

Navajo Nation Energy Opportunities

DNR EXPO 2026

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The proposed Navajo Nation Energy Office is anticipated to serve as the foundational driver of innovation by integrating major trends in energy and technology with infrastructure, capital, and natural resources to create sustainable revenue that improves and safeguards the quality of life for the Navajo people and their communities.

The 2013 Navajo Nation Energy Policy

What is the 2013 Navajo Energy Policy?

- Provides guidance for all stakeholders pursuing energy-related activities on the Navajo Nation. It sets out principles for exploration, development, sustainable management, and the use of energy resources.
- To ensure such resources and assets are used for the benefit of the Diné and to create a self-sustaining economic future for the Diné on their lands.
- To ensure sovereign control and management by the Nation over the planning, assessment, development, and the extraction and delivery of resources from the Nation's lands.
- To supply Navajo communities with the benefits of energy and mineral development through total resource sovereignty.

Legislative Authority

The Energy Policy is established pursuant to CO-50-13 and under title 2 N.N.C., where the Resources and Development Committee (RDC) of the is the legislative authority and oversight.

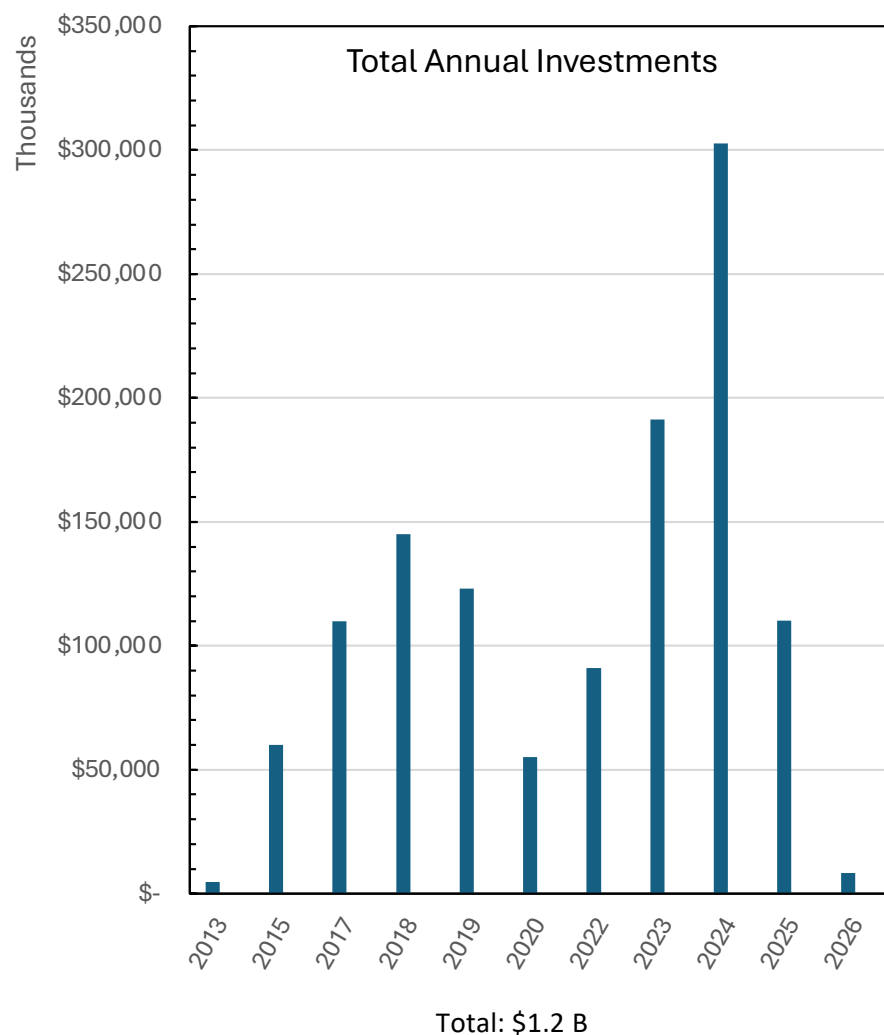
Policy Sections

1. Preamble
2. Scope & Review
3. Definitions
4. Fundamental Law
5. Sustainable Energy Economy
6. General Provisions
7. Large-Scale Energy Developments
8. Community & Economy
9. Coal
10. Renewable Energy
11. Nuclear Matters
12. Electrical and Energy Distribution Systems
13. Navajo Energy Office
14. Research and Development
15. Taxation
16. Limitations

