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GLOBAL ENERGY TODAY: THE ASIAN NEXUS

By Scott L. Montgomery, an affiliate faculty member in the Henry M. Jackson School of International Studies at the University of Washington



Shoveling Coal; Pingyao, Shanxi, China

Article 5 EAST ASIA: NEW CENTER OF GLOBAL ENERGY AND RELATED ISSUES

It used to be that tankers carrying oil and liquefied natural gas turned right when leaving the Persian Gulf, headed to Europe and the U.S. Today, they turn left, towards East Asia. In a single decade, this region has become the new center of demand for fossil fuels. Yet it is rapidly becoming the nexus for non-carbon energy too, meaning solar, wind, hydro, and nuclear power.

East Asia is even more central if we add Russia, which geography and history argue we should. While China is now the world's leading energy consumer, Russia is the largest supplier. The two share a 2,650-mile border, which might seem ideal. But Moscow and Beijing have long competed for influence in the region. China has made major inroads in acquiring oil/gas from former Soviet territories Kazakhstan and Turkmenistan. Russia's energy influence, however, lies elsewhere: its immense pipeline system, built during the Cold War, focused on Belarus, Ukraine, and East Europe, its buffer against the West. This has led to a pointed historical irony: today, Europe is deeply dependent on Russian oil/gas. This stands as a warning to East Asia, which has seen Moscow's readiness to use energy exports as a tool of foreign policy.

China is unique for industrializing an economy of over 1.3 billion people in a single generation. But the country has both benefited and suffered from such breakneck growth. It is now the world's largest oil importer and coal consumer and worries greatly about the insecurity this brings. The South China Sea is now an oil lifeline to China and its military, one reason this maritime area has become a sea of conflict.

Government policy for energy self-reliance led to overwhelming use of coal, which the country has in abundance. The result has been horrific pollution, particularly in the cities, where more than a million people now die prematurely every year, creating much public anger and dissent. To deal with this, China greatly expanded wind, solar, hydro, and nuclear power all at the same time. While it now leads the world in solar and wind power, it has also built many new dams on rivers shared by South and Southeast Asian nations. China also sells cheap solar panels to North Korea, where no national grid operates. Chinese companies now lead the world in building 6-7 nuclear reactors annually, planning hundreds more. It will soon be the first to commercialize and export advanced, next-generation nuclear technology.

South Korea and Japan are technological powerhouses that share energy challenges but have different plans to deal with them. Lacking fossil fuel resources, both countries import around 98% of their oil and gas. Both have increased their consumption of these and coal. Japan was set to reduce such consumption, but after the 2011 Fukushima accident, the government shut down the country's 48 reactors, only two of which have been restarted. Both countries have ratified the Paris Climate Agreement, which requires they reduce their emissions considerably. But while Japan plans to achieve this with renewables, efficiency, and a smaller nuclear program, Korea intends to expand nuclear power 50%, while becoming a global exporter of nuclear technology.

In this, the Koreans will have competition not only from China, but Japan and, especially, Russia. Despite Fukushima, other nations understand Japan's companies have unmatched expertise building reactors in earthquake zones. But it is Russia's state-owned firm, Rosatom, that has made agreements with no fewer than 36 countries to build, operate, and even help finance their first nuclear plants.

These basic facts show that East Asia, while having become the global center of fossil fuel demand, is also moving the non-carbon energy transition forward in major ways.



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