

**ESHB 2645 (Corrected Copy) - S COMM AMD**

By Committee on Environment, Energy & Technology

ADOPTED 03/07/2020

1 Strike everything after the enacting clause and insert the  
2 following:

3 "Sec. 1. RCW 70.355.010 and 2017 3rd sp.s. c 36 s 12 are each  
4 amended to read as follows:

5 (1) (~~(Findings.)~~) The legislature finds that a convenient, safe,  
6 and environmentally sound system for the recycling of photovoltaic  
7 modules, minimization of hazardous waste, and recovery of  
8 commercially valuable materials must be established. The legislature  
9 further finds that the responsibility for this system must be shared  
10 among all stakeholders, with manufacturers financing the takeback and  
11 recycling system.

12 (2) (~~(Definitions. For purposes of this section the following~~  
13 ~~definitions apply:)~~) The definitions in this subsection apply  
14 throughout this section unless the context clearly requires  
15 otherwise.

16 (a) "Consumer electronic device" means any device containing an  
17 electronic circuit board that is intended for everyday use by  
18 individuals, such as a watch or calculator.

19 (b) "Department" means the department of ecology.

20 (c) "Distributor" means a person who markets and sells  
21 photovoltaic modules to retailers in Washington.

22 (d) "Installer" means a person who assembles, installs, and  
23 maintains photovoltaic module systems.

24 (e) "Manufacturer" means any person in business or no longer in  
25 business but having a successor in interest who, irrespective of the  
26 selling technique used, including by means of distance or remote  
27 sale:

28 (i) Manufactures or has manufactured a photovoltaic module under  
29 its own brand names for use or sale in or into this state;

1 (ii) Assembles or has assembled a photovoltaic module that uses  
2 parts manufactured by others for use or sale in or into this state  
3 under the assembler's brand names;

4 (iii) Resells or has resold in or into this state under its own  
5 brand names a photovoltaic module produced by other suppliers,  
6 including retail establishments that sell photovoltaic modules under  
7 their own brand names;

8 (iv) Manufactures or has manufactured a cobranded photovoltaic  
9 module product for use or sale in or into this state that carries the  
10 name of both the manufacturer and a retailer;

11 (v) Imports or has imported a photovoltaic module into the United  
12 States that is used or sold in or into this state. However, if the  
13 imported photovoltaic module is manufactured by any person with a  
14 presence in the United States meeting the criteria of manufacturer  
15 under ~~((a))~~ (e)(i) through ~~((d))~~ (vi) of this subsection, that  
16 person is the manufacturer;

17 (vi) Sells at retail a photovoltaic module acquired from an  
18 importer that is the manufacturer and elects to register as the  
19 manufacturer for those products; or

20 (vii) Elects to assume the responsibility and register in lieu of  
21 a manufacturer as defined under ~~((b))~~ (e)(i) through (vi) of this  
22 subsection.

23 ~~((d))~~ (f) "Photovoltaic module" means the smallest  
24 nondivisible, environmentally protected assembly of photovoltaic  
25 cells or other photovoltaic collector technology and ancillary parts  
26 intended to generate electrical power under sunlight, except that  
27 "photovoltaic module" does not include a photovoltaic cell that is  
28 part of a consumer electronic device for which it provides  
29 electricity needed to make the consumer electronic device function.  
30 "Photovoltaic module" includes but is not limited to  
31 interconnections, terminals, and protective devices such as diodes  
32 that:

33 (i) Are installed on, connected to, or integral with buildings;  
34 ~~((e))~~

35 (ii) Are used as components of freestanding, off-grid, power  
36 generation systems, such as for powering water pumping stations,  
37 electric vehicle charging stations, fencing, street and signage  
38 lights, and other commercial or agricultural purposes; or

39 (iii) Are part of a system connected to the grid or utility  
40 service.

1       ~~((e))~~ (g) "Predecessor" means an entity from which a  
2 manufacturer purchased a photovoltaic module brand, its warranty  
3 obligations, and its liabilities. "Predecessor" does not include  
4 entities from which a manufacturer purchased only manufacturing  
5 equipment.

6       (h) "Rare earth element" means lanthanum, cerium, praseodymium,  
7 neodymium, promethium, samarium, europium, gadolinium, terbium,  
8 dysprosium, holmium, erbium, thulium, ytterbium, lutetium, yttrium,  
9 or scandium.

10       ~~((f))~~ (i) "Reuse" means any operation by which a photovoltaic  
11 module or a component of a photovoltaic module changes ownership and  
12 is used for the same purpose for which it was originally purchased.

13       ~~((g))~~ (j) "Retailer" means a person who offers photovoltaic  
14 modules for retail sale in the state through any means including, but  
15 not limited to, remote offerings such as sales outlets, catalogs, or  
16 internet sales.

17       (k) "Stewardship plan" means the plan developed by a manufacturer  
18 or its designated stewardship organization for a self-directed  
19 stewardship program.

20       ~~((h))~~ (l) "Stewardship program" means the activities conducted  
21 by a manufacturer or a stewardship organization to fulfill the  
22 requirements of this chapter and implement the activities described  
23 in its stewardship plan.

