

118TH CONGRESS  
1ST SESSION

# S. 3439

To strengthen and enhance the competitiveness of cement, concrete, asphalt binder, and asphalt mixture production in the United States through the research, development, demonstration, and commercial application of technologies to reduce emissions from cement, concrete, asphalt binder, and asphalt mixture production, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

DECEMBER 7, 2023

Mr. COONS (for himself and Mr. TILLIS) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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## A BILL

To strengthen and enhance the competitiveness of cement, concrete, asphalt binder, and asphalt mixture production in the United States through the research, development, demonstration, and commercial application of technologies to reduce emissions from cement, concrete, asphalt binder, and asphalt mixture production, 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,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Concrete and Asphalt  
3 Innovation Act of 2023”.

4 **SEC. 2. DEFINITIONS.**

5 In this Act:

6 (1) **BASELINE EMBODIED GREENHOUSE GAS**  
7 **EMISSIONS.**—The term “baseline embodied green-  
8 house gas emissions” has the meaning given the  
9 term in section 458(b) of the Energy Independence  
10 and Security Act of 2007.

11 (2) **COMMERCIALY AVAILABLE.**—The term  
12 “commercially available” has the meaning given the  
13 term in section 458(b) of the Energy Independence  
14 and Security Act of 2007.

15 (3) **EMBODIED GREENHOUSE GAS EMISSIONS.**—  
16 The term “embodied greenhouse gas emissions” has  
17 the meaning given the term in section 458(b) of the  
18 Energy Independence and Security Act of 2007.

19 (4) **ENGINEERING PERFORMANCE STANDARD.**—  
20 The term “engineering performance standard” has  
21 the meaning given the term in section 458(b) of the  
22 Energy Independence and Security Act of 2007.

23 (5) **ENVIRONMENTAL PRODUCT DECLARA-**  
24 **TION.**—The term “environmental product declara-  
25 tion” means a product-specific type III environ-  
26 mental product declaration that—

- 1 (A) conforms to ISO Standard 14025;
- 2 (B) assesses the embodied greenhouse gas  
3 emissions of the product;
- 4 (C) assesses copollutant emissions; and
- 5 (D) allows for environmental impact com-  
6 parisons between different cements, concretes,  
7 asphalt binders, and asphalt mixtures produced  
8 using the same product category rule.

9 (6) LOW-EMISSIONS CEMENT, CONCRETE, AS-  
10 PHALT BINDER, OR ASPHALT MIXTURE.—The term  
11 “low-emissions cement, concrete, asphalt binder, or  
12 asphalt mixture” has the meaning given the term in  
13 section 458(b) of the Energy Independence and Se-  
14 curity Act of 2007.

15 (7) PORTLAND CEMENT.—The term “portland  
16 cement” means any hydraulic cement produced by  
17 pulverizing portland-cement clinker, usually includ-  
18 ing calcium sulfate and other ingredients as identi-  
19 fied in specifications.

20 (8) SECRETARY.—The term “Secretary” means  
21 the Secretary of Energy.

22 (9) TASK FORCE.—The term “Task Force”  
23 means the Interagency Task Force for Concrete and  
24 Asphalt Innovation established under section 7(a).

1 **SEC. 3. LOW-EMISSIONS CEMENT, CONCRETE, ASPHALT**  
2 **BINDER, AND ASPHALT MIXTURE PRODUC-**  
3 **TION RESEARCH PROGRAM.**

4 (a) IN GENERAL.—Subtitle D of title IV of the En-  
5 ergy Independence and Security Act of 2007 (42 U.S.C.  
6 17111 et seq.) is amended by adding at the end the fol-  
7 lowing:

8 **“SEC. 458. LOW-EMISSIONS CEMENT, CONCRETE, ASPHALT**  
9 **BINDER, AND ASPHALT MIXTURE PRODUC-**  
10 **TION RESEARCH PROGRAM.**

11 “(a) PURPOSE.—The purpose of this section is to ad-  
12 vance the research and development of innovative tech-  
13 nologies aimed at—

14 “(1) achieving significant greenhouse gas emis-  
15 sions and copollutant emissions reductions in the  
16 production processes for cement, concrete, asphalt  
17 binder, and asphalt mixture products;

18 “(2) increasing the technological and economic  
19 competitiveness of industry and production in the  
20 United States;

21 “(3) increasing the stability of supply chains  
22 through enhanced domestic production, nearshoring,  
23 and cooperation with allies; and

24 “(4) creating quality domestic jobs.

25 “(b) DEFINITIONS.—In this section:

1           “(1) ALTERNATIVE FUELS.—The term ‘alter-  
2 native fuels’ means any solid, liquid, or gaseous ma-  
3 terial, or any combination of those materials, used to  
4 replace or supplement any portion of fuels used in  
5 combustion or pyrolysis for the production of low-  
6 emissions cement, concrete, asphalt binder, or as-  
7 phalt mixture.

8           “(2) BASELINE EMBODIED GREENHOUSE GAS  
9 EMISSIONS.—The term ‘baseline embodied green-  
10 house gas emissions’ means the reported regional in-  
11 dustry averages of embodied greenhouse gas emis-  
12 sions of cement, concrete, asphalt binder, or asphalt  
13 mixture, as determined by the Secretary under sub-  
14 section (i)(1).

15           “(3) COMMERCIALY AVAILABLE.—The term  
16 ‘commercially available’, with respect to cement, con-  
17 crete, asphalt binder, and asphalt mixture, means  
18 that the cement, concrete, asphalt binder, or asphalt  
19 mixture is, or the component materials of cement,  
20 concrete, asphalt binder, and asphalt mixture are—

21                   “(A) readily and widely available for public  
22 purchase in the United States; and

23                   “(B) produced using a production method  
24 that is widely in use.

1           “(4) ELIGIBLE ENTITY.—The term ‘eligible en-  
2           tity’ means—

3                   “(A) a Federal entity, including a federally  
4                   funded research and development center of the  
5                   Department;

6                   “(B) a State, territory, or possession of  
7                   the United States;

8                   “(C) a municipality of a State or equiva-  
9                   lent geographic area in a territory or possession  
10                  of the United States;

11                  “(D) a State energy office (as defined in  
12                  section 124(a) of the Energy Policy Act of 2005  
13                  (42 U.S.C. 15821(a)));

14                  “(E) a State energy financing institution  
15                  (as defined in section 1701 of the Energy Pol-  
16                  icy Act of 2005 (42 U.S.C. 16511));

17                  “(F) an institution of higher education;

18                  “(G) a nonprofit research institution;

19                  “(H) a private entity;

20                  “(I) any other relevant entity the Secretary  
21                  determines to be appropriate; and

22                  “(J) a partnership or consortium of 2 or  
23                  more entities described in any of subparagraphs  
24                  (A) through (I).

