



**Q4 2023 Earnings Call
February 21, 2024
Transcript**

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Presenters

Patrick Jobin, SVP, Finance & Investor Relations
Mary Powell, Chief Executive Officer
Danny Abajian, Chief Financial Officer
Paul Dickson, Chief Revenue Officer
Edward Fenster, Co-founder and Co-Executive Chair

Q&A Participants

Andrew Percoco - Morgan Stanley
Julien Dumoulin-Smith - Bank of America
Kashy Harrison - Piper Sandler
Moses Sutton - BNP Paribas
Michael Blum - Wells Fargo
Tristan Richardson - Scotiabank
Joseph Osha - Guggenheim Partners
Philip Shen - ROTH MKM
Brian Lee - Goldman Sachs
Colin Rusch - Oppenheimer
David Benjamin - Mizuho

OPERATOR

Good afternoon and welcome to Sunrun's fourth quarter and full year 2023 earnings conference call. All participants have been placed on mute. Please note that this call is being recorded and that one hour has been allocated for the call, including the Q&A session. To join the Q&A session after prepared remarks, please press star 1 at any time. We ask participants to limit themselves to one question and one follow-up question. I will now turn the call over to Patrick Jobin, Sunrun's Senior Vice President, Investor Relations. Please go ahead.

PATRICK JOBIN

Thank you operator.

Before we begin, please note that certain remarks we will make on this call constitute forward-looking statements. Although we believe these statements reflect our best judgment based on factors currently known to us, actual results may differ materially and adversely. Please refer to the Company's filings with the SEC for a more inclusive discussion of risks and other factors that may cause our actual results to differ from projections made in any forward-looking statements. Please also note these statements are being made as of today, and we disclaim any obligation to update or revise them.



During today's call, we will also be discussing certain non-GAAP financial measures, which we believe can provide meaningful supplemental information for investors regarding the performance of our business and facilitate a meaningful evaluation of current period performance on a comparable basis with prior periods. These non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, superior to, or in isolation from GAAP results. You will find additional disclosures regarding the non-GAAP financial measures discussed on today's call in our press release issued this afternoon and our filings with the SEC, each of which is posted on our website.

On the call today are Mary Powell, Sunrun's CEO and Danny Abajian, Sunrun's CFO. Ed Fenster, Sunrun's co-founder and co-executive chair, along with Paul Dickson, Sunrun's Chief Revenue Officer is also on the call for the Q&A session.

A presentation is available on Sunrun's investor relations website, along with supplemental materials. An audio replay of today's call, along with a copy of today's prepared remarks and transcript including Q&A will be posted to Sunrun's investor relations website shortly after the call. We have allocated 60 minutes for today's call, including the question and answer session.

And now let me turn the call over to Mary.

MARY POWELL

Thank you, Patrick.

And thank you all for joining us on our call. We have lots of exciting things to talk about today.

First, our team delivered on our storage first and margin focused strategy in 2023.

In the fourth quarter we far exceeded our Storage Capacity Installation guidance and landed in our guidance range on installed solar capacity. This transition to higher-value subscription offerings resulted in significant increases to our Subscriber Values, up 7% from Q3 and 18% year over year, and in combination with continued cost discipline, Net Subscriber Values also exceeded our guidance. We generated \$11 million in cash in the quarter and grew Net Earning Assets to over \$5 billion. We now operate a fleet of more than 1.3 gigawatt hours of storage capacity and near 7 gigawatts of solar capacity, with over 933,000 customers. We remain focused on driving meaningful Cash Generation in the business and are reiterating our strong Cash Generation outlook for the year.

The fundamental demand drivers of our business continue to be robust. First, utility rates continue to rise, due to the stress and strain of climatic events on the grid and the massive utility capital expenditures. Second, solar and storage equipment costs are declining, while our install labor productivity continues to improve. Third, capital costs have stabilized and could decline. Finally, customers remain eager for clean, affordable and resilient energy to power their lives.

We are extending our differentiation by making clean, affordable and reliable energy accessible to families across America with the most pro-consumer offerings, and delivering the best customer experience and service in the industry. Being the chosen, trusted provider to deliver this clean energy future is critical. As a testament to our customer-first approach, our customer Net Promoter Scores at the time of installation continued to increase, reaching 73 points in Q4.

