

(4) new highly active, selective, and durable electrolyzer catalysts and electro-catalysts that—

(A) greatly reduce or eliminate the need for platinum group metals; and

(B) enable electrolysis of complex mixtures with impurities, including seawater;

(5) modular electrolyzers for distributed energy systems and the bulk-power system (as defined in section 8240(a) of title 16);

(6) low-cost membranes or electrolytes and separation materials that are durable in the presence of impurities or seawater;

(7) improved component design and material integration, including with respect to electrodes, porous transport layers and bipolar plates, and balance-of-system components, to allow for scale-up and domestic manufacturing of electrolyzers at a high volume;

(8) clean hydrogen storage technologies;

(9) technologies that integrate hydrogen production with—

(A) clean hydrogen compression and drying technologies;

(B) clean hydrogen storage; and

(C) transportation or stationary systems; and

(10) integrated systems that combine hydrogen production with renewable power or nuclear power generation technologies, including hybrid systems with hydrogen storage.

**(f) Grants, contracts, cooperative agreements**

**(1) Grants**

In carrying out the program, the Secretary shall award grants, on a competitive basis, to eligible entities for projects that the Secretary determines would provide the greatest progress toward achieving the goal of the program described in subsection (c).

**(2) Contracts and cooperative agreements**

In carrying out the program, the Secretary may enter into contracts and cooperative agreements with eligible entities and Federal agencies for projects that the Secretary determines would further the purpose of the program described in subsection (b).

**(3) Eligibility; applications**

**(A) In general**

The eligibility of an entity to receive a grant under paragraph (1), to enter into a contract or cooperative agreement under paragraph (2), or to receive funding for a demonstration project under subsection (d) shall be determined by the Secretary.

**(B) Applications**

An eligible entity desiring to receive a grant under paragraph (1), to enter into a contract or cooperative agreement under paragraph (2), or to receive funding for a demonstration project under subsection (d) shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

**(g) Authorization of appropriations**

There is authorized to be appropriated to the Secretary to carry out the program \$1,000,000,000

for the period of fiscal years 2022 through 2026, to remain available until expended.

(Pub. L. 109–58, title VIII, §816, as added Pub. L. 117–58, div. D, title III, §40314(2), Nov. 15, 2021, 135 Stat. 1013.)

**Editorial Notes**

**PRIOR PROVISIONS**

A prior section 816 of Pub. L. 109–58 was renumbered section 821 and is classified to section 16165 of this title.

**Statutory Notes and Related Subsidiaries**

**WAGE RATE REQUIREMENTS**

For provisions relating to rates of wages to be paid to laborers and mechanics on projects for construction, alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117–58, including authority of Secretary of Labor, see section 18851 of this title.

**§ 16161e. Laboratory management**

**(a) In general**

The National Energy Technology Laboratory, the Idaho National Laboratory, and the National Renewable Energy Laboratory shall continue to work in a crosscutting manner to carry out the programs established under sections 16161a and 16161c of this title.

**(b) Coordination; clearinghouse**

In carrying out subsection (a), the National Energy Technology Laboratory shall—

(1) coordinate with—

(A) the Idaho National Laboratory, the National Renewable Energy Laboratory, and other National Laboratories in a cross-cutting manner;

(B) institutions of higher education;

(C) research institutes;

(D) industrial researchers; and

(E) international researchers; and

(2) act as a clearinghouse to collect information from, and distribute information to, the National Laboratories and other entities described in subparagraphs (B) through (E) of paragraph (1).

(Pub. L. 109–58, title VIII, §817, as added Pub. L. 117–58, div. D, title III, §40314(2), Nov. 15, 2021, 135 Stat. 1014.)

**Statutory Notes and Related Subsidiaries**

**WAGE RATE REQUIREMENTS**

For provisions relating to rates of wages to be paid to laborers and mechanics on projects for construction, alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117–58, including authority of Secretary of Labor, see section 18851 of this title.

**§ 16162. Technology transfer**

In carrying out this subchapter, the Secretary shall carry out programs that—

(1) provide for the transfer of critical hydrogen and fuel cell technologies to the private sector;

(2) accelerate wider application of those technologies in the global market;

(3) foster the exchange of generic, nonproprietary information; and

(4) assess technical and commercial viability of technologies relating to the production, distribution, storage, and use of hydrogen energy and fuel cells.

