

PLUG-IN ELECTRIC VEHICLES IN CLIMATE AND ENERGY LEGISLATION IN THE 111TH CONGRESS

Plug-in electric vehicles (PEVs) provisions in the [American Clean Energy and Security Act](#) (ACES, Waxman-Markey), [American Clean Energy Leadership Act](#) (ACELA, Bingaman), [American Power Act](#) (APA, Kerry-Lieberman), and the [Electric Vehicle Deployment Act](#) (EVDA, Dorgan-Alexander-Merkley) require the Department of Energy (DOE) to deploy PEVs and PEV infrastructure in a similar degree while varying on levels funding and DOE involvement. While all four bills provide incentives to encourage the use of PEVs, the EVDA is the only bill that includes a hard target for vehicle deployment. Furthermore, the EVDA is the most comprehensive, as it includes provisions across a broad range of areas from workforce development to tax policy. ACELA is the only bill that requires the DOE to define charging standards for electric drive transportation.

Program Category	American Clean Energy and Security Act (H.R.2454, as passed by the House)	American Clean Energy Leadership Act (S.1462, as passed by the Senate Energy and Natural Resources Committee)	American Power Act (discussion draft, 5/12/2010)	Electric Vehicle Deployment Act (S.3442, as introduced)
Funding	<ul style="list-style-type: none"> 3% of total emission allowances for years 2012-2017 and 1% of allowances for years 2018-2025 available. 1/8 for deployment, 1/8 for manufacturing, and remaining allowances for advanced technology vehicle manufacturers (including non-PEVs) and component suppliers; Advanced Technology Vehicle Manufacturing Loan Program doubled to \$50 billion 	<ul style="list-style-type: none"> Appropriations as necessary are authorized for infrastructure support; federal fleet pilot allows for \$10,000 per vehicle purchased or \$1,500 per year for leased vehicles as well as a recharging infrastructure at appropriate Federal facilities from 2010-2015. 	<ul style="list-style-type: none"> Clean Vehicle Technology Fund (CVTF) is funded by auction of 1% of all allowances from 2013 to 2020 and 0.5% for 2021; CVTF would support more than PEVs 	<ul style="list-style-type: none"> \$10 million per year from FY 2011 through 2016 for DOE deployment program for PEVs; \$2 billion for Targeted PEV Deployment Communities Program; \$1 billion bond program for recharging stations; \$10 million for 500-mile battery prize; \$1.5 billion for R&D; \$250 million for workforce development
Plug-in Electric Vehicle Infrastructure and Deployment	<ul style="list-style-type: none"> Requires regulatory authorities to provide a charging infrastructure for PEVs; directs the Secretary of Energy to establish a program to assist with the deployment of PEVs 	<ul style="list-style-type: none"> Department of Energy (DOE) will deploy electric vehicle infrastructure to multiple regions 	<ul style="list-style-type: none"> PEV pilot project providing grants and financial incentives in strategic regions (at least 1 freight & 1 rural) funded through 5% of CVTF; 20% of CVTF available for deployment support. 	<ul style="list-style-type: none"> Technical assistance by DOE to all communities for deployment Two phased program for targeted PEV deployment program run by DOE. Phase I is for 5-15 communities for 5 years with goal of 700,000 PEVs on the road (up to \$250 million in funds for each community); Phase II could add more communities Model codes defined by DOE for charging infrastructure for residences, buildings, parking lots, and public spaces
Federal Fleet	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Conduct pilot program for federal vehicle fleet with PEVs 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Conduct pilot program for federal vehicle fleet with PEVs; assessment required for all agencies on using PEVs
Federal R&D	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> DOE shall conduct research on manufacturing batteries and battery systems for PEVs 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> R&D by DOE for advanced batteries, electric drive components, charging

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				infrastructure, manufacturing, and deployment; studies by DOE on secondary use for batteries and demonstration, battery recycling, and raw materials
Battery or Vehicle Manufacturing	<ul style="list-style-type: none"> DOE shall establish a program to provide financial assistance to PEV manufacturers for the reconstruction or retooling of facilities to manufacturer PEVs and batteries in the United States 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Development, and deployment of clean vehicles including manufacturing and vehicle infrastructure funded through 25% of CVTF 	<ul style="list-style-type: none"> 500-mile vehicle battery prize of \$10 million; loan guarantees for large battery purchases for stationary sources
Tax Policy	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Increase tax credit limit for PEV manufacturers from 200,000 to 300,000 vehicles; double the base for the PEV tax credit from \$2,500 to \$5,000; extend the HEV tax credit from 12/31/2009 to 12/31/2016; at least doubling of credit for medium- and heavy-duty vehicles; extending credits for alternative fuel refueling station to 2017 for electricity
Workforce Development	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Grants to institutions of higher education and other qualified training and education institutions by DOE for workforce development
Studies	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Identify options to reduce oil consumption and GHGs from transportation; determine needs for PEV charging infrastructure at city, regional, national level for 10, 20, and 50 percent market penetration; determine end-of-life options for vehicle batteries 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> National plan for PEVs by DOE within one year including maximum feasible deployment in 2020 and 2030, goals for market penetration in 2020 and 2030, deployment community program plan, and other action necessary for nationwide adoption of PEVs
PEV Charging Standards	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> DOE will establish charging standards for electric drive transportation 	<ul style="list-style-type: none"> Not specified 	<ul style="list-style-type: none"> Not specified