

S. 3352, THE EXPANDING INDUSTRIAL ENERGY AND WATER EFFICIENCY INCENTIVES ACT

Section 1.

Combined Heat and Power Credit (Code Section 48). A recent Department of Energy study estimates that increasing U.S. combined heat and power to account for 20 percent of electricity capacity would eliminate over 60 percent of the expected increase in carbon dioxide emissions from today to 2030 — the equivalent of taking more than half of current passenger vehicles in the U.S. off the road. In 2008, Congress enacted a 10 percent investment tax credit for combined heat and power systems. The bill would expand that credit's applicability, from the first 15 megawatts to the first 25 megawatts of system capacity. The bill would also remove the existing overall system size cap of 50 megawatts, allowing a greater number of combined heat and power projects to be financially viable and move forward.

Section 2.

Industrial Motor Efficiency Credit. On average, motors account for 65 percent of an industrial energy user's electricity use, a percentage that is even higher in certain industries, such as water supply, mining and oil and gas extraction. New advances in power electronics and controls over the past five years have advanced the potential for new smart motor technologies to provide a significant energy savings potential if these new motors are placed widely into service. The bill establishes a \$75-per-horsepower tax credit for efficient motor systems with adjustable speed capability. By reducing the initial design and added component costs, this new credit will accelerate the adoption of advanced motor technologies into higher volume production, helping to make the technology available economy-wide.

Section 3.

CFC Chiller Replacement Credit. Large water-cooled chillers are the engines of air-conditioning systems for almost all large buildings. The bill would establish a credit of \$150 per ton, plus an additional incentive of \$100 for each ton downsized during replacement. The incentive would extend only to pre-1993, post-1980 water-cooled chillers that use the environmentally harmful refrigerants CFC-11 and CFC-12. (While chillers that use CFC-11 and CFC-12 refrigerants have been banned for new installations, some 30,000 chillers that still use these refrigerants remain in both public and private facilities across the country.)

Section 4.

Industrial Water Reuse Credit. The U.S. currently reuses only 6 percent of its water, and there is significant potential for gains in this area. The industrial sector, which is responsible for 45 percent of domestic freshwater withdrawals, is an ideal place to introduce transformative water reuse and water saving technologies. The bill would create a technology-neutral, performance-based investment tax credit for reuse, recycling, and/or efficiency measures related to industrial water reuse in the manufacturing sector. Savings would be certified by a third-party engineer.

Section 5.

Thermal Biomass Credit. Currently no incentives exist to promote thermal-only biomass use for commercial and industrial applications. Using biomass for thermal applications has numerous advantages over using biomass to produce electricity. Thermal use is significantly more efficient, less polluting, and more appropriately-scaled to biomass resources (which are limited to certain "haul distances"). This bill creates a tiered investment tax credit for highly efficient thermal biomass incentives: 15% for systems that achieve 65% or greater efficiency and 30% for systems that achieve 80% or greater efficiency. The definition of biomass references the definition located in section 45 of the Code.