AB 2832 Policy Recommendation Survey

Start of Block: Introduction

Q1.1 This survey is designed to determine levels of support for different policy recommendations among members of the Lithium Car Battery Advisory Group convened by Assembly Bill 2832. Please fill out the following survey on behalf of the organizations you represent. The results of this survey will inform the policy recommendations in the final report to the legislature.

Each question will briefly describe potential policies that have been previously discussed in the advisory group and/or subcommittee meetings. Unless specified otherwise, the questions will ask you to rate your support on a scale of "Strongly oppose/ Oppose/ No opinion/ Support/ Strongly support/ Support with modifications". There is also an optional text entry box next to each position if you would like to explain further, and a space for additional commentary at the end of each section. You can use these spaces to suggest considerations for implementation, identify additional information that may be needed, or further articulate your opinion.

Please keep in mind that most policies are not mutually exclusive and do your best to evaluate them each individually. Lastly, this is the final version of the survey, therefore it represents the final vote of the organization you represent.

End of Block: Introduction

Start of Block: Identifying Information

Q2.1 Name:

_____

Q2.2 Affiliation:

_____

End of Block: Identifying Information

Start of Block: Defining responsibility for end-of-life management and financing mechanisms

Q3.1 The following policy options have been proposed to ensure that electric vehicle (EV) batteries are properly managed at their end-of-life (EOL) by allocating responsibility or defining financing mechanisms for collection and recycling costs, if applicable. The 7 policies will first be evaluated by a Likert scale and then by a rank order choice question.

Q3.2 **1. Producer take-back (returning the battery to the auto manufacturer at end-of-life is required):**

The auto manufacturer is responsible to ensure proper repurposing*, reuse, or recycling of its EV traction batteries by a licensed facility. Auto manufacturer responsibility initiates when the auto manufacturer or its agent takes custody of the battery at no cost to the consumer. This responsibility includes:*

- *Arranging reverse logistics to transport the batteries to recycling hubs*
- *Being responsible for the recycling costs*
- *Documenting the proper disposal of the battery*

The Auto manufacturer will provide educational materials to customers and the service/repair industry, explaining the return process. This material will be made available through the vehicle owners manual or in-vehicle display, in printed dealer materials, and online. In addition, companion legislation that requires all EV batteries to be returned to the manufacturer or its agent upon removal from the EV is necessary.

Please rate your level of support for a producer take-back program with the required return of batteries at their end-of-life.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.3 **2. Producer take-back (returning the battery to the auto manufacturer at EOL is optional):**

The auto manufacturer is responsible to ensure proper repurposing, reuse, or recycling of its EV traction batteries by a licensed facility at no cost to the consumer if and/or when they are no longer wanted by the owner, and in the event no other entity has taken possession of the battery. Auto manufacturer responsibility initiates when the auto manufacturer has been notified the battery has reached its EOL and is available to be disposed of. If the battery is repurposed, the EOL responsibility transfers to the repurposing company. This responsibility includes:

- *Arranging reverse logistics to transport the batteries to recycling hubs*
- *Being responsible for the recycling costs*
- *Documenting the proper disposal of the battery*

The Auto manufacturer will provide educational materials to customers and the service/repair industry, explaining the return process. This material will be made available through the vehicle owner manual or in-vehicle display, in printed dealer materials, and online.

Please rate your level of support for a producer take-back program with the optional return of

batteries at their end-of-life.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.4 **3. Core exchange and unwanted vehicle backstop proposal:**
For EVs still in service, if a battery (or any module or cell) is replaced before the vehicle reaches EOL, a core exchange program as detailed by the EV battery supplier or manufacturer shall be used for the replacement battery (or any module or cell). The entity removing the battery shall be responsible for ensuring the used battery (or module or cell) is properly reused, repurposed, refurbished, or recycled.*

For EVs reaching EoL, a dismantler who removes the lithium-ion battery from the vehicle is responsible for ensuring the battery is properly reused, repurposed, refurbished, or recycled. In circumstances where an EOL EV is unwanted, and without parts removed (i.e. a "complete vehicle") by a licensed dismantler, the vehicle manufacturer shall be responsible for ensuring that the vehicle is properly dismantled and the lithium-Ion battery is properly reused, refurbished, or recycled.

