

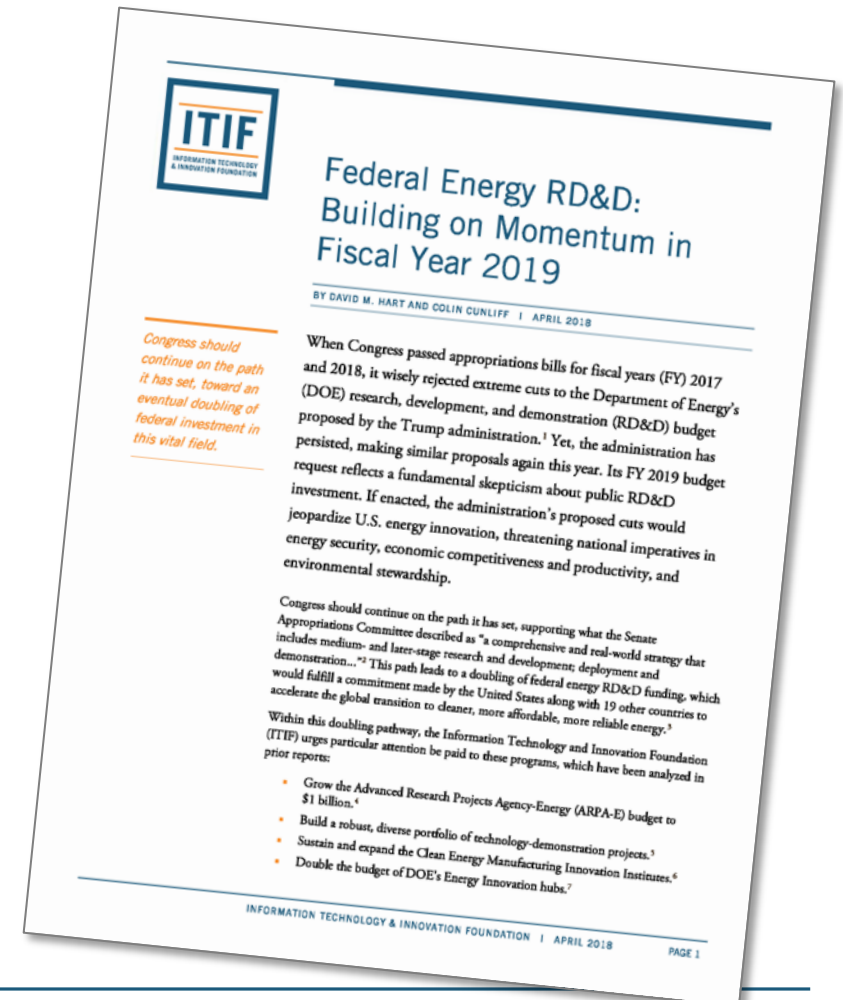
Federal Energy RD&D: Building on Momentum in Fiscal Year 2019

