Forecasting the Trump Administration's Energy Policy: Analyzing the President's Budget FY2026 and its Implications for U.S. Nuclear Policy

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1. Introduction

With the inauguration of the Trump administration, significant shifts in U.S. energy policy are expected, particularly in strategy for energy research and development. As the Department of Energy (DOE) plays a key role in advancing nuclear and other energy technologies, changes in fiscal priorities will shape the future of U.S. energy strategy. The President's Budget for Fiscal Year 2026 (FY2026) offers an early insight into these shifts, highlighting the administration's priorities for energy funding and its broader policy direction.

This study analyzed DOE's Budget Request for FY2026 to assess resource allocation in the energy sector, with a focus on nuclear energy. By examining funding trends, it explored how the administration's goals for energy are reflected in fiscal decisions.

2. U.S. Administration Budget Request and Decision Process

The U.S. federal budget process is a complex, multistep procedure that determines how government funds are allocated across various sectors, including energy. The process begins with the President's Budget Request, which outlines the administration's policy priorities and funding allocations for the upcoming fiscal year. This request serves as a blueprint for federal spending and must go through congressional review and approval before final appropriations are made.

The budget cycle starts with the Office of Management and Budget (OMB), which works closely with federal agencies, including the DOE, to develop funding proposals aligned with the administration's priorities. DOE submit their budget requests to the OMB, which evaluates them based on policy objectives, fiscal constraints, and economic conditions. After review and revisions, the President submits the Budget Request to Congress, typically by March. For the DOE, this stage is critical in determining funding for energy programs, including research and development. The administration's stance on energy policy influences DOE's budget proposal, reflecting its priorities. Once the President's Budget Request is submitted, Congress reviews it and makes detailed spending bills, debates, amends, and votes on these appropriations bills. Once both chambers of Congress approve the appropriations

bills, they are sent to the President for signature, finalizing the budget.

The budget process plays a crucial role in shaping U.S. nuclear energy policy. Changes in funding levels directly impact research, development, and deployment of energy technologies.

Under the Trump administration, fiscal decisions reflect its broader energy strategy, emphasizing energy dominance, deregulation, and domestic innovation. The FY2026 Budget Request indicates the administration's commitment to nuclear energy and its vision for the sector's future development.

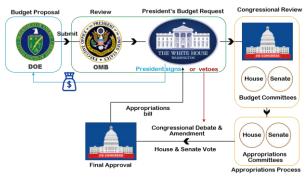


Fig. 1. Key step of federal budget approval process

3. Biden Administration vs Trump Administration

The Biden and Trump administrations pursued contrasting energy policies, shaping different approaches to nuclear energy, funding priorities.

3.1 Biden Administration's Budget Trend

The Biden administration prioritized clean energy, climate action, and technological innovation in its energy budget. The Department of Energy (DOE) budget requests under Biden consistently emphasized investments in renewable energy, energy efficiency, and decarbonization efforts. Nuclear energy received support, particularly for advanced reactor development and small modular reactors (SMRs), as part of a broader clean energy transition.

A key focus of Biden's energy budget was increasing funding for research, development, and deployment (RD&D) of clean energy technologies. The Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL) allocated significant resources to nuclear energy, hydrogen, and grid modernization. Additionally, Biden's budgets sought to phase out subsidies for fossil fuels while strengthening climate resilience initiatives.

Overall, the Biden administration's budget trend reflected a strong commitment to carbon neutrality and energy innovation, with nuclear energy positioned as a crucial component of the clean energy mix.

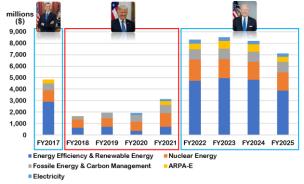


Fig.2. Budget request history for DOE's applied energy R&D

3.2 2nd Trump Administration's Budget Trend

The Trump administration's President's Budget Request for energy is reflecting its broader energy policy priorities, emphasizing energy dominance, deregulation, and domestic production. Based on previous trends, the budget prioritized fossil fuel development, including investments in carbon capture and utilization technologies, while reducing funding for renewable energy programs such as the Office of Energy Efficiency & Renewable Energy (EERE).

For nuclear energy, the administration is supporting advanced reactor development and small modular reactors (SMRs), aligning with previous Republican-led energy policies that favor nuclear as a stable and reliable energy source.

In the electricity sector, the budget may focus on grid reliability and security, with potential funding directed toward modernization efforts, particularly in areas that support baseload power sources like coal, natural gas, and nuclear.

Overall, while fossil fuels and nuclear energy are receiving strong support, renewables and energy efficiency initiatives face cuts or stagnation in funding, reflecting a shift away from climate-focused policies of the previous administration.

3. Conclusions

By comparing the Biden and Trump administrations' budget trends, this study highlights the policy divergence in U.S. energy strategy, particularly in the allocation of federal resources to different energy sectors. The President's Budget Request for FY2026 provides insight into the Trump administration's energy priorities, signaling a strategic shift from the Biden administration's clean energy emphasis toward policies favoring energy dominance, deregulation. Based on historical trends and preliminary expectations, the administration is likely to prioritize fossil fuels, nuclear energy, and grid reliability, while funding for renewable energy and energy efficiency programs may be reduced or restructured.

Ultimately, the evolution of U.S. energy policy under the Trump administration will have significant implications for energy security and global climate commitments.

As the administration's detailed budget proposals are released, further analysis will be required to assess the long-term impact on research, commercialization, and international collaboration in the energy sector.

REFERENCES

 [1] DOE, Office of Nuclear Energy, www.energy.gov/ne
[2] DOE, FY Budget Justification, 2018-2026, https://www.energy.gov/cfo/budget-performance

- [3] American Institute of Physics(AIP), <u>https://ww2.aip.org</u>
- [4] White House Office of Management and Budget (OMB), https://www.whitehouse.gov/omb/budget/

[5] Dong Hoon Lee, "Comparative Analysis of Nuclear R&D Program and Budgets: A Case study of the U.S. and Korea

"Korean Nuclear Society Spring Meeting Jeju, Korea, May 9-10, 2024.,