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Russia's Energy Ambitions in the Arctic: Cooperation with Asia

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Outline

I. Russia’s Arctic ambitions

II. Impact of Western sanctions

III. Russia’s pivot to Asia

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I. Russia’s Arctic ambitions

Russia’s Arctic strategy

Basic Principles of Russian Federation State Policy in the Arctic to 2020 (2008)

- **National interests:**
- The Arctic zone as a strategic resource base
- To maintain the Arctic as a region of peace and cooperation
- To preserve the unique ecological systems in the Arctic
- To use the NSR as a national transport route in the Arctic

- **Main objectives:**
- The expansion of the resource base to satisfy Russia’s needs in hydrocarbons and raw materials
- The maintenance of the required combat potential
- Safeguarding the Arctic environment
- The provision of a mutually beneficial regime for bilateral and multilateral cooperation

Russia’s Arctic strategy

- Significant emphasis is placed on improving geological and geophysical prospecting of the continental shelf, implementation of large-scale resource projects and development of transport infrastructure and infrastructure related to the resource projects
- 13% and 30% of the world’s undiscovered oil and gas resources respectively
- Accounts for 10% of Russia’s GDP and 20% of Russia’s exports

Russia’s Arctic strategy

Basic Principles of Russian Federation State Policy in the Arctic to 2035 (2019)

- **National interests:**
- To ensure Russia’s sovereignty and territorial integrity
- To preserve the Arctic as a region of peace, with stable and mutually beneficial partnerships
- To guarantee high living standards and prosperity for people of the Russian Arctic zone
- To develop the NSR as a globally competitive national transport route
- To protect the Arctic environment and indigenous minorities

- **Main achievements by 2020:**
- The creation of regulatory framework for the protection of Russia’s national interests in the Arctic
- The launch of large-scale econ projects
- The creation of integrated infrastructure along the NSR; modernization of the ice-class fleet
- Activization of mutually beneficial international partnerships

