

Energy and Clean Technology Alert: Highlights of the Stimulus Package for the Energy and Clean Technology Sector

2/18/2009

On February 17, 2009, President Obama signed into law the American Recovery and Investment Act of 2009 (the "Act"), an unprecedented economic stimulus package totaling over \$787 billion in spending and tax incentives. The Act emphasizes energy related investments and technologies with renewable energy, smart grid, energy efficiency, and electric-vehicle provisions accounting for well over \$60 billion of the total. On Friday, February 20, 2009 at 12:00 pm, Mintz Levin and ML Strategies will host a webinar to provide more information (learn more).

The Act provides significant funding for loan guarantees and grants for the deployment of renewable energy and smart grid technologies. The loan guarantees are expected to support over \$60 billion in new loans, while the grants are designed to award companies 50% of the cost of demonstrating smart grid projects.

In addition to these spending provisions, the Act relies heavily on tax incentives. As noted in detail below, the Act extends the availability of the production tax credit, significantly expands the energy investment tax credit (including possibly receiving its value up-front as a grant), and adds a new investment tax credit for advanced energy manufacturing.

The Act further provides for over \$10 billion of research and development grants in the areas of renewable energy, smart grid, and energy efficiency technologies. It also provides for direct government spending and grants totaling over \$18 billion related to energy efficiency programs and alternative fuel and electric-vehicle technologies.

The following is a summary of the key provisions of the Act regarding renewable energy and smart grid projects, energy efficiency programs and alternative fuel and electric-vehicle technologies.

Loan Guarantees and Grants for Renewable Energy and Smart Grid Projects

Renewable Energy and Electric Transmission Loan Guarantee Program

The Act authorizes \$6 billion for the cost of guaranteeing loans under the existing Innovative Technology Loan Guarantee Program to support projects that commence construction before September 30, 2011 in the categories of renewable energy systems, electric power transmission systems, and biofuels. Examples of projects for which the program has solicited proposals in the past include battery manufacturing facilities, bio-oil derived fuel projects, smart grid technologies, geothermal advanced exploration and drilling technologies, combined heat and power fuel cells for buildings, solar technology manufacturing facilities, and advanced wind power plants. These new loan guarantees are expected to support more than \$60 billion in loans providing much-needed capital for these types of projects.

Smart Grid Demonstration Projects

The Act authorizes the Department of Energy (DOE) to award grants for up to 50% of the cost of certain smart grid demonstration projects. Smart grid technologies enable utilities and their customers to track and manage the flow of energy more effectively, reduce expensive peak-power usage, prevent blackouts and integrate renewable energy and storage into the grid. Notably, to encourage innovation and greater interoperability among smart grid components, the grants are conditioned upon the projects utilizing open internet-based protocols and standards and providing all information requested by DOE, such information to become available through a DOE-established clearinghouse. Examples of qualifying smart grid demonstration projects include:

- manufacturers designing and installing internal devices that allow appliances to engage in smart grid functions;
- utilities purchasing and installing transmission and distribution equipment fitted with monitoring and communications devices to enable smart grid functions;
- utilities, distributors and consumers purchasing and installing smart meters that allow consumers to see and respond to real-time pricing information through in-home displays, smart thermostats and appliances; and
- purchasing software that enables devices or computers to engage in smart grid functions. In making the grants, DOE is to seek to reward innovation and early adoption, rather than deployment of proven and commercially viable technologies.

Tax Incentives for Renewable Energy Projects

Extension of Renewable Energy Production Tax Credit

The Act extends the production tax credit an additional three years for facilities producing electricity from wind, biomass, geothermal and certain other renewable energy sources. The production tax credit is earned on the basis of the number of kilowatt-hours of electricity produced by the facility and is paid out over a period of ten years. The current credit rate is 2.1 cents per kilowatt-hour for wind, closed-loop biomass, geothermal, and solar and 1 cent per kilowatt-hour for open-loop biomass, municipal solid-waste, and qualified hydropower.

Prior to the Act, wind facilities were required to be placed in service on or before December 31, 2009 in order to qualify for the production tax credit, and the cutoff date for the other facilities was December 31, 2010. With the three-year extension under the Act, wind facilities placed in service on or before December 31, 2012 will now qualify for the production tax credit, as will biomass, geothermal, municipal solid-waste, and qualified hydropower facilities placed in service on or before December 31, 2013.

Expansion of Investment Tax Credit

Under the Act, those firms qualifying for the production tax credit will now have the option to take the investment tax credit instead. The investment tax credit is a one-time, up-front tax credit equal to 30% of the cost of the facility. The Act permits firms that place qualified facilities in service to irrevocably elect to take the 30% investment tax credit in the year the facility is placed in service, instead of the production tax credit, which is taken for ten years. A firm that elects to take the investment tax credit is prohibited from later filing an amended return to revoke the election.

