

Energy Geopolitics - Brief Summary of Reader

Energy Shocks - Weaponization of Energy

- 1973 Arab oil embargo
 - led to the creation of the International Energy Agency (IEA) and requirement that member countries hold 90 days of oil in strategic reserve
 - led Japan to develop domestic nuclear power, which until the Fukushima disaster in 2011 provided 30% of the country's energy
 - led Denmark to develop on/off-shore wind energy to become the world leader
- Russian invasion of Ukraine and cutoff of natural gas pipelines to Europe and embargo of Russian petroleum shipments around the world

Definitions of Energy Security

- IEA - *ensuring the availability, affordability, and accessibility of energy supply for a country*
- Daniel Yergin, author of The Prize - *the capability to assure adequate, reliable energy supplies at reasonable prices in ways that do not jeopardize major national values and objectives*
- Meghan O'Sullivan, author of Windfall - *having access to affordable energy without having to contort one's political, security, diplomatic, or military arrangements*

Major Points

- **Energy is Political** - 200 people died in Texan "deep freeze," CA and others have rolling blackouts, Germany cancelled shutdown of 3 reactors after Russia invaded Ukraine
- **Energy Security is part of Great Power Competition** - Trump's "trade war" on China sought to slow its progress in green tech, China thought capable of cyber threats against our power grid, Russia cuts off natural gas supply to Europe
- **Security & Sustainability are Interrelated, but often Contradictory** - Europe shifted to coal to counter Russia, CA closed aging nuclear power plant which raised emissions from other sources, EVs require REES from China
- **Energy Diversity is key to both Security & Sustainability** - hydrocarbons are 75% of global energy, National oil companies control >70% of world's oil & gas assets, 840 million people live without access to electricity

Supplemental Video - The Role of Nuclear Energy Wall Street Week, October 14th, 2022, 4:11 PM PDT

Christine Todd Whitman, Former EPA Administrator & Former New Jersey Governor explains why nuclear power can help bridge the way from fossil fuels to renewable energy and why we should be investing more in developing the technology. (Source: Bloomberg)

<https://www.bloomberg.com/news/videos/2022-10-14/the-role-of-nuclear-energy>