**Supplier could mean sales, dismantler, manufacturer, etc.*

Please rate your level of support for a core exchange and unwanted vehicle backstop.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.5 **4. Environmental handling fee used to finance an EOL management program:**
A one-time payment is assessed at the point of purchase of a new EV to finance an EOL collection and recycling program. Further research should be done to estimate the appropriate fee and fee structure (e.g. based on the size of battery or type of car). The fee should be reevaluated and adjusted yearly. These are dedicated funds for managing EOL batteries and should be preserved for this use.

Please rate your level of support for an environmental handling fee.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.6 **5. Added electric vehicle registration fee to finance an EOL management program:**
A recurring fee is gathered at the time of yearly vehicle registration to finance a lithium-ion battery collection and recycling program. Further research should be done to estimate the appropriate fee and fee structure (e.g. based on the size of battery or type of car). The fee should be reevaluated and adjusted yearly. These are dedicated funds for managing EOL batteries and should be preserved for this use.

Please rate your level of support for an electric vehicle registration fee.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.7 **6. A yearly fee split between the auto manufacturer and the EV owner at vehicle registration to finance an EOL management program:**
A recurring fee is gathered at the time of vehicle registration to finance a lithium-ion battery collection and recycling program. This yearly fee will be split between the EV owner and the auto manufacturer. Further research should be done to estimate the appropriate fee and fee structure (e.g. based on the size of battery or type of car). The fee should be reevaluated and adjusted yearly. These are dedicated funds for managing EOL batteries and should be preserved for this use.

Please rate your level of support for a yearly fee split between the auto manufacturer and the

EV owner at vehicle registration.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.8 **7. Define the current owner as the responsible party for EOL management:**
The current owner or party handling the retired EV is responsible for paying any costs associated with EOL management and ensuring the battery is compliant with the collection, repurposing, and recycling requirements. This is the current situation in California and the United States.

Please rate your level of support for defining the current owner as the responsible party.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q3.9 Please rank the following policy options in order of preference (i.e. 1 represents the preferred policy option, 2 represents the second preferred option, etc.)
_____ Option 1: Producer take-back (returning the battery to the auto manufacturer at EOL is required) (1)
_____ Option 2: Producer take-back (returning the battery to the auto manufacturer at EOL is optional) (2)
_____ Option 3: Core exchange with unwanted vehicle backstop proposal (3)
_____ Option 4: Environmental handling fee used to finance an EOL management program (4)
_____ Option 5: Added electric vehicle registration fee to finance an EOL management program (5)
_____ Option 6: A yearly fee split between the auto manufacturer and the EV owner at vehicle registration to finance an EOL management program (6)
_____ Option 7: Define the current owner as the responsible party for EOL management (7)
_____ Not listed: (8)

Q3.10 If a fund is created using policy options 4, 5, or 6, which of the following entities should manage the program?

- ○ A third-party (1)
- ○ A third-party under state oversight (including enforcement) (2)
- ○ A state agency (4)

Q3.11 If a fund is created using policy options 4,5, or 6, what should the fund be used for?

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Q3.12 Optional: Please use the space below to provide any additional feedback or comments about the policies suggested above.

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End of Block: Defining responsibility for end-of-life management and financing mechanisms

Start of Block: Access to battery information

Q4.1 The following options have been discussed to ensure that relevant stakeholders will be able to access the information required to safely and efficiently handle end-of-life (EOL) EV batteries.

Q4.2

1. Physical labeling requirement:

Require original equipment manufacturers (OEM) to attach a physical label containing information about the battery in symbol or text form to the pack in a visible and legible manner. The label(s) should be located in such a manner that they are visible during maintenance, replacement and/or after being removed from the vehicle.

For additional context, the California Air Resource Board is currently developing a label requirement that will be applied to the pack and module of the lithium-ion battery. The information required includes the manufacturer name, cathode chemistry, voltage, performance/capacity, product alert statements/hazards, composition/process related information, and electronic information exchange/digital identifier.

Please rate your level of support for requiring a physical labeling requirement. The next question will ask what information you think should be included as part of a labeling requirement.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q4.3 What information do you think should be included as part of a labeling requirement?

