



**UNITED STATES CLEAN
HEAT & POWER ASSOCIATION**

**Clean Heat and Power Provisions
The American Clean Energy and Security Act of 2009
H.R. 2454
("Waxman-Markey")**

The American Clean Energy and Security Act of 2009 (H.R. 2454) approved by the House of Representatives on June 26, 2009, includes both energy and climate provisions. Key energy provisions are a renewable electricity standard (RES), building codes, and efficiency programs, while the climate provisions set targets for reducing greenhouse-gas emissions. Most provisions become effective in 2012.

Greenhouse-Gas Emission Reductions. Power producers and most industrialists need to reduce greenhouse-gas emissions by 17% below 2005 levels by 2020 and by 83% below 2005 levels by 2050. (The Pew Center on Global Climate Change anticipates a ton of carbon will be valued at \$15.)

Energy Efficiency: The combined Efficiency and Renewable Electricity Standard (Section 101) defines CHP, fuel cells and recycled energy. Compared to previous bills, the efficiency provision was raised from 4 percent to 8 percent by 2020, while the renewables mandate fell from 20 percent to 12 percent.

Biomass and Co-Firing. Compared to earlier drafts, the RES biomass definition is significantly expanded, including access to federal lands. It also allows for co-firing.

Renewable Distributed Generation. Distributed generation projects (no greater than 2 megawatts) that use renewable energy, such as biomass, receive three federal renewable electricity credits within the RES for each megawatt-hour of renewable electricity generated. The capacity limit for non-combustion systems such as fuel cells is up to 4 MW.

Industrial Energy Efficiency Programs. Subtitle D sets industrial plant energy efficiency standards and creates an electric and thermal waste energy recovery awards program. This Subtitle also includes language that would clarify restrictions within Section 451 of the Energy Independence and Security Act of 2007 to allow projects to elect to take either the CHP investment tax credit or utilize the Waste Energy Incentive Grant Program. CHP projects also are eligible for SEED (State Energy and Environment Development) funding, which receive 12.5% of allowances.

Independent Power Producers. Generators with long-term power purchase agreements will receive 1.5% of allowances. An amendment allows cogeneration facilities with long-term contracts to receive allowances for thermal energy contracts as well as power contracts.

Industrial Rebates (and product output). Eligible industrial sectors and subsectors will receive allowances to help cover the costs they incur in order to comply with pollution limits. Rebates are distributed to eligible facilities on a product output basis, with compensation provided for both direct and indirect compliance costs. An amendment allows the Administrator to consider an industry's use of CHP when allocating allowances.

Clean Energy Bank. An autonomous Clean Energy Deployment Administration will provide a suite of financing options, including direct loans, letters of credit, loan guarantees, and insurance products. The bank would fund "breakthrough" technologies and is aimed at bridging what is known as the "valley of death" that can prevent promising technologies from moving from the lab into commercial demonstrations and markets for lack of private-sector lending.

Clean Energy Manufacturing Revolving Loan Program. States will be provided grants to: a) help reequip, expand, or establish manufacturing facilities that produce renewable and energy-efficient products, or b) reduce a manufacturing facility's energy intensity.

Small CHP. A CHP unit that burns fossil fuel and is 25 megawatts or less is exempt under the carbon cap.

Energy Savings Performance Contracting. Subtitle E specifies consideration of cogeneration by adding provisions associated with thermal renewable energy. An amendment allows such performance contracts to be for 20 years.

State Investments in Efficiency. States initially receive 9.5 percent of allowances to invest in renewable energy and energy efficiency, including CHP. Cogeneration also is identified as an eligible project for funding under the low-income community energy efficiency program.

Clean Energy Innovation Centers. Subtitle H creates new research and development centers. CHP is defined as "clean."

Transmission Planning. FERC will develop regional and grid planning principles to integrate renewable and zero-carbon energy sources, including energy efficiency and distributed generation.

Large Coal-Fired CHP. An amendment allows the owners of large (100 megawatts or greater) coal or petroleum-coke fired CHP to be eligible for allowances.

Building Efficiency. Buildings are required to be 30% more efficient by 2012 and 50% more efficient by 2016, as compared to the baseline of ASHRAE Standard 90.1-2004