Prior to the Act, the investment tax credit was primarily available and used for solar equipment; the Act now expands the availability of the investment tax credit to include wind facilities placed in service between January 1, 2009 and December 31, 2012 and biomass, geothermal, municipal solid-waste, and qualified hydropower facilities placed in service between January 1, 2009 and December 31, 2013.

The investment tax credit continues to be available for investments in solar, small wind (utilizing wind turbines of 100 kilowatts or less of rated capacity), and fuel cell equipment at a 30% rate, as well as for investments in microturbine, geothermal heat pump, and combined heat and power equipment at a 10% rate. Such equipment must be placed in service prior to January 1, 2017 to qualify for the credit. The investment tax credit for small wind investments has historically been capped at \$4,000 per year; however, the Act repeals this cap.

Election of Renewable Energy Investment Grants

The Act further provides that firms may elect to receive direct grants in lieu of the production tax credit and investment tax credit, which will benefit firms that may not have otherwise had sufficient tax liabilities to take advantage of the credits.

In general, the amount of the grant is 30% of the cost of the facilities or equipment otherwise eligible for the production tax credit and investment tax credit. Eligible investments include wind, biomass, geothermal, municipal solid-waste, qualified hydropower facilities, as well as solar and fuel cell equipment. Investments in microturbine, geothermal heat pump, and combined heat and power equipment are entitled to grants in the amount of 10% of the cost of the equipment. To qualify, firms must place in service or begin construction of such facilities or equipment during 2009 or 2010; for those beginning construction, the property must be placed in service before the applicable date that eligibility for the investment tax credit expires.

These grants will generally mimic the operation of the investment tax credit; for example, the grants are not reported in taxable income. For purposes of future depreciation and amortization, the tax basis of the property is reduced by 50% of the grant (a 15% reduction in basis on a 30% grant). In addition, some or all of each grant is subject to recapture if the property is disposed of or otherwise ceases to be eligible energy property within five years.

Repeal of Subsidized Energy Financing Limitations

Firms receiving any subsidized energy financing or proceeds from private activity bonds have been required to reduce the basis of the property by the amount of the financing. The Act removes this limitation.

Advanced Energy Manufacturing Tax Credit

The Act establishes a 30% tax credit for investment in projects that reequip, expand, or establish manufacturing facilities that produce:

- equipment designed to be used in the generation of energy from renewable resources;
- fuel cells, microturbines, or energy storage systems for use with electric or hybrid-electric motor vehicles;
- electric grids to support the transmission of intermittent sources of renewable energy, including storage of such energy;
- equipment designed to capture and sequester carbon dioxide emissions;
- equipment designed to refine or blend renewable fuels (but not fossil fuels) or to produce energy conservation technologies (including smart grid technologies);
- plug-in electric vehicles or any component designed specifically for use in such vehicles;
- advanced equipment designed to reduce greenhouse gas emissions; and
- other equipment having the greatest potential for technological innovation and commercial deployment, as determined by the Secretary of the Treasury in consultation with the Secretary of Energy.

The Act authorizes \$2.3 billion for these manufacturing credits to be allocated by the Treasury in a competitive bidding process. Applications must be received within two years from the date the Treasury begins accepting applications, and each applicant will have one year from the date the application is accepted to provide the Treasury with evidence that the requirements for certification have been met. An applicant receiving certification will then have three years to place the project in service.

New Clean Renewable Energy Bonds Issued by Government and Non-Profit Entities

The Act authorizes the issuance of up to an additional \$1.6 billion of new clean renewable energy bonds ("New CREBs") by municipal entities, electric cooperatives, public utilities, and certain not-for-profit entities. These bonds are issued for projects that generate electricity from clean and/or renewable sources. In lieu of interest payments by the issuer, the holder receives a quarterly tax credit at a rate that is set by the Treasury. Repayment is made in equal, annual payments. The proceeds from the issuance of these New CREBs must be used within three years of the date of issuance.

Repeal of Personal Tax Credit Caps

The Act removes existing personal tax credit caps on solar electric, geothermal, wind, and fuel cell purchases.

Research and Development Grants

Electricity Delivery and Energy Reliability

The Act authorizes an additional \$4.5 billion for the Electricity Delivery and Reliability program to support, among other things, research and development of technologies that modernize the nation's electricity delivery systems. Such technologies include distributed energy (*i.e.*, small-scale and modular devices designed to provide electricity to locations close to consumers); energy storage to help balance electricity output with demand (important to the integration of wind and solar which produce electricity inconsistently); and other smart grid technologies.

