

# Clean Tech Advisory

An informational newsletter from Goodwin Procter's Clean Tech Group

## Congress Extends and Approves New Alternative Energy Tax Credits

The financial recovery legislation (H.R. 1424) that Congress passed and the President signed on October 3, 2008, also includes the Energy Improvement and Extension Act of 2008 (the "Act"), which contains about \$17 billion in tax incentives for clean energy services. The Act both extends and expands eligibility for several renewable energy tax credits and provides new incentives for energy efficiency, alternative fuels and other "clean" energy technologies that reduce greenhouse gas emissions. Some of the key changes are outlined below.

### **Production Tax Credit Expanded to Cover Marine and Hydrokinetic Energy**

Section 45 of the Internal Revenue Code (the "Tax Code") provides for a production tax credit (the "PTC") for "qualified facilities" that generate energy from "qualified energy resources." Prior to the Act's passage, "qualified energy resources" included wind, closed-loop biomass, open-loop biomass, geothermal energy, solar energy, small irrigation power, municipal solid waste and certain qualified hydropower production. The Act expanded that definition to also include "marine and hydrokinetic renewable energy." As a result of this expansion, energy derived from waves, tides, free flowing water in rivers, lakes, streams and man-made systems and differentials in ocean temperature can all benefit from the PTC.

### **Extension of Production Tax Credit**

In addition to the expanded definition of qualified energy resources, the Act also amends the definition of qualified facilities to expand the time frame for qualification. Previously, the availability of the PTC for new facilities was scheduled to expire on December 31, 2008, as qualified facilities were limited to those placed in service prior to January 1, 2009. The Act extends that time limit, and the new expiration date varies dependent on energy source. The PTC for wind and refined coal facilities has been extended for just one year, until January 1, 2010. For other types of qualified facilities, such as closed-loop biomass, open-loop biomass, geothermal, solar, small irrigation and landfill gas, the PTC has been extended for two years, until January 1, 2011. Marine and hydrokinetic energy facilities can benefit from the PTC as long as placed in service prior to January 1, 2012.

This extension under Section 45 did not affect qualified energy facilities already placed in service; however it will likely have an impact on renewable energy investment. Until the Act's passage, numerous large wind and solar projects, originally scheduled to be built in 2009, had been put on hold as developers waited for Congress to extend the PTC. Although renewable energy investments can once again rely on the PTC, given the short duration of the extension (especially for wind projects) and current constraints on financing, this extension may not stimulate renewable energy investment to the extent many renewables advocates had hoped. Congress will likely need to revisit the duration of the PTC in the next session.

### **Amendments to Biodiesel, Renewable Diesel and other Alternative Fuel Tax Credits**

In addition to the PTC provided under Section 45, the Tax Code provides for a similar tax credit for biodiesel and renewable diesel fuels under Section 40A. The Act extends that credit for a year, until December 31, 2009. The Act also increases the amount of the credit from 50 cents per gallon of biodiesel (or renewable diesel) to one dollar per gallon. Furthermore, prior to the Act's passage, Section 40A (and also Section 40 which provides for the alcohol fuels credit) had allowed for tax credits to be given for biodiesel and alcohol fuels produced outside the U.S., but blended in the U.S. – creating the so-called “splash and dash” issue. The Act amends Sections 40 and 40A to close that loophole and limit the applicability of the tax credit solely to alcohol and biodiesel fuels produced in the United States.

Section 6426 of the Tax Code also provides for a tax credit in relation to alternative fuels. The Act extends that credit from September 30, 2009 until December 31, 2009. In addition, the Act calls for the inclusion of compressed or liquefied gas derived from biomass as an alternative fuel. Other “alternative fuels” qualifying under Section 6426 include liquefied petroleum gas, compressed or liquefied natural gas, liquefied hydrogen, liquid fuel derived from coal and liquid hydrocarbons derived from biomass. Furthermore, the Act adds the requirement that fuels be certified as having been derived from coal produced at a gasification facility which separates and sequesters 50% of the facility's CO<sub>2</sub> emissions in the case of fuel produced between September 30, 2009 and December 30, 2009, and 75% of the facility's CO<sub>2</sub> emissions after December 30, 2009.

### **Energy Property Tax Credit**

Besides the PTC, the Tax Code also provides, in Section 48, for a 30% energy credit for qualified fuel cell property and “energy property” that consists of equipment used to produce solar energy. Section 48 also provides for a 10% energy credit for “energy property” other than solar. Prior to the Act's passage, “energy property” was limited to equipment used to produce energy from solar equipment, geothermal equipment used in connection with geothermal deposits, qualified fuel cell property and qualified microturbine property. The Act amends that definition to add combined heat and power sources, small wind energy property and geothermal equipment that uses ground or ground water as a thermal energy source for heating and cooling purposes. Furthermore, the Act extends the termination periods relating to this energy credit from December 31, 2008 to December 31, 2016.

## **Tax Credits for Residential Energy Efficient Property**

Section 25D of the Tax Code allows for a 30% credit for solar energy and fuel cell property expenditures. The Act increases the scope of the credit to cover residential wind energy and geothermal heat pump property expenditures as well. Although a 30% tax credit could conceivably create considerable incentives for residential investment in renewable energy equipment, Section 25D imposes a cap on the total expenditure subject to the credit. The Act has removed the \$2,000 cap solely with respect to solar electric property expenditures, such that taxpayers installing photovoltaic solar equipment will now be able to take full advantage of a 30% tax credit. The cap, however, remains at the following amounts with respect to the other types of qualifying residential energy property expenditures:

- \$2,000 with respect to solar water heating property expenditures;
- \$500 with respect to each half kilowatt of capacity of qualified fuel cell property for which qualified fuel cell property expenditures are made;
- \$500 with respect to each half kilowatt of capacity (not to exceed \$4,000) of wind turbines for which qualified small wind energy property expenditures are made; and
- \$2,000 with respect to any qualified geothermal heat pump property expenditures.