1           “(5) EMBODIED GREENHOUSE GAS EMIS-  
2           SIONS.—The term ‘embodied greenhouse gas emis-  
3           sions’ means greenhouse gas emissions, measured in  
4           global warming potential, generated as a result of  
5           the production of a material, including mining, refin-  
6           ing, manufacturing, and shipping.

7           “(6) ENGINEERING PERFORMANCE STAND-  
8           ARD.—The term ‘engineering performance standard’  
9           means a standard in which the requirements are  
10          stated in terms of required results, with criteria for  
11          verifying compliance rather than specific composi-  
12          tion, design, or procedure.

13          “(7) LOW-EMISSIONS CEMENT, CONCRETE, AS-  
14          PHALT BINDER, OR ASPHALT MIXTURE.—The term  
15          ‘low-emissions cement, concrete, asphalt binder, or  
16          asphalt mixture’ means cement, concrete, asphalt  
17          binder, or asphalt mixture, as determined by the  
18          Secretary under subsection (i)(1)—

19                 “(A) that has substantially lower embodied  
20                 greenhouse gas emissions and copollutant emis-  
21                 sions than the baseline embodied greenhouse  
22                 gas emissions of the cement, concrete, asphalt  
23                 binder, or asphalt mixture, as applicable; and

24                 “(B) the substantially lower embodied  
25                 greenhouse gas emissions and copollutant emis-

1           sions of which are achieved through any com-  
2           bination of—

3                   “(i) production processes using low-  
4                   carbon feedstocks;

5                   “(ii) higher energy efficiency at the  
6                   level of the cement, concrete, asphalt bind-  
7                   er, or asphalt mixture plant;

8                   “(iii) low-carbon fuel substitution at  
9                   the level of the cement, concrete, asphalt  
10                  binder, or asphalt mixture plant;

11                  “(iv) local production of, and use of  
12                  locally sourced material in, the concrete or  
13                  asphalt mixture, resulting in reduced con-  
14                  crete or asphalt mixture delivery miles and  
15                  reduced emissions from transportation;

16                  “(v) the reduction of clinker content  
17                  in the cement component of concrete or the  
18                  substitution of clinker content with less  
19                  carbon-intensive alternative materials, such  
20                  as slag cement, coal ash, natural  
21                  pozzolans, recycled ground-glass pozzolan,  
22                  or other supplementary cementitious mate-  
23                  rial;

24                  “(vi) the reduction of petroleum-based  
25                  asphalt in the asphalt binder component of



1 asphalt mixtures, or the substitution of pe-  
2 troleum-based asphalt with less carbon-in-  
3 tensive alternative materials such as  
4 biobased binder, recycled material, or other  
5 alternative;

6 “(vii) the reduction of cement in con-  
7 crete or asphalt binder in asphalt mixtures  
8 through mixture optimization, including  
9 the use of admixtures;

10 “(viii) the capture, storage, or use of  
11 point source carbon dioxide emissions dur-  
12 ing the cement, concrete, or asphalt binder  
13 production process;

14 “(ix) the use and storage of carbon in  
15 concrete or asphalt mixture materials;

16 “(x) the use of noncarbonate feed-  
17 stocks at the level of the cement plant; or

18 “(xi) other technologies, practices, or  
19 processes determined by the Secretary.

20 “(8) NATIONAL LABORATORY.—The term ‘Na-  
21 tional Laboratory’ has the meaning given the term  
22 in section 2 of the Energy Policy Act of 2005 (42  
23 U.S.C. 15801).

24 “(9) RELEVANT CENTERS.—The term ‘relevant  
25 Centers’ means—

1           “(A) the Turner-Fairbank Highway Re-  
2           search Center;

3           “(B) the William J. Hughes Technical  
4           Center;

5           “(C) the U.S. Army Engineer Research  
6           and Development Center, including the Con-  
7           struction Engineering Research Laboratory;  
8           and

9           “(D) the Technical Service Center of the  
10          Bureau of Reclamation.

11          “(10) TASK FORCE.—The term ‘Task Force’  
12          means the Interagency Task Force for Concrete and  
13          Asphalt Innovation established under section 7(a) of  
14          the Concrete and Asphalt Innovation Act of 2023.

15          “(c) ESTABLISHMENT OF PROGRAM.—Not later than  
16          180 days after the date of enactment of the Concrete and  
17          Asphalt Innovation Act of 2023, the Secretary shall estab-  
18          lish a program of research, development, demonstration,  
19          and commercial application of tools, technologies, and  
20          methods for the production and use of low-emissions ce-  
21          ment, concrete, asphalt binder, or asphalt mixture.

22          “(d) REQUIREMENTS.—In carrying out the program  
23          established under subsection (c), the Secretary shall—

24                  “(1) coordinate the activities carried out under  
25                  that program with, as applicable—

1           “(A) the activities of the Industrial Effi-  
2           ciency and Decarbonization Office of the Office  
3           of Energy Efficiency and Renewable Energy of  
4           the Department, the Advanced Materials and  
5           Manufacturing Technologies Office of the Office  
6           of Energy Efficiency and Renewable Energy of  
7           the Department, the Office of Fossil Energy  
8           and Carbon Management of the Department,  
9           the Office of Manufacturing and Energy Supply  
10          Chains of the Department, the Building Tech-  
11          nologies Office of the Department, the Office of  
12          Clean Energy Demonstrations of the Depart-  
13          ment, the Department of Transportation, the  
14          Department of Defense, and the General Serv-  
15          ices Administration, including activities carried  
16          out pursuant to a collaborative research and de-  
17          velopment partnership described in section 6(a)  
18          of the American Energy Manufacturing Tech-  
19          nical Corrections Act (42 U.S.C. 6351(a));

20           “(B) the activities carried out under sec-  
21          tions 454, 455, and 456; and

22           “(C) activities carried out pursuant to the  
23          national plan for smart manufacturing tech-  
24          nology development and deployment developed

1 under section 6006 of the Energy Act of 2020  
2 (42 U.S.C. 17115a); and

3 “(2) conduct research, development, and dem-  
4 onstration of technologies for the production and use  
5 of low-emissions cement, concrete, asphalt binder,  
6 and asphalt mixtures that have the potential to in-  
7 crease—

8 “(A) domestic production and use of low-  
9 emissions cement, concrete, asphalt binder, and  
10 asphalt mixtures; and

11 “(B) employment in fields relating to that  
12 domestic production and use.

