



U.S. DEPARTMENT OF  
**ENERGY**

# **Energy Efficiency and Renewable Energy**

**Jacques Beaudry-Losique**

**Deputy Assistant Secretary for Renewable Energy**

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**2009 DOE Hydrogen Program and  
Vehicle Technologies Program**

**Annual Merit Review and Peer Evaluation Meeting**

*May 18, 2009*



# New Energy for America's Economy

## Investing in the Clean Energy Jobs of the Future

- New jobs in the clean energy economy
- Next generation of energy technologies

## Securing our Energy Future

- Breaking dependence on oil
- Producing more energy at home
- Promoting energy efficiency



## Transforming the energy economy through science and innovation



Invests in Obama Administration's priorities for improvements in energy efficiency and job-creation in the near term

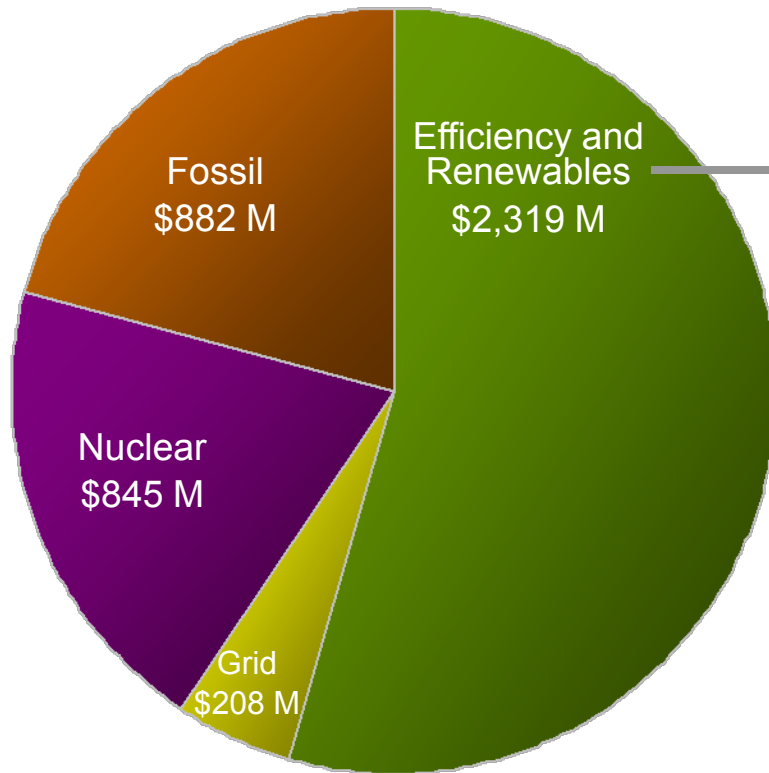
Emphasizes programs with higher near-term impact to invest in our economic future

Grounded in more effective management

# FY2010 budget invests in clean energy priorities

## Energy FY2010 Budget Request

*Total: \$4.3 billion*



### Notable Changes (from FY09 to FY10)

Solar	+ 83%	+ \$145M
Buildings	+ 60%	+ \$98M
Wind	+ 36%	+ \$20M
Vehicles	+ 22%	+ \$60M

**Clean energy investments create jobs, reduce dependence on oil, and confront climate change.**

*DOE FY2010 Budget Request Total: \$26.4 billion*



## FY2010 budget funds breakthrough science

### 46 Energy Frontier Research Centers

– \$100 million –

- 1,800 researchers and students
- Universities, national labs, industry, and non-profits
- 1/3 will be supported by Recovery Act funding

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### ARPA-E

– FY10: \$10 million | ARRA: \$400 million –

- Grants
- Development of breakthrough energy technologies

### Eight Energy Innovation Hubs

– \$280 million –

- Encourage collaboration and team science
- Connect research lab to industrial world



This merit review will focus on activities during the past year for the Hydrogen Program and the Vehicle Technologies Program.

### Hydrogen Program

EERE

BES

FE

NE

#### R&D Activities

- Production & Delivery
- Storage
- Fuel Cells
- Manufacturing

#### Common Activities

- Safety, Codes & Standards
- Education
- Technology Validation

### Vehicle Technologies Program

#### R&D Activities

- Hybrid Electric Systems
- Materials Technologies
- Fuels Technologies
- Advanced Combustion Engines

Systems Analysis & Market Transformation

### Other Fuel Cell Applications

(Stationary/Backup, Portable, and Specialty Vehicles)

### Transportation Applications