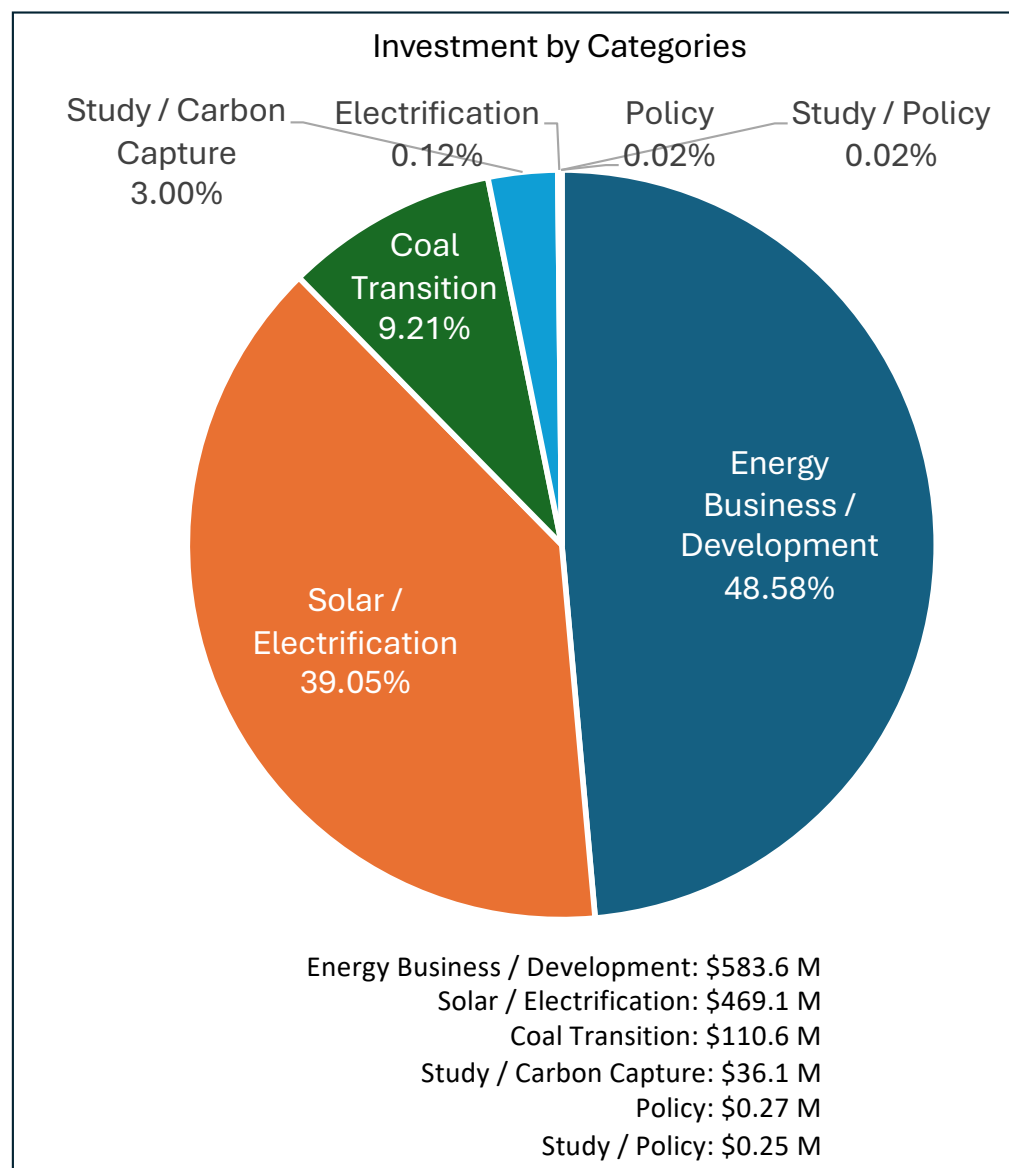
To serve as the central clearinghouse for energy-related projects, to facilitate energy development and to increase institutional capacity

- Develop a strategic energy plan
- Address energy opportunities
- Foster a competitive business environment
- Attract investors
- Engage stakeholders
- Investigate all available energy resources
- Prioritize energy projects
- Serve as a technical resource

13-Yr Timeline Annual Investment & Categories



Note: Investments were made by the Nation, Federal Grants, and the Navajo Enterprises/Businesses.



