

Geopolitics Shaping Future Energy Maps

What is the New Energy Security Age?

The New Energy Security Age is the emerging geopolitical era in which access to, control over, and resilience of energy systems have become primary determinants of national power and economic competitiveness. Unlike earlier periods when energy security was framed mainly in terms of oil stocks, diversification, and market liberalization, today's picture is defined by:

- **Self-Sufficiency & Stability:** The use of nuclear, geothermal, solar, wind, and storage to reduce reliance on fossil fuel imports and produce stable electricity prices to attract industry, as well as the export of electricity or domestic fossil fuels to allies.
- **Minerals:** Competition for critical materials (e.g. lithium, cobalt, nickel, rare earths) that underpin advanced technologies.
- **Infrastructure & Interconnection:** Cross-border grids, pipelines, and digital-energy systems that both enable resilience and expose shared vulnerabilities.
- **Technology & Industrial Policy:** The race to dominate strategic technologies (AI, batteries, advanced nuclear) where energy is both an input and an output.
- **Finance & Statecraft:** The deployment of capital, subsidies, sanctions, and investment controls as levers of energy power.

In this age, energy continues to be a front-line instrument of statecraft, shaping alliances, trade flows, and even conflict, but in new, more complicated ways as the landscape shifts from the dominance of hydrocarbons and demand skyrockets to meet new technologies.

Energy has always been intrinsic to geopolitics

Throughout history, competition over resources and innovations have fueled global rivalries, created alliances, and sparked wars. Yet today, the traditional energy security paradigm—rooted in supply diversification and market liberalization, and centered on hydrocarbons—has given way to new forms of infrastructure nationalism, resource weaponization, and partnerships shaped by technological and mineral interdependence.

Today's contest is no longer just about barrels and pipelines. It's about who controls minerals, grids, financing, and technologies that will power the 21st century. In this New Energy Security Age:

- Energy security is industrial strategy.
- Infrastructure is a tool of diplomacy.
- The global energy order has the potential to fracture into rival blocs with divergent interests and supply networks.

Artificial intelligence (AI) has only supercharged this shift

The data centers driving the AI race require gigawatts of stable electricity, forcing governments to treat power as a strategic asset on par with oil in the 20th century. Otherwise, they risk missing out on a new wave of innovation and economic growth as technology transforms societies.

This is not a single contest, but many overlapping ones—rooted in geography, natural resources, innovation, and industrial capacity. Competitive advantages in natural resources domestically and with allies are leading to divergent behavior globally as countries seek to increase power supply and invest in domestic infrastructure, including for AI. Policy and technology innovation determine how these cards are played.

Clear competitive advantage for fossil fuel dominance is in North America, the Middle East, and Asia. However, other sources of energy production see additional strategic advantages not only in North America and Asia, but also Africa, Australia, South America, and Europe. Water availability, sunshine, wind, geothermal access, critical minerals, and technology innovation provide additional strategic national resource advantages. Technology innovation—especially for those with self-sufficiency to move away from fossil fuels—has had historic advantages in the U.S., EU, Russia (nuclear) Africa and Australia, but is gaining in Asia.

The natural resource hand that individual countries have been dealt is not necessarily deterministic. Both price and geopolitics will play a role in how regions choose to further develop their natural resources to build out energy infrastructure for independence or cross-border partnerships.

Geopolitics and national security interests will increasingly influence market-driven principles, changing how resources are used and which technologies scale. This may alter the total addressable market size for certain technologies, companies, or resources, limiting growth in some areas and accelerating it in others.

If you assume energy supply growth will be prioritized above other considerations, then an “all of the above” approach will be taken, optimizing for strategic advantages within one’s borders and trading partner allies. Access to pools of specialized capital to support

specific energy technologies, either from the private sector or governments, will speed or slow deployment; however, energy security considerations will drive growth overall.

Business leaders need to familiarize themselves with these changing dynamics in order to best capitalize on emerging global dynamics.

Financial success will hinge on understanding how geopolitical shifts impact future investments and are included in strategic planning. Those who can anticipate and adapt to these changes will be best positioned to capitalize on the opportunities and manage the risks that arise in this New Energy Security Age.