



## **Pew Center Summary of the Practical Energy and Climate Plan Act**

This document is a summary of the Practical Energy and Climate Plan Act of 2010, S. 3464, as introduced by Senators Richard Lugar (R-IN), Lindsay Graham (R-SC), and Lisa Murkowski (R-AK) on June 9, 2010.

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## **Title I – Reducing Foreign Oil Dependence**

### **Subtitle A – Vehicle Efficiency**

#### **Sec. 101. Fuel efficiency standards.**

This section requires the Secretary of the Department of Transportation (DOT) to increase Corporate Average Fuel Efficiency standards for light-duty vehicles 4 percent per year from 2017 to 2030. The Secretary may increase the standards by less than 4 percent for a year if it is technologically unachievable, safety is seriously impacted, or it is not cost-effective. To determine cost-effectiveness, the Secretary will take into account the U.S. savings associated with less petroleum use (valued at either 50 percent of the value of a gallon of gasoline saved or based on the results of a comprehensive analysis that considers value to the consumers, economic security, national security, foreign policy, and other impacts of oil use).

Every four years beginning in 2017, the Secretary will set fuel-efficiency standards for medium- and heavy-duty trucks. The Secretary shall base the standard on maximum achievable technology, accounting for oil import dependence, which does not affect safety and is cost-effective using the same criteria as those used to set standards for light-duty vehicles.

The Secretary is directed to develop regulations in conjunction with pollution regulations from the Environmental Protection Agency (EPA).

#### **Sec. 102. Revenue neutral fuel performance program for motor vehicles.**

This section creates a program commonly known as a “feebate” for light-duty vehicles. The feebate would consist of a tax credit for fuel-efficient vehicles and a tax on “fuel guzzler” vehicles. [Subpart B of Part IV of Subchapter A of Chapter 1](#) of the Internal Revenue Code of 1986, is amended to include:

##### **“Sec. 30E. Fuel Performance Rebate.**

This section creates a tax credit for new qualified fuel-efficient motor vehicles using revenue received from the sale of fuel-inefficient vehicles. For model year 2011, the credit is \$1,000 for a vehicle purchased which exceeds the reference fuel economy rating, or \$2,000 if the vehicle is at least 50 percent more efficient than the reference levels. For post-2011, the rebate schedule is \$1,500 for exceeding the reference fuel economy, \$2,500 for at least a 50 percent improvement, or \$3,500 for at least a 75 percent improvement. The credit program only applies to new vehicles with a purchase price of \$50,000 or less. Special rules, interactions with other tax rules, and conforming amendments are specified.

This section also amends Sec. 4064 to read:

##### **“Sec. 4064. Fiscal Offset Provisions for Fuel Performance Credit.**

This section, beginning in model year 2013, imposes a tax on “fuel guzzler motor vehicles,” which are passenger automobiles or light trucks with a gross weight of less than 8,500 pounds and which achieve a fuel-economy rating less than the reference fuel-economy rating for such motor vehicle for the model year. The tax is equal to the product of the absolute value of the difference between the fuel-economy rating and the reference fuel-economy rating, 100, and an applicable amount. The applicable amount is \$1,500 for a vehicle purchased which falls below the reference fuel economy rating and \$2,500 for a vehicle that is more than 50 percent less efficient than the reference levels, or \$3,500 for a vehicle that is more than 75 percent less efficient than the reference levels. The tax only applies to new vehicles.

### **Subtitle B – Fuel Choice**

#### **Sec. 111. Production incentives for renewable fuels.**

This section amends [Sec. 942](#) of the Energy Policy Act of 2005 to provide production incentives for renewable fuels found in [Sec. 211\(o\)\(1\)](#) of the Clean Air Act. The definition of “renewable fuels” is expanded to include algae and to exclude grain, instead of only cellulosic biofuels as currently written. It also authorizes appropriations of \$250 million for each fiscal year 2011 to 2015.

