(§ 3171 et seq.) of title XXXI of div. C of Pub. L. 112–239, Jan. 2, 2013, 126 Stat. 2211. For complete classification of this Act to the Code, see Short Title of 2013 Amendment note set out under section 2011 of this title and Tables.

Section 16279a of this title (as added by section 2003), referred to in subsec. (b)(2)(D)(iii), is section 16279a of this title as added by section 2003 of div. Z of Pub. L. 116–260.

CODIFICATION

Section was enacted as part of the Energy Act of 2020, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

Statutory Notes and Related Subsidiaries

DEVELOPMENT, QUALIFICATION, AND LICENSING OF ADVANCED NUCLEAR FUEL CONCEPTS

Pub. L. 118–67, div. B, title IV, § 404, July 9, 2024, 138 Stat. 1469, provided that:

''(a) IN GENERAL.—The [Nuclear Regulatory] Commission shall establish an initiative to enhance preparedness and coordination with respect to the qualification and licensing of advanced nuclear fuel.

''(b) AGENCY COORDINATION.—Not later than 180 days after the date of enactment of this Act [July 9, 2024], the Commission and the Secretary of Energy shall enter into a memorandum of understanding—

''(1) to share technical expertise and knowledge through—

''(A) enabling the testing and demonstration of accident tolerant fuels for existing commercial nuclear reactors and advanced nuclear reactor fuel concepts to be proposed and funded, in whole or in part, by the private sector;

''(B) operating a database to store and share data and knowledge relevant to nuclear science and engineering between Federal agencies and the private sector;

''(C) leveraging expertise with respect to safety analysis and research relating to advanced nuclear fuel; and

''(D) enabling technical staff to actively observe and learn about technologies, with an emphasis on identification of additional information needed with respect to advanced nuclear fuel; and

''(2) to ensure that—

''(A) the Department of Energy has sufficient technical expertise to support the timely research, development, demonstration, and commercial application of advanced nuclear fuel;

''(B) the Commission has sufficient technical expertise to support the evaluation of applications for licenses, permits, and design certifications and other requests for regulatory approval for advanced nuclear fuel;

''(C)(i) the Department of Energy maintains and develops the facilities necessary to enable the timely research, development, demonstration, and commercial application by the civilian nuclear industry of advanced nuclear fuel; and

''(ii) the Commission has access to the facilities described in clause (i), as needed; and

''(D) the Commission consults, as appropriate, with the modeling and simulation experts at the Office of Nuclear Energy of the Department of Energy, at the National Laboratories, and within industry fuel vendor teams in cooperative agreements with the Department of Energy to leverage physics-based computer modeling and simulation capabilities.

''(c) REPORT.—

''(1) IN GENERAL.—Not later than 2 years after the date of enactment of this Act, the Commission shall submit to the appropriate committees of Congress [Committee on Energy and Commerce of the House of Representatives and Committee on Environment and Public Works of the Senate] a report describing the efforts of the Commission under subsection (a), including—

''(A) an assessment of the preparedness of the Commission to review and qualify for use—

''(i) accident tolerant fuel;

''(ii) ceramic cladding materials;

''(iii) fuels containing silicon carbide;

''(iv) high-assay, low-enriched uranium fuels;

''(v) molten-salt based liquid fuels;

''(vi) fuels derived from spent nuclear fuel or depleted uranium; and

''(vii) other related fuel concepts, as determined by the Commission;

''(B) activities planned or undertaken under the memorandum of understanding described in subsection (b);

''(C) an accounting of the areas of research needed with respect to advanced nuclear fuel; and

''(D) any other challenges or considerations identified by the Commission.

''(2) CONSULTATION.—In developing the report under paragraph (1), the Commission shall seek input from—

''(A) the Secretary of Energy;

''(B) National Laboratories;

''(C) the nuclear energy industry;

''(D) technology developers;

''(E) nongovernmental organizations; and

''(F) other public stakeholders.''

