

# Reducing the Carbon Footprint of Buildings



## 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.

**OFFICE OF  
ENERGY EFFICIENCY &  
RENEWABLE ENERGY**

For more information, visit:  
[energy.gov/eere](https://energy.gov/eere)

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## 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.

## Reduce the Carbon Footprint of U.S. Building Stock

EERE's goal is to achieve carbon reductions while maintaining or improving affordability, comfort, and performance of buildings. EERE will invest in decarbonizing the power grid, which in turn decarbonizes the electricity that serves buildings; electrifies a significant share of building end uses that currently use fossil fuels, like space and water heating; and significantly improves the energy efficiency of building equipment and the entire building envelope. Residential and commercial buildings are the single largest energy-consuming sector in the U.S. economy, and are responsible for 36% of energy-related carbon dioxide emissions. Americans spend more than \$400 billion annually to energize our 129 million homes, offices, schools, hospitals, and other commercial and residential buildings. For low-income households, the energy burden is on average three times that of non-low-income households.

## FY 2022 Budget Highlights

EERE's FY 2022 budget request for enterprise-wide activities and programs that support the goal of reducing the carbon footprint of buildings totals \$1.8 billion. Highlights include the following:

- **Grid Interactivity and Modernization and Renewables Integration (\$82M)** – Provides R&D to improve the state of technology, deploy data and best practices, and demonstrate examples that support industry efforts to connect with the power grid in new and increasingly adaptive ways.
- **Appliance and Equipment Standards and Building Codes (\$62M)** – Facilitates meeting statutorily required deadlines for covered appliances and equipment and building energy codes.
- **Assisting Federal Facilities with Energy Conservation Technologies (\$400M)** – Provides direct funding to federal agencies to develop energy and water efficiency projects and processes that address climate change mitigation and/or adaptation.
- **Build Back Better Challenge Grants (\$300M)** – Launches a program to incubate novel approaches to deploying clean energy technology that meet energy needs at the local level and elevate impoverished and disenfranchised communities and/or communities that have been marginalized or overburdened. ■

**FY 2022 EERE BUDGET REQUEST BREAKDOWN (\$ IN THOUSANDS)**

	<b>FY 2020 Enacted (\$K)</b>	<b>FY 2021 Enacted (\$K)</b>	<b>FY 2022 Request (\$K)</b>
<b>Sustainable Transportation</b>	<b>805,500</b>	<b>805,000</b>	<b>1,132,500</b>
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
<b>Renewable Power</b>	<b>642,000</b>	<b>646,000</b>	<b>951,765</b>
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
<b>Energy Efficiency</b>	<b>1,091,000</b>	<b>1,103,500</b>	<b>2,179,150</b>
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
<b>Corporate Support</b>	<b>309,500</b>	<b>309,500</b>	<b>468,585</b>
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
<b>Subtotal, EERE</b>	<b>2,848,000</b>	<b>2,864,000</b>	<b>4,732,000</b>
Rescission of Prior Year Balances	(58,000)	(2,240)	
Energy Program Rescission	(12,723)		
<b>Total, EERE</b>	<b>\$2,777,277</b>	<b>\$2,861,760</b>	<b>\$4,732,000</b>
<b>Total, Reducing the Carbon Footprint of Buildings</b>		<b>\$781,500*</b>	<b>\$1,761,080*</b>

\*These figures represent the amount for all activities and programs that support this decarbonization goal and do not comprise the total EERE FY21 Enacted or FY22 budget request.

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