

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.)

§ 13458. Energy efficient lighting and building centers

(a) Purpose

The purpose of this section is to encourage energy efficiency in buildings through the estab-

lishment of regional centers to promote energy efficient lighting, heating and cooling, and building design.

(b) Grants for establishment

Not later than 18 months after October 24, 1992, the Secretary shall make grants to nonprofit institutions, or to consortiums that may include nonprofit institutions, State and local governments, universities, and utilities, to establish or enhance one regional building energy efficiency center (hereafter in this section referred to as a "regional center") in each of the 10 regions served by a Department of Energy regional support office.

(c) Permitted activities

Each regional center established under this section may—

(1) provide information, training, and technical assistance to building professionals such as architects, designers, engineers, contractors, and building code officials, on building energy efficiency methods and technologies, including lighting, heating and cooling, and passive solar;

(2) operate an outreach program to inform such building professionals of the benefits and opportunities of energy efficiency, and of the services of the center;

(3) provide displays demonstrating building energy efficiency methods and technologies, such as lighting, windows, and heating and cooling equipment;

(4) coordinate its activities and programs with other institutions within the region, such as State and local governments, utilities, and educational institutions, in order to support their efforts to promote building energy efficiency;

(5) serve as a clearinghouse to ensure that information about new building energy efficiency technologies, including case studies of successful applications, is disseminated to end-users in the region;

(6) study the building energy needs of the region and make available region-specific energy efficiency information to facilitate the adoption of cost-effective energy efficiency improvements;

(7) assist educational institutions in establishing building energy efficiency engineering and technical programs and curricula; and

(8) evaluate the performance of the center in promoting building energy efficiency.

(d) Application

Any nonprofit institution or consortium interested in receiving a grant under this section shall submit to the Secretary an application in such form and containing such information as the Secretary may require. A lighting or building energy center in existence on October 24, 1992, which is owned and operated by a nonprofit institution or a consortium as described in subsection (b) shall be eligible for a grant under this section.

(e) Selection criteria

The Secretary shall select recipients of grants under this section on the basis of the following criteria: