

An Update on Energy Project Incentives

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Agenda

- ✓ **Relevant incentives for district energy technology and projects**
- ✓ **Application tips and resources**

The image shows a modern building facade. The upper portion features a grid of large windows, some of which are covered by horizontal wooden slats. Below this, the text 'Incentives Opportunities and Tips' is centered. The lower portion of the image shows an open area with industrial equipment, including large metal cabinets and complex piping systems.

Incentives

Opportunities and Tips

The Challenge

Even if a distributed energy or district energy project looks promising...

- Positive life cycle cost
- Reduces GHG emissions and demonstrates environmental leadership
- Supports job creation and market development
- Achieves emissions compliance
- Hedges against financial risks of aging infrastructure
- Increases electric and thermal reliability and resiliency

...How do you justify the capital outlay?

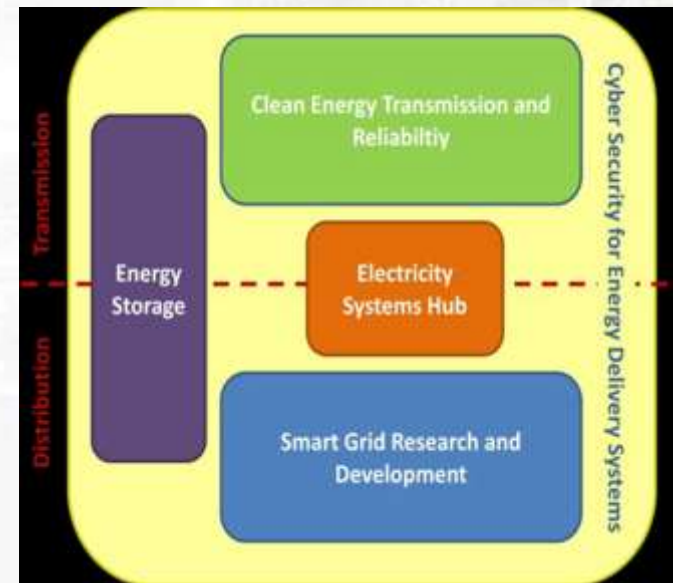
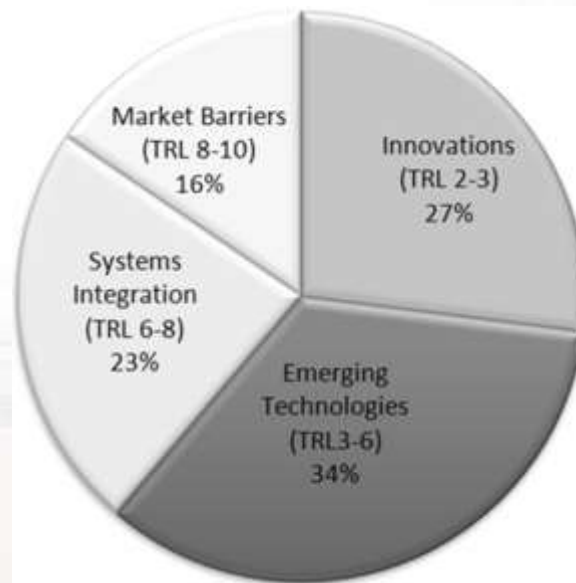
Federal Incentives

- Federal funding sources
 - DOE, EPA, USDA, DHS, DOD, National Laboratories all have programs to support a wide variety of energy technologies and projects - R&D / Demo / Commercial
- Grants, cost-share agreements and cooperative agreements
 - **up to 100%** for analysis, modeling and testing
 - **up to 80%** for R&D
 - **up to 50%** for demonstration and commercial deployment
- Level of government oversight
- Loan guarantees

Federal Incentives – DOE Funding Outlook

- **DOE FY15 budget** for clean energy programs - \$2+ billion
- **No significant increases** over 2014 funding
- **DOE FY16 budget request** for clean energy programs - \$3+ billion

- EERE
- OE
- FEMP
- ARPA-E



Federal Incentives – DOE Applied R&D Programs

Programs supporting energy efficiency and renewable energy technologies:

- Biomass: eere.energy.gov/biomass/
- Buildings: eere.energy.gov/buildings/
- Federal Energy Management: eere.energy.gov/femp/
- Geothermal: eere.energy.gov/geothermal/
- Fuel Cells: eere.energy.gov/hydrogenandfuelcells/
- Advanced Manufacturing: eere.energy.gov/manufacturing/
- Solar: eere.energy.gov/solar/
- Vehicles: eere.energy.gov/vehiclesandfuels/
- Weatherization: eere.energy.gov/wip/
- Wind: eere.energy.gov/wind/
- Water Power: eere.energy.gov/water/

Federal Incentives - Opportunities

- **BENEFIT**
 - 2014: \$14M in grants for building energy efficiency projects.
- **ARPA-E Open FOA**
 - 2015 FOA offering \$125M in grants.
- **SUNSHOT Technology to Market**
 - 2015 FOA offering \$45M in grants.
- **FEMP AFFECT**
 - 2014: \$5M in grants awarded. 2015 FOA issued in March.
- **NETL Resilient Electricity Delivery Infrastructure (REDI)**
 - 2014/2015: \$3.5M in grants for local governments.
- **Loan Guarantee Program**
 - Updated 2014. \$2.8B available. Challenging for smaller projects (<\$50M).
- **Tax Credits**
 - 10% ITC for CHP / 30% ITC for renewables. Dec 2016 Sunset dates looming.

