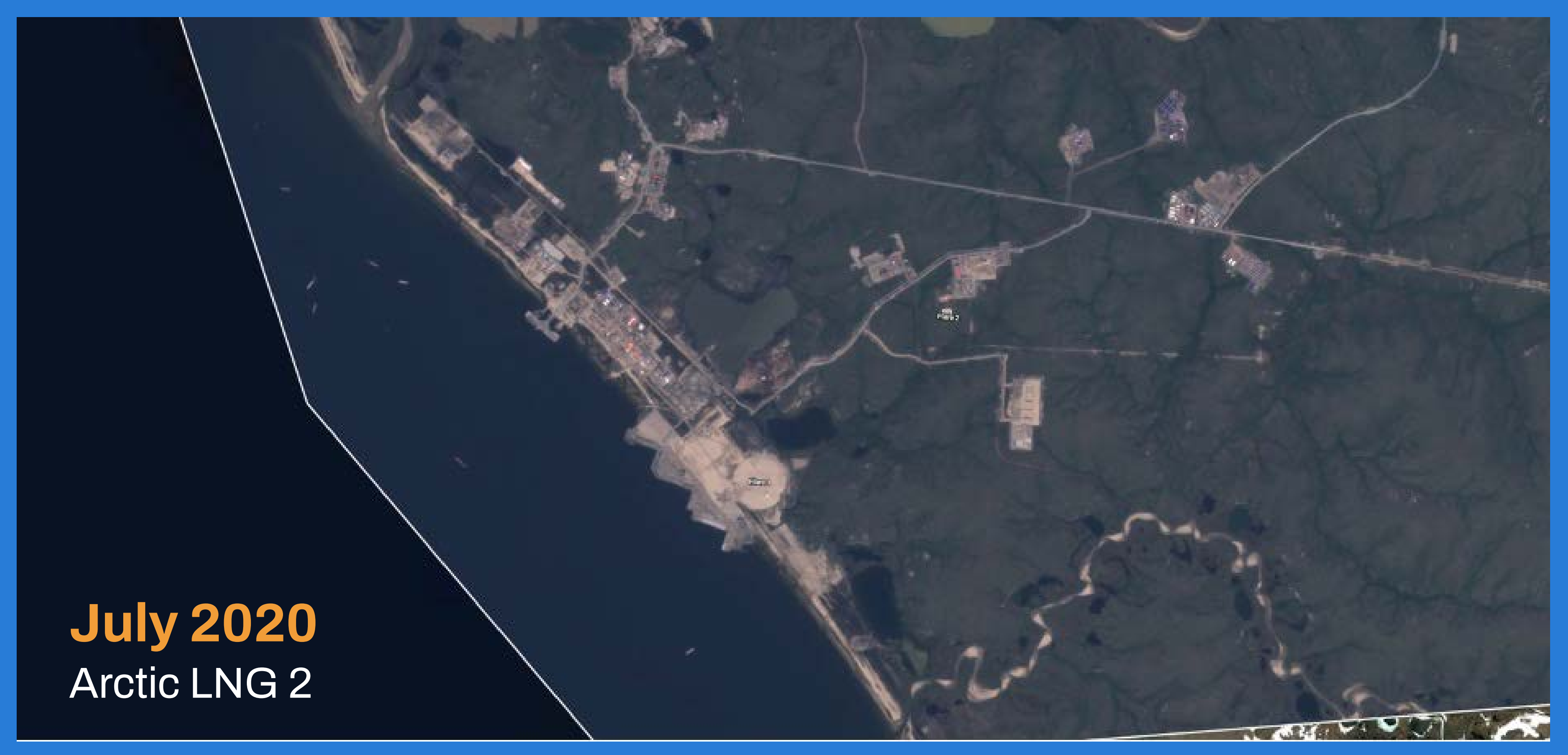
In the early 2010s, the PRC state-owned oil company China National Petroleum Corporation (CNPC) purchased a 20% stake in Russia's Yamal Liquefied Natural Gas (LNG) project.<sup>14,15</sup> International sanctions following Russia's annexation of Crimea in 2014 created financial difficulties for the project, and Russia was no longer able to secure credit from European institutions. In 2015, Russia sold another 9.9% stake in Yamal LNG to the PRC via the Silk Road Fund to secure the future of the project. Additionally, since at least 2017, the PRC has supplied technology, such as drilling rig installations, to Russian LNG producers.<sup>16</sup>

One of the most recent examples of PRC involvement in Russian Arctic development projects is Arctic LNG 2. In 2019, two PRC organizations, CNPC and China National Offshore Oil Corporation (CNOOC), each purchased a 10% stake in the project for more than \$4 billion.<sup>17</sup>

As the project lost access to Western technology following Russia's full-scale invasion of Ukraine, the PRC has stepped in to fill the gap by providing key technology, such as gas turbines.<sup>18</sup> Despite the United States' implementing sanctions to try to kill the project,<sup>19</sup> PRC technology has helped keep Arctic LNG 2 alive.<sup>20</sup> The progression of the project is evident in satellite imagery that shows July 2020 versus July 2023.



**Despite the war in Ukraine, Russia, with PRC funding and technology, has managed to drastically update and prepare the area to be one of Russia's primary LNG shipment locations.**



**July 2020**  
Arctic LNG 2



**July 2023**  
Arctic LNG 2

*Image & analytics courtesy of Planet Labs & SpaceKnow.*







**The PRC has invested heavily in other Russian Arctic development projects. In 2023, the China Communications and Construction Company signed an agreement with Russian Titanium Resources.**

In addition to mining, the cooperation will include infrastructure projects such as the expansion of the Indiga deep-water port and the Sosnogorsk-Indiga railway.<sup>21</sup>

Russia-PRC trade via the NSR is also on the rise. Eleven ships transported Russian crude oil to the PRC via the NSR in 2023.<sup>22</sup> In 2022, only one “trial” voyage was made.<sup>23</sup>

Although economic cooperation between Russia and the PRC has been occurring for more than a decade, experts agree that a game-changing moment would be a Sino-Russian partnership that moved from the economic space to the security realm. Recent months have seen indications of such a shift.<sup>24</sup>



**In 2023, the Russian Federal Security Service and the PRC Coast Guard signed a memorandum of understanding covering cooperation on maritime law enforcement in the region, including counterterrorism, arms and drug smuggling, illegal migration, illegal fishing, and rescue operations.**

The Russian Federal Security Service also invited<sup>25</sup> the PRC Coast Guard to observe its maritime security exercise, “Arctic Patrol 2023.”<sup>26</sup> In August, Russian and Chinese ships participated in naval exercises in the Bering Sea off the coast of Alaska.<sup>27</sup>





# DEVELOPING THE NORTHERN SEA ROUTE

One of the most significant dynamics of a changing climate is the potential of navigable Arctic waterways. As summers get longer and the amount of sea ice decreases, Arctic waterways such as the Northern Sea Route (NSR) become much more economically viable and beneficial, creating a potential focal point for competing regional stakeholders.