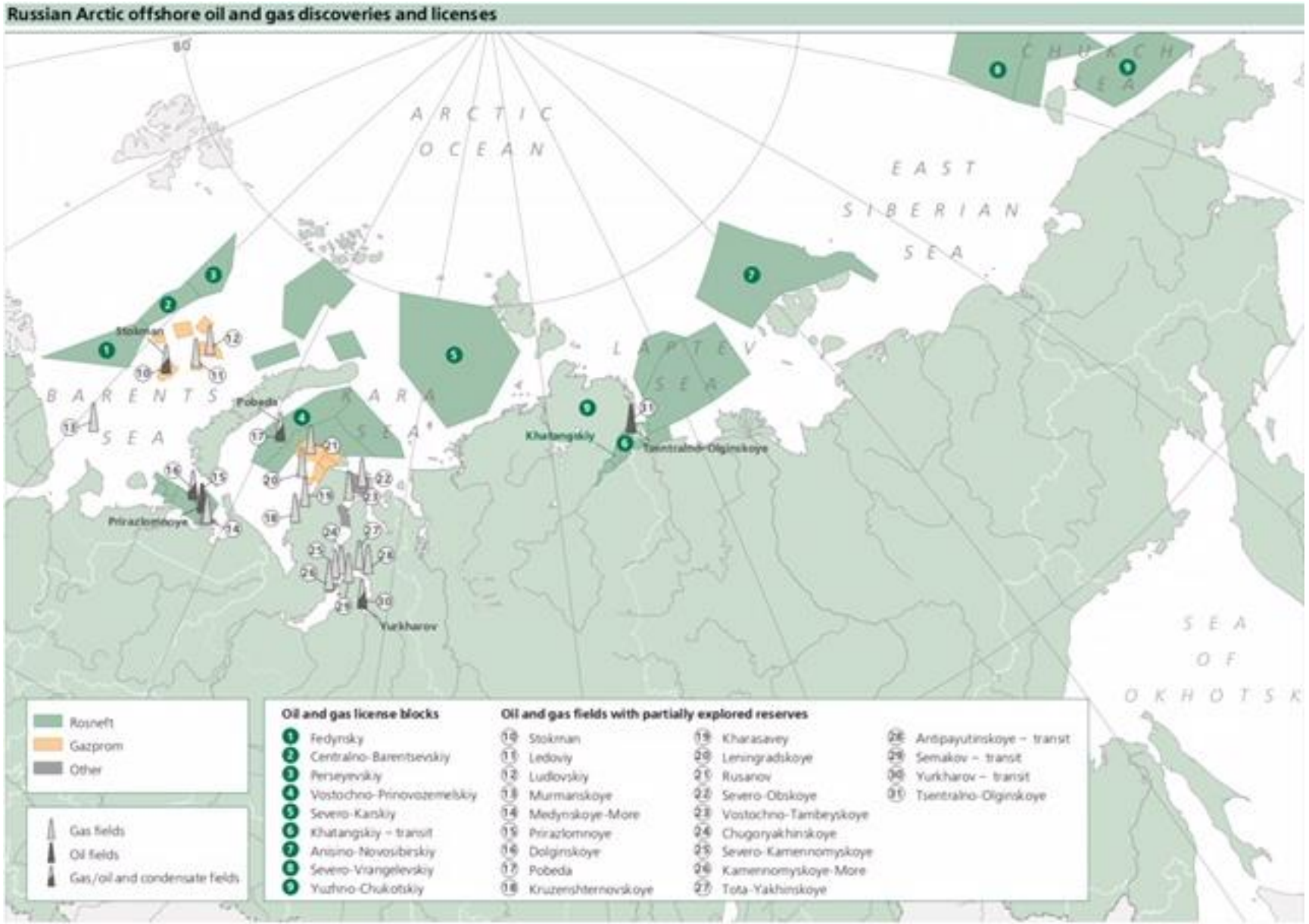
Russia’s Arctic strategy

Basic Principles of Russian Federation State Policy in the Arctic to 2035 (2019)

- **Main threats:**
- Demographic decrease in the Arctic zone
- Low level of development of social, transport and communications infrastructure
- Low pace of geological prospecting
- Lack of Govt support for the realization of econ projects
- Delays with infrastructure development; lack of homegrown technologies for the exploration of the Arctic

New State Programme 2021-2024

- **“Social and Economic Development of the Arctic Zone of the Russian Federation” for 2021-2024**
- Job creation: 28,500 new jobs
- Govt support: tax incentives for new projects; subsidies for infrastructure development
- Attracting private investors: Arctic resident status; granting access to private companies to work on the shelf
- International cooperation through the Arctic fora
- Allocations under the programme in 2021-2024: 22 bn roubles from the budget and up to 490 bn roubles from private investors



Source: Natural Resources Ministry, Sberbank CIB Investment Research

Limited access to the shelf deposits to Gazprom (34.7%), Rosneft (40%) and Lukoil (8.3%)

Foreign companies and private Russian companies can only work on the shelf in cooperation with Gazprom and Rosneft

The Kara Sea and the Barents Sea account for the most of O&G resources; Russian Arctic offshore holds mostly gas (83%)

Most work is conducted on the Arctic onshore; lack of experience and geological prospecting to work on the Arctic offshore

Development of the Northern Sea Route

- 2018: Modernization and Infrastructure Development Plan to 2024
- **The key transportation route to ship hydrocarbons to Europe and Asia**
- May 2018: Goal of transporting 80 mln tonnes through the NSR by 2024 (reduced subsequently)
- **Tightly linked to the development of econ and industrial projects**
- Export of hydrocarbons is the most econ viable activity (90%)
- **Full transit is limited due to weather conditions**
- Modernization of nuclear ice-breaker fleet

