

§ 16106. Ultra-efficient engine technology for aircraft

(a) Ultra-efficient engine technology partnership

The Secretary shall enter into a cooperative agreement with the National Aeronautics and Space Administration for the development of ultra-efficient engine technology for aircraft.

(b) Performance objective

The Secretary shall establish the following performance objectives for the program set forth in subsection (a):

(1) A fuel efficiency increase of at least 10 percent.

(2) A reduction in the impact of landing and takeoff nitrogen oxides emissions on local air quality of 70 percent.

(3) Exploring advanced concepts, alternate propulsion, and power configurations, including hybrid fuel cell powered systems.

(4) Exploring the use of alternate fuel in conventional or nonconventional turbine-based systems.

(c) Authorization of appropriations

There are authorized to be appropriated to the Secretary for carrying out this section \$50,000,000 for each of the fiscal years 2006, 2007, 2008, 2009, and 2010.

(Pub. L. 109-58, title VII, §758, Aug. 8, 2005, 119 Stat. 833.)

PART E—FEDERAL AND STATE PROCUREMENT

§ 16121. Definitions

In this part:

(1) Fuel cell

The term “fuel cell” means a device that directly converts the chemical energy of a fuel and an oxidant into electricity by electrochemical processes occurring at separate electrodes in the device.

(2) Light-duty or heavy-duty vehicle fleet

The term “light-duty or heavy-duty vehicle fleet” does not include any vehicle designed or procured for combat or combat-related missions.

(3) Stationary; portable

The terms “stationary” and “portable”, when used in reference to a fuel cell, include—

- (A) continuous electric power; and
- (B) backup electric power.

(4) Task Force

The term “Task Force” means the Hydrogen and Fuel Cell Technical Task Force established under section 16155 of this title.

(5) Technical Advisory Committee

The term “Technical Advisory Committee” means the independent Technical Advisory Committee selected under section 16156 of this title.

(Pub. L. 109-58, title VII, §781, Aug. 8, 2005, 119 Stat. 835.)

§ 16122. Federal and State procurement of fuel cell vehicles and hydrogen energy systems

(a) Purposes

The purposes of this section are—

(1) to stimulate acceptance by the market of fuel cell vehicles and hydrogen energy systems;

(2) to support development of technologies relating to fuel cell vehicles, public refueling stations, and hydrogen energy systems; and

(3) to require the Federal government,¹ which is the largest single user of energy in the United States, to adopt those technologies as soon as practicable after the technologies are developed, in conjunction with private industry partners.

(b) Federal leases and purchases

(1) Requirement

(A) In general

Not later than January 1, 2010, the head of any Federal agency that uses a light-duty or heavy-duty vehicle fleet shall lease or purchase fuel cell vehicles and hydrogen energy systems to meet any applicable energy savings goal described in subsection (c).

(B) Learning demonstration vehicles

The Secretary may lease or purchase appropriate vehicles developed under subsections (a)(10) and (b)(1)(A) of section 16157 of this title to meet the requirement in subparagraph (A).

(2) Costs of leases and purchases

(A) In general

The Secretary, in cooperation with the Task Force and the Technical Advisory Committee, shall pay to Federal agencies (or share the cost under interagency agreements) the difference in cost between—

- (i) the cost to the agencies of leasing or purchasing fuel cell vehicles and hydrogen energy systems under paragraph (1); and
- (ii) the cost to the agencies of a feasible alternative to leasing or purchasing fuel cell vehicles and hydrogen energy systems, as determined by the Secretary.

(B) Competitive costs and management structures

In carrying out subparagraph (A), the Secretary, in consultation with the agency, may use the General Services Administration or any commercial vendor to ensure—

- (i) a cost-effective purchase of a fuel cell vehicle or hydrogen energy system; or
- (ii) a cost-effective management structure of the lease of a fuel cell vehicle or hydrogen energy system.

(3) Exception

(A) In general

If the Secretary determines that the head of an agency described in paragraph (1) cannot find an appropriately efficient and reliable fuel cell vehicle or hydrogen energy system in accordance with paragraph (1), that agency shall be excepted from compliance with paragraph (1).

(B) Consideration

In making a determination under subparagraph (A), the Secretary shall consider—

¹ So in original. Probably should be capitalized.