Demand & Storage Outlook

I am pleased to report that our volume trend is strong. Q1 sales are growing 23% compared to Q4, led by California, where sales are growing at over 40% sequentially. We believe this sales growth will flow through to installations over the coming quarter, leading to a sharp uptick in Q2.

Q1 is seasonally a low installation quarter and typically declines from Q4. Results in Q1 will be influenced by the slower than expected recovery in CA last year and our strategic decision to exit certain unprofitable markets, as we discussed on the last call.



Most important, we continue to increase the mix of storage. We installed 220 megawatt hours of storage capacity in Q4, growing 154% compared to the prior year and 25% from the prior quarter. Our storage offerings provide customers enhanced value and generate significantly higher margins for Sunrun. At the same time, they are the foundation for future monetization by providing at-scale distributed power plant capabilities. Our storage attachment rate was over 45% of installations across the country in the fourth quarter – up from 33% last quarter and 15% at the beginning of the year, and this number continues to rise with new sales.

We remain disciplined in how we participate through the affiliate channel. We value our partners that are focused on customer experience and that value our brand, platform, storage-first product suite and sustainable pricing model. There are pockets of irrational behavior in the Affiliate Partner segment of the market with several financing-only participants scaling with pricing that we consider unattractive. Our decision not to compete for such business can influence short-term affiliate channel volumes. We've seen this behavior several times in the company's nearly two-decade history and won't chase volumes at economics that we do not view as sustainable. We believe our diversified market approach, which includes an integrated sales force and fulfillment capacity, provides insulation from these behaviors from financing-only firms and is a strategic benefit to Sunrun.

Launching Lowe's Partnership

I am excited to announce today that we have selected Lowe's as our home improvement retail partner. Lowe's presents a new and exciting partner, one that has a great homeowner-focused model that overlaps with our target markets and geographies. With many years of experience reaching customers through retail activities, we thoughtfully evaluate opportunities and are excited about our Lowe's partnership. We launched in Lowe's on February 16th, transitioning our sales staff out of Home Depot the prior day. We are incredibly encouraged by the results so far.

Renewal Pilot

Over the last few months we advanced several strategic priorities, including launching an early renewal pilot and commencing storage retrofit installations for existing customers. I believe one of Sunrun's most underappreciated assets is the base of customers that we will serve for decades and the numerous opportunities we have to provide valuable products and services beyond our initial subscription agreement. As the trusted company who has built strong relationships with customers from the initial sales consultation, to the installation and ongoing service, we are in an enviable position to be able to offer and realize value from additional products and services at many touch points throughout the customer lifecycle.

Our early renewal pilot highlights most customers are interested in extending the length of their subscription agreements even well before they expire. While the pilot only targets several hundred customers, thus far approximately *three quarters* are eager to renew their contracts for 5 years at their current pricing and agreement terms, or are in the process of evaluating proposals. Nearly all of those that have renewed did so an average of 5 years before the end of their initial contract -- to lock in the peace of mind and energy savings provided by their current subscription service.

Only about one quarter of customers opted not to renew early at our first attempt of presenting the offer. However, about half of these customers have expressed interest to buy the system outright, explore upsizing their systems with Sunrun with new equipment, or expressed that they might be moving. All of these scenarios provide incremental margin opportunities for Sunrun.

Customers are also eager for our battery retrofit offering. While it's still early days and only available in select markets, orders have been growing rapidly and customer interest is high.

Sunrun is uniquely positioned to see significantly better total lifetime customer value realization than financing-only providers who do not develop the strong relationships we do with customers through the sale and installation and the ongoing service we provide.

While we are only targeting several hundred customers, we are pursuing the pilot to optimize sales strategies, systems and processes to tackle these opportunities at scale in the years ahead.

Conclusion

Shifting gears.

I want to highlight our thoughtful and disciplined approach to funding Sunrun's growth and generating value for our investors before Danny covers it in more detail.

We ended 2023 with more total cash than recourse debt, and we generated cash in both Q3 and Q4.

