

117TH CONGRESS
2D SESSION

H. R. 9018

To require the Secretary of Energy to establish a hydrogen infrastructure finance and innovation pilot program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 28, 2022

Mr. PETERS (for himself, Mr. FITZPATRICK, and Mr. MICHAEL F. DOYLE of Pennsylvania) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Transportation and Infrastructure, and Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To require the Secretary of Energy to establish a hydrogen infrastructure finance and innovation pilot program, 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 “Hydrogen Infrastruc-
5 ture Finance and Innovation Act”.

1 **SEC. 2. STUDY.**

2 Not later than 1 year after the date of enactment
3 of this Act, the Secretary of Energy, in coordination with
4 the Administrator of the Environmental Protection Agen-
5 cy, the Council on Environmental Quality, the Adminis-
6 trator of the Energy Information Administration, and the
7 heads of other relevant Federal agencies, shall conduct a
8 study subject to notice and public comment—

9 (1) to fully assess and report the potential lay-
10 out of pipeline corridors that are robust against a
11 range of projected hydrogen demand futures;

12 (2) to synthesize the results from research, de-
13 velopment, and demonstration projects on materials
14 and metallurgy for transporting and storing hydro-
15 gen and hydrogen-rich fuels;

16 (3) to determine outstanding questions with re-
17 gard to research, development, and demonstration of
18 infrastructure for transporting and storing hydrogen
19 and hydrogen-rich fuels;

20 (4) to investigate the behavior and environ-
21 mental impact of hydrogen leakage in pipelines and
22 from geologic storage sites and nongeologic storage
23 equipment;

24 (5) to determine best practices for the construc-
25 tion and maintenance of hydrogen pipelines;

(6) to determine the percentage at which hydrogen must be blended into the natural gas network to substantially reduce carbon intensity; and

(7) to establish a framework for the measurement, reporting, and management of hydrogen leaks.

**SEC. 3. SUPPORTING HYDROGEN INFRASTRUCTURE AND
REGIONAL DEVELOPMENT OF HYDROGEN.**

(a) DEFINITIONS.—In this section:

(1) BOARD-REGULATED RATES.—The term “Board-regulated rates” means rates regulated by the Surface Transportation Board.

(2) COMMISSION-REGULATED RATES.—The term “Commission-regulated rates” means rates regulated by the Federal Energy Regulatory Commission.

(3) COMMON CARRIER.—The term “common carrier” means a transportation infrastructure operator or owner that—

(A) publishes a publicly available tariff containing the just and reasonable rates, terms, and conditions of nondiscriminatory service; and

(B) holds itself out to provide transportation services to the public for a fee.

1 (4) ELIGIBLE ACTIVITY.—The term “eligible
2 activity” means an activity described in subsection
3 (g)(2) relating to, or carried out in connection with,
4 an eligible project.

5 (5) ELIGIBLE ENTITY.—The term “eligible enti-
6 ty” means a corporation, partnership, joint venture,
7 trust, non-Federal governmental entity, agency, or
8 instrumentality, or other entity.

9 (6) ELIGIBLE PROJECT.—

10 (A) IN GENERAL.—Subject to subpara-
11 graph (B), the term “eligible project” means an
12 infrastructure project for hydrogen transpor-
13 tation, storage, or delivery, including pipeline,
14 shipping, rail, refueling, or other infrastructure,
15 or associated equipment, as the Secretary deter-
16 mines to be appropriate.

17 (B) INCLUSION OF PIPELINE PROJECTS.—
18 The term “eligible project” includes a pipeline
19 project only if the project is for—

20 (i) the construction of 1 or more new
21 pipelines that are capable of handling pure
22 hydrogen; or

23 (ii) the retrofitting of 1 or more exist-
24 ing natural gas pipelines—

1 (I) to transport a blend of hydro-
2 gen and natural gas; and

3 (II) in a manner that will signifi-
4 cantly increase the capacity of the
5 pipelines to transport hydrogen, as de-
6 termined by the Secretary.

7 (7) ELIGIBLE PROJECT COST.—

8 (A) IN GENERAL.—The term “eligible
9 project costs” means—

10 (i) the costs of carrying out an eligible
11 activity; and

12 (ii) any costs described in subpara-
13 graph (B) relating to, or incurred in con-
14 nection with, an eligible project.

15 (B) COSTS DESCRIBED.—The costs re-
16 ferred to in subparagraph (A)(ii) are—

17 (i) the costs of capitalized interest
18 necessary to meet market requirements,
19 the costs of reasonably required reserve
20 funds, capital issuance expenses, and any
21 other carrying costs during construction of
22 the applicable infrastructure; and

23 (ii) transaction costs associated with
24 financing an eligible project, including the

1 cost of legal counsel and technical consult-
2 ants.

