

# Tax Benefits for Engineers and Architects

# AE FIRMS ARE PAYING TOO MUCH TAX

Don't Be One of Them

# Agenda

- Part I Tax credit: Research & Development
- Part II Tax deduction: IRC 179D
- Part III Additional opportunities

# Research & Development Tax Credits

# Federal Incremental Research Credit Status

- **Computation rules for the “regular” IRC 41 are unchanged from July 1, 1995**
  - Credit = 20% \* (Excess of current R&D expense over fixed base amount) + expenses are not deducted. OR`
  - Elect IRC 280C then credit = 13% \* (Excess of current R&D expense over fixed base amount) and no reduction of total expenditures.
- **Method 2: Alternative Incremental Credit available June 30, 1996 - January 1, 2010**
  - Credit ranges from 3.25 - 5% of current year R&D IF R&D exceeds 1-2% of a fixed base
- **Method 3: Alternative Simplified Credit available after December 31, 2006 - January 1, 2010**
  - Credit = 12% \* (Excess of current R&D expense over (Average 3 yr QRE \* 50%))
    - NOTE: Limited to 6% of any of prior 3 years has -0- QRE
  - Credit = 7.8% under IRC 280C election>same treatment as stated above
- Senate is seeking to pass a permanent research credit provision in 2010?

# R&D Incremental Tax Credit

## Benefit

- Federal
  - Up to possibly 9% of *qualified research expenses*
  - \$250,000 = the average credit of companies in professional, scientific, and technical services, and in construction.
- States
  - Most states have R&D tax credits.
  - Pennsylvania does too. Discussed on next slide.
- Non U.S.
  - More than 30 other countries provide credits and other incentives for R&D and R&D-related activities.

# R&D Incremental Tax Credit

## Pennsylvania benefit:

- = up to 10% of *qualified research expenses* for businesses with assets > \$5M.
- = up to 20% for businesses with assets < \$5M.
- \$40 million of credits can be approved; credits are prorated for approved participants.
- Credits can be sold or assigned.
- Can be used against PA personal income tax, PA corporate net income tax or PA capital stock/foreign franchise tax.
- Not available for expenditures incurred in a Keystone Opportunity Zone (KOZ).
- Credit must be applied for annually for next fiscal year

# R&D Incremental Tax Credit: What meets the definition of Qualified Research?

- “Qualified Research” - four-part test:
  - Activities intended to develop or improve the functionality, performance, reliability, or quality of a product, process, software, technique, invention, or formula (“component”)
  - Developed through a process of experimentation: evaluate alternatives, develop and test hypothesis, refine or discard hypothesis, success or failure
  - Discover information that fundamentally relies on the principles of engineering or the physical, biological, or computer sciences
  - To eliminate uncertainty regarding one’s capability or method for or improving the component, or its appropriate design

# R&D Incremental Tax Credit: Excluded Activities

Activities do not qualify to the extent they are:

- Conducted outside the US, Puerto Rico, or U.S. Possessions.
- Intended to develop software primarily for internal use-exceptions exist.
- Funded by an unrelated person or governmental entity:
  - An activity is funded if and to the extent that you:
    - Retain no substantial rights to the work; or
    - Will be paid whether your work is successful or not.

# R&D Incremental Tax Credit: Impact of Funded Exp

	<u>Not Funded</u>	<u>Fully Funded</u>	<u>50% Funded</u>
Spending	1,000,000	1,000,000	1,000,000
QREs	<u>1,000,000</u>	<u>0</u>	<u>500,000</u>
Credit potential *	190,000	0	95,000

\* Estimated and assuming activities were conducted in Pennsylvania, not in a KOZ.

