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Selected Energy Tax Credit Provisions in the Internal Revenue Code

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"SELECTED ENERGY TAX CREDIT PROVISIONS IN THE INTERNAL REVENUE CODE"

ELECTRICITY PRODUCED FROM: (CODE §)	DEFINITION OF SOURCE:	FACILITY PLACED IN SERVICE DEADLINES	CREDIT RATE	CREDIT PERIOD
Wind (§ 45)	[No definition provided]	After 12/31/93 and before 1/1/2009	Full amount (currently 2.0 cents/kWh)	10-year period beginning on date facility is placed in service.
Closed-loop biomass (§ 45)	Any organic material from a plant which is planted exclusively for the purposes of being used at a qualified facility to produce electricity NOTE: Special rules apply to facilities that are modified to use closed-loop biomass to co-fire with coal or other biomass.	After 12/31/92 and before 1/1/2009	Full amount (currently 2.0 cents/kWh)	10-year period beginning on date facility is placed in service.
Open-loop biomass (§ 45)	 Any agricultural livestock waste nutrients (bovine, swine, poultry or sheep manure and litter, and other bedding material for the disposition of manure) Any solid, nonhazardous, celulosic waste material or any lignin material which is segregated from other waste materials and which is derived from: Mill and harvesting residues, precommercial thinnings, slash, and brush. Solid wood waste materials (waste pallets, crates, dunnage, manufacturing and construction wood wastes (that are not pressure treated, chemically treated or painted), and landscape or right of way tree trimmings (but excluding municipal solid waste, landfill gas or paper which is commonly recycled). Agricultural sources including orchard tree crops, vineyard, grain, legume, sugar, and other crop by-products or residues. NOTE: Open-loop biomass does not include closed-loop biomass, or biomass burned in conjunction with fossil fuel (cofiring) beyond such fossil fuel required for startup and flame stabilization. 	In the case of a facility using agricultural livestock waste nutrients, after 10/22/04 and before 1/1/2009. In addition, the nameplate capacity must be at least 150KW. For all other open-loop biomass facilities, originally placed in service before 1/1/2009. NOTE: If the owner of the biomass facility is not the producer of the electricity, the lessee or operator may claim the credits.	1/2 of credit amount allowed under section 45(a)(1) (as adjusted for inflation) (currently 1.0 cents/kWh)	Depends on when the facility is placed in service: For open-loop biomass facilities placed in service before 10/22/04, the 5-year period beginning on 1/1/05. For facilities placed in service after 10/22/04 and on or before 8/8/05: 5-year period beginning on date facility is placed in service. For facilities placed in service after 8/8/05: 10-year period beginning on date facility is placed in service.



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ELECTRICITY PRODUCED	DEFINITION OF SOURCE:	FACILITY PLACED IN SERVICE DEADLINES	CREDIT RATE	CREDIT PERIOD
FROM: (CODE §)		NAME OF THE PERSON OF THE PERS		8
Geothermal energy (§ 45)	Energy derived from a geothermal reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure). NOTE: Facilities described in section 48(a)(3) the basis of which is taken into account for purposes of determining the energy credit under 48 do not qualify for section 45 tax credits.	After 10/22/04 and before 1/1/2009.	Full amount (currently 2.0 cents/kWh)	Depends on when the facility is placed in service: For facilities placed in service after 10/22/04 and on or before 8/8/05: 5-year period beginning on date facility is placed in service. For facilities placed in service after 8/8/05: 10-year period beginning on date facility is placed in service.
Solar energy (§ 45)	[No definition provided] NOTE: Facilities described in section 48(a)(3) the basis of which is taken into account for purposes of determining the energy credit under 48 do not qualify for section 45 tax credits.	After 10/22/04 and before 1/1/2006. NOTE: The placed in service date for solar facilities was not extended.	Full amount (currently 2.0 cents/kWh)	Depends on when the facility is placed in service: For facilities placed in service after 10/22/04 and on or before 8/8/05: 5-year period beginning on date facility is placed in service. For facilities placed in service after 8/8/05: 10-year period beginning on date facility is placed in service.
Small irrigation power (§ 45)	Power (a) generated without any dam or impoundment of water through an irrigation system canal or ditch, and (2) the nameplate capacity of which is at least 150 KW, but less than 5 MW.	After 10/22/04 and before 1/1/2009.	½ of credit amount allowed under section 45(a)(1) (as adjusted for inflation) (currently 1.0 cents/kWh)	Depends on when the facility is placed in service: For facilities placed in service after 10/22/04 and on or before 8/8/05: 5-year period beginning on date facility is placed in service. For facilities placed in service after 8/8/05: 10-year period beginning on date facility is placed in service.