By Colin Cunliff and David M. Hart

April 2018

New ITIF Report on U.S. Energy RD&D Spending

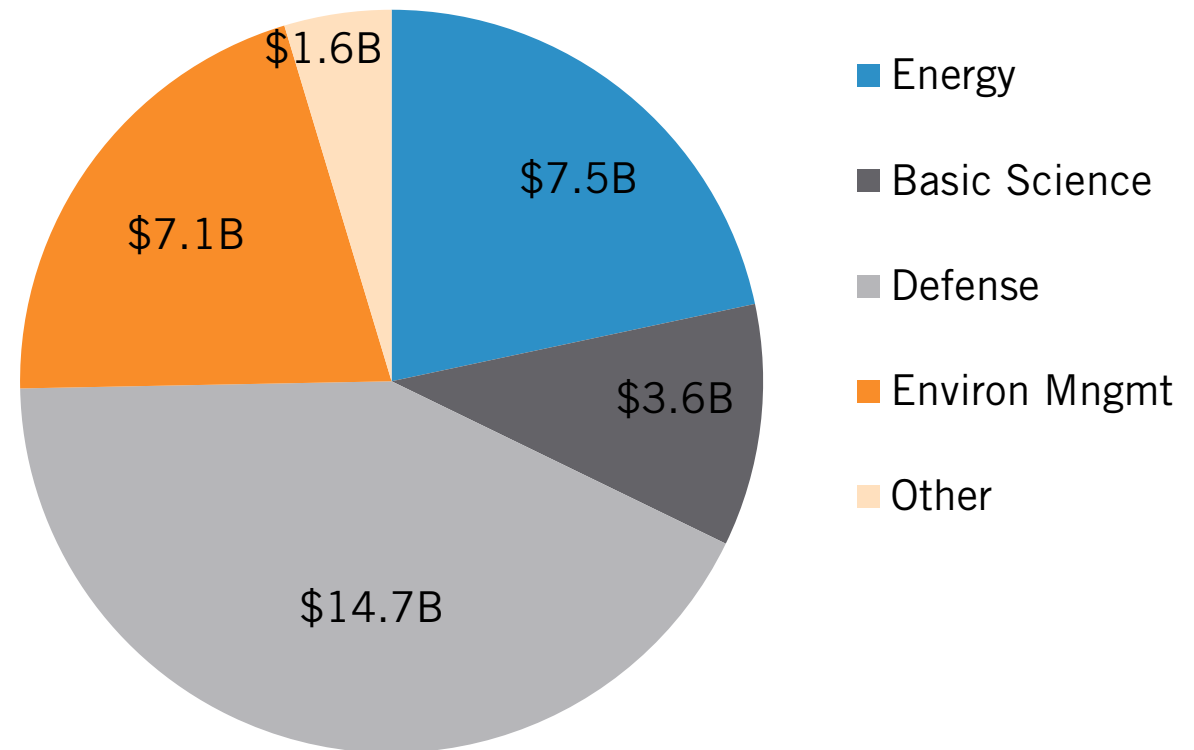
- In-depth analysis of all programs and subprograms that make up the clean energy innovation budget.
- Analytical overview, plus two-pagers covering areas such as ARPA-E, solar, nuclear, vehicle technologies, grid modernization, etc.
- PDFs available at itif.org/energy-budget.



