

# Financial Incentives for CHP

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**CHP Webinar**  
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# DSIRE Project Overview

**DSIRE**  
Database of State Incentives for Renewables & Efficiency

Home | Glossary | Links | FAQs | Contacts | About Us

**DSIRE SOLAR**  
DSIRE is a comprehensive source of information on state, local, utility, and federal incentives and policies that promote renewable energy and energy efficiency. Established in 1995, DSIRE is an ongoing project of the NC Solar Center and the Interstate Renewable Energy Council funded by the U.S. Department of Energy.

Choose one or both databases:  
 Renewable Energy  Energy Efficiency

Federal Incentives

**Resources**  
 Summary Maps  
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 What's New?

Last Updated: 05/27/2009

**NC STATE UNIVERSITY**

Please note: The information on the DSIRE web site provides an overview of incentives and other policies, but it should not be used as the only source of information when making purchasing decisions, investment decisions, tax decisions or other binding agreements. Please refer to the individual contact provided each record to verify that a specific incentive or other policy is applicable to your specific project.

- Created in 1995
- Funded by DOE / NREL
- Managed by NCSU; works closely with IREC
- Scope: government & utility policies/programs that promote RE/EE deployment
- > 2,000 total summaries
- *DSIRE Solar*

# Production Tax Credit (PTC)

- Mainly intended for large, utility-scale installations
- Technologies eligible for the PTC can now opt for the ITC
- Nothing specific to CHP, would depend on use of qualified resource

Resource Type	In Service Deadline	Credit Amount
Wind	December 31, 2012	2.1¢/kWh
Closed-loop Biomass	December 31, 2013	2.1¢/kWh
Open-loop Biomass	December 31, 2013	1.1¢/kWh
Geothermal Energy	December 31, 2013	2.1¢/kWh
Landfill Gas	December 31, 2013	1.1¢/kWh
Municipal Solid Waste	December 31, 2013	1.1¢/kWh
Qualified Hydroelectric	December 31, 2013	1.1¢/kWh
Marine and Hydrokinetic (150 kW or larger)	December 31, 2013	1.1¢/kWh

# The Investment Tax Credit (ITC)

- **30%** of the system cost (includes installation costs), with no cap for:
  - Solar
  - Small wind (100 kW max)
  - Fuel cells
  - Qualified facilities as defined in PTC
- **10%** for geothermal (commercial), microturbines, CHP
- Expires December 31, 2016
- AMT, subsidized energy financing = okay
- Cash grants in lieu of tax credit available for **commercial** property installed in 2009 and 2010
- Can only take one of the following incentives: ITC, cash grant, PTC

# CHP in the ITC

- Facilities must be 50 MW or less (or 67,000 horsepower)
- Same energy source for electrical power, mechanical shaft power, or both, and steam or other forms of useful thermal energy
- Must produce 20% of useful energy in form of thermal energy; this 20% must not be used to produce electrical power or mechanical shaft power
- Must produce 20% of useful energy in form of electrical power or mechanical shaft power (or combination of both)
- Must exceed 60% energy efficiency, unless system uses biomass for 90% of energy source
- Certain limitations for large systems (over 15 MW or 20,000 horsepower); can only take credit up to 15 MW
- Credit applies to property placed in service after Oct. 3, 2008

# US Department of Treasury Grants

- Applications being accepted as of July 31, 2009
- Will only be available for projects placed in service in 2009 and 2010, or projects that began construction in 2009 and 2010
  - Construction must be completed and project placed in service before Jan. 1, 2017
- Only available to Corporate taxpayers
- Personal income tax filers, federal, state and local government bodies, non-profits, qualified energy tax credit bond lenders, and cooperative electric companies will not qualify
- The same general rules of the ITC will apply
- Application is short – only a few pages
- Treasury is required to issue a check within 60 days of receiving a completed application
  - Project must be placed in service for application to be complete
- Basis for taking grant may be reduced by other federal grants, state grants, or rebates

# Modified Accelerated Cost Recovery System (MACRS)

- Businesses recover investments in assets through depreciation deductions taken over a specified number of years depending on the type of property
- May be limits on depreciation based on use of other federal tax incentives
- CHP investments may be depreciated according to an accelerated schedule of 6 years (five year property)
- "Class life" of 6 years
  - Year 1: 20%
  - Year 2: 32%
  - Year 3: 19.2%
  - Year 4: 11.52%
  - Year 5: 11.52%
  - Year 6: 5.76%
- Additionally, equipment installed in 2008 and 2009 can receive bonus depreciation of 50% in Year 1

