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**HOUSE BILL 2389**

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**State of Washington**

**66th Legislature**

**2020 Regular Session**

**By** Representatives Shewmake, Ramel, Wylie, Doglio, and Hudgins

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1 AN ACT Relating to establishing a comprehensive, statewide  
2 photovoltaic module recovery, reuse, recycling, and end-of-life  
3 program; creating new sections; and repealing RCW 70.355.010.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** (1) The legislature finds that the  
6 deployment of solar energy generation in the state reduces greenhouse  
7 gas emissions and provides diversity in clean electric generation.  
8 One way that the state can encourage deployment of solar photovoltaic  
9 modules is to encourage the sale of the high efficiency photovoltaic  
10 modules.

11 (2) With new manufacturing processes incorporated by the industry  
12 over the last twenty years, many hazardous material inputs into the  
13 module manufacturing processes have been minimized or completely  
14 removed, while useful lives and energy production levels have been  
15 extended and enhanced, leading to useful lives of photovoltaic  
16 modules of fifty years or more.

17 (3) The legislature finds that the stewardship program recently  
18 enacted in chapter 70.355 RCW has created uncertainty for  
19 manufacturers who may cease to sell modules in the state.  
20 Furthermore, the stewardship program addresses only small system  
21 modules sold in the state after July 1, 2017. Modules sold before

1 July 1, 2017, will still need to be recycled or disposed of and are  
2 expected to enter the waste stream earlier, and initially at higher  
3 volumes than modules sold after July 1, 2017. The absence of any  
4 program addressing the pre-2017 modules would lead to at least two  
5 different module collection and end-of-life programs operating in the  
6 state, one a manufacturer financed product stewardship program for  
7 modules sold after July 1, 2017, and one or more as yet unknown,  
8 unfunded collection and disposal systems for modules sold before July  
9 1, 2017, and all utility scale modules.

10 (4) With the substantial increase in solar energy generation  
11 deployment over the last decade throughout the country, multiple  
12 studies are now being conducted on the life cycle and end-of-life  
13 processes of photovoltaic modules. Those studies are analyzing and  
14 recommending best practices for collection, recovery, reuse,  
15 recycling, processing of modules, and ultimate disposal of any  
16 remaining residual materials. The legislature finds that the state  
17 could benefit from investing the time and effort to review these  
18 studies by creating a task force of experts that obtains input on  
19 current and potential future manufacturing materials and processes  
20 from module manufacturers and recommends a comprehensive, statewide,  
21 environmentally friendly, and cost-effective program, and further has  
22 the time to do so before any significant amounts of modules requiring  
23 end-of-life processing enter the waste stream.

24 NEW SECTION. **Sec. 2.** (1) By July 1, 2020, the director of the  
25 department of ecology must appoint a photovoltaic module recovery,  
26 reuse, and recycling task force to review and provide recommendations  
27 in a final report on potential methodologies for the management of  
28 end-of-life photovoltaic modules, including modules from utility  
29 scale solar projects. The task force's report is due to the  
30 legislature by December 1, 2021.

31 (2) The director of the department of ecology shall convene a  
32 photovoltaic module recovery, reuse, and recycling task force. The  
33 duties of the task force include, but are not limited to:

34 (a) Obtaining and reviewing existing data from the Washington  
35 State University extension energy program pertaining to the  
36 manufacturer, location by zip code, in-service date, and estimated  
37 volumes of modules deployed under the state's renewable energy cost  
38 recovery incentive program established under RCW 82.16.165;

1 (b) Obtaining from manufacturers or existing studies the expected  
2 economically productive life cycle of various types of photovoltaic  
3 modules currently in use in the state;

4 (c) Obtaining from manufacturers and other sources the past,  
5 present, and potential future material and components of photovoltaic  
6 modules sold in or into the state. The material list must identify  
7 recyclable materials, rare earth elements, and materials that exhibit  
8 any of the characteristics of hazardous waste identified in 40 C.F.R.  
9 Part 261 (2019);

10 (d) Identifying in-progress and recently completed studies  
11 related to photovoltaic module recycling and end-of-life programs;  
12 and

13 (e) Analyzing and recommending financing mechanisms including  
14 advance recovery fees, recycling and disposal fees, and manufacturer-  
15 financed product stewardship programs, including the photovoltaic  
16 module stewardship and takeback program issued under RCW 70.355.010  
17 as it existed on December 31, 2019.

18 (3) The task force must submit a report to the legislature by  
19 December 1, 2021, in compliance with RCW 43.01.036, that includes the  
20 task force's recommendations for the financing and management of the  
21 recovery, reuse, and recycling of photovoltaic modules and their  
22 components and disposing of the remaining end-of-life residual  
23 materials. The report must identify legislation, if any, necessary to  
24 implement the recommendations of the report.

25 (4) The director of the department of ecology or the director's  
26 designee must chair or designate a chair of the task force created in  
27 subsection (1) of this section and must appoint task force members.  
28 Task force membership must include, but is not limited to, members  
29 representing:

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

31 (b) A manufacturer of photovoltaic modules located outside the  
32 state;

33 (c) A national solar industry group;

34 (d) Solar installers in the state;

35 (e) A utility scale solar project;

36 (f) An organization with expertise in waste minimization; and

37 (g) Other members with expertise in relevant areas to be reviewed  
38 by the task force.

39 (5) The director of the department of ecology or the director's  
40 designee shall convene the initial meeting of the task force.

1           (6) Participation in the task force created in subsection (1) of  
2 this section is strictly voluntary and without compensation.

3           NEW SECTION.       **Sec. 3.**     RCW 70.355.010 (Photovoltaic module  
4 stewardship     and     takeback     program—Definitions—Requirements—  
5 Enforcement—Fees—Rule making) and 2017 3rd sp.s. c 36 s 12 are each  
6 repealed.

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