

117TH CONGRESS
1ST SESSION

H. R. 5965

To direct the Secretary of Energy to establish a pilot program to enter into contracts for payment of costs associated with using eligible hydrogen, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

NOVEMBER 12, 2021

Mr. TONKO (for himself and Mr. MCKINLEY) introduced the following bill;
which was referred to the Committee on Energy and Commerce

A BILL

To direct the Secretary of Energy to establish a pilot program to enter into contracts for payment of costs associated with using eligible hydrogen, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Clean Hydrogen De-
5 ployment Act of 2021”.

6 **SEC. 2. CLEAN HYDROGEN CONTRACT FOR DIFFERENCES**
7 **PILOT PROGRAM.**

8 (a) ESTABLISHMENT OF PILOT PROGRAM.—The Sec-
9 retary, acting through the Assistant Secretary of the Of-

1 fice of Fossil Energy and Carbon Management and in con-
2 sultation with the Assistant Secretary of the Office of En-
3 ergy Efficiency and Renewable Energy and other relevant
4 offices within the Department of Energy, shall establish
5 a pilot program to enter into contracts, on a competitive
6 basis, with entities for payment of costs associated with
7 the production or purchase of eligible hydrogen that is
8 used in projects carried out by such entities.

9 (b) SELECTION.—

10 (1) IN GENERAL.—Not later than 2 years after
11 the date of enactment of this Act, the Secretary
12 shall enter into at least 5 contracts under the pilot
13 program established under subsection (a), with each
14 contract term for a period of no longer than 5 years.

15 (2) APPLICATIONS.—In selecting entities to
16 enter into contracts with under the pilot program es-
17 tablished under subsection (a), the Secretary shall
18 ensure—

19 (A) at least 1 entity selected will carry out
20 a project that uses eligible hydrogen as a feed-
21 stock in an industrial application, such as syn-
22 thesis of ammonia, fuels, or chemicals;

23 (B) at least 1 entity selected will carry out
24 a project that uses eligible hydrogen as a fuel
25 in an industrial application;

1 (C) at least 1 entity selected will carry out
2 a project that uses eligible hydrogen as a fuel
3 in a transportation application, including use at
4 a transportation hub, such as a port, transit
5 depot, or distribution center;

6 (D) at least 1 entity selected will carry out
7 a project that uses eligible hydrogen as a fuel
8 in a power application;

9 (E) not less than 2 entities selected will
10 carry out a project that uses eligible hydrogen
11 produced using electricity, or thermal energy,
12 generated from zero-emission energy sources;
13 and

14 (F) each entity selected addresses any nec-
15 essary hydrogen storage and infrastructure
16 needs associated with the project, including by
17 procuring those services from other entities.

18 (c) CONTRACT FOR DIFFERENCES.—

19 (1) PAYMENT.—The Secretary shall provide at
20 least one payment annually to an entity with which
21 the Secretary has entered into a contract under the
22 pilot program established under subsection (a).

23 (2) AMOUNT.—Except as otherwise provided in
24 this subsection, the amount of a payment, with re-
25 spect to eligible hydrogen used by a project over a

1 designated period of time, as determined by the Sec-
2 retary, to an entity with which the Secretary has en-
3 tered into a contract under the pilot program estab-
4 lished under subsection (a) shall be—

5 (A) with respect to an entity carrying out
6 a project using eligible hydrogen produced using
7 electricity, or thermal energy, generated from
8 zero-emission energy sources, an amount equal
9 to—

10 (i) the cost of such eligible hydrogen
11 that is produced or purchased, and then
12 used by the project; minus

13 (ii) the applicable fair market value,
14 as determined by the Secretary, to produce
15 or purchase an equal quantity of conven-
16 tional hydrogen; or

17 (B) with respect to an entity carrying out
18 a project using any other type of eligible hydro-
19 gen, an amount equal to—

20 (i) the number that is equal to—

21 (I) the cost of such eligible hy-
22 drogen that is produced or purchased,
23 and then used by the project; minus

24 (II) the applicable fair market
25 value, as determined by the Secretary,

1 to produce or purchase an equal quan-
2 tity of conventional hydrogen; multi-
3 plied by

4 (ii) the number that is equal to—

5 (I) 1; minus

6 (II) as determined by the Sec-
7 retary, the number that is equal to—

8 (aa) the quantity of the
9 greenhouse gas emissions, on a
10 life-cycle basis, associated with
11 such eligible hydrogen that is
12 used by the project; divided by

13 (bb) the quantity of green-
14 house gas emissions, on a life-
15 cycle basis, associated with an
16 equal quantity of conventional
17 hydrogen.

