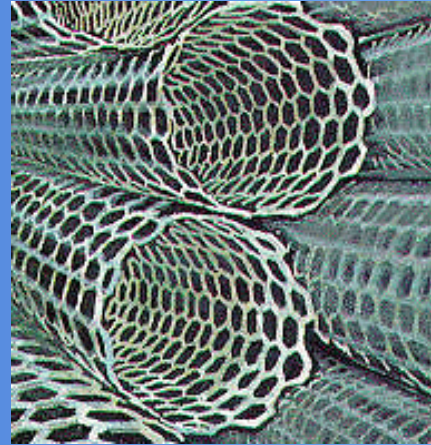




# Save ENERGY Now



## American Recovery and Reinvestment Act: What Does it Mean for EERE and ITP?



Webinar  
May 28, 2009



Jim Quinn  
Industrial Technologies Program  
U.S. Department of Energy

# Agenda

- Introduction to the American Recovery and Reinvestment Act
- EERE Funding, Opportunities, and Resources
- ITP Funding and Upcoming Opportunities
- Legislation in the Pipeline and the Recovery Act



# The American Recovery and Reinvestment Act of 2009 (Recovery Act)

- President Obama signed this unprecedented effort into law on February 17, 2009:
  - Jumpstarts our economy, create or save millions of jobs, and put a down payment on addressing long-term challenges, so our country can thrive in the 21st Century
  - Requires the hard work and collaboration of homeowners, scientists, local and state governments, small businesses, industry, and many others





# 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



# Distribution of Funds from the Recovery Act is Consistent with President Obama's Campaign Platform

- Return to 1990 GHG levels by 2020
- Reduce electricity use 15% by 2020
- Net-zero energy buildings by 2030
- Overhaul federal appliance standards
- By 2014, reduce energy use 45% in new federal buildings; 25% in existing federal buildings
- Flip incentives for utilities



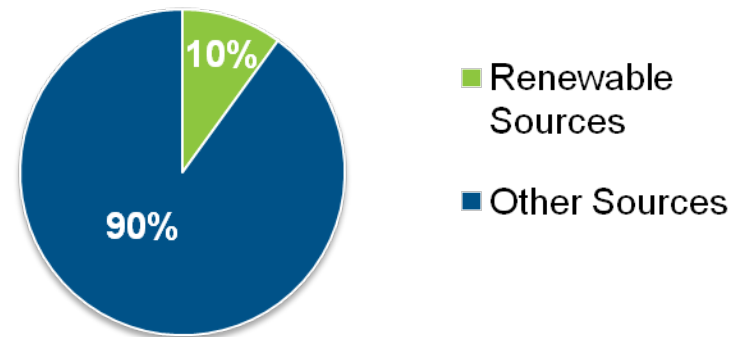
- Invest in a smart grid
- Weatherize 1 million homes per year
- Create incentives to invest in livable cities



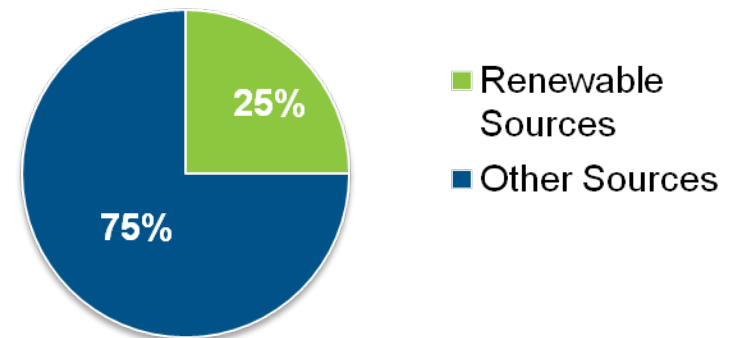
# Funding from the Recovery Act Helps to Complete the Administration's Energy Goals