# R&D Incremental Tax Credit: Eligible Expenses

“Qualified Research Expenses” include:

- Taxable wages for employees who perform or directly support or directly supervise *qualified research* (excludes 401(k), employee benefits, and overhead costs)
- 65% - 100% of contractor expenses for qualified research
  - Fee paid by taxpayer to consultants or engineering firms
  - Taxpayer must bear economic risk (funding) and retain rights in research results
- Costs of supplies used in qualified research:
  - “Supplies” means tangible property not of a character subject to the allowance for depreciation
  - Includes costs to fabricate prototypes

# R&D Incremental Tax Credit: Qualified Exp cont'd

Examples for engineering and architecture include attempting to develop or improve:

- Building elevations
- Functional site plans to incorporate or overcome the site plan features
- Lateral force resistance systems for buildings
- Marinas to meet unique structural and load requirements
- Brownfield redevelopment
- Bridges and roadway structures
- Water treatment plants to optimize plant capacity or efficiency
- Sanitary sewer systems for new residential communities
- Water pipeline and ancillary systems
- Energy-efficient features
- Wastewater technologies

## R&D Incremental Tax Credit: IRS Exam Issues

IRS Tier I Issue: Will be examined; agent has no discretion in field for audit resolution.

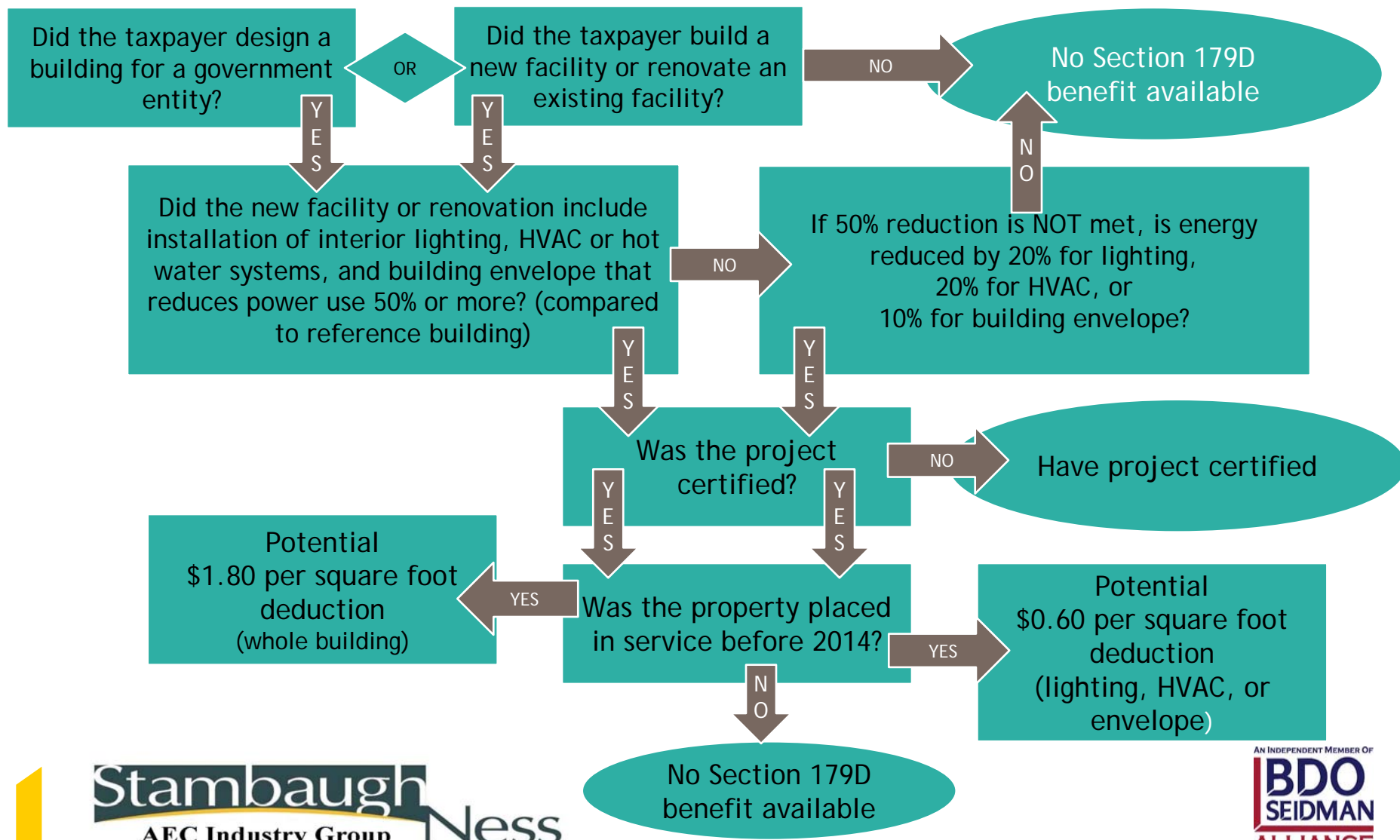
- Prototypes
- Self-constructed assets
- Technical support
- Control of experiments
- Routine data collection
- Lack of documentation
- Lack of time-tracking system to calculate QRE wages
- Validation of fixed-base percentage QRE

