

## CASE STUDY

# Virtual PV Supply Chain Mapping: Ensuring Transparency and Minimizing Risk in the Solar Industry

## SUMMARY

Increased risk and uncertainty exists in today's global PV supply chains, meaning that understanding the flow of raw materials is crucial. A solar developer engaged CEA's Chain of Custody Audit Services for a Virtual PV Supply Chain Mapping Study. This study illuminated the journey of raw materials, from polysilicon to finished solar modules, ensuring transparency and aiding in risk-based supplier choice.

## THE CHALLENGE

For the client, the stakes were high. Operating in a global market with strict national trade regulations and their company's own internal ESG policies, they faced the daunting task of ensuring that their supply chain was free from materials originating from sensitive regions.

Any misstep could jeopardize their reputation, lead to potential legal ramifications, and disrupt the funding of operations. They needed a partner who could provide more than just a superficial assessment—a partner who could delve deep into the intricacies of the supply chain and offer actionable insights.

## KEY TAKEAWAYS

- **In-depth Analysis:** CEA's Virtual PV Supply Chain Mapping Study provided the client with a granular view of their supply chain, highlighting potential risks associated with both direct and indirect exposure to specific areas of concern.
- **Empowered Decision Making:** With the insights gained, the client could make informed choices about their suppliers, ensuring compliance and minimizing risk.
- **Industry Compliance:** The study highlighted the importance of adhering to US trade policy for supply chain traceability, emphasizing the need for continuous monitoring and assessment, and ranking suppliers by ability to comply.



## THE SOLUTION

With a significant database and profound knowledge of purchasing patterns in the industry, CEA stood out as the ideal partner for this challenge. Our expertise, derived from large amounts of QA data and research on publicly available documents, was instrumental in conducting a comprehensive Virtual PV Supply Chain Mapping Study. This study provided the client with a detailed insight into their supply chain, illuminating potential risks associated with both direct and indirect exposure to specific areas of concern. The study centered on the client's designated suppliers for photovoltaic wafers.

Two primary PV module suppliers were assessed on parameters such as factory location, nameplate capacity, purchase contract transparency, and geographic diversification. CEA's meticulous approach revealed insights into each supplier's supply chain, their degree of vertical integration, and their potential alignment with industry standards, giving the client the confidence and assurance they sought.



## THE RESULTS

- The client received a detailed map of their supply chain, offering clarity on the origins of materials and the potential risks associated with each supplier.
- This study empowered the client to make informed decisions, ensuring they chose suppliers that minimized risk and upheld the highest standards of transparency and compliance.

## WE WALK THE EXTRA MILE

- **Comprehensive evaluation:** CEA doesn't just submit documents; we conduct in-depth analyses rooted in industry best practices to ensure accuracy and reliability.
- **Extensive database:** We have a significant database and knowledge of the purchasing patterns in the industry, both from our copious amounts of quality assurance (QA) data and through research on publicly available documents.
- **Supporting Legal Entities through Analysis:** While we don't directly submit documents to customs, our on-site assessments and meticulous record-keeping provide crucial evidence for legal entities. This foundational support aids in compiling robust traceability packages, ensuring compliance and minimizing risk.