13 “(e) FOCUS AREAS.—In carrying out the program es-  
14 tablished under subsection (c), the Secretary shall focus  
15 on—

16 “(1) carbon capture technologies for cement or  
17 asphalt binder production processes, which may in-  
18 clude—

19 “(A) oxycombustion and chemical looping  
20 technologies;

21 “(B) precombustion technologies;

22 “(C) postcombustion technologies; or

23 “(D) direct carbon dioxide separation tech-  
24 nologies;

1           “(2) alternative materials, technologies, and  
2 processes that—

3           “(A) produce fewer greenhouse gas and co-  
4 pollutant emissions during production, use, or  
5 end use of cement, concrete, asphalt binder, or  
6 asphalt mixtures; and

7           “(B) with respect to quality, durability,  
8 and resilience, provide products that are equiva-  
9 lent to or better than commercially available  
10 products;

11          “(3) medium- and high-temperature heat-gen-  
12 eration technologies used for production of low-emis-  
13 sions cement, asphalt binder, and asphalt mixtures,  
14 which may include—

15           “(A) alternative fuels;

16           “(B) renewable heat-generation and stor-  
17 age technology;

18           “(C) electrification of heating processes; or

19           “(D) other heat-generation and storage  
20 sources;

21          “(4) technologies and practices that minimize  
22 energy and natural resource consumption, which  
23 may include—

24           “(A) designing products that enable reuse,  
25 refurbishment, remanufacturing, or recycling;

1           “(B) minimizing waste, including waste  
2           heat, from cement, concrete, asphalt binder,  
3           and asphalt mixture production processes, in-  
4           cluding through the reuse of waste as a re-  
5           source in other industrial processes for mutual  
6           benefit;

7           “(C) increasing resource efficiency; or

8           “(D) increasing the energy efficiency of ce-  
9           ment, concrete, asphalt binder, or asphalt mix-  
10          ture production processes;

11          “(5) technologies and approaches to reduce co-  
12          pollutants from the production of cement, concrete,  
13          asphalt binder, or asphalt mixtures, including—

14               “(A) sulfur dioxide;

15               “(B) nitrogen oxide;

16               “(C) particulate matter;

17               “(D) carbon monoxide emissions; and

18               “(E) a hazardous air pollutant (as defined  
19               in section 112(a) of the Clean Air Act (42  
20               U.S.C. 7412(a)));

21          “(6) high-performance computing to develop ad-  
22          vanced materials and production processes that may  
23          contribute to the focus areas described in para-  
24          graphs (1) through (5), including—

1           “(A) modeling, simulation, and optimiza-  
2           tion of the design of energy-efficient and sus-  
3           tainable products; and

4           “(B) the use of digital prototyping and ad-  
5           ditive production to enhance product design;  
6           and

7           “(7) technologies that can be retrofitted at ce-  
8           ment, concrete, asphalt binder, or asphalt mixture  
9           plants that represent the most common facility types  
10          in the United States and in other countries.

11         “(f) STRATEGIC PLAN.—

12           “(1) IN GENERAL.—Not later than 180 days  
13           after the date of enactment of the Concrete and As-  
14           phalt Innovation Act of 2023, the Secretary shall de-  
15           velop and submit to the Committee on Energy and  
16           Natural Resources of the Senate and the Committee  
17           on Science, Space, and Technology of the House of  
18           Representatives a 5-year strategic plan identifying  
19           research, development, demonstration, and commer-  
20           cial application goals for the program established  
21           under subsection (c).

22           “(2) CONTENTS.—The strategic plan developed  
23           under paragraph (1) shall—

1           “(A) establish technological and pro-  
2           grammatic goals to achieve the requirements  
3           described in subsection (d);

4           “(B) document existing activities of the  
5           Department relating to low-emissions cement,  
6           concrete, asphalt binder, or asphalt mixtures;

7           “(C) identify existing programs of the De-  
8           partment that—

9                   “(i) relate to the production of low-  
10                  emissions cement, concrete, asphalt binder,  
11                  or asphalt mixtures; and

12                   “(ii) support, or could support, the re-  
13                  search, development, demonstration, and  
14                  commercial application activities described  
15                  in this section, including any demonstra-  
16                  tion projects carried out under subsection  
17                  (g);

18           “(D) to avoid duplication of efforts, incor-  
19           porate findings from—

20                   “(i) the document of the Department  
21                  entitled ‘Industrial Decarbonization Road-  
22                  map’, numbered DOE/EE–2635, and  
23                  dated September 2022; and

24                   “(ii) the document of the Department  
25                  entitled ‘Pathway to Commercial Liftoff:



1 Low-Carbon Cement’, and dated Sep-  
2 tember 2023;

3 “(E) identify any new programs needed to  
4 fully carry out this section;

5 “(F) identify resource needs of the Depart-  
6 ment relating to the research, development, and  
7 demonstration of technologies for the produc-  
8 tion and use of low-emissions cement, concrete,  
9 asphalt binder, and asphalt mixtures;

10 “(G) identify research areas that the pri-  
11 vate sector is unable or unwilling to undertake  
12 due to the cost of, or risks associated with, the  
13 research; and

14 “(H) identify and engage in opportunities  
15 for the Department, National Laboratories, and  
16 relevant Centers to participate in international  
17 standards setting to enhance United States  
18 manufacturing competitiveness.

19 “(3) UPDATES TO PLAN.—Not less frequently  
20 than once every 2 years, the Secretary shall submit  
21 to the Committee on Energy and Natural Resources  
22 of the Senate and the Committee on Science, Space,  
23 and Technology of the House of Representatives an  
24 updated version of the strategic plan developed  
25 under paragraph (1).

1 “(g) DEMONSTRATION INITIATIVE.—

2 “(1) ESTABLISHMENT.—Not later than 180  
3 days after the date of enactment of the Concrete  
4 and Asphalt Innovation Act of 2023, the Secretary,  
5 in consultation with industry partners, institutions  
6 of higher education, environmental nongovernmental  
7 organizations, the Secretary of Transportation, the  
8 Administrator of General Services, National Labora-  
9 tories, and relevant Centers, shall establish, as part  
10 of the program established under subsection (c), an  
11 initiative (referred to in this subsection as the ‘ini-  
12 tiative’) for the demonstration of 1 or more methods  
13 for the production of low-emissions cement, concrete,  
14 asphalt binder, and asphalt mixtures that use ei-  
15 ther—

16 “(A) a single technology; or

17 “(B) a combination of multiple tech-  
18 nologies.

19 “(2) SELECTION OF ELIGIBLE ENTITIES.—

20 “(A) IN GENERAL.—The Secretary shall  
21 select eligible entities to carry out demonstra-  
22 tion projects under the initiative.