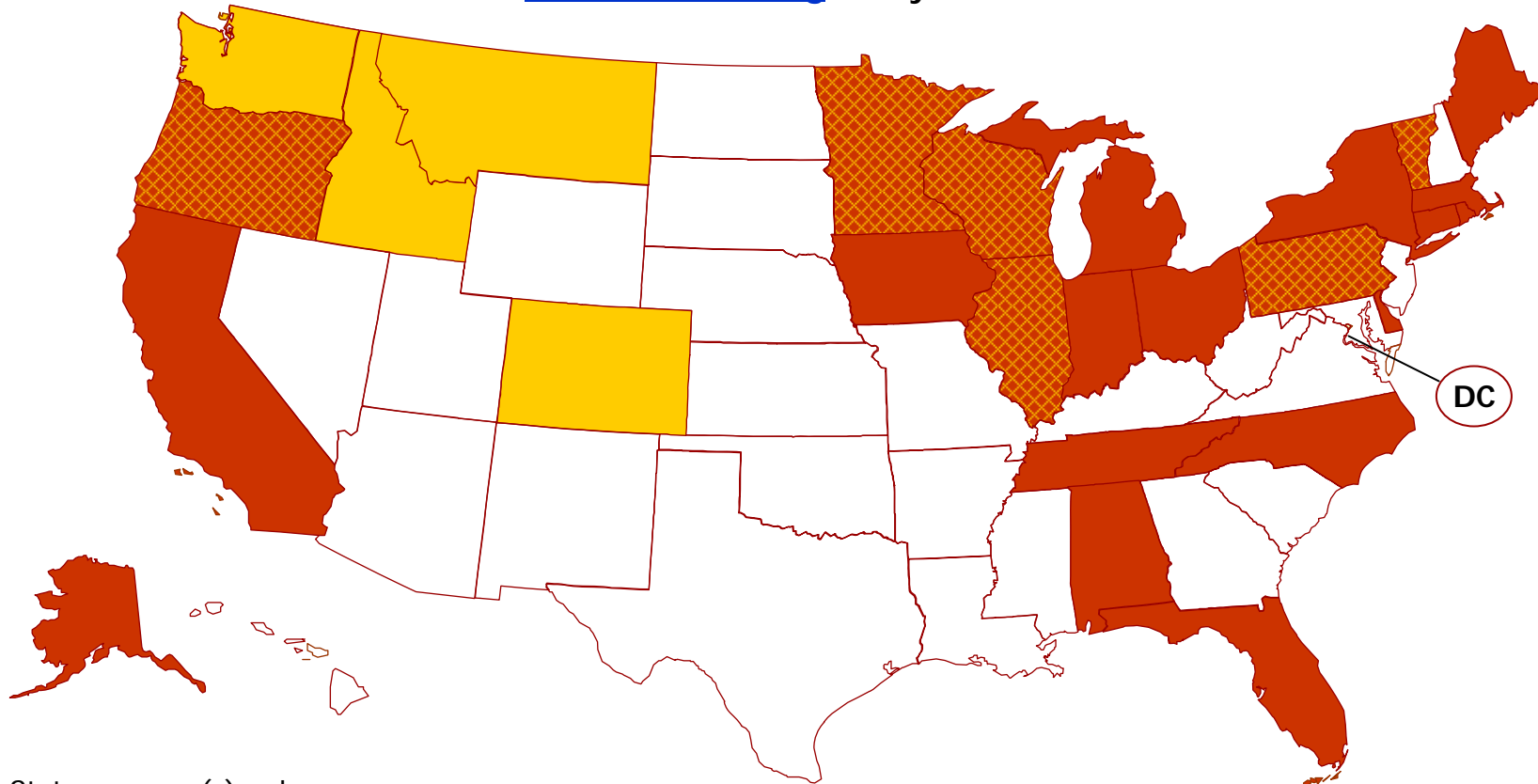
# MACRS Example

- Eligible cost of \$100,000
- Take ITC or grant at 10% for \$10,000
- Depreciation basis is \$95,000 (adjusted basis is reduced by half of value of federal tax credit)

Depreciation Rate for 5-year recovery period	Depreciation Deduction	Effective Tax Savings (34% federal tax rate)
Year 1: 50% Bonus Depreciation	\$47,500	\$16,150
Year 1: 20%	\$9,500	\$3,230
Year 2: 32%	\$15,200	\$5,168
Year 3: 19.2%	\$9,120	\$3,100.80
Year 4: 11.52%	\$5,472	\$1,860.48
Year 5: 11.52%	\$5,472	\$1,860.48
Year 6: 5.76%	\$2,736	\$930.24
<b>Total</b>	<b>\$95,000</b>	<b>\$32,300</b>

