



Implementing the American Recovery and Reinvestment Act

Office of Energy Efficiency and Renewable Energy
U. S. Department of Energy

Brian Hirsch, Ph.D. Senior Project Leader – Alaska
National Renewable Energy Laboratory
Brian.hirsch@nrel.gov [907-299-0268](tel:907-299-0268)
www.nrel.gov



The Recovery Act will have a significant positive impact on our nation

- Modernizes our nation's infrastructure
- Enhances energy independence
- Expands educational opportunities
- Preserves and improves affordable health care
- Provides tax relief and protects those in greatest need
- Puts Americans back to work





The Department of Energy's role is critical

- Transforms the way we use energy
- Helps reduce our carbon emissions
- Creates entire new industries based on our nation's resources, ingenuity, and workers
- Turns economic crisis into an opportunity to build a clean, secure, and prosperous energy future

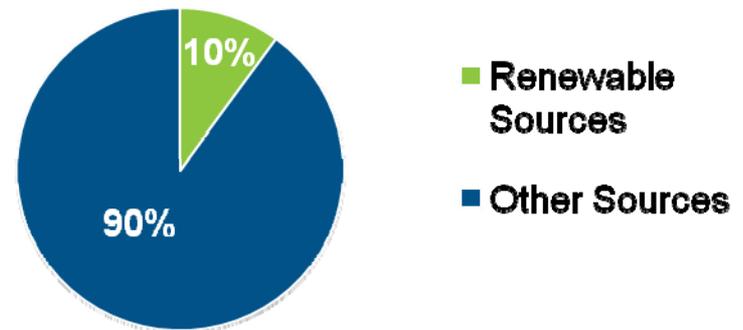




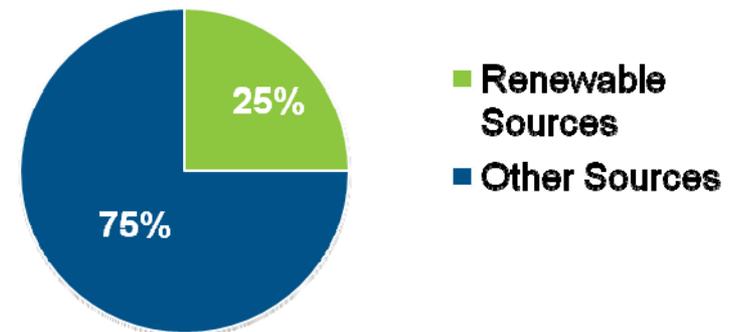
The Administration's Energy Goals

- Ensure 10 percent of our electricity comes from renewable sources by 2012, and 25 percent by 2025
- Achieve an 80 percent reduction in greenhouse gases by 2050

Electricity Sources In 2012



Electricity Sources In 2025





Secretary Chu's key objectives for the Recovery Act

- Getting good projects underway quickly
- Ensuring projects have lasting value
- Delivering an unprecedented degree of transparency
- Making a significant down payment on the nation's energy and environmental future



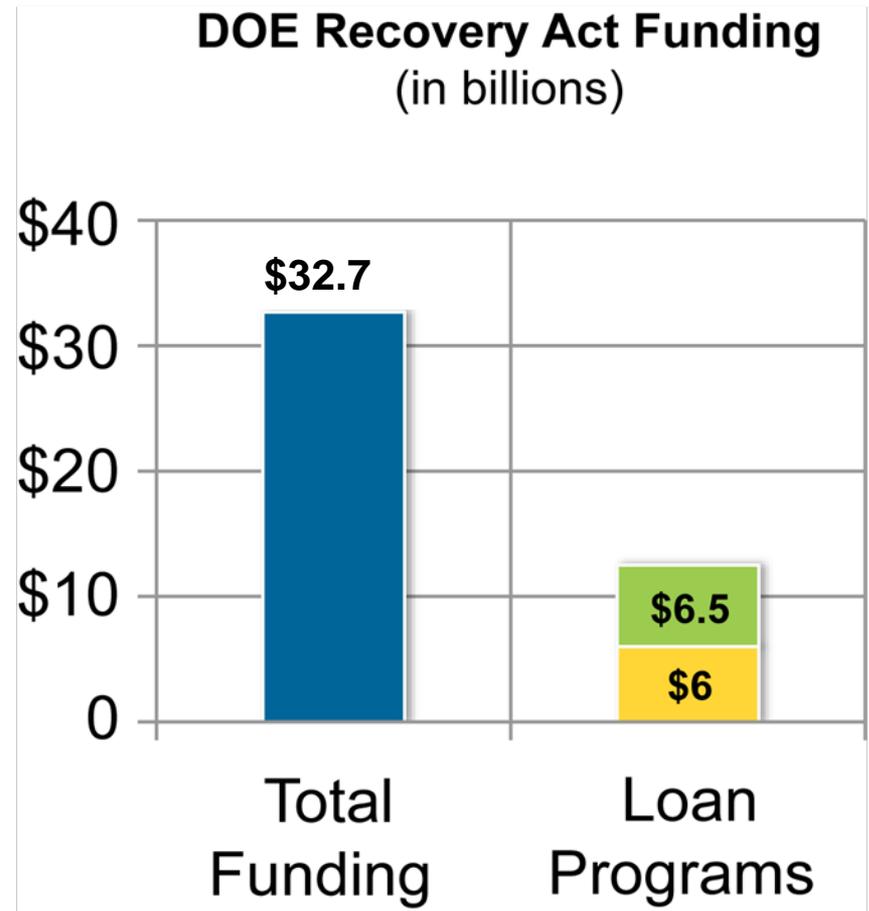


DOE Recovery Act funding

Total—\$32.7 billion
(excluding loan programs)

Loan programs—\$12.5 billion

- Rapid deployment of renewable energy systems—\$6 billion
- DOE power administration borrowing authority—\$6.5 billion





Energy Efficiency and Renewable Energy (EERE) Recovery Act funding

EERE RD&D			\$2.5B
	Biomass	\$800M	
	Geothermal	\$400M	
	Information & Communications Tech.	\$50M	
	EERE Discretionary Funding	\$1.25B	
Energy Efficiency Conservation Block Grants			\$3.2B
State Energy Program			\$3.1B
Weatherization Assistance			\$5.0B
Energy Efficient Appliance and ENERGY STAR Rebates			\$300M
Alternative Fuel Vehicle Grant Program			\$300M
Advanced Battery Manufacturing Grants			\$2.0B
Transportation Electrification Grants			\$400M
EERE Total:			\$16.8B



Types of funding available from DOE

- **Grants; contracts; cooperative agreements;** and other transactions to companies, universities, and other entities selected through a competitive process for research and development, and industrial energy efficiency projects
- **Loan guarantees,** selected through a solicitation process, to promote the rapid deployment of renewable energy systems that generate electricity or thermal energy (or facilities manufacturing related components), electric power transmission systems, and certain leading-edge biofuel projects
- **Energy grant programs** administered by state and local governments—Weatherization Assistance Program, Energy Efficiency Community Block Grants Program, and State Energy Program



How to apply for a grant or loan guarantee from DOE

- Track funding opportunity announcements through:
 - All types—energy.gov/recovery/funding.htm
 - Grants—grants.gov
 - Contracts—fbo.gov
 - Loan guarantees—energy.gov/recovery/funding.htm.
- For first-time applicants, register before submitting applications
 - Register early to be ready when opportunities are announced (process can take 3 days to 2 weeks)
 - Read registration instructions carefully



Applying for grants administered by states or local governments

- Apply directly to state energy office or local government entity
- Go to energy.gov/recovery/ to find link to your state energy office



Types of state and local projects

- State and local building retrofits that are ready to start
- Residential energy efficiency programs—energy audits and financial incentives
- Programs incorporating sustainable strategies—performance contracting, state procurement standards, revolving loan programs, and transportation initiatives that will provide long-term dividends



The State Energy Program

- Congress created the State Energy Program (SEP) in 1996 by consolidating the State Energy Conservation Program and the institutional Conservation Program to:
 - Encompass both renewable energy and energy efficiency technologies and address all sectors of the economy
 - Fund states to carry out their own clean energy programs and projects

Within Alaska, \$28 million, shared between AHFC & AEA.

AHFC: commercial & public energy audits & conservation

AEA: 2/3 into RE projects; 1/3 for EE rebates and retrofits



Weatherization Assistance Program

- The program helps low-income households improve the efficiency of their homes
- Funds are allocated to the states, which distribute funds to local agencies
- Low-income families save an average of \$350 or more each year on their energy bills after their homes have been weatherized. These homes avoid an estimated 1.79 tons of carbon dioxide emissions annually.
- Alaska: \$18.5 million to AHFC; 5 statewide agencies; income-based; \$200 million from state funds



Energy Efficiency and Conservation Block Grants program

- Formula grants that support energy audits, efficiency retrofits, improved building codes, etc.
- Applies to cities and counties nationwide. Smaller cities and counties can work through state energy offices to access the funds
- Drives significant improvements in energy efficiency and renewable energy at the local level—high return projects
- Alaska: \$28.5 million total, including \$12M to Tribes;
 - \$9.5M to AHFC for local gov't and some competition;
 - \$7M to large municipalities; NON-competitive



Tax credits and benefits of the Recovery Act

The Production Tax Credit (PTC) extension:

- Provides a three year extension of the PTC for most renewable energy facilities, while offering expansions on, and alternatives for, tax credits on renewable energy systems
- Keeps the wind energy PTC in effect through 2012
- Extends the PTC for municipal solid waste, qualified hydropower, and biomass and geothermal energy facilities through 2013
- Extends PTC two years for marine and hydrokinetic renewable energy systems, which will keep that tax credit in effect through 2013
- Allow producers eligible for the PTC to claim the ITC instead



Residential and business tax benefits

- Provides greater tax credits for clean energy projects at homes and businesses and for the manufacturers of clean energy technologies
- Increases 10% tax credit for homeowners' energy efficiency improvements to a 30% tax credit as well as:
 - Eliminating caps for specific improvements (such as windows and furnaces)
 - Establishing an aggregate cap of \$1,500 for all improvements placed in service in 2009 and 2010 (except biomass systems, which must be placed in service after the Act is enacted)
- Tighten the energy efficiency requirements to meet current standards



Residential and business tax benefits (continued)

- Remove all caps on tax credits, which equal 30% of the cost of qualified solar energy systems, geothermal heat pumps, small wind turbines, and fuel cell systems
- Allows facilities to apply for a grant instead of claiming the ITC
- Eliminate reduction in credits for installations with subsidized financing
- Provide bonus to homeowners or business owners installing clean fuel refueling systems at their homes or businesses
 - For businesses, the maximum credit for installing such refueling systems increases to \$50,000 for most systems, up from \$30,000, and it increases to \$200,000 for hydrogen refueling stations
 - For homeowners, the credit is doubled from \$1,000 to \$2,000



Tracking our progress

The American people want to know who is receiving the money, and they want to know they are receiving value for their hard-earned tax dollars

Everything we do will be transparent:

- Posting weekly updates on the Web site
- Upgrading the Web site and setting up a call center to handle the activity

Visit recovery.gov or energy.gov/recovery/ to stay informed





For more information

- If you have questions about the Recovery Act and the funding allotted to EERE, please contact the EERE Information Center at <http://www.eere.energy.gov/informationcenter/> or 1-877-EERE-INF (1-877-337-3463)