



AN UPDATE ON ENERGY PROJECT INCENTIVES

Rod Schwass, MBA, LEED AP | Program Manager, Energy & Power Solutions

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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

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/

FEDERAL INCENTIVES – Opportunities

BENEFIT

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

2017: \$TBD, Fall/Winter FOA

ARPA-E Open FOA

2015: FOA offered \$125M in grants

2017: \$/Timing TBD

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 Issued - \$3M in grants offered (\$200k to \$1M)

FEDERAL INCENTIVES – Opportunities

SUNSHOT Technology to Market

2015: FOA offering \$45M in grants

2016: \$21M in grants – accelerate deployment / soft costs

2017: \$25M in grants for grid integration of solar power (ENERGISE)

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

APPLICATIONS

TIPS

LESSONS LEARNED

RESOURCES

Create a "logic model"



Here is our
new simplified
logic model



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 Reps
- 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

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?

Rod Schwass

Jacobs Engineering Group Inc.

Energy & Power Solutions

roderick.schwass@jacobs.com

816.718.1500