# Grant Programs for Renewables

[www.dsireusa.org](http://www.dsireusa.org) / July 2009

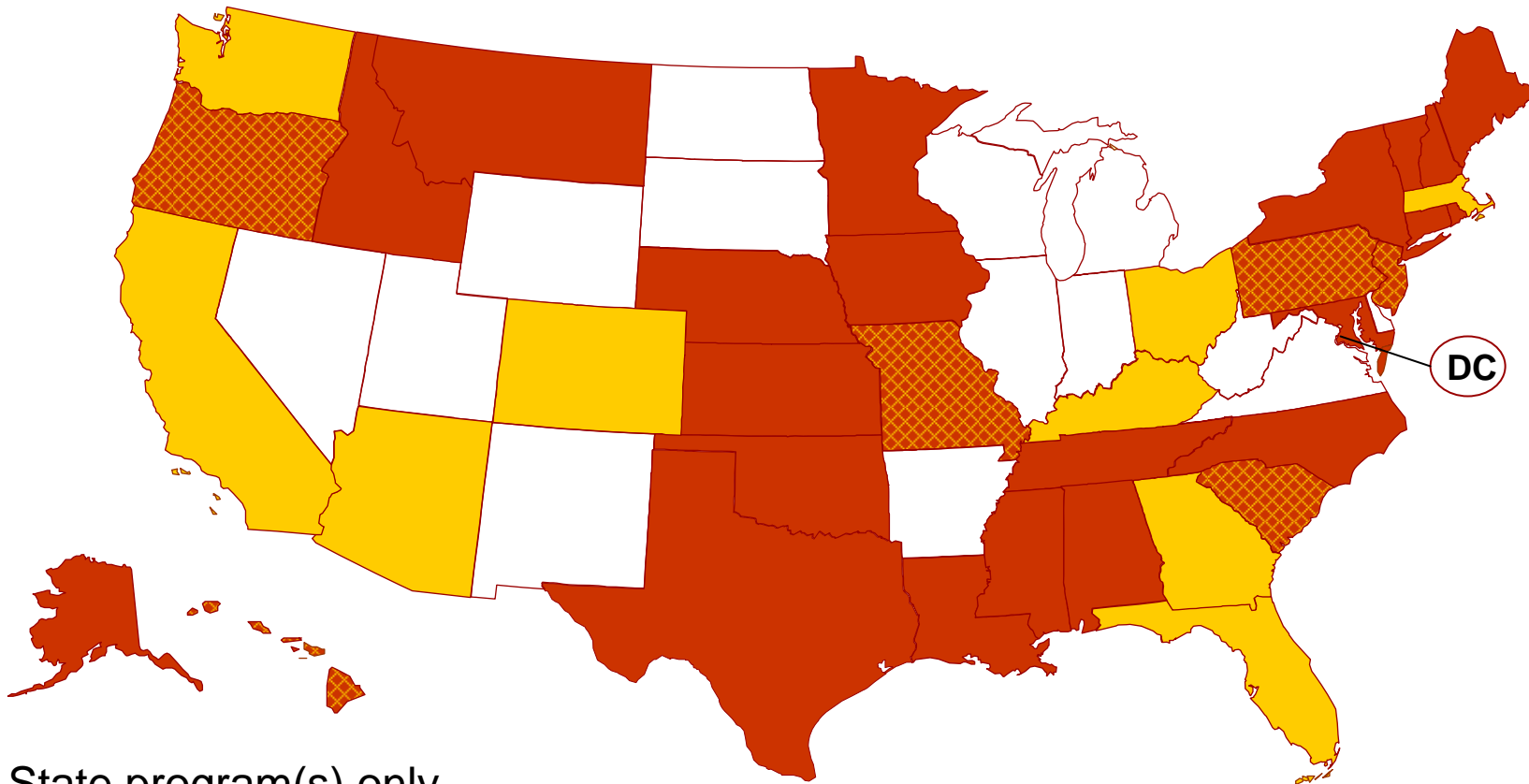





- State program(s) only
- Utility, local, or private program(s) only
- State program(s) + utility, local, and/or private program(s)

*Notes: This map only addresses grant programs for end-users. It does not address grants programs that support R&D, nor does it include grants for geothermal heat pumps or other efficiency technologies. The Virgin Islands also offers a grant program for certain renewable energy projects.*

