



RESOURCE SECURITY WATCH

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

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Related Categories: Energy Security; Science and Technology; Resource Security; China; Russia; United States

A NEW ENERGY SOURCE... IN A DIFFERENT GULF

The attention of policymakers in Washington has long focused on the Persian Gulf and the fraught security situation there, which from time to time threatens to interrupt the global oil trade and impact gasoline prices for U.S. consumers. But new energy progress is now being made in a different Gulf – progress that has the potential to improve American energy security. To wit, the U.S. Department of the Interior has proposed holding a second offshore wind energy auction in the Gulf of Mexico, covering four areas off Louisiana and Texas spanning 410,060 acres to be developed into wind farms. If approved, this wind farm proposal has the potential to power 1.2 million homes. Until recently, the wind industry has been challenged by increased costs and supply chain issues, limiting the ability of the United States to harness this growing source of clean energy. While the Gulf of Mexico presents challenges to developing a wind farm, such as lower wind speeds, soft soils, and hurricane risks, a resurgence in interest for clean energy has revived attention to its potential. (U.S. Department of the Interior, March 20, 2024)

CHINA'S RISE TO CLEAN ENERGY SECTOR DOMINANCE

China is on track to dominate the clean energy sector, leaving the United States and Europe at risk of being pushed out of the global market. China's Tongwei Group has grown to become the largest producer of solar cells, and is now on track to produce 130 gigawatts of solar cells per year. China currently produces 80% of the world's solar panels, as compared to just 2% produced by the U.S. It also manufactures two-thirds of the world's electric vehicles, wind turbines, and lithium-ion batteries.

China's expanding clean energy drive has strategic implications. Officials in the U.S. are alarmed by the prospect of a flood of cheap Chinese clean energy products, which would significantly damage U.S. efforts to grow its own renewable energy industry. U.S. Treasury Secretary Janet Yellen has said that China's production capacity "distorts global prices" and "hurts American firms and workers." Countering China's massive production capacity in renewable energy will not be easy, however. According to Wood Mackenzie, an energy consultancy, wealthy nations will need to invest about \$6 trillion in order to compete with China's new renewable energy technology. However, concerns about potential retaliation from Beijing should the United States continue to criticize its industrial growth are mounting, given that China currently holds a monopoly on most of the renewable energy supply chain. (*Washington Post*, March 29, 2024)

A GEOTHERMAL BREAKTHROUGH

The United States is on the verge of harnessing a large amount of geothermal energy thanks to new technologies that expand the ability of scientists to access energy below the surface of the earth. Previously, geothermal energy has only been accessible in areas like hot springs or geysers where earth's inner heat comes to the surface. Accordingly, less than 1% of U.S. electricity is powered through geothermal means. However, now that scientists can more readily harness this form of energy as a result of new drilling technology, that percentage can potentially surge – assisting America's quest for energy independence along the way. (*The Guardian*, April 2, 2024)

CAN WASHINGTON AND BEIJING COOPERATE ON CLIMATE?

Over the past several years, relations between China and the United States have moved from cooperation to competition across a broad range of issues – a shift that is likely to remain a defining feature of U.S. foreign policy for the foreseeable future. Does this mean that no cooperation at all is possible between the U.S. and the PRC, however? As China softens its political tone vis-à-vis America, areas of at least tactical collaboration have begun to emerge. For instance, the United States and China have begun to work together to curb methane emissions as a part of the Working Group on Enhancing Climate Change Action in the 2020s. Beginning with the so-called "Sunnylands Statement" last year, the two countries tentatively began to cooperate on the broader goal of mitigating the climate crisis. Now, China has been presented with an opportunity to cut emissions from its coal sector at a low cost, making further progress on this front more feasible than ever. (Reuters, March 19, 2024)

FLOODS THREATEN THE MINING STATUS QUO IN RUSSIA

Amid flooding in Russia's Kurgan Oblast, concerns are rising over the vulnerability of the Dobrovolnoye uranium deposit, which is operated by the ROSATOM-governed firm Dalur. Despite the state agency's assurances that the environmental crisis will have a minimal impact on mining, satellite imagery of the site reveals it to be inundated with water. The satellite images, which have been released by multiple sources, depict flooding across the Tobol floodplain, encompassing vital segments of the uranium deposit.

The issue has the potential to turn into a local political crisis in the south-central Russian region. Local Kurgan activists have been pushing for a ban on uranium mining for years over fears that radioactive materials could leak into groundwater and contaminate the Tobol River, thereby posing a direct threat to public health. Now, although officials have downplayed the severity of the flooding, environmentalists are warning anew of radioactive contamination risks. (*Agentstvo*, April 22, 2024)