Federal Energy RD&D: Building on Momentum in Fiscal Year 2019

By Colin Cunliff and David M. Hart

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- In-depth analysis of all programs and subprograms that make up the clean energy innovation budget.
- Analytical overview, plus two-pagers covering areas such as ARPA-E, solar, nuclear, vehicle technologies, grid modernization, etc.
- PDFs available at itif.org/energy-budget.
Total DOE Budget by Major Function

- Energy programs comprise just 22 percent of the total DOE budget.
- Defense and Environmental Management together account for nearly two-thirds of the DOE Budget.
Proposed Changes in the DOE Energy Budget

- The proposed cut would be the largest single-year decrease (40 percent below FY 2018) in the history of the department.
Federal Energy R&D Funding, FY 1978 to FY 2019 Request

U.S. DOE Energy RD&D Spending

- DOE Energy RD&D Spending (left axis)
- DOE Energy RD&D Share of Non-Defense Discretionary Budget (right axis)
The report examines the impact of the proposed budget on 19 energy technology RD&D programs in the following DOE offices:

Examples: Solar Energy and Nuclear Energy RD&D

Solar Energy RD&D Proposed Cut: 72 Percent

Nuclear Energy RD&D Proposed Cut: 49 Percent

Read the complete series on the U.S. energy budget at itif.org/energy-budget.
Examples: Vehicle Technologies and Carbon Capture RD&D

Vehicle Technologies RD&D Proposed Cut: 80 Percent

<table>
<thead>
<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>Tech Int. &amp; Analysis</th>
<th>Materials</th>
<th>Efficient Mobility</th>
<th>Adv Engines</th>
<th>Battery/Electric</th>
<th>FY 2019</th>
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<tbody>
<tr>
<td>Millions</td>
<td>$141</td>
<td>$338</td>
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<td>$16</td>
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Carbon Capture RD&D Proposed Cut: 49 Percent

<table>
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<tr>
<th></th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>Pre-Combustion</th>
<th>Post-Combustion</th>
<th>FY 2019</th>
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<td>Millions</td>
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Read the complete series on the U.S. energy budget at [itif.org/energy-budget](http://itif.org/energy-budget).
Federal Energy RD&D – Read the Complete Series

Available at itif.org/energy-budget:

- Summary
- ARPA-E
  - ARPA-E
- Renewables
  - Solar
  - Wind
  - Water
  - Geothermal
- Transportation
  - Vehicles
  - Bioenergy
  - H₂ & Fuel Cells
- Energy Efficiency
  - Advanced Manufacturing
  - Buildings
- Fossil Energy
  - CO₂ Capture
  - CO₂ Storage
  - Advanced Coal
  - Oil & Gas
- Nuclear
- Office of Electricity
  - Grid Modernization
  - Cybersecurity
- Office of Science
  - Basic Energy Sciences
  - Fusion
Thank You!

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