23 “(B) REQUIREMENTS.—In selecting eligi-  
24 ble entities to carry out demonstration projects

1 under subparagraph (A), the Secretary, to the  
2 maximum extent practicable, shall—

3 “(i) ensure—

4 “(I) regional diversity among the  
5 eligible entities selected, including by  
6 selecting eligible entities located in  
7 rural areas (as defined in section  
8 343(a) of the Consolidated Farm and  
9 Rural Development Act (7 U.S.C.  
10 1991(a)));

11 “(II) technological diversity  
12 among the eligible entities selected;  
13 and

14 “(III) that the projects carried  
15 out by those eligible entities under the  
16 initiative expand on the existing tech-  
17 nology demonstration programs of the  
18 Department; and

19 “(ii) prioritize the selection of eligible  
20 entities—

21 “(I) based on the extent to which  
22 the projects carried out by the eligible  
23 entities contribute to emissions reduc-  
24 tions; and

1                   “(II) that will carry out projects  
2                   that leverage matching funds from  
3                   non-Federal sources.

4                   “(3) REPORTS.—

5                   “(A) IN GENERAL.—Not less frequently  
6                   than once every 2 years for the duration of the  
7                   initiative, the Secretary shall submit to the  
8                   Committee on Energy and Natural Resources of  
9                   the Senate and the Committee on Science,  
10                  Space, and Technology of the House of Rep-  
11                  resentatives a report that, for the period cov-  
12                  ered by the report—

13                  “(i) describes the activities carried out  
14                  by the Secretary in support of the initia-  
15                  tive;

16                  “(ii) provides a review of the cost-  
17                  competitiveness and other value streams,  
18                  the technology readiness level, and the  
19                  adoption readiness level of each technology  
20                  demonstrated under the initiative;

21                  “(iii) describes the status and out-  
22                  comes of any projects carried out under  
23                  the initiative; and

24                  “(iv) recommends appropriate applica-  
25                  tion of cement, concrete, asphalt binder,

1           and asphalt mixture materials, in consulta-  
2           tion with engineering and design experts  
3           with demonstrated records of utilization of  
4           novel materials in construction.

5           “(B) FINAL REPORT.—If the initiative is  
6           terminated, the Secretary shall submit to the  
7           Committee on Energy and Natural Resources of  
8           the Senate and the Committee on Science,  
9           Space, and Technology of the House of Rep-  
10          resentatives a report assessing the success of,  
11          and any education provided by, the demonstra-  
12          tion projects carried out by any recipients of fi-  
13          nancial assistance under the initiative.

14          “(4) AUTHORIZATION OF APPROPRIATIONS.—  
15          There is authorized to be appropriated to the Sec-  
16          retary to carry out the initiative \$200,000,000 for  
17          the period of fiscal years 2025 through 2029.

18          “(5) TERMINATION.—The Secretary may termi-  
19          nate the initiative if the Secretary determines that  
20          sufficient low-emissions cement, concrete, asphalt  
21          binder, and asphalt mixtures are commercially avail-  
22          able domestically at a price comparable to the price  
23          of cement, concrete, asphalt binder, and asphalt mix-  
24          tures produced through traditional methods of pro-  
25          duction.

1 “(h) TECHNICAL ASSISTANCE PROGRAM.—

2 “(1) IN GENERAL.—The Secretary, in consulta-  
3 tion with the Secretary of Transportation, the Sec-  
4 retary of Commerce (acting through the Director of  
5 the National Institute of Standards and Tech-  
6 nology), the Administrator of General Services, and  
7 the Administrator of the Environmental Protection  
8 Agency, shall provide technical assistance to eligible  
9 entities to carry out an activity described in para-  
10 graph (2) to promote the commercial application of  
11 technologies for the production and use of low-emis-  
12 sions cement, concrete, asphalt binder, or asphalt  
13 mixtures.

14 “(2) ACTIVITIES DESCRIBED.—An activity re-  
15 ferred to in paragraph (1) is—

16 “(A) the updating of local codes, specifica-  
17 tions, and standards to engineering perform-  
18 ance standards;

19 “(B) a lifecycle assessment of the final  
20 product;

21 “(C) an environmental product declaration  
22 (as defined in section 2 of the Concrete and As-  
23 phalt Innovation Act of 2023);

24 “(D) a techno-economic assessment;

1           “(E) an environmental permitting or other  
2 regulatory process;

3           “(F) an evaluation or testing activity; or

4           “(G) any other activity that promotes the  
5 commercial application of technologies devel-  
6 oped through the program established under  
7 subsection (c).

8           “(3) APPLICATIONS.—The Secretary shall seek  
9 applications for technical assistance under this sub-  
10 section—

11           “(A) on a competitive basis; and

12           “(B) on a periodic basis, but not less fre-  
13 quently than once every 12 months.

14           “(4) REGIONAL CENTERS.—The Secretary may  
15 designate or establish 1 or more regional centers to  
16 provide technical assistance to eligible entities to  
17 carry out the activity described in paragraph (2)(A).

18           “(i) DETERMINATION OF EMISSION LEVELS.—

19           “(1) BASELINE EMBODIED GREENHOUSE GAS  
20 EMISSIONS.—The Secretary shall—

21           “(A) determine current baseline embodied  
22 greenhouse gas emissions of cement, concrete,  
23 asphalt binder, and asphalt mixtures, including  
24 a detailed methodology for determining each of  
25 those emissions; and

1           “(B) within 1 year of the date of enact-  
2           ment of the Concrete and Asphalt Innovation  
3           Act of 2023, determine a timeline for regional-  
4           level emissions reductions, to the maximum ex-  
5           tent practicable, taking into consideration—

6                   “(i) potential for greenhouse gas emis-  
7                   sions reductions;

8                   “(ii) feedstock availability;

9                   “(iii) equipment and skilled workforce  
10                  availability;

11                  “(iv) technology and market readiness  
12                  levels of low-emissions cement, concrete,  
13                  asphalt binder, and asphalt mixture tech-  
14                  nologies;

15                  “(v) the regulatory and specification  
16                  landscape; and

17                  “(vi) any other factor, as determined  
18                  by the Secretary.

19           “(2) CONFORMING LOW-EMISSIONS CEMENT,  
20           CONCRETE, ASPHALT BINDER, OR ASPHALT MIX-  
21           TURES FOR DEPARTMENT OF TRANSPORTATION AD-  
22           VANCE PURCHASE COMMITMENTS.—The Secretary  
23           shall establish or update, as applicable, a reasonable  
24           but ambitious threshold, expressed as a percentage-  
25           based delta relative to the current baseline embodied



1 greenhouse gas emissions, for purposes of defining  
2 conforming low-emissions cement, concrete, asphalt  
3 binder, or asphalt mixtures under section 6(b)(2) of  
4 the Concrete and Asphalt Innovation Act of 2023,  
5 which shall be reassessed not less frequently than  
6 once every 2 years.

