DuraMat Capability 6:
Market Analysis

Poster Number	Capability Name	Short Paragraph Description of Capability (300 words same as the abstract. Summarize what it does and value to DuraMat and Module Materials)	Capability Expert (principal contact)	Organization Name and Type - (National Laboratory - NL, Academic Institution - AI, Company- C)	Which Capability Area Best Fits This Work (Select One)	Define from an industry perspective what near term 1 year and long term 5 year successful use of the capability would be. (100 words)	Link to Your Website (if available)
63	Technology to Market: Technoeconomic Analysis Support to DuraMat Capability Areas	The DuraMat consortium integrates NREL's solar technoeconomic analysis capabilities in order to identify research areas that could have the greatest economic and market impact. These capabilities can serve researchers and industry members within the consortium by developing and adapting lifecycle economics and finance models. NREL has established itself as a global competency leader of objective, rigorous, and thorough analysis in this area. Across the spectrum of detailed bottom-up cell and module manufacturing cost modeling to total project lifecycle levelized-cost-of-energy (LCOE) and internal rate of return (IRR) calculations, the team will be able to leverage capabilities that have already been developed under the sponsorship of the SunShot program. The research thrusts that have been selected for this consortium, and examples of new capabilities that we could aim to establish, are given in Table 1. In working with researchers and developing cost models throughout the duration of this consortium, the technoeconomic analysis team will share and collect relevant input materials and equipment prices. Operational cost drivers—such as labor content, yields, cycle times, and energy requirements—will be researched and incorporated, as will the costs of overhead, income taxes, and financing the purchase of land and manufacturing facilities and equipment. The team can also work with researchers to catalog current and selected next-generation technologies in terms of their maturation levels, as well as detail the risks and timeframes for implementing these technologies on a globally broad scale. The team will identify the major industry players with activities related to each working group and will make connections between these companies and researchers as appropriate. Over the next five years, the economic analyses and technology readiness assessments will be reviewed regularly with researchers, the DuraMat executive team and industry board, and DOE. The result will be numerous contributions for publications and transitioning technologies to the PV market.	Michael Woodhouse	NL- NREL	6. Market Analysis		