

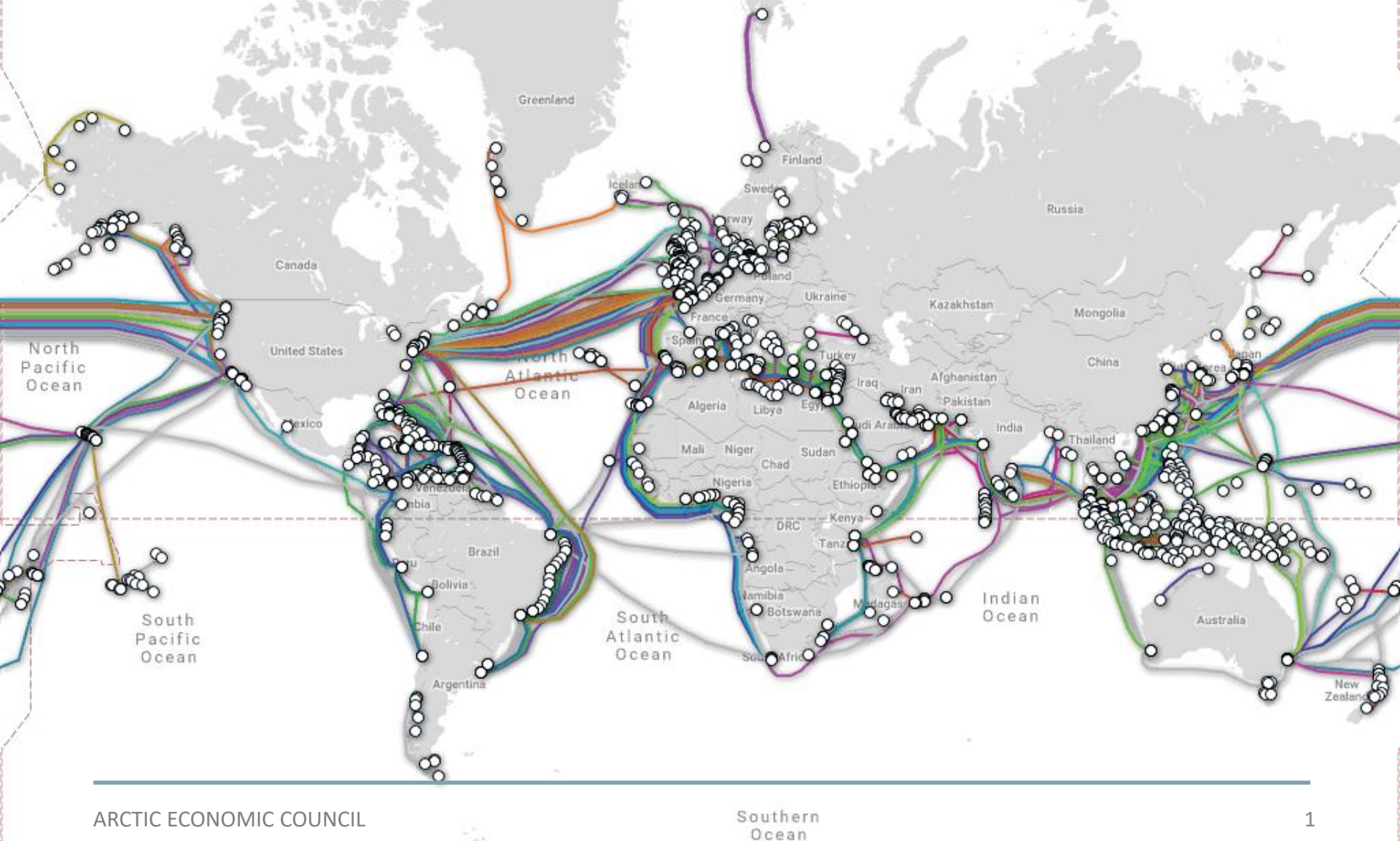
New Arctic Opportunities

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27.06.18



The arteries of the digital globe



Arctic connects 90% of world economy



20% of natural resources

15% of land

0,05% of population

Economic growth 7-8%
for the foreseeable future



The challenge ahead is building infrastructure

**Those living inside the circle need the resources
which exist in the Arctic**



More people
living inside
this circle than
outside

**Two billion people will enter the middle class over the
next decade, thereof 88% will be inside the circle**

The world is changing fast



Urbanization



Increase in wealth



Digitization and automation growing



4th Industrial Revolution

Data Centers

Data Centers are growing enormously, **doubling** in capacity **every 2-3 year**
(Cisco/IBM)

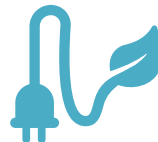
Carbon footprint overtook the aviation industry in 2013