#### **Sec. 112. Ensuring the availability of dual fueled automobiles and light duty**

This section amends [Chapter 329](#) of Title 49 of United States Code on Automobile Fuel Economy to add the following:

**“§32902A. Requirement to manufacture dual fueled automobile and light duty trucks**

This section requires automobile and light-duty vehicle manufactures to ensure that 50 percent of vehicles for sale in the United States are dual fuel for model years 2013 and 2014. That amount increases to 90 percent for model years 2015 and after. This provision does not apply to electric vehicles or vehicles operating only on non-petroleum based energy sources.

## **Title II – Energy Efficiency**

### **Subtitle A – National Building Energy Performance Standards**

#### **Sec. 201. Greater energy efficiency in building codes.**

This section amends [Sec. 304](#) of the Energy Conservation and Production Act to read:

**“Sec. 304. Updating Building Energy Efficiency Codes.**

This section sets building code energy efficiency targets for residential and commercial buildings. After enactment, relative to a baseline code, residential buildings must attain a 30 percent reduction in energy use by January 1, 2012 and 50 percent by January 1, 2015. For commercial buildings, improvements of 30 percent by May 1, 2012 and 50 percent reduction in energy use by January 1, 2017 are required. The baseline codes are the 2006 IECC (residential) and ASHRAE Standard 90.1-2004 (commercial) codes.

The Secretary of Energy will support updating the national model building energy codes and standards at least every three years to meet these targets. Upon enactment of this Act, the Minimum Building Efficiency Standard will be the 2009 IECC (residential) and ASHRAE Standard 90.1-2007 (commercial). Targets will be set by the Secretary at least three years in advance of each target date at a level of energy efficiency that is technologically feasible and cost effective (based on life-cycle costs) and on a path to achieving net-zero energy buildings. If the Secretary determines that revisions of IECC or ASHRAE Standard 90.1 do not meet set targets, and amendments proposed by the Secretary to meet targets are not incorporated by the model code or standard developer, the Secretary may establish a modified code or standard that does meet set targets.

Within two years of enactment, each state must certify that its code meets or outperforms the Minimum Building Efficiency Standard or achieves equivalent or greater energy savings. Within three years of certification each state must achieve compliance with the certified state code or the Minimum Building Efficiency Standard; or have made significant progress. To attain compliance, the state must show that at least 90 percent of new building space covered by the code in the preceding year substantially meet all energy efficiency requirements or achieve equivalent energy savings level; or the estimated excess energy use of new and renovated buildings failing to meet the code in the preceding year is not more than five percent of the estimated energy use of all new and renovated buildings covered by the code.

A state is considered to be making significant progress toward compliance if it: is implementing a plan to achieve compliance within eight years; demonstrating progress after one or more years of adequate funding; has 80 percent of space meeting energy efficiency provisions and estimated excess energy use not exceeding ten percent, after five or more years of adequate federal funding; or has not had adequate federal funding for more than eight years. For these purposes, adequate federal funding is considered at least \$50 million in fiscal year. Non-compliance of a state does not preclude a local government in the state from achieving compliance.

The Secretary will provide assistance funding to states and local governments to implement this section and to improve and implement state residential and commercial building energy efficiency codes. Additional funding will also be available for implementation of a state-wide plan to achieve at least a 90 percent rate of compliance with building energy efficiency codes meeting or exceeding 2009 IECC (residential) and ASHRAE Standard 90.1-2007 (commercial). (Local governments in a non-compliant state or state with no state-wide energy code for buildings are also eligible for additional funding.) The bill authorizes \$300 million for each fiscal year 2011 to 2015 and necessary sums after that for the purposes of this section.

## **Subtitle B – Federal Buildings**

### **Sec. 211. Energy efficient Federal buildings.**

This section amends [Sec. 543](#) of the National Energy Conservation Policy Act by adding the subsection, “Energy Efficient Federal Buildings,” which requires each Federal agency to ensure any new Federal building is designed to enhance energy efficiency. Any Federal building that enters the design phase on or after January 1, 2012 must be designed to exceed national building performance standards; make use of technologies and strategies to minimize consumption of energy, water, and materials; and be located in accordance with a process that considers sites with convenient access to public transportation alternatives. Any Federal building that enters the design phase on or after January 1, 2020, must be designed to achieve net zero energy use by January 1, 2030.