Total DOE Budget by Major Function

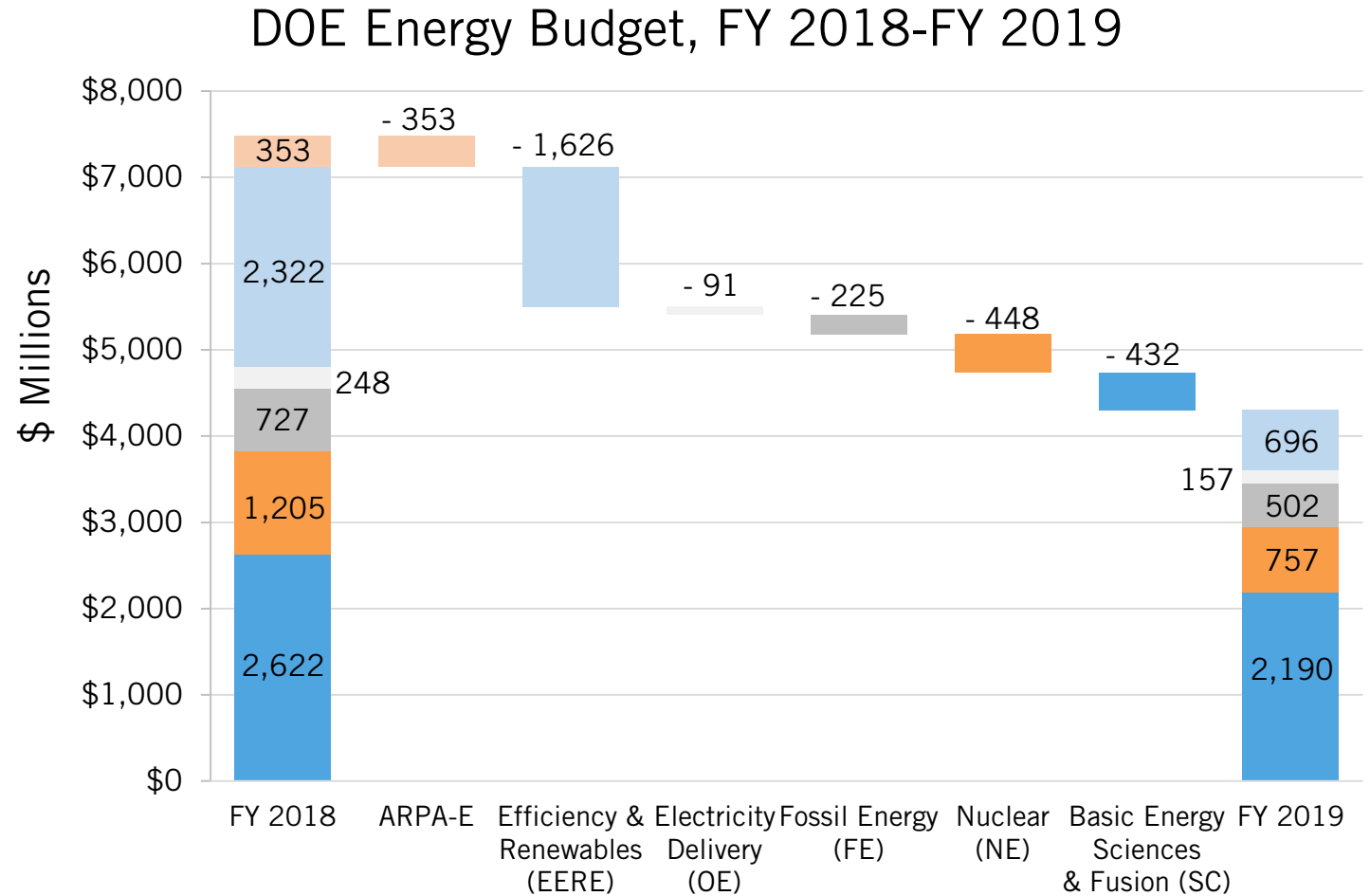
Total DOE Budget in FY 2018: \$34.5 billion

- 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.