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ELECTRICITY	DEFINITION OF SOURCE:	FACILITY PLACED IN	CREDIT RATE	CREDIT PERIOD
PRODUCED FROM:		SERVICE DEADLINES	RAIE	
(CODE §)				N. S.
Municipal solid waste (§ 45)	Any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities (but excluding solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to certain permits. NOTE: A "trash combustion facility" includes a new unit placed in service in connection with a facility placed in service on or before 8/8/05, but only to the extent of the increased amount of electricity produced at the facility due to the new unit. NOTE: A facility which produces electricity from gas derived from the biodegradation of municipal solid waste does not qualify for section 45 credits if the biodegradation occurred in a facility (within the meaning of section 29) that claims or claimed section 29 credits.	Facilities producing electricity from landfill gas: After 10/22/04 and before 1/1/2009. Facilities producing electricity from the combustion of municipal solid waste: After 10/22/04 and before 1/1/2009.	1/2 of credit amount allowed under section 45(a)(1) (as adjusted for inflation) (currently 1.0 cents/kWh)	Depends on when the facility is placed in service: For facilities placed in service after 10/22/04 and on or before 8/8/05: 5-year period beginning on date facility is placed in service. For facilities placed in service after 8/8/05: 10-year period beginning on date facility is placed in service.
Hydropower (§ 45)	 In the case of any hydroelectric dam which was placed in service on or before 8/8/05, the "incremental hydropower production" (the percentage of average annual hydropower production attributable to efficiency improvements or additions of capacity placed in service after 8/8/05). The hydropower production of a facility in the case of any nonhydroelectric dam which is: licensed by FERC and meets all applicable environmental, licensing and regulatory requirements placed in service before 8/8/05 and did not produce hydroelectric power before 8/8/05, and turbines or other generating devices are added to the facility after 8/8/05 to produce hydroelectric power (except not by enlargement of diversion structure, enlargement of channel or impoundment of water). 	1) In the case of a facility producing incremental hydropower production, the efficiency improvements or additions to capacity placed in service after 8/8/05 and before 1/1/2009. 2) In the case of any other facility: After 8/8/05 and before 1/1/2009.	½ of credit amount allowed under section 45(a)(1) (as adjusted for inflation) (currently 1.0 cents/kWh)	10-year period beginning on date the efficiency improvements or addition to capacity or the facility is placed in service, as applicable.



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ELECTRICITY PRODUCED FROM: * (CODE §)	DEFINITION OF SOURCE:	FACILITY PLACED IN SERVICE DEADLINES	CREDIT RATE	CREDIT PERIOD
Nuclear (§ 45J)	The reactor design of the facility must be approved by the Nuclear Regulatory Commission after 12/31/93 and such design or a substantially similar design of comparable capacity was not approved prior to 12/31/93. The facility must receive an allocation of MW capacity from and be approved through a certification process by the Secretary of the Treasury. The Secretary is authorized to allocate a maximum of 6,000 MW.	After 8/8/05 and before 1/1/2021	1.8 cents/kWh (not adjusted for inflation) NOTE: Credit amount is limited to: (1) MW allocated to the facility by IRS over the MW capacity of the facility, and (2) \$125MM times MW allocated to the facility by IRS over 1,000	8-year period beginning on the date the nuclear power plant is placed in service.