[For definitions of terms used in section 404 of Pub. L. 118–67, set out above, see section 2 of Pub. L. 118–67, set out as a note under section 2011 of this title.]

RECEIPTS TO BE CREDITED TO AMERICAN ENERGY INDEPENDENCE FUND

Pub. L. 118–42, div. D, title III, § 312(a), Mar. 9, 2024, 138 Stat. 210, provided in part: ''That notwithstanding 31 U.S.C. 3302, receipts from the sale or transfer of LEU and HALEU or from any other transaction in connection with the amounts repurposed, transferred, or otherwise made available pursuant to this section shall hereafter be credited to the 'American Energy Independence Fund' as discretionary offsetting collections and shall be available, for the same purposes as funds repurposed or transferred pursuant to this section, to the extent and in the amounts provided in advance in appropriations Acts: *Provided further*, That receipts may hereafter be collected from transactions entered into pursuant to section 2001(a)(2)(F)(iii) of the Energy Act of 2020 (42 U.S.C. 16281(a)(2)(F)(iii)) and, notwithstanding 31 U.S.C. 3302, receipts from any transaction entered into pursuant to section 2001(a)(2)(F)(ii) and (iii) of such Act (42 U.S.C. 16281(a)(2)(F)(ii) and (iii)) shall hereafter be credited to the 'American Energy Independence Fund' as discretionary offsetting collections and shall be available, for the same purposes as funds repurposed or transferred pursuant to this section, to the extent and in the amounts provided in advance in appropriations Acts''.

§ 16282. U.S. nuclear fuel security initiative

(a) Short title

This section may be cited as the ''Nuclear Fuel Security Act of 2023''.

(b) Sense of Congress

It is the sense of Congress that—

(1) the Department should—

(A) support increased domestic production of low-enriched uranium; and

(B) accelerate efforts to establish a domestic high-assay, low-enriched uranium enrichment capability; and

(2) if domestic enrichment of high-assay, low-enriched uranium will not be commercially available at the scale needed in time to meet the needs of the advanced nuclear reac-

tor demonstration projects of the Department, the Secretary shall consider and implement, as necessary—

(A) all viable options to make high-assay, low-enriched uranium produced from inventories owned by the Department available in a manner that is sufficient to maximize the potential for the Department to meet the needs and schedules of advanced nuclear reactor developers, without impacting existing Department missions, until such time that commercial enrichment and deconversion capability for high-assay, low-enriched uranium exists at a scale sufficient to meet future needs; and

(B) all viable options for partnering with countries that are allies or partners of the United States to meet those needs and schedules until that time.

(c) Objectives

The objectives of this section are—

(1) to support domestic production of low-enriched uranium;

(2) to expeditiously increase domestic production of high-assay, low-enriched uranium by an annual quantity, and in such form, determined by the Secretary to be sufficient to meet the needs of—

(A) advanced nuclear reactor developers; and

(B) the consortium;

(3) to ensure the availability of domestically produced, converted, enriched, deconverted, and reduced uranium in a quantity determined by the Secretary, in consultation with U.S. nuclear energy companies, to be sufficient to address a reasonably anticipated supply disruption;

(4) to address gaps and deficiencies in the domestic production, conversion, enrichment, deconversion, and reduction of uranium by partnering with countries that are allies or partners of the United States if domestic options are not practicable;

(5) to ensure that, in the event of a supply disruption in the nuclear fuel market, a reserve of nuclear fuels is available to serve as a backup supply to support the nuclear nonproliferation and civil nuclear energy objectives of the Department, including collaborative research and development activities with other Federal agencies;

(6) to support enrichment, deconversion, and reduction technology deployed in the United States; and

(7) to ensure that, until such time that domestic enrichment and deconversion of high-assay, low-enriched uranium is commercially available at the scale needed to meet the needs of advanced nuclear reactor developers, the Secretary considers and implements, as necessary—

(A) all viable options to make high-assay, low-enriched uranium produced from inventories owned by the Department available in a manner that is sufficient to maximize the potential for the Department to meet the needs and schedules of advanced nuclear reactor developers; and

(B) all viable options for partnering with countries that are allies or partners of the United States to meet those needs and schedules.