CHNL

NSR Shipping Traffic // Actitvities in January - June 2020

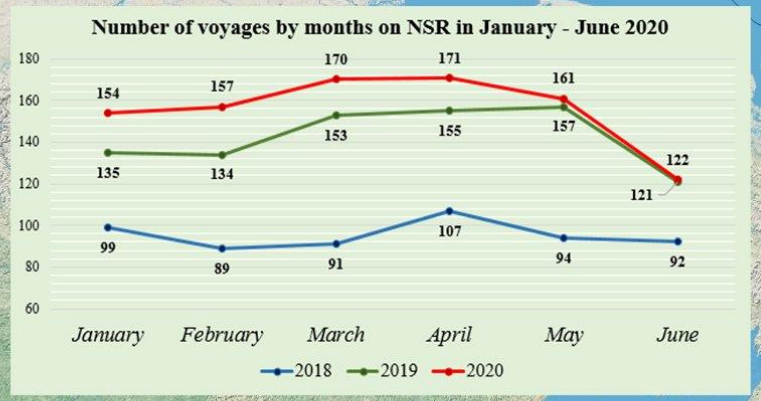
Created by CHNL

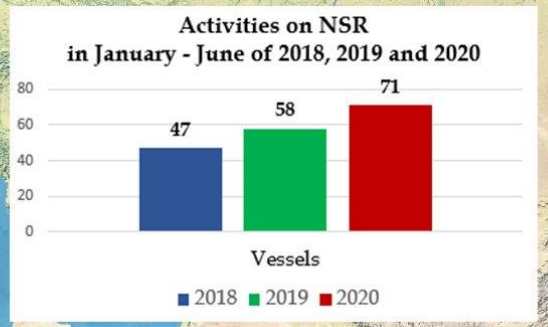
NORD University

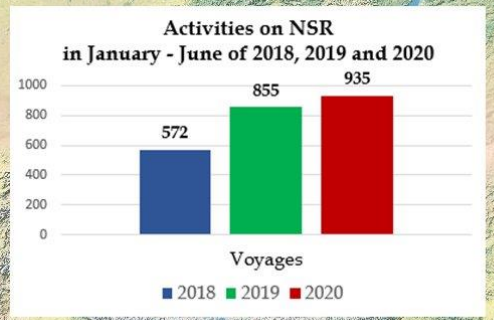
Track colors by vessel type
Tanker
General cargo
LNG carrier
Container
Icebreaker
Other

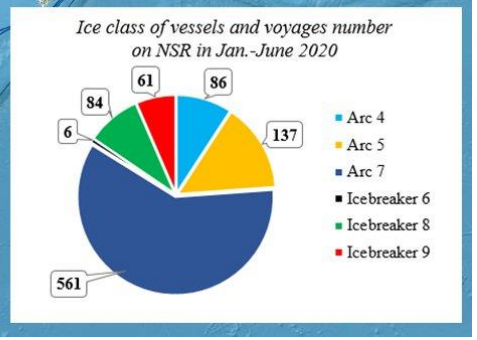
Barents Sea
Kara Sea
Laptev Sea
East Siberian Sea
Chukchi Sea

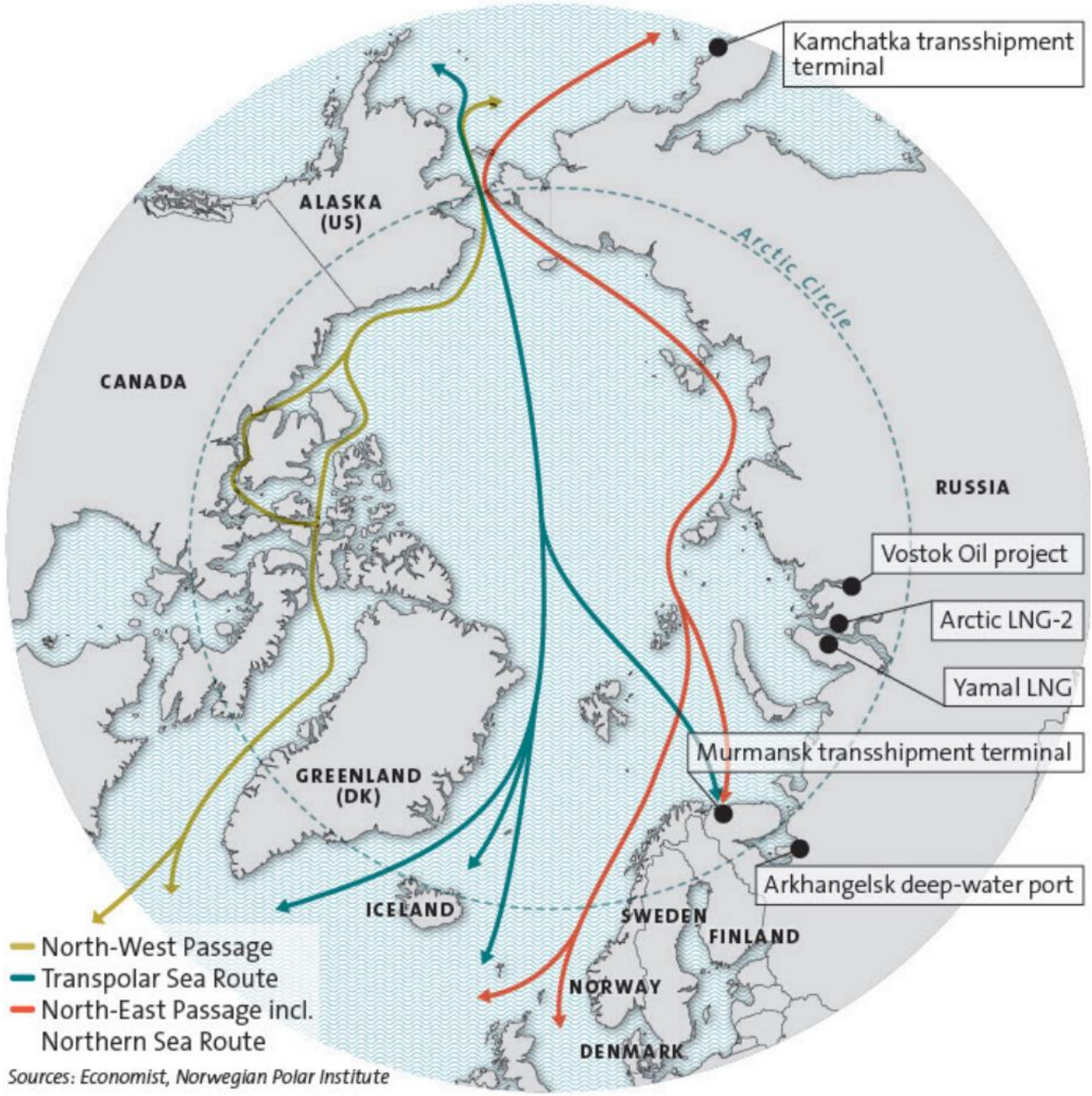
Dikson
Sabetta
Salmanovskoe Field
Dudinka
Mys Kamennyy
Murmansk
Honningsvag
Vardo
Arkhangelsk
Porvoo
Skagen
Milford Haven
Wilhelmshaven
Rotterdam
Zeebrugge
Dunkirk
Saint-Nazaire
Ferrol
Bilbao
Sines
Huelva
Cape Dezhnev
Nakhodka
Okpo
Yokohama
Jiangsu











