



# AN UPDATE ON ENERGY PROJECT INCENTIVES

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# AGENDA

**1** Relevant incentives for district energy technology and projects

**2** Application tips lessons learned and resources

# 1 RELEVANT INCENTIVES FOR DISTRICT ENERGY TECHNOLOGY AND PROJECTS

# THE CHALLENGE

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



Achieves emissions compliance

Hedges against financial risks of aging infrastructure

Increases electric/thermal reliability and resiliency

Produces positive life cycle cost

Reduces GHG emissions

Supports job creation/  
market development

...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

# FEDERAL INCENTIVES

Grants, cost-share agreements and cooperative agreements offer

up to  
**100%**  
for analysis, modeling  
and testing

up to  
**80%**  
for research  
and design

up to  
**50%**  
for demonstration and  
commercial deployment

Level of government oversight

Loan guarantees

Technical Assistance

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# FEDERAL INCENTIVES – DOE Outlook

**FY15** budget (enacted) for clean energy programs

**\$2.0 + billion**

**FY16** budget request for clean energy programs

**\$3.0 + billion**

# FEDERAL INCENTIVES – DOE Programs

Applied R&D Programs supporting energy efficiency and renewable energy technologies:

**Biomass:**

[eere.energy.gov/biomass/](http://eere.energy.gov/biomass/)

**Buildings:**

[eere.energy.gov/buildings/](http://eere.energy.gov/buildings/)

**Federal Energy Management:**

[eere.energy.gov/femp/](http://eere.energy.gov/femp/)

**Geothermal:**

[eere.energy.gov/geothermal/](http://eere.energy.gov/geothermal/)

**Fuel Cells:**

[eere.energy.gov/hydrogenandfuelcells/](http://eere.energy.gov/hydrogenandfuelcells/)

**Advanced Manufacturing:**

[eere.energy.gov/manufacturing/](http://eere.energy.gov/manufacturing/)

**Solar:**

[eere.energy.gov/solar/](http://eere.energy.gov/solar/)

**Vehicles**

[eere.energy.gov/vehiclesandfuels/](http://eere.energy.gov/vehiclesandfuels/)

**Weatherization:**

[eere.energy.gov/wip/](http://eere.energy.gov/wip/)

**Wind:**

[eere.energy.gov/wind/](http://eere.energy.gov/wind/)

**Water Power:**

[eere.energy.gov/water/](http://eere.energy.gov/water/)

# FEDERAL INCENTIVES – Opportunities

## BENEFIT

2016: \$20M in grants for building energy efficiency projects

## ARPA-E Open FOA

2015: FOA offering \$125M in grants (Next FOA in 2017)

## Grid Modernization Initiative (GMI)

2016: \$220M in grants for integration of renewables and energy storage, cybersecurity, controls

## FEMP AFFECT

2014/2015: \$7.9M in grants awarded

2016: FOA TBD

# FEDERAL INCENTIVES – Opportunities

## SUNSHOT Technology to Market

2015: FOA offering \$45M in grants

2016: \$21M in grants – Accelerate deployment / Soft costs

## NETL Resilient Electricity Delivery Infrastructure (REDI)

2014/2015: \$3.5M in grants for local governments

## Loan Guarantee Program

Updated Oct 2015: Additional \$1B. Rolling application periods. Challenging for smaller projects (<\$50M)

## Tax Credits

10% ITC for CHP / 30% ITC for renewables. Dec 2016

Sunset dates looming

# FEDERAL INCENTIVES – 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

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# 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 2014/2015

**CA PUC:** Ongoing Self Generation Incentive Program grants

## “Green Bank” Initiatives

CA, CT, HI, MA, NY

**Varied capitalization** - Bonding, loans, grants, credit support

Varied technology focus

**Accelerate the pace** of private investment

## Utility Incentives

Alternative portfolio standards and customer demand **on the rise**

**Stability** and cost avoidance

Prescriptive and custom **project incentives**

## Clean Power Plan

Compliance plans 2016-2018

Auction / Allocation of allowances

**Potential for reinvestment in CHP, DG, EE projects**

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**APPLICATIONS**

**TIPS**

**LESSONS LEARNED**

**RESOURCES**

THE MAZES WERE TOO EASY,  
SO NOW THEY HAVE ME RUNNING  
THROUGH BUREAUCRACIES AND  
LOOKING FOR GRANTS.



# APPLICATION TIPS

The key elements of successful applications:



**Take the long view**



**Technology**



**Team**



**Timing**

# APPLICATION TIPS

Pursue precursor technical and financial assistance at a smaller-scale

Develop 2-3 page white papers

Develop appropriate partnerships

Hold meetings with career staff

# APPLICATION TIPS

Pursue precursor  
technical and  
financial assistance  
at a smaller-scale



Analytic grants  
Technical support  
Competitive solicitations  
Unsolicited proposals

Develop  
appropriate  
partnerships



End users  
Technology partners  
Design partners  
Construction partners

# APPLICATION TIPS

Develop 2-3 page  
white papers



Create visibility  
Legislative support  
Industry support

Hold meetings  
with career staff



Align priorities  
Risk reduction  
Legislative support  
Industry support

# LESSONS LEARNED

## Accounting System

### Compliance:

- DCAA
- Pre-Award Audits

### Legal Review:

- Certs and Reqs
- FARS
- Davis-Bacon

## M&V Plan:

- Additional Instrumentation

## Project Timing:

- Award Process
- Cost Eligibility

# LESSONS LEARNED

## Project Recognition:

- Ribbon Cutting
- VIP Tours
- Project Profile
- Peer Reviews
- Industry Publications

# RESOURCES

Database of State Incentives for Renewables and Efficiency

[DSIRE.org](https://www.dsire.org)

EERE Energy Efficiency Exchange

[eere-exchange.energy.gov](https://eere-exchange.energy.gov)

EPA-CHP Policies and Incentives Database

[epa.gov/chp/policies/database](https://epa.gov/chp/policies/database)

DOE Technical Assistance Partnerships

[energy.gov/eere/amo/chp-technical-assistance-partnerships](https://energy.gov/eere/amo/chp-technical-assistance-partnerships)

State Energy Office websites

Utility websites

# QUESTIONS?

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