(d) Definitions

In this section:

(1) Advanced nuclear reactor

The term ''advanced nuclear reactor'' has the meaning given the term in section 16271(b) of this title.

(2) Associated entity

The term ''associated entity'' means an entity that—

(A) is owned, controlled, or dominated by—

(i) the government of a country that is an ally or partner of the United States; or

(ii) an associated individual; or

(B) is organized under the laws of, or otherwise subject to the jurisdiction of, a country that is an ally or partner of the United States, including a corporation that is incorporated in such a country.

(3) Associated individual

The term ''associated individual'' means an alien who is a national of a country that is an ally or partner of the United States.

(4) Consortium

The term ''consortium'' means the consortium established under section 16281(a)(2)(F) of this title.

(5) Department

The term ''Department'' means the Department of Energy.

(6) High-assay, low-enriched uranium; HALEU

The term ''high-assay, low-enriched uranium'' or ''HALEU'' means high-assay low-enriched uranium (as defined in section 16281(d) of this title).

(7) Low-enriched uranium; LEU

The term ''low-enriched uranium'' or ''LEU'' means each of—

(A) low-enriched uranium (as defined in section 2297h) of this title; and

(B) low-enriched uranium (as defined in section 2297h–10a(a) of this title).

(8) Programs

The term ''Programs'' means—

(A) the Nuclear Fuel Security Program established under subsection (e)(1);

(B) the American Assured Fuel Supply Program of the Department; and

(C) the HALEU for Advanced Nuclear Reactor Demonstration Projects Program established under subsection (e)(3).

(9) Secretary

The term ''Secretary'' means the Secretary of Energy.

(10) U.S. nuclear energy company

The term ''U.S. nuclear energy company'' means a company that—

(A) is organized under the laws of, or otherwise subject to the jurisdiction of, the United States; and

(B) is involved in the nuclear energy industry.

(e) Establishment and expansion of programs

The Secretary, consistent with the objectives described in subsection (c), shall—

(1) establish a program, to be known as the ''Nuclear Fuel Security Program'', to increase the quantity of HALEU and, if determined to be necessary after completion of a market evaluation, LEU produced by U.S. nuclear energy companies;

(2) expand the American Assured Fuel Supply Program of the Department to ensure the availability of domestically produced, converted, enriched, deconverted, and reduced uranium in the event of a supply disruption; and

(3) establish a program, to be known as the ''HALEU for Advanced Nuclear Reactor Demonstration Projects Program''—

(A) to maximize the potential for the Department to meet the needs and schedules of advanced nuclear reactor developers until such time that commercial enrichment and deconversion capability for HALEU exists in the United States at a scale sufficient to meet future needs; and

(B) where practicable, to partner with countries that are allies or partners of the United States to meet those needs and schedules until that time.

(f) Nuclear Fuel Security Program

(1) In general

In carrying out the Nuclear Fuel Security Program, the Secretary—

(A) shall—

(i) if determined to be necessary or appropriate based on the completion of a market evaluation, not later than 90 days after December 22, 2023, take actions, including cost-shared financial agreements, milestone-based payments, or other mechanisms, to support commercial availability of LEU and to promote diversity of supply in domestic uranium mining, conversion, enrichment, and deconversion capacity and technologies, including new capacity, among U.S. nuclear energy companies;

(ii) not later than 180 days after December 22, 2023, enter into 2 or more contracts with members of the consortium to begin acquiring not less than 20 metric tons per year of HALEU by December 31, 2027 (or the earliest operationally feasible date thereafter), from U.S. nuclear energy companies;

(iii) utilize only uranium produced, converted, enriched, deconverted, and reduced in—