Transshipment terminals in Murmansk and Kamchatka are an important part of Novatek's plan to optimize logistics along the NSR and cut transportation costs

The Belkomur railway connecting Arkhangelsk and the port of Indiga

Novatek, Rosatom and Sovkomflot are planning new experimental voyages in winter 2021 to expand navigation via the NSR to 9-10 months (vs. 6-7 months)

Rosatom plans: to increase full transit – 8-10 mln t pa (10 times higher than in 2019); a JV with DP World (Saudi Arabia) for cargo shipping

Development of the NSR

Tensions between the commercialisation of the NSR and its securitization / between military and econ actors

- Supervision of the NSR is divided between the Min of Transport (issues traffic authorizations) and Rosatom (navigation rules; icebreaker escort) (lobbied by Gazprom and Novatek)
- Ban on using the vessels flying foreign flags for transportation of O&G from the Russia Arctic (since 2018) (Novatek exempted)
- New protectionist measures to only allow vessels built in Russia
- Dual-use purpose of critical infrastructure
- NSR as an integral part of its territory

Permafrost degradation is a double-edged sword:

“While the disappearance of sea ice is opening up the Arctic for shipping and fossil fuel extraction, onshore projects face a variety of risks from rising temperatures and permafrost degradation."

II. The impact of Western sanctions

US energy-related sanctions:

- **Financial Sanctions:**
- Directive 2: new debt financing and share capital operations with maturity of **>90 days** for these designated entities or their subsidiaries (50%+ ownership rule)

  Gazpromneft — Novatek — Rosneft — Transneft

- CAATSA Sanctions (amended/effective of Nov 2017): revised down **from 90 days to 60 days**

US energy-related sanctions

- **Energy Sector:**
- Directive 4: prohibits the provision, export or re-export, directly or indirectly, of goods, services or technology for the exploration or production for **deepwater, Arctic offshore, or shale oil projects** in Russia involving any of these designated entities or their subsidiaries (50%+ ownership rule)
- Gazprom — Gazpromneft — Lukoil — Rosneft — Surgutneftegaz
- CAATSA Sanctions (amended/effective of Jan 2018): the scope was expanded to cover such projects **worldwide** (not just in Russia), where one or more of these five designated Russian companies has/have (1) a 33%+ ownership interest or (2) a majority of the voting interests

