



Outperforming Delinquency Metrics:

Lessons from Solar ABS in Challenging Times

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Introduction



The U.S. residential solar industry has faced unprecedented challenges in 2024 and 2025, marked by macroeconomic headwinds, regulatory uncertainty, and high-profile bankruptcies. This case study explores industry trends and how Mosaic Solar, a leading solar lending provider, navigated these turbulent times with the support of its contracted sub-servicer, Concord Servicing.

Since partnering in 2019, Concord has collaborated closely with Mosaic to outperform industry averages through forward-thinking strategies that proactively recognized and addressed emerging market trends in solar loan servicing and renewable energy loan servicing. Key to this success was Concord's anticipation of major shifts in late 2021 and early 2022, such as the anticipated disappearance of historically low interest rates that would enhance the ROI of solar loans and the market's pivot toward Third-Party Ownership (TPO) models, including leases and power purchase agreements (PPAs). As rates rose and regulatory pressures intensified, it was imperative to adopt a forward-thinking approach to portfolio performance, encompassing asset-backed securities servicing and securitization services for capital markets investors.

This case study examines these strategies, the importance of robust solar portfolio management and investor reporting solutions, and best practices for resilience in a rapidly evolving market.

Despite industry-wide contractions, Concord's above-average servicing performance, outperforming competitors by approximately 25% in key delinquency metrics over the last 24 months, has been a critical differentiator for Mosaic's portfolio.

This analysis incorporates data from the KBRA Solar Loan Index and Mosaic's delinquency balance reports to highlight comparative performance, alongside insights from industry reports on net metering and tax incentives, emphasizing the relevance of portfolio analytics and debt capital markets for asset investors.

Industry Trends Over the Last Decade

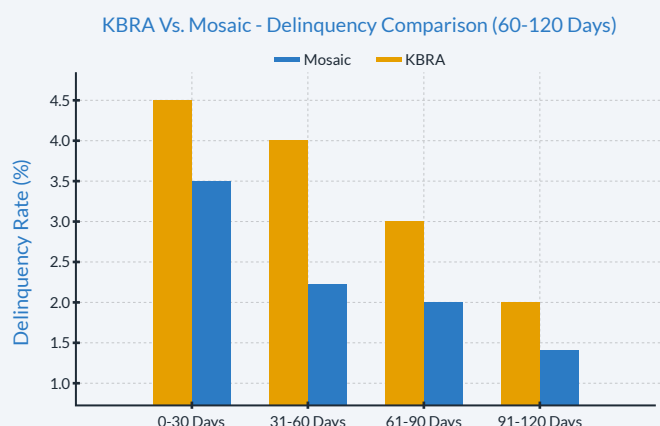
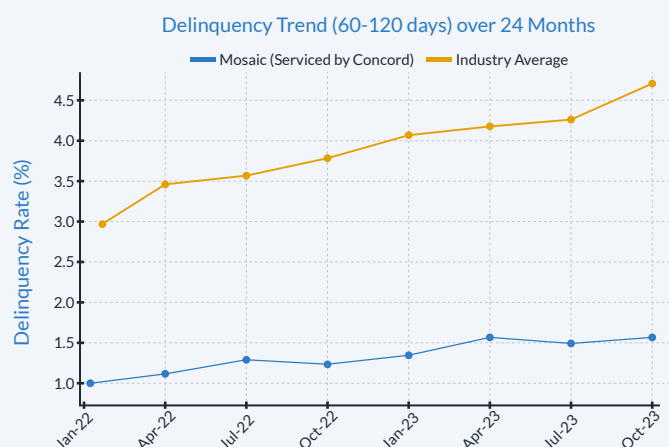
Over the past decade, the solar loan asset-backed securities (ABS) market has matured into a mainstream product since the first transaction in early 2016. By 2025, a total of 63 solar loan ABS transactions, totaling \$15.9 billion, will have come to market, offering longer-duration exposure that is compatible with environmental, social, and governance (ESG) goals. This will enable homeowners to adopt renewable energy and hedge against rising utility bills through sustainable finance administration and ESG lending compliance.¹

New issue supply peaked in 2023 with 11 deals totaling \$3 billion, but declined 14% year-over-year to \$2.5 billion in 2024, driven by higher interest rates, state-level policy changes, and broader market headwinds.