(I) the United States; or

(II) if domestic options are not practicable, a country that is an ally or partner of the United States; and

(iv) to the maximum extent practicable, ensure that the use of domestic uranium utilized as a result of that program does not negatively affect the economic operation of nuclear reactors in the United States; and

(B)(i) may not make commitments under this subsection (including cooperative agreements (used in accordance with section 6305 of title 31), purchase agreements, guarantees, leases, service contracts, or any other type of commitment) for the purchase or other acquisition of HALEU or LEU unless funds are specifically provided for those purposes in advance in appropriations Acts enacted after March 9, 2024; and

(ii) may make a commitment described in clause (i) only—

(I) if the full extent of the anticipated costs stemming from the commitment is recorded as an obligation at the time that the commitment is made; and

(II) to the extent of that up-front obligation recorded in full at that time.

(2) Considerations

In carrying out paragraph (1)(A)(ii), the Secretary shall consider and, if appropriate, implement—

(A) options to ensure the quickest availability of commercially enriched HALEU, including—

(i) partnerships between 2 or more commercial enrichers; and

(ii) utilization of up to 10-percent enriched uranium as feedstock in demonstration-scale or commercial HALEU enrichment facilities;

(B) options to partner with countries that are allies or partners of the United States to provide LEU and HALEU for commercial purposes;

(C) options that provide for an array of HALEU—

(i) enrichment levels;

(ii) output levels to meet demand; and

(iii) fuel forms, including uranium metal and oxide; and

(D) options—

(i) to replenish, as necessary, Department stockpiles of uranium that were intended to be downblended for other purposes, but were instead used in carrying out activities under the HALEU for Advanced Nuclear Reactor Demonstration Projects Program;

(ii) to continue supplying HALEU to meet the needs of the recipients of an award made pursuant to the funding opportunity announcement of the Department numbered DE–FOA–0002271 for Pathway 1, Advanced Reactor Demonstrations; and

(iii) to make HALEU available to other advanced nuclear reactor developers and other end-users.

(3) Avoidance of market disruptions

In carrying out the Nuclear Fuel Security Program, the Secretary, to the extent practicable and consistent with the purposes of that program, shall not disrupt or replace market mechanisms by competing with U.S. nuclear energy companies.

(g) Expansion of the American Assured Fuel Supply Program

The Secretary, in consultation with U.S. nuclear energy companies, shall—

(1) expand the American Assured Fuel Supply Program of the Department by merging the operations of the Uranium Reserve Program of the Department with the American Assured Fuel Supply Program; and

(2) in carrying out the American Assured Fuel Supply Program of the Department, as expanded under paragraph (1)—

(A) maintain, replenish, diversify, or increase the quantity of uranium made available by that program in a manner determined by the Secretary to be consistent with the purposes of that program and the objectives described in subsection (c);

(B) utilize only uranium produced, converted, enriched, deconverted, and reduced in—

(i) the United States; or

(ii) if domestic options are not practicable, a country that is an ally or partner of the United States;

(C) make uranium available from the American Assured Fuel Supply, subject to terms and conditions determined by the Secretary to be reasonable and appropriate;

(D) refill and expand the supply of uranium in the American Assured Fuel Supply, including by maintaining a limited reserve of uranium to address a potential event in which a domestic or foreign recipient of uranium experiences a supply disruption for which uranium cannot be obtained through normal market mechanisms or under normal market conditions; and

(E) take other actions that the Secretary determines to be necessary or appropriate to address the purposes of that program and the objectives described in subsection (c).

(h) HALEU for Advanced Nuclear Reactor Demonstration Projects Program

(1) Activities

On enactment of this Act, the Secretary shall immediately accelerate and, as necessary, initiate activities to make available from inventories or stockpiles owned by the Department and made available to the consortium, HALEU for use in advanced nuclear reactors that cannot operate on uranium with lower enrichment levels or on alternate fuels, with priority given to the awards made pursuant to the funding opportunity announcement of the Department numbered DE–FOA–0002271 for Pathway 1, Advanced Reactor Demonstrations, with additional HALEU to be made available to other advanced nuclear reactor developers, as the Secretary determines to be appropriate.