## **Subtitle C – Homes and Buildings Energy Retrofits Program**

### **Sec. 221. Definitions.**

This section provides definitions for this subtitle.

### **Sec. 222. Homes and Buildings Energy Retrofits Program.**

This section establishes the Homes and Buildings Energy Retrofits Program within the Department of Energy which aims to attain annual target energy efficiency retrofit rates of five percent for homes and two percent for commercial buildings. Based on certain eligibility criteria, the Secretary may provide financial assistance in the form of direct loans, letters of credit, loan guarantees, insurance products, other credit enhancements or debt instruments (including securitization or indirect credit support), or other financial products for energy efficiency measures and on-site renewable energy generation systems in buildings. Eligible applicants for financial assistance can include individual homeowners or lessees; multifamily apartment building owners or lessees; condominium owners associations; commercial building owners or lessees (including multi-tenant); industrial building owners and lessees; and schools, hospitals and other designated buildings.

The Secretary will develop debt instruments that directly or indirectly aggregate energy efficiency and on-site renewable energy generation program deployment. Additionally, the Secretary will seek to expedite reviews of applications for credit support and may dispose of debt or interest; impose charges or fees for different classes of applicants, originators, sellers, servicers, or services; and make commitments to lend on the security of any debt authorized under this section.

#### **Sec. 223. General provisions.**

This section requires the Secretary to submit to the Senate’s Committee on Energy and Natural Resources and the House’s Committee on Energy and Commerce a progress report one year after the beginning of the Homes and Buildings Energy Retrofits Program and biannually thereafter.

#### **Sec. 224. Authorization of appropriations.**

This section authorizes the appropriation of \$2 billion to carry out this subtitle.

### **Subtitle D – Rural Energy Savings Program**

#### **Sec. 231. Rural energy savings program.**

This section amends [Title VI](#) of the Farm Security and Rural Investment Act of 2002 by adding the following:

#### **"Sec. 6407. Rural energy savings program.**

This section authorizes the Secretary of Agriculture to make loans to public power districts, public utility districts, or similar entities, or any electric cooperative that borrowed and repaid, prepaid, or is paying an electric loan made or guaranteed by the Rural Utilities Service to make loans to qualified consumers for implementing energy efficiency measures. Loans to qualified consumers will have of the following terms: a maximum three percent interest rate; a term that is not more than ten years (in order not to impose undue financial burden on the qualified consumer); measures are limited to changes in fixtures to real property or a manufactured home (e.g., not an appliance); repayment will be through additional charges to the electric bill; and an energy audit to determine the impact of the energy efficiency measures will be required.

To carry out this section \$993, million is authorized for appropriations to the Secretary for fiscal year 2010 and will remain available until expended.

### **Subtitle E – Industrial Energy Efficiency**

#### **Sec. 241. State partnership industrial energy efficiency revolving loan program.**

This section amends [Sec. 399A](#) of the Energy Policy and Conservation Act by adding “industry” to the section heading and adding the subsection, “State Partnership Industrial Energy Efficiency Revolving Loan Program.”

The Secretary is authorized to provide grants to eligible lenders to pay the federal share of creating a revolving loan program that provides loans to commercial and industrial manufacturers to implement technologies or processes that reduce systems energy intensity and improve industrial competitiveness

of the United States. The amount of cost-matched federal funds to an eligible lender is not to exceed \$100 million for any fiscal year. To be eligible a lender must: be a community and economic development lender certified by the Secretary; lead a partnership that includes at least a state government agency and private financial institution (or other loan provider); submit an application to the Secretary; and ensure that there is a 100 percent non-federal match.

This section authorizes \$500 million for each fiscal year from 2010 through 2014 to carry out this subsection.