- [ ] Main cathode chemistry (e.g. NMC) (1)
- [ ] Main cathode chemistry with stoichiometric ratio (e.g. NMC 622) (2)
- [ ] Capacity (3)
- [ ] System Voltage (e.g. 28.8V) (4)
- [ ] Digital identifier (e.g. QR code) (6)
- [ ] Anode chemistry (8)
- [ ] Electrolyte chemistry (9)
- [ ] Battery manufacturer's name (10)
- [ ] Auto manufacturer's name (7)
- [ ] Max discharge and charge currents (11)
- [ ] Appropriate storage temperatures (12)
- [ ] VIN of the original car the battery was installed in (13)
- [ ] Test summary including the test lab and test results (14)
- [ ] Not listed (15) _____

Q4.4

2. Electronic information exchange (i.e. QR code with online database):

An electronic information exchange would be enabled by a digital identifier, such as a QR or bar code, applied as a physical label on the battery pack. This digital identifier will direct to an online

database.

Please rate your level of support for requiring an electronic information exchange.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q4.5 What information do you think should be included in an electronic information exchange?

- [ ] Main cathode chemistry (e.g. NMC) (1)
- [ ] Main cathode chemistry with stoichiometric ratio (e.g. NMC 622) (2)
- [ ] Capacity (3)
- [ ] System Voltage (e.g. 28.8V) (4)
- [ ] Instructions for disassembly (6)
- [ ] Instructions for shipping (7)
- [ ] Information about available collection schemes (8)
- [ ] OEM contact information to request safe disposal of the battery (9)
- [ ] Listing or content of hazardous materials or heavy metals (10)
- [ ] Charging capacity (11)
- [ ] Capacity retention (12)
- [ ] Voltage (13)
- [ ] Maximum internal resistance increase (14)
- [ ] Minimum round trip efficiency (15)
- [ ] Dynamic information: State of Health (16)
- [ ] Not listed (17) _____

Q4.6 **3. Universal diagnostic system**

In addition to information about the contents of the battery pack, it has been suggested that enabling third-party access to state of health (SOH) would facilitate repurposing and reuse. This is often discussed in terms of a Universal Diagnostic System (UDS) installed on the battery that would enable non-OEM actors to access relevant data about the condition and/or history of the battery after it has been removed from the vehicle. The Universal Diagnostic System would be analogous to the Onboard Diagnostics II (OBD2) systems in vehicles where engine and other vehicle system information (and particularly faults or failures) is reported. OBD2 is required for all light-duty vehicles built after 1996.

The California Air Resources Board has also proposed that standardized battery SOH information be readable by the driver without the use of a tool. The CARB proposal is distinct from this proposal for a UDS because the UDS would function even after a battery is removed from a vehicle.

Please rate your level of support for requiring batteries to be equipped with a UDS.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q4.7 4. Please rate your level of support for requiring OEMs to make SOH data accessible to third parties without specifying the mechanism (i.e. not requiring that it be through a UDS).

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q4.8 Optional: Please use this space to provide any additional commentary about labeling and data sharing requirements.

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End of Block: Access to battery information

Start of Block: Support repurposing, reuse, and recycling industry development

Q5.1 The following policies were discussed to support the development of repurposing, reuse, and recycling industries within California.

Q5.2

1. Establish a timeline for the Department of Substance Control (DTSC) and all hazardous waste processors applying for a processing permit:
As part of the hazardous waste facility permitting process, a timeline shall be established during the initiation of the permitting process. Both DTSC and the permit applicant are expected to comply with this timeline and any and all milestones as described in SB 158.

Please rate your level of support for establishing a timeline for the Department of Substance Control (DTSC) and all hazardous waste processors applying for a processing permit.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q5.3

2. Economic incentive package provided to lithium-ion battery recyclers:
In addition to, or instead of, the prior policy, financial incentives in the forms of tax breaks or

grants would be provided to the hazardous waste processors that recycle lithium-ion batteries, in order to subsidize upfront costs and encourage industry development within California.

Please rate your level of support for offering economic incentive packages.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q5.4

3. Expand eligibility for relevant incentive programs to include repurposed and reused batteries:
Currently, battery storage systems from repurposed and reused batteries are not eligible for incentive programs that subsidize the cost of new battery storage. One specific proposal is to expand eligibility for the Self-Generation Program (SGIP) to include repurposed and reused battery systems if they meet state of health (SoH) standards specified by the program. The SoH standards should be developed based on best available research by academics and industry.

