U.S. DEPARTMENT OF
ENERGY

*Office of*
ENERGY EFFICIENCY &
RENEWABLE ENERGY

# EERE Fiscal Year 2022 Budget Request

## EERE Overview

The Office of Energy Efficiency and Renewable Energy (EERE) accelerates the research, development, demonstration, and deployment of technologies and solutions to equitably transition America to net-zero greenhouse gas emissions economy-wide by no later than 2050. To lead in this transition, **EERE's FY 2022 budget request is $4.7 billion**. The request calls for activities and programs to help decarbonize the electricity, transportation, industrial, buildings, and agriculture sectors, while training the next generation of clean energy workers; supporting state and local economies; creating new, high-quality, good paying jobs in the field; and deploying new, efficient, and clean technologies that are affordable for all Americans. The majority of new investments are directly in deployments or demonstrations of technologies to show viable pathways for achieving EERE's five decarbonization goals.

## Guiding Principles

### ENVIRONMENTAL JUSTICE

We will build the clean energy economy in a way that benefits ALL Americans.

### DIVERSITY IN STEM

To ensure the success of clean energy industries, we will actively foster diverse STEM talent.

### FOCUS ON WORKFORCE

We will strengthen the pipeline for permanent, good-paying jobs in the clean energy workforce.

### STATE AND LOCAL

We will partner with state and local governments to transition to a clean energy economy.

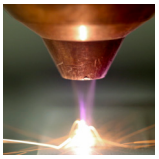
### Decarbonizing the Electricity Sector: $1.9B

EERE's will initiate a path to achieve a carbon pollution-free electricity sector no later than 2035, by supporting technologies that enable the United States to generate all electricity from clean, renewable sources. EERE will invest in reducing the cost of renewables and make major strides in renewables integration to ensure reliability, security, and resiliency as the grid evolves.

### Decarbonizing the Transportation Sector: $1.7B

The transportation sector is the largest source of GHG emissions in the country. EERE will develop lower-cost technologies to transition new light-duty vehicle sales to electric vehicles, meet 100% of the nation's sustainable aviation fuel needs by 2050, and enable commercially viable hydrogen fuel cell long-haul heavy-duty trucks by 2030.

### Decarbonizing the Industrial Sector: $799M



Industrial processes currently contribute around 23% of the nation's GHG emissions.[1] EERE will identify a pathway to help electrify and improve the energy efficiency of industrial processes, use hydrogen for hard-to-decarbonize industries like steel, and seek to capture and use emissions.

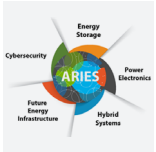
### Reducing the Carbon Footprint of Buildings: $1.7B

Residential and commercial buildings combined are responsible for 36% of energy-related GHG emissions.[2,3] EERE will invest in reducing the carbon footprint of U.S. building stock by 2035, with a focus on the research, development, and deployment needed for new affordable housing and advanced energy efficient retrofits for buildings.

### Decarbonizing the Agricultural Sector: $134M

Agriculture represents nearly 10% of the nation's GHG emissions.[4] EERE will invest in and expand its work in the agricultural sector to include developing biofuels, improving the efficiency of off-road agricultural vehicles, on-site production of animal waste to clean energy, and enhancing understanding and prediction of water flow to design more water and energy efficient irrigation systems.

### Corporate Support Programs: $469M




EERE will prioritize investment in the Advanced Research in Integrated Energy Systems (ARIES) initiative, which focuses its research on energy storage, power electronics, hybrid systems, future energy infrastructure, and cybersecurity. EERE will take steps to convert the four remaining National Renewable Energy Laboratory Flatirons Campus facilities to net zero emissions no later than 2023.

**Figures above represent the EERE budget request for the activities and programs that support each decarbonization goal and do not comprise the total EERE FY22 budget request. The sum of the totals will exceed $4.7B because many activities and programs support each decarbonization goal enterprise-wide*

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**For more information, visit:**
energy.gov/eere

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## FY 2022 EERE BUDGET REQUEST BREAKDOWN ($ IN THOUSANDS)

| | FY 2020 Enacted ($K) | FY 2021 Enacted ($K) | FY 2022 Request ($K) |
|---|---|---|---|
| **Sustainable Transportation** | **805,500** | **805,000** | **1,132,500** |
| Vehicle Technologies | 396,000 | 400,000 | 595,000 |
| Bioenergy Technologies | 259,500 | 255,000 | 340,000 |
| Hydrogen and Fuel Cell Technologies | 150,000 | 150,000 | 197,500 |
| **Renewable Power** | **642,000** | **646,000** | **951,765** |
| Solar Energy Technologies | 280,000 | 280,000 | 386,575 |
| Wind Energy Technologies | 104,000 | 110,000 | 204,870 |
| Water Power Technologies | 148,000 | 150,000 | 196,560 |
| Geothermal Technologies | 110,000 | 106,000 | 163,760 |
| **Energy Efficiency** | **1,091,000** | **1,103,500** | **2,179,150** |
| Advanced Manufacturing | 395,000 | 396,000 | 550,500 |
| Federal Energy Management Program | 40,000 | 40,000 | 438,150 |
| Building Technologies | 285,000 | 290,000 | 382,000 |
| Weatherization and Intergovernmental Programs | 371,000 | 377,500 | 808,500 |
| **Corporate Support** | **309,500** | **309,500** | **468,585** |
| Program Direction | 165,000 | 165,000 | 250,000 |
| Strategic Programs | 14,500 | 14,500 | 43,585 |
| Facilities and Infrastructure (NREL) | 130,000 | 130,000 | 175,000 |
| **Subtotal, EERE** | **2,848,000** | **2,864,000** | **4,732,000** |
| Rescission of Prior Year Balances | (58,000) | (2,240) | |
| Energy Program Rescission | (12,723) | | |
| **Total, EERE** | **$2,777,277** | **$2,861,760** | **$4,732,000** |

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1 U.S. Environmental Protection Agency. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions

2 https://www.eia.gov/environment/emissions/carbon/.

3 U.S. Energy Information Administration. Annual Energy Outlook 2019 with projections to 2050. Washington, DC: U.S. Department of Energy, January 2019. https://www.eia.gov/outlooks/archive/aeo19/pdf/aeo2019.pdf.

4 U.S. Environmental Protection Agency. https://www.epa.gov/sites/production/files/2021-04/documents/us-ghg-inventory-2021-main-text.pdf