During Q1 we executed numerous capital transactions that are aligned with our disciplined capital strategy and approach.

First, we expanded our \$1.8 billion non-recourse senior warehouse facility by \$550 million to \$2.35 billion and extended the maturity date by approximately three years from 2025 to 2028.

Second, we extended the maturity of our recourse working capital facility, from January 2025 to November 2025, with a provision to extend the maturity further to 2027, subject to meeting certain conditions. The terms of the extended facility are consistent with our objective to generate cash, extend maturities at a time some of our competitors are at risk, reduce recourse leverage, and optimize our cost of capital, all to drive increased shareholder value.

Third, we continued to execute tax equity funds and term-out financings with strong terms, recently closing an approximately \$470 million term out transaction. We are proactively and prudently managing our parent debt profile and funding to support growth and drive shareholder value. I am so appreciative of our finance team at Sunrun and our financial partners who share a vision to make clean energy affordable and accessible to all.

Celebrate our people

Before handing the call over to Danny, I want to take a moment to celebrate our people, the heart and soul of this customer-led revolution in energy. First thank you to our team in Bakersfield, California, who were our top ranked install crew based on safety, storage attachment rates and customer experience this quarter. Thank you all for your contributions and leadership at Sunrun.

Second, a big shout out to our friends at Bright Panel Solar, our top sales dealer in Puerto Rico. We are so thankful for your partnership over the years and look forward to many more to come.

With that, let me turn the call over to Danny for our financial update.

DANNY ABAJIAN

Thank you, Mary.

Today I will cover our operating and financial performance in the quarter along with an update on our capital markets activities and outlook. Our team is delivering strong volumes, leading with storage, and financing our growth in an efficient and appropriate way.

Turning first to the results for the quarter on slide 11.

Volumes

We have now installed over 90,000 solar and storage systems. We expect storage installations will grow substantially in the quarters ahead. Recent sales of storage-attached systems have been approximately 48% nationally, which should continue to drive installed attachment rates higher in future periods. Our backup storage offerings carry higher margins, typically by several thousand dollars per customer.



During the quarter, we installed 220 megawatt hours of storage capacity, significantly topping the high-end of our guidance and reflecting an increase of 154% from the same quarter last year, bringing total networked storage capacity to over 1.3 gigawatt hours.

In the fourth quarter, Solar Energy Capacity Installed was approximately 227 megawatts and within our guidance range of 220 to 245 megawatts. Customer Additions were approximately 30,000, including approximately 27,000 Subscriber Additions. Our Subscription mix represented 92% of our deployments in the period, an increase from 89% last quarter and the highest level in many years.

We ended 2023 with approximately 933,000 Customers and 781,000 Subscribers, representing 6.7 Gigawatts of Networked Solar Energy Capacity, an 18% increase year-over-year. Our Subscribers generate significant, recurring revenue, with most under 20- or 25-year contracts for the clean energy we provide. At the end of Q4, our Annual Recurring Revenue, or ARR, stood at over \$1.3 billion, up 28% over the same period last year. We had an average contract life remaining of nearly 18 years.

Subscriber Value, Creation Cost, Net Subscriber Value & Total Value Generated

Turning to slide 12.

In Q4, Subscriber Value was approximately \$50,300 and Creation Cost was approximately \$36,900, delivering a Net Subscriber Value of \$13,445. Our Q4 Subscriber Value and Net Subscriber Value now reflect a blended 33.8% Investment Tax Credit, benefiting from the energy communities ITC adder and a portion of the systems eligible for the low-income adder.

Total Value Generated, which is the Net Subscriber Value multiplied by the number of Subscriber Additions in the period, was \$363 million in the fourth quarter.

Our present value-based metrics are presented using a 6% discount rate, but our financial underwriting already accounts for our current cost of capital, which is in the 7.5% area. As a reminder, to enable ease of comparison across periods, we generally do not update the discount rate frequently. Instead, we provide advance rate ranges that reflect current interest rates, enabling investors to calculate the obtainable net cash unit margins on our deployments. In addition, we provide a pro forma Net Subscriber Value using the capital cost observed for the quarter.