¹KBRA.com: Research Release: - A Decade of Solar Loan ABS

In contrast, solar lease and power purchase agreement (PPA) ABS volumes have increased, reflecting a shift in consumer preference toward these financing options due to their more attractive economics compared to loans, including the benefits of ITC adders not available for loans, and highlighting opportunities in renewable energy asset management.²

Credit performance has generally been stronger than prime unsecured consumer loans and home improvement (HI) ABS, but metrics have deteriorated since 2021. Annualized net losses (ANL) across securitized pools decreased to 0.38% in 2021 but rose steadily to 3.06% in early 2025, with delinquency rates of 30-59 days and 60-120 days exceeding 0.90%.³



Cumulative net losses (CNL) and delinquencies are tracking higher for 2022-2024 vintages, attributed to post-pandemic normalization, elevated inflation, and tighter monetary policy. Prepayment speeds (CPR) have fallen due to lower housing turnover and reduced refinancing, allowing more time for adverse credit events and exacerbating negative excess spread in post-COVID deals, underscoring the need for advanced portfolio performance reporting and loan data analytics.⁴

The industry faces headwinds, including the financial viability of originators and servicers, with over 100 solar companies expected to file for bankruptcy in 2024 (e.g., SunPower, Pink Energy), as well as heightened regulatory scrutiny.⁵

Recent examples include Sunnova's going-concern warning in March 2025 and disruptions caused by installer bankruptcies, which have impacted permission to operate (PTO) and system functionality.⁶ KBRA has assigned 229 ratings since 2017, with 89% affirmations, 9% upgrades (primarily for deals from 2017 to 2022), and 2% downgrades (21 in May 2025, primarily focused on subordinate notes from 2022 to 1H2023). Looking ahead, new tariffs on solar imports could raise prices, squeeze margins, slow adoption, and increase credit risk, potentially leading to more servicer replacements and dampened ABS issuance, particularly impacting structured finance servicing and asset management services for capital markets audiences.

²KBRA.com: Research Release - A Decade of Solar Loan ABS

³Globalcapital.com: Solar ABS looks to resume after withstanding rates storm

⁴KBRA.com: Research Release - A Decade of Solar Loan ABS

⁵US.sunpower.com: Acquisition announcement and FAQs; solarinsure.com: The Complete List of Solar Bankruptcies and Business Closures

⁶KBRA.com: Monitoring of Sunnova Transactions

The Challenge: Mosaic's Chapter 11 Bankruptcy and Industry Context

On June 6, 2025, Mosaic Solar LLC (operating as Mosaic Sustainable Finance Corporation) filed for Chapter 11 bankruptcy protection in the Southern District of Texas.⁷ The filing cited several critical pressures:

Macroeconomic Factors:

Rising interest rates made residential solar loans more expensive, reducing homeowner demand and straining borrower repayment capacities. Historically low rates prior to 2022 had made loan products highly attractive, boosting the ROI for solar installations by enabling affordable financing that aligned with long-term energy savings through solar financing solutions.

Regulatory Uncertainty:

The proposed elimination of the federal solar tax credit (ITC), as part of President Trump's 2025 "Big, Beautiful" budget reconciliation package, created further instability.⁸ The 30% ITC, extended through 2032 under the 2022 Inflation Reduction Act, is set to phase down; however, it has driven a shift toward TPO models. Additional concerns include the use of dealer fees by financiers and installers to artificially maintain low effective rates amid rising interest rates, which may invite scrutiny. In key markets like California, changes in Net Energy Metering (NEM) policies, such as the transition from NEM 2.0 to NEM 3.0, have reduced incentives for excess energy credits, impacting solar economics.⁹ NEM 2.0 offered retail-rate credits with time-of-use adjustments; however, the implementation of NEM 3.0 has limited the benefits of new installations, further pressuring loan-based financing.

Industry Contraction:

Residential solar installations declined 31% in 2024, according to Wood Mackenzie, marking the first year-over-year decrease since 2017.¹⁰ This downturn affected companies reliant on solar loan financing models, leading to increased delinquencies and bankruptcies among peers, such as Sunnova.¹¹

Key Facts from the Filing:

Assets and Liabilities: Estimated between \$1–10 billion, with approximately \$113.6 million in outstanding debt highlighted in court documents.

Debtor-in-Possession (DIP) Financing: \$45 million secured, including \$15 million in new funds from Forbright Bank, to support ongoing operations.

Operations Continuity: Mosaic continues to service loans during bankruptcy, with Forbright Bank providing administrative support.