Data Centers now amount **over 7% of energy demand**
(World Economic Forum)

Data Centers need



Cooling



Clean
energy



Safe
environment

The Arctic is a fantastic area to build out data centers

Despacito

Despacito has been played **5,2 billion** times on Youtube.com

Energy production is 2/3 carbon fuels globally

Global average PUE in 2016 was 1,71

Co2 of 420gr/kwh

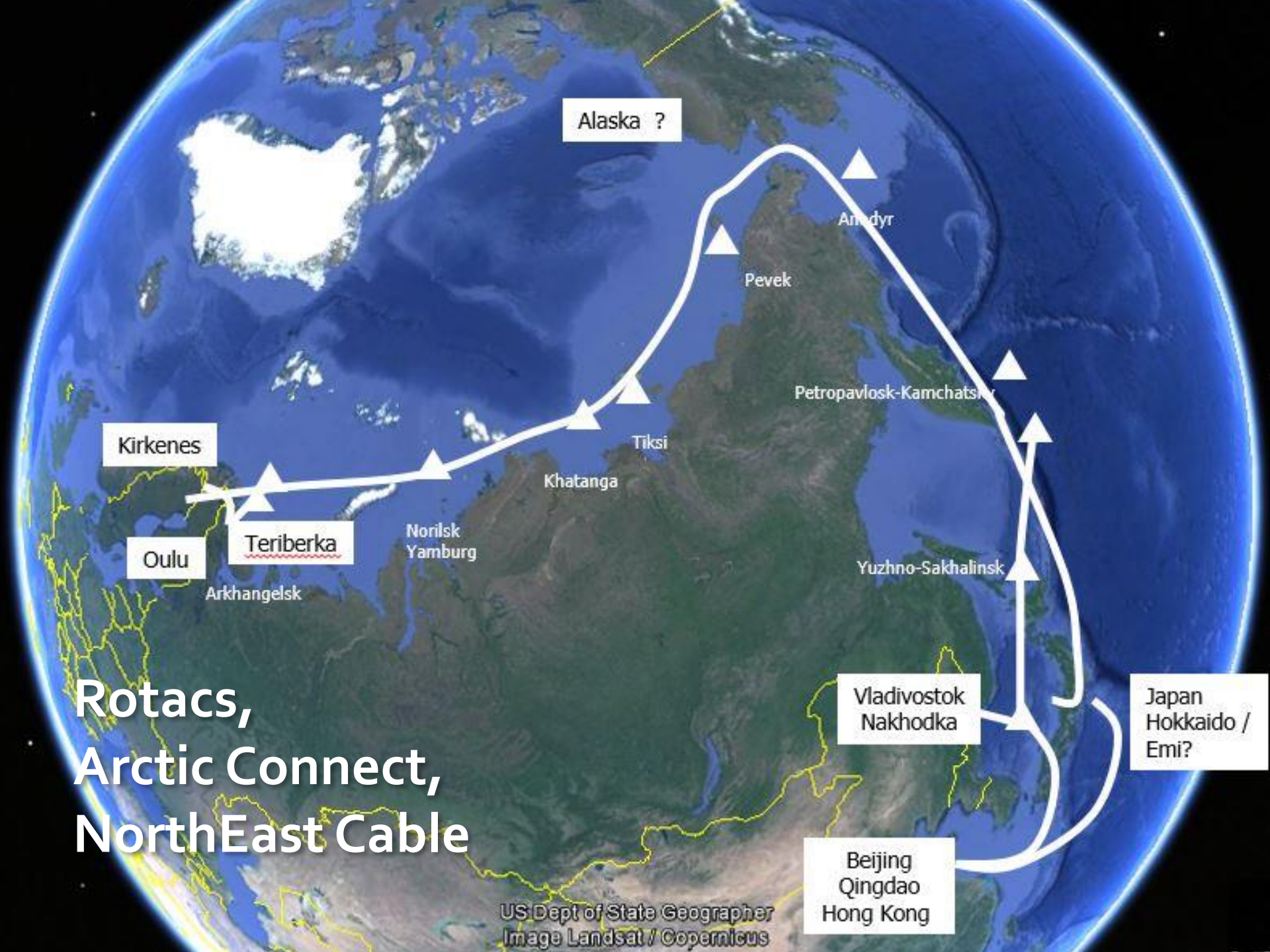
Each play generates 0,175kwh



Despacito has a bigger carbon footprint than **100 thousand taxis** over a whole year



Q
QUINTILLION



Alaska ?

