

Arctic Route: challenges and opportunities

The Arctic Route: a new scenario for global maritime trade

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Maritime traffic performances



Main energy projects



Conclusions

A special thanks to the research Team

3

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The Arctic Maritime routes

Routes along the Arctic



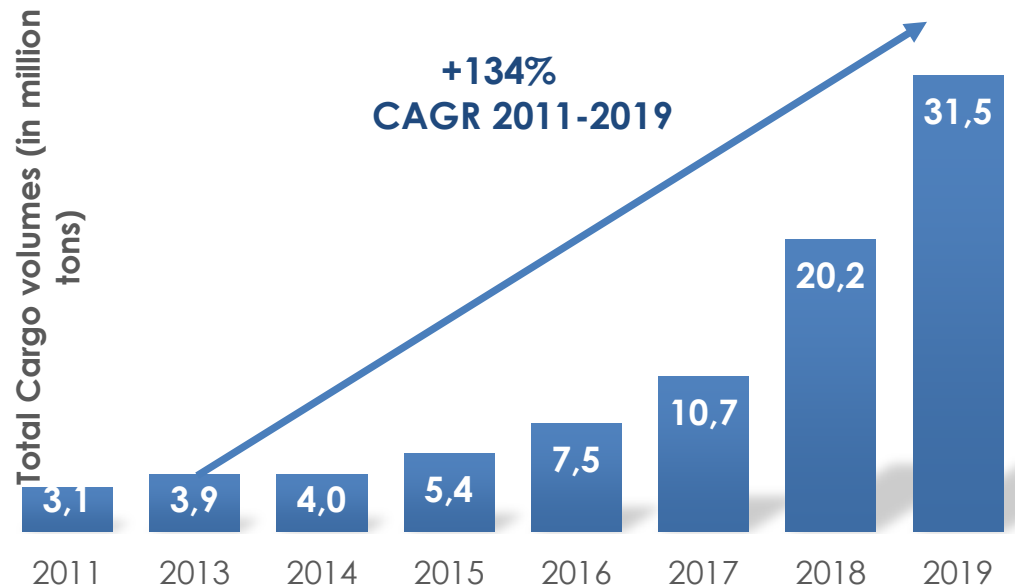
Source: SRM on Arctic Portal

- There are **three** main routes along the Arctic: **The Northern Sea Route (NSR)**, the **North-West Passage (NWP)** and the **Transpolar Sea Route (TSR)**.
- **The NSR** is the most promising one as it is the link between **Europe and Asia** and for its **less harsh climate**.
- In 2019, the **NSR** was open to transits for **30% of the year** from July to the beginning of November.

The brilliant performance of the NSR

5

Volume of Cargo 2011-2019



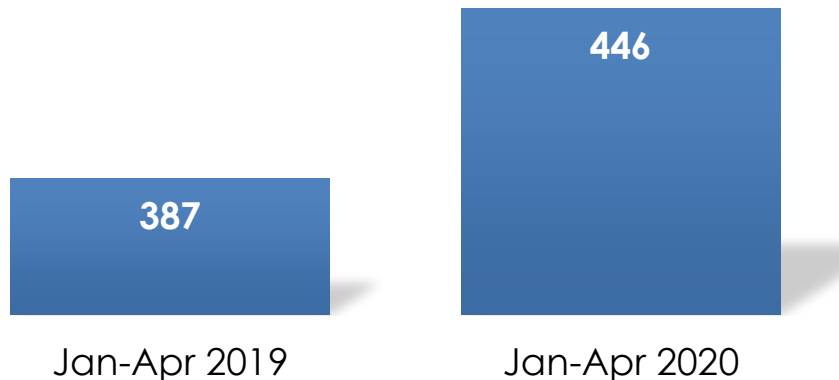
Source: SRM on CHNL information office

Transits:
697 thousand tons

- 2011-2019: the NSR shows a **dramatic increase**. In 2019, 31.5 million tons were handled.
- The **NSR** is a **regional route**: **98% is SSS** activity **concentrated** on the Russian port of **Sabetta (55%)**.
- **Transits** (almost 700,000 tons) are only a **part of the handling activity**.
- In 2018, **Venta Maersk (3,600 Teus)** **completed the 1st containership transit** along the NSR (between S. Korea and Germany).
- **Chinese COSCO is the most active shipper** in the NSR (19% of transits only in 2019).