Please rate your level of support for expanding SGIP to include repurposed and reused batteries.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Page Break

Q5.5

4. Incentivize a disassembly industry within California:
Provide financial incentives in the forms of tax breaks or grants to facilities who disassemble battery packs to encourage industry development within California.

Please rate your level of support for incentivizing a disassembly industry within California.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q5.6 Optional: Please use this space to provide any additional commentary about policies encouraging industry development within California.

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End of Block: Support repurposing, reuse, and recycling industry development

Start of Block: Circular economy and quality recycling

Q6.1 The following policies were discussed to ensure that batteries are recycled in facilities with high-quality, sustainable processes and encourage a circular battery economy.

Q6.2 **1. Minimum material recovery rates:**
Required recovery rates for specific materials were recommended to guarantee quality recycling that recovers critical materials. Targets should be phased in over time and should reflect technological developments.

- *Material recovery rates: The percent of material recovered from the product through the recycling process, also defined as the total output of useable critical materials by weight as a percentage of the total weight of input material.*

- *Critical materials: A material used in technology that is subject to supply risks, which has no easy substitutes. The US Department of the Interior has defined the following materials used in lithium batteries to be critical: lithium, cobalt, and manganese. In addition, the White House report on America's supply chains includes Class I nickel as a critical material to the lithium-ion battery supply chain.*

An example of recovery rates for lithium-ion batteries is the proposed "medium ambition" revisions to the EU Battery Directive that specify the following material recovery rates in 2025. Please note these rates are an example and not the recommended rates by the subcommittee. The recycling rates should be determined through the best available research of commercial recycling capabilities in the US.

- *Cobalt: 90%*
- *Nickel: 90%*
- *Lithium: 35%*
- *Copper: 90%*

Please rate your level of support for establishing minimum material recovery rates.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.3

2. Third-party verification: *Require lithium-ion batteries to be disassembled, processed, and recycled in facilities that have been verified by a third party to guarantee high-quality recycling in terms of environmental performance (i.e. emissions control) and worker safety. This is intended to provide assurance that recycling facilities operating in any jurisdiction are conforming to a minimum standard that is proven through an initial and annual auditing process, with the intention of providing a level playing field across any jurisdiction. The legislature should call for the establishment of a third-party process standard for facilities where used lithium-ion batteries, production scrap, and derived materials are processed or recycled that would be then approved by a designated state agency for this purpose.*

- *Third party verification is done by an independent source (e.g. certification body) that awards certification based on a facility meeting certain environmental criteria outlined in a certification standard and described in certification requirements.*
- *Certification is based on a process standard covering the performance of systems and processes in recycling and verified through auditing of facilities.*
- *Requires consensus standard development to address specific types of processes within recycling and processing facilities (e.g. dismantling, pyrometallurgical, hydrometallurgical).*
- *Example programs using third-party verification include E-stewards and PaintCare*

Please rate your level of support for third-party verification.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.4

3. As part of an overall end-of-life management system for the state of California, develop a reporting system for lithium-ion batteries retired from use / exported batteries:

An online database should be created to track and report lithium-ion batteries that are retired within California and used EVs that are exported from California. Companies recycling or repurposing EV batteries within California, and companies moving EV batteries from California for this purpose, are responsible for reporting the final recipients of the batteries.

Please rate your level of support for end-of-life reporting.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.5

4. As part of an overall end-of-life management system for the state of California, develop a reporting system for lithium-ion battery recycling recovery rates:

An online database should be created to track and report lithium-ion battery recycling recovery rates. Companies recycling batteries are responsible for reporting their total recovery rates, as well as the recovery rates of cobalt, lithium, manganese, and nickel.

Please rate your level of support for establishing lithium-ion battery recycling recovery rates.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.6

5. Recycled content standards:

Mandatory recycled content standards were recommended to ensure the use of recycled materials in battery manufacturing. The recycled content standards should be determined by best available research to ensure they are achievable. These rates should be phased-in and reviewed/revised to account for technical developments.

- *Recycled content: The total percentage of recovered material in a product.*
- *Battery grade materials: Materials that are of the quality necessary to manufacture lithium-ion batteries*

The recycled content standard would be third-party verified. The verification is done by an independent source (e.g. certification body) that awards certification based on the product and facility meeting certain environmental criteria outlined in a certification standard and described in certification requirements. This requires consensus standard development to address specific types of processes within the manufacturing.