(2) Quantity

In carrying out activities under this subsection, the Secretary shall consider and implement, as necessary, all viable options to make HALEU available in quantities and forms sufficient to maximize the potential for the Department to meet the needs and schedules of advanced nuclear reactor developers, including by seeking to make available—

(A) by September 30, 2024, not less than 3 metric tons of HALEU;

(B) by December 31, 2025, not less than an additional 8 metric tons of HALEU; and

(C) by June 30, 2026, not less than an additional 10 metric tons of HALEU.

(3) Factors for consideration

In carrying out activities under this subsection, the Secretary shall take into consideration—

(A) options for providing HALEU from a stockpile of uranium owned by the Department, including—

(i) uranium that has been declared excess to national security needs during or prior to fiscal year 2023;

(ii) uranium that—

(I) directly meets the needs of advanced nuclear reactor developers; but

(II) has been previously used or fabricated for another purpose;

(iii) uranium that can meet the needs of advanced nuclear reactor developers after removing radioactive or other contaminants that resulted from previous use or fabrication of the fuel for research, development, demonstration, or deployment activities of the Department, including activities that reduce the environmental liability of the Department by accelerating the processing of uranium from stockpiles designated as waste;

(iv) uranium from a high-enriched uranium stockpile (excluding stockpiles intended for national security needs), which can be blended with lower assay uranium to become HALEU to meet the needs of advanced nuclear reactor developers; and

(v) uranium from stockpiles intended for other purposes (excluding stockpiles intended for national security needs), but for which uranium could be swapped or replaced in time in such a manner that would not negatively impact the missions of the Department;

(B) options for expanding, or establishing new, capabilities or infrastructure to support the processing of uranium from Department inventories;

(C) options for accelerating the availability of HALEU from HALEU enrichment demonstration projects of the Department;

(D) options for providing HALEU from domestically enriched HALEU procured by the Department through a competitive process pursuant to the Nuclear Fuel Security Program established under subsection (e)(1);

(E) options to replenish, as needed, Department stockpiles of uranium made available pursuant to subparagraph (A) with domestically enriched HALEU procured by the Department through a competitive process pursuant to the Nuclear Fuel Security Program established under subsection (e)(1); and

(F) options that combine 1 or more of the approaches described in subparagraphs (A) through (E) to meet the deadlines described in paragraph (2).

(4) Limitations

(A) Certain services

The Secretary shall not barter or otherwise sell or transfer uranium in any form in exchange for services relating to—

(i) the final disposition of radioactive waste from uranium that is the subject of a contract for sale, resale, transfer, or lease under this subsection; or

(ii) environmental cleanup activities.

(B) Certain commitments

In carrying out activities under this subsection, the Secretary—

(i) may not make commitments under this subsection (including cooperative agreements (used in accordance with section 6305 of title 31), purchase agreements, guarantees, leases, service contracts, or any other type of commitment) for the purchase or other acquisition of HALEU or LEU unless funds are specifically provided for those purposes in advance in appropriations Acts enacted after March 9, 2024; and

(ii) may make a commitment described in clause (i) only—

(I) if the full extent of the anticipated costs stemming from the commitment is recorded as an obligation at the time that the commitment is made; and

(II) to the extent of that up-front obligation recorded in full at that time.

(5) Sunset

The authority of the Secretary to carry out activities under this subsection shall terminate on the earlier of—

(A) the date on which the Secretary notifies Congress that the HALEU needs of advanced nuclear reactor developers can be fully met by commercial HALEU suppliers in the United States, as determined by the Secretary, in consultation with U.S. nuclear energy companies; and

(B) September 30, 2034.