...even in the period Jan-Apr 2020 (during the Covid-19)

NSR Traffic in January-April 2020
(N° of Voyages)



Source: SRM on CHNL information office

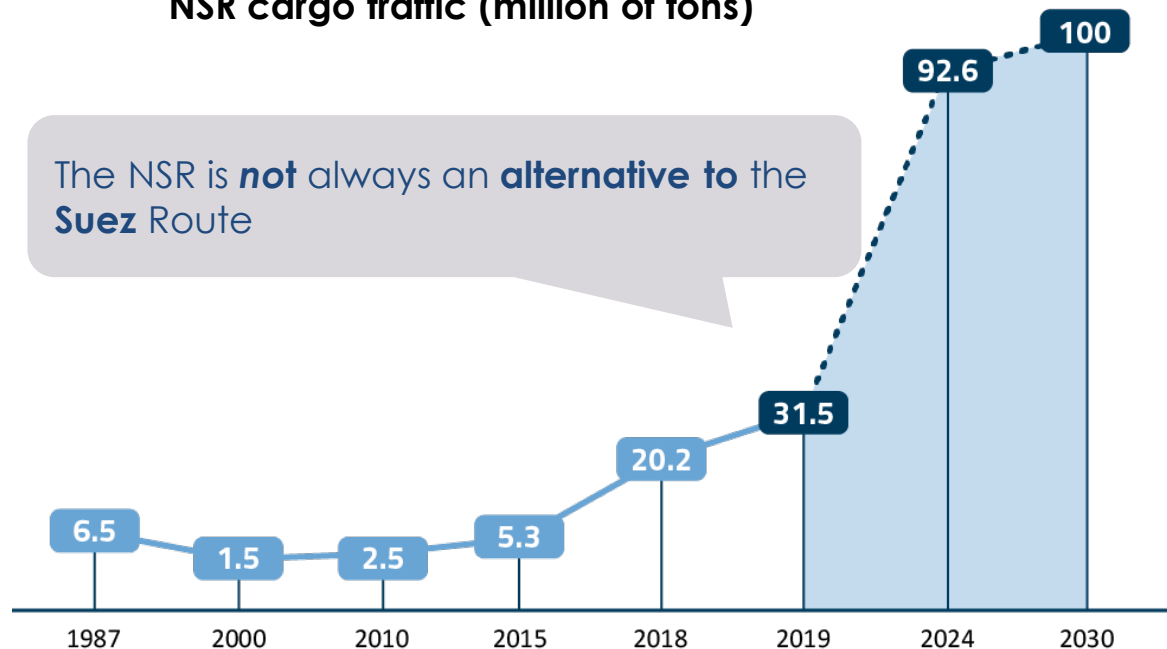
- Between January and April 2020 NSR **activity did not stop** (+15% on January- April 2019).
- this is happening also because **shipowners** are looking for new **routes at lower costs** as in the case of circumnavigation of the Cape of Good Hope.

The route is expected to grow even more

7

NSR cargo traffic (million of tons)

The NSR is **not** always an **alternative to** the **Suez** Route



Source: SRM on rosscongras.org

- Russian government officials predict cargo volumes on the NSR as high as **92.6 million tons by 2024**, and **by 2030** they hope to add a significant part of **international transit to that**.
- Russia expects shipping along the NSR to **increase more than threefold by 2030** compared to 2019 levels.



An example of the NSR impact: route benefits

- The figure shows examples of routes and **the impact of the NSR**

Trade Route	SUEZ Days	NSR Days
Yokohama-Rotterdam	31	19
Shanghai-Rotterdam	29	22
Shanghai-Genoa	24	31

Convenient route

Point of indifference: Ho Chi Minh C. (Rotterdam)
& Yokohama (Genoa)