## **Subtitle F – Appliance and Equipment Efficiency Standards**

### **Sec. 251. Appliance and equipment efficiency.**

This section amends [Sec. 322\(a\)](#) of the Energy Policy and Conservation Act by adding “computer monitors and displays” as covered products under energy efficiency provisions of the Act.

It amends [Sec. 325\(l\)](#) of the Energy Policy and Conservation Act to require the Secretary to prescribe an energy conservation standard for a covered product if it meets certain energy-use criteria and to has DOE labeling that is not sufficient to induce manufacturers to produce and consumers to buy the product in its most energy-efficient form. It also allows the Secretary to prescribe energy conservation standards for computer monitors and displays in addition to television sets.

The section amends [Sec. 340\(2\)\(B\)](#) of the Energy Policy and Conservation Act to add “other equipment” as a type of industrial equipment for purposes of the Act..

The section amends [Sec. 342](#) of the Energy Policy and Conservation Act by requiring the Secretary to establish an energy conservation standard for each type or class of covered equipment. It also requires the Secretary to submit a report to the House’s Committee on Energy and Natural Resources that identifies consumer products and commercial and industrial equipment not covered by efficiency standards that have significant national energy savings potential; estimates the associated level of energy savings; and provides information as to whether the products are covered under the Act or require additional authority for the Secretary to be covered.

### **Sec. 252. Federal procurement of energy efficient products.**

This section amends [Sec. 553\(b\)](#) of the National Energy Conservation Policy Act by requiring that for not less than 95 percent of new contract actions, task orders, and delivery orders for products and services, each agency should procure an Energy Star rated product or one rated better; a Federal Energy Management (FEMP) designated product; a similarly rated product if neither an Energy Star nor FEMP designated product exists; or a designated innovative product to enhance energy savings or production of on-site energy. It also requires the head of every agency to implement best management practices for energy-efficient management of the agency’s servers and Federal data centers.

## **Title III – Diverse Domestic Power**

### **Sec. 301. Federal diverse energy standard.**

This section adds the following to [Title VI](#) of the Public Utility Regulatory Policies Act of 1978:

### **"Sec. 610. Federal Diverse Energy Standard"**

This section requires electric utilities to obtain a percentage of the base quantity of electricity in each calendar year from diverse sources. The minimum annual percentages required under this section are:

2015 to 2019	15 percent
2020 to 2024	20 percent
2025 to 2029	25 percent
2030 to 2049	30 percent
2050	50 percent

The Secretary is required to make interim reports on deployment of diverse energy sources, including recommendations to utilities.

Diverse energy sources include:

- advanced coal generation, meaning the generation of electricity produced from coal by a new or existing coal generating facility that captures and permanently sequesters, stores (including for enhanced oil recovery), or reuses (in a manner so that reuse provides equivalent long-term sequestration as from sequestration or storage) at least 80 percent of greenhouse gases produced by the facility;
- biomass;
- coal mine methane;
- end-user efficiency savings;
- efficiency savings in power generation;
- geothermal energy;
- landfill and biogas;
- marine and hydrokinetic renewable energy;
- qualified hydropower, meaning new dams, new capacity from existing dams made three years prior to enactment or thereafter;
- qualified nuclear energy;
- solar energy;
- waste-to-energy;
- wind energy; and
- any other energy source that will result in at least a 80 percent reduction in GHG emissions compared to average emissions of freely emitting sources in the calendar year prior to certification of the Secretary, as determined by the Secretary through rulemaking.

The Secretary is required to issue regulations prescribing a reasonable phase-in of compliance and directed to establish a diverse energy credit trading program by January 1, 2011. Utilities demonstrate compliance through submitting diverse energy credits or making alternative compliance payments at a rate determined by the Secretary but not less than 5 cents per kilowatt hour (adjusted for inflation). Under the program, the Secretary will issue credits to generators for generation of diverse energy. Each kilowatt hour credit will used only once for purposes of this Act and may also be issued to utilities associated with substantially similar State diverse energy standard compliance mechanisms. During the years 2015 to 2029, credits issued per kilowatt hour for demonstration coal generation with carbon capture and storage (CCS) of at least 65 percent of GHG produced will be the product of the kilowatt

hours of electricity generated by a facility and supplied to the grid during the prior year; by, during the same year, the ratio of the quantity of carbon dioxide captured from the facility and sequestered bears to the sum of the quantity of CO<sub>2</sub> captured from the facility and sequestered and the quantity of CO<sub>2</sub> emitted from the facility. Alternative compliance payments are made to states and must be used for increasing the quantity of diverse energy used or offset costs to consumers through efficiency improvements in the state.