# R&D Incremental Tax Credit: Implementation items to consider

- Recordkeeping/cost accumulation process
  - Documentation is key
    - Qualitative analysis
    - Quantitative analysis
    - Contract research analysis
  - Calendar year taxpayers > timing of study completion vs tax due date
  - Resource planning (tax, financial and operational)
  - Statistical sampling
  - Pre-filing agreement with credit firm
    - Phases involved & cost per phase
    - Documentation of credit
    - Audit representation

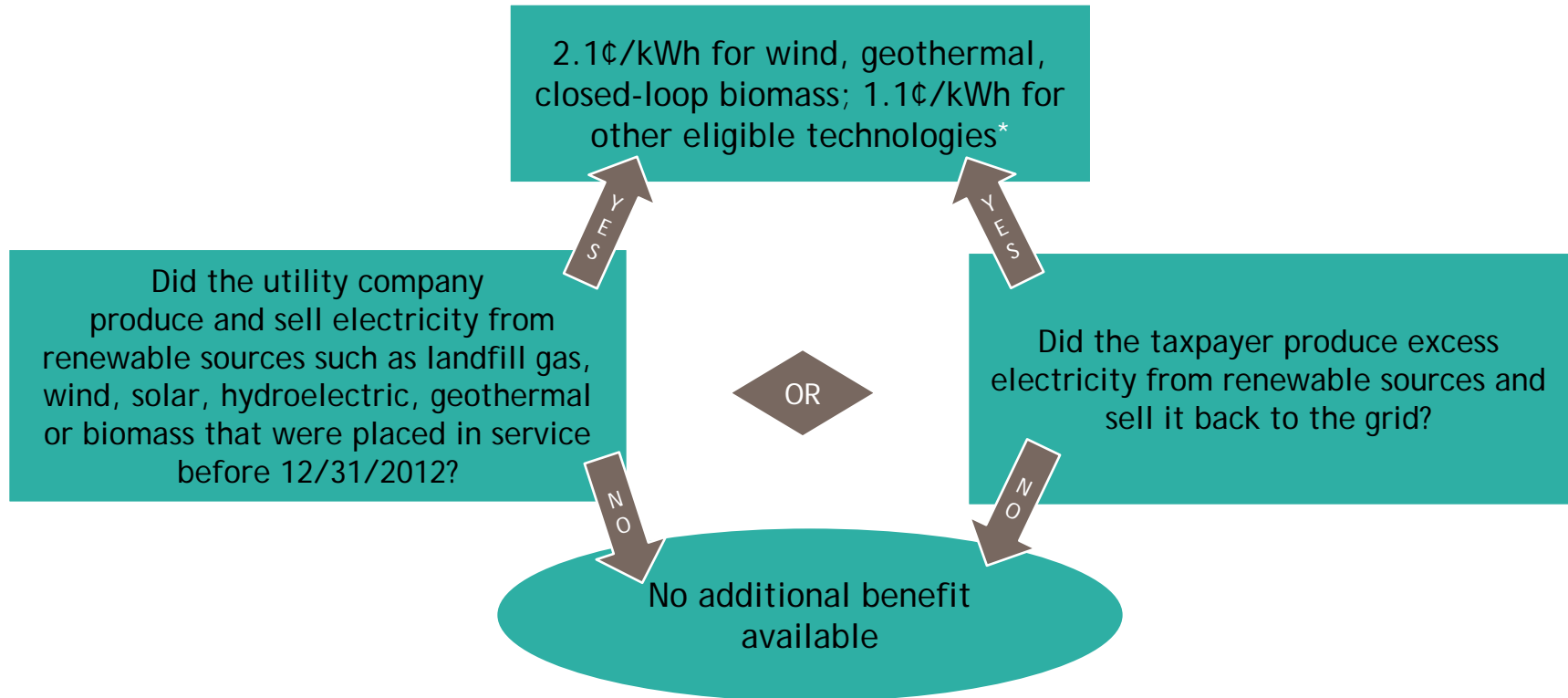
# Tax Deduction: IRC 179D Energy-Efficient Commercial Building Deduction