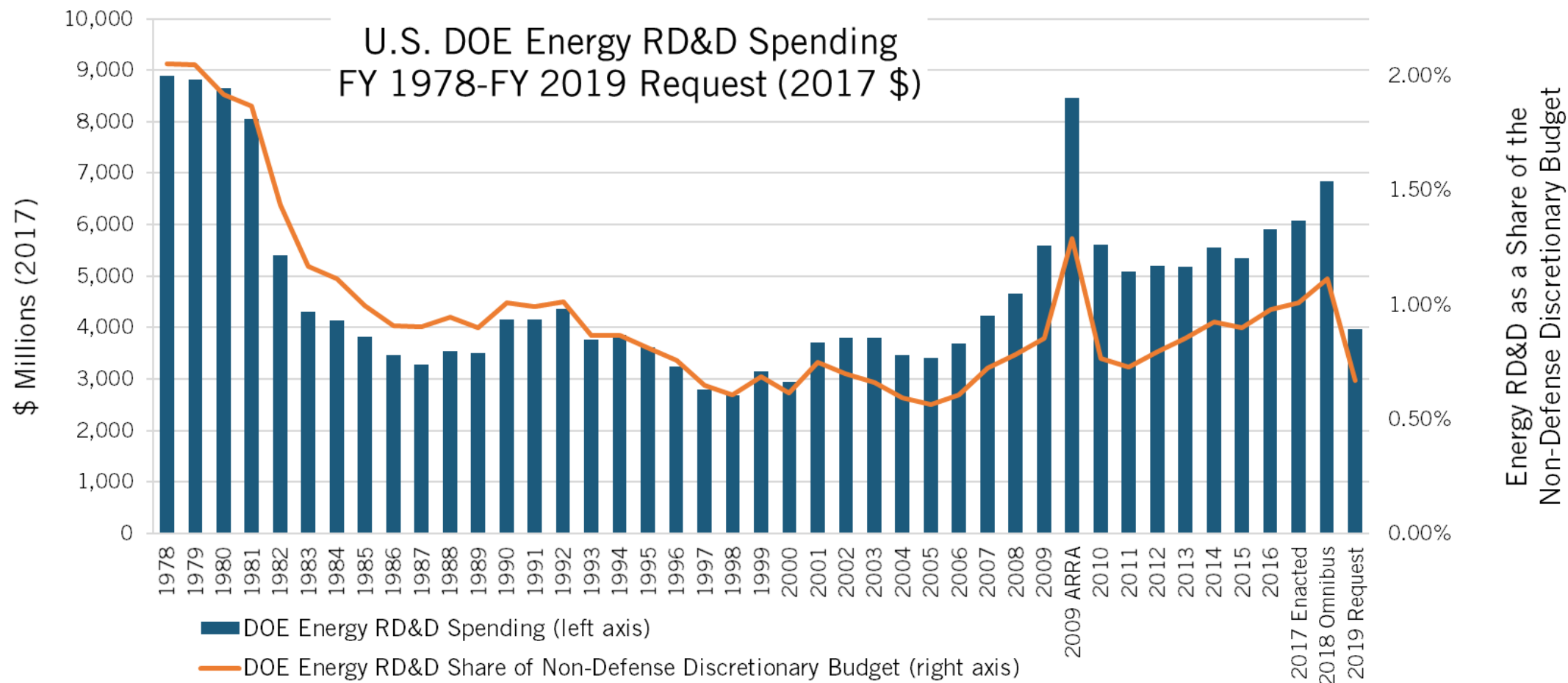


Proposed Changes in the DOE Energy Budget

- 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

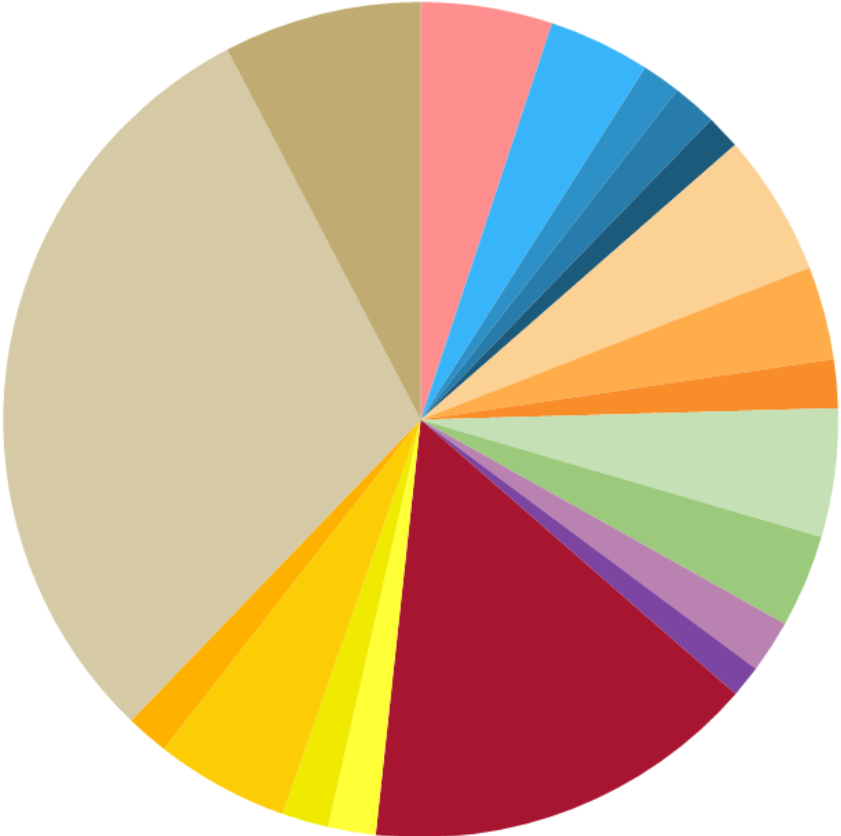


Energy RD&D by Program Office

DOE Energy R&D Budget, FY 2018

The report examines the impact of the proposed budget on 19 energy technology RD&D programs in the following DOE offices:

