

113TH CONGRESS
2D SESSION

S. _____

To prohibit the export from the United States of certain electronic waste,
and for other purposes.

IN THE SENATE OF THE UNITED STATES

_____ introduced the following bill; which was read twice
and referred to the Committee on _____

A BILL

To prohibit the export from the United States of certain
electronic waste, 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 “Responsible Elec-
5 tronics Recycling Act”.

6 **SEC. 2. ELECTRONIC WASTE EXPORT RESTRICTIONS.**

7 (a) AMENDMENT.—Subtitle C of the Solid Waste
8 Disposal Act (42 U.S.C. 6921 et seq.) is amended by add-
9 ing at the end the following new section:

1 **“SEC. 3025. ELECTRONIC WASTE EXPORT RESTRICTIONS.**

2 “(a) IN GENERAL.—Beginning on the date that is 30
3 months after the date of enactment of this section, no per-
4 son shall export restricted electronic waste to a country
5 described in subsection (e).

6 “(b) DEFINITIONS; RULE OF CONSTRUCTION.—For
7 purposes of this section:

8 “(1) CONSIGNEE.—The term ‘consignee’ means
9 the ultimate repair, refurbishment, treatment, stor-
10 age, or disposal facility in a receiving country to
11 which restricted electronic waste will be sent.

12 “(2) COVERED ELECTRONIC EQUIPMENT.—

13 “(A) IN GENERAL.—The term ‘covered
14 electronic equipment’ means the following used
15 items, whole or in fragments, including parts,
16 components, or assemblies thereof:

17 “(i) Computers.

18 “(ii) Central processing units.

19 “(iii) Mobile computers (including
20 notebooks, netbooks, tablets, and e-book
21 readers).

22 “(iv) Computer accessories (including
23 input devices, webcams, speakers, data
24 storage devices, servers, and monitors).

25 “(v) Televisions (including portable
26 televisions and portable DVD players).

1 “(vi) Video display devices (including
2 digital picture frames and portable video
3 devices).

4 “(vii) Digital imaging devices (includ-
5 ing printers, copiers, facsimile machines,
6 image scanners, and multifunction ma-
7 chines).

8 “(viii) Television peripheral devices
9 (including video cassette recorders, DVD
10 players, video game systems, game control-
11 lers, signal converter boxes, and cable and
12 satellite receivers).

13 “(ix) Digital cameras and projectors.

14 “(x) Digital audio players.

15 “(xi) Telephones and electronic com-
16 munication equipment (including cellular
17 phones and wireless Internet communica-
18 tion devices).

19 “(xii) Networking devices (including
20 routers, network cards, modems, and
21 hubs).

22 “(xiii) Audio equipment.

23 “(xiv) Portable video game systems.

24 “(xv) Personal digital assistants.

1 “(xvi) Portable global positioning sys-
2 tem navigation devices.

3 “(xvii) Other used electronic products
4 the Administrator determines to be similar
5 under the procedures promulgated in ac-
6 cordance with subsection (c).

7 “(B) EXCEPTION.—The term ‘covered elec-
8 tronic equipment’ shall not include parts of a
9 motor vehicle.

10 “(3) RESTRICTED ELECTRONIC WASTE.—

11 “(A) IN GENERAL.—The term ‘restricted
12 electronic waste’ means—

13 “(i) items of covered electronic equip-
14 ment that include, contain, are derived
15 from, or consist of—

16 “(I) cathode ray tubes or cathode
17 ray tube glass in any form, or cathode
18 ray tube phosphor residues or dusts in
19 any form;

20 “(II) a lamp or other device con-
21 taining mercury phosphor;

22 “(III) batteries containing—

23 “(aa) lead, cadmium, or
24 mercury; or

1 “(bb) organic solvents exhib-
2 iting the characteristic of ignit-
3 ability, as defined in section
4 261.21 of title 40, Code of Fed-
5 eral Regulations;

6 “(IV) switches or any other de-
7 vices containing mercury;

8 “(V) hexavalent chromium;

9 “(VI) other than batteries de-
10 scribed in subclause (III), items con-
11 taining antimony, barium, cadmium,
12 lead, thallium, beryllium, arsenic, or
13 selenium, including—

14 “(aa) circuit boards;

15 “(bb) printer drums;

16 “(cc) liquid crystal displays;

17 “(dd) flatscreen glass; and

18 “(ee) light emitting diodes;

19 or

20 “(ii) any other covered electronic
21 equipment, or materials derived therefrom,
22 containing any other toxic material, in ele-
23 mental or compound form, identified by
24 the Administrator under subsection (c).