The NSR spans the entirety of Russia's eastern and northern borders and decreases the shipping distance from Asia to Europe by approximately 8,000 km. Not only does the NSR cut transit time, but the route also has the potential of being a significant source of revenue. Countries like Panama and Egypt are each able to bring in billions of dollars a year from maritime transit fees through their respective waterways. Russia views the NSR as an opportunity to diversify its economy away from solely hydrocarbon exports.<sup>28,29</sup>

This view prompted the Russian government in 2022 to allocate \$29 billion to the development of the NSR through 2035. The plan envisions the NSR as a superhighway for exporting minerals and other natural resources from the Arctic and aims to facilitate the construction and expansion of Russian ports and new areas of economic growth in the region.<sup>30</sup>

Northern Sea Route

Suez Canal Route





# SHIFTING DEFENSE SPENDING

**Moscow points to foreign invasions—from Genghis Khan and Napoleon Bonaparte to Adolf Hitler— and what it views as NATO encroachment to justify the need to maintain a buffer zone around its borders.**

Ironically, Russia's efforts to keep NATO away from its western border have resulted in it being surrounded at its northern border. Prior to the invasion of Ukraine, five of the eight Arctic countries were members of NATO. Finland has since joined the security alliance, and Sweden is seeking to follow suit. When it does, Russia will be the lone non-NATO country in the Arctic.<sup>32</sup>

Contrary to Putin's 2014 pledge to "qualitatively strengthen" Russia's position in the region, the construction of military infrastructure as of late appears to be minimal. Though Russia has continued to fund the strategic assets of the Northern Fleet, substantial military infrastructure updates appear to be slowing.<sup>33</sup> Satellite imagery shows some improvements to runways, radars, and other infrastructure,<sup>34</sup> but most of these projects are aimed at updating aging Soviet-era bases, rather than substantially expanding military capabilities.<sup>35</sup>

"Over decades, step by step, Russia has built up, strengthened its positions in the Arctic... And our goal is not only to regain them, but also to qualitatively strengthen them."