(i) Domestic sourcing considerations

(1) In general

Except as provided in paragraph (2), the Secretary may only carry out an activity in connection with 1 or more of the Programs if—

(A) the activity promotes manufacturing in the United States associated with uranium supply chains; or

(B) the activity relies on resources, materials, or equipment developed or produced—

(i) in the United States; or

(ii) in a country that is an ally or partner of the United States by—

(I) the government of that country;

(II) an associated entity; or

(III) a U.S. nuclear energy company.

(2) Waiver

The Secretary may waive the requirements of paragraph (1) with respect to an activity if the Secretary determines a waiver to be necessary to achieve 1 or more of the objectives described in subsection (c).

(j) Reasonable compensation

In carrying out activities under this section, the Secretary shall ensure that any LEU and HALEU made available by the Secretary under 1 or more of the Programs is subject to reasonable compensation, taking into account the fair market value of the LEU or HALEU and the purposes of this section.

(k) Nuclear Regulatory Commission

The Nuclear Regulatory Commission shall prioritize and expedite consideration of any action related to the Programs to the extent permitted under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) and related statutes.

***(l)* USEC Privatization Act**

The requirements of section 3112(d)(2) of the USEC Privatization Act (42 U.S.C. 2297h–10(d)(2)) shall not apply to activities related to the Programs.

(m) National security needs

The Secretary shall only make available to a member of the consortium under this section for commercial use or use in a demonstration project material that the President has determined is not necessary for national security needs during or prior to fiscal year 2023, subject to the condition that the material made available shall not include any material that the Secretary determines to be necessary for the National Nuclear Security Administration or any critical mission of the Department.

(n) International agreements

This section shall be applied in a manner consistent with the obligations of the United States under international agreements.

***(o)* Report on civil nuclear credit program**

Not later than 180 days after December 22, 2023, the Secretary shall submit to the appropriate committees of Congress a report that identifies the anticipated funding requirements for the civil nuclear credit program described in section 18753 of this title, taking into account—

(1) the zero-emission nuclear power production credit authorized by section 45U of title 26; and

(2) any increased fuel costs associated with the use of domestic fuel that may arise from the implementation of that program.

(Pub. L. 118–31, div. C, title XXXI, § 3131, Dec. 22, 2023, 137 Stat. 795; Pub. L. 118–42, div. D, title III, § 312(c), Mar. 9, 2024, 138 Stat. 211.)

Editorial Notes

REFERENCES IN TEXT

Enactment of this Act, referred to in subsec. (h)(1), means the enactment of Pub. L. 118–31, which was approved Dec. 22, 2023.

The Atomic Energy Act of 1954, referred to in subsec. (k), is act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, § 1, 68 Stat. 919, which is classified principally to chapter 23 (§ 2011 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

CODIFICATION

Section is comprised of section 3131 of Pub. L. 118–31. Pars. (1) and (2) of subsec. (p) of section 3131 of Pub. L. 118–31 amended sections 19351 and 16274 of this title, respectively.

Section was enacted as the Nuclear Fuel Security Act of 2023, and also as part of the National Defense Authorization Act for Fiscal Year 2024, and not as part of the Energy Policy Act of 2005 which comprises this chapter.

AMENDMENTS

2024—Subsec. (f)(1)(B)(i). Pub. L. 118–42, § 312(c)(1), amended cl. (i) generally. Prior to amendment, cl. (i)

read as follows: ''may not make commitments under this subsection (including cooperative agreements (used in accordance with section 6305 of title 31), purchase agreements, guarantees, leases, service contracts, or any other type of commitment) for the purchase or other acquisition of HALEU or LEU unless—

''(I) funds are specifically provided for those purposes in advance in appropriations Acts enacted after December 22, 2023; or

''(II) the commitment is funded entirely by funds made available to the Secretary from the account described in subsection (j)(2)(B); and''.