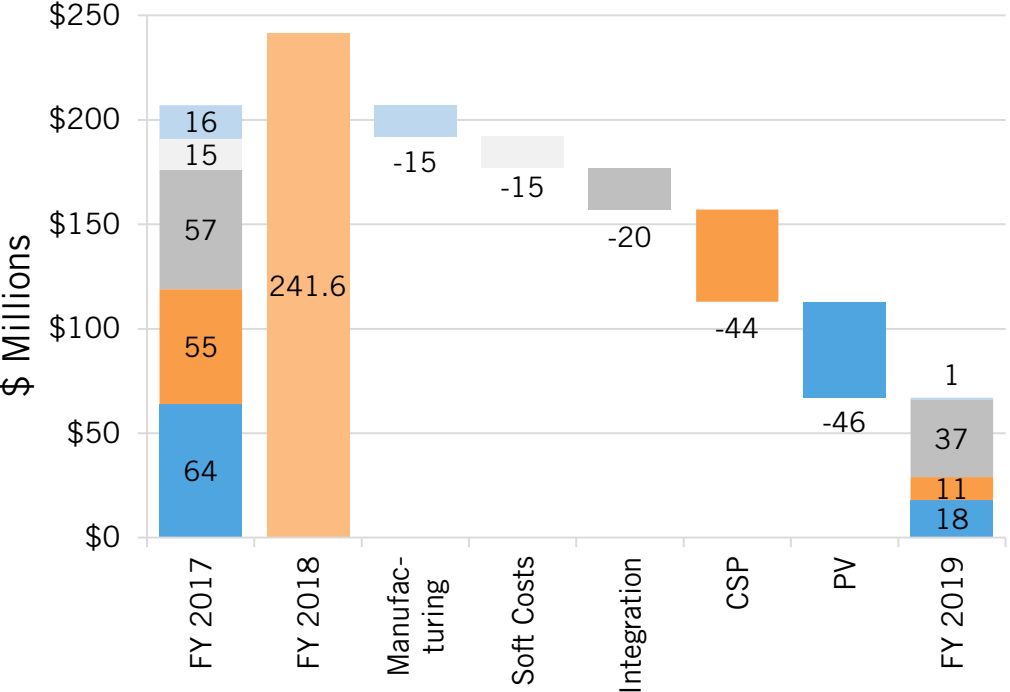
- ARPA-E, Renewable Energy, Sustainable Transportation, Energy Efficiency, Electricity, Nuclear Energy, Fossil Energy, and Science.