**VLADIMIR PUTIN, 2014<sup>31</sup>**

**When Sweden joins NATO, Russia will be the lone non-NATO country in the Arctic.**

■ Part of NATO    ■ Not part of NATO

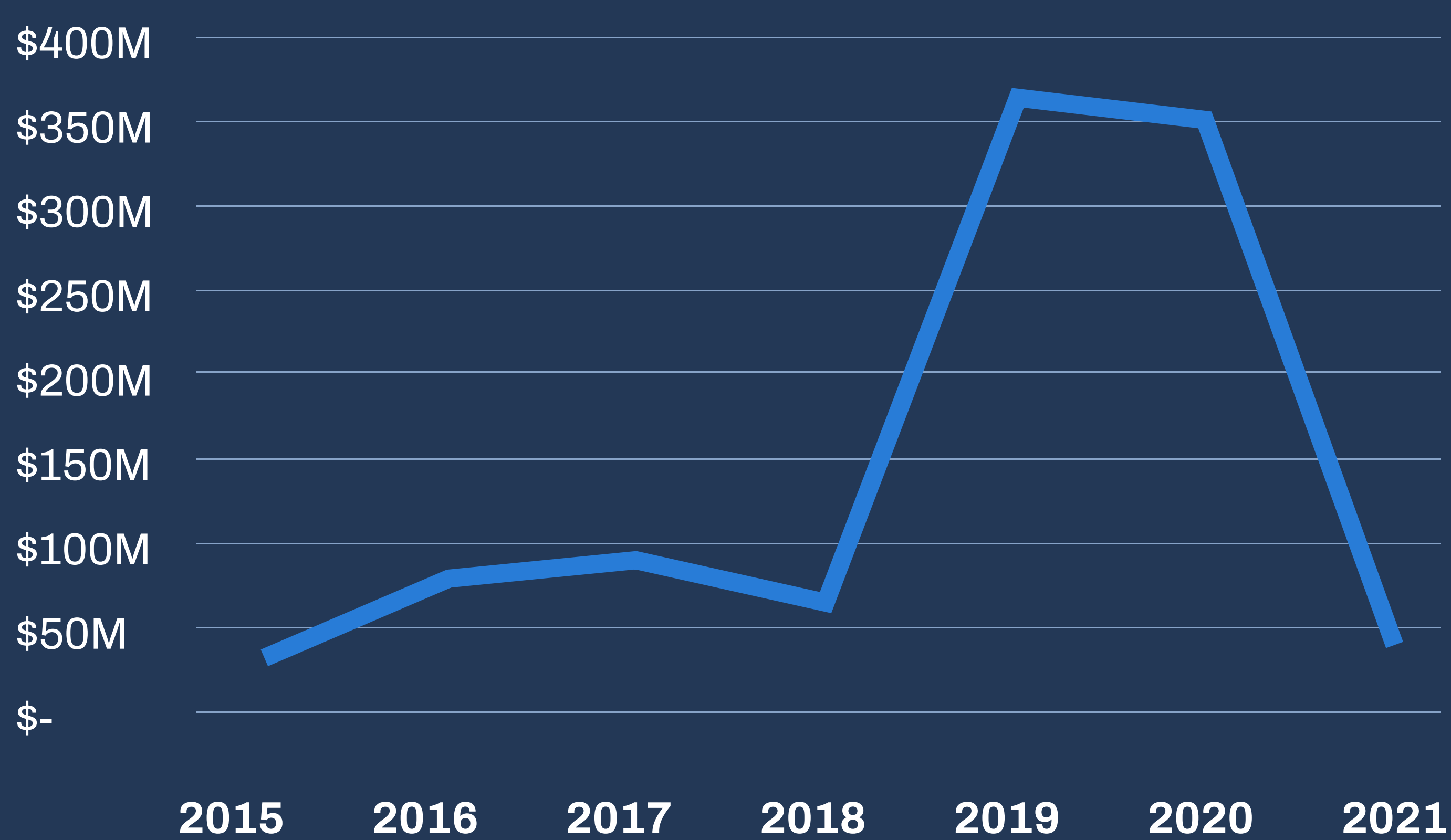




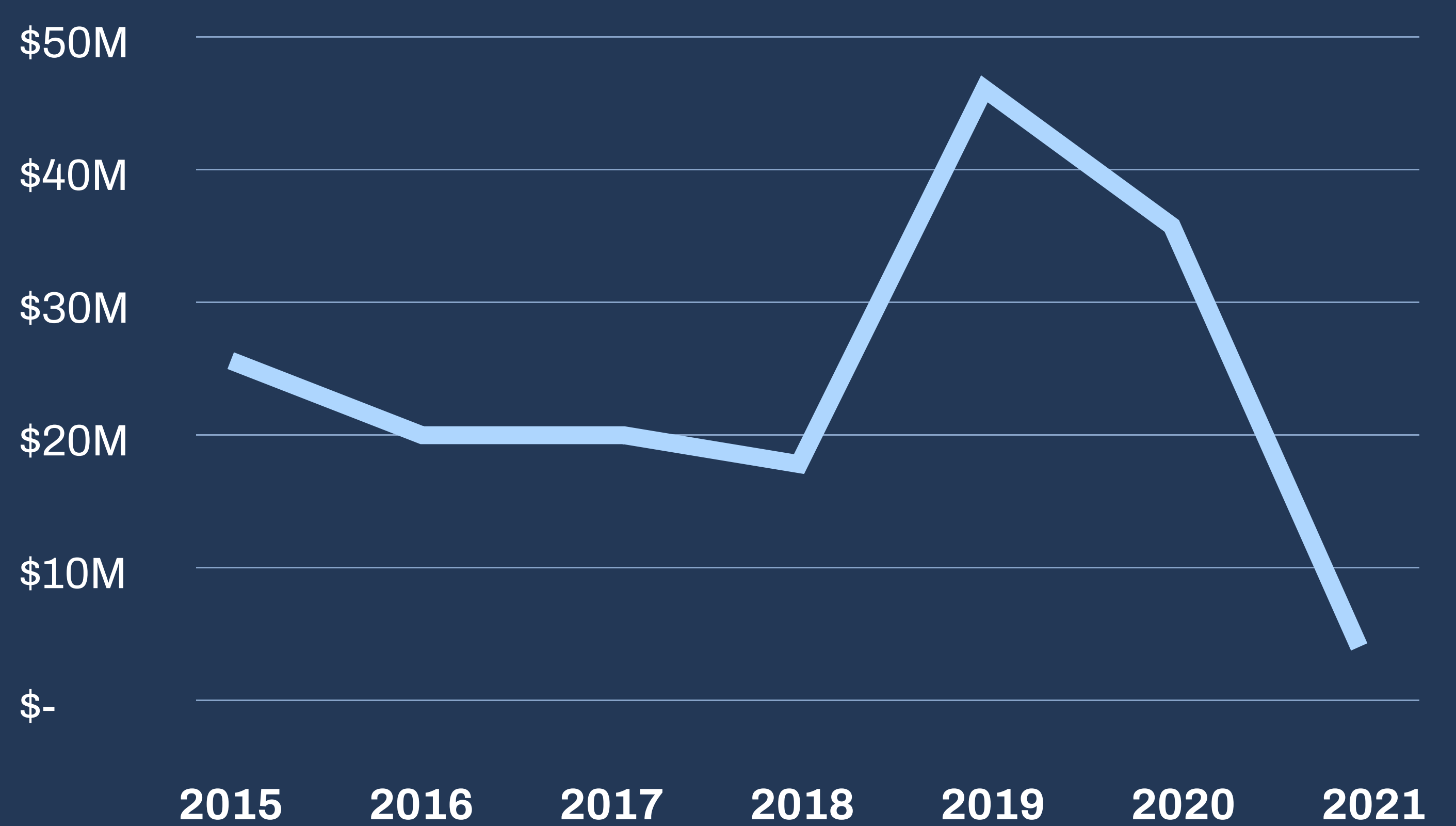
The lack of significant expansion of military infrastructure is likely the result of defense budget reprioritization. While Russian defense spending overall increased in the run-up to the Ukraine invasion,<sup>36</sup> conventional defense spending in the Arctic has remained stagnant.<sup>37</sup> Strider analyzed spending by five major Russian defense bodies in the Arctic since 2015 and discovered that aggregate expenditures dropped sharply in the lead-in to the Ukraine invasion. **From peak spending in 2019, the cumulative spending of these five organizations declined by approximately 90% by 2021.**

Four of the companies are part of the United Shipbuilding Corporation, a state-owned enterprise responsible for developing Russia’s maritime infrastructure in the Arctic. United Shipbuilding is also the country’s largest shipbuilder and is responsible for almost all warships built for the Russian Navy.<sup>38</sup>