The Secretary may grant deferrals for a maximum of three years for compliance if a Governor submits a plan demonstrating that a state program will achieve equivalent levels of diverse energy deployment by the end of the deferral period or the utility submits a plan demonstrating that it will achieve required levels of deployment as a consequence of facilities under construction. The Secretary may also waive the requirements for up to five years for reasons resulting from natural disasters.

A utility that holds credits in excess of compliance needs may transfer or sell the credits to any other utility. However, credits issued for efficiency savings may not be transferred or sold outside the state in which the electricity is generated or sold. In creating a transparent national market for credits, the Secretary may delegate administration of the market to a market-making or regional entity.

Utilities failing to meet the diverse energy requirements are subject to civil penalties equal to the product of the number of kilowatt-hours sold in violation of the requirements and 200 percent of the value of the inflation-adjusted alternative compliance payment.

This section does not preempt state programs for diverse energy use or energy efficiency, and the Secretary is directed to consult and coordinate with state programs. Through regulation, a utility will receive an equal number of federal credits if it complies with state diverse energy standards or similar programs.

The Secretary is directed to promulgate regulations implementing this section within one year of enactment and to review the program and make recommendations to Congress by January 15, 2017 and every five years thereafter. The authority of this section terminates December 31, 2051.

### **Sec. 302. Fossil fuel generating facility retirement program.**

This section directs the EPA Administrator, in consultation with the Secretary of Energy, to establish an incentive program to permanently retire conventional coal plants with the largest pollution-related liabilities. An electric generating unit (EGU) that voluntarily enters into and fulfills the requirements of a legally-binding agreement to retire by December 31, 2018 will be authorized to participate in an incentive program with alternative compliance mechanisms, determined by the Administrator in consultation with the Secretary of Energy, pursuant to new source review requirements under the Clean Air Act, existing unit performance standards for greenhouse gas emissions under [Sec. 111\(d\)](#) of the Clean Air Act, regulation of hazardous air pollutants under [Sec. 112](#) of the Clean Air Act, the final rule entitled "[Regional Haze Regulations and Guidelines for Best Available Retrofit Technology \(BART\) Determinations](#)", regulation of coal combustion waste water discharges from thermal generating units under [Title III](#) of the Federal Water Pollution Control Act, and regulation of cooling water intake structures under [Sec. 316\(b\)](#) of the Federal Water Pollution Control Act. The requirements of the agreement will prohibit operation of the EGU after January 1, 2019 or an excess of the average annual electrical production of the EGU in the three-year period prior to enactment of this Act, except for if the



Administrator issues a temporary waiver if it is determined that national or regional energy disruptions will occur if a waiver is not provided.

**Sec. 303. Funding for loan guarantees for advanced nuclear energy facilities.**

This section amends [Sec. 1704](#) of the Energy Policy Act of 2005 to provide additional funds for loan guarantees for advanced nuclear energy facilities. The Secretary of the Treasury is directed to transfer \$360 million of unappropriated funds to the Secretary of Energy for the costs of loan guarantees.

## **Title IV – Measurement and Review of Energy and Climate Programs**

**Sec. 401. Measurement and review of energy and climate change programs.**

This section directs the Secretary of Energy, in consultation with the EPA Administrator and the Secretary of Transportation to submit to Congress a list of federal programs for which the Comptroller General will carry out a study every two years that monitors the progress of and makes recommendations for these programs in meeting the energy security and GHG reduction goals of this Act.