''(b) REPORT.—Not later than 2 years after the date of the enactment of the Energy Policy Act of 2005 [Aug. 8, 2005], the Secretary shall transmit to the Congress a report containing the findings, conclusions and recommendations, if any, of the Secretary for carrying out Federal, State, and local programs as a result of the study conducted under subsection (a).''

STUDY AND REPORT ON VIBRATION REDUCTION TECHNOLOGIES

Pub. L. 102–486, title I, §173, Oct. 24, 1992, 106 Stat. 2865, as amended by Pub. L. 105–362, title IV, §401(c), Nov. 10, 1998, 112 Stat. 3282, provided that:

''(a) IN GENERAL.—The Secretary shall, in consultation with the appropriate industry representatives, conduct a study to assess the cost-effectiveness, technical performance, energy efficiency, and environmental impacts of active noise and vibration cancellation technologies that use fast adapting algorithms.

''(b) PROCEDURE.—In carrying out such study, the Secretary shall—

''(1) estimate the potential for conserving energy and the economic and environmental benefits that may result from implementing active noise and vibration abatement technologies in demand side management; and

''(2) evaluate the cost-effectiveness of active noise and vibration cancellation technologies as compared to other alternatives for reducing noise and vibration.

''(c) DEMONSTRATION.—The Secretary may, based on the findings and conclusions of the study carried out under this section, conduct at least one project designed to demonstrate the commercial application of active noise and vibration cancellation technologies using fast adapting algorithms in products or equipment with a significant potential for increased energy efficiency.''

§ 13452. Natural gas and electric heating and cooling technologies

(a) Program direction

(1) The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on energy efficient natural gas and electric heating and cooling technologies for residential and commercial buildings.

(2) The natural gas heating and cooling program shall include activities on—

(A) thermally activated heat pumps, including absorption heat pumps and engine-driven heat pumps; and

(B) other advanced natural gas technologies, including fuel cells for residential and commercial applications.

(3) The electric heating and cooling program shall focus on—

(A) advanced heat pumps;

(B) thermal storage; and

(C) advanced electric HVAC (heating, ventilating, and air conditioning) and refrigeration systems that utilize replacements for chlorofluorocarbons.

(b) Proposals

Within 180 days after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(Pub. L. 102–486, title XXI, §2102, Oct. 24, 1992, 106 Stat. 3068.)

§ 13453. Pulp and paper

(a) Program direction

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on advanced pulp and paper technologies. Such program shall include activities on energy generation technologies, boilers, combustion processes, pulping processes (excluding de-inking), chemical recovery, causticizing, source reduction processes, and other related technologies that can improve the energy efficiency of, and reduce the adverse environmental impacts of, pulp and papermaking operations. This section does not authorize projects involving the combustion of waste paper, other than gasification.

(b) Proposals

Within 180 days after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(Pub. L. 102–486, title XXI, §2103, Oct. 24, 1992, 106 Stat. 3069.)

§ 13454. Advanced buildings for 2005

(a) Program direction

The Secretary shall initiate a 5-year program, in accordance with sections 13541 and 13542 of this title, to increase building energy efficiency, while maintaining affordability, by the year 2005. Such program shall include activities on—

(1) building design, design methods, and construction techniques;

(2) building materials, including recycled materials, and components;

(3) on-site energy supply conversion systems such as photovoltaics;

(4) automated energy management systems;

(5) methods of evaluating performance; and

(6) insulation products manufactured with nonozone depleting materials.

(b) Proposals

(1) Solicitation

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section.

(2) Contents of proposals

Proposals submitted under this subsection shall include and be judged upon—

(A) evidence of knowledge of current building practices in the United States and in other countries;

(B) an explanation of how the proposal will encourage the commercialization of the technologies resulting from activities in subsection (a);

(C) evidence of consideration of collaboration with Department of Energy national laboratories;

(D) evidence of collaboration with relevant industry or other groups or organizations; and

(E) a demonstration of the ability of the proposers to undertake and complete the project proposed.