Subsec. (h)(4)(B)(i). Pub. L. 118–42, §312(c)(1), amended cl. (i) generally. Prior to amendment, cl. (i) read as follows: ''may not make commitments under this subsection (including cooperative agreements (used in accordance with section 6305 of title 31), purchase agreements, guarantees, leases, service contracts, or any other type of commitment) for the purchase or other acquisition of HALEU or LEU unless—

''(I) funds are specifically provided for those purposes in advance in appropriations Acts enacted after December 22, 2023; or

''(II) the commitment is funded entirely by funds made available to the Secretary from the account described in subsection (j)(2)(B); and''.

Subsec. (j). Pub. L. 118–42, §312(c)(2), amended subsec. (j) generally. Prior to amendment, subsec. (j) consisted of pars. (1) and (2) relating to reasonable compensation for LEU and HALEU and deposit of revenues from the sale or transfer of certain fuel feed material into a revolving fund.

PART F—FOSSIL ENERGY

§ 16291. Fossil energy

(a) Establishment

(1) In general

The Secretary shall carry out research, development, demonstration, and commercial application programs in fossil energy, including activities under this part, with the goal of improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption.

(2) Objectives

The programs described in paragraph (1) shall take into consideration the following objectives:

(A) Increasing the energy conversion efficiency of all forms of fossil energy through improved technologies.

(B) Decreasing the cost of all fossil energy production, generation, and delivery.

(C) Promoting diversity of energy supply.

(D) Decreasing the dependence of the United States on foreign energy supplies.

(E) Improving United States energy security.

(F) Decreasing the environmental impact of energy-related activities, including technology development to reduce emissions of carbon dioxide and associated emissions of heavy metals within coal combustion residues and gas streams resulting from fossil fuel use and production.

(G) Increasing the export of fossil energy-related equipment, technology, including emissions control technologies, and services from the United States.

(H) Decreasing the cost of emissions control technologies for fossil energy production, generation, and delivery.

(I) Significantly lowering greenhouse gas emissions for all fossil fuel production, generation, delivery, and utilization technologies.

(J) Developing carbon removal and utilization technologies, products, and methods that result in net reductions in greenhouse gas emissions, including direct air capture and storage, and carbon use and reuse for commercial application.

(K) Improving the conversion, use, and storage of carbon oxides produced from fossil fuels.

(L) Reducing water use, improving water reuse, and minimizing surface and subsurface environmental impact in the development of unconventional domestic oil and natural gas resources.

(3) Priority

In carrying out the objectives described in subparagraphs (F) through (K) of paragraph (2), the Secretary shall prioritize activities and strategies that have the potential to significantly reduce emissions for each technology relevant to the applicable objective and the international commitments of the United States.

(b) Authorization of appropriations

There are authorized to be appropriated to the Secretary to carry out fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this part—

(1) $611,000,000 for fiscal year 2007;
(2) $626,000,000 for fiscal year 2008; and
(3) $641,000,000 for fiscal year 2009.

(c) Allocations

From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 16292[1] of this title—

(A) $367,000,000 for fiscal year 2007;
(B) $376,000,000 for fiscal year 2008; and
(C) $394,000,000 for fiscal year 2009.

(2) For activities under section 16294 of this title—

(A) $20,000,000 for fiscal year 2007;
(B) $25,000,000 for fiscal year 2008; and
(C) $30,000,000 for fiscal year 2009.

(3) For activities under section 16296 of this title—

(A) $1,500,000 for fiscal year 2007; and
(B) $450,000 for each of fiscal years 2008 and 2009.

(4) For the Office of Arctic Energy under section 7144d of this title $25,000,000 for each of fiscal years 2007 through 2009.

(d) Extended authorization

There are authorized to be appropriated to the Secretary for the Office of Arctic Energy established under section 7144d of this title $25,000,000 for each of fiscal years 2010 through 2012.

(e) Limitations

(1) Uses

None of the funds authorized under this section may be used for Fossil Energy Environ-

[1] See References in Text note below.