18 (3) ALTERNATIVE AMOUNT CALCULATION.—

19 With respect to an entity with which the Secretary
20 has entered into a contract under the pilot program
21 established under subsection (a) that will carry out
22 a project that uses eligible hydrogen to displace a
23 nonhydrogen fuel or feedstock, the Secretary may
24 determine and apply a formula that is different than
25 the otherwise applicable formula under paragraph

1 (2) for calculating payments to such entity, taking
2 into consideration the differences between the eligi-
3 ble hydrogen to be used in the project and the non-
4 hydrogen fuel or feedstock being displaced with re-
5 spect to—

6 (A) cost;

7 (B) emissions; and

8 (C) heating value, as applicable.

9 (4) ADDITIONAL PAYMENT.—To the extent ap-
10 propriations are available, and notwithstanding sub-
11 section (d), the Secretary may provide a payment to
12 an entity with which the Secretary has entered into
13 a contract under the pilot program established under
14 subsection (a) at the beginning of such contract—

15 (A) that is additional to any other payment
16 under this subsection;

17 (B) that is not more than 50 percent of
18 the expected total payments for the first year of
19 the contract; and

20 (C) for capital expenditures or procure-
21 ment of services related to the project carried
22 out by such entity, including equipment and in-
23 frastructure for storage, delivery, and distribu-
24 tion of eligible hydrogen.

1 (5) APPLICABLE FAIR MARKET VALUE.—Before
2 entering into a contract with an entity under the
3 pilot program established under subsection (a), the
4 Secretary shall communicate to such entity the ex-
5 pected dollar amount of, and method for calculating,
6 the applicable fair market value of conventional hy-
7 drogen or a relevant displaced fuel that will apply
8 for the duration of such contract for the purposes of
9 this subsection.

10 (d) MAXIMUM PAYMENT PER YEAR.—

11 (1) IN GENERAL.—The amount of payments to
12 an entity under a contract entered into under this
13 section (other than a payment described in sub-
14 section (c)(4)) shall not exceed \$50,000,000 per
15 year.

16 (2) PAYMENT ADJUSTMENT.—Subject to the
17 availability of appropriations, the Secretary may in-
18 crease the maximum amount of payments described
19 in paragraph (1) to an entity to up to \$100,000,000
20 per year, as determined appropriate by the Sec-
21 retary.

22 (e) APPLICATIONS.—To be eligible to enter into a
23 contract under this section, an entity shall submit an ap-
24 plication to the Secretary that includes—

25 (1) a description of the applicable project;

1 (2) the location of any facility included in the
2 project;

3 (3) the method of production, including ex-
4 pected feedstocks, and expected cost, of eligible hy-
5 drogen to be used in the project;

6 (4) a description of any infrastructure and
7 equipment investments, including modification, con-
8 version, and retooling, that will be done to support
9 increased use of eligible hydrogen at any facility of
10 the project;

11 (5) an estimate of annualized expected green-
12 house gas emissions associated with the production
13 of the eligible hydrogen expected to be used in the
14 project, calculated using methods and procedures de-
15 termined appropriate by the Secretary; and

16 (6) any additional information determined to be
17 appropriate by the Secretary.