Energy Efficiency and Renewable Energy

The Act authorizes \$2.5 billion for the Energy Efficiency and Renewable Energy program to be used for applied research, development, demonstration and deployment activities in energy efficiency and renewable energy. This amount includes \$800 million for projects related to biomass, \$400 million for geothermal projects, and \$50 million to improve the efficiency of information and communications technology.

Fossil Energy Research and Development

The Act authorizes an additional \$3.4 billion in funding for the Fossil Energy Research and Development program. The funding breaks down as follows: \$1.0 billion for fossil energy research and development programs; \$800 million for the Clean Coal Power Initiative Round III Funding Opportunity Announcement; \$1.52 billion for a range of industrial carbon capture and energy efficiency improvement projects; \$50 million for site characterization activities in geologic formations; \$20 million for geologic carbon sequestration training and research grants; and \$10 million for program direction funding.

Energy Efficiency Programs and Building Improvements

Energy Efficiency Programs

The Act authorizes an additional \$3.2 billion for the Energy Efficiency and Conservation Block Grant program (EECBG) to fund state and local governments in developing and implementing energy efficiency and conservation strategies. The EECBG will help state and local governments finance energy audits and consulting services, development and installation of onsite renewable energy power generation facilities, and the implementation of energy distribution and landfill gas technologies. In addition to the portion of the EECBG funds allocated to the states, the Act authorizes \$3.1 billion for the State Energy Program, which will assist states in addressing their energy priorities and adopting emerging renewable

energy and energy efficiency technologies. The Act also increases the national limitation on the issuance by state and local governments of conservation bonds from \$800 million to \$3.2 billion. These bonds are for green-community programs and include the financing of loans to individual homeowners to retrofit existing houses with energy conservation products. The Act further authorizes \$300 million for the Energy Efficiency Appliance Rebate program and the Energy Star program to encourage consumer purchases of energy-efficient appliances.

Building Improvements

The Act authorizes:

\$5 billion for the Weatherization Assistance Program, which enables low- to moderate-income families to permanently reduce their energy bills by making their homes more energy efficient;

\$4.5 billion to build and upgrade federal buildings to be “high-performance green buildings”;

\$510 million to rehabilitate and improve the efficiency of housing units maintained by Native American housing programs; and

\$250 million to increase the energy efficiency of low-income housing supported by the Department of Housing and Urban Development.

The Act also increases existing personal tax credits for energy-efficient home improvements from 10% to 30%, removes tax credit caps on certain purchases and extends the credits through 2010.

Alternative Fuel and Electric-Vehicle Technologies

Alternative-Energy Refueling Infrastructure

The Act increases the tax credit for qualified alternative-energy refueling properties placed in service during 2009 and 2010 from 30% to 50%, except in the case of hydrogen refueling property, which remains at 30%. The maximum credit is increased from \$30,000 to \$50,000, except in the case of hydrogen refueling property, which is increased to \$200,000. This primarily benefits investments in clean-fuel stations dispensing ethanol (at least 85%), natural gas, compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, or biodiesel.

Fuel Efficient Vehicles

The Act authorizes \$300 million for the Alternative Fueled Vehicles Pilot Grant Program and \$300 million for the acquisition of high-fuel-efficiency vehicles for the federal fleet, including plug-in hybrid vehicles if they are commercially available before September 30, 2010.

Advanced Battery Manufacturing Grant Program

The Act authorizes \$2 billion in grants to support the manufacturing of advanced batteries and components. These grants are available to manufacturers to fund facilities that produce vehicle batteries and other advanced battery systems in the United States, including advanced lithium ion batteries and hybrid electric systems. Grants are also available to firms for manufacturing components and designing software for advanced battery systems.

Conclusion

The Act presents a significant opportunity for companies and investors in the energy space to obtain federal support and incentives that encourage development of energy technologies and facilities. In particular, the provisions of the Act are clearly designed to incentivize the rapid expansion of renewables and innovative technologies through an unprecedented infusion of grants, tax credits, and bonds.

Mintz Levin and ML Strategies can provide additional information regarding the Act and guidance regarding taking full advantage of the tax incentives and grants available to companies, investors, research institutions, and government and not-for-profit entities.

If you have any questions about the new regulations or the regulatory process, please call your Mintz Levin service professional or any of those listed below.