1 “(B) EXCEPTIONS.—The term ‘restricted
2 electronic waste’ shall not apply to items de-
3 scribed in this subparagraph.

4 “(i) DE MINIMIS.—Covered electronic
5 equipment described in subparagraphs
6 (A)(i)(VI) and (A)(ii), including separated
7 component streams (such as plastics or
8 metals), which does not exceed de minimis
9 levels set by the Administrator under sub-
10 section (d).

11 “(ii) REUSE.—Covered electronic
12 equipment that is—

13 “(I) tested, pursuant to sub-
14 section (i)(1), prior to export and
15 found to be—

16 “(aa) functional for the pur-
17 pose for which the equipment
18 was designed, or, in the case of
19 multifunction devices, fully func-
20 tional for at least one of the pri-
21 mary purposes for which the
22 equipment was designed; and

23 “(bb) appropriately pack-
24 aged for shipment to prevent the
25 equipment from losing

1 functionality due to damage dur-
2 ing transit; and

3 “(II) appropriately labeled or
4 marked pursuant to subsection
5 (i)(3)(A).

6 “(iii) CERTAIN CATHODE RAY TUBE
7 GLASS.—Furnace-ready cathode ray tube
8 glass cullet, cleaned of all phosphors, that
9 the competent authority in the importing
10 country declares in writing is not waste, to
11 be used as—

12 “(I) a direct feedstock in a lead-
13 glass manufacturing furnace; or

14 “(II) another feedstock applica-
15 tion that does not require further
16 processing or preparation other than
17 quality control.

18 “(iv) WARRANTIES.—Customer re-
19 turns, to point of sale, to original equip-
20 ment manufacturers, or to contractual
21 warranty collectors, of recently purchased
22 covered electronic equipment—

23 “(I) that is either—

1 “(aa) under original equip-
2 ment manufacturer warranty to
3 customers; or

4 “(bb) under warranty from
5 the original design manufacturer
6 or original component manufac-
7 turer to the original equipment
8 manufacturer, or otherwise re-
9 turned by the original purchaser
10 of the electronic equipment, due
11 to defect or customer dissatisfac-
12 tion, and the manufacturer ac-
13 cepts such returns for the pur-
14 poses of repair or replacement in
15 order to return to the customer a
16 functional working product or
17 part of the same type and model,
18 except that products and parts
19 covered in this item shall not in-
20 clude—

21 “(AA) covered elec-
22 tronic equipment accepted
23 for return from individuals
24 or businesses under general
25 takeback, recycling, trade-in

1 (for purposes of recycling,
2 disposal, sales promotions,
3 or obtaining credit for prod-
4 uct purchases or leases) or
5 buy-back programs, events,
6 or policies designed to col-
7 lect used or waste electronic
8 equipment;

9 “(BB) covered elec-
10 tronic equipment returned at
11 the end of leases to cus-
12 tomers; or

13 “(CC) covered elec-
14 tronic equipment collected
15 by asset recovery programs;
16 and

17 “(II) where any export of such
18 covered electronic equipment is to a
19 country from whose competent au-
20 thority the Administrator receives
21 written consent pursuant to sub-
22 section (h)(1).

23 “(v) RECALLS.—Recalls of covered
24 electronic equipment by an original equip-
25 ment manufacturer, original design manu-

1 facturer, or original component manufac-
2 turer where—

3 “(I) the covered electronic equip-
4 ment is subject to recall notice issued
5 by the Consumer Product Safety
6 Commission or other pertinent Fed-
7 eral authority;

8 “(II) the original design manu-
9 facturer or original component manu-
10 facturer requires the defective covered
11 electronic equipment to be physically
12 returned to that manufacturer as a
13 term of the warranty; and

14 “(III) any export of recalled cov-
15 ered electronic equipment is to a
16 country from whose competent au-
17 thority the Administrator receives
18 written consent pursuant to sub-
19 section (h)(1).

20 “(4) RULE OF CONSTRUCTION REGARDING
21 CHEMICAL ELEMENTS.—Any reference to a chemical
22 element shall be construed to be a reference to that
23 element in compound or elemental form.

24 “(c) ADDITIONAL COVERED ELECTRONIC EQUIP-
25 MENT AND RESTRICTED MATERIALS.—Not later than 18

1 months after the date of enactment of this section, the
2 Administrator shall, after notice and opportunity for pub-
3 lic comment, and after consultation with appropriate Fed-
4 eral and State agencies, develop and promulgate proce-
5 dures for identifying—

6 “(1) similar electronic equipment to add to the
7 list of covered electronic equipment under subsection
8 (b)(2); and

9 “(2) additional restricted toxic materials to add
10 to the list in subsection (b)(3)(A)(ii), the presence of
11 which in covered electronic equipment poses a poten-
12 tial hazard to human health or the environment.

13 Such procedures shall include a method for any interested
14 party to propose a new product or material for review by
15 the Administrator.

16 “(d) DE MINIMIS LEVELS.—Not later than 18
17 months after the date of enactment of this section, the
18 Administrator shall, after notice and opportunity for pub-
19 lic comment, and after consultation with appropriate Fed-
20 eral and State agencies, develop and promulgate proce-
21 dures for identifying de minimis levels for restricted elec-
22 tronic waste described in subparagraphs (A)(i)(VI) and
23 (A)(ii) of subsection (b)(3), below which such waste is de-
24 termined by the Administrator not to pose a potential haz-
25 ard to human health or the environment.

1 “(e) COUNTRIES TO WHICH PROHIBITION AP-
2 PLIES.—The countries referred to in subsection (a) are all
3 countries which are not—

4 “(1) members of the Organisation for Economic
5 Co-operation and Development or the European
6 Union; or

7 “(2) Liechtenstein.

8 “(f) NOTICE TO ADMINISTRATOR.—

9 “(1) IN GENERAL.—Except as provided in para-
10 graph (2), no person shall export covered electronic
11 equipment described in subsection (b)(3)(B) to a
12 country described in subsection (e) unless, not later
13 than 60 days before the initial export shipment, such
14 person transmits to the Administrator written notice
15 of an intended export. Such a notification may cover
16 export activities extending over a maximum of 12
17 months for the same type of covered electronic
18 equipment, exported to the same facility via the
19 same transit countries. The notification shall include
20 the following information:

21 “(A) The name, mailing address, telephone
22 number, and if applicable, the Environmental
23 Protection Agency or Resource Conservation
24 and Recovery Act identification number.

1 “(B) Documentation of licensing of the ex-
2 porter under subsection (g).

3 “(C) The name and site address of the
4 consignee and any alternate consignee.

5 “(D) A statement from the exporter that
6 includes—

7 “(i) a description of the type and total
8 quantity of covered electronic equipment
9 that will be exported to the consignee;

10 “(ii) the estimated frequency or rate
11 at which such covered electronic equipment
12 is to be exported, and the period of time
13 over which such covered electronic equip-
14 ment is to be exported;

15 “(iii) all points of entry to and depart-
16 ure from each country through which the
17 covered electronic equipment will pass in
18 transit;

19 “(iv) a description of the means by
20 which each shipment of the covered elec-
21 tronic equipment will be transported, in-
22 cluding the mode of transportation and
23 type or types of container; and

24 “(v) a description of the manner in
25 which the covered electronic equipment will

1 be treated, stored, or disposed of in the re-
2 ceiving country.

3 “(E) A list of all transit countries through
4 which the covered electronic equipment will be
5 transported, and a description of the approxi-
6 mate length of time the covered electronic
7 equipment will remain in each country and the
8 nature of its handling while there.

9 “(2) EXCEPTION.—The requirements of para-
10 graph (1) shall not apply with respect to exports of
11 covered electronic equipment described in subsection
12 (b)(3)(B)(i), or exports of covered electronic equip-
13 ment described in subsection (b)(3)(B)(ii).

14 “(g) LICENSES.—In order to export covered elec-
15 tronic equipment to a country described in subsection (e)
16 under the exceptions to restricted electronic waste in sub-
17 section (b)(3)(B), an entity shall obtain a license for such
18 export that is issued by the Administrator in accordance
19 with regulations issued under subsection (i)(2).

20 “(h) ADDITIONAL EXPORT CONDITIONS.—

21 “(1) WARRANTIES AND RECALLS.—

22 “(A) IN GENERAL.—No person shall ex-
23 port covered electronic equipment to a country
24 described in subsection (e) under the exceptions

1 to restricted electronic waste in subsections
2 (b)(3)(B)(iv) or (v) unless—

3 “(i) the export is made by an original
4 equipment manufacturer or its contractual
5 agent to the original design manufacturer
6 or original component manufacturer’s site
7 of last assembly, or to a company con-
8 tracted to make warranty repairs, for the
9 purposes of business credit to the original
10 equipment manufacturer, repair or refur-
11 bishment and subsequent reuse, or replace-
12 ment;

13 “(ii) the original equipment manufac-
14 turer has a presence and assets in the
15 United States; and

16 “(iii) the person who exports the cov-
17 ered electronic equipment—

18 “(I) keeps copies of normal busi-
19 ness records, such as contracts, dem-
20 onstrating that each shipment of ex-
21 ported covered electronic equipment is
22 intended for repair or refurbishment
23 and subsequent reuse, or replacement,
24 which documentation shall be retained

1 for a period of at least 3 years after
2 the date of export; and

3 “(II) submits an annual report to
4 the Administrator on the amount and
5 types of waste resulting from the re-
6 furbishment or replacement process,
7 and how it was disposed of or recy-
8 cled, which shall include—

9 “(aa) number and weight of
10 units of products returned by the
11 original equipment manufacturer
12 for repair, refurbishment, or re-
13 placement listed by category and
14 country of destination; and

15 “(bb) the covered electronic
16 equipment, or materials derived
17 therefrom, sent onward to fur-
18 ther reuse, disposal, or recycling
19 following repair, refurbishment,
20 or replacement, listed by weight,
21 a description of the wastes, and
22 the ultimate country destination.

23 “(B) ACKNOWLEDGMENT OF CONSENT.—

24 “(i) REQUIREMENT.—No person shall
25 export covered electronic equipment to a

1 country described in subsection (e) under
2 the exceptions to restricted electronic waste
3 in subsections (b)(3)(B)(iv) or (v) until the
4 Administrator—

5 “(I) obtains the written consent
6 of the competent authority of the re-
7 ceiving country, and of each country
8 through which the covered electronic
9 equipment will pass in transit; and

10 “(II) transmits to the exporter
11 an Acknowledgment of Consent re-
12 flecting receipt of each country’s con-
13 sent.

14 “(ii) COUNTRY NOTIFICATION.—In co-
15 operation with other appropriate agencies,
16 the Administrator shall provide notification
17 in writing of an intended export submitted
18 under subsection (f) to the receiving coun-
19 try and any transit countries.

20 “(iii) CONSENT AND EXPORTER NOTI-
21 FICATION.—When the receiving country
22 and all transit countries consent in writing
23 to the receipt or transit of the covered elec-
24 tronic equipment, the Administrator shall
25 transmit an Acknowledgment of Consent to

1 the exporter. The consent from a receiving
2 or transit country may be for a notice of
3 multiple shipments or a specified duration
4 as described in subsection (f). The exporter
5 shall attach a copy of the Acknowledgment
6 of Consent to the shipping papers or equiv-
7 alent documents to ensure that the Ac-
8 knowledgment of Consent accompanies the
9 shipment of covered electronic equipment.

10 “(C) WITHDRAWAL OF CONSENT.—Where
11 the receiving country or a transit country ob-
12 jects to receipt or transit of the covered elec-
13 tronic equipment, or withdraws a prior consent,
14 the Administrator shall notify the exporter in
15 writing.

16 “(2) REUSE.—No person shall export covered
17 electronic equipment to a country described in sub-
18 section (e) under the exception to restricted elec-
19 tronic waste in subsection (b)(3)(B)(ii) unless such
20 covered electronic equipment is accompanied by doc-
21 umentation that is available for review, including—

22 “(A) documentation of licensing of the ex-
23 porter under subsection (g); and

1 “(B) a declaration signed by an officer or
2 designated representative of the exporter assert-
3 ing that such equipment—

4 “(i) was tested, pursuant to sub-
5 section (i)(1), after it was removed from
6 service, or after it was repaired or refur-
7 bished, and is functional in accordance
8 with the requirements of subsection
9 (b)(3)(B)(ii); and

10 “(ii) is being exported for the purpose
11 of direct reuse, and not for recycling or
12 final disposal.

13 “(3) DE MINIMIS EXPORTS.—No person shall
14 export covered electronic equipment described in
15 subsection (b)(3)(B)(i) unless such equipment is ac-
16 companied by documentation of licensing of the ex-
17 porter under subsection (g).

18 “(4) CERTAIN TRANSACTIONS.—In the case of
19 a routed export transaction of covered electronic
20 equipment under the exceptions to restricted elec-
21 tronic waste in subsection (b)(3)(B) where the ex-
22 porter of record is a Foreign Principle Party in In-
23 terest (FFPI), then the U.S. Principle Party in In-
24 terest (USPPI) is responsible for compliance with

1 the requirements of this section, including the licens-
2 ing requirements under subsection (g).

3 “(i) REGULATIONS.—Not later than 18 months after
4 the date of enactment of this section, the Administrator
5 shall issue regulations for carrying out this section, includ-
6 ing the following:

7 “(1) Testing requirements for covered electronic
8 equipment proposed to be exported pursuant to the
9 exception to restricted electronic waste in subsection
10 (b)(3)(B)(ii).

11 “(2) Establishing a process for licensing entities
12 under subsection (g), including requirements that
13 entities proposing to export covered electronic equip-
14 ment under the exceptions to restricted electronic
15 waste in subsection (b)(3)(B) must meet to obtain a
16 license, including documentation that—

17 “(A) the exporter has an adequate physical
18 presence in the United States, as determined by
19 the Administrator, in order to be able to phys-
20 ically manage the equipment being exported;
21 and

22 “(B) with respect to covered electronic
23 equipment that is being exported for reuse pur-
24 suant to the exception to restricted electronic
25 waste in subsection (b)(3)(B)(ii), the exporter

1 has procedures and controls in place to ensure
2 that adequate testing, pursuant to paragraph
3 (1), will occur to determine the functionality of
4 such equipment, in accordance with the require-
5 ments of such subsection (b)(3)(B)(ii).

6 “(3) In consultation with the appropriate Fed-
7 eral agency or agencies, provisions for an efficient
8 export control regime which will allow for—

9 “(A) requiring a person exporting under
10 this section to use appropriate labeling or
11 marking, distinguishing among—

12 “(i) covered electronic equipment as
13 permitted under this section;

14 “(ii) restricted electronic waste de-
15 scribed in this section; and

16 “(iii) tested working covered electronic
17 equipment as permitted under this section;
18 and

19 “(B) enforcement mechanisms, tests, and
20 procedures in coordination with enforcement
21 procedures administered by other appropriate
22 Federal agencies, including—

23 “(i) procedures to ensure that exports
24 of covered electronic equipment under the
25 exception to restricted electronic waste in

1 subsection (b)(3)(B)(ii) without proper
2 documentation required under subsection
3 (h)(2) shall not proceed out of the port;
4 and

5 “(ii) procedures whereby entities who
6 obtain a license for export under sub-
7 section (g) will forfeit such license for vio-
8 lation of this section.

9 “(4) Establishing a registry of violators, where-
10 by any person or entity found to be exporting re-
11 stricted electronic waste in violation of this section
12 shall be listed on a public registry on a website
13 maintained by the Administrator for a period of 5
14 years after each violation.”.