EU energy-related sanctions

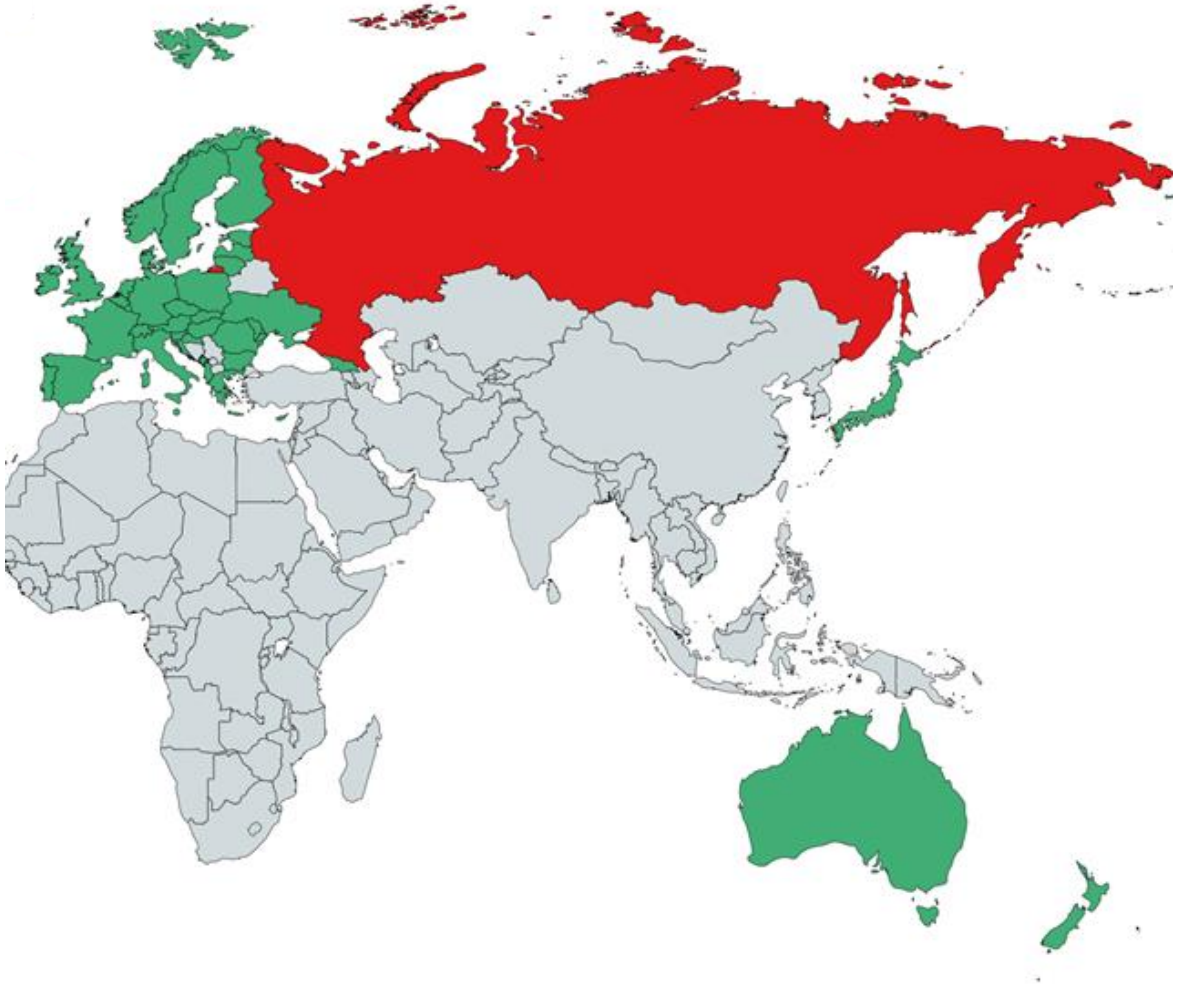
- **Financial Sanctions:**
- Prohibitions for new debt securities with maturity **> 30 days** for the following entities and their non-EU subsidiaries (>50%+ ownership rule)
- Rosneft — Transneft — Gazpromneft
- Novatek is not included
- “Grandfathering” clause

EU energy-related sanctions

- **Energy sector:**
- Prohibitions on sale, supply, transfer or export, directly or indirectly, of the items listed in Annex II for Russian deepwater, Arctic offshore, and shale **oil** exploration and production projects
- Gazpromneft – Rosneft — Transneft
- Lukoil and Surgutneftegas are excluded
- “Grandfathering” clause

Asia’s sanctions alignment

- **Australia:** EU-style sectoral sanctions; imposed sanctions for 3 years (Sept 2017)
- **Japan:** abstained from energy sanctions
- **New Zealand:** visa bans, undisclosed to the public
- **China, India, South Korea, Singapore, Vietnam** did not join Western sanctions



Suspended partnerships due to sanctions

= JV in Kara Sea, Laptev Sea and Chukchi Sea

= JV in Barents Sea

= JV in Pechora Sea and Chukchi Sea

= JV in Barents Sea

Import substitution

- High dependence on Western technology, esp. offshore equipment (>80%) and software (>90%)
- **Protracted progress on import substitution**
- Lack of inter-sectoral cooperation and know-how sharing between companies
- **Homegrown technology with higher costs and lower quality**
- Novatek's Arctic Cascade to be tested at Yamal LNG and Ob LNG
- Rosneft-led Zvezda Shipyard to construct offshore platforms, LNG vessels and drilling equipment

III. Russia’s pivot to Asia

Yamal LNG

- **Delivering advanced technology and equipment**
- Drilling equipment (e.g. Jereh Group, Honghua)
- Six Chinese shipyards supplied 80% of equipment for Yamal LNG
- EPC contract - Chiyoda Corp, JGC Group
- DSME - 15 Arc7 LNG vessels
- **Providing financing**
- $12 bn from the China Development Bank, ExIm Bank and the Silk Road Fund
- **Equity participation**
- CNCP/Silk Road Fund – 29.9%