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COAL TYPE (CODE §)	DEFINITION:	PLACED IN SERVICE DEADLINE	CREDIT RATE	CREDIT PERIOD
REFINED COAL (§ 45)	 A fuel which is: Liquid, gaseous, or solid fuel produced from coal (including lignite) or high carbon fly ash, including such fuel used as a feedstock; Sold by the taxpayer with the reasonable expectation that it will be used for the purpose of producing steam; Certified by the taxpayer as resulting (when used in the production of steam) in a reduction of at least 20% of the emissions of (a) NO_x and (b) either SO₂ or mercury released when burning the refined coal (excluding dilution effects) as compared to the feedstock coal or comparable coal predominantly available in the marketplace as of 1/1/2003; and Produced in such a manner as to result in an increase of at least 50% in the market value of the refined coal (excluding any increase caused by materials added during the process), as compared to the value of the feedstock coal. NOTE: Any facility which has claimed or claims section 29 credits does not qualify for section 45 tax credits. 	After 10/22/2004 and before 1/1/2009	\$4.375 per ton of refined coal (currently \$5.877/ton; adjusted for inflation after 1992)	10-year period beginning on the date the facility is placed in service
INDIAN COAL (§ 45)	 Coal which is produced from coal reserves which on 6/14/05: were owned by an Indian tribe, OR were held in trust by the US for the benefit of any Indian tribe or its members. 	Before 1/1/2009	2006 \$1.50/ton 2007 \$1.544/ton (\$1.50/ton in 2006-2009; \$2.00/ton in 2009-2013 (after 2006, adjusted for inflation after 2005)	7-year period beginning on 1/1/2006
COKE & COKE GAS (§ 45K)	[No definition provided] NOTE: The Sectioon 45K tax credit phase-out based on the reference price of oil no longer applies with respect to coke and coke gas produced in these facilities.	Before 1/1/93 OR After 6/30/98 and before 1/1/2010	\$3.00 per barrel of oil equivalent (adjusted for inflation after 2004) NOTE: Credit limited to average barrel of oil equivalent	Beginning on the later of 1/1/06 or the date the facility was placed in service and ending 4 years after such date.



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of	f 4,000 barrels
pe	er day

ENERGY PROPERTY (CODE §)	 NOTE: In order to qualify for credit: property must be constructed by taxpayer or acquired by taxpayer if the original use of the property commences with taxpayer, depreciation or amortization must be allowable for property, and in the case of § 48 property, meet any performance or quality standards set by Treasury. 	TAX CREDIT %	NOTE: Basis is reduced by subsidized energy financing or tax-exempt private activity bonds.	CREDIT PERIOD, NOTE: Rules similar to rules of § 48(m) (as in effect before repeal) apply
Fuel Cell Property (§ 48)	 A fuel cell power plant (an integrated system comprised of a fuel cell stack assembly and associated balance of plant components which converts fuel into electricity using electrochemical means) which has: a nameplate capacity of at least 0.5 kW of electricity using an electrochemical process, and an electricity-only generation efficiency of greater than 30 percent 	30%	\$500 for each 0.5 kW of capacity of the property NOTE: "Public utility property" does not qualify for section 48 credits, except in the case of telecommunication companies	Periods after 12/31/05 and before 1/1/09 for property placed in service after 12/31/05
Microturbine Property (§ 48)	A stationary microturbine power plant (an integrated system comprised of a gas turbine engine, a combustor, a recuperator or regenerator, a generator or alternator, and associated balance of plant components which converts a fuel into electricity and thermal energy) which has: • a nameplate capacity of less than 2,000 kW, and • an electricity-only generation efficiency of not less than 26 percent at ISO conditions NOTE: A stationary microturbine power plant also includes all secondary components located between the existing infrastructure for fuel delivery and the existing infrastructure for power distribution, including equipment and controls for meeting relevant power standards, such as voltage, frequency and power factors.	10%	\$200 for each kW of capacity of the property NOTE: "Public utility property" does not qualify for section 48 credits, except in the case of telecommunication companies	Periods after 12/31/05 and before 1/1/09 for property placed in service after 12/31/05