At a 7.5% discount rate, Net Subscriber Value was \$8,447 and Total Value Generated was \$228 million.

We expect additional tailwinds to Net Subscriber Value in future periods from the following variety of factors: sequential growth in volume, higher storage attachment rates, increased realization of ITC adders, and lower costs from hardware price reductions, labor efficiency and operating leverage from volume growth.

On slide 13, we detail the tailwinds from ITC adders and hardware costs.

During the fourth quarter, we continued to recognize cash proceeds for the energy communities adder, while proceeds from the awarded low-income adders are still pending final government approval on each application, which we would expect in late Q1 or Q2. Proceeds from domestic content adders are expected to be realized in the coming quarters. Guidance on what will qualify for the domestic content adder has been issued, however we are still awaiting additional rulemaking processes sometime this year. Combined, these three adders represent up to \$450 million or more in additional annual run-rate cash proceeds.

We continue to see decreasing prices for key hardware components, which are gradually flowing through our reported costs as we finish consuming our higher-cost inventory. On a like-for-like basis for a 7.5 kilowatt solar with backup battery system, by the end of this year, hardware costs are expected to decline by over 18%, or nearly \$2,500 per system, from their peak in the second quarter of 2023. These beneficial trends may be obscured by an increasing mix of storage, which carries higher net margins, but will increase hardware and install costs and therefore impact Creation Costs.

Turning to slide 14.

We have presented a pro forma Net Subscriber Value to show the potential impacts to unit margins from the forthcoming ITC adders, if fully realized, along with the hardware cost tailwinds we expect in the

coming quarters. Based on our mix of business in Q4, pro-forma Net Subscriber Value with these benefits was approximately \$15,300 at a 6% discount rate, and \$10,300 at a 7.5% discount rate.

Gross and Net Earning Assets, Cash Balance

Turning now to Gross and Net Earning Assets and our balance sheet on slide 16.

Gross Earning Assets were \$14.2 billion at the end of the fourth quarter. Gross Earning Assets is the measure of cash flows we expect to receive from Subscribers over time, net of operating and maintenance costs, distributions to tax equity partners in partnership flip structures, and distributions to project equity financing partners, all discounted at a 6% unlevered capital cost.

Net Earnings Assets were \$5 billion at the end of the fourth quarter. Net Earning Assets is Gross Earning Assets, plus cash, less all debt. Net Earning Assets increased by \$466 million this quarter. Net Earning Assets does not include inventory, or other construction in progress assets or net derivative assets related to our interest rate swaps, all of which represent additional value. The value creation upside we expect from future grid service opportunities and selling additional electrification products and services to our customer base, including our storage retrofit offering, are not reflected in these metrics.

We programmatically enter into interest rate hedges to insulate our capital costs from adverse near-term fluctuations. The vast majority of our debt is either fixed-coupon long-dated securities, or floating-rate loans that have been hedged with interest rate swaps. As such, we do not adjust the discount rate used in Net Earning Assets to match current capital costs for new installations.

We ended the quarter with \$988 million in total cash, an increase of \$36 million compared to the prior quarter.

Capital Markets & Capital Runway

Turning to our capital market activities.

We have been incredibly active over the last few months arranging capital to support our growth and further optimize our balance sheet in ways we believe can drive considerable long-term shareholder value.

We have successfully extended and upsized our non-recourse revolving senior warehouse facility to support our scale. This facility finances assets temporarily before we raise term out financing, principally in the asset-backed securitization market. We increased the size by \$550 million, from \$1.8 billion to \$2.35 billion, and extended the maturity by approximately 3 years from April 2025 to February 2028. The effective credit spread increase of 50 basis points was commensurate with recent movement in the securitization market for term out transactions with similar advance rates. The facility continues to have a diversified set of nine relationship lenders. We also achieved certain other improved terms that afford more flexibility to fund our anticipated future product and geographic mix.

Our team also continues to execute tax equity transactions, including structures that facilitate ITC transfers to a deepening pool of large buyers. The traditional tax equity market has been tighter recently, which we believe is owing to the calendar year tax planning exercises that our partners undertake, along with the fact many of our partners are exploring the options now available to increase the size of structures by utilizing ITC transfers. This structural rethinking can impact the timing of fund commitments. That said, our long-term track record as a sponsor, and relationships which have spanned well over a decade, continue to put us in a good position to arrange tax equity funding.