15 (b) TABLE OF CONTENTS AMENDMENT.—The table
16 of contents for the Solid Waste Disposal Act is amended
17 by adding after the item relating to section 3024 the fol-
18 lowing new item:

“See 3025. Electronic waste export restrictions.”.

19 **SEC. 3. ENFORCEMENT.**

20 (a) CRIMINAL PENALTIES.—Section 3008(d) of the
21 Solid Waste Disposal Act (42 U.S.C. 6928(d)) is amend-
22 ed—

23 (1) by striking “or” at the end of paragraph
24 (6);

1 (2) by inserting “or” at the end of paragraph
2 (7)(B); and

3 (3) by inserting after paragraph (7) the fol-
4 lowing new paragraph:

5 “(8) knowingly exports restricted electronic
6 waste in violation of section 3025;”.

7 (b) INSPECTIONS.—Section 3007(a) of the Solid
8 Waste Disposal Act (42 U.S.C. 6927(a)) is amended—

9 (1) by inserting “or restricted electronic
10 wastes” after “or has handled hazardous wastes”;
11 and

12 (2) by inserting “or restricted electronic
13 wastes” after “or other place where hazardous
14 wastes”.

15 **SEC. 4. CRITICAL MINERALS AND RARE EARTH ELEMENTS**

16 **RECYCLING RESEARCH.**

17 (a) DEFINITIONS.—In this section:

18 (1) ADMINISTRATOR.—The term “Adminis-
19 trator” means the Administrator of the Environ-
20 mental Protection Agency.

21 (2) CRITICAL MINERALS.—The term “critical
22 mineral” means any of the following chemical ele-
23 ments in any physical form or chemical combination:

24 (A) Antimony.

25 (B) Beryllium.

24

- 1 (C) Cobalt.
- 2 (D) Fluorspar.
- 3 (E) Gallium.
- 4 (F) Germanium.
- 5 (G) Graphite.
- 6 (H) Indium.
- 7 (I) Magnesium.
- 8 (J) Niobium.
- 9 (K) Platinum group metals (PGMs).
- 10 (L) Tantalum.
- 11 (M) Tungsten.
- 12 (N) Other elements identified by the Sec-
- 13 retary as in critical supply.
- 14 (3) RARE EARTH ELEMENTS.—The term “rare
- 15 earth element” means any of the following chemical
- 16 elements in any physical form or chemical combina-
- 17 tion:
- 18 (A) Scandium.
- 19 (B) Yttrium.
- 20 (C) Lanthanum.
- 21 (D) Cerium.
- 22 (E) Praseodymium.
- 23 (F) Neodymium.
- 24 (G) Promethium.
- 25 (H) Samarium.

25

1 (I) Europium.

2 (J) Gadolinium.

3 (K) Terbium.

4 (L) Dysprosium.

5 (M) Holmium.

6 (N) Erbium.

7 (O) Thulium.

8 (P) Ytterbium.

9 (Q) Lutetium.

10 (4) SECRETARY.—The term “Secretary” means
11 the Secretary of Energy.

12 (b) RESEARCH ON CRITICAL MINERALS AND RARE
13 EARTH ELEMENTS IN ELECTRONIC DEVICES.—The Sec-
14 retary, in consultation with the Administrator and the
15 heads of other appropriate Federal agencies, shall assist
16 in, and coordinate the development of, research in the re-
17 covering and recycling of critical minerals and rare earth
18 elements found in electronic devices.

19 (c) GRANTS.—Not later than 120 days after the date
20 of enactment of this Act, the Secretary shall establish a
21 competitive research application program under which the
22 Secretary shall provide grants to applicants to conduct re-
23 search on one or more of the following activities:

1 (1) The safe removal, separation, and recycling
2 of critical minerals and rare earth elements from
3 electronics.

4 (2) Technology, component, and material design
5 of electronics more suitable for disassembly and re-
6 cycling of critical minerals and rare earth elements.

7 (3) Collection, logistics, and reverse supply
8 chain optimization as related to recycling critical
9 minerals and rare earth elements from electronics.

10 (d) GRANT REQUIREMENTS.—The Secretary shall
11 issue requirements for applying for grants under sub-
12 section (c).