Thomas R. Burton III

Chair
Energy and Clean Technology (Boston)
(617) 348-3097
TRBurton@mintz.com

Brady Berg

Member
Corporate (Palo Alto)
(650) 251-7758
BBerg@mintz.com

Evan M. Bienstock

Corporate (Boston)
(617) 348-3090
EMBienstock@mintz.com

Travis L. Blais

Tax Law (Boston)
(617) 348-1684
TLLBlais@mintz.com

Faith L. Charles

Member
Corporate (New York)
(212) 692-6770
FLCharles@mintz.com

Ralph A. Child

Member
Environmental (Boston)
(617) 348-3021
RChild@mintz.com

Jonathan Cosco

Real Estate (Boston)
(617) 348-4727
JMCosco@mintz.com

David F. Crosby
Member
Intellectual Property (Boston)
(617) 348-1830
DFCrosby@mintz.com

Julian Crump
Managing Partner, Member
Intellectual Property (London)
+44 (0) 20 7776 7302
JCrump@mintz.com

Daniel I. DeWolf
Member
Co-Chair, Venture Capital and
Emerging Companies (New York)
(212) 692-6223
DDewolf@mintz.com

David P. Dutil
Member
Corporate (Washington)
(202) 434-7425
DDutil@mintz.com

Susan L. Foster, Ph.D.
Corporate (London)
+44 (0) 20 7776 7330
SFoster@mintz.com

Jeremy Glaser
Member
Corporate (San Diego)
(858) 314-1515
JDGlaser@mintz.com

Jeremy B. Hayden
Of Counsel
Corporate (San Diego)
(858) 314-1524
JBHayden@mintz.com

Irwin Heller
Member
Corporate (Boston)
(617) 348-1654
IHeller@mintz.com

Katherine Comer Holliday
Of Counsel
Corporate (Boston)
(617) 348-1796
KHolliday@mintz.com

Richard A. Kanoff
Of Counsel
Energy Regulatory and
Project Development (Boston)
(617) 348-3070
RAKanoff@mintz.com

Patrick J. Kealy
Corporate (Boston)
(617) 348-1679
PJKealy@mintz.com

Jonathan L. Kravetz
Member
Chair, Securities Practice Group (Boston)
(617) 348-1674
JLKravetz@mintz.com

Carl A. Kukkonen III
Member
Intellectual Property (San Diego)
(858) 314-1535
CAKukkonen@mintz.com

Cynthia Larose
Member
Corporate (Boston)

(617) 348-1732
CJLarose@mintz.com

David J. Leiter
Senior Executive Vice President
of Government Relations
ML Strategies (Washington)
(202) 434-7346
DJLeiter@mlstrategies.com

Jeffrey A. Moerdler
Member
Real Estate, Communications, Environmental (New York)
(212) 692-6700
JAMoerdler@mintz.com

David L. O'Connor
Senior Vice President for
Energy and Clean Technology
ML Strategies (Boston)
(617) 348-4418
DOConnor@mlstrategies.com

Jeffrey R. Porter
Member
Environmental (Boston)
(617) 348-1711
JPorter@mintz.com

Jennifer Sacco Smith
Real Estate (Boston)
(617) 348-1678
JSaccoSmith@mintz.com

Chuck A. Samuels
Member
Federal/Energy Efficiency (Washington)
(202) 434-7311
CASamuels@mintz.com

Paul Scapicchio
Senior Vice President
of Government Relations
ML Strategies (Boston)
(617) 348-3031
PJScapicchio@mlstrategies.com

Gabriel Schnitzler
Real Estate (Palo Alto)
(650) 251-7720
GSchnitzler@mintz.com

Sahir C. Surmeli
Member
Corporate (Boston)
(617) 348-3013
SSurmeli@mintz.com

Stanley A. Twarog
Member
Corporate (Boston)
(617) 348-1749
STwarog@mintz.com

Paula J. Valencia-Galbraith
Corporate (Boston)
(617) 210-6854
PVGalbraith@mintz.com

Michael D. Van Loy, Ph.D.
Intellectual Property (San Diego)
(858) 314-1559
MDVanLoy@mintz.com

Maureen J. Walsh
Director of Federal Government Relations
ML Strategies (Washington)
(202) 434-7388
MJWalsh@mlstrategies.com

Peter Zlotnick
Member
Litigation (New York)
(212) 692-6887
PBZlotnick@mintz.com

© 1994-2009 Mintz, Levin, Cohn, Ferris, Glovsky and Popeo P.C. All Rights Reserved.

This website may constitute attorney advertising. Prior results do not guarantee a similar outcome. Any correspondence with this website does not constitute a client/attorney relationship. Neither the content on this web site nor transmissions between you and Mintz Levin Cohn Ferris Glovsky and Popeo PC through this web site are intended to provide legal or other advice or to create an attorney-client relationship. Images or photography appearing on this website may not be actual attorneys or images associated with Mintz Levin.