

support commercialization of truck technologies demonstrated by industry partners. The Committee further encourages the Department to identify additional measures to leverage the success of the current program toward additional fuel economy gains to incorporate alternatives to petroleum fuels in commercial vehicles. The Committee notes that class 8 heavy-duty trucks account for 25 percent of commercial trucks, yet consume 75 percent of the total amount of petroleum used for all commercial trucks. The Committee recommends that a portion of the funds appropriated to the Vehicle Technology Program be used to research, develop, and demonstrate the most promising class 8 heavy-duty long-haul truck technologies (such as alternative fuel or dual fuel technologies), capable of significantly reducing air pollution emissions and petroleum consumption in a cost effective manner. The Committee believes that such work will leverage existing Federal investments and help put our heavy-duty truck fleet on the path to reduced petroleum usage. The Committee supports the grid integration activities proposed in the budget request. Further, within available funds, \$10,000,000 is provided to continue funding of section 131 of the 2007 Energy Independence and Security Act. Lastly, \$10,000,000 is provided for competitive demonstrations of electric vehicle deployment programs. Grants made available with this funding should focus on a limited number of awards in order to maximize large-scale deployment.

Building Technologies.—The Committee recommends \$224,000,000 for building technologies. The Committee supports the grid integration activities proposed in the budget request. These activities hold particular promise for the Building Technologies Program, where new control paradigms at the building/grid interface promise near-term efficiency gains, as well as additional operational flexibility and resilience for electric distribution systems. The Committee notes that television set-top boxes cost consumers \$3,000,000,000 in electricity charges in 2011, with \$2,000,000,000 wasted when televisions are not in use. The Committee commends industry for its commitments to utilize more efficient equipment. The Committee encourages the Department of Energy to work with industry and stakeholders to develop and deploy widely equipment that meets Energy Star 4 specifications and powers down or off when not in use as soon as feasible. Further, the Committee urges the Department to consider establishing a Geothermal Heat Pump Technology Office within the Buildings Technology Program to promote developing innovative geothermal heat pump technologies and enhancing their use in both residential and commercial buildings. The Department is to report back within 6 months of enactment of this act on the progress for the Geothermal Heat Pump Technology Office.

The Committee recommends no funding for the Energy Efficient Buildings Hub, and directs the Department to terminate the Hub. The Department may use the remainder of prior year balances provided to the Hub for research and development activities within the program. After \$80,000,000 in appropriations and spending \$55,000,000 over the last 4 years, the Committee has seen no measurable benefit from this investment. The purpose of the Hubs is to accelerate the discovery of transformational energy tech-

nologies within 5 years that are likely to be commercialized by the private sector. Unlike the other Hubs, which have clear goals and timeframes, the Energy Efficient Buildings Hub never established key deliverables within the 5 year award period. The Hub was more focused on the economic development of the Philadelphia area rather than developing a national program to improve the energy efficiency of commercial and residential buildings across the United States. In addition, most of the activities described in the Hub's program plan are already being addressed by core programs in the Office of Energy Efficiency and Renewable Energy. Last year, an independent review team found that this Hub was poorly managed and lacked measurable goals. Despite efforts by the Department to help improve management of the Hub and establish key deliverables within the 5 year award period, the Committee has seen no improvement. The Committee is frustrated that the Department did not exercise sufficient oversight of the Hub at its inception to avoid these mistakes and expects the Department to take faster action when programs are not meeting management or scientific goals. It appears that part of the Department's problem in exercising control of the Hub stems from the Hub's organizational structure, which involves several Federal agencies and other non-Federal partners which have changed since the Hub was created. In proposing future Hubs, the Department should incorporate the lessons learned from this Hub to provide the greatest opportunity for success. If the Department again seeks to propose a Hub jointly with any other Federal agency it will have to detail how the Department is going to exercise oversight and control in such a structure. The Department should work to minimize duplication and overlap between any Hub and the Department's program offices.

Advanced Manufacturing.—The Committee recognizes the importance of the manufacturing sector to the U.S. economy, directly generating 12 percent of U.S. GDP and employing nearly 12 million people. The Committee recommends \$215,985,000 for advanced manufacturing. Within this total funding, \$5,000,000 is for the joint additive manufacturing pilot institute with the Department of Defense, \$10,000,000 is for development of additive manufacturing processes, low cost carbon fiber, and other manufacturing technologies at the existing Manufacturing Demonstration Facility, \$25,000,000 is for the Critical Materials Hub aimed at improving critical material supply chains that are prone to disruption, \$56,000,000 is for the wide bandgap semiconductor institute. The Committee supports the President's vision to strengthen domestic manufacturing and improve U.S. competitiveness through a National Network for Manufacturing Innovation, however, the Committee would like to see analysis to identify and prioritize investments in clean energy manufacturing. The Committee encourages the Department to conduct this analysis to justify requests for more substantial increases for institutes in clean energy manufacturing.

Federal Energy Management Program.—The Committee recommends \$30,000,000 for the Federal Energy Management Program.