

August 2, 2019

Sam Fiorillo
Director of Industrial Climate Policy
Alberta Environment and Parks

Re: Proposed Technology Innovation and Emissions Reduction System: Discussion Document

Dear Mr. Fiorillo,

The Canadian Solar Industries Association (CanSIA) is a not-for-profit membership-based national trade association for the solar energy industry throughout Canada, established in 1992. We proudly represent manufacturers, installers, developers, builders, owners, engineers, and other stakeholders, such as municipalities or Indigenous communities, who want to see solar energy grow in Canada. Our members are involved in multiple segments of the solar industry including microgeneration, “behind the meter” applications, and utility scale solar connected to either the distribution or transmission systems. CanSIA’s mandate includes engaging in policy development and regulatory affairs activities in Alberta in order to support a growing role for solar energy in the province’s electricity supply mix.

With recent Alberta utility-scale solar procurements producing pricing less than \$0.05/kWh, Alberta is leading the country with the lowest prices on solar energy. Low prices are part of a North American and global; crystalline solar PV applications in the US have decreased by 88% over the past 9 years to approximately \$0.043/kWh (USD) in 2018. Greater public interest is prompting industry collaborations and partnerships to develop and advance projects. We appreciate the opportunity to provide comments to Alberta Environment and Parks (AEP), with respect to the proposed Technology Innovation and Emissions Reduction (TIER) system, and the recently published discussion document.

CanSIA’s submission recognizes the importance of market-driven approaches with respect to developing solar electricity in Alberta. One way to support a market-driven approach is by enabling renewable energy project owners to monetize the value of emissions offsets by contracting directly with non-utility buyers. The ability to generate emissions offsets is a key value stream for solar projects and the value of emissions offsets are offered as a line item in power purchase agreement

(PPA) negotiations. It is anticipated that the TIER system will continue to permit the use of solar energy to generate emissions offsets via the Alberta Emission Offset System¹.

While out of scope for this consultation, CanSIA is requesting further consultation and engagement with our members in respect of enabling opportunities for microgeneration. Although the proposed TIER system may create feasible investment opportunities for large-scale renewable energy developers, many microgeneration renewable energy producers (e.g., homeowners, small-businesses, community groups, etc.) will not have the knowledge, sophistication, capabilities or market-access to individually enter PPAs with large final emitters under the TIER system. For example, even though microgeneration renewable energy projects create emissions offsets, the producers may be unable to monetize the value due to significant administrative and structural barriers. Simply put, it is not feasible for large final emitters to contract with individual microgeneration suppliers for the supply of emissions offsets. Therefore, CanSIA would like to explore options to facilitate market access and the recognition of the value of the emissions offsets produced by renewable microgeneration projects, potentially through the use of an intermediary or aggregator.

The remainder of CanSIA's submission is attached per the prescribed feedback form. In summary, our recommendations include:

- Support of the 'Good as Best' gas approach
- Support for the benchmark of 0.37 Tonnes/MWh with predictable tightening
- Principles of 1) leveling the playing field, and 2) flexibility;
- Ability of all generators to "opt-in" to TIER; which thereby enables flexibility for large final emitters to meet compliance obligations through the use of either offsets or credits.
- Fungibility of credits across all sectors
- TIER fund floor price of \$30/Tonne to maintain "made in Alberta" plan; recognizing that CanSIA would support increasing the TIER fund price overtime
- The need for long-term and stable price signal
- No limit on the use of credits for compliance purposes
- CCIR/SGER credits should maintain value

¹ Quantification protocols for the Alberta Emission Offset System are available here: <https://www.alberta.ca/alberta-emission-offset-system.aspx>



L'ASSOCIATION DES
INDUSTRIES SOLAIRES
DU CANADA

240 Bank Street, Suite 400
Ottawa, ON, K2P 1X4

- T 613-736-9077
- TF 1-866-522-6742
- F 613- 736-8938
- E info@cansia.com
- cansia.com

Thank you for your consideration of our submission. Please don't hesitate to reach out to me to discuss further.

Sincerely,

A handwritten signature in black ink that reads "Wesley J. Johnston".

Wes Johnston
President and CEO
Canadian Solar Industries Association

Encl: TIER Stakeholder Feedback Form

Cc: Hon. Jason Nixon, Alberta Environment and Parks
Hon. Sonja Savage, Alberta Energy

*Information you provide to Alberta Environment and Parks (AEP) is collected under the authority of section 33(c) of the *Freedom of Information and Protection of Privacy (FOIP)* Act and is managed in accordance with Part 2 of the *FOIP* Act. Your name, organization, and contact information you provide will be used for the purpose of analysis and contacting you should AEP have follow-up questions based on your input. AEP will not use or disclose your information for any other purpose without your written consent or unless required to do so by law. If you have any questions or you wish to request the change or removal of information you provided, please contact Sam Fiorillo, Director of Industrial Climate Policy by phone at 780-644-6958 or by email at Sam.Fiorillo@gov.ab.ca

This stakeholder feedback document accompanies [Alberta's Proposed Technology Innovation and Emissions Reduction System: Discussion Document](#).

