## Warming Arctic spurs battles for riches, shipping routes

By FRANK JORDANS August 23, 2017



As climate change pushes ice farther north each year, it is spurring talk of a gold rush in the Arctic for natural resources, shipping routes, tourism and fishing in one of earth's last largely unexplored regions. (Aug. 23)

"As the world demand for raw materials is ever increasing, and (with) a realization that a large

part of the unexplored deposits are in the Arctic, there is a natural shift to focus on that area,"

said Mads Boye Peterson, head of Denmark's Nordic Bulk Carriers Shipping.

specializing in Arctic development.

than just something you decide to do overnight."

Peterson's company sent a freighter through the Northwest Passage four years ago to show the route can be used to haul cargo in summer. However, he also noted that rising temperatures make operations harder because moving floes are less predictable than unbroken sheets of ice. "On the surface it might look like a slam dunk," he said. "But it's actually a lot more complicated

A China Shipping Line cargo ship sails sails the North Pacific Ocean off the coast of Alaska past the Finnish icebreaker Warming Arctic spurs battles for riches, shipping routes MSV Nordica. (AP Photo/David Goldman) The U.S. Geological Survey has estimated that up to 30 percent of the world's undiscovered gas and 13 percent of oil waiting to be found are inside the Arctic Circle. Precious minerals also slumber beneath the icy surface, along with rare earth elements, lithium and cobalt, used in batteries for electric cars and handheld devices, said Morten Smelror, director of the Geological

along with the deep oceans," said Smelror. The geography also opens up new opportunities. Sailing through the Northwest Passage could

Main mining sites

"The Arctic is certainly among the last frontiers with respect to undiscovered mineral resources,

potentially cut the distance from East Asia to Western Europe by more than 10,000 kilometers

(6,200 miles), compared with the traditional route through the Panama Canal, offering huge

Major development Gas/oil reserves

Alaska

Greenland

Resources in the Arctic

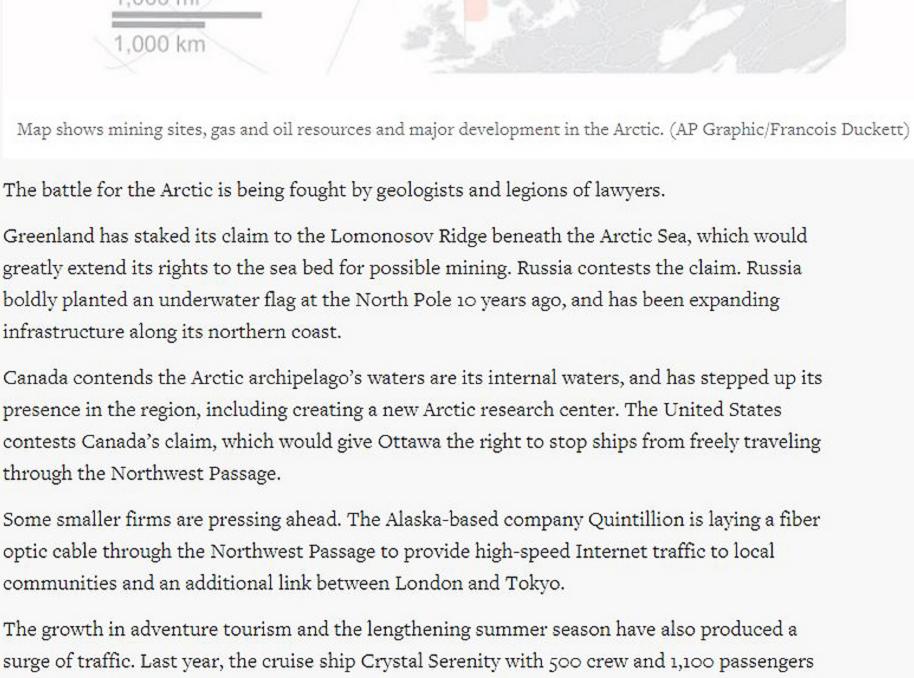
Survey of Norway.

fuel savings.