## **Expansion and Modification of Advanced Coal Project and Coal Gasification Investment Credits**

The Tax Code provides for a tax credit for certain “qualifying advanced coal projects” under Section 48A (“Coal Projects”) and for “qualifying gasification projects” under Section 48B (“Gasification Projects”). The credit for Coal Projects was previously limited to \$1.3 billion in the aggregate. The Act increased the aggregate limit to \$2.55 billion. Furthermore, the Act expands the scope of “qualifying advanced coal projects” to include Coal Projects that include equipment which separates and sequesters at least 65% of the project’s carbon dioxide (“CO<sub>2</sub>”) emissions. Finally, the Act calls for highest priority to be given to those Coal Projects having the greatest separation and sequestration percentage of total CO<sub>2</sub> emissions.

Similar to the amendment for Coal Projects, the Act increases the cap on credits for Gasification Projects from \$350 million to \$600 million the additional \$250 million solely to be used for Gasification Projects that include equipment which separates and sequesters at least 75% of such project’s total CO<sub>2</sub> emissions (for which priority is given to the Gasification Projects with the highest sequestration percentage). Furthermore, the types of eligible projects are expanded to include those Gasification Projects that use transportation grade liquid fuels.

## **New Tax Credit for Carbon Dioxide Capture and Sequestration**

In addition to the CO<sub>2</sub> sequestration provisions related to Coal Projects and Gasification Projects, the Act adds a new section to the Tax Code that provides for tax credits in relation to CO<sub>2</sub> sequestration generally, Section 45Q. The tax credit is equal to \$10 or \$20 per metric ton of qualified CO<sub>2</sub> sequestered depending on whether the captured CO<sub>2</sub> is used by the taxpayer as a tertiary injectant in a qualified enhanced oil or natural gas recovery project (\$10 credit) or disposed of in secure geological storage (\$20 credit). The tax credit is limited only to CO<sub>2</sub> captured and disposed of or used within the United States.

## **New Tax Credit for Qualified Plug-In Hybrid Motor Vehicles**

The Act also adds a new tax credit under Section 30D for qualified plug-in electric drive motor vehicles (“Electric Vehicles”) equal to \$2,500 plus \$417 for each kilowatt hour of traction battery capacity in excess of four kilowatt hours. The tax credit is capped to between \$7,500 and \$15,000 depending on the weight of the vehicle. Furthermore, the credit will be phased out over the course of a year once the number of Electric Vehicles sold for use exceeds 250,000. This creates incentives for people to buy plug-in hybrids quickly so as to be able to take advantage of one of the first 250,000 tax credits. Notwithstanding the 250,000 vehicle phase-out trigger, the tax credit does not apply to property purchased after December 31, 2014.

Complementary to the Electric Vehicle tax credit, the Act also amends Section 30C of the Tax Code, which provides for an alternative fuel vehicle refueling property credit. Section 30C allows for a credit equal to 30% of the cost of any qualified alternative fuel vehicle refueling property placed in service by the taxpayer during the taxable year, limited to \$30,000 in the case of a property of a character subject to an allowance for depreciation, and \$1,000 in any other case. This credit has been extended from December 31, 2009 to December 31, 2010, and adds electricity as a type of fuel that qualifies for alternative fuel vehicle refueling property (in addition to ethanol, natural gas, compressed and liquefied natural gas, hydrogen and biodiesel mixtures).

## **Other Provisions of the Act**

In addition to the provisions of the Act highlighted above, the Act includes a myriad of other energy policy provisions. The Act added a new transportation fringe benefit for bicycle commuters. In addition, the Act provided for numerous additional amendments to extend other credits and provisions set to expire in 2008 and 2009, such as those related to qualified green building and sustainable design projects under Section 142, the new energy efficient home credit under Section 451, the energy efficient commercial buildings deduction under Section 179D and certain credits for nonbusiness energy property under Section 25C, to name just a few. The Act also provided for a new Qualified Energy Conservation Bond, Section 54D, and a new Clean Renewable Energy Bond, Section 54C. Finally, there are numerous policies aimed at energy conservation and efficiency, such as: (i) clarifying the amount of tax credits applicable to certain appliances under the energy efficient

appliance credits provided under Section 45M, (ii) including asphalt roofs with cooling granules among those energy efficiency improvements that qualify for a tax credit under Section 25C, (iii) providing for an accelerated recovery period for depreciation by electric utilities on smart meters and smart grid systems under Section 168 and (iv) a special depreciation allowance for certain reuse and recycling property also under Section 168.

### Conclusion

The Energy Improvement and Extension Act of 2008 provides a timely boost for U.S. renewable energy production and energy efficiency investments. As such, it should further stimulate clean tech investment across a broad range of energy and transportation sectors. The Act provided a needed extension of the PTC and other soon-to-expire alternative energy credits, although the one-year extension of the PTC for wind is insufficient to provide the necessary certainty for long-term investments in wind power projects. The new and extended tax credits, together with other federal energy programs and state mandates such as renewable portfolio standards and state climate change legislation, should facilitate increased investment in both large renewable energy projects and small scale distributed generation at the residential level, as well as stimulating the domestic production of biodiesel and other alternative fuels. The new incentives for carbon capture and sequestration and plug-in hybrid vehicles, as well as those for renewable electricity generation, should materially assist in the United States' transition to a low carbon economy and help create "green collar jobs" in a variety of clean tech industries.

If you would like additional information about the issues addressed in this client advisory, please contact:

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