

**Session: The gas role in a changing geopolitical context:
natural gas, hydrogen, other renewable gases
and CCUS**

Adonis Yatchew

Professor, Economics Department, University of Toronto
VP Publication, IAEE
Editor-in-Chief Emeritus (2006-2023), *The Energy Journal*

Current and Future Challenges to Energy Security

9th AIEE Energy Symposium
Rome November 21, 2025

Hybrid Vehicle



Background

- Soviet Union collapses in 1991.
- Premises:
 - Integration of autocratic regimes into world trading systems would ultimately lead not only to economic liberalization, but eventually to political liberalization.
 - Countries with intertwined supply chains would remain on cordial/peaceful terms.
- Increased European dependence on Russian hydrocarbons rationalized using economic, environmental and geopolitical arguments

Background

- 1992 *The End of History and the Last Man*, Francis Fukuyama
 - “Fukuyama wasn’t arguing that history had ground to a halt. Rather, he was saying that the competition between liberalism and authoritarianism had been settled and that liberal democracy had won. **It was a seductive argument.**” Chrystia Freeland, *Foreign Policy*, June 14, 2018
- 1993 “The Clash of Civilizations” Samuel Huntington responds to his former student in a *Foreign Affairs* essay (and subsequent book of the same title).
 - 2020 *The New Map: Energy, Climate and the **Clash of Nations***, Daniel Yergin

Natural Gas in Europe

- Europe increases its dependence on Russian hydrocarbons
 - 2011 Nord Stream 1 operational
 - Sept 2014 Nord Stream 2 memo signed, after Russian invades Crimea
- Lithuania which imported almost all its natural gas from Russia, spent \$330 million on a floating LNG storage and regasification unit.
 - Launched in 2014, it was named the *Independence*.



Dutch Disease v. Resource Curse

- **Dutch Disease and *Industrialization***
- **Resource Curse and *Democratization***
- Ruling elites in countries which receive much of their revenues from resource extraction (think oil) –
 - do not have to engage with the people, or give them **political voice**
 - absence of ‘**revenue bargaining**’ (whereby the population would provide government with tax revenues, in return for services, stability, and political voice)
 - in ‘**rentier**’ states, ruling elites need to provide sufficient goods and services so they are not overthrown, but not much more

Russia's Natural Resource Curse

- Russia's natural resources – most importantly oil and natural gas – have
 - stifled modernization
 - stifled democratization
- “... the case of Russia since 1998 illustrates how oil revenues can endanger a weak democracy by boosting the popularity of an elected incumbent, who gradually removes checks and balances on their own authority”
 - Ross, M. (2012). *The oil curse: how petroleum wealth shapes the development of nations*. Princeton University Press.
- It provided Russia with leverage against European countries which were heavily dependent on Russian gas and to a lesser degree oil.

Natural Gas and the Energy Trilemma

- Economics – reasonably priced natural gas critical for economic growth and affordable end-use applications (heating)
- Environment – roughly half the carbon footprint of coal, but also fugitive methane issue; essential complement for non-dispatchable resources
- Security – reliable suppliers minimize risk of exposure to political or economic coercion

Comments

- Increased weight placed on security
 - Diversification of natural gas supplies
 - Resumption of gas trade with Russia unlikely to lead to democratization
- Autocracies coalesce through commonality of interests (i.e., opposition to democracy) rather than being united by ideology
 - The long game – Weiqi vs. Chess
- Acceleration of energy transition? Increased incentives for innovation?
- Long-lived natural gas infrastructure and its future uses in the energy transition

Initial Comments

- Re-examination of dependency on non-democratic regimes; de-risking rather than de-coupling
- Increasing voice of Global South
- Economics of Energy and the Environment (EEEP) Anne Neumann anne.neumann@ntnu.no is organizing a special issue of papers on Ukraine [EEEP_Ukraine_CfP.pdf](#)
 - Or send me an email adonis.yatchew@utoronto.ca