(Pub. L. 102–486, title XXI, §2104, Oct. 24, 1992, 106 Stat. 3069.)

§ 13455. Electric drives

(a) Program

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of

this title, to increase the efficiency of electric drive technologies, including adjustable speed drives, high speed motors, and high efficiency motors.

(b) Proposals

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for projects under this section.

(Pub. L. 102–486, title XXI, § 2105, Oct. 24, 1992, 106 Stat. 3070.)

§ 13456. Improving efficiency in energy-intensive industries

(a) Secretarial action

The Secretary, in accordance with sections 13541 and 13542 of this title, shall—

(1) pursue a research, development, demonstration and commercial application program intended to improve energy efficiency and productivity in energy-intensive industries and industrial processes; and

(2) undertake joint ventures to encourage the commercialization of technologies developed under paragraph (1).

(b) Joint ventures

(1) The Secretary shall—

(A) conduct a competitive solicitation for proposals from private firms and investors for such joint ventures under subsection (a)(2); and

(B) provide financial assistance to at least five such joint ventures.

(2) The purpose of the joint ventures shall be to design, test, and demonstrate changes to industrial processes that will result in improved energy efficiency and productivity. The joint ventures may also demonstrate other improvements of benefit to such industries so long as demonstration of energy efficiency improvements is the principal objective of the joint venture.

(3) In evaluating proposals for financial assistance and joint ventures under this section, the Secretary shall consider—

(A) whether the activities conducted under this section improve the quality and energy efficiency of industries or industrial processes;

(B) the regional distribution of the energy-intensive industries and industrial processes; and

(C) whether the proposed joint venture project would be located in the region which has the energy-intensive industry and industrial processes that would benefit from the project.

(Pub. L. 102–486, title XXI, § 2107, Oct. 24, 1992, 106 Stat. 3070.)

§ 13457. Energy efficient environmental program

(a) Program direction

The Secretary, in consultation with the Administrator of the Environmental Protection Agency, is authorized to continue to carry out a 5-year program to improve the energy efficiency and cost effectiveness of pollution prevention technologies and processes, including source reduction and waste minimization technologies and processes. The purposes of this section shall be to—

(1) apply a systems approach to minimizing adverse environmental effects of industrial production in the most cost effective and energy efficient manner; and

(2) incorporate consideration of the entire materials and energy cycle with the goal of minimizing adverse environmental impacts.

(b) Identification of opportunities

Within 9 months after October 24, 1992, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall identify opportunities for the demonstration of energy efficient pollution prevention technologies and processes.

(c) Report

Within 1 year after October 24, 1992, the Secretary shall submit a report to Congress evaluating the opportunities identified under subsection (b). Such report shall include—

(1) an assessment of the technologies available to increase productivity and simultaneously reduce the consumption of energy and material resources and the production of wastes;

(2) an assessment of the current use of such technologies by industry in the United States;

(3) the status of any such technologies currently being developed, together with projected schedules of their commercial availability;

(4) the energy savings resulting from the use of such technologies;

(5) the environmental benefits of such technologies;

(6) the costs of such technologies;

(7) an evaluation of any existing Federal or State regulatory disincentives for the employment of such technologies; and

(8) an evaluation of any other barriers to the use of such technologies.

In preparing the report required by this subsection, the Secretary shall consult with the Administrator of the Environmental Protection Agency, any other Federal, State, or local official the Secretary considers necessary, representatives of appropriate industries, members of organizations formed to further the goals of environmental protection or energy efficiency, and other appropriate interested members of the public, as determined by the Secretary.

(d) Proposals

Within 1 year after October 24, 1992, the Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall solicit proposals for activities under this section. Proposals selected under this subsection shall demonstrate—

(1) technical viability and cost effectiveness; and

(2) procedures for technology transfer and information outreach during and after completion of the project.

(Pub. L. 102–486, title XXI, § 2108, Oct. 24, 1992, 106 Stat. 3071.)