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Jim Duffy  
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California Air Resources Board

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*Via electronic submittal:* [LCFSworkshop@arb.ca.gov](mailto:LCFSworkshop@arb.ca.gov)

Re: GlassPoint Solar Comments on April 5, 2019 Cost Containment Workshop Proposals

GlassPoint Solar, Inc. (GlassPoint) supports the LCFS and its fundamental structure of incenting investment in low-carbon technologies through the use of market price signals. We appreciate the opportunity to submit these comments on the April 5, 2019 Cost Containment Workshop and potential amendment concepts to the Low Carbon Fuel Standard (LCFS).

GlassPoint is a California company that develops, manufactures and finances solar steam generators for industrial processes including thermal enhanced oil recovery and other industrial processes. Our renewable energy technology, born out of the policy mechanism of the LCFS, has been proven reliable, safe and economical in field operations in California and the Middle East.

CARB's historic recognition of the potential for solar steam to deliver meaningful emissions reductions in the production of liquid fuels, through both the Innovative Crude provisions and the recognition of low-carbon energy sources for biofuel refining has always been appreciated. We believe these policy provisions remain appropriate given the program's fundamental focus on fuel life cycle emissions. The market price signal has created projects that deliver California economic growth while reducing both criteria pollutants and GHG emissions. Such a market signal is important to private capital and investment decision makers who are necessary for larger projects to be built. It is the possible modification to this powerful market price signal that is the focus of these comments.

GlassPoint has a variety of concerns about the proposals, and would like to see more information about the "price ceiling" concept that was introduced at the workshop. It has been described by CARB as a simple solution, yet the LCFS marketplace has developed into a complex matrix of commercial transactions. GlassPoint would like to better understand if this is really needed, and if so, how such a complex system would react to such a blunt instrument as a hard price cap.

Our first concern relates to potential discriminatory treatment of technologies which deliver pure LCFS credit streams, including CCS, EVs, and Innovative Crude (solar PV and solar steam). No corresponding price cap provisions are proposed for credit transfers associated with liquid fuels. By applying such limits to only a portion of the market, such a cap could disadvantage non-liquid fuel credit production projects and create an unlevel playing field.



Of greater concern, the proposed caps may reduce investor interest in credit generating projects. Capital projects such as solar steam and CCS in particular need long-term stability of the program, as capital commitments take decades to generate their required return. Risks and returns on investment must be proportional. The proposed concepts may complicate long-term credit transfer agreements and limit potential returns on investment, which could shift low carbon investment away from the more ambitious technology and larger carbon reductions projects that can be accomplished with a longer time horizon. An unintended consequence of price caps could be reduced activity by compliance entities to enter into long-term contracts to mitigate future price risk. It is these long-term contracts that are the enabler for attracting long-term investment. Large and heavy capital-intensive projects that lack a fixed long-term LCFS offtake may be unable to raise the required capital, diverting investment to shorter-term alternative projects, which is against the goals of the program.

Based on discussions with counterparties, GlassPoint believes that other efforts to improve the CCM, in combination with CARB's proposed borrowing of future credits, could deliver improvements in market price stability without the potential problems caused by a fixed hard price cap. We understand that such modifications could eliminate exposure of commercially sensitive information, and eliminate revocation risk for credits purchased through CCM-associated transactions.

GlassPoint supports CARB's work to improve the program and ensure its long-term viability, but firmly believes more details and analysis are needed prior to CARB committing to move forward with these proposals as presented.

Thank you for the opportunity to provide these comments, and we look forward to continued discussions.

Sincerely,

/s/

John O'Donnell  
Vice President, Business Development