### Ship Repair Center “Zvezdochka”<sup>39</sup>

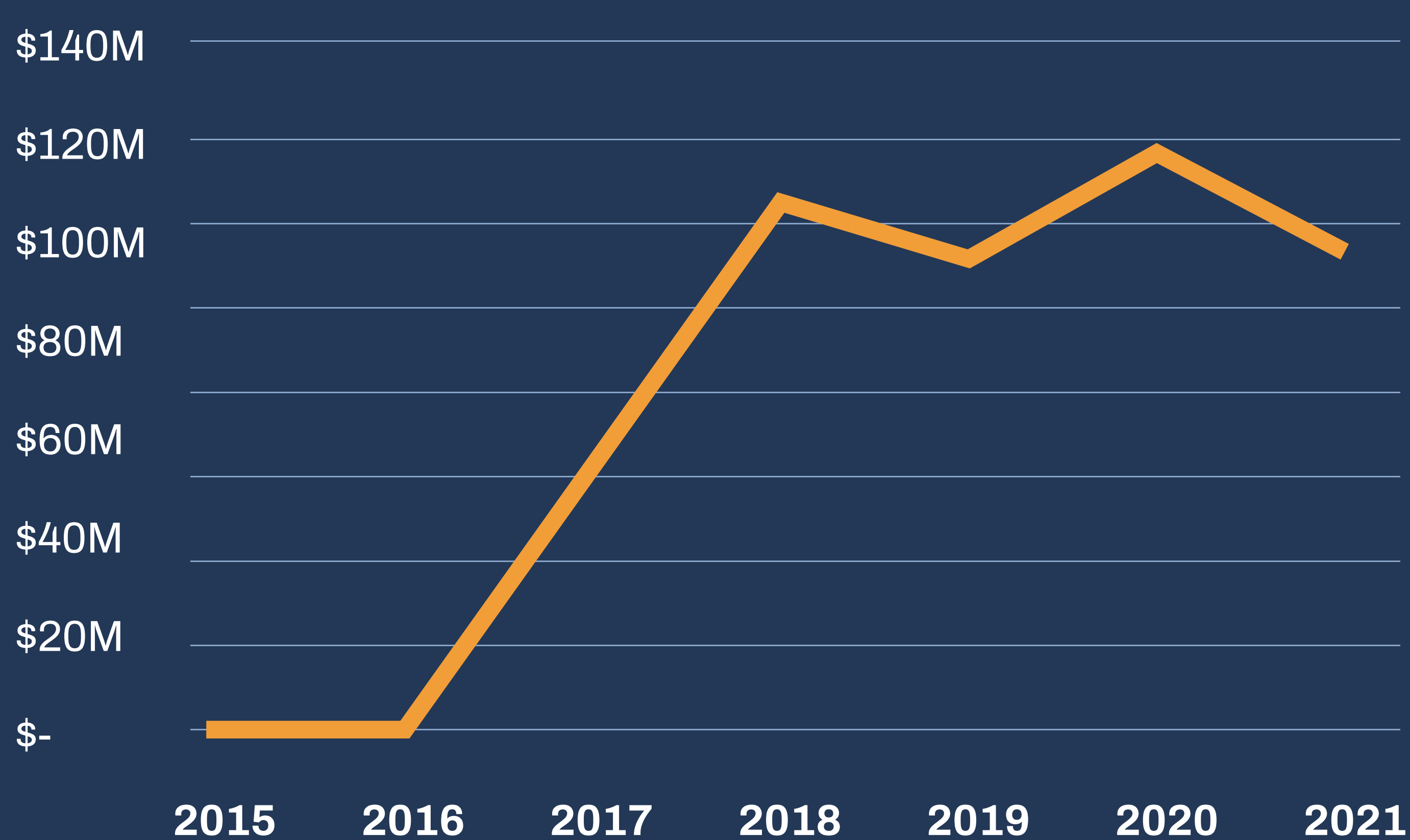


### Northern Production Association Arktika<sup>40</sup>



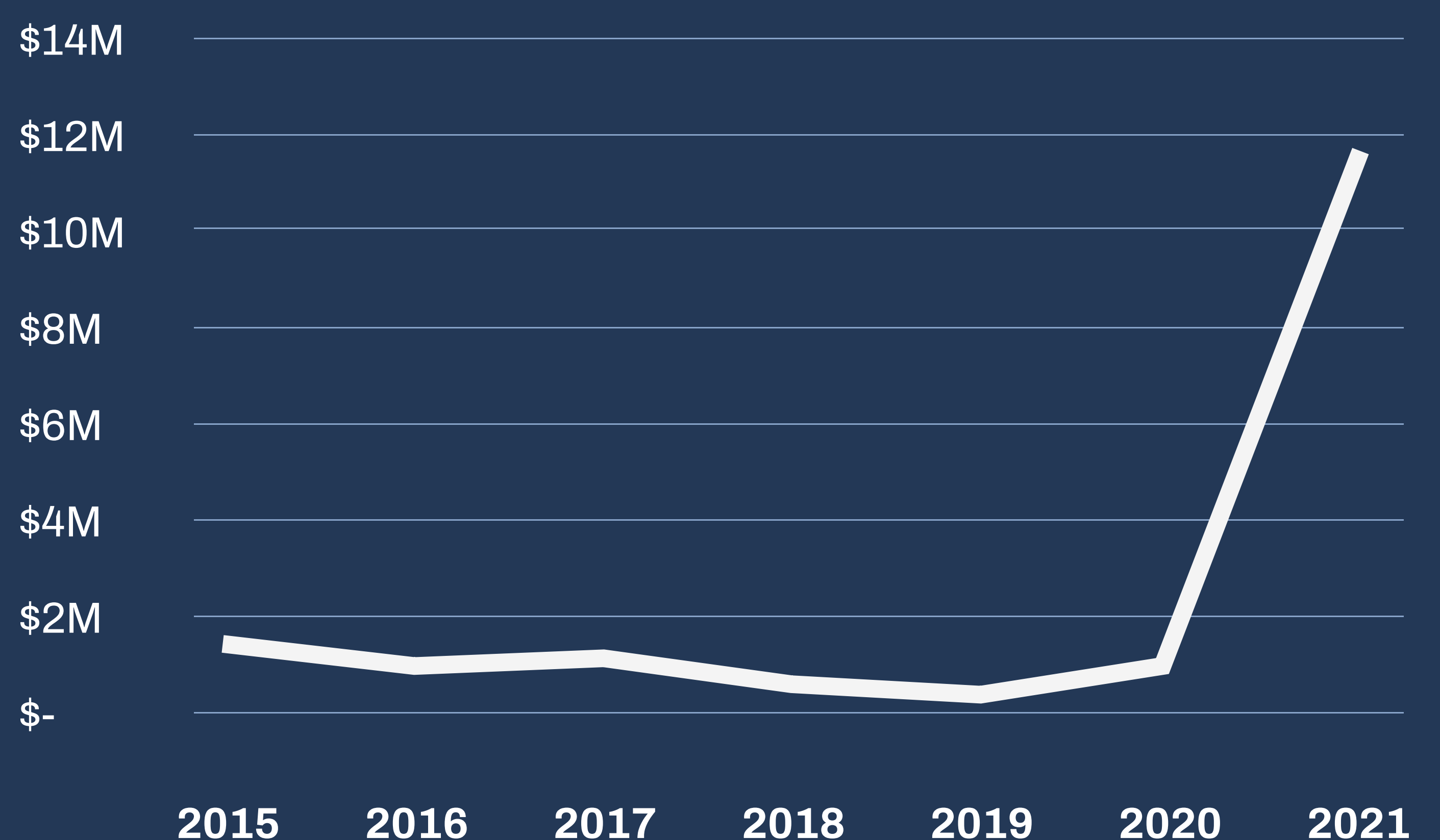
Ship Repair Center “Zvezdochka” and Northern Production Association Arktika both experienced dramatic decreases in spending between 2020 and 2021.

### Sevmash<sup>41</sup>



Even Sevmash, where Putin dedicated two new nuclear submarines in December 2023,<sup>42</sup> experienced an almost 18% decline in spending between 2020 and 2021.

### Research and Design Technological Bureau ONEGA<sup>43</sup>



Research and Design Technological Bureau ONEGA is the outlier among the companies, experiencing an increase in spending between 2020 and 2021.





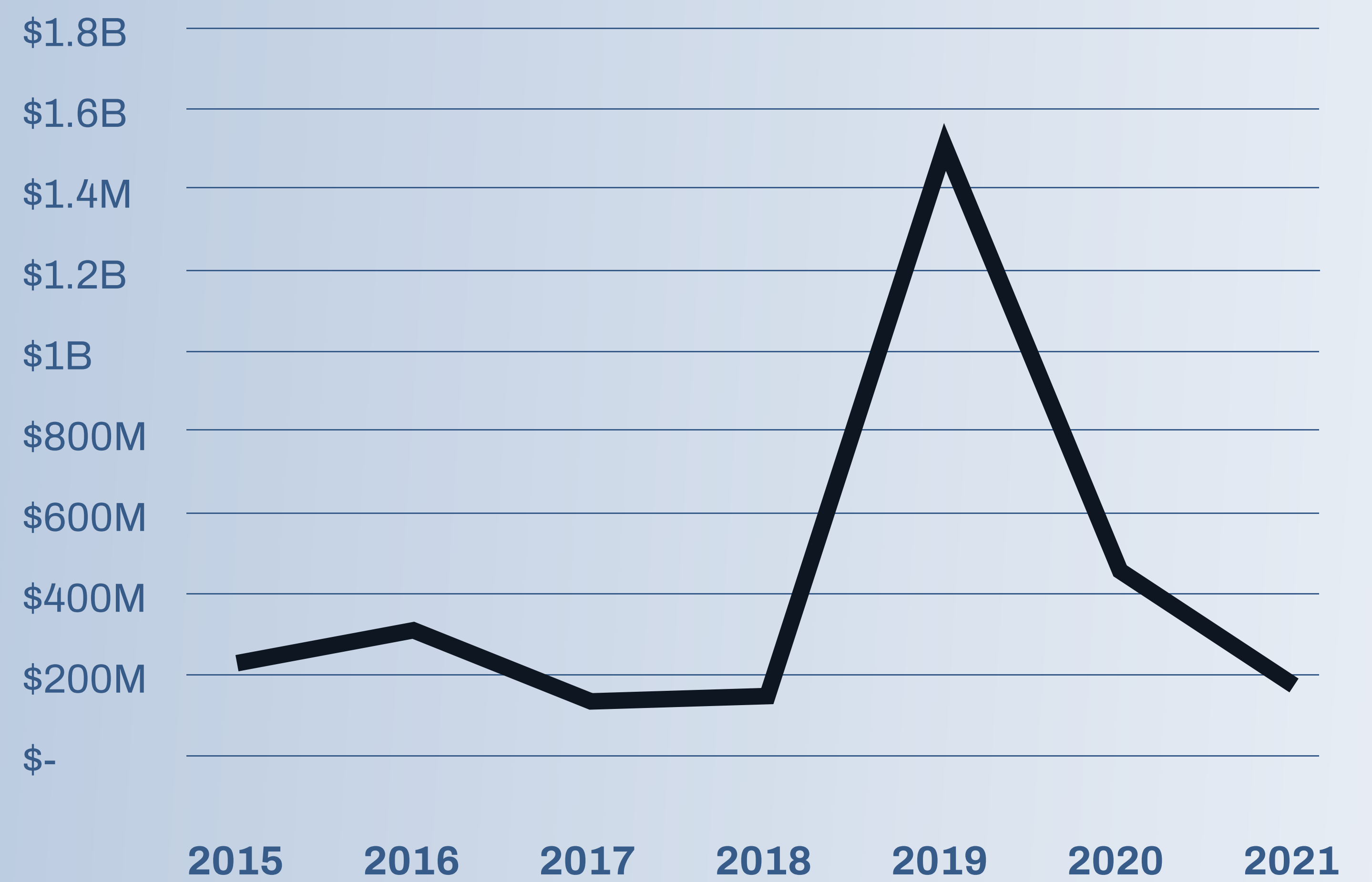
The sixth Arctic defense company, Atomflot, maintains Russia’s fleet of nuclear-powered icebreakers. Atomflot is part of the Russian state-owned nuclear corporation, Rosatom.<sup>44</sup>

### Atomflot<sup>45</sup>



Similar to Ship Repair Center “Zvezdochka” and Northern Production Association Arktika, Atomflot also experienced a dramatic decrease in spending between 2020 and 2021.