Stakeholders who wish to provide feedback on the development of the proposed Technology Innovation and Emissions Reduction system are required to complete the following steps:

1. Provide contact information in the form below (please limit stakeholder submissions to one per regulated facility or organization)
2. Complete the "Stakeholder Comments" on this document
3. Email the completed form to engagement@gov.ab.ca

Stakeholder Information

Name	Email Address:	Phone
Wes Johnston	wjohnston@cansia.ca	613-736-9077
Organization (if applicable)	Facility (if applicable)	
Canadian Solar Industries Association (CanSIA)	n/a	

Line Item Section of Discussion Document and Stakeholder Comments

1 to 27	1. Overview and Context	CanSIA is supportive of the overall approach, including "good-as-best-gas" benchmark. We would seek to see all generators held to a consistent emission standard, which would help to minimize the cost of emissions reduction within the electricity sector.
28 to 35	2. Purpose of this Document	No comment
36 to 45	3. Principles of the TIER System	CanSIA agrees with the principles outlined. In addition, CanSIA recommends adding the principle of "level playing field". The TIER system should treat generators of different technologies and scales similarly to avoid market distortion and improve competition. Further, CanSIA suggest that flexibility should be added to these core principles.
46 to 55	4. Principles of Engagement	CanSIA agrees with the principles outlined. In addition, while recognizing the need for detailed consultation, there is also a need to take swift action to provide clarity and stability to the market.
56 to 72	5. Engagement Approach	CanSIA welcomes the opportunity to provide feedback. CanSIA recommends that the engagement approach includes the development of a public consultation report to summarize the input received and how recommendations are considered.
73 to 87	6. Out of Scope Items	CanSIA appreciates the recognition of the need to ensure that via the TIER system Alberta maintains jurisdiction over Alberta's own emissions reductions management system. We also

note that although emissions offset protocols is out of scope for this engagement, details on this file, including the updated calculations of the grid displacement factor may influence investor decisions on compliance options. CanSIA and our members respectfully request to be included in any future consultations with respect to offset protocols (for example, protocols to account for generation being close to load, avoiding transmission line losses, should remain in order to continue to encourage level-playing field).

89 to 93

7.1 Emissions Threshold

CanSIA notes that the federal OBPS threshold is being set to 50,000 tonnes; we flag this noting the desire to maintain a "made-in-Alberta" plan.

94 to 110

7.2 Opt-in

CanSIA recommends that all generation facilities, including renewable sources, be afforded the opportunity to opt-in, or enabled through aggregation. Further, we recommend not establishing any minimum thresholds (e.g., facility size limits) to enable greater participation from more solar resources. Allowing all renewables to opt-in will improve fairness/competition and creation of a market for power purchase agreements (i.e., allows large final emitters compliance flexibility via offset/credit purchase.)

111 to 119

7.3 Opt-out

No comment.

120 to 130

7.4 First Year of Compliance for New Facilities

The regulations and benchmark should apply in the first year of operations for electricity generation (both for facilities with emissions obligations and for facilities that create emissions credits.)

131 to 137

7.5 Review Period

CanSIA agrees with the approach, recognizing potential influence and changes that result from federal government and the potential need for an interim review. The intent, scope and items should be well-defined during the review period; to avoid investor uncertainty the review should contain within well defined parameters (e.g., tweak vs. overhaul). Greater stability and certainty can also be achieved by signaling \$30/T the floor price (noting preference to see prices increase gradually over time and the desire to avoid price swings.)

139 to 145

8.1 Reference Years

No comment

146 to 151

8.2 "Good-as-best-gas" Benchmark

CanSIA agrees with the approach overall, and recommends that the benchmark be tied to economically efficient baseload generation.

152 to 157

8.3 Best-in-Class Facility Treatment

No comment

158 to 171

8.4 Benchmarks for New Facilities or Facilities that have Undergone Significant Expansion or Change

No comment

172 to 185	8.5 Treatment of Multi-Product Facilities No comment
186 to 195	8.6 Product Definitions for Refining, Upgrading and Natural Gas Processing No comment
196 to 204	8.7 Tightening Rate CanSIA is generally supportive of the approach. As an overarching principle, CanSIA recommends that Alberta adopt a tightening that creates policy predictability (e.g., ensures made-in-Alberta approach continues)
206 to 216	9.1 Indirect Emissions No comment
217 to 231	9.2 Industrial Process Emissions No comment
232 to 242	9.3 Biomass Emissions No comment
243 to 252	9.4 Formation CO ₂ Emissions No comment
253 to 259	9.5 Fugitive Emissions No comment
260 to 283	10. Conventional Oil and Gas Facilities Below Emissions Threshold No comment
284 to 298	11. Revenue Recycling CanSIA recommends that innovative demonstration projects within the electricity sector, which clearly contribute to emissions reduction, be eligible to receive TIER funding support. Specifically, solar and energy storage projects should be eligible to receive funding support.
300 to 309	12.1 Reporting Requirements No comment

310 to 316 12.2 Verification Requirements

No comment

317 to 320 12.3 Compliance Flexibility and Fund Price

CanSIA is supportive of compliance flexibility, and we are supportive of carbon prices of at least \$30/tonne initially. We encourage enduring stability and market-confidence to pricing. It is important to enable flexibility to large final emitters, therefore we recommend that solar generation retain the ability to generate offsets under the protocol or opt-in to generate credits under the TIER program.

321 to 329 12.3.1 Credit Expiry

To protect investment confidence, the value of CCIR and SGER credits should be maintained

330 to 333 12.3.2 Credit Usage Limit

CanSIA recommends avoiding setting a limit on the ability to use credits. Any limit will unduly raise the cost of complying.

334 to 335 12.3.3 TIER Fund Price

The price should be stable and predictable, and increase overtime. This is required to provide a clear investment signal to the market and reduce compliance costs.

336 to 355 13. Compliance Cost Containment

No comment