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ENERGY PROPERTY	DESCRIPTION OF ENERGY PROPERTY	TAX CREDIT	CREDIT LIMITATIONS	CREDIT PERIOD,
(CODE §)	NOTE: In order to qualify for credit: property must be constructed by taxpayer or acquired by taxpayer if the original use of the property commences with taxpayer, depreciation or amortization must be allowable for property, and in the case of § 48 property, meet any performance or quality standards set by Treasury.	%	NOTE: Basis is reduced by subsidized energy financing or tax-exempt private activity bonds.	NOTE: Rules similar to rules of § 48(m) (as in effect before repeal) apply
(§ 48)	Equipment which uses solar energy to generate electricity, to heat and cool (or provide hot water for use in) a structure, or to provide solar process heat, excepting property used to generate energy for the purposes of heating a swimming pool	30% for periods ending after 12/31/05 and before 1/1/09 10% for other periods	No credit allowed for any property which is part of a facility that qualifies for section 45 tax credits NOTE: "Public utility property" does not qualify for section 48 credits.	Periods after 12/31/05 and before 1/1/09 for property placed in service after 12/31/05
Solar (§ 48)	Equipment which uses solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight	30%	NOTE: "Public utility property" does not qualify for section 48 credits.	Periods after 12/31/05 and before 1/1/09 for property placed in service after 12/31/05
Geothermal (§ 48)	Equipment used to produce, distribute, or use energy derived from a geothermal deposit (geothermal reservoir consisting of natural heat which is stored in rocks or in an aqueous liquid or vapor (whether or not under pressure)), but in the case of electricity generated by geothermal power, up to (but not including) the electrical transmission stage	10%	No credit allowed for any property which is part of a facility that qualifies for section 45 tax credits. NOTE: "Public utility property" does not qualify for section 48 credits.	



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Integrated Gasification Combined Cycle (IGCC) Projects (§ 48A)	A new or retrofitted/repowered electric generation unit (at least 50% of the total annual net output is electrical power) which produces electricity by converting coal to synthesis gas which is used to fuel a combined cycle plant which produces electricity from both a combustion turbine (including a combustion turbine/fuel cell hybrid) and a steam turbine AND: • the fuel input for the project is at least 75% coal • has a total nameplate generating capacity of at least 400MW • applicant must provide evidence that • majority of the output of the project reasonably expected to be acquired or utilized • ownership or control of site of sufficient size to allow the proposed project to be constructed and to operate on a long-term basis • located in the United States, and • designed to meeting the following performance requirements: Performance	20%	NOTE: Treasury Secretary is authorized to certify \$800,000,000 for IGCC projects NOTE: Loan guarantees provided under § 411 of the 2005 Energy Act for projects to produce energy from coal of less than 7,000 Btu using IGCC technology do not preclude the facility from receiving an allocation for § 48A tax credits. Use of § 48A tax credits does not prohibit use of other clean coal program funding.	Periods after 8/8/05
	NOTE: Project must be certified by the Treasury Secretary. Certifications are issued using a competitive bidding process and high priority is given to projects which include greenhouse gas capture capability, increased by-product utilization, and other benefits			



