



RESOURCE SECURITY WATCH

The American Foreign Policy Council's Review of
Changes to the Global Strategic Environment

Resource Security Watch No. 34

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Related Categories: Energy Security; International Economics and Trade; Science and Technology; Resource Security; Global Health; Arctic; Middle East; Europe; Russia

GROWING PAINS FOR RUSSIA'S ICEBREAKERS

In early November, Russian Transport Minister Yevgeny Dietrich announced his government's plans to add ten new icebreakers to the Russian naval fleet by 2030. This will reduce the average age of the country's icebreaker vessels from their current median age of 37 years to an average of 25 years, Dietrich noted. At present, Russia's fleet includes 36 icebreakers and icebreaking tugs, with an additional five Russian icebreakers at the disposal of the country's nuclear agency, ROSATOM.

Meanwhile, on November 14th, state-owned ROSATOMFLOT aborted the maiden voyage of the "Arktika" to the North Sea. The nuclear icebreaker, powered by two water-cooled RITM-200 reactors, departed from Murmansk's Kola Bay en route to the Kara Sea. According to a November 16th press release, the vessel was to operate in the Northern Sea Route until mid-December. However, halfway into the Barents Sea, the "Arktika" suddenly made a 180 degree turnaround and eventually returned to port in Murmansk. A ROSATOMFLOT official cited "adjustment works [sic] onboard" to account for the incident, but provided no additional information when interviewed by *The Barents Observer*. (TASS, November 3, 2020; *The Barents Observer*, November 17, 2020)

OPEC+ EYES THE FUTURE

A two-day meeting held at the end of November saw the OPEC+ alliance discuss the next phase of its production policy. Back in April, the bloc agreed to a historic output cut of 9.7 million barrels per day, which was subsequently scaled back to 7.7 million in August (see *Resource Security Watch* no. 29). Now, a planned two million bpd production ramp-up slated for January looks set to be delayed, with diverging views on whether that would be for three or six months. Many market watchers see oil benchmarks at, or around, \$50 a barrel over the next year as demand slowly builds after the shock to global markets seen in March and April (See *Resource Security Watch* no. 27).

As a result, some analysts have become bullish on oil and gas prices. However, OPEC+ is keeping a close eye on American shale producers, who present a considerable threat to the cartel's global profits if they resume ramping up production. Capital Economics chief commodities economist Caroline Bain told CNBC that "a gradual recovery in U.S. production, alongside the return of 'some' OPEC+ supply, will act as a ceiling on oil prices in the not too distant future." (Reuters, November 10, 2020; CNBC, November 29, 2020)

COVID DRIVES DROP IN POLLUTION

At the 2020 International Conference for High Performance Computing in mid-November, America's space agency presented its research on reduced air pollutants resulting from lower economic activity during the COVID-19 pandemic. According to NASA, global nitrogen dioxide concentrations have been reduced by almost 20% over the past year. Nitrogen dioxide, produced by fossil fuel combustion, is primarily used by industry and the transportation sector, and is a harmful air pollutant. COVID-19 imposed lockdowns and travel restrictions are among the primary reasons for the reduction in nitrogen dioxide emissions. NASA's research and presentation also noted that Wuhan, China, was "the first to show reduced nitrogen dioxide emissions - reporting 60% lower than simulated values expected. A 60% decrease in Milan and a 45% decrease in New York followed shortly, as their local restrictions went into effect." With many communities beginning to ease up on lockdown restrictions, scientists are paying close attention to just how quickly nitrogen dioxide emissions increase in coming months. (*AI Arabiya*, November 29, 2020)

THE PROMISE OF GREEN HYDROGEN

Global energy analysts are talking about CO₂-free green hydrogen technology, which uses renewable energy to produce hydrogen from water. While wind and solar energy can provide power to houses and cars, green hydrogen can handle the energy requirements of large-scale industries. According to Natural Resources Defense Council energy analyst Rachel Fakhry, "the last 15 percent of the economy is hard to clean up — aviation, shipping, manufacturing, long-distance trucking, Green hydrogen can do that." Skeptics, however, are wary of the industry's ability to implement green hydrogen on a sizable scale. Michael Liebreich of Bloomberg recently wrote: "Its storage requires compression to 700 times atmospheric pressure, refrigeration to 253 degrees Celsius... It carries one quarter the energy per unit volume of natural gas... It can embrittle metal; it escapes through the tiniest leaks and yes, it really is explosive." Undeterred, a number of nations — including Saudi Arabia, Japan, Australia and several EU members — continue to invest millions in building the necessary infrastructure to generate green hydrogen in an effort to reduce energy costs and pursue decarbonization. (*Yale Environment* 360, November 5, 2020)