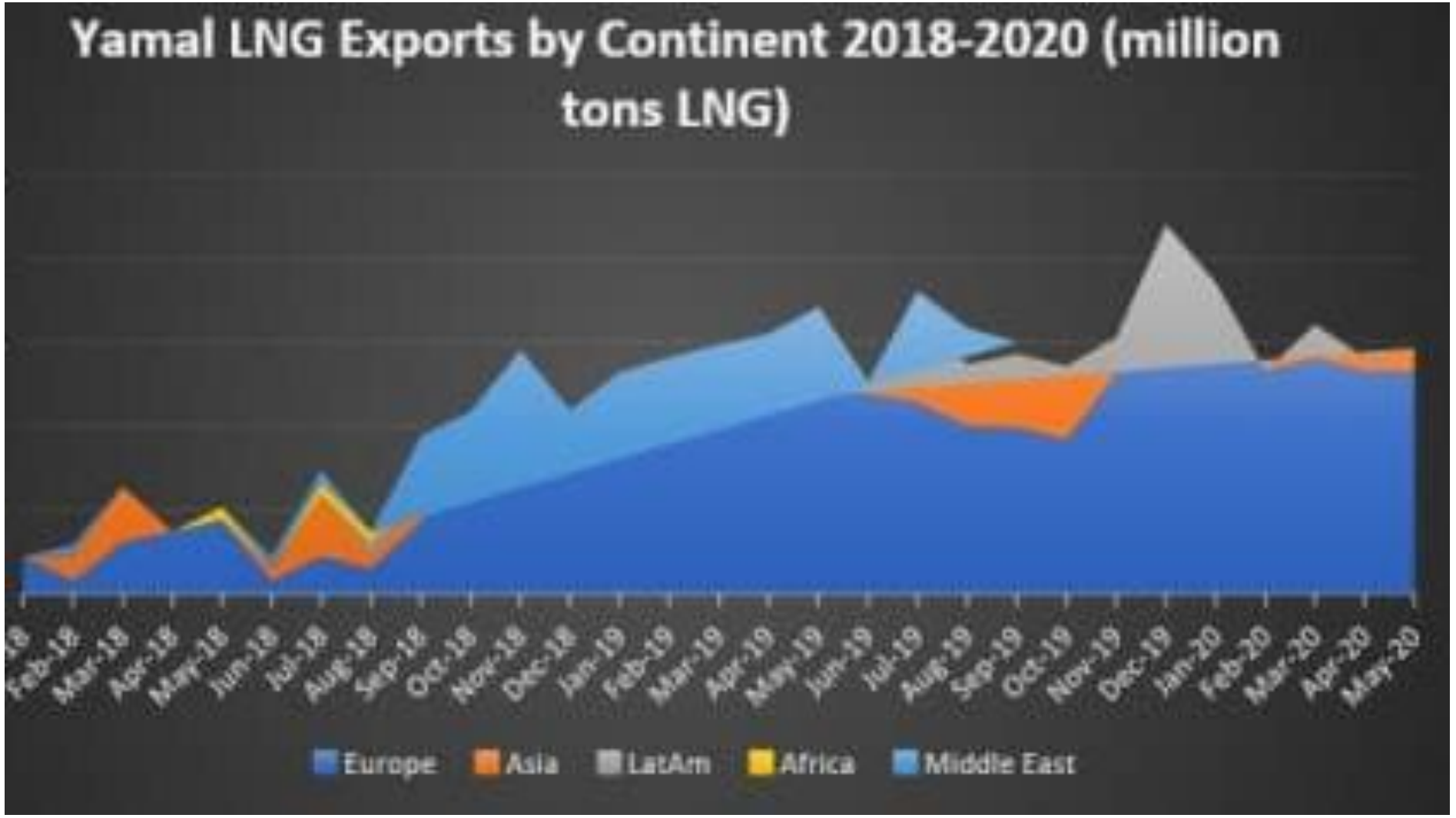
Yamal LNG

- **Mitigating financial sanctions**
- Funding via government-backed institutions and credit export agencies
- Use of euros to avoid US nexus
- Equity participation and pre-arranged payments as an alternative source of capital
- Investments via mutual funds ($40 bn, incl. CIC, JBIC, KIC)

Table 3: Project financing for Yamal LNG

Entity	Percentage of total financing	Loan currency	Amount
China Development Bank and the Export-Import Bank of China	3.7%	CNY	4.6 Billion
Russia's National Welfare Fund	12.4%	RUB	150 Billion
Gazprombank and Sberbank under the auspices of EXIAR program	21.2%	EUR	3.6 Billion
China Development Bank and the Export-Import Bank of China	54.9%	EUR	9.3 Billion
Intesa San Paolo, BPI Finance, SACE	4.3%	EUR	750 Million
Japan Bank for International Cooperation	1.1%	EUR	200 Million
Euler Hermes, EKN, Intesa San Paolo, Raiffeisen Bank International	2.4%	EUR	425 Million

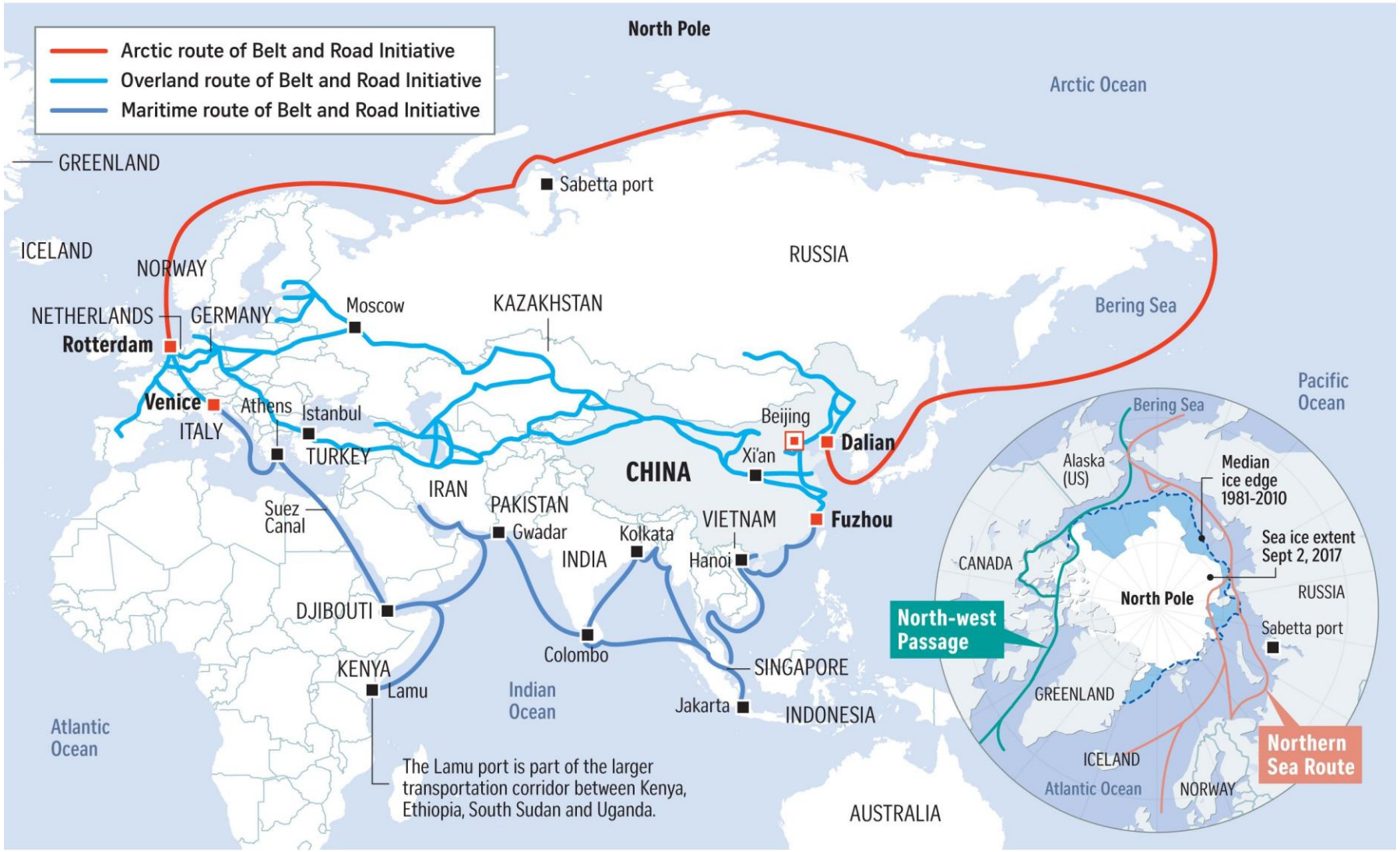
Source: OIES, based on Novatek press releases