24       (3) ~~((**Program guidance, review, and approval.**))~~ The department  
25 must develop guidance for a photovoltaic module stewardship and  
26 takeback program to guide manufacturers in preparing and implementing  
27 a self-directed program to ensure the convenient, safe, and  
28 environmentally sound takeback and recycling of photovoltaic modules  
29 and their components and materials. By January 1, 2018, the  
30 department must establish a process to develop guidance for  
31 photovoltaic module stewardship plans by working with manufacturers,  
32 stewardship organizations, and other stakeholders on the content,  
33 review, and approval of stewardship plans. The department's process  
34 must be fully implemented and stewardship plan guidance completed by  
35 July 1, 2019.

36       (4) ~~((**Stewardship organization as agent of manufacturer.**))~~ A  
37 stewardship organization may be designated to act as an agent on  
38 behalf of a manufacturer or manufacturers in operating and  
39 implementing the stewardship program required under this chapter. Any  
40 stewardship organization that has obtained such designation must

1 provide to the department a list of the manufacturers and brand names  
2 that the stewardship organization represents within sixty days of its  
3 designation by a manufacturer as its agent, or within sixty days of  
4 removal of such designation.

5 (5) (~~(Stewardship plans.)~~) Each manufacturer must prepare and  
6 submit a stewardship plan to the department by the later of (~~January~~  
7 ~~1, 2020~~) July 1, 2022, or within thirty days of its first sale of a  
8 photovoltaic module in or into the state.

9 (a) A stewardship plan must, at a minimum:

10 (i) Describe how manufacturers will finance the takeback and  
11 recycling system, and include an adequate funding mechanism to  
12 finance the costs of collection, management, and recycling of  
13 photovoltaic modules and residuals sold in or into the state by the  
14 manufacturer with a mechanism that ensures that photovoltaic modules  
15 can be delivered to takeback locations without cost to the last owner  
16 or holder;

17 (ii) Accept all of their photovoltaic modules sold in or into the  
18 state after July 1, 2017;

19 (iii) Describe how the program will minimize the release of  
20 hazardous substances into the environment and maximize the recovery  
21 of other components, including rare earth elements and commercially  
22 valuable materials;

23 (iv) Provide for takeback of photovoltaic modules at locations  
24 that are within the region of the state in which (~~the~~) their  
25 photovoltaic modules were used and are as convenient as reasonably  
26 practicable, and if no such location within the region of the state  
27 exists, include an explanation for the lack of such location;

28 (v) Identify how relevant stakeholders, including consumers,  
29 installers, building demolition firms, and recycling and treatment  
30 facilities, will receive information required in order for them to  
31 properly dismantle, transport, and treat the end-of-life photovoltaic  
32 modules in a manner consistent with the objectives described in  
33 (a)(iii) of this subsection;

34 (vi) Establish performance goals, including a goal for the rate  
35 of combined reuse and recycling of collected photovoltaic modules as  
36 a percentage of the total weight of photovoltaic modules collected,  
37 which rate must be no less than eighty-five percent.

38 (b) A manufacturer must implement the stewardship plan.

39 (c) A manufacturer may periodically amend its stewardship plan.  
40 The department must approve the amendment if it meets the

1 requirements for plan approval outlined in the department's guidance.  
2 When submitting proposed amendments, the manufacturer must include an  
3 explanation of why such amendments are necessary.

4 (6) (~~(Plan approval.)~~) The department must approve a stewardship  
5 plan if it determines the plan addresses each element outlined in the  
6 department's guidance.

7 (7) (~~(Annual report.)~~) (a) Beginning April 1, (~~(2022)~~) 2024, and  
8 by April 1st in each subsequent year, a manufacturer, or its  
9 designated stewardship organization, must provide to the department a  
10 report for the previous calendar year that documents implementation  
11 of the plan and assesses achievement of the performance goals  
12 established in subsection (5)(a)(vi) of this section.

13 (b) The report may include any recommendations to the department  
14 or the legislature on modifications to the program that would enhance  
15 the effectiveness of the program, including management of program  
16 costs and mitigation of environmental impacts of photovoltaic  
17 modules.

18 (c) The manufacturer or stewardship organization must post this  
19 report on a publicly accessible web site.

20 (8) (~~(Enforcement.)~~) Beginning (~~(January 1, 2021)~~) July 1, 2023,  
21 no manufacturer, distributor, retailer, or installer may sell or  
22 offer for sale a photovoltaic module in or into the state unless the  
23 manufacturer of the photovoltaic module has submitted to the  
24 department a stewardship plan and received plan approval.

25 (a) The department must send a written warning to a manufacturer  
26 that is not participating in a plan. The written warning must inform  
27 the manufacturer that it must submit a plan or participate in a plan  
28 within thirty days of the notice. The department may assess a penalty  
29 of up to ten thousand dollars upon a manufacturer for each sale that  
30 occurs in or into the state of a photovoltaic module ((in or into the  
31 state that occurs)) for which a stewardship plan has not been  
32 submitted by the manufacturer and approved by the department after  
33 the initial written warning. A manufacturer may appeal a penalty  
34 issued under this section to the superior court of Thurston county  
35 within one hundred eighty days of receipt of the notice.