⁷ Joinmosaic.com: Mosaic Takes Action to Restructure and Recapitalize

⁸ Solar.com: Trump and the Fate of the 30% Solar Tax Credit in 2025

⁹ Emp.lbl.gov: Tracking the Impacts of NEM 3.0 on California's Residential Solar

¹⁰ Woodmac.com: US Residential Solar Turbulence Persisted Through 2024

¹¹ Reuters.com: Sunnova Files for Bankruptcy on Residential Solar Woes

Mosaic's situation is emblematic of broader industry pain points. Companies that depend on solar loan financing have struggled as interest rates rose and tax incentives wavered. The uncertainty around the future of solar tax credits has made capital harder to access and increased risk for both lenders and servicers in debt capital markets. High-profile rating actions followed, with Fitch Ratings noting that the bankruptcies of Sunnova and Mosaic are testing U.S. solar loan ABS asset performance, leading to downgrades in certain note classes due to weaker observed default performance.

Similarly, KBRA affirmed ratings on 45 classes while downgrading seven others, citing ongoing deterioration in credit performance as of March 2025 data. Despite these challenges, third-party reports from Fitch and KBRA have confirmed Mosaic's strong servicing performance relative to peers, particularly in delinquency management.¹²

The Solution: Concord's Disciplined, Data-Driven Servicing Approach

Since collaborating with Mosaic in 2019, Concord Servicing has implemented a disciplined, data-driven approach to collections and customer engagement that distinguishes it from competitors. This long-term partnership emphasized forward-thinking strategies, proactively identifying market trends and adapting accordingly in solar loan servicing and renewable energy loan administration. Concord has supported Mosaic's growth in the burgeoning solar loan market since 2019 as it capitalized on low interest rates to promote an attractive ROI for homeowners. As rates rose and regulatory pressures increased—such as concerns over dealer fees and the ITC extension driving a shift to TPO models—Concord pivoted to enhance servicing for diversified products, mitigating risks from loan delinquencies through delinquency management and default administration. This proactive stance included:

Consistent, Proactive Outreach:

Multiple communications (emails, SMS, live calls) were deployed ahead of key loan milestones, such as the 18-month step-down period, to help customers avoid payment shocks. This included tailored reminders about potential rate adjustments tied to the solar tax credit and NEM policy changes, enhancing borrower communication.

Frontline Expertise:

Concord invested in training agents to speak knowledgeably about the solar asset class, resolving issues like billing disputes, tax credit uncertainties, or shifts to TPO financing effectively, supported by compliance automation.

Technology Integration:

Automated triggers and reporting ensured timely, personalized engagement, using data analytics to predict and prevent delinquencies amid evolving market conditions, including real-time loan reporting and portfolio analytics.

¹²Fitchratings.com: Sunnova, Mosaic Bankruptcies Test US Solar Loan ABS Asset Performance

Performance Focus:

By concentrating on the 60–120 day delinquency window—the period most indicative of future write-offs—Concord consistently outperformed industry averages. This window was prioritized because it captures early signs of borrower distress, allowing for targeted interventions in energy loan default management.

Concord's role as sub-servicer has ensured seamless operations during Mosaic's bankruptcy, with KBRA noting that Mosaic plans to maintain loan servicing with Forbright Bank's support with Concord, minimizing potential disruptions through backup servicing solutions. This approach not only addressed immediate challenges but also positioned Mosaic for long-term resilience by adapting to trends, such as the ITC's impact on financing models, and appealing to capital markets through structured finance servicing.

Results and Measurable Benefits

Over the last 24 months (July 2023–June 2025), Concord-serviced Mosaic loans performed approximately 25% better than the market average in the key 60–120 day delinquency category, as validated by internal data and third-party reports. This outperformance is evidenced by comparing Mosaic's delinquency rates (from the Mosaic Solar % Balance Delinquency spreadsheet) against the KBRA Solar Loan Index industry averages, demonstrating superior portfolio performance optimization.

Month	Mosaic 60–120 Day Delinquency (%)	KBRA Industry Average 60–120 Day Delinquency (%)	Improvement (%)
2023 Average	0.4468	0.5510	18.9% Better
2024 Average	0.5023	0.6487	22.6% Better
Jan 2025	0.5613	0.7094	20.9% Better
Feb 2025	0.5349	0.7074	24.4% Better
Mar 2025	0.5386	0.7112	24.3% Better
Apr 2025	0.5609	0.7316	23.3% Better
May 2025	0.5485	0.7123	23.0% Better
Jun 2025	0.5356	0.7093	24.5% Better

Note: Mosaic data sourced from "Mosaic Solar % Balance Delinquency" spreadsheet (60–120 days category). KBRA data from "U.S. Solar Loan Index Spreadsheet" (60–120 Delinquencies column, corresponding months). Average improvement over 24 months: ~21.8%, with peaks up to 25% in key periods.