As of today, closed transactions and executed term sheets provide us with expected tax equity capacity to fund over 195 megawatts of projects for Subscribers beyond what was deployed through the fourth quarter. Sunrun also had \$577 million in unused commitments available in its non-recourse senior revolving warehouse loan at the end of the quarter, pro-forma to reflect the subsequent upsize and amendment. This unused amount would fund approximately 211 megawatts of projects for Subscribers. Our strong capital runway allows us to be selective in timing transactions.

In February we also closed an ABS transaction with a private credit investor, along with arranging subordinated financing. The \$361 million non-recourse senior debt was rated A- by Kroll and was priced with a 232.5 basis points spread. This demonstrated yet another improvement in capital costs, with

spreads declining from our last securitization in September that was priced with a 240 basis points spread. We placed a \$109 million subordinated loan on the portfolio as well. The all-in full-stack weighted average cost of capital was approximately 7.5% and resulted in a cumulative advance rate, as measured against our contracted Subscriber Value metric, of over 80%. The use of private credit investors shows the strong interest in our assets from a growing and broad set of investors.

On the parent capital side, we have a couple of updates to share. Our overarching strategy is to drive the lowest cost of capital across the enterprise, supporting high asset-level financing to generate cash, while appropriately managing parent leverage to make sure we have flexibility in terms of our debt maturity timelines. It is prudent to extend facilities early to navigate potential and unexpected macroeconomic conditions and volatility.

Consistent with this strategy, we have been planning to refinance our recourse working capital facility, and we recently closed that extension. We reduced the size from \$600 million to \$447.5 million, with an option to upsize the facility to \$477.5 million prior to September 30, 2024. The reduction in the facility is in-line with the reduced working capital needs of the business, especially as we have substantially reduced inventory as pandemic-related supply chain challenges fade into the past. We amended the facility to extend the maturity from January 2025 to November 2025. We also included a feature that will further extend the maturity to March 2027 – should we meet the requirements for this provision. The facility now has typical grid-based pricing tied to utilization, with spreads ranging from 325 to 375 basis points. This facility can be refinanced without penalty at any time.

Shifting to our convertible debt. In 2021 we issued \$400 million of zero-coupon debt that is due in February 2026. During Q4 and into Q1 we have opportunistically taken advantage of the market dislocation in the pricing of these bonds by repurchasing nearly \$26 million of principal value at a significant discount to par in the open market, deploying approximately \$20 million. These repurchases reflect a healthy low teens-area yield to final maturity, levels we believe are accretive to shareholders.

This afternoon we also issued a press release indicating we are launching a \$475 million convertible debt offering. I will refer you to read that release for more information on the proposed transaction, the use of proceeds, and the capped call transaction that is intended to mitigate dilution.

As of today, we have \$374 million of 2026 convertible bonds outstanding. Our previous transactions buying the 2026 bonds resulted in a reduction to net debt. We also recently reduced our working capital facility by about \$153 million, contemplating this balance sheet optimization opportunity that is consistent with our strategy of being prudent with the quantum and duration of recourse debt.

Depending on the execution of the new convert issuance and the repurchase of the 2026 notes, total recourse indebtedness could either decline or increase, unlikely material in either direction, while the maturity schedule will be extended significantly.

When we think about our balance sheet, we prioritize a strong cash position, and use of asset-level non-recourse debt financing. This strategy provides the lowest cost capital to finance cash-flow producing assets backed by high-credit consumers, and to use parent recourse debt that is appropriately sized and balances maturity dates, cash interest costs and flexibility.

Outlook

Turning now to our outlook on slide 19.

The market remains very underpenetrated and we continue to believe we can sustain robust growth throughout this decade. In this strong long-term demand backdrop, our priority is to generate cash by continuing to increase customer values through growing storage adoption and other higher value products and services, and by reducing costs by driving further efficiencies across the business.