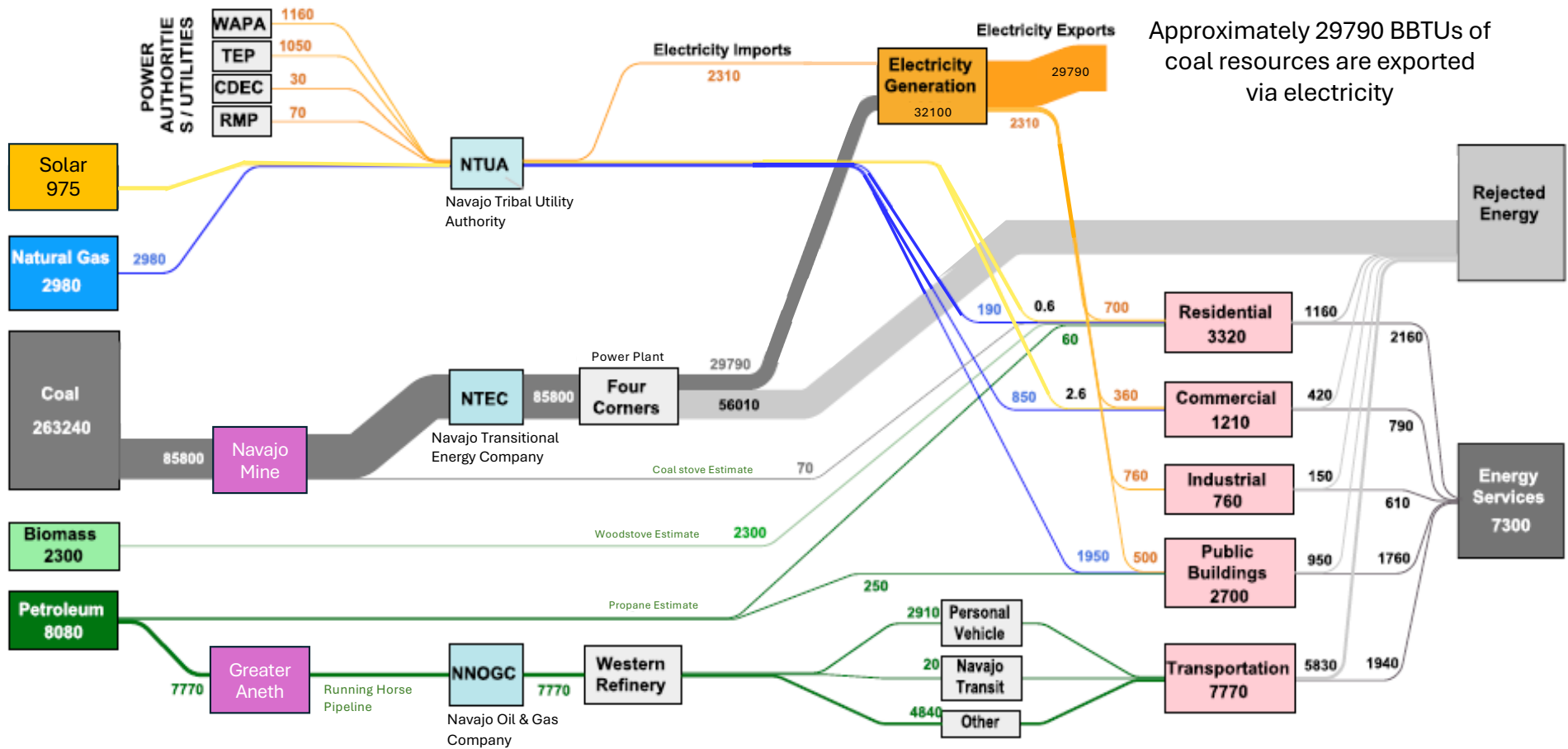
Navajo Nation Resources Estimates (2026)

Resource	Quantity	Unit assumption	Price used	Implied value (USD billions)
Coal	42 B tons reserves	1 metric ton	130.20 USD/ton	≈ \$5,468 B
Uranium	70 M tons reserves	1 metric ton	86.80 USD/lb ≈ 191,000 USD/ton (2,200 lb)	≈ \$13,370 B
Oil	3.5 B barrels reserves	1 barrel	69.57 USD/bbl	≈ \$243.5 B
Natural gas	700 Bcf reserves	1,000 cf ≈ 1 MMBtu	2.81 USD/MMBtu (Henry Hub)	≈ \$2.0 B
Solar	~1,919,730 MW potential	1 MW capacity	1.3 MUSD/MW (overnight cost)	≈ \$2,496 B
Wind	4,562 MW potential	1 MW capacity	1.5 MUSD/MW	≈ \$6.8 B
Geothermal	160,372 MW potential	1 MW capacity	4.0 MUSD/MW	≈ \$641 B
Hydro	84 MW	1 MW capacity	3.0 MUSD/MW	≈ \$0.25 B
Minerals/gases	N/A	–	–	Not estimated
Total Implied Value:				≈ \$22.2 T

