

- Sec.
 12403. Hydrogen research and development.
 12404. Demonstrations.
 12405. Technology transfer program.
 12406. Coordination and consultation.
 12407. Technical panel.
 12408. Authorization of appropriations.

§ 12401. Finding, purposes, and definitions

(a) Finding

Congress finds that it is in the national interest to accelerate efforts to develop a domestic capability to economically produce hydrogen in quantities that will make a significant contribution toward reducing the Nation's dependence on conventional fuels.

(b) Purposes

The purposes of this chapter are—

- (1) to direct the Secretary of Energy to conduct a research, development, and demonstration program leading to the production, storage, transport, and use of hydrogen for industrial, residential, transportation, and utility applications;
- (2) to direct the Secretary to develop a technology assessment and information transfer program among the Federal agencies and aerospace, transportation, energy, and other entities; and
- (3) to develop renewable energy resources as a primary source of energy for the production of hydrogen.

(c) Definitions

As used in this chapter, the term:

- (1) "critical technology" (or "critical technical issue") means a technology (or issue) that, in the opinion of the Secretary, requires understanding and development in order to take the next needed step in the development of hydrogen as an economic fuel or storage medium;
- (2) "Department" means the Department of Energy; and
- (3) "Secretary" means the Secretary of Energy.

(Pub. L. 101-566, § 102, Nov. 15, 1990, 104 Stat. 2797; Pub. L. 104-271, title I, § 101, Oct. 9, 1996, 110 Stat. 3304.)

AMENDMENTS

1996—Subsec. (b)(1). Pub. L. 104-271, § 101(a), amended par. (1) generally. Prior to amendment, par. (1) read as follows: "to direct the Secretary to prepare a comprehensive 5-year comprehensive program management plan that will identify and resolve critical technical issues necessary for the realization of a domestic capability to produce, distribute, and use hydrogen economically within the shortest time practicable;"

Subsec. (c). Pub. L. 104-271, § 101(b), added par. (2) and redesignated former par. (2) as (3).

SHORT TITLE OF 1996 AMENDMENT

Pub. L. 104-271, § 1, Oct. 9, 1996, 110 Stat. 3304, provided that: "This Act [enacting section 7238 of this title, amending this section and sections 12402 to 12405, 12407, 12408, and 13436 of this title, and enacting provisions set out as notes under sections 7238, 12403, and 13436 of this title] may be cited as the 'Hydrogen Future Act of 1996'."

SHORT TITLE

Pub. L. 101-566, title I, § 101, Nov. 15, 1990, 104 Stat. 2797, provided that: "This Act [enacting this chapter]

may be referred to as the 'Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990'."

§ 12402. Report to Congress

(a) Not later than January 1, 1999, the Secretary shall transmit to Congress a detailed report on the status and progress of the programs authorized under this chapter.

(b) A report under subsection (a) shall include, in addition to any views and recommendations of the Secretary—

- (1) an analysis of the effectiveness of the programs authorized under this chapter, to be prepared and submitted to the Secretary by the Hydrogen Technical Advisory Panel established under section 12407 of this title; and
- (2) recommendations of the Hydrogen Technical Advisory Panel for any improvements in the program that are needed, including recommendations for additional legislation.

(Pub. L. 101-566, § 103, Nov. 15, 1990, 104 Stat. 2797; Pub. L. 104-271, title I, § 102(a), Oct. 9, 1996, 110 Stat. 3304.)

AMENDMENTS

1996—Pub. L. 104-271 amended section generally, substituting provisions requiring report to Congress on chapter programs by Jan. 1, 1999, for provisions regarding preparation and contents of comprehensive 5-year program management plan for research and development activities and comprehensive large-scale hydrogen demonstration plan with respect to section 12404 demonstrations.

§ 12403. Hydrogen research and development

(a) Program

The Secretary shall conduct a hydrogen research and development program relating to production, storage, transportation, and use of hydrogen, with the goal of enabling the private sector to demonstrate the technical feasibility of using hydrogen for industrial, residential, transportation, and utility applications.

(b) Research

In conducting the program authorized by this section, the Secretary shall—

- (1) give particular attention to developing an understanding and resolution of critical technical issues preventing the introduction of hydrogen into the marketplace;
- (2) initiate or accelerate existing research in critical technical issues that will contribute to the development of more economic hydrogen production and use, including, but not limited to, critical technical issues with respect to production (giving priority to those production techniques that use renewable energy resources as their primary source of energy for hydrogen production), liquefaction, transmission, distribution, storage, and use (including use of hydrogen in surface transportation); and
- (3) survey private sector hydrogen activities and take steps to ensure that research and development activities under this section do not displace or compete with the privately funded hydrogen research and development activities of United States industry.

(c) Innovative energy technologies

The Secretary is authorized to evaluate any reasonable new or improved technology, includ-