Amundyr

Pevek

Petropavlosk-Kamchatskiy

Tiksi

Khatanga

Norilsk
Yamburg

Kirkenes

Oulu

Teriberka

Arkhangelsk

Yuzhno-Sakhalinsk

Vladivostok
Nakhodka

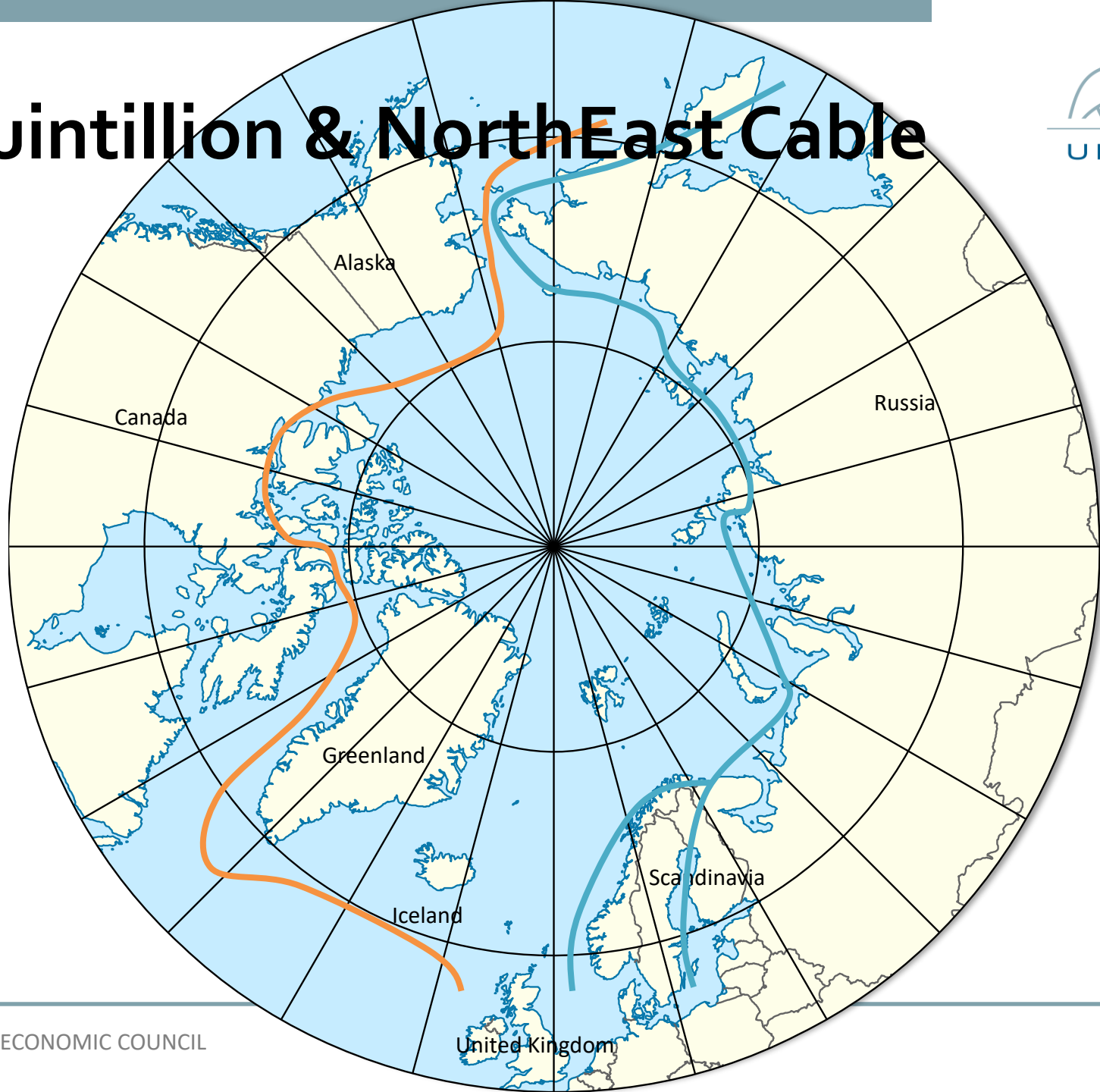
Japan
Hokkaido /
Emi?

Beijing
Qingdao
Hong Kong

Rotacs,
Arctic Connect,
NorthEast Cable

US Dept of State Geographer
Image Landsat / Copernicus

Quintillion & NorthEast Cable



Data Centers



Connecting the Arctic opens up new possibilities

- ☐ Direct connection from Asia to Europe
- ☐ Access to clean power sources at very competitive prices
- ☐ Increased data and communications security



This is a Win-Win situation

- ☐ Local communities get better connectivity
- ☐ Untapped clean power sources get utilized
- ☐ Economic diversification
- ☐ Carbon footprint is reduced

https://arcticeconomiccouncil.com/wp-content/uploads/2017/02/AEC-Report_Final-LR-1.pdf