### Aggregate<sup>46</sup>



As an aggregate, the spending of these organizations decreased by approximately 90% between 2019 and 2021. According to the Stockholm International Peace Research Institute, during the period of 2019 to 2021, the overall defense spending of the Russian government increased by 4%.<sup>47</sup>



**Moscow not only views the Arctic from a security perspective, it is also counting on the region to provide an economic springboard for the country. Russia also sees energy extraction in the Arctic as necessary to offset declining production of oil and gas in other areas.**

The Khanty-Mansiysk region in West Siberia, for example, has accounted for 40% of the country’s oil production, but the oil there is dwindling and increasingly difficult to extract.<sup>48</sup> Even prior to Russia’s invasion of Ukraine and the onslaught of international sanctions, energy forecasts predicted that Russia’s crude-oil production could drop 40% by 2035.<sup>49</sup> Without a replacement for the decline in oil output in West Siberia, Russia’s battered economy will face additional challenges.







# INCREASING RELIANCE ON THE PRIVATE SECTOR

As spending by Arctic defense organizations plummeted, Russia's efforts to attract private investment increased sharply. The budget for MDRFEA, the federal executive body charged with the socioeconomic development of Russia's Far East and Arctic regions,<sup>51</sup> has increased nearly 300% since 2016, according to Strider's data.<sup>52</sup>

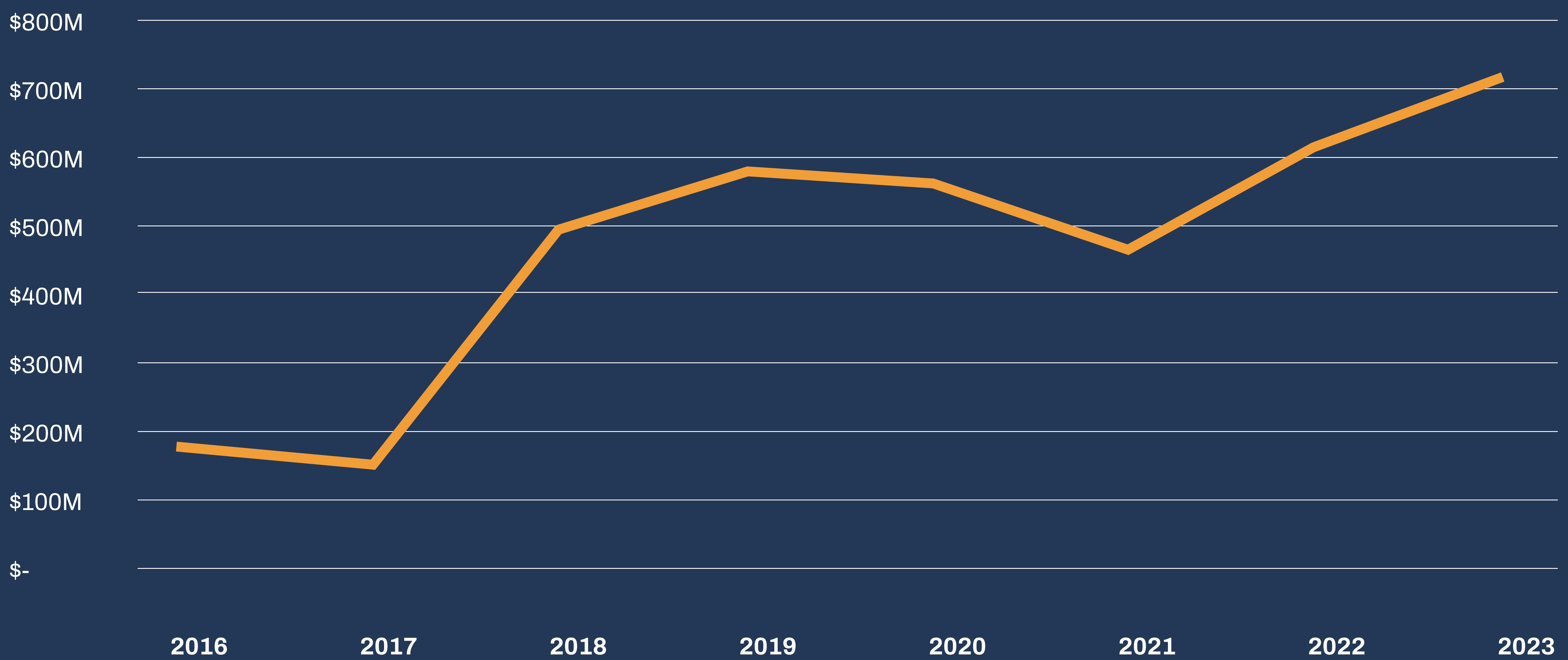
“...for implementing investment projects in the Arctic, I would like you to make active use of state support mechanisms...”