3 (8) HIFIA PILOT PROGRAM.—The term
4 “HIFIA pilot program” means the hydrogen infra-
5 structure finance and innovation pilot program es-
6 tablished under subsection (b)(1).

7 (9) LETTER OF INTEREST.—The term “letter
8 of interest” means a letter submitted by a potential
9 applicant prior to an application for a grant or a
10 loan under the HIFIA pilot program that—

11 (A) is in a format prescribed by the Sec-
12 retary on the website of the HIFIA pilot pro-
13 gram;

14 (B) describes the project and the location,
15 purpose, and cost of the project;

16 (C) outlines the proposed financial plan,
17 including—

18 (i) the requested grant or loan assist-
19 ance; and

20 (ii) the proposed obligor, if applicable;

21 (D) provides a status of environmental re-
22 view; and

23 (E) provides information regarding satis-
24 faction of other eligibility requirements of the
25 HIFIA pilot program.

1 (10) LOW-INCOME OR DISADVANTAGED COMMU-
2 NITY.—The term “low-income or disadvantaged
3 community” means a community (including a city, a
4 town, a county, and any reasonably isolated and di-
5 visible segment of a larger municipality) with an an-
6 nual median household income that is less than 100
7 percent of the statewide annual median household
8 income for the State in which the community is lo-
9 cated, according to the most recent decennial census.

10 (11) OBLIGOR.—The term “obligor” means an
11 eligible entity that is liable for payment of the prin-
12 cipal of, or interest on, a loan under the HIFIA pilot
13 program.

14 (12) SECRETARY.—The term “Secretary”
15 means the Secretary of Energy.

16 (b) ESTABLISHMENT.—

17 (1) IN GENERAL.—Not later than 1 year after
18 the date of enactment of this Act, the Secretary, in
19 consultation with the Federal Energy Regulatory
20 Commission, the Surface Transportation Board, and
21 the Administrator of the Pipeline and Hazardous
22 Materials Safety Administration, shall establish a
23 hydrogen infrastructure finance and innovation pilot
24 program under which the Secretary shall provide—

1 (A) financial assistance to eligible entities
2 for eligible projects through—

3 (i) grants; or

4 (ii) long-term, low-cost supplemental
5 loans; and

6 (B) technical assistance in accordance with
7 subsection (l).

8 (2) COORDINATION WITH HYDROGEN HUBS.—

9 To ensure that the HIFIA pilot program is compat-
10 ible with and complementary to any hydrogen hubs
11 developed under any other law, the Secretary, to the
12 maximum extent practicable, shall coordinate the es-
13 tablishment of the HIFIA pilot program with—

14 (A) the establishment of any program to
15 support the development of hydrogen hubs that
16 is required to be established under any other
17 law; and

18 (B) the development of those hubs.

19 (c) ELIGIBILITY.—

20 (1) IN GENERAL.—The Secretary may provide
21 financial assistance for an eligible project under the
22 HIFIA pilot program if—

23 (A) the eligible entity proposing to carry
24 out the project submits a letter of interest prior

1 to submission of an application under para-
2 graph (2) with respect to the project; and

3 (B) the eligible entity and the eligible
4 project meet all applicable requirements of this
5 section.

6 (2) APPLICATIONS.—

7 (A) IN GENERAL.—To be eligible for a
8 grant or a loan under the HIFIA pilot pro-
9 gram, an eligible entity shall submit to the Sec-
10 retary an application at such time, in such
11 manner, and containing such information as the
12 Secretary determines to be appropriate.

13 (B) ELECTION.—

14 (i) IN GENERAL.—An eligible entity
15 may elect to apply for a grant, a loan, or
16 both under the HIFIA pilot program.

17 (ii) DECISION.—The Secretary shall
18 have discretion to award any mix of grants
19 and loans under the HIFIA pilot program
20 as the Secretary determines to be appro-
21 priate, including with respect to each eligi-
22 ble entity that applies for both a grant and
23 a loan.

24 (C) APPLICATION PROCESSING PROCE-
25 DURES.—

1 (i) NOTICE OF COMPLETE APPLICA-
2 TION.—Not later than 30 days after the
3 date of receipt of an application under this
4 paragraph, the Secretary shall provide to
5 the applicant a written notice describing
6 whether—

7 (I) the application is complete; or
8 (II) additional information or
9 materials are needed to complete the
10 application.

11 (ii) APPROVAL OR DENIAL OF APPLI-
12 CATION.—Not later than 90 days after the
13 date of issuance of a written notice under
14 clause (i), the Secretary shall provide to
15 the applicant a written notice informing
16 the applicant whether the Secretary has
17 approved or disapproved the application.