# Energy-Efficient Commercial Building Deduction - Section 179D



# Additional Opportunities

# Renewable Electricity Production Credit - Section 45 (Production Tax Credit)



\*Note that the duration of the credit is generally 10 years after the date the facility is placed in service, but there are two exceptions: open-loop biomass, geothermal, small irrigation hydro, landfill gas and municipal solid waste combustion facilities placed into service after October 22, 2004, and before enactment of the *Energy Policy Act of 2005*, on August 8, 2005, are only eligible for the credit for a five-year period. Open-loop biomass facilities placed in service before October 22, 2004 are eligible for a five-year period beginning January 1, 2005.

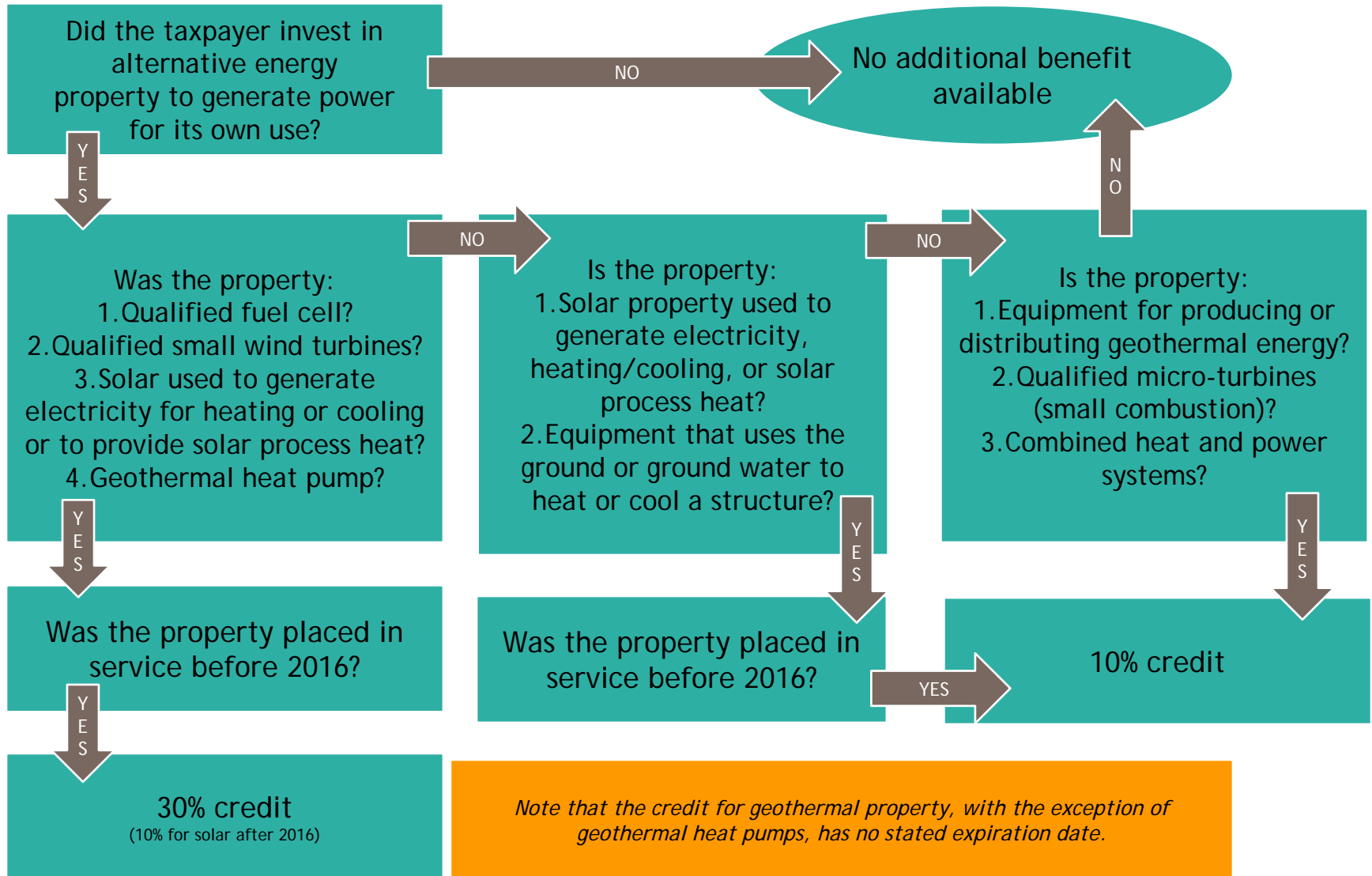
\*\*An irrevocable election can be made to take the Section 48 Investment Tax Credit in lieu of the Section 45 Production Tax Credit.

\*\*\*\$2.4B in energy conservation bonds for facilities that qualify for the PTC (may be used to finance retrofitting of existing facilities).