(Pub. L. 109–58, title VIII, §818, formerly §813, Aug. 8, 2005, 119 Stat. 855; renumbered §818, Pub. L. 117–58, div. D, title III, §40314(1), Nov. 15, 2021, 135 Stat. 1008.)

### § 16163. Miscellaneous provisions

#### (a) Representation

The Secretary may represent the United States interests with respect to activities and programs under this subchapter, in coordination with the Department of Transportation, the National Institute of Standards and Technology, and other relevant Federal agencies, before governments and nongovernmental organizations including—

- (1) other Federal, State, regional, and local governments and their representatives;
- (2) industry and its representatives, including members of the energy and transportation industries; and
- (3) in consultation with the Department of State, foreign governments and their representatives including international organizations.

#### (b) Regulatory authority

Nothing in this subchapter shall be construed to alter the regulatory authority of the Department.

(Pub. L. 109–58, title VIII, §819, formerly §814, Aug. 8, 2005, 119 Stat. 855; renumbered §819, Pub. L. 117–58, div. D, title III, §40314(1), Nov. 15, 2021, 135 Stat. 1008.)

### § 16164. Cost sharing

The costs of carrying out projects and activities under this subchapter shall be shared in accordance with section 16352 of this title.

(Pub. L. 109–58, title VIII, §820, formerly §815, Aug. 8, 2005, 119 Stat. 855; renumbered §820, Pub. L. 117–58, div. D, title III, §40314(1), Nov. 15, 2021, 135 Stat. 1008.)

### § 16165. Savings clause

Nothing in this subchapter shall be construed to affect the authority of the Secretary of Transportation that may exist prior to August 8, 2005, with respect to—

- (1) research into, and regulation of, hydrogen-powered vehicles fuel systems integrity, standards, and safety under subtitle VI of title 49;
- (2) regulation of hazardous materials transportation under chapter 51 of title 49;
- (3) regulation of pipeline safety under chapter 601 of title 49;
- (4) encouragement and promotion of research, development, and deployment activities relating to advanced vehicle technologies under section 5506<sup>1</sup> of title 49;
- (5) regulation of motor vehicle safety under chapter 301 of title 49;
- (6) automobile fuel economy under chapter 329 of title 49; or

(7) representation of the interests of the United States with respect to the activities and programs under the authority of title 49.

(Pub. L. 109–58, title VIII, §821, formerly §816, Aug. 8, 2005, 119 Stat. 855; renumbered §821, Pub. L. 117–58, div. D, title III, §40314(1), Nov. 15, 2021, 135 Stat. 1008.)

### Editorial Notes

#### REFERENCES IN TEXT

Section 5506 of title 49, referred to in par. (4), was repealed by Pub. L. 112–141, div. E, title II, §52010(a), July 6, 2012, 126 Stat. 887.

### § 16166. Clean hydrogen production qualifications

#### (a) In general

Not later than 180 days after November 15, 2021, the Secretary, in consultation with the Administrator of the Environmental Protection Agency and after taking into account input from industry and other stakeholders, as determined by the Secretary, shall develop an initial standard for the carbon intensity of clean hydrogen production that shall apply to activities carried out under this subchapter.

#### (b) Requirements

##### (1) In general

The standard developed under subsection (a) shall—

(A) support clean hydrogen production from each source described in section 16154(e)(2) of this title;

(B) define the term “clean hydrogen” to mean hydrogen produced with a carbon intensity equal to or less than 2 kilograms of carbon dioxide-equivalent produced at the site of production per kilogram of hydrogen produced; and

(C) take into consideration technological and economic feasibility.

##### (2) Adjustment

Not later than the date that is 5 years after the date on which the Secretary develops the standard under subsection (a), the Secretary, in consultation with the Administrator of the Environmental Protection Agency and after taking into account input from industry and other stakeholders, as determined by the Secretary, shall—

(A) determine whether the definition of clean hydrogen required under paragraph (1)(B) should be adjusted below the standard described in that paragraph; and

(B) if the Secretary determines the adjustment described in subparagraph (A) is appropriate, carry out the adjustment.

#### (c) Application

The standard developed under subsection (a) shall apply to clean hydrogen production from renewable, fossil fuel with carbon capture, utilization, and sequestration technologies, nuclear, and other fuel sources using any applicable production technology.

(Pub. L. 109–58, title VIII, §822, as added Pub. L. 117–58, div. D, title III, §40315(a), Nov. 15, 2021, 135 Stat. 1015.)

<sup>1</sup> See References in Text note below.