The subcommittee discussed the proposed revisions to the EU Battery Directive as an example

of the policy, which includes the following minimum recycled content standards. Please note these rates are an example and not the recommended rates by the subcommittee.

- *January, 2030: 12% cobalt; 4% lithium; 4% nickel*
- *January, 2035: 20% cobalt; 10% lithium; 12% nickel*

Please rate your level of support for creating recycled content standards.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.7

6. Design for repurposing, reuse, and recycling:

Require that OEMS design batteries in a way that facilitates repurposing, reuse, and recycling. Examples that not binding or exhaustive include sealing battery packs with screws instead of adhesives, using an alternative binder than PVDF to increase end-of-life solubility, and converting to solid busbars that are in a standardized position.

Please rate your level of support for creating recycled content standards.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q6.8 Optional: Please use this space to provide any additional commentary about policies that pertain to the quality and performance of the recycling process.

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End of Block: Circular economy and quality recycling

Start of Block: Support safe and efficient reverse logistics

Q7.1 The following options were suggested to promote the safe and efficient handling and transportation of EOL EV batteries prior to repurposing, reuse, or recycling.

Q7.2

1. Develop training materials to address knowledge and capacity gaps:

To support industries that will need to adapt to vehicle electrification and promote safe EOL management, funding should be made available to support training materials that provide clear, detailed guidelines on occupational safety, storage, and shipping protocol and requirements. Examples of current efforts to increase training include a course for first responders created by the National Fire Protection Association, and a webinar on the safe handling of LIBs (mainly portable) created in a joint effort by the US Department of Transportation (USDOT) and the EPA.

Please rate your level of support for developing training materials.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.3

2. Support existing efforts to improve the enforcement of unlicensed dismantling laws: *An ongoing concern in the state of California is the rise of unlicensed dismantling, which is problematic because unlicensed dismantlers do not take the same precautions when disposing of hazardous materials and fluids. Unlicensed dismantling is particularly undesirable for EVs given the hazards posed by large-format lithium batteries when handled incorrectly. Increased resources should be provided to improve enforcement of unlicensed dismantling facilities.*

Please rate your level of support for improved enforcement of unlicensed dismantling laws.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.4

3. Require pre-approval to bid on EVs at auctions:
Unlicensed dismantlers acquire most of their vehicles through auto auctions and dismantle them in various locations including repair shops, remote locations, parking lots, industrial lots, and residences. To minimize unlicensed dismantling, it was suggested that bidding on EVs at insurance auctions be limited to pre-approved parties. Interested parties will therefore be required to apply for pre-approval before participation. The pre-approval process includes registering their contact information (e.g. name, address, etc.) in order to track the battery.

Please rate your level of support for requiring certification to bid on EVs at auctions.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.5

4. Interpretation of universal waste regulations:
To facilitate battery repurposing, reuse, and recycling, it has been suggested that if the U.S. EPA makes a change that reduces the regulatory burden on batteries, then DTSC should adopt those changes.

Please rate your level of support.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.6

5. Develop strategic collection and sorting infrastructure:
To support a more efficient reverse logistics network, the state should support the development of strategic reverse logistics, including but not limited to strategically located collection and sorting facilities. Such facilities can reduce transportation costs by accumulating batteries to optimize shipment volumes and distance travelled.

Please rate your level of support for developing strategic collection and sorting infrastructure.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.7

6. Identify strategies to reduce the burden of transportation:
Support research on solutions to reduce the cost of collection and transportation, a step that represents approximately 50% of the recycling costs. This research should include 1) regulatory analysis focused on lowering the costs of federal regulation compliance, without compromising safety, and 2) technical solutions for regulatory compliance related to packaging and handling safety mechanisms.

Please rate your level of support for identifying strategies to reduce the burden of transportation.

- ○ Strongly oppose (1) _____
- ○ Oppose (2) _____
- ○ No opinion (3) _____
- ○ Support (4) _____
- ○ Strongly support (5) _____
- ○ Support with modifications (6) _____

Q7.8 Optional: Please use this space to provide any additional commentary about encouraging safe reverse logistics.

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End of Block: Support safe and efficient reverse logistics

Start of Block: Additional feedback

Q8.1 Are there any recommendations that were not included in this survey that you think the advisory group should consider?

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Q8.2 Please use this space to provide any final comments.

End of Block: Additional feedback