Source: Thomson Reuters

- **Chinese offshore technology is improving**
- Rosneft and Gazprom used COSL's semisubmersible rig Nanhai-8/9 for exploration in the Sea of Okhotsk (2016) and the Kara Sea (2019/2020)
- Nanhai-8 in the Kara Sea made two of Russia's biggest offshore findings over the last decade (> 1,2 trillion cubic meters of natural gas)
- **Technology transfer through localisation**
- Gazprom Neft & CNPC = enhanced oil recovery

China's polar extension to Silk Road



NOTE: September is the end of summer in the North Pole when the frozen lid of sea ice tends to shrink to its smallest. Unlike the Antarctica, there is no land under the frozen Arctic ice.

Sources: CHINA'S NATIONAL DEVELOPMENT AND REFORM COMMISSION, THE ARCTIC INSTITUTE, NATIONAL SNOW AND ICE DATA CENTRE, REUTERS STRAITS TIMES GRAPHICS

Sino-Russian cooperation

- **Strategic partnership:** a complex pattern of cooperation and competition
- **Different ambitions, but overlapping economic interests:** Chinese technology & capital in exchange for access to Russian hydrocarbons
- Energy cooperation is not necessarily driven by econ fundamentals
- Moscow's **heightened expectations** of China's unconditional help to mitigate sanctions
- Beijing's success at Yamal made Moscow wary of China's ambitions in the Arctic

Sino-Russian cooperation

- **Challenges:**
- Territorial issues: the status of the NSR
- China’s growing expertise in the construction of icebreakers
- Technology transfer of sanctioned equipment
- China’s equity participation in critical infrastructure
- Dual purpose of Chinese scientific research: e.g. *BeiDou* navigation satellite system

Pivot beyond China

Diversification to Japan and India: luring investments for Rosneft's Vostok Oil

Reliance on South Korean shipyards: DSME built LNG vessels for Arctic LNG-2 and floating barge units for Novatek's transhipment terminals in Murmansk and Kamchatka; technological cooperation with the Zvezda Shipyard

Singapore: offshore drilling platforms; repair works for drilling platforms *Arkticheskaya* and *Amazon*

VI. Conclusions

Implications for Russia's pivot to Asia in the Arctic

- **Over-dependence on China's** energy demand, equipment and capital
- **Cooperation will prevail if China keeps accommodating Russia's interests**
- **Diversification to other actors**: limited scope of cooperation with Japan and South Korea; India as an emerging alternative; China's own diversification strategy
- **High-level involvement and govt-backed funding is necessary;** Asia's unwillingness pay any price for Russian deals
- The global pandemic will **exacerbate Russia's asymmetrical relations** with China
- **Shift to carbon-neutrality** will affect Russia's ambitious projects in the Arctic

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Thank you for your attention!

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