

September 20, 2025

Honourable Rebecca Schulz  
Minister of Environment and Protected Areas  
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Sent by email to: [EPA.RecyclingRegulation@gov.ab.ca](mailto:EPA.RecyclingRegulation@gov.ab.ca)

## Re: RCA Feedback on End-of-Life Management of Solar Panels

The Recycling Council of Alberta (RCA) appreciates the opportunity to provide input on policies and program design for the management of solar panels at end-of-life. RCA strongly supports Alberta's decision to apply a product stewardship model under the Electronics Recycling Regulation, and we recognize the opportunities to position Alberta as a leader in solar panel reuse and recycling across Western Canada.

Our feedback is summarized below and organized by key policy and operational themes.

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### 1. Policy Considerations

- **Landfill disposal:** While disposal provides low immediate cost, it represents a long-term liability, forfeits recoverable materials (glass, aluminum, silver, copper), and undermines Alberta's circular economy goals. RCA recommends **phased landfill bans** tied to the availability of processing capacity.
- **Reuse:** There is opportunity to extend panel life in secondary markets (off-grid, agricultural, Indigenous, community projects). However, safety, performance standards, and liability clarity are required to unlock reuse markets.
- **Recycling:** Alberta is well-positioned to host regional recycling capacity, leveraging industrial expertise, logistics networks, and renewable energy leadership. Short-term incentives and per-tonne rebates would help facilities reach scale.
- **Funding:** Eco-fees on new sales should fund collection, reuse, and recycling, with time-limited public support (capital grants, tax credits, rebates) to seed Alberta-based recycling/refurbishment businesses and manage legacy panels.
- **Jobs and benefits:** Recycling and refurbishment can create stable facility jobs, logistics employment, and local economic activity, while reducing municipal disposal burdens.

## 2. Operational Design

- **Collection networks:**
  - *Residential/small systems:* depots, e-waste drop-offs, installer take-back.
  - *Medium systems:* scheduled pickup and consolidation at transfer stations.
  - *Utility/industrial:* on-site decommissioning contractors, palletizing, and direct shipping.
- **Other system components:** Consider racking, wiring, and motors in later phases, alongside panels, inverters, and electronics.
- **Volume forecasting:** Alberta should model incoming volumes using installation data, assumed lifespans, and scenarios for early retirement or storm damage.
- **Technology watch:** Establish a technical advisory group to monitor shifts in panel design (bifacial, thin film, perovskite) and adjust recycling standards accordingly.

## 3. Summary of RCA Recommendations

Theme	Recommended Policy/Program Action	Rationale
Landfill disposal	Phase in bans once processing capacity exists; apply differential tipping fees	Disincentivizes disposal, ensures diversion
Funding	Eco-fees on new panels; capital grants, low-interest loans, and per-tonne rebates for recyclers/refurbishers; short-term transport subsidies	Reduces upfront risk, builds Alberta-based industry
Reuse	Develop refurbishment and recertification standards; clarify liability; set reuse targets	Enables safe secondary markets, delays disposal
Recycling	Support Alberta-based recycling facility through pilot funding and processing rebates	Retains value, creates jobs, positions Alberta as regional hub
Collection	Use depots for small-scale, transfer stations for medium-scale, direct contractor logistics for utility-scale	Matches logistics approach to system size and volume
Other components	Phase in racking, wiring, motors, and batteries	Maximizes material recovery over time
Data & forecasting	Fund a provincial market study and lifespan model	Provides reliable volume forecasts, supports investment decisions
Research & partnerships	Support applied R&D with universities, recyclers, and producers	Reduces recycling costs, adapts to new technologies

## Conclusion

Solar panels represent both a challenge and a significant opportunity for Alberta. With the right policies, Alberta can avoid costly landfill liabilities, foster new industries, and position itself as a **Western Canadian hub for solar panel reuse and recycling**. RCA is ready to collaborate with government, producers, and industry to advance pilots, policy design, and capacity building.

We thank you for the opportunity to provide feedback and look forward to working together to make Alberta's circular economy vision a reality.

Sincerely,



Jennifer Koole, Executive Director