Other Federal Incentive Opportunities

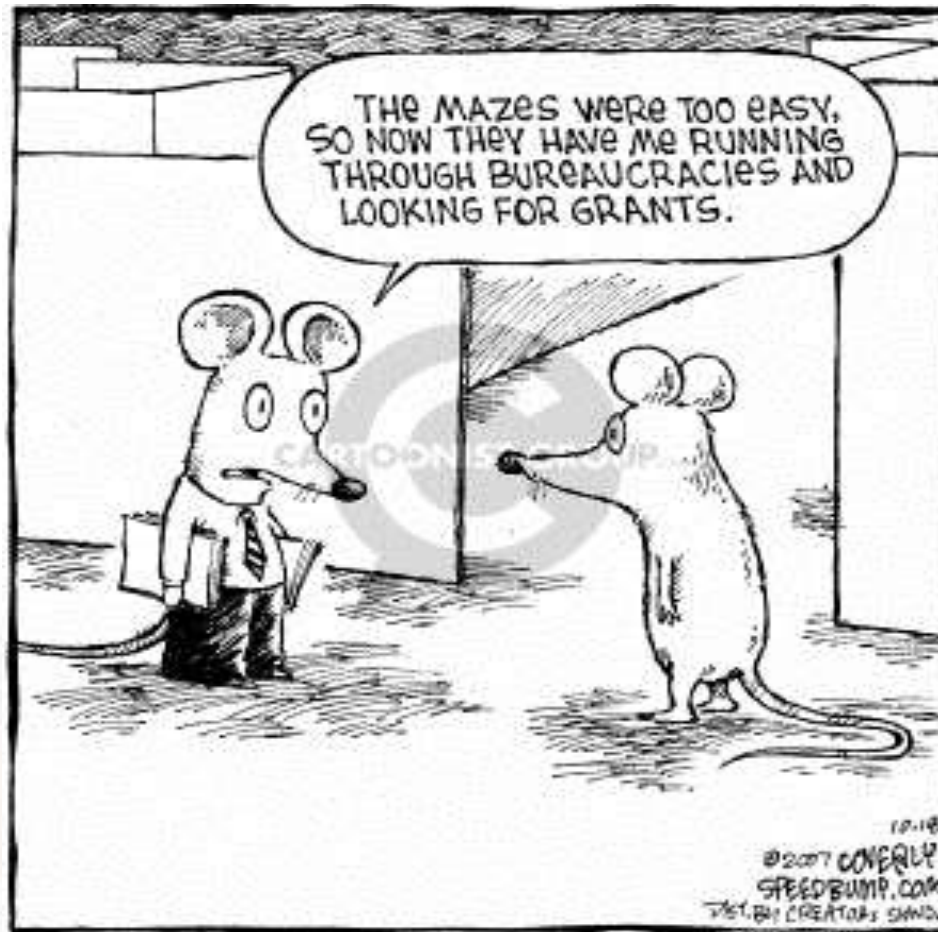
- **Other DOE Sources** – ARPA-E, National Labs, Clean Energy RACs, Industrial Assessment Centers, Federal Utility Partnership Working Group
- **USDA** – BRDI / AFRI
- **FAA** – GSE / Terminal Ops Efficiency
- **DOD** – ESTCP, DARPA, Onsite and Utility Scale Renewables, Biofuels, EUL/UESC/ESPC
- **EPA** – Recognition / Tech Support, brownfields, EPA-CHP Partnership
- **DHS / FEMA** – Cybersecurity, Hazard/Flood Mitigation
- **Commerce** – Economic Development



State and Local Incentives

- State Energy Programs
 - NYSERDA: Ongoing program to fund CHP and other energy efficiency projects
 - MA DOER: \$40M in grants awarded for energy resiliency projects in 2014
 - CA PUC: Ongoing Self Generation Incentive Program (SGIP) grants
- Utility Incentives
 - On the rise – alternative portfolio standards, customer demand
 - Stability and cost avoidance
 - Prescriptive and custom project incentives
- “Green Bank” Initiatives
 - CA, CT, HI, MA, NY
 - Varied capitalization - Bonding, loans, grants, credit support.
 - Accelerate the pace of private investment

Application Tips



Application Tips

Create visibility with agency career program management staff prior to issuance of a grant opportunity.

- Develop 2-3 page white papers
- Hold meetings with career staff
- Develop appropriate partnerships
 - End users
 - Technology partners
 - Legislative support
 - Industry support
- Pursue precursor technical and financial assistance at a smaller-scale
 - Analytic grants
 - Technical support
 - Competitive solicitations
 - Unsolicited proposals

The key elements of successful applications:

- **Take the long view**
- **Technology**
- **Team**
- **Timing**

Resources

- Database of State Incentives for Renewables and Efficiency
 - DSIRE.org
- EERE Energy Efficiency Exchange
 - eere-exchange.energy.gov
- EPA-CHP Policies and Incentives Database
 - epa.gov/chp/policies/database
- DOE Technical Assistance Partnerships
 - energy.gov/eere/amo/chp-technical-assistance-partnerships
- State Energy Office websites
- Utility websites

Questions?

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