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) $75,000,000 for fiscal year 1994;
(C) $80,000,000 for fiscal year 1995;
(D) $80,000,000 for fiscal year 1996;
(E) $90,000,000 for fiscal year 1997; and
(F) $100,000,000 for fiscal year 1998.

(Pub. L. 102–486, title XX, § 2021, Oct. 24, 1992, 106 Stat. 3061.)

§ 13432. Advanced automotive fuel economy

(a) Program direction

The Secretary shall conduct a program, in accordance with sections 13541 and 13542 of this title, to supplement ongoing research activities of a similar nature at the Department of Energy, to accelerate the near-term and mid-term development of advanced technologies to improve the fuel economy of light-duty passenger vehicles powered by a piston engine, and hybrid vehicles powered by a combination of piston engine and electric motor.

(b) Program goal

The goal of the program established under subsection (a) shall be to stimulate the development of emerging technologies with the potential to achieve significant improvements in fuel economy while reducing emissions of air pollutants.

(c) Proposals

Within 1 year after October 24, 1992, the Secretary shall solicit proposals for conducting activities under this section, making a special effort to involve small businesses in the program.

(Pub. L. 102–486, title XX, § 2022, Oct. 24, 1992, 106 Stat. 3061.)

§ 13433. Alternative fuel vehicle program

(a) Program direction

The Secretary shall carry out a program, in accordance with sections 13541 and 13542 of this title, on techniques related to improving natural gas and other alternative fuel vehicle technology, including—

(1) fuel injection;
(2) carburetion;
(3) manifolding;
(4) combustion;
(5) power optimization;
(6) efficiency;
(7) lubricants and detergents;
(8) engine durability;
(9) ignition, including fuel additives to assist ignition;
(10) multifuel engines;
(11) emissions control, including catalysts;
(12) novel gas compression concepts;
(13) advanced storage systems;
(14) advanced gaseous fueling technologies; and
(15) the incorporation of advanced materials in these areas.

(b) Cooperative agreements and assistance

The Secretary may enter into cooperative agreements with, and provide financial assistance to, public or private entities willing to provide 50 percent of the costs of a program to perform activities under subsection (a).

(c) Definitions

For purposes of this section—

(1) the term ''alternative fuel vehicle'' means a motor vehicle that operates on alternative fuels; and

(2) the term ''motor vehicle'' includes any automobile, truck, bus, van, or other on-road or off-road motor vehicle, including a boat.

(Pub. L. 102–486, title XX, § 2023, Oct. 24, 1992, 106 Stat. 3062.)

§ 13434. Biofuels user facility

(a) The Secretary shall establish a biofuels user facility to expedite industry adoption of biofuels technologies, including production of alcohol fuels from biomass.

(b) The Secretary, through such universities and colleges as the Secretary determines are qualified, shall establish a program, in accordance with sections 13541 and 13542 of this title, with respect to the production and use of diesel fuels from vegetable oils or animal fats. The program shall investigate—

(1) the economic feasibility of production of oilseed crops for biofuels purposes; and

(2) the establishment of a mobile small-scale oilseed pressing and esterification unit and a stationary small-scale commercial oilseed pressing and esterification unit.

(Pub. L. 102–486, title XX, § 2024, Oct. 24, 1992, 106 Stat. 3062.)

§ 13435. Electric motor vehicles and associated equipment research and development

(a) General

The Secretary shall conduct, pursuant to the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901–5920), a research and development program on electric motor vehicles and associated equipment. Such program shall be conducted in cooperation with