- 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





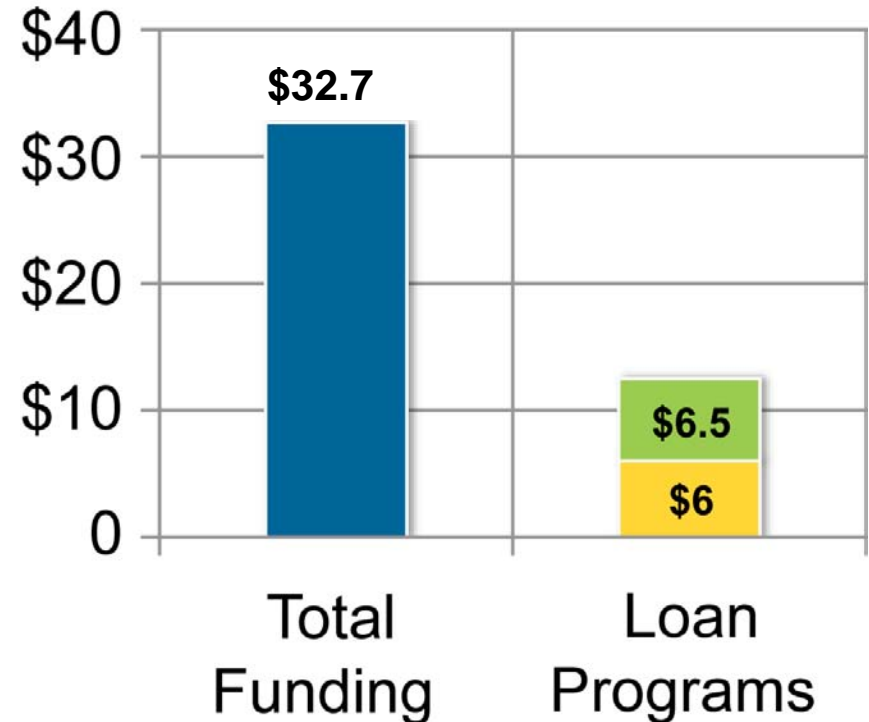
# Total DOE Recovery Act funding

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

**DOE Recovery Act Funding**  
(in billions)





# Energy Efficiency and Renewable Energy (EERE) Received \$16.8 Billion in Recovery Act funding

• Of the total \$787 Billion in the Recovery Act, about \$16.8 Billion is EE Funding

- \$2.5 billion is EERE RD&D

  - \$800 million Biomass

  - \$400 million Geothermal

  - \$50 million Information & Communications Tech.

  - \$1.25 billion EERE Discretionary Funding

**Includes  
ITP Funding**

- \$3.2 billion for Energy Efficiency Conservation Block Grants

- \$3.1 billion for the State Energy Program

- \$5.0 billion for Weatherization Assistance

- \$300 million for Energy Efficient Appliance and ENERGY STAR Rebates

- \$300 million for the Alternative Fuel Vehicle Grant Program

- \$2.0 billion for Advanced Battery Manufacturing Grants

- \$400 million for Transportation Electrification Grants





# EERE Offers Stimulus Funding Opportunities in its 11 Subprograms



## EERE Recovery Act Activities ▶



**Biomass** is offering a total of \$480 million for Demonstrations of Integrated Biorefinery Operations

The **Solar** program has solicitations for several solar projects, with \$91 million available

The **Weatherization** program is offering a total of \$3.2 billion in Block Grants

The Industrial Technologies Program will post upcoming opportunities to our **Solicitations** webpage

# 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](http://energy.gov/recovery/funding.htm)
  - Grants—[grants.gov](http://grants.gov)
  - Contracts—[fbo.gov](http://fbo.gov)
  - Loan guarantees—[energy.gov/recovery/funding.htm](http://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
- To apply directly to state energy office or local government entity go to [energy.gov/recovery/](http://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

