technologies to boilers to demonstrate this technology.

(3) Report to Congress

The Secretary shall, before December 31, 1995, submit to the Congress a report on the progress made in carrying out this subsection.

(d) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section and sections 13414 and 13415 of this title, \$29,745,000 for fiscal year 1993 and \$45,000,000 for fiscal year 1994.

(Pub. L. 102-486, title XX, §2013, Oct. 24, 1992, 106 Stat. 3059.)

§13414. Natural gas end-use technologies

The Secretary shall carry out a 5-year program, in accordance with sections 13541 and 13542 of this title, on new and advanced natural gas utilization technologies including, but not limited to—

(1) stationary source emissions control and efficiency improvements including combustion systems, industrial processes, cogeneration, and waste fuels; and

(2) natural gas storage including increased deliverability from existing gas storage facilities and new capabilities for storage near demand centers, and on-site storage at major energy consuming facilities.

(Pub. L. 102-486, title XX, §2014, Oct. 24, 1992, 106 Stat. 3060.)

§13415. Midcontinent Energy Research Center (a) Finding

(u) I Intuing

Congress finds that petroleum resources in the midcontinent region of the United States are very large but are being prematurely abandoned.

(b) Purposes

The purposes of this section are to—

(1) improve the efficiency of petroleum recovery;

 $\left(2\right)$ increase ultimate petroleum recovery; and

(3) delay the abandonment of resources.

(c) Establishment

The Secretary may establish the Midcontinent Energy Research Center (referred to in this section as the "Center") to—

(1) conduct research in petroleum geology and engineering focused on improving the recovery of petroleum from existing fields and established plays in the upper midcontinent region of the United States; and

(2) ensure that the results of the research described in paragraph (1) are transferred to users.

(d) Research

(1) In general

In conducting research under this section, the Center shall, to the extent practicable, cooperate with agencies of the Federal Government, the States in the midcontinent region of the United States, and the affected industry.

(2) Programs

Research programs conducted by the Center may include—

(A) data base development and transfer of technology;

(B) reservoir management;

- (C) reservoir characterization;
- (D) advanced recovery methods; and

(E) development of new technology.

(Pub. L. 102-486, title XX, §2015, Oct. 24, 1992, 106 Stat. 3060.)

PART B—OIL AND GAS DEMAND REDUCTION AND SUBSTITUTION

§13431. General transportation

(a) Program direction

The Secretary shall conduct a 5-year program, in accordance with sections 13541 and 13542 of this title, on cost effective technologies to reduce the demand for oil in the transportation sector for all motor vehicles, including existing vehicles, through increased energy efficiency and the use of alternative fuels. Such program shall include a broad range of technological approaches, and shall include field demonstrations of sufficient scale and number in operating environments to prove technical and economic viability to meet the goals stated in section 13401 of this title. Such program shall include the activities required under sections 13432 through 13437 of this title, and ongoing activities of a similar nature at the Department of Energy.

(b) Program plan

Within 180 days after October 24, 1992, the Secretary shall prepare and submit to the Congress a 5-year program plan to guide activities under this part. In preparing the program plan, the Secretary shall consult with appropriate representatives of industry, utilities, institutions of higher education, Federal agencies, including national laboratories, and professional and technical societies.

(c) Proposals

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

(d) "Alternative fuels" defined

For purposes of this part, the term "alternative fuels" includes natural gas, liquefied petroleum gas, hydrogen, fuels other than alcohol that are derived from biological materials, and any fuel the content of which is at least 85 percent by volume methanol, ethanol, or other alcohol.

(e) Authorization of appropriations

(1) There are authorized to be appropriated to the Secretary for carrying out this part, including all transportation sector energy conservation research and development (other than activities under section 13435 of this title) and all transportation sector biofuels energy systems under solar energy, \$119,144,000 for fiscal year 1993 and \$160,000,000 for fiscal year 1994.

(2) There are authorized to be appropriated to the Secretary for carrying out section 13435 of this title—

(A) \$60,300,000 for fiscal year 1993;

(B) 55,000,000 for fiscal year 1994;

(C) \$80,000,000 for fiscal year 1995;