**VLADIMIR PUTIN, APRIL 2022<sup>50</sup>**





## Ministry of Far East and Arctic Development Budget (USD)

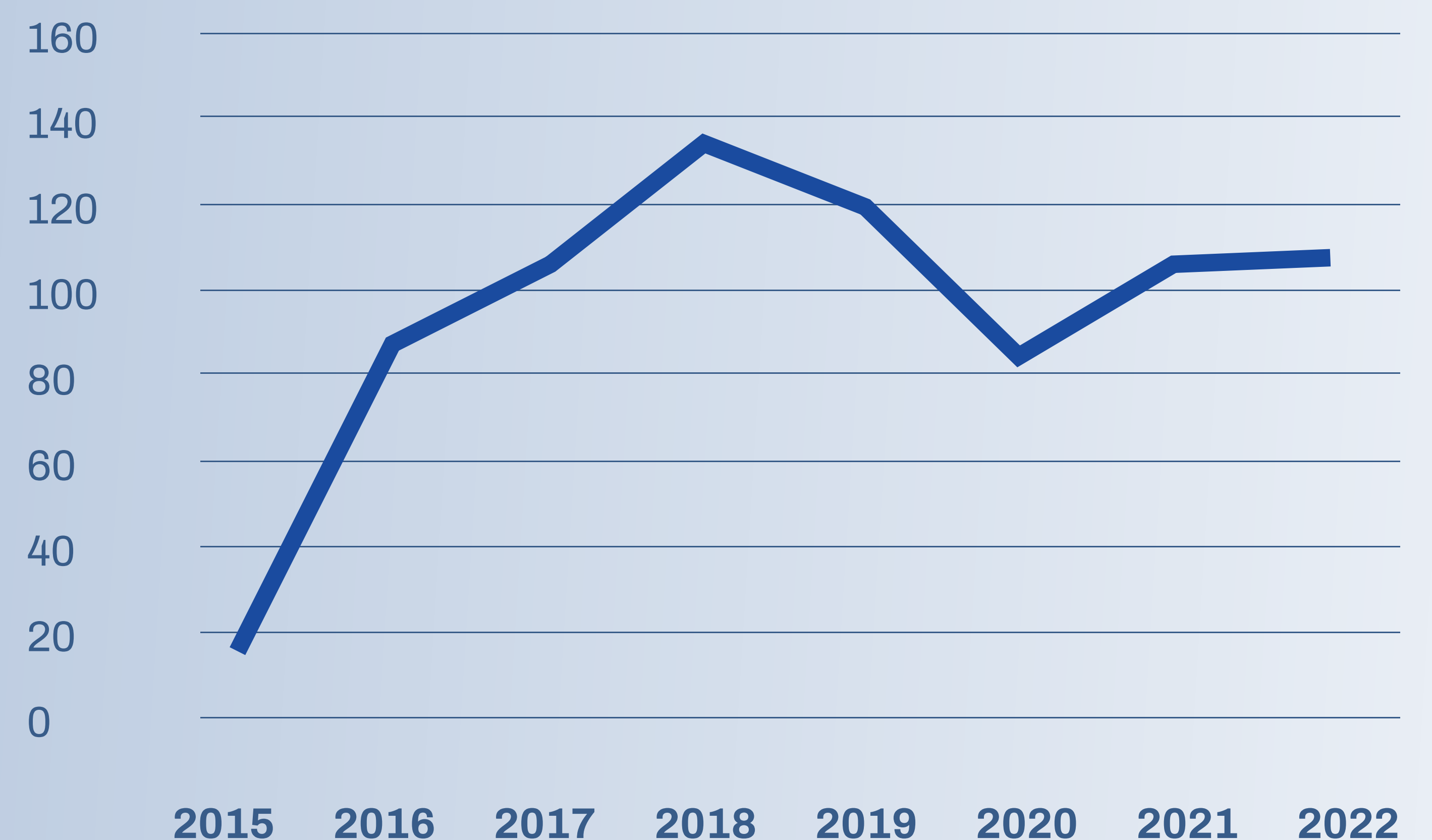


The MDRFEA and its management arm, the Russian Far East and Arctic Development Corporation, oversee several government programs designed to create special economic zones and attract private investment and development in the region.

These include special programs that give incentives to companies and entrepreneurs to develop the Arctic, including areas along the NSR.<sup>53</sup>

The Advanced Special Economic Zone (ASEZ) program began in 2015 and includes 18 special economic zones in Russia's Far East and Arctic regions, primarily in the areas along the NSR, where the MDRFEA has incentivized entrepreneurial activity. Companies that move into these areas receive tax concessions, lower social security tax payments, administrative preferences, and access to land and infrastructure.<sup>54,55</sup>

## Companies Added to ASEZ Each Year



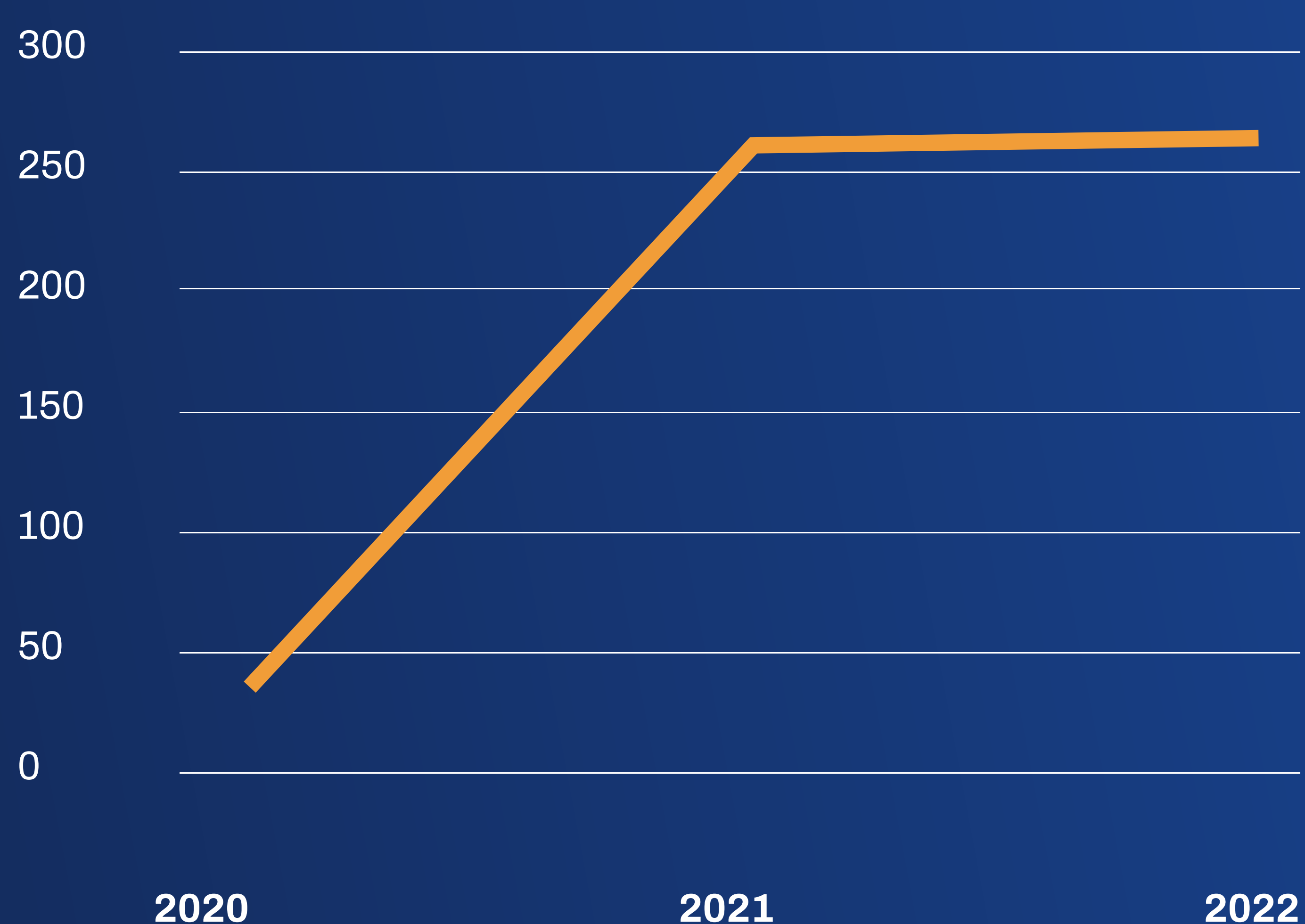


**The MDRFEA also oversees the Arctic Zone of the Russian Federation (AZRF), the world's largest special economic zone, covering all of Russia's nine Arctic regions.**

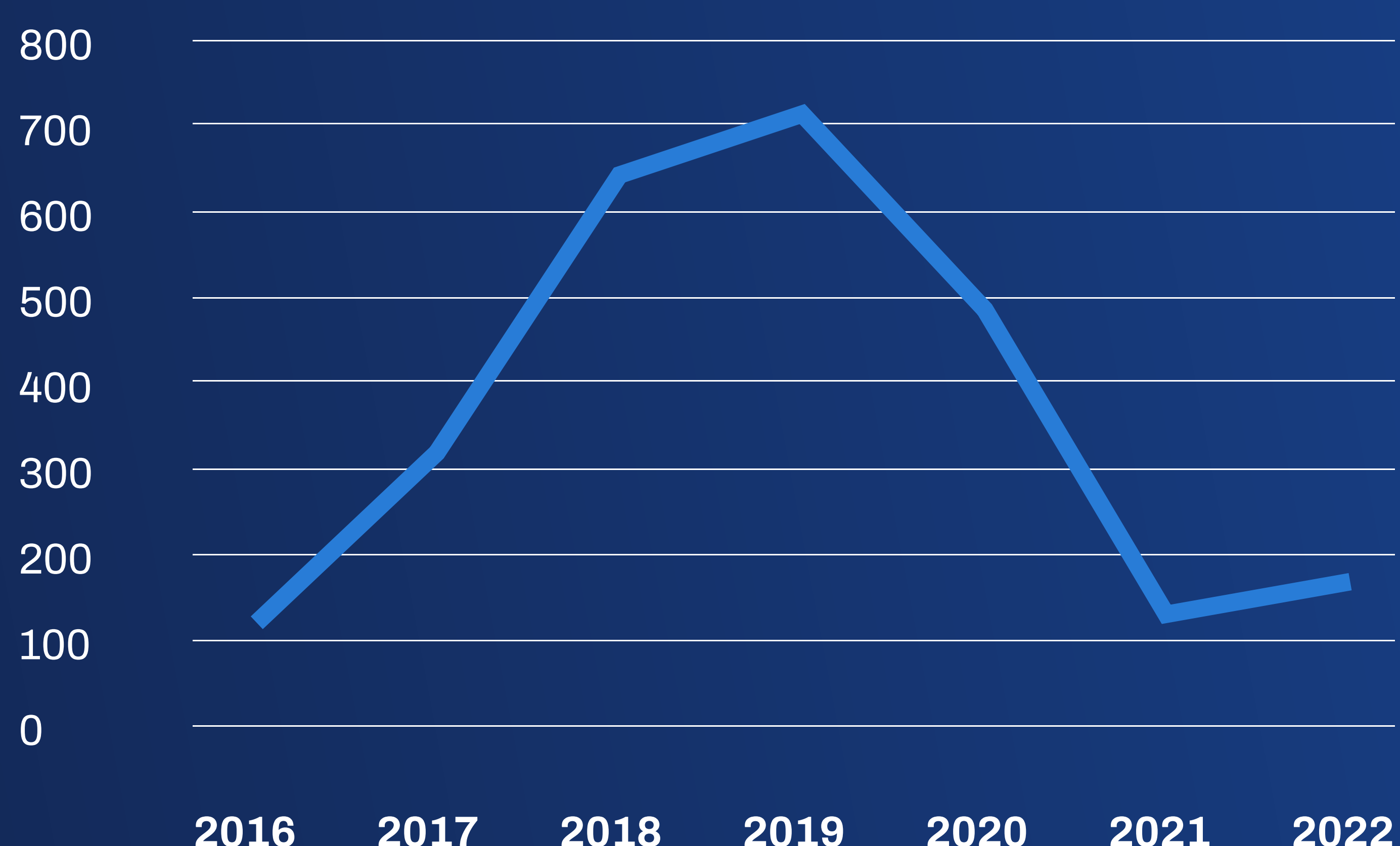
Established in 2020,<sup>56</sup> the program provides tax concessions and administrative privileges to companies and entrepreneurs to develop the Arctic. As of mid-2023, the program had brought 825 billion rubles (\$9.114 million USD) of investment to the region.<sup>57,58</sup>

The Free Port Vladivostok (FPV) has seen a significant decrease in participation since 2019. Unlike the MDRFEA's more Arctic-centric initiatives, the FPV program is primarily designed to attract investment to the city of Vladivostok.<sup>59</sup> Moscow is seeking to turn the city, located near Asian powerhouses like China, South Korea, and Japan, into Russia's version of Silicon Valley. Since 2015, the government has provided incentives for companies to come to Vladivostok, and in 2018, created the Far East High Technology Fund to invest in tech companies in the area. Despite these efforts, there has been a significant decrease in FPV participation since 2019,<sup>60</sup> an indication that companies are unwilling to bet on Vladivostok as a tech hub amid Russia's economic turmoil.<sup>61</sup>

### Companies Added to AZRF Each Year



### Companies Added to FPV Each Year







**Though satellite imagery shows improvements and updates at military sites, the pace of development at military sites is much less than that at commercial and port cities that are receiving substantial private investment.**

For example, Dudinka, one of the primary ports along the NSR<sup>62</sup>, has seen massive development in recent years. Largely spearheaded by Russian oligarch Vladimir Potanin and his mining and metallurgy company Nor Nickel,<sup>63</sup> massive infrastructure projects, such as a new medical center,<sup>64</sup> a logistics center,<sup>65</sup> and other developments to increase cargo volumes at the port,<sup>66</sup> have been completed.



Image & analytics courtesy of Planet Labs & SpaceKnow.



### **Compare the developments at Dudinka to Tiksi Air Base.**

The air base is an important node in Russia's strategic air-defense system in the Arctic, but the base has experienced only minor developments the last several years and many of these developments have been behind schedule.<sup>67</sup> Satellite imagery does show some improvements to the area, such as new radar dome construction, but compared with areas such as Dudinka, these improvements have been minimal.



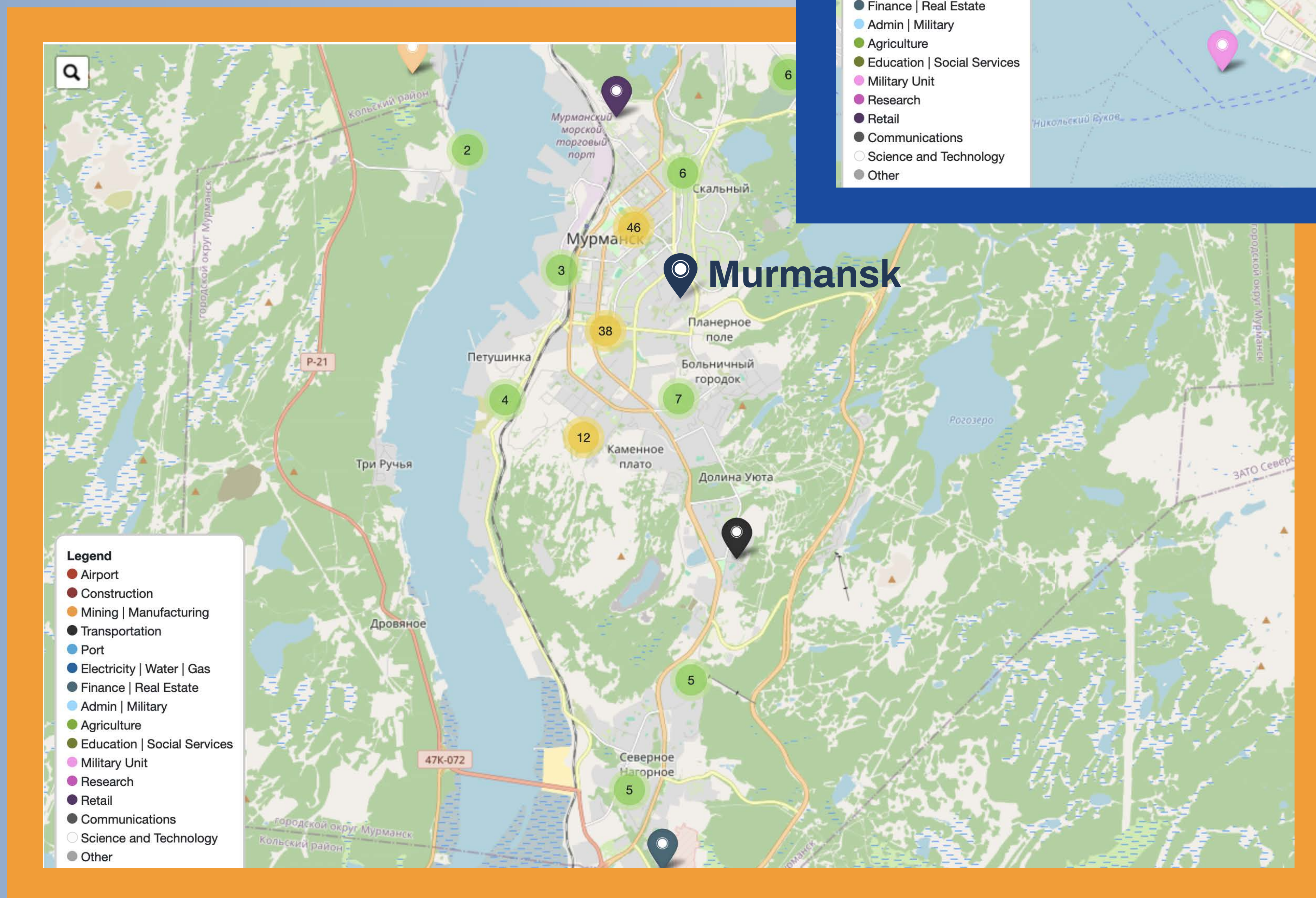
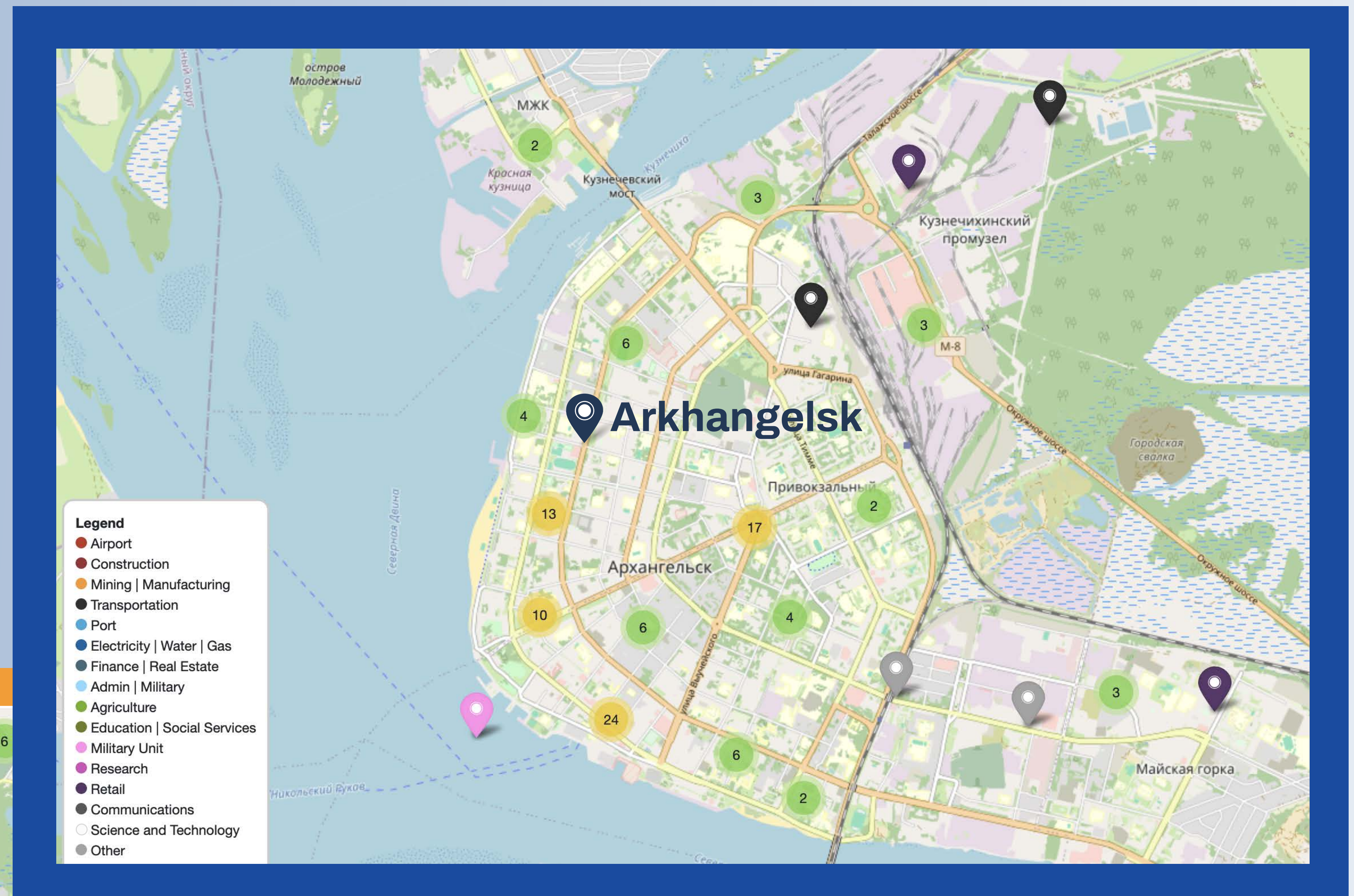
Tiksi Air Base dome construction, September 2021 vs. August 2022  
Image & analytics courtesy of Planet Labs & SpaceKnow.







Strider data shows that the strategically important cities of Murmansk and Arkhangelsk have seen an **increase in participation in state support programs.**



At least 115 entities in Arkhangelsk have received Russian government support to develop the Arctic.

At least 98 entities in Murmansk have received Russian government support to develop the Arctic.

Images are from Strider's Arctic Intelligence Product.

**Despite the substantial resources devoted to the invasion of Ukraine, Russia continues to bet on the Arctic as its economic and security future, but global dynamics are forcing some noticeable differences in strategy.**

The Arctic is emerging as a key battleground in global strategic competition. As Russia shifts its Arctic strategy, the political, economic, and military dynamics of the region are also evolving. The once sleepy fishing villages in northern Scandinavia are now at the forefront of conflict between NATO and Russia, and the formerly peaceful region is increasingly home to NATO and Russian military training exercises, an indication of where the next conflict may occur.<sup>68</sup>

Russia is adapting its strategy to bring in new players, like the private sector and the PRC, to the Arctic. The military will always be a key pillar in Russia's Arctic strategy, but the private sector and the PRC are taking on increasing responsibilities. Now, more than ever, policy makers and Arctic stakeholders need to understand the region's changing dynamics and players. These stakeholders need to look beyond the Russian rhetoric and identify the key players spearheading Russia's Arctic strategy. The West is already trailing Russia's Arctic development, but without this knowledge, the West may never catch up and the Arctic region will find itself completely within Russia and the PRC's sphere of influence.







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