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ENERGY	DESCRIPTION OF ENERGY PROPERTY	770 A 327	CDEDIT I MATE ATTONIC	CDEDIT
PROPERTY	DESCRIPTION OF ENERGY PROPERTY	TAX	CREDIT LIMITATIONS	CREDIT
TAOLENTI	NOTE: In order to qualify for credit:	CREDIT	NOTE: Desir is and and have	PERIOD,
(CODE §)		%	NOTE: Basis is reduced by	NOTE: D. L.
(CODE 3)	property must be constructed by taxpayer of acquired by taxpayer if		subsidized energy financing or	NOTE: Rules
	the original use of the property commences with taxpayer,		tax-exempt private activity	similar to rules
	depreciation or amortization must be allowable for property, and		bonds.	of § 48(m)
	• in the case of § 48 property, meet any performance or quality standards			(as in effect
	set by Treasury.			before repeal)
Other				apply
Advanced	A new or retrofitted/repowered electric generation unit (at least 50% of the total annual net output is electrical power) which has a design net heat rate of	15%	NOTE: Treasury Secretary is	Periods after
Coal-Based	8530 Btu/kWh (40% efficiency), OR		authorized to certify	8/8/05
Generation			\$500,000,000 for projects that	
Technologies	An electric generation unit existing on 8/8/05 which achieves a minimum efficiency of 35% and an overall thermal design efficient improvement,		use other advanced coal-based	
_ comingres	compared to the efficiency of the unit as operated, of not less than		generation technologies	<u> </u>
(§ 48A)	7 percentage points for coal of more than 9000 Btu			
(8 1012)	6 percentage points for coal of 7000 to 9000 Btu, or			
	4 percentage points for coal of less than 7000 Btu AND:			
	I			
	• the fuel input for the project is at least 75% coal		ļ	
	has a total nameplate generating capacity of at least 400MW			
	applicant must provide evidence that			
	o majority of the output of the project reasonably expected to be			
	acquired or utilized			
	o ownership or control of site of sufficient size to allow the			
	proposed project to be constructed and to operate on a long-term basis			
	located in the United States, and			
	• designed to meeting the following performance requirements:			
	Performance Design Level for			
	Characteristic Project			
	SO2 (% removal) 99%			
	NOx emissions 0.07 lbs/MMBtu			
	PM* (emissions) 0.015 lbs/MMBtu]
	Hg (% removal) 90%			
	NOTE: Project must be cortified by the Tracoury Secretary, Cartifications and in-			
	NOTE: Project must be certified by the Treasury Secretary. Certifications are issued using a competitive bidding process			
	asing a competitive ordaing process			



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ENERGY PROPERTY (CODE §)	 NOTE: In order to qualify for credit: property must be constructed by taxpayer or acquired by taxpayer if the original use of the property commences with taxpayer, depreciation or amortization must be allowable for property, and in the case of § 48 property, meet any performance or quality standards set by Treasury. 	TAX CREDIT %	NOTE: Basis is reduced by subsidized energy financing or tax-exempt private activity bonds.	CREDIT PERIOD, NOTE: Rules similar to rules of § 48(m) (as in effect before repeal) apply
Qualifying Gasification Project (§ 48B)	 Any project which: employs any process which converts a solid or liquid product from: coal (anthracite, bituminous coal, subbituminous coal, lignite and peat) petroleum residue (carbonized product of high-boiling hydrocarbon fractions obtained in petroleum processing) biomass (agricultural or plant waste, byproduct of wood or paper mill operations, including lignin in spent pulping liquors, and other products of forestry maintenance) other material which are recovered for their energy or feedstock value into a synthesis gas composed primarily of carbon monoxide and hydrogen for direct use or subsequent chemical or physical conversion will be carried out by any person whose application for certification is principally intended for use in a domestic project which employs domestic gasification applications related to chemical, fertilizers, glass, steel, petroleum residues, forest products, and agriculture (including feedlots and dairy operations), and any portion of the qualified investment of which is certified under the qualifying gasification program as eligible for the credit under this section in an amount determined by the Treasury Secretary NOTE: Includes any property which is a part of a qualifying gasification project and is necessary for the gasification technology of such project NOTE: Project must be certified by the Treasury Secretary. Certifications are issued using a competitive bidding process 	20%	Maximum of \$650,000,000 of credit-eligible investment may be allocated to a single project (\$130,000,000 in credits) NOTE: Treasury Secretary is authorized to certify a total of \$350,000,000 in credits for qualifying gasification projects NOTE: No § 48B credit is allowed with respect to any qualified investment for which a credit is allowed under § 48A	Periods after 8/8/05