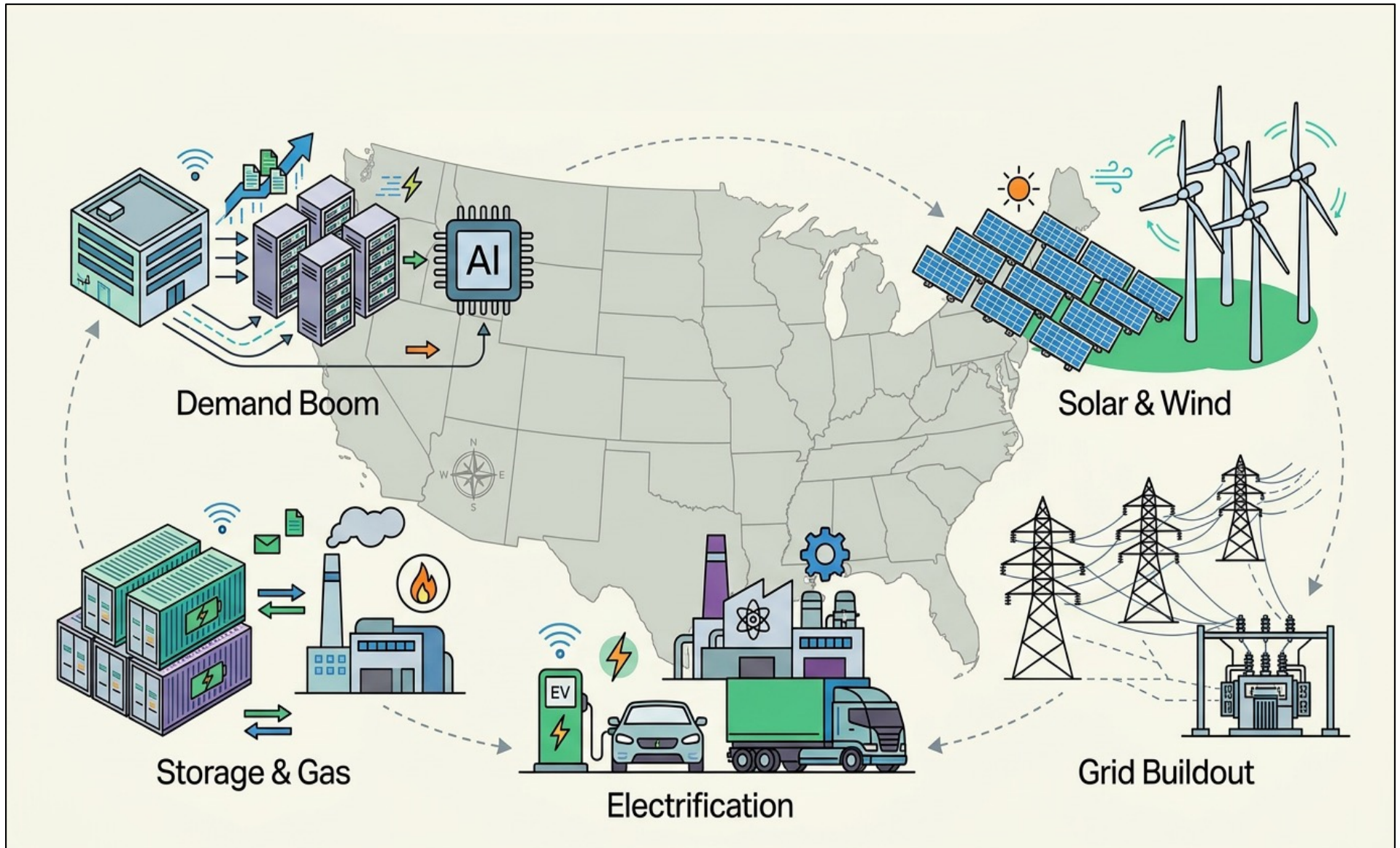
Source: Navajo Nation Mineral Department, Navajo Wind Energy Development Exclusion – Grant Brummels, Geospatial Analysis of Renewable Energy Technical Potential on Tribal Lands – E. Doris, A. Lopez, and D. Beckley (NREL), Developing Clean Energy Projects on Tribal Lands – Office of Indian Energy (DOE)

2026 Estimated Navajo Nation Energy Snapshot

An estimated 100+ trillion BTU's (conservative) are consumed



2026 U.S. Energy Megatrends



Southwest Energy Mega Trends

- ❖ **Electricity is projected to grow.** SRP, APS, TEP, and PNM are all adding clean energy resources in accordance with their IRPs and ISPs. Per the plans, by 2030, renewable generation is expected to outpace fossil-fuel generation.
- ❖ **Increase energy efficiency and reduce environmental impact.** Reduce water use and carbon emissions from generating sources, including fleet carbon emissions.
 - ❖ APS: 65% clean energy by 2030
 - ❖ SRP: Reducing CO₂ by 40% by 2043.
 - ❖ TEP: 80% CO₂, NO_x, and water reduction by 2035.
 - ❖ PNM: 65% by 2035 and a carbon-free portfolio by 2040.
- ❖ **Energy is becoming more decentralized, decarbonized, and digitized.** Resource and System planning is a data-driven process.
 - ❖ Increasing the number of distributed energy resources (DERs)
 - ❖ Using AI and other Data Technologies
 - ❖ Revolutionizing the Grid and gaining more control of the resources
- ❖ **Investing in flexible generation and hydrogen-capable gas generation.** All source RFP's will more likely be technology-neutral to ensure greater reliability.
- ❖ **Energy costs volatility.** In many markets surrounding Navajo, costs are projected to increase by 30% or more due to higher fuel prices, rising demand for data centers, and wildfire mitigation and grid infrastructure improvements.

Navajo Nation Energy Megatrends

The Navajo Nation's energy outlook is increasingly defined by five structural shifts: a transition away from coal dependence, incomplete electrification, greater sovereignty over transmission and siting, a practical need for firm power during decarbonization, and stronger demands for local value retention.

1. Coal Transition

Solar, storage, and selective wind are replacing a shrinking coal-centered revenue model.

2. Electrification Gap

Line extensions and distributed systems remain essential because of residential energy poverty.

3. Energy Sovereignty

Transmission corridors and project terms are being negotiated as sovereign economic decisions.

4. Firm Power Strategy

Leadership is balancing decarbonization with reliability, employment, and supply resiliency.

5. Local Value

Projects now prioritize jobs, revenue, workforce training, benefits, and tribal ownership.

6. Funding Opportunities

Integrating public funding and capital layering to deliver feasibility studies necessary to deploy infrastructure development.

What to Watch:

- Interconnection and corridor control will shape which projects can scale economically
- Who captures cash flow, tax-equivalent revenues, and long-term governance rights will matter as much as MW size
- Legacy sites remain central to debates over jobs, reliability, and transition pacing
- Household access progress will remain a visible test of whether the transition delivers local benefits.