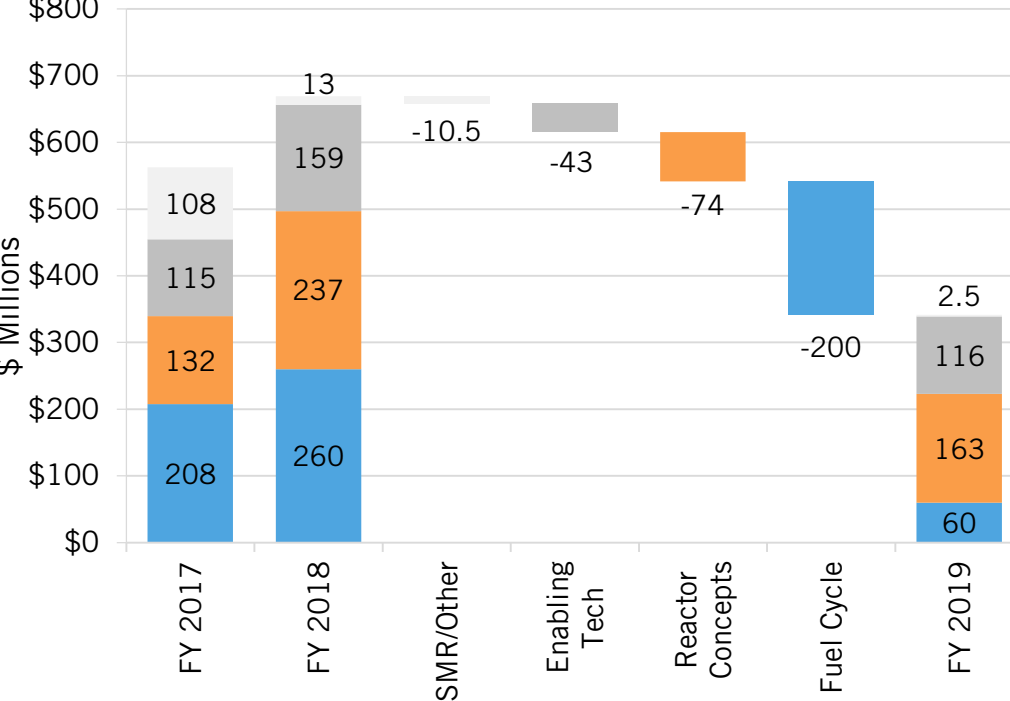
ARPA-E	ARPA-E
Renewable Energy	Solar
	Wind
	Water
	Geothermal
Sustainable Transportation	Vehicles
	Bioenergy
	H2 & Fuel
Energy Efficiency	Manufacturing
	Buildings
Office of Electricity	Grid Mod
	Cyber
Nuclear	Nuclear
Fossil Energy	CO2 Capture
	CO2 Storage
	Adv Coal
	Oil & Gas
Office of Science	Basic Energy
	Fusion

Examples: Solar Energy and Nuclear Energy RD&D

Solar Energy RD&D Proposed Cut: 72 Percent



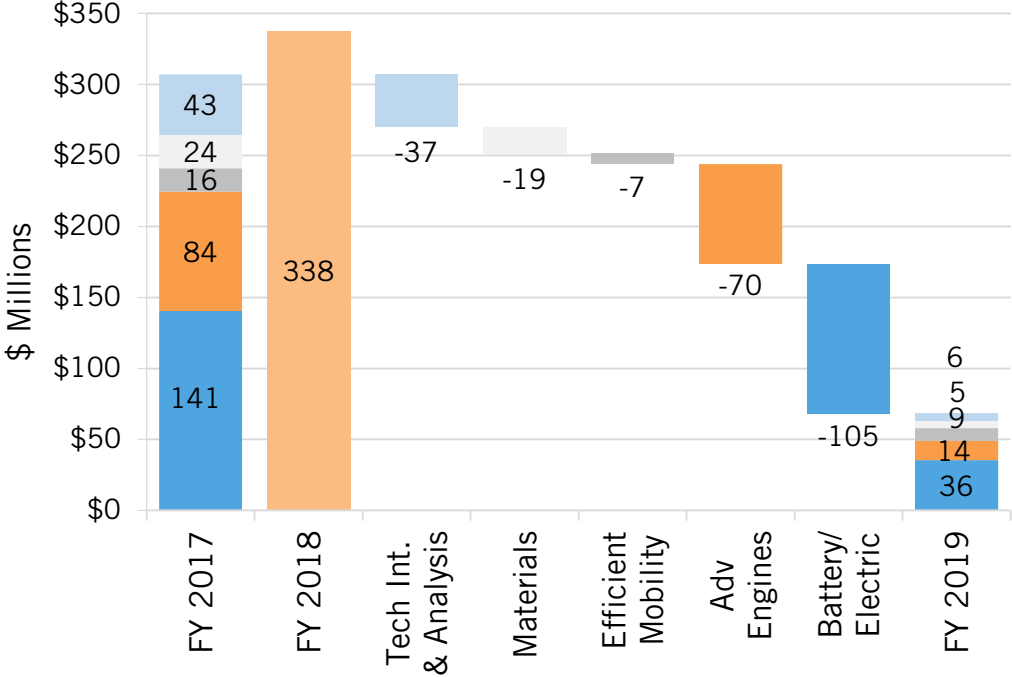
Nuclear Energy RD&D Proposed Cut: 49 Percent