7 “(3) CONSULTATION.—In carrying out this sub-  
8 section, the Secretary shall consult with the fol-  
9 lowing stakeholders, who shall reflect regional diver-  
10 sity to the maximum extent practicable:

11 “(A) Entities in the cement, concrete, as-  
12 phalt binder, and asphalt mixture sectors, in-  
13 cluding—

14 “(i) ready-mix or site-mixed concrete  
15 producers;

16 “(ii) precast concrete producers;

17 “(iii) portland cement (as defined in  
18 section 2 of the Concrete and Asphalt In-  
19 novation Act of 2023) and other cement  
20 producers;

21 “(iv) aggregate producers;

22 “(v) asphalt binder producers;

23 “(vi) asphalt mixture producers;

1           “(vii) producers of emerging cement,  
2           concrete, asphalt binder, or asphalt mix-  
3           ture solutions; and

4           “(viii) distributors and users of ce-  
5           ment, concrete, asphalt binder, or asphalt  
6           mixture production.

7           “(B) Contracting companies with at least  
8           1 Federal Government contract awarded in the  
9           preceding 5 years.

10          “(C) Contracting companies with at least 1  
11          private sector contract awarded in the pre-  
12          ceding 5 years.

13          “(D) Experts, including from nongovern-  
14          mental organizations, on the environmental im-  
15          pact of cement, concrete, asphalt binder, and  
16          asphalt mixture production in architectural and  
17          nonarchitectural applications, with expertise  
18          in—

19                 “(i) developing codes, specifications,  
20                 and standards for cement, concrete, as-  
21                 phalt binder, and asphalt mixtures;

22                 “(ii) conducting performance tests on  
23                 cement, concrete, asphalt binder, and as-  
24                 phalt mixtures;

1 “(iii) working with the National Insti-  
2 tute of Building Sciences;

3 “(iv) working for State departments  
4 of transportation from different regions of  
5 the United States; and

6 “(v) developing benchmarks for em-  
7 bodied greenhouse gas emissions.

8 “(E) Stakeholders in any other relevant in-  
9 dustries, as determined by the Secretary.

10 “(j) MANUFACTURING USA INSTITUTES.—In car-  
11 rying out this section, the Secretary shall—

12 “(1) support, including through financial assist-  
13 ance provided under subsection (e) of section 34 of  
14 the National Institute of Standards and Technology  
15 Act (15 U.S.C. 278s), Manufacturing USA insti-  
16 tutes established or supported under section 4(d) of  
17 the Concrete and Asphalt Innovation Act of 2023;

18 “(2) leverage the resources of those Manufac-  
19 turing USA institutes; and

20 “(3) integrate the activities carried out under  
21 the program established under subsection (c) with  
22 the activities of those Manufacturing USA institutes.

23 “(k) OTHER FEDERAL AGENCIES.—In carrying out  
24 this section, the Secretary shall coordinate with relevant  
25 officials at other Federal agencies that are carrying out

1 research and development initiatives to increase industrial  
 2 competitiveness and achieve significant greenhouse gas  
 3 emissions reductions in the production of low-emissions ce-  
 4 ment, concrete, asphalt binder, or asphalt mixtures, in-  
 5 cluding relevant officials at the Department of Defense,  
 6 the Department of Transportation, the General Services  
 7 Administration, the Environmental Protection Agency,  
 8 and the National Institute of Standards and Technology.”.

9 (b) CLERICAL AMENDMENT.—The table of contents  
 10 in section 1(b) of the Energy Independence and Security  
 11 Act of 2007 (Public Law 110–140; 121 Stat. 1494; 134  
 12 Stat. 2556; 134 Stat. 2559; 134 Stat. 2560; 135 Stat.  
 13 1067) is amended by adding at the end of the items relat-  
 14 ing to subtitle D of title IV the following:

“Sec. 458. Low-emissions cement, concrete, asphalt binder, and asphalt mixture  
 production research program.”.

15 **SEC. 4. LOW-EMISSIONS CONCRETE AND LOW-EMISSIONS**  
 16 **ASPHALT MANUFACTURING USA INSTITUTES.**

17 (a) DEFINITIONS.—In this section:

18 (1) ELIGIBLE ENTITY.—The term “eligible enti-  
 19 ty” has the meaning given the term in section  
 20 458(b) of the Energy Independence and Security Act  
 21 of 2007 (as added by section 3).

22 (2) MANUFACTURING USA INSTITUTE.—The  
 23 term “Manufacturing USA institute” has the mean-  
 24 ing given the term in section 34(d) of the National

1 Institute of Standards and Technology Act (15  
2 U.S.C. 278s(d)).

3 (3) SECRETARY.—The term “Secretary” means  
4 the Secretary of Commerce, acting through the Di-  
5 rector of the National Institute of Standards and  
6 Technology.

7 (b) PURPOSE.—The purpose of this section is to sup-  
8 port—

9 (1) the development of standardized testing and  
10 technical validation of low-emissions cement, con-  
11 crete, asphalt binder, and asphalt mixtures; and

12 (2) the expansion, reskilling, and upskilling of  
13 the manufacturing workforce to increase employ-  
14 ment in fields relating to the domestic production  
15 and use of low-emissions cement, concrete, asphalt  
16 binder, and asphalt mixtures.

17 (c) CONSIDERATIONS.—In carrying out this section,  
18 the Secretary shall consider strategies for—

19 (1) improving the durability and performance of  
20 cement, concrete, asphalt binder, and asphalt mix-  
21 tures, including low-emissions cement, concrete, as-  
22 phalt binder, and asphalt mixtures;

23 (2) reducing the cost of low-emissions cement,  
24 concrete, asphalt binder, and asphalt mixtures;

1           (3) supporting continuous innovation and emis-  
2           sions reductions in the production of low-emissions  
3           cement, concrete, asphalt binder, and asphalt mix-  
4           tures;

5           (4) increasing employment in fields relating to  
6           the domestic production and use of low-emissions ce-  
7           ment, concrete, asphalt binder, and asphalt mix-  
8           tures; and

9           (5) providing information to satisfy the respon-  
10          sibilities of the Task Force.