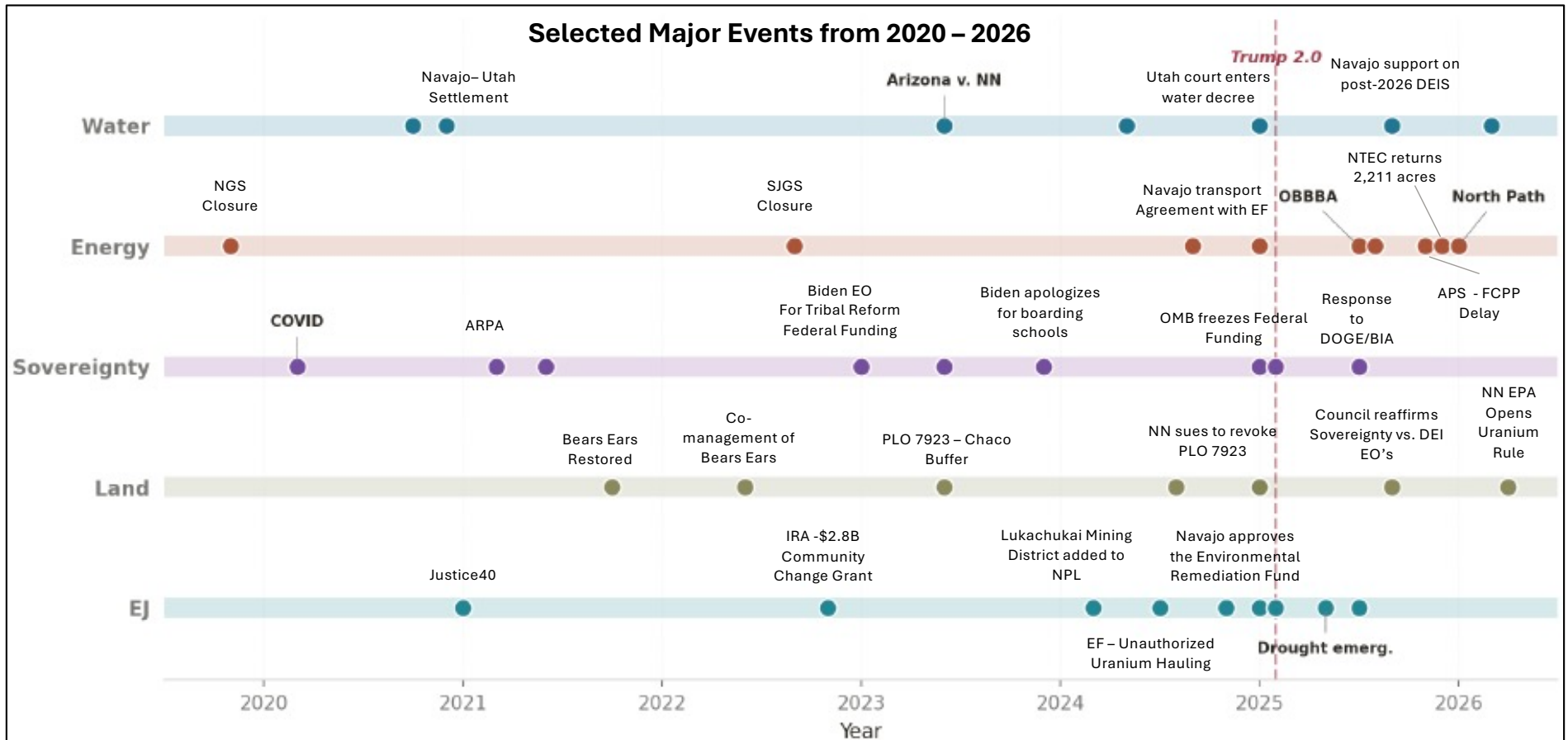
Technologies

- ❖ To accelerate economic growth and bridge infrastructure gaps, the Nation has deployed a comprehensive technology mix, including clean energy, advanced water management, forest carbon trade, 3-D printing, drone surveys, and high-speed digital infrastructure. Listed below are some technologies currently in use (green) and some planned (red) for future implementation.

Renewable & Non-Renewable Energy	AI & Data	Ag & Water	Environmental Assets	Manufacturing
•Utility – Scale PV •Residential – Scale PV w/BESS •Extraction & Detection •EHV Transmission & Substation •Geothermal •LEED Certified •Oil & Gas Processing •EV & Charging	•Tier 3 Co-Location Data Center •Data Storage •Fiber/Broadband Network •Satellite (Dish, Starlink, etc.)	•Genetics Lab – crop resilience & nutrition •Hemp •Center –Pivots •Drone Monitoring •Satellite Mapping •Agrivoltaics •Off-grid Purification & RO •Water Rehabilitation •Cistern •Water Canals •Nano - Filtration	•GHG Mitigation •ESP, FGD, and SCRs •Drone Monitoring •Remediation •Forest Carbon Sequestration	•Additive – 3D Printing •Electronics Assembly •Modular Homes •Digital Arts
•Advanced Fuels •Utility-scale BESS •Grid Modernization •Enhanced Geothermal •IGCC •DER / Modulars	•Hyperscale Data •AI (Health, Medicine, Data, Infrastructure) •Cloud Services •Regulatory Reviews •Advanced IT Services •Advanced Fiber / Broadband	•Advanced Agrivoltaics •Aquaponics & Hydroponics •Desalination •Water Harvesting	•CCS/CCUS •Sustainable Materials •Wildfire Mitigation •Critical Minerals Processing	•Modules & Accessories •Robotics •GIS •Advanced Additive Printing •Micro-factories •Building Materials

Geopolitical Forces

- ❖ In the last 1.5 years, Trump 2.0 has reversed the Biden-era environmental justice framework by rescinding \$433 billion in IRA authorizations, the Greenhouse Gas Reduction Fund, and the Environmental and Climate Justice Block Grants. Following this move, the EPA terminated the \$7B Solar for All Program, and the freeze removed more than \$720 million from Indian Country.
- ❖ While the Nation awaits crucial decisions, its path forward will be solidified through negotiated settlements/deals and the assertive exercise of sovereign authority, positioning the Nation to further leverage the federal environment.