18 (d) PRIORITY.—In selecting eligible projects to re-
19 ceive a grant or a loan under the HIFIA pilot program,
20 the Secretary shall give priority to eligible projects that—

21 (1) will provide greater net impact in avoiding
22 or reducing emissions of greenhouse gases; and

23 (2) are sited in a manner that minimizes envi-
24 ronmental disturbance and other siting concerns, in-

1 including by being sited within, or adjacent to, existing
2 pipeline or other linear infrastructure corridors.

3 (e) CONSIDERATIONS.—In selecting eligible projects
4 to receive a grant or a loan under the HIFIA pilot pro-
5 gram, the Secretary, to the maximum extent practicable,
6 shall select projects—

7 (1) that are large-capacity, common carrier in-
8 frastructure;

9 (2) that enable geographical diversity in associ-
10 ated projects and supply chains to produce, use, or
11 store hydrogen, with the goal of enabling projects in
12 all major regions of the United States with current
13 hydrogen demand and potential future hydrogen de-
14 mand;

15 (3) that will generate the greatest benefit to
16 low-income or disadvantaged communities; and

17 (4) that will—

18 (A) maximize creation or retention of jobs
19 in the United States; and

20 (B) provide the highest job quality.

21 (f) LOANS.—

22 (1) IN GENERAL.—In carrying out the HIFIA
23 pilot program, the Secretary shall make loans to eli-
24 gible entities, the proceeds of which shall be used to
25 finance eligible projects.

1 (2) INTEREST RATE.—The interest rate of a
2 loan under the HIFIA pilot program shall be not
3 less than the interest rate on United States Treas-
4 ury securities of a similar maturity to the maturity
5 of the loan on the date of closing on the loan.

6 (3) MATURITY DATE.—The final maturity date
7 of a loan provided under the HIFIA pilot program
8 shall be the date that is 30 years after the date of
9 substantial completion of the applicable eligible
10 project.

11 (4) REPAYMENT.—

12 (A) IN GENERAL.—The Secretary shall es-
13 tablish a repayment schedule for each loan pro-
14 vided under the HIFIA pilot program.

15 (B) COMMENCEMENT.—Repayment of a
16 loan provided under the HIFIA pilot program
17 shall commence on the date of substantial com-
18 pletion of the applicable eligible project for
19 which the loan was provided.

20 (C) DEFERRAL OF REPAYMENT.—If, at
21 any time during the 5-year period beginning on
22 the date of substantial completion of an eligible
23 project, the project is unable to generate suffi-
24 cient revenues in excess of reasonable and nec-
25 essary operating expenses to pay the scheduled

1 loan repayments of principal and interest on the
2 loan, the Secretary may allow the borrower to
3 defer repayment of the loan until the end of
4 that 5-year period.

5 (5) REQUIREMENTS.—

6 (A) CREDITWORTHINESS.—

7 (i) IN GENERAL.—Each obligor with
8 respect to a loan provided for an eligible
9 project under the HIFIA pilot program
10 shall be creditworthy, such that there ex-
11 ists a reasonable prospect of repayment of
12 the principal and interest on the loan, as
13 determined by the Secretary under clause
14 (ii).

15 (ii) REASONABLE PROSPECT OF RE-
16 PAYMENT.—The Secretary shall base a de-
17 termination of whether there is a reason-
18 able prospect of repayment under clause (i)
19 on a comprehensive evaluation of whether
20 the obligor has a reasonable prospect of re-
21 paying the loan for the eligible project, in-
22 cluding evaluation of—

23 (I) the forecast of noncontractual
24 cash flows supported by market pro-
25 jections from reputable sources, as de-

1 terminated by the Secretary, and cash
2 sweeps or other structural enhance-
3 ments;

4 (II) the strength of the contrac-
5 tual terms of an eligible project (if
6 available for the applicable market
7 segment);

8 (III) the projected financial
9 strength of the obligor—

10 (aa) at the time of loan
11 close; and

12 (bb) throughout the loan
13 term, including after the project
14 is completed;

15 (IV) the financial strength of the
16 investors and strategic partners of the
17 obligor, if applicable; and

18 (V) other financial metrics and
19 analyses that are relied on by the pri-
20 vate lending community and nation-
21 ally recognized credit rating agencies,
22 as determined to be appropriate by
23 the Secretary.

24 (B) DEDICATED SOURCE OF REVENUE.—

25 An eligible project for which a loan is provided

1 under the HIFIA pilot program shall have a
2 dedicated source of revenue separate from any
3 financial assistance received under the HIFIA
4 pilot program.