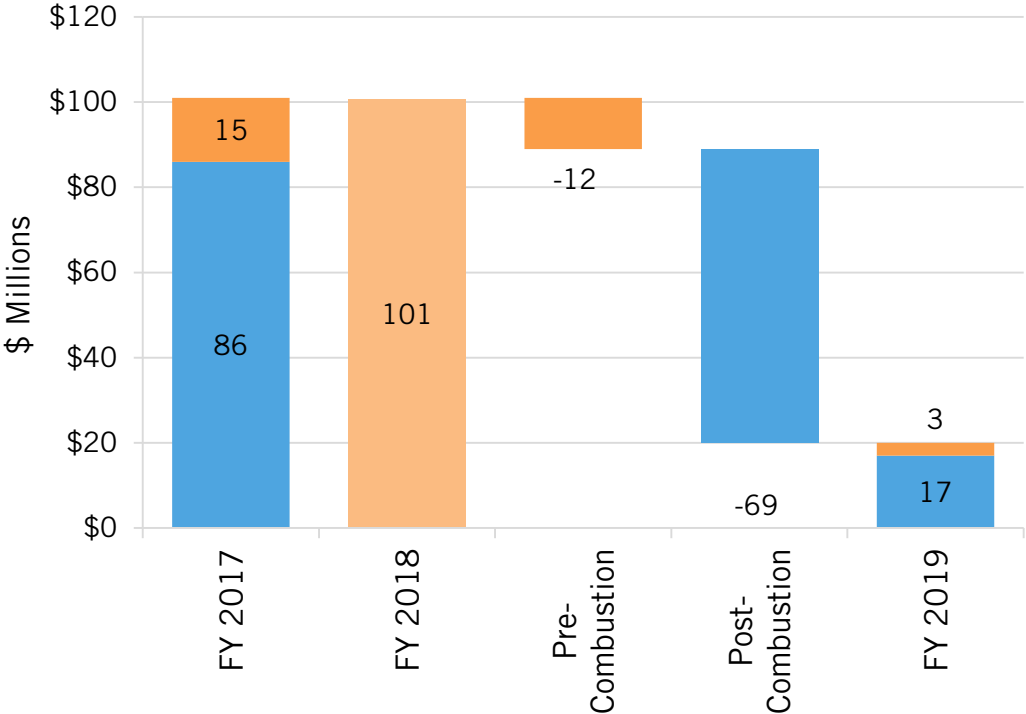
Read the complete series on the U.S. energy budget at itif.org/energy-budget.

Examples: Vehicle Technologies and Carbon Capture RD&D

Vehicle Technologies RD&D Proposed Cut: 80 Percent



Carbon Capture RD&D Proposed Cut: 49 Percent



Read the complete series on the U.S. energy budget at itif.org/energy-budget.

Federal Energy RD&D – Read the Complete Series

Available at itif.org/energy-budget:

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|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">▪ Summary | Transportation | Fossil Energy | Office of Electricity |
| ARPA-E | <ul style="list-style-type: none">▪ Vehicles▪ Bioenergy▪ H₂ & Fuel Cells | <ul style="list-style-type: none">▪ CO₂ Capture▪ CO₂ Storage▪ Advanced Coal▪ Oil & Gas | <ul style="list-style-type: none">▪ Grid Modernization▪ Cybersecurity |
| Renewables | Energy Efficiency | Nuclear | Office of Science |
| <ul style="list-style-type: none">▪ Solar▪ Wind▪ Water▪ Geothermal | <ul style="list-style-type: none">▪ Advanced Manufacturing▪ Buildings | <ul style="list-style-type: none">▪ Nuclear | <ul style="list-style-type: none">▪ Basic Energy Sciences▪ Fusion |

Thank You!

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