11          (d) AUTHORITY TO ESTABLISH OR SUPPORT THE  
12          ESTABLISHMENT OF MANUFACTURING USA INSTITUTES  
13          FOCUSED ON LOW-EMISSIONS CEMENT AND CONCRETE  
14          AND LOW-EMISSIONS ASPHALT BINDER AND MIX-  
15          TURES.—

16           (1) IN GENERAL.—Subject to subsection (g),  
17          the Secretary may, in consultation with the Sec-  
18          retary of Energy, the Secretary of Transportation,  
19          the Secretary of Defense, and the Administrator of  
20          the General Services Administration, establish, or  
21          award financial assistance under section 34(e)(1) of  
22          the National Institute of Standards and Technology  
23          Act (15 U.S.C. 278s(e)(1)) to plan, establish, or  
24          support, 2 Manufacturing USA institutes, 1 for low-

1 emissions cement and concrete and 1 for low-emis-  
2 sions asphalt binder and mixtures that—

3 (A) establish advanced testing capabilities  
4 for properties of low-emissions cement or con-  
5 crete and low-emissions binder or mixtures, re-  
6 spectively, produced by an eligible entity;

7 (B) provide centralized, publicly available  
8 data on the properties of low-emissions cement  
9 or concrete and low-emissions asphalt binder or  
10 mixtures, respectively;

11 (C) support the development and imple-  
12 mentation of education, training, and workforce  
13 recruitment courses, materials, and programs  
14 addressing workforce needs in fields related to  
15 the domestic production and use of low-emis-  
16 sions cement or concrete, and low-emissions as-  
17 phalt binder or mixtures, respectively, through  
18 training and education programs at all appro-  
19 priate education levels; and

20 (D) provide collected information to the  
21 Task Force.

22 (2) COORDINATION.—In addition to subpara-  
23 graphs (A) through (D) of paragraph (1), the Sec-  
24 retary shall require the Manufacturing USA insti-  
25 tutes established, planned, or supported under such

1 paragraph to coordinate with the research program  
2 established under section 458(c) of the Energy Inde-  
3 pendence and Security Act of 2007, as added by sec-  
4 tion 3, to carry out activities focused on researching,  
5 developing, demonstrating, and deploying low-emis-  
6 sions cement, concrete, asphalt binder, and asphalt  
7 mixtures.

8 (3) SUPPORT AND ASSISTANCE FOR STATES.—

9 (A) IN GENERAL.—The Manufacturing  
10 USA institutes established, planned, or sup-  
11 ported under paragraph (1) shall, pursuant to  
12 a request from a State agency for testing sup-  
13 port, guidance, or resources, provide the State  
14 agency with such testing support, guidance, or  
15 resources in the form of technical assistance or  
16 a grant.

17 (B) CONDITION.—The Secretary shall re-  
18 quire, as a condition on the receipt of a grant  
19 under subparagraph (A), that the recipient of  
20 the grant make publicly available all data col-  
21 lected by the recipient using amounts from the  
22 grant.

23 (e) SELECTION OF CEMENT, CONCRETE, ASPHALT  
24 BINDER, OR ASPHALT MIXTURES FOR TESTING.—In se-  
25 lecting cement, concrete, asphalt binder, or asphalt mix-



1 tures from eligible entities for testing by the Manufac-  
2 turing USA institutes established, planned, or supported  
3 under subsection (d)(1), the Manufacturing USA insti-  
4 tutes shall—

5           (1) seek to achieve regional diversity in the ce-  
6           ment, concrete, asphalt binder, or asphalt mixtures  
7           from eligible entities selected for testing;

8           (2) seek to achieve technological diversity in the  
9           cement, concrete, asphalt binder, or asphalt mixtures  
10          from eligible entities selected for testing;

11          (3) prioritize cement, concrete, asphalt binder,  
12          or asphalt mixtures from eligible entities that lever-  
13          age matching funds from non-Federal sources; and

14          (4) prioritize projects that would have the  
15          greatest reduction in emissions on a lifecycle basis.

16          (f) ALTERNATIVES.—The Secretary may carry out  
17 this section by—

18           (1) leveraging resources of relevant existing  
19           Manufacturing USA institutes;

20           (2) integrating program activities into a rel-  
21           evant existing Manufacturing USA institute; or

22           (3) establishing new Manufacturing USA insti-  
23           tutes in accordance with subsection (d).

1 (g) FUNDING.—The Secretary shall carry out this  
2 section using amounts otherwise available to the Sec-  
3 retary.

4 **SEC. 5. FEDERAL HIGHWAY ADMINISTRATION.**

5 (a) PERFORMANCE-BASED LOW-EMISSIONS TRANS-  
6 PORTATION MATERIALS GRANTS.—

7 (1) PURPOSE.—The purpose of this subsection  
8 is to encourage States to improve State-level cement,  
9 concrete, asphalt binder, and asphalt mixture speci-  
10 fications and standards to facilitate the purchase of  
11 low-emissions cement, concrete, asphalt binder, or  
12 asphalt mixtures.

13 (2) ESTABLISHMENT.—The Administrator of  
14 the Federal Highway Administration (referred to in  
15 this section as the “Administrator”) shall provide to  
16 States—

17 (A) reimbursement for the additional cost  
18 of using low-emissions cement, concrete, asphalt  
19 binder, and asphalt mixtures used in highway  
20 projects of the State;

21 (B) incentives for the acquisition of low-  
22 emissions cement, concrete, asphalt binder, and  
23 asphalt mixtures for use in highway projects of  
24 the State; and

1 (C) technical assistance to update the spec-  
2 ifications and standards of the State to be per-  
3 formance-based specifications and standards.

4 (3) ELIGIBILITY.—To be eligible to receive re-  
5 imbursement or incentives under this subsection, a  
6 State shall have in effect, as appropriate, special  
7 provisions, specifications, or standards, such as engi-  
8 neering performance standards, that facilitate the  
9 purchase of low-emissions cement, concrete, asphalt  
10 binder, and asphalt mixtures.

11 (4) COORDINATION.—In carrying out this sub-  
12 section, the Administrator shall leverage the Every  
13 Day Counts Initiative of the Department of Trans-  
14 portation to promote the commercialization of low-  
15 emissions cement, concrete, asphalt binder, and as-  
16 phalt mixtures.

17 (5) AUTHORIZATION OF APPROPRIATIONS.—  
18 There is authorized to be appropriated to the Sec-  
19 retary to carry out this subsection \$15,000,000 for  
20 the period of fiscal years 2025 through 2027.