Source: SRM elaboration

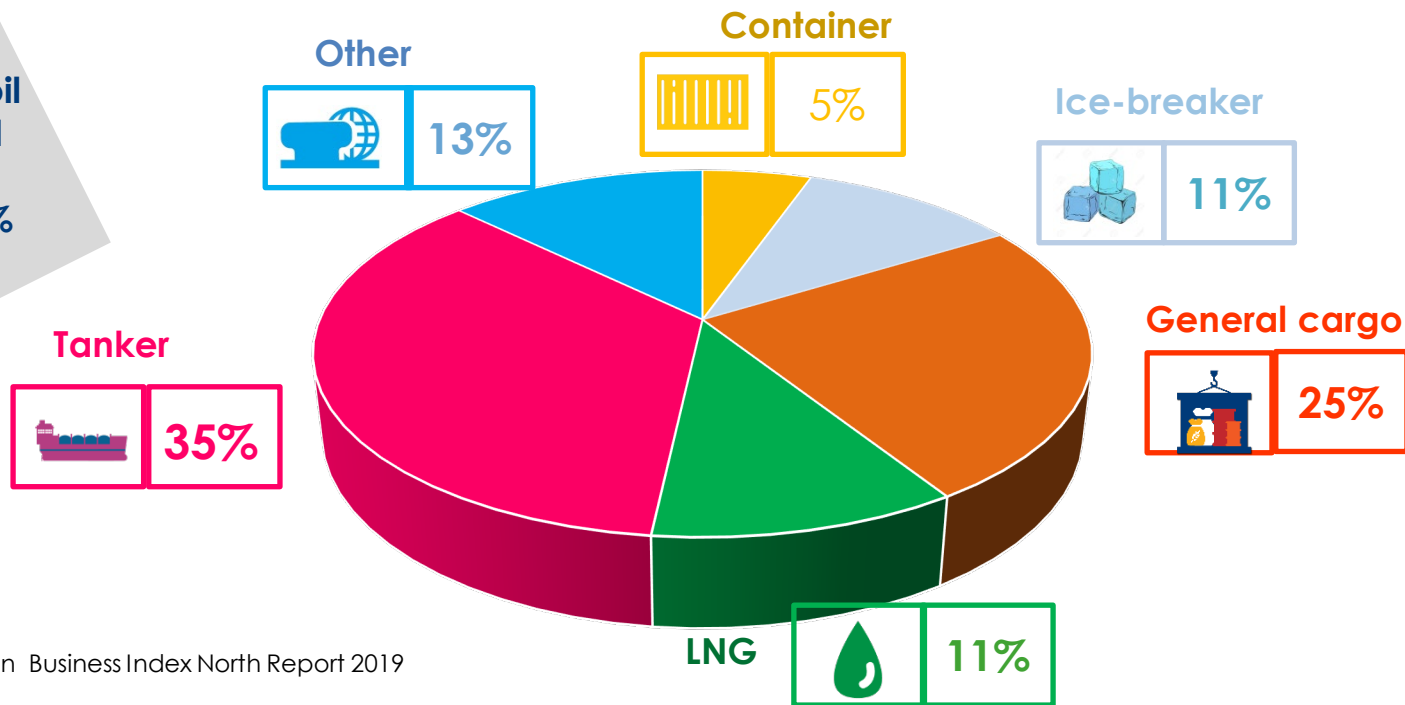


..... Northern Sea Route

..... Existing Route

Different trade type along the NSR

Number of voyages for type of vessels on the NSR (%)



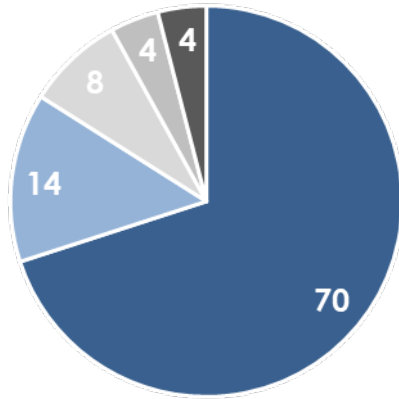
Source: SRM on Business Index North Report 2019

The Arctic: a strategic maritime energy corridor

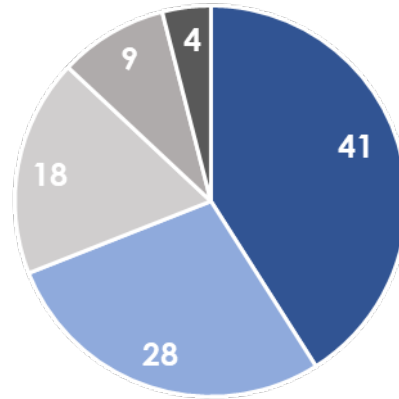
10

Distribution of **undiscovered hydrocarbon resources** among the Arctic Coastal states (%)

Natural gas



Oil



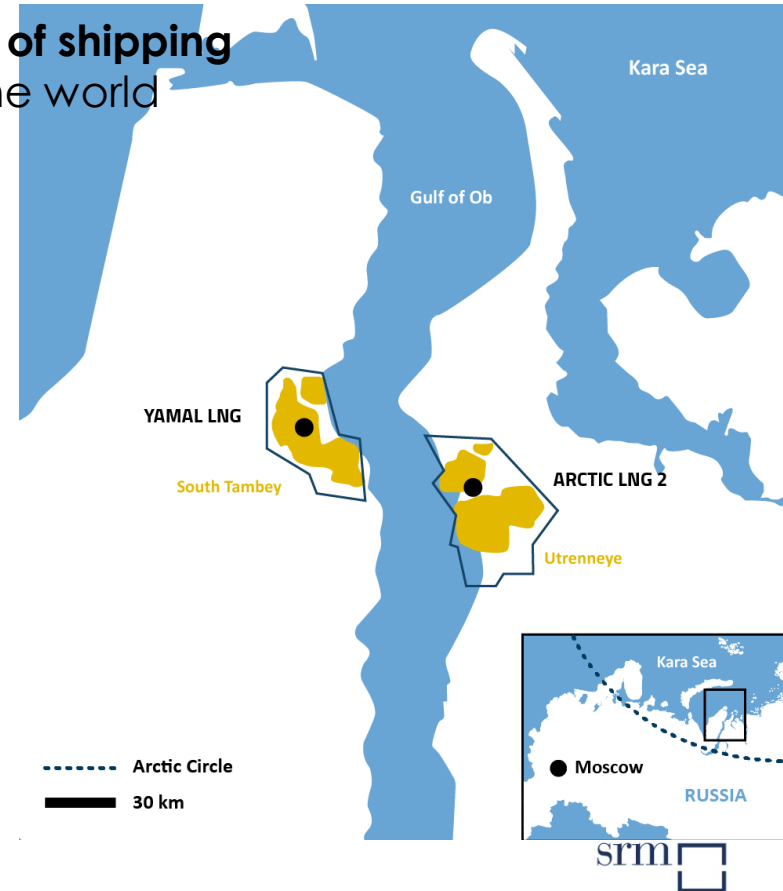
■ Russia ■ U.S. (Alaska) ■ Greenland (Denmark) ■ Canada ■ Norway

- Total undiscovered conventional fossil resources: **90 billion barrels of oil;**
- Approximately **1,700 trillion cubic feet of natural gas;**
- **44 billion barrels of liquid natural gas.**
- **Russia: 70% Gas & 41% Oil**