North

Pole

Scandinavia



paying at least \$22,000 each sailed through the passage. Part of the revenue goes to local

Some Inuit are hoping for new economic opportunities from the region's growing fishing

"Money-wise it's great," said Maatiusi Manning, a 33-year-old Inuk from Baffin Island. "It's

Climate change is even opening new avenues in agriculture. Mette Bendixen, a climate

researcher at the University of Copenhagen, projects that global warming will extend the

communities whose hunting grounds and travel routes might be disrupted.

industry.

company.

going to help a lot of families."

growing season by two months.

"Not many people know that potatoes, strawberries are grown in southern Greenland," he said. Despite its promise, several challenges are holding back Arctic development. The search for fossil fuels above North America has slowed in recent years, partly because of low oil prices and public pressure. Shell relinquished most of its federal offshore leases in

Alaska's Chukchi Sea last year, after pouring billions of dollars into exploration efforts. Former

Shell leases in the neighboring Beaufort Sea have been taken over by an Alaska Native-owned

And only 10 percent of the Northwest Passage is surveyed to the highest modern standards,

Ocean currents are predicted to push polar pack ice into the passage for decades, limiting the

route to sturdy vessels with experienced navigators — and keeping insurance costs high.

Wild flowers grow in Nuuk, Greenland. (AP Photo/David Goldman)

meaning uncharted shallows could pose a serious risk to shipping.

"We need to rethink how we build things in the Arctic," said Gritsenko, who is based at the University of Helsinki. "Even if we develop a tremendous system of Arctic ports, how would the goods get there? That's the irony of climate change."

Learn more about the Arctic and read dispatches sent by a team of AP journalists as they traveled through the region's fabled Northwest Passage last month: https://www.apnews.com/tag/NewArctic

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A glacier calves icebergs into a fjord off the Greenland ice sheet in southeastern Greenland. (AP Photo/David Goldman) "Think about a high mountain pass that is closed for half the year, has no gas stations, convenience stores or repair facilities," said Andrew Kinsey, a senior marine risk consultant at insurance giant Allianz. "Is this the route that you want to use for your daily commute?" Environmental concerns and a growing acceptance of the indigenous population's rights have held back some plans for Arctic exploration. Cargo hauls to the Baffinland iron ore mine are already restricted to August to mid-October, so as not to disrupt the Inuit's ability to cross the ice to hunt, fish or trade. Daria Gritsenko, a public policy researcher on board the Nordica, also cautioned that melting permafrost poses a problem for Arctic infrastructure.

## the Arctic appear barren — a craggy world of snow-capped peaks and glaciers surrounded by a sea of floating ice even in the midst of summer. Yet beneath the forbidding surface of the world's fifth largest island lies an exceptionally pure strain of iron ore, and the Baffinland mine is believed to hold enough of it to feed smelters for decades. As climate change pushes the ice a little farther north each year, it is spurring talk of a gold rush in the remote Arctic for abundant natural resources, prized shipping routes and business opportunities in tourism and fishing. The Arctic, including the fabled Northwest Passage between the Atlantic and the Pacific, is among the last regions on earth to remain largely unexplored. In April, U.S. President Donald Trump signed an executive order to reverse Obamaera restrictions on oil drilling. However, experts say there remain many obstacles to reaping the riches once blocked by the ice. The Associated Press took a first-hand look at the region on a month-long, 10,000-kilometer (6,200-mile) journey aboard the Finnish icebreaker MSV Nordica, along with researchers specializing in Arctic development. era restrictions on on arming. However, experts say there remain many obstacles to reaping the riches once blocked by the ice. The Associated Press took a first-hand look at the region on a month-long, 10,000-kilometer (6,200-mile) journey aboard the Finnish icebreaker MSV Nordica, along with researchers