21 (b) TIMELY APPROVAL OF CEMENT, CONCRETE, AS-  
22 PHALT BINDER, OR ASPHALT MIXTURES.—

23 (1) IN GENERAL.—Not later than 180 days  
24 after the date of enactment of this Act, the Adminis-  
25 trator shall establish a procedure under which States

1       may submit new low-emissions cement, concrete, as-  
2       phalt binder, or asphalt mixtures for timely approval  
3       for use in highways projects of the State.

4           (2) SUBMISSION.—To be considered for ap-  
5       proval under the procedure established under para-  
6       graph (1), a State shall submit an application to the  
7       Administrator at such time, in such manner, and  
8       containing such information as the Administrator  
9       determines to be necessary.

10          (3) DECISION DEADLINE.—Not later than 180  
11       days after the date on which the Administrator re-  
12       ceives an application under paragraph (2), the Ad-  
13       ministrators shall—

14           (A) approve the application; or

15           (B) deny the application.

16          (4) APPROVAL.—Low-emissions cement, con-  
17       crete, asphalt binder, or asphalt mixtures approved  
18       under paragraph (3)(A) may be used in any highway  
19       project of the State.

20          (5) WRITTEN REASONS FOR DENIAL.—If the  
21       Administrator denies an application under para-  
22       graph (3)(B), the Administrator shall provide the  
23       State a written explanation for the denial.

24 **SEC. 6. ADVANCE PURCHASE COMMITMENT AUTHORITY.**

25          (a) PURPOSE.—The purposes of this section are—

1           (1) to authorize the Secretary to directly pur-  
2           chase or contractually guarantee the direct purchase  
3           of conforming low-emissions cement, concrete, as-  
4           phalt binder, or asphalt mixtures; and

5           (2) to encourage continuous innovation and  
6           long-term emissions reductions in the production of  
7           concrete, cement, asphalt binder, and asphalt mix-  
8           tures.

9           (b) DEFINITIONS.—In this section:

10           (1) ADVANCE PURCHASE COMMITMENT.—The  
11           term “advance purchase commitment” means a  
12           binding commitment from the Department of Trans-  
13           portation to purchase, 3 or more years in the future,  
14           from a private entity, a specified minimum quantity  
15           of conforming low-emissions cement, concrete, as-  
16           phalt binder, or asphalt mixtures at a specified min-  
17           imum price with the objective of establishing market  
18           demand for the conforming low-emissions cement,  
19           concrete, asphalt binder, or asphalt mixtures.

20           (2) CONFORMING LOW-EMISSIONS CEMENT,  
21           CONCRETE, ASPHALT BINDER, OR ASPHALT MIX-  
22           TURE.—The term “conforming low-emissions ce-  
23           ment, concrete, asphalt binder, or asphalt mixture”  
24           means a low-emissions cement, concrete, asphalt  
25           binder, or asphalt mixture that—

1 (A) meets or exceeds the threshold estab-  
2 lished by the Secretary of Energy under section  
3 458(i)(2) of the Energy Independence and Se-  
4 curity Act of 2007 that is in effect on the date  
5 on which the applicable advance purchase com-  
6 mitment is awarded under the program; and

7 (B) meets all applicable technical specifica-  
8 tions established by the Secretary.

9 (3) PROGRAM.—The term “program” means  
10 the program established under subsection (c).

11 (4) SECRETARY.—The term “Secretary” means  
12 the Secretary of Transportation.

13 (c) ESTABLISHMENT OF PROGRAM.—Not later than  
14 180 days after the date of enactment of this Act, the Sec-  
15 retary shall establish a program for awarding, on a com-  
16 petitive basis, advance purchase commitments.

17 (d) REQUIREMENT.—An advance purchase commit-  
18 ment shall be awarded under the program only after—

19 (1) a private entity submits to the Secretary—

20 (A) a statement describing the quantity  
21 and cost of the conforming low-emissions ce-  
22 ment, concrete, asphalt binder, or asphalt mix-  
23 ture for which the advance purchase commit-  
24 ment is sought; and

1 (B)(i) an environmental product declara-  
2 tion;

3 (ii) in cases in which a private entity does  
4 not have sufficient production to generate an  
5 environmental product declaration, a lifecycle  
6 assessment consistent with ISO 14044 of the  
7 International Organization for Standardization;  
8 or

9 (iii) a preliminary environmental product  
10 declaration, which shall be verified within 1  
11 year of fulfillment of delivery of materials pur-  
12 suant to the advance purchase commitment;  
13 and

14 (2) the Secretary, based on those submissions—

15 (A) confirms that the embodied greenhouse  
16 gas emissions of the conforming low-emissions  
17 cement, concrete, asphalt binder, or asphalt  
18 mixture meet or exceed the threshold described  
19 in subsection (b)(2)(A); and

20 (B) based on the submission under para-  
21 graph (1)(B) otherwise verifies that the low-  
22 emissions cement, concrete, asphalt binder, or  
23 asphalt mixture is a conforming low-emissions  
24 cement, concrete, asphalt binder, or asphalt  
25 mixture.

1 (e) PREFERENCE CRITERIA.—In carrying out the  
2 program, the Secretary shall prioritize the award of ad-  
3 vance purchase commitments based on the following fac-  
4 tors:

5 (1) The degree of greenhouse gas emissions re-  
6 duced during or in connection with the production of  
7 the applicable conforming low-emissions cement, con-  
8 crete, asphalt binder, or asphalt mixture.

9 (2) The anticipated suitability of the con-  
10 forming low-emissions cement, concrete, asphalt  
11 binder, or asphalt mixture for its intended use.

12 (3) The potential of the advance purchase com-  
13 mitment to increase the availability of, or financing  
14 for, conforming low-emissions cement, concrete, as-  
15phalt binder, or asphalt mixtures.

16 (4) The utilization or mineralization of carbon  
17 dioxide in the conforming low-emissions cement, con-  
18 crete, or asphalt mixture, subject to the condition  
19 that the utilization or mineralization of the carbon  
20 dioxide does not lead to positive net carbon dioxide  
21 emissions.

22 (f) ASSIGNABILITY.—A contract entered into or ma-  
23 terial purchased pursuant to this section may be assigned  
24 to a State department of transportation or a local trans-  
25 portation authority at the discretion of the Secretary.



1 (g) CLARIFICATION.—Any update or revision to the  
2 threshold established by the Secretary of Energy under  
3 section 458(i)(2) of the Energy Independence and Secu-  
4 rity Act of 2007 shall not affect or otherwise apply to any  
5 advance purchase commitment awarded under the pro-  
6 gram before the date of that update or revision.

7 (h) FUNDING.—The Secretary shall carry out this  
8 section using amounts otherwise available to the Sec-  
9 retary.