# Production Tax Credit Issues Summary

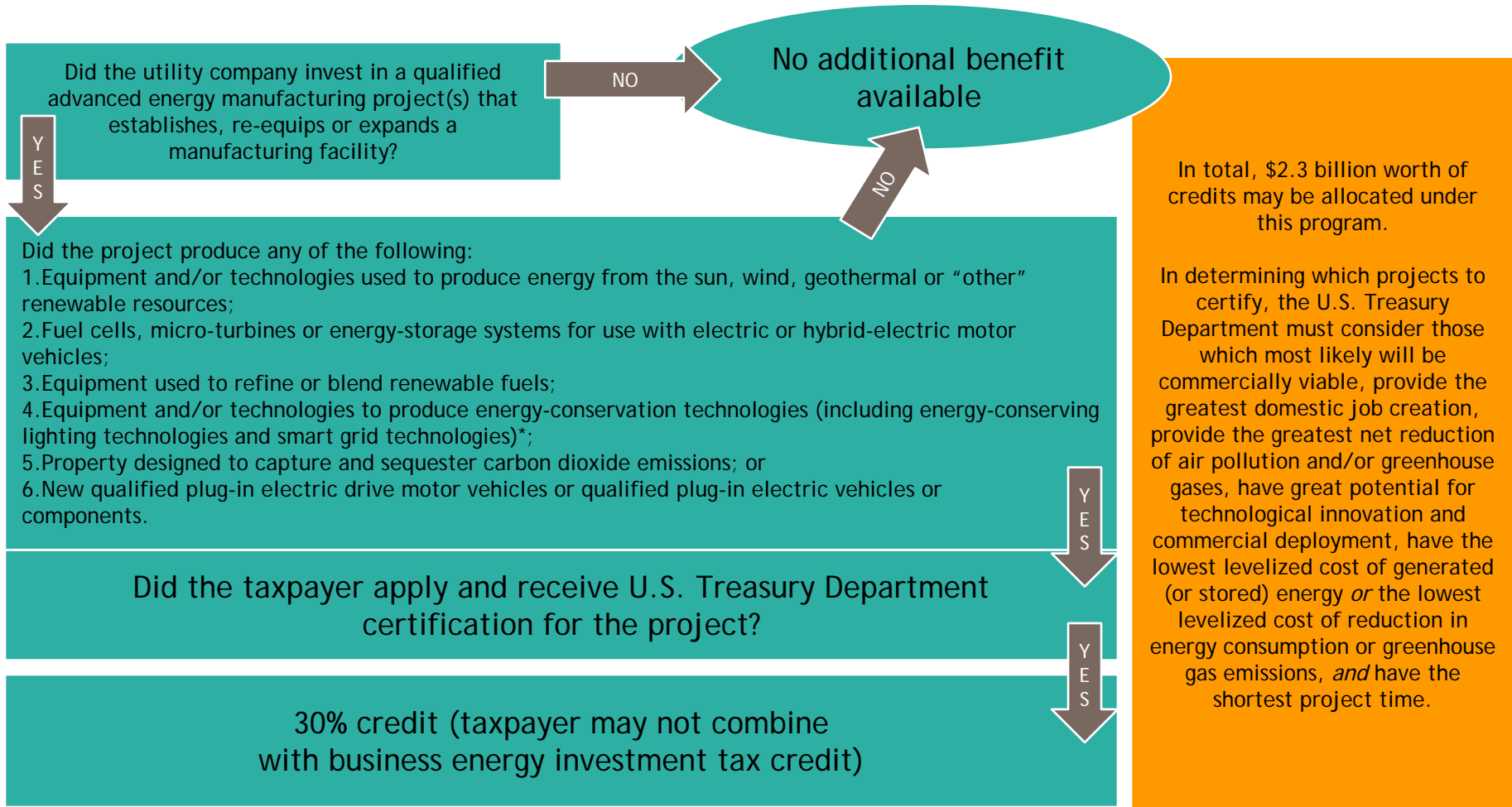
- Available for biomass, geothermal, hydropower, marine and hydrokinetic, municipal solid waste, small irrigation, and wind
- 10-year credit period
- Requirement for 3<sup>rd</sup> party sales
- Reduction of credit for subsidized or tax-exempt financing
- Ownership requirement
- Structuring available to monetize the credit
- No basis reduction in the property

# Business Energy Investment Tax Credit - Section 48



*Note that the credit for geothermal property, with the exception of geothermal heat pumps, has no stated expiration date.*