36 (b) The department must send a written warning to a distributor,  
37 retailer, or installer that sells or installs a photovoltaic module  
38 made by a manufacturer that is not participating in a plan. The  
39 written warning must inform the distributor, retailer, or installer  
40 that they may no longer sell or install a photovoltaic module if a

1 stewardship plan for that brand has not been submitted by the  
2 manufacturer and approved by the department within thirty days of the  
3 notice.

4 (9) (~~(Fee-)~~) The department may collect a flat fee from  
5 participating manufacturers to recover costs associated with the plan  
6 guidance, review, and approval process described in subsection (3) of  
7 this section. Other administrative costs incurred by the department  
8 for program implementation activities, including stewardship plan  
9 review and approval, enforcement, and any rule making, may be  
10 recovered by charging every manufacturer an annual fee calculated by  
11 dividing department administrative costs by the manufacturer's pro  
12 rata share of the Washington state photovoltaic module sales in the  
13 most recent preceding calendar year, based on best available  
14 information. The sole purpose of assessing the fees authorized in  
15 this subsection is to predictably and adequately fund the  
16 department's costs of administering the photovoltaic module recycling  
17 program.

18 (10) (~~(Account-)~~) The photovoltaic module recycling account is  
19 created in the custody of the state treasurer. All fees collected  
20 from manufacturers under this chapter must be deposited in the  
21 account. Expenditures from the account may be used only for  
22 administering this chapter. Only the director of the department or  
23 the director's designee may authorize expenditures from the account.  
24 The account is subject to the allotment procedures under chapter  
25 43.88 RCW, but an appropriation is not required for expenditures.  
26 Funds in the account may not be diverted for any purpose or activity  
27 other than those specified in this section.

28 (11) (~~(Rule-making-)~~) The department may adopt rules as necessary  
29 for the purpose of implementing, administering, and enforcing this  
30 chapter.

31 (12) (~~(National-program-)~~) In lieu of preparing a stewardship  
32 plan and as provided by subsection (5) of this section, a  
33 manufacturer may participate in a national program for the  
34 convenient, safe, and environmentally sound takeback and recycling of  
35 photovoltaic modules and their components and materials, if  
36 substantially equivalent to the intent of the state program. The  
37 department may determine substantial equivalence if it determines  
38 that the national program adequately addresses and fulfills each of  
39 the elements of a stewardship plan outlined in subsection (5)(a) of  
40 this section and includes an enforcement mechanism reasonably

1 calculated to ensure a manufacturer's compliance with the national  
2 program. Upon issuing a determination of substantial equivalence, the  
3 department must notify affected stakeholders including the  
4 manufacturer. If the national program is discontinued or the  
5 department determines the national program is no longer substantially  
6 equivalent to the state program in Washington, the department must  
7 notify the manufacturer and the manufacturer must provide a  
8 stewardship plan as described in subsection (5)(a) of this section to  
9 the department for approval within thirty days of notification.

10 NEW SECTION. **Sec. 2.** (1) Subject to the availability of amounts  
11 appropriated for this specific purpose, the Washington State  
12 University extension energy program must convene a photovoltaic  
13 module recovery, reuse, and recycling work group to review and  
14 provide recommendations on potential methodologies for the management  
15 of end-of-life photovoltaic modules, including modules from utility  
16 scale solar projects.

17 (2) The membership of the work group convened under this section  
18 must include, but is not limited to, members representing:

19 (a) A manufacturer of photovoltaic modules located in the state;

20 (b) A manufacturer of photovoltaic modules located outside the  
21 state;

22 (c) A national solar industry group;

23 (d) Solar installers in the state;

24 (e) A utility scale solar project;

25 (f) A nonprofit environmental organization with expertise in  
26 waste minimization;

27 (g) A city solid waste program;

28 (h) A county solid waste program;

29 (i) An organization with expertise in photovoltaic module  
30 recycling;

31 (j) A community-based environmental justice group; and

32 (k) The department of ecology.

33 (3) Participation in the work group convened under this section  
34 is strictly voluntary and without compensation or reimbursement.

35 (4) The Washington State University extension energy program must  
36 submit its findings and recommendations in a final report to the  
37 legislature and the governor, consistent with RCW 43.01.036, by  
38 December 1, 2021.

39 (5) This section expires January 31, 2022."

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**ADOPTED 03/07/2020**

1        On page 1, line 2 of the title, after "program;" strike the  
2 remainder of the title and insert "amending RCW 70.355.010; creating  
3 a new section; and providing an expiration date."

EFFECT: Delays the requirement to submit a stewardship plan to Ecology by 2.5 years, from January 1, 2020, to July 1, 2022.

Delays the annual reporting requirement for manufacturers by one additional year, from April 1, 2022, to 2024.

Delays enforcement of the photovoltaic module stewardship program by six months, from January to July 1, 2023.

Requires the WSU Extension Energy Program to submit both findings and recommendations in a final report.

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