# Loan Programs for Renewables

[www.dsireusa.org](http://www.dsireusa.org) / July 2009



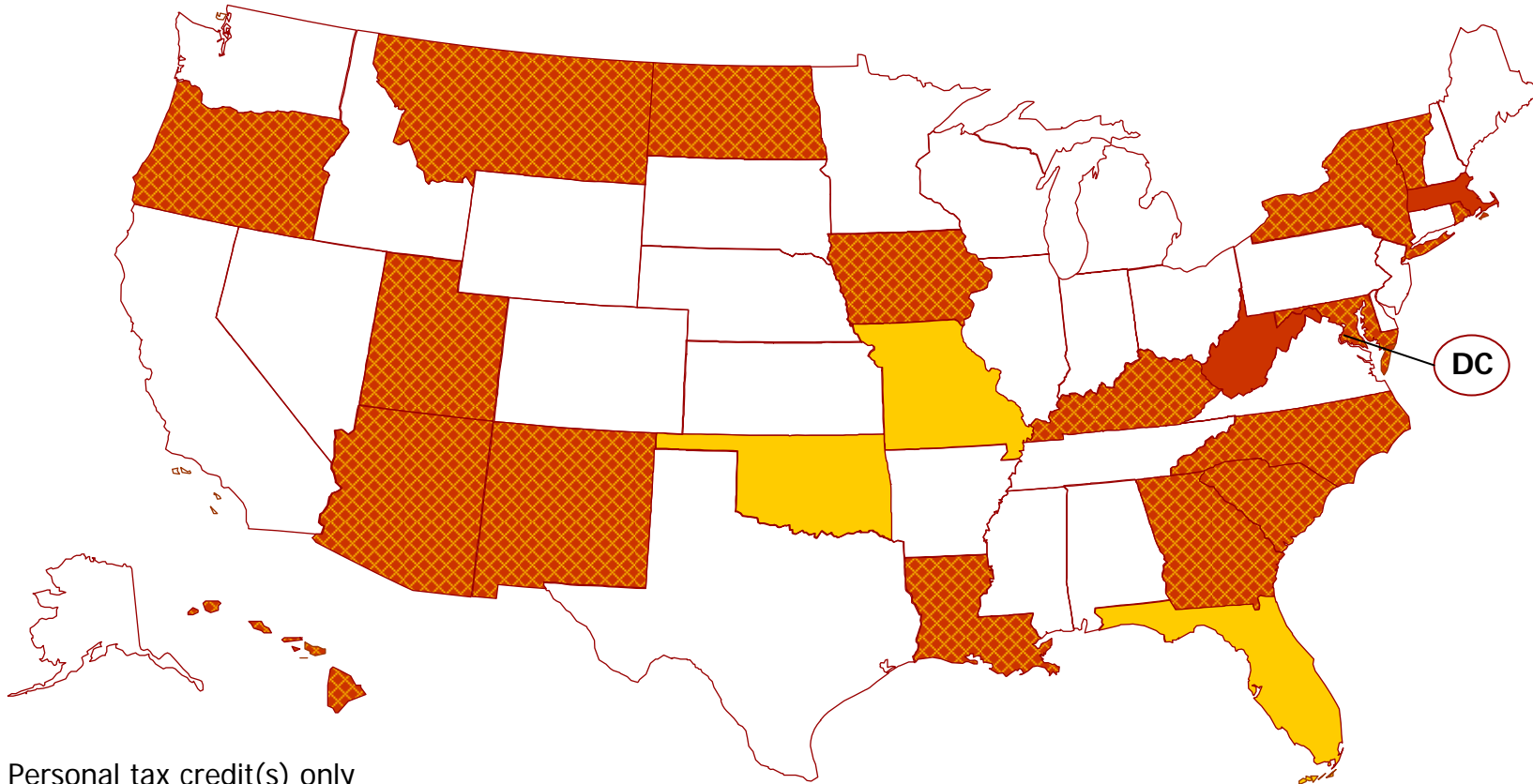
-  State program(s) only
-  Utility and/or local program(s) only
-  State program(s) + utility and/or local program(s)

*Note: This map does not include loan programs for geothermal heat pumps or other energy efficiency technologies.*



# Tax Credits for Renewables

[www.dsireusa.org](http://www.dsireusa.org) / July 2009



- Personal tax credit(s) only
- Corporate tax credit(s) only
- Personal + corporate tax credit(s)

*Notes: This map does not include corporate or personal tax deductions or exemptions; or tax incentives for geothermal heat pumps. Puerto Rico also offers tax credits for renewable energy systems.*

# State Incentives in Southeast

## Grants

- Florida Renewable Energy Technologies Grant Program
- North Carolina Green Business Fund

## Loans

- Alabama Local Government Energy Loan Program
- Mississippi Energy Investment Loan Program
- South Carolina ConserFund Loan Program

## Tax Credits

- Georgia Biomass Sales and Use Tax Exemption
- Florida Renewable Energy Production Tax Credit
- South Carolina Biomass Energy Tax Credit

# *Contact*

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