5 (g) USE OF FINANCIAL ASSISTANCE.—

6 (1) IN GENERAL.—A grant or loan provided
7 under the HIFIA pilot program may be used for any
8 eligible project costs.

9 (2) ELIGIBLE ACTIVITIES.—A grant or loan
10 provided under the HIFIA pilot program may be
11 used to carry out any of the following activities with
12 respect to an eligible project:

13 (A) Development phase activities, includ-
14 ing—

- 15 (i) planning;
- 16 (ii) preliminary engineering;
- 17 (iii) design;
- 18 (iv) environmental review;
- 19 (v) revenue forecasting; and
- 20 (vi) other preconstruction activities.

21 (B) Construction, reconstruction, rehabili-
22 tation, and replacement activities, including the
23 training of construction personnel in handling
24 and safety.

25 (C) Acquisition of—

1 (i) real property or an interest in real
2 property; or

3 (ii) equipment.

4 (D) Environmental mitigation activities.

5 (E) Activities relating to construction con-
6 tingencies.

7 (h) FEDERAL REQUIREMENTS.—

8 (1) IN GENERAL.—Nothing in this section su-
9 persedes the applicability of any other requirement
10 under Federal law (including regulations).

11 (2) NEPA.—Federal assistance may only be
12 provided under the HIFIA pilot program for a
13 project that has received an environmental categor-
14 ical exclusion, a finding of no significant impact, or
15 a record of decision under the National Environ-
16 mental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

17 (i) LEAK DETECTION.—Each eligible entity that re-
18 ceives a loan or grant under the HIFIA pilot program
19 shall conduct—

20 (1) a hydrogen leakage monitoring, reporting,
21 and verification (also known as “MRV”) program;
22 and

23 (2) a hydrogen leak detection and repair (also
24 known as “LDAR”) program.

1 (j) MAXIMUM FEDERAL INVOLVEMENT.—The max-
2 imum Federal share of an eligible project for which a loan
3 is provided under the HIFIA pilot program shall not ex-
4 ceed 80 percent of the eligible costs of the project.

5 (k) AMENDMENT.—Section 1703(b)(3) of the Energy
6 Policy Act of 2005 (42 U.S.C. 16513(b)(3)) is amended
7 by striking “Hydrogen fuel” and inserting “Hydrogen
8 technologies applicable to 1 or more end-use sectors, such
9 as power generation, transportation, aviation, storage, in-
10 dustrial, and chemicals, including hydrogen fuel”.

11 (l) TECHNICAL ASSISTANCE.—

12 (1) IN GENERAL.—The Secretary and the Na-
13 tional Laboratories may provide technical assistance
14 under the HIFIA pilot program to assess the grad-
15 ing and readiness of existing infrastructure to trans-
16 port, store, or deliver hydrogen with respect to infor-
17 mal State and regional planning for investments in
18 that grading and readiness.

19 (2) PRIORITY.—In providing technical assist-
20 ance under paragraph (1), the Secretary and the
21 National Laboratories shall prioritize—

22 (A) preexisting infrastructure corridors;

23 (B) geologic storage potential for hydro-
24 gen; and

25 (C) industrial clusters.

1 (m) REGULATORY ASSESSMENT TO ENCOURAGE HY-
2 DROGEN TRANSPORTATION INFRASTRUCTURE DEPLOY-
3 MENT.—Not later than 270 days after the date of enact-
4 ment of this Act, each of the Federal Energy Regulatory
5 Commission, the Surface Transportation Board, and the
6 Administrator of the Pipeline and Hazardous Materials
7 Safety Administration, in coordination with the Secretary,
8 shall—

9 (1) assess jurisdiction over the siting, construc-
10 tion, safety, and regulation of hydrogen transpor-
11 tation infrastructure, including, at a minimum, the
12 blending of hydrogen in natural gas pipelines;

13 (2) if that assessment indicates that additional
14 authority is needed to support the deployment of hy-
15 drogen transportation infrastructure, submit to Con-
16 gress a report describing the needed authority; and

17 (3) identify the eligibility of, and process for,
18 hydrogen transportation infrastructure to receive
19 cost recovery under the HIFIA pilot program
20 through Commission-regulated rates, Board-regu-
21 lated rates, or other applicable regulated rates, as
22 appropriate, for the transportation of hydrogen in
23 interstate commerce.

24 (n) AUTHORIZATION OF APPROPRIATIONS.—There is
25 authorized to be appropriated to the Secretary to carry

- 1 out the HIFIA pilot program \$100,000,000 for each of
- 2 fiscal years 2023 through 2027.