Energy Investment: Yamal LNG

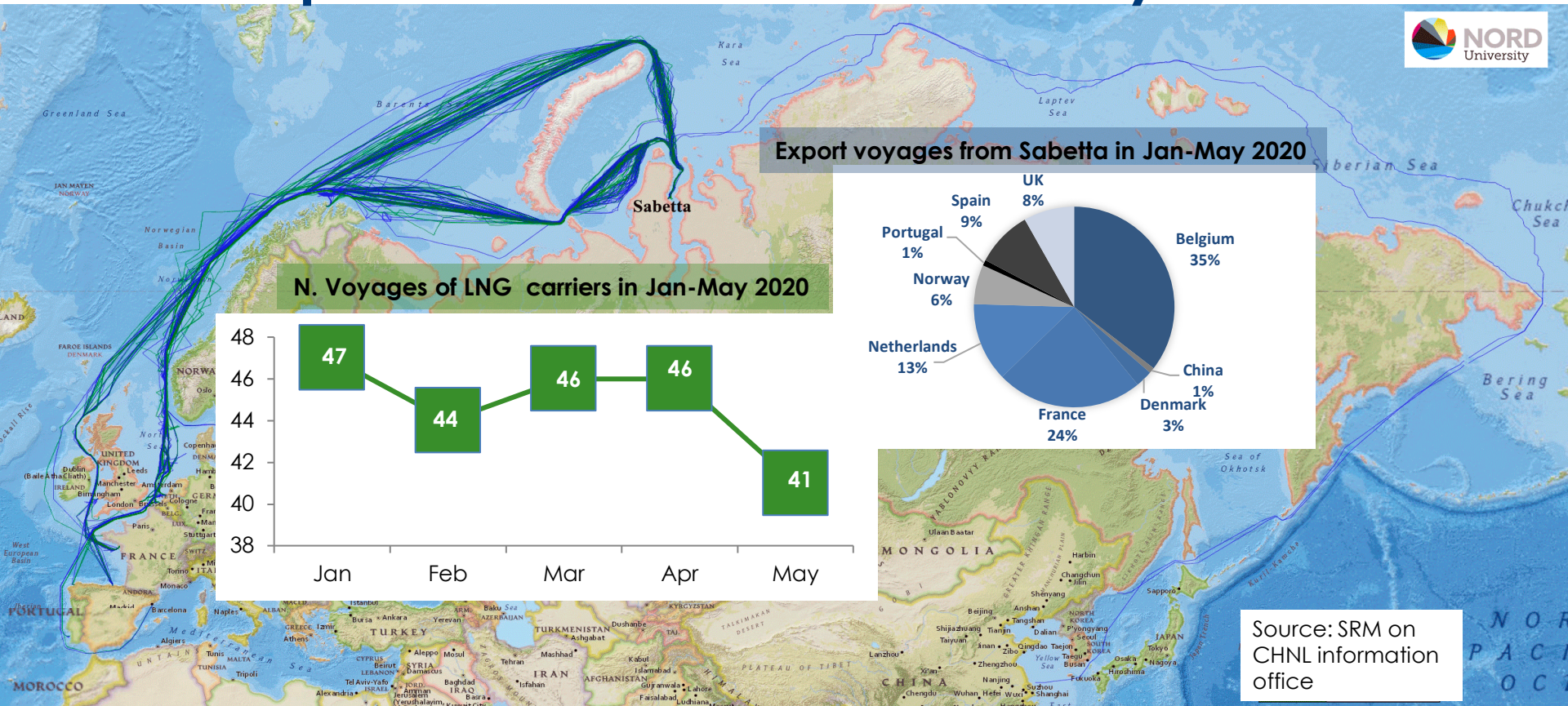
- ❑ **LNG is one of the strategic and sustainable driver of shipping**
- ❑ **Yamal LNG** is one of the largest LNG projects in the world
- **Project:** 98.1% completion.
- **Total investments** nearly **\$30.5 billion** at the end of 2019.
- **Three liquefaction trains in operation.**
- **Sabetta port** takes part in this project with an handling of 20.7 mln. tons in 2019.
- **Production** 2017-2019: 27.2 million tons of LNG.
- **A twin project** was placed: **Arctic LNG-2.**

Source: SRM elaboration

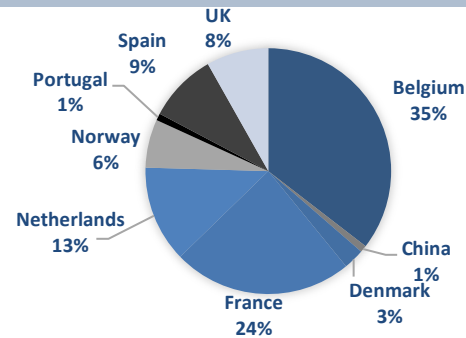


LNG transportations on NSR in Jan-May 2020

12



Export voyages from Sabetta in Jan-May 2020



Source: SRM on CHNL information office

Conclusions

1. The **Arctic Route** has great **potential** as a **transoceanic route**, but this will probably become more apparent **in the long term** rather than in the near future.
2. Suez and the Mediterranean will remain central for a long time. The development of the Arctic route will be complementary
3. **Climate change and the environmental impact** are **critical issues** for the exploitation of the Arctic Route both for shipping and energy sector.
4. **The Arctic** is currently a **maritime energy corridor** rather than a global cargo route.
5. The international and complex **legal framework needs to be harmonized** to avoid drawbacks.
6. A **geo-political context still in balance**: between **competition and cooperation**. Will the **Covid-19** pandemic **change the game**?



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