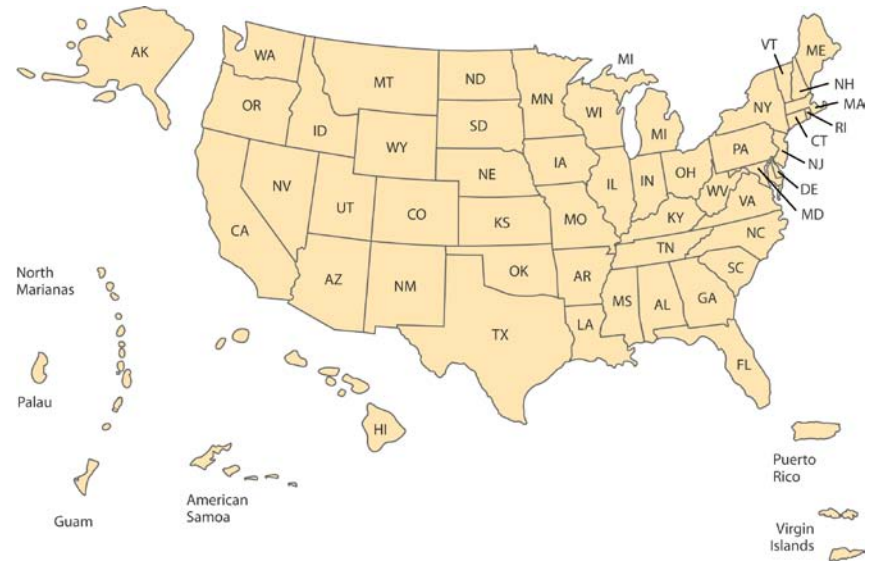
**MARCH 12, 2009**

**DOE Announced Nearly \$3 Billion under SEP**



# How the State Energy Program works

- SEP distributes financial assistance to the states, District of Columbia, and territories (American Samoa, Guam, Puerto Rico, U.S. Virgin Islands, and the Northern Mariana Islands) through formula grants
- States develop energy efficiency and renewable energy projects that meet their unique energy needs and are consistent with national energy goals





# Progress is Tracked Online, and Information Can Be Accessed from DOE

Everything the Department of Energy does will be transparent:

- Posting weekly updates on the Web site: **Visit [www.recovery.gov](http://www.recovery.gov) or [www.energy.gov/recovery/](http://www.energy.gov/recovery/) to stay informed**
- Upgrading the Web site and setting up a call center to handle the activity: **Call the DOE's Recovery Act Clearinghouse at 888-DOE-RCVY**

Visit [recovery.gov](http://recovery.gov) or [energy.gov/recovery/](http://energy.gov/recovery/) to stay informed





# Recovery Act Funding – Combined Heat and Power

- Competitive solicitation for cost-shared deployment projects in the following areas :
  - **Combined Heat and Power** – Systems for co-generation of electrical and useful thermal energy with a minimum efficiency (electrical plus thermal) of 60%.
  - **District Energy Systems** – Systems may include CHP technologies, and are required to have a minimum 60% efficiency.
  - **Waste Energy Recovery** – Systems are required to have a minimum efficiency of 30%.
  - **Efficient Industrial Equipment** – Equipment must be a minimum of 25% more efficient than the equipment being replaced.
- **Proposed Funding - \$156 million**

<http://www1.eere.energy.gov/industry/financial/solicitations.html>



# Recovery Act Funding – Information and Communication Technology

- Cost-shared solicitation to promote R&D of innovative technologies that increase the energy efficiency of server-based information and communication technology (ICT) systems found in data centers and telecommunications central offices:
  - Projects that **increase the efficiency of IT equipment and software, power systems, and cooling systems**
  - **Demonstration and field test** of pre-commercial technologies in these areas as well as in distributed generation or alternative power technologies used to power ICT systems

<http://www1.eere.energy.gov/industry/financial/solicitations.html>



# Preparation for Upcoming Funding Opportunity Announcements

- DOE plans to make the Funding Opportunity Announcement available in the near future. The Funding Opportunity Announcement will be available for viewing at Grants.gov (<http://www.grants.gov>) and at FedConnect (<https://www.fedconnect.net/FedConnect/>).
  - **Pre-registration at the sites will allow notification of posted announcements**
  
- Prospective applicants must complete one-time actions in order to submit an application through Grants.gov:
  - Obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number
    - <http://www.grants.gov/GetStarted>
  - Register with the Central Contract Registration (CCR)
    - [www.ccr.gov](http://www.ccr.gov)
  - Register with the credential provider
  - Register with Grants.gov.
  - **Due to the likelihood of a short response period, interested applicants are strongly encouraged to ensure these requirements have been met.**
  - **Applicants not yet registered with CCR and Grants.gov should allow 21 days to complete these requirements**

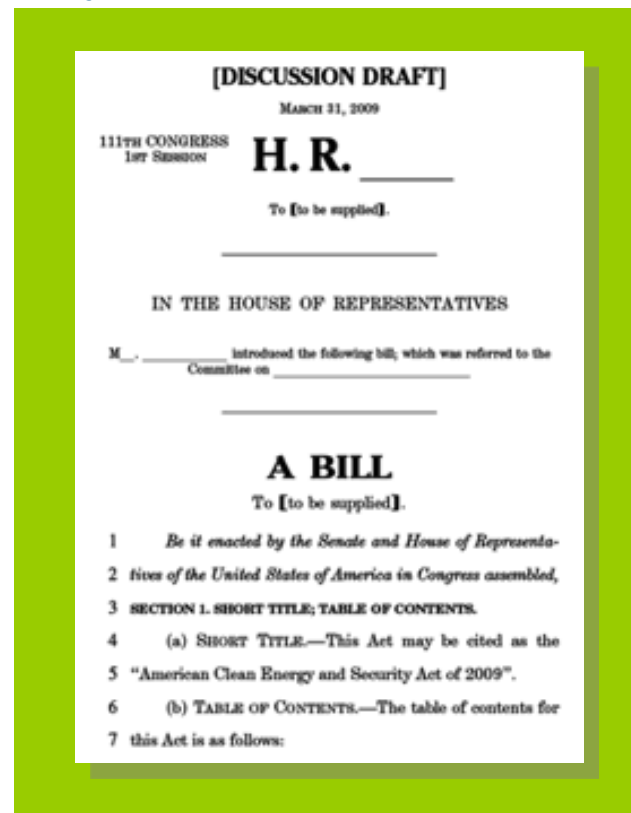


## New 10-30% tax credit to encourage new manufacturing facilities

- Encourages investment in the manufacturing facilities that help make such clean energy projects possible. Available for projects that establish, re-equip, or expand manufacturing facilities for:
  - Fuel cells
  - Microturbines
  - Renewable fuel refineries and blending facilities
  - Energy-saving technologies
  - Smart-grid technologies
  - Solar, wind, and geothermal technologies
- Applies to the manufacture of plug-in electric vehicles and their electric components, such as battery packs, electric motors, generators, and power control units
- The Secretary of Treasury will establish a certification program for this by August

# The American Clean Energy & Security Act (ACES) of 2009 Continues to Strengthen DOE Programs Funded by the Recovery Act

- Cap & Trade (Down 83% from 2005 – 2050)
- Renewable & EE Portfolio Standards
- Building, appliance, industry Energy Efficiency
- Smart Grid
- Low-carbon fuel standards
- VMT reduction
- Coal power plant standards
- Adaptation plans: US + International
- Protects U.S. Industry – Industry Rebates and or Carbon Tariff



# Industry Related Provisions in ACES

## Carbon Capture

Within 2 years, EPA to distribute funds to support CC&S in industrial operations emitting >250,000 tCO<sub>2</sub>e

## Industrial EE Standards

DOE energy efficiency standards for benchmarking industrial plants (standards accredited by ANSI)

## Recovered Heat

Demonstration grants for Thermal Energy Recovery: 1) electric generation, 2) stored energy with commercial value

## Building Retrofit Grants

Energy efficiency retrofit grants for commercial/industrial buildings (up to 50% of retrofit cost)

## Vehicles

EPA emissions standards for all transport modes (light vehicles, trucking, trains, boats, etc.)

## Cap & Trade

Cap-and-trade (all emitters >25,000 tCO<sub>2</sub>e/year)

## Additional GHG Standards

Additional GHG standards for HFCs & 'Black Carbon'

## Industry Rebates

Rebates to help industrial sector remain competitive under Cap & Trade transition