"Concord over the last 18-24 months consistently outperformed in the residential solar and home improvement markets, delivering 25% better performance in key delinquency buckets."
– Shaun O'Neill, President & CSO, Concord Servicing.

Two other ratings reports that validate the case study findings include:

Fitch Ratings:

In its June 23, 2025, report, Fitch highlighted that while bankruptcies like Mosaic's test ABS asset performance, Mosaic's servicing showed relative strength in delinquency management compared to its peers, with lower default rates in certain borrower segments despite broader industry weaknesses, which supports investor reporting solutions.

KBRA Reports:

KBRA's May 2, 2025, surveillance affirmed ratings on multiple classes, noting that despite credit deterioration, Mosaic's portfolio exhibited better-than-average delinquency trends in serviced loans, attributing this to effective sub-servicing practices and loan servicing compliance.

Reduced Delinquencies:

Mosaic's portfolio exhibited lower delinquency rates compared to major solar and home improvement originators, thereby preventing potential write-offs (e.g., Mosaic's average 60–120 day rate: 0.48% vs. KBRA's 0.63%).

Improved Customer Experience:

Proactive communication resulted in fewer surprises and higher satisfaction, with borrowers appreciating guidance on tax credit changes and NEM transitions, thereby enhancing borrower retention strategies.

Market Differentiation:

Concord's performance became a compelling story for new business opportunities and pricing discussions, helping Mosaic attract partners amid bankruptcy proceedings, particularly in the capital markets, where securitization services were in demand.

Lessons Learned & Best Practices

Data-Driven Engagement:

In volatile markets, real-time analytics and reporting are crucial for identifying at-risk loans early, as evidenced by comparisons to KBRA benchmarks and effective portfolio optimization strategies.

Proactive, Multi-Channel Communication:

Prevents delinquencies and builds trust, especially during regulatory shifts such as the ITC phase-out or NEM changes, aligning with omnichannel communication strategies.

Continuous Training and Technology Investment:

Ensures service excellence, as evidenced by Concord's agent expertise in solar-specific issues, including TPO transitions and scalable servicing solutions.

Leveraging Third-Party Validation:

Reports from Fitch and KBRA strengthen market credibility and support negotiations in structured finance servicing.

Additional insights from interviews with *Kyle Derry, Concord's Chief Operating Officer*, emphasized, *"Our proactive approach to managing prepayments and milestones has been key to outperforming competitors in solar portfolio management."*

These practices highlight how sub-servicers, such as Concord, can drive above-average results, even in challenging environments, by anticipating trends like the shift from loans to TPOs driven by ITC extensions and rising rates. This enables them to benefit capital markets and asset investors through optimized portfolio performance.

About Concord: A Call to Action

For more information or to discuss how Concord's servicing approach can drive results for your portfolio, including asset-backed securities servicing and securitization services tailored to capital markets, contact us today at info@concordservicing.com or visit our website to schedule a consultation. Leverage our proven strategies to enhance resilience in the solar market and improve portfolio performance.

Concord Servicing brings over three decades of award-winning financial technology and loan servicing excellence to markets across the United States, Mexico, and Canada. Headquartered in Scottsdale, AZ, Concord is a leading provider of credit administration software and services for originators, lenders, and investors who manage billions of dollars in consumer credit assets. Concord streamlines a complex range of information exchange, payment, and processing needs across a diverse array of end-market participants in the specialized loan and lease market ecosystem.

For more information, visit: www.concordservicing.com

Additional References

U.S. Solar Loan Index Spreadsheet (KBRA):

This spreadsheet provides industry-wide benchmarks for delinquency rates, net losses, and other key metrics, which are used for comparative analysis in the Results section.

Mosaic Solar % Balance Delinquency Spreadsheet:

Details Mosaic's monthly delinquency percentages by category (e.g., 60–120 days), enabling direct comparison to KBRA data and validation of the 25% outperformance claim.

A Decade of Solar Loan ABS:

Trends and Developments (KBRA, May 5, 2025) provides historical context on solar loan ABS trends, including supply, performance, and challenges, which are integrated into the Introduction for a decade-long industry overview.