What actions or initiatives are being worked or planned for?

NAVAJO ENERGY OFFICE

2026

Established

Per CO-50-13

4

Subdivision

Executive - Strategy –
Finance - Community

RDC

Oversight

Resources & Development
Committee

§ 501

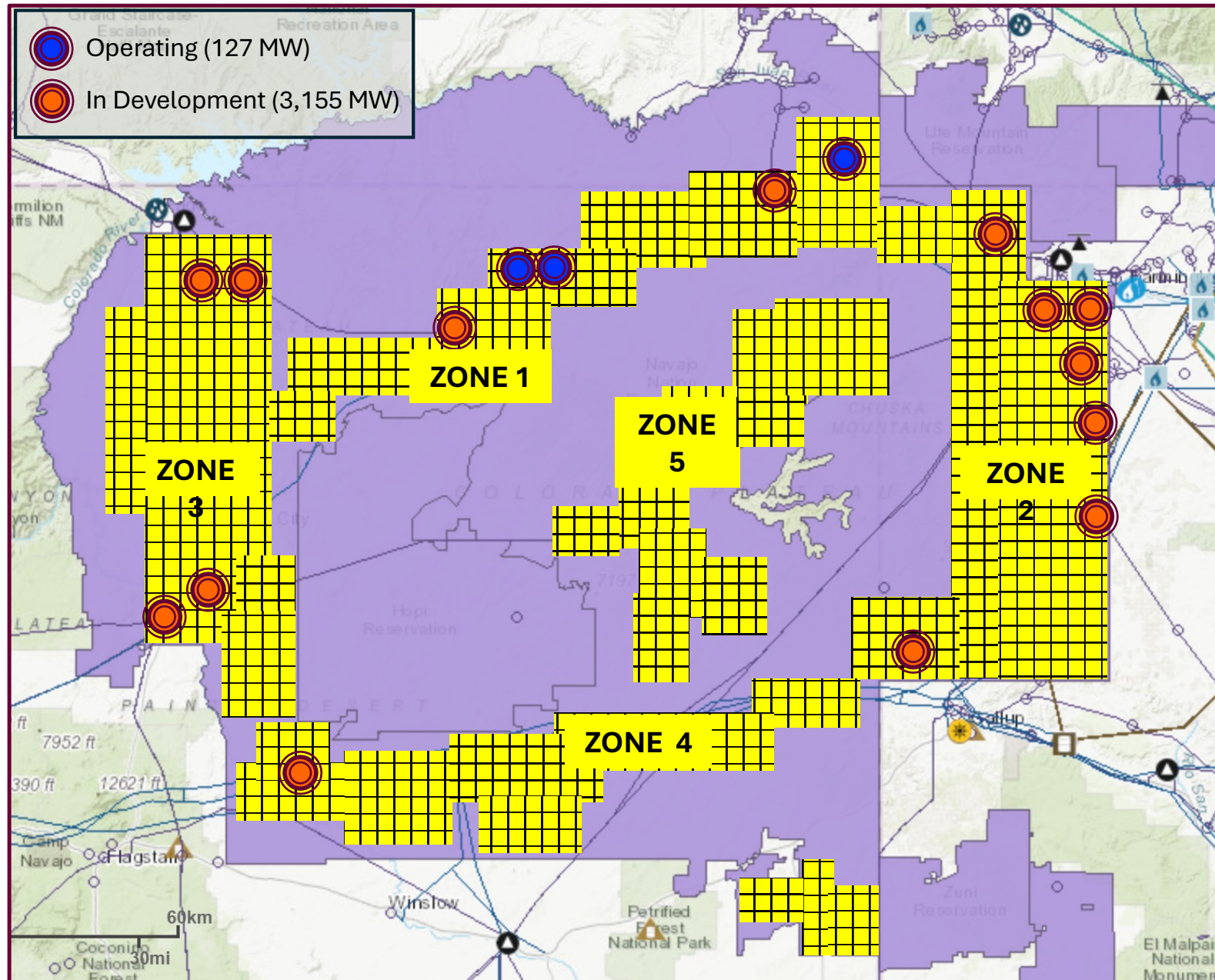
Authority

2 N.N.C. Legislative
Framework

Proposed Energy Office – Lowest Hanging Fruit

Opportunity	Category	Year
1. Apply for DOE Grant Funding Opportunities – Energy Policy Update	Policy	2026
2. Apply for DOE Grant Funding Opportunities – Strategy Plan	Policy	2026
3. Establish the Navajo Nation Energy Office – Executive & Legislative Approval (Executive Order by OPVP)	Policy	2026
4. Hire the Energy Office Staff & Director	Program / Development	2026
5. TEP Transmission ROW Settlement	Energy Business / Development	2026
6. Develop MOU with Navajo Entities/Programs & External Developers	Partnerships	2026
7. Address Energy / Mineral Approval Pipeline	Process Pipeline	2026
8. 500MW short-term transmission scheduling/contracting	Energy Business / Development	2026
9. Develop Leasing Framework for Energy Project	Policy / Regulation	2027
10. Develop Leasing Framework for Mineral Projects	Policy / Regulation	2027
11. Established Energy Hubs / Development Zones for Sales	Regulation / Development	2027
12. Apply for Community Infrastructure Deployment Grants	Energy Business / Development	2027
13. Establish Monetization of Resources and Regional Planning	Energy Business / Development	2028

Navajo Nation Utility-Scale Solar Development & Corridors



Proposed & Operating Navajo Nation Solar Projects

Navajo Nation Renewable Energy Projects – In Development

	<u>Description</u>	<u>Developer</u>	<u>MW</u>	<u>Location</u>
1	Wildcat Solar	Solariant Capital	90	Blackhat, NM
2	Moasi Solar	RWE	125	Yatahey, NM
3	Tohajille Solar	Sunpower	30	Tohajille, NM
4	Bisti Solar	Allium Renewable	100	Huerfano, NM
5	Chaco NIP Solar	NTUA/Drew Solar	100	Chaco, NM
6	San Juan Solar II	Photsol/Paranorma	400	Fruitland, NM
7	Shiprock Solar	Photsol/Paranorma	360	Shiprock/Fruitland, NM
8	Mexican Water	Dine Grid-STEG LLC	100	Red Mesa, AZ
9	Leupp Solar	NTEC	100	Leupp, AZ
10	Painted Desert Solar	EAS/NP	750	Cameron, AZ
11	Cameron Solar	NTUA/DE Shaw	200	Cameron, AZ
12	Red Antelope Solar	NTUA/Advantus	400	LeChee, AZ
13	LeChee Solar	NextEra Energy	400	LeChee, AZ

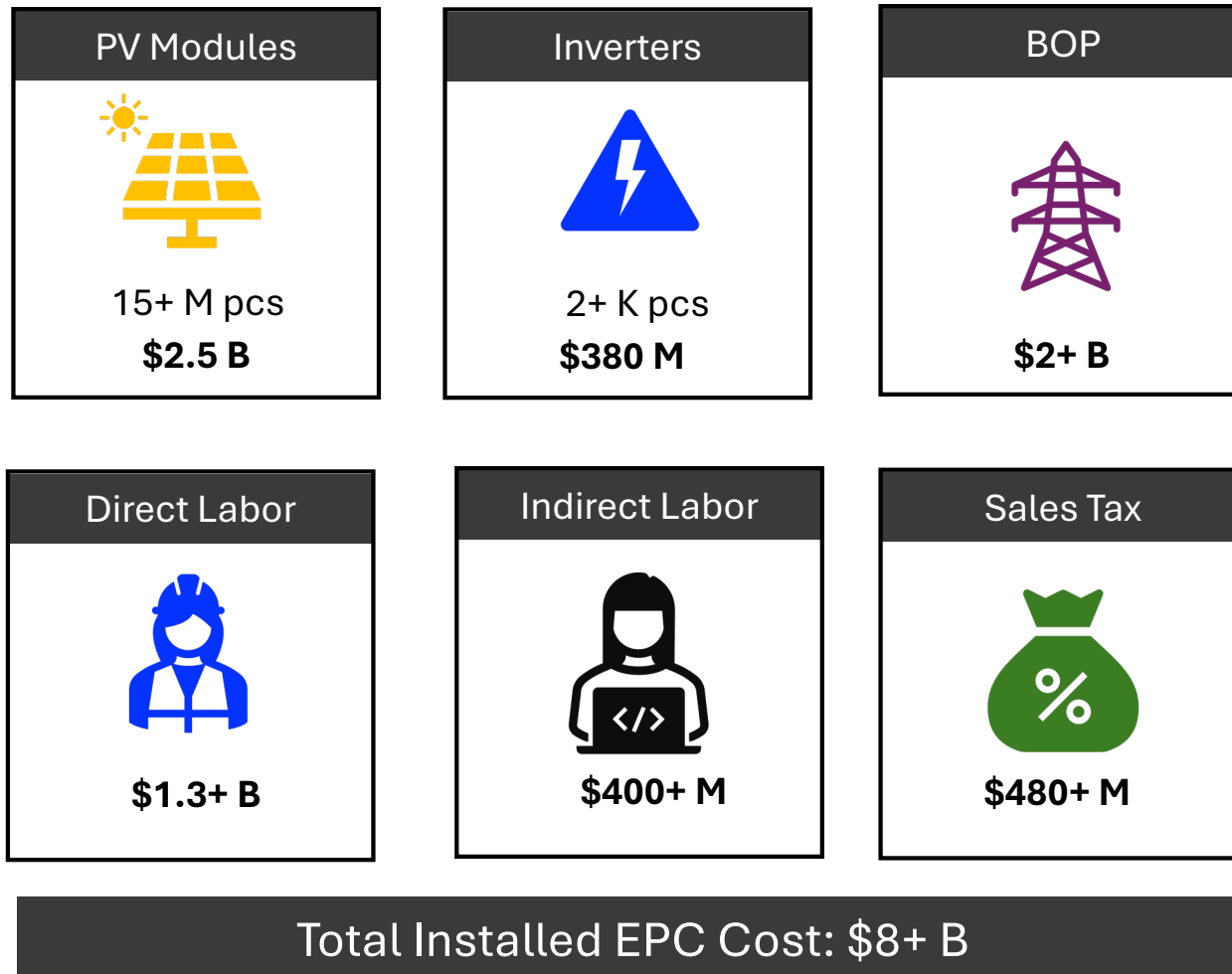
Total: 3,155MW

Navajo Nation Renewable Energy Projects - Operating

	<u>Description</u>	<u>Developer</u>	<u>MW</u>	<u>Location</u>
1	Kayenta Solar I	NTUA	27.5	Kayenta, AZ
2	Kayenta Solar II	NTUA	27.8	Kayenta, AZ
3	Red Mesa – Tapahe Solar	NTUA	72	Red Mesa, AZ

Total: 127.3 MW

Estimated Solar Energy Impacts to the Navajo Economy



Small Business Opportunities in a Local Energy Development Project

Job placement and workforce services can anchor a broader contractor-and-supplier network around every developing energy project, while opening new manufacturing and infrastructure business lines.



Every Energy Project Creates a Stack of Local Service Opportunities

EXPAND BEYOND SERVICES – BUILD NEW SERVICE LINES

- Solar Panel (Modules)
- Batteries
- Hardware
- Sand & Gravel
- 3-D Printing
- AI

Suppliers → Manufacturing → Infrastructure

Scale from Project Services into equipment manufacturing and supporting site infrastructure.

Key Trends from the 13-Yr Energy Timeline

13-Year Timeline Takeaways.

- ❖ Most of the Navajo investments were in business/development and solar/electrification, rather than in policy or electrification.
- ❖ The funding strategy has primarily focused on horizontal expansion – driving acquisitions to increase market breadth – with minimal investments in vertical integration, such as controlling supply chain stages, or developing niche-focused chains
- ❖ The Nation's renewable efforts heavily favor solar, neglecting wind, geothermal, and biomass, often with limited comprehensive feasibility studies.
- ❖ In 2025, a policy project was funded by a federal grant to establish the Navajo Energy Office.
 - A policy is a set of guidelines that steer decisions toward rational outcomes and goes hand in hand with regulations. Both policy and regulations are interconnected, it drives change. When laws and regulations remain stagnant, the Navajo Nation faces operational stagnation, which can halt economic development.
- ❖ Very few investments in electrification. The Navajo Nation has more than 10,000 homes without electricity. The Light It Up and recent grant funding are slowly increasing access to the grid.
- ❖ While the coal transition continues elsewhere, the Navajo Nation remains reliant on fossil fuels; therefore, continued dependency must be addressed in the updated energy policy.

Proposed Focused Recommendations

- The U.S. **removed \$1.5B** in federal funding, affecting 1,600 tribal projects. Federal funding is not secure, and energy development requires feasibility and FEED studies.