18 (f) PRIORITY.—In selecting entities to enter into con-
19 tracts with under this section, the Secretary shall give pri-
20 ority to an entity based on—

21 (1) with respect to the project to be carried out
22 by such entity using eligible hydrogen, the extent to
23 which such project would—

1 (A) use hydrogen as a fuel or feedstock as
2 a portion of total fuels or feedstocks used at the
3 facility;

4 (B) use eligible hydrogen as a portion of
5 total hydrogen used at the facility;

6 (C) support or encourage future use, com-
7 mercialization, or cost reduction of eligible hy-
8 drogen and associated infrastructure, including
9 development of centralized hubs for hydrogen
10 production, distribution, delivery, and storage
11 and use of existing infrastructure;

12 (D) reduce greenhouse gas emissions;

13 (E) seek to mitigate emissions of nitrogen
14 oxides from the production and use of eligible
15 hydrogen; and

16 (F) seek to source fuels and feedstocks
17 used in the production of eligible hydrogen that
18 are associated with fewer greenhouse gas emis-
19 sions; and

20 (2) the extent to which such entity commits to
21 making or contracting for additional investments to
22 support the production, distribution, delivery, stor-
23 age, and use of eligible hydrogen, including modi-
24 fying, installing, and constructing equipment and in-
25 frastructure.

1 (g) ASSURANCES.—Before entering into a contract
2 under this section with an entity that will produce or pur-
3 chase, and then use eligible hydrogen produced from fossil
4 fuels where carbon capture technologies are used during
5 the production of such eligible hydrogen, the Secretary
6 shall secure a written assurance from such entity that
7 such entity shall seek to ensure—

8 (1) the reduction of upstream fugitive green-
9 house gas emissions associated with any feedstock
10 used in the production of such eligible hydrogen; and

11 (2) with respect to the carbon dioxide captured
12 from the production of such eligible hydrogen, the
13 long-term storage or utilization, if such utilization
14 results in long-term storage, of such captured carbon
15 dioxide, where such captured carbon dioxide is
16 stored in a manner that the Secretary determines is
17 consistent with existing relevant regulations for long-
18 term storage of carbon dioxide and is otherwise ap-
19 propriate.

20 (h) REPORT TO CONGRESS.—Not later than 1 year
21 after all funding made available for the pilot program es-
22 tablished under subsection (a) is expended, the Secretary
23 shall submit to Congress and make available to the public
24 a report that describes—

1 (1) any challenges or benefits that entities
2 under such pilot program reported with respect to
3 the integration or use of eligible hydrogen;

4 (2) an assessment of the national market poten-
5 tial for eligible hydrogen;

6 (3) an assessment of barriers and opportunities
7 for widespread use of eligible hydrogen;

8 (4) recommendations for how future Federal,
9 State, and local programs can best support the
10 adoption and widespread use of eligible hydrogen;
11 and

12 (5) any other data and analysis the Secretary
13 determines to be necessary to describe the imple-
14 mentation, outcomes, or effectiveness of such pilot
15 program.

16 (i) DEFINITIONS.—In this Act:

17 (1) CONVENTIONAL HYDROGEN.—The term
18 “conventional hydrogen” means hydrogen produced
19 from steam methane reforming of nonrenewable
20 feedstocks, such as natural gas, where carbon cap-
21 ture technology is not used during such production.

22 (2) ELIGIBLE HYDROGEN.—The term “eligible
23 hydrogen”—

24 (A) means hydrogen, the production of
25 which releases at least 80 percent less green-

1 house gas emissions into the atmosphere per
2 kilogram of hydrogen as compared to the pro-
3 duction of conventional hydrogen, as deter-
4 mined by the Secretary taking into consider-
5 ation greenhouse gas emissions released from—

6 (i) the applicable hydrogen production
7 facility;

8 (ii) the production of electricity con-
9 sumed in the applicable hydrogen produc-
10 tion process;

11 (iii) conventional hydrogen production
12 facilities; and

13 (iv) the production of electricity con-
14 sumed in conventional hydrogen production
15 processes; and

16 (B) includes hydrogen produced using elec-
17 tricity, or thermal energy, generated from zero-
18 emission energy sources.

19 (3) SECRETARY.—The term “Secretary” means
20 the Secretary of Energy.

21 (j) AUTHORIZATION OF APPROPRIATIONS.—There is
22 authorized to be appropriated to carry out this Act—

23 (1) \$375,000,000 for fiscal year 2022; and

- 1 (2) \$250,000,000 for each of fiscal years 2023
- 2 through 2026.

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