



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

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/

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/

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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

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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.



18-18

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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

M&V Plan:

- Additional Instrumentation

Legal Review:

- Certs and Reps
- FARS
- Davis-Bacon

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

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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