- During this downturn, the Nation should focus on strategic planning, policy development, and engagement plans, and on building internal capacity and resources, such as an **energy office**, a tribal utility office/commissions, corridors & land lease sales, and other meaningful streamlining of tribal processes.
- The Nation should focus on **leveraging new funding** opportunities (grants, capital layering, and other incentives) for large-scale deployment and decide whether monetizing its natural resources and assets would generate additional revenue.
- The Nation should continue **phasing out** fossil fuels or invest in clean technology programs to support a diversified energy mix that generates multiple, resilient revenue streams.
- Capture **all value streams**, from a development project to the end-to-end supply chain of speed-to-market distribution and sourcing of raw materials to manufacturing critical components.
- **Strategically plan** for grid and system demands created by forthcoming energy/technology hubs, such as data centers and “behind-the-meter” power generation sources.
- Protect the Nation’s sovereignty by **insulating the short-term and long-term strategies** from policy-cycle volatility as federal policies shift between administrations.

Additional Final Thoughts

- Establish the Navajo Nation Energy Office as the **central catalyst** for energy innovation.
- Integrate emerging energy and technology trends (e.g., renewables, digitalization, infrastructure modernization, clean fuels) into a **cohesive strategy**.
- Align energy-technology innovation with **existing and planned** infrastructure (transmission, distribution, generation, storage, processing) corridors and hubs.
- Mobilize capital—public, private, and tribal—to finance projects that **advance** energy sovereignty and economic development.
- Leverage the Nation’s natural resources (land, solar, wind, minerals, etc.) in a sustainable, **value-added** manner.
- Direct a focus drive **energy fund** from energy-derived revenues toward improving community-level quality of life (e.g., housing, water, broadband, health, education).
- **Prioritize** environmental stewardship and climate resilience in energy development.
- Continue to **empower** the Nation by advancing sovereignty and self-determination through strategic decision-making.
- Ensure that technological and infrastructure advances are designed and governed primarily for the **benefit** of the Navajo people and their communities.

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