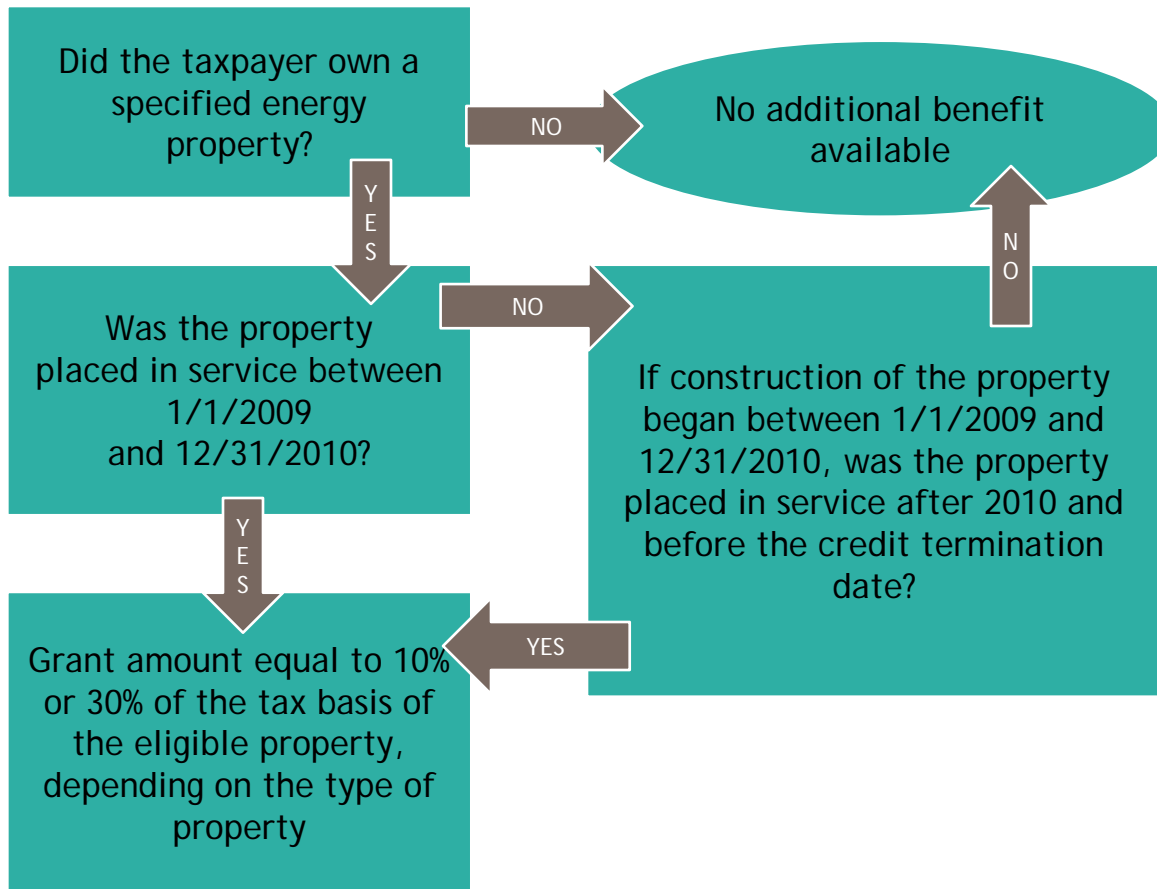
# Qualifying Advanced Energy Project Investment Credit - Section 48C



In total, \$2.3 billion worth of credits may be allocated under this program.

In determining which projects to certify, the U.S. Treasury Department must consider those which most likely will be commercially viable, provide the greatest domestic job creation, provide the greatest net reduction of air pollution and/or greenhouse gases, have great potential for technological innovation and commercial deployment, have the lowest levelized cost of generated (or stored) energy *or* the lowest levelized cost of reduction in energy consumption or greenhouse gas emissions, *and* have the shortest project time.

# Payments for Specified Energy Property in Lieu of Tax Credits - Section 1603



1. Specified energy properties are depreciable properties that are, among others, part of an electricity production facility using wind, biomass, geothermal or solar energy, or certain power plants using fuel cells or micro-turbines.
  - a. Qualified property includes expansions of an existing property that is qualified property under §45 or §48 of the IRC.
2. For property placed in service in 2009 or 2010 OR for properties that were not placed in service in 2009 or 2010, but for which construction began in 2009 or 2010, applications must be submitted after the property has been placed in service and before October 1, 2011.
3. Eligible persons must be the owner or lessee of the property and must have originally placed the property in service.
4. [treas.gov/recovery/docs/guidance.pdf](http://treas.gov/recovery/docs/guidance.pdf) for more information regarding credit termination dates and applicable payment percentages.
5. Independent account attestation for project costs between \$500k - \$1mm is required in the form of agreed upon procedures; >\$1mm require an audit report.

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