10 **SEC. 7. INTERAGENCY TASK FORCE FOR CONCRETE AND**  
11 **ASPHALT INNOVATION.**

12 (a) IN GENERAL.—The Secretary, in coordination  
13 with the Secretary of Transportation, the Administrator  
14 of General Services, the Secretary of Defense, the Director  
15 of the National Institute of Standards and Technology,  
16 and the Administrator of the Environmental Protection  
17 Agency, shall establish a task force, to be known as the  
18 “Interagency Task Force for Concrete and Asphalt Inno-  
19 vation”.

20 (b) OBJECTIVES.—In carrying out the duties of the  
21 Task Force, the Task Force shall consider strategies for—

22 (1) improving the durability and performance of  
23 low-emissions cement, concrete, asphalt binder, or  
24 asphalt mixtures;

1           (2) reducing the cost of low-emissions cement,  
2 concrete, asphalt binder, or asphalt mixtures;

3           (3) supporting continuous innovation and emis-  
4 sions reductions in the production of low-emissions  
5 cement, concrete, asphalt binder, or asphalt mix-  
6 tures;

7           (4) increasing employment in fields related to  
8 the domestic production of low-emissions cement,  
9 concrete, asphalt binder, or asphalt mixtures; and

10          (5) ensuring a trained workforce in fields re-  
11 lated to the domestic production and use of low-  
12 emissions cement, concrete, asphalt binder, or as-  
13phalt mixtures.

14          (c) COMPOSITION.—The Task Force shall be com-  
15 posed of 2 members from each of—

16           (1) the Department of Energy;

17           (2) the Department of Transportation;

18           (3) the General Services Administration;

19           (4) the Department of Defense;

20           (5) the National Institute of Standards and  
21 Technology; and

22           (6) the Environmental Protection Agency.

23          (d) CONSULTATION.—In carrying out the duties of  
24 the Task Force, the Secretary shall consult with the fol-

1 lowing stakeholders, who shall reflect regional diversity to  
2 the maximum extent practicable:

3 (1) Entities in the cement, concrete, asphalt  
4 binder, and asphalt mixture sectors, including—

5 (A) ready-mix or site-mixed concrete pro-  
6 ducers;

7 (B) precast concrete producers;

8 (C) portland cement and other cement pro-  
9 ducers;

10 (D) aggregate producers;

11 (E) asphalt binder producers;

12 (F) asphalt mixture producers;

13 (G) producers of emerging cement, con-  
14 crete, asphalt binder, or asphalt mixture solu-  
15 tions; and

16 (H) distributors and users of cement, con-  
17 crete, asphalt binder, or asphalt mixture pro-  
18 duction.

19 (2) Contracting companies with at least 1 Fed-  
20 eral Government contract awarded in the preceding  
21 5 years.

22 (3) Contracting companies with at least 1 pri-  
23 vate sector contract awarded in the preceding 5  
24 years.

1 (4) Experts, including from nongovernmental  
2 organizations, on the environmental impact of ce-  
3 ment, concrete, asphalt binder, and asphalt mixture  
4 production in architectural and nonarchitectural ap-  
5 plications, with expertise in—

6 (A) developing codes, specifications, and  
7 standards for cement, concrete, asphalt binder,  
8 and asphalt mixtures;

9 (B) conducting performance tests on ce-  
10 ment, concrete, asphalt binder, and asphalt  
11 mixtures;

12 (C) working with the National Institute of  
13 Building Sciences;

14 (D) working for State departments of  
15 transportation from different regions of the  
16 United States; and

17 (E) developing benchmarks for embodied  
18 greenhouse gas emissions.

19 (5) Stakeholders in any other relevant indus-  
20 tries, as determined by the Secretary.

21 (e) RESPONSIBILITIES.—The Task Force shall—

22 (1) provide recommendations to the Secretary  
23 on—

24 (A) the use of engineering performance  
25 standards for low-emissions cement, concrete,

1 asphalt binder, and asphalt mixtures, including  
2 taking into account lessons learned from the re-  
3 imbursement and incentives provided under sec-  
4 tion 5(a)(2);

5 (B) creating guidelines and best practices  
6 for the testing and evaluation of low-emissions  
7 cement, concrete, asphalt binder, and asphalt  
8 mixtures, including taking into account lessons  
9 learned from the Manufacturing USA institutes  
10 planned, established, or supported under section  
11 4(d);

12 (C) improving the product category rules  
13 governing the creation of relevant environ-  
14 mental product declarations for low-emissions  
15 cement, concrete, asphalt binder, and asphalt  
16 mixture, including taking into account lessons  
17 learned from the technical assistance program  
18 established under section 458(h) of the Energy  
19 Independence and Security Act of 2007; and

20 (D) incentives that would encourage the  
21 use of low-emissions cement, concrete, asphalt  
22 binder, and asphalt mixtures, including taking  
23 into account lessons learned from the advance  
24 purchase commitment program established  
25 under section 6(c);

1           (2) coordinate meetings and facilitate discus-  
2           sions through forums such as roundtables, work-  
3           shops, or conferences to inform the recommenda-  
4           tions provided under paragraph (1); and

5           (3) host briefings and provide updates to—

6                   (A) the Committee on Energy and Natural  
7           Resources of the Senate; and

8                   (B) the Committee on Science, Space, and  
9           Technology of the House of Representatives.

10          (f) REPORT.—Once every 2 years, the Secretary, in  
11          consultation with the Task Force, shall submit to Con-  
12          gress a report that describes—

13                (1)(A) each of the recommendations made  
14          under subsection (e)(1); and

15                (B) the response of the Secretary to each of  
16          those recommendations, including how best to imple-  
17          ment each recommendation;

18                (2) the determinations made by the Secretary  
19          under section 458(i)(1) of the Energy Independence  
20          and Security Act of 2007;

21                (3) the threshold established under section  
22          458(i)(2) of the Energy Independence and Security  
23          Act of 2007, including a justification for that  
24          threshold;

1           (4) changes to State and local codes and speci-  
2           fications facilitated by the Task Force during the  
3           period covered by the report; and

4           (5) meetings with cement, concrete, asphalt  
5           binder, and asphalt mixture producers, contractors,  
6           engineers, academics, State and local government of-  
7           ficials, or any other relevant stakeholders coordi-  
8           nated by the Task Force during the period covered  
9           by the report.

10          (g) TERMINATION.—The Secretary may terminate  
11          the Task Force if the Secretary determines that sufficient  
12          low-emissions cement, concrete, asphalt binder, and as-  
13          phalt mixtures are commercially available domestically at  
14          a price comparable to the price of cement, concrete, as-  
15          phalt binder, and asphalt mixtures produced through tra-  
16          ditional methods of production.

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