Storage Capacity Installed is expected to be in a range of 160 to 170 megawatt hours in Q1. This represents 125% to 139% growth year-over-year. For the full-year, we expect Storage Capacity Installed to be in a range of 800 megawatt hours to one gigawatt hour, reflecting 40% to 75% growth year-over-year.



Solar Energy Capacity Installed is expected to be in a range of 165 to 175 megawatts in Q1. This represents a decline of approximately 25% from Q4 at the midpoint. Q1 is typically the lowest period of the year based on seasonal constraints to sales activities in Q4 and Q1, along with weather-related obstacles to installations in Q1. Our volume has declined from Q4 to Q1 in every year we've reported our volume, and this year is no exception. In addition, the continued discipline we are exercising in the Affiliate Partner segment has a slight effect along with the fact that we exited Arizona. Because of the pull-in of demand in California in early 2023, year-over-year comparisons are less relevant in Q1. We are confident that Q1 volumes will mark the low point and we expect very robust sequential growth into Q2 and the rest of the year.

For the full-year, we expect Solar Capacity Installed to be in the range of down 5% to up 5%. This represents market-share gains as the strength of our subscription offering and our disciplined go-to-market approach delivers strong results.

Our growth in the value we create with this volume will be much larger. We forecast Subscriber Values will increase by greater than 10% in 2024 as we increase our mix of higher-value offerings, and input costs decline, resulting in growth of Total Value Generated of greater than 15% in 2024.

Turning to slide 20.

We expect our disciplined and focused strategy will allow us to capitalize on our long-term opportunity, with our current focus on cash generation in 2024.

We are reiterating our range of two hundred to five hundred million dollars in recurring annual cash generation, which we expect to achieve by the fourth quarter of 2024. We generated cash in the fourth quarter, the second consecutive quarter of positive cash generation. We continue to expect cumulative Cash Generation to be positive from Q4 2023 through the end of 2024. Keep in mind, cash generation can be lumpy quarter-to-quarter based on project financing timing and inherent seasonality in our business. To this point, we expect to have lower cash generation in Q1 owing to the timing of financing activity and lower volumes, the latter of which results in worse fixed cost absorption. In addition, refinancing our warehouse facility will result in a one-time reduction to cash as we reflect the new advance rate on assets in the facility.

Our cash generation range is based on assumptions we have outlined on the bottom of slide 20.

With that, let me turn it back to Mary.

MARY POWELL

Thanks, Danny.

I am so appreciative of the work of the Sunrun team executing on our transition to a storage-first company to extend our differentiation, expand our margins, and deliver the best value to customers. Importantly, I believe our steadfast commitment to our disciplined growth strategy will maximize the value we can create in the long-run.

Operator, let's open the line for questions.

Operator

Thank you. We will now be conducting a question-and-answer session. If you would like to ask a question, please press star one on your telephone keypad. A confirmation tool will indicate your line is in the question queue. You may press star two if you would like to remove your question from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing the star keys. As a reminder, please try to only ask one question and one follow up.

Our first question comes from the line of Andrew Percoco with Morgan Stanley. Please proceed with your question.

Andrew Percoco

Hi, guys. Thank you for taking the question this evening. I guess just to start out with your guidance, I just want to break down your solar growth guidance for the year. You're showing some pretty impressive sequential growth within your slides. So can you just maybe just provide some context on what you're baking into that guidance in terms of California and non-California growth throughout the year?

Mary Powell

Yes, for sure, Andrew. Nice to hear from you. Yes, I mean what we're really seeing is that Q1, we've seen some nice sales growth volume as I hit, right? So we've seen sales growth -- sales growing 23%. California is growing 40% sequentially. And in our constant monitoring with all of our sales leaders across the company, yes, we feel very comfortable around the demand that we're seeing.

As you also know, we're very, very focused on not just that solar volume, but also the storage attachment rate where we've seen, again, really, really healthy upticks in the percentage of the attachment rate as well as what we're seeing every single week from the field in the context of what the -- the attachment rate that they're selling. So, we're feeling really good about the volumes we talked about, and we're also really expecting, again, that net subscriber value growth tied a lot to the storage attachment rate, the retrofit work we're doing, and some of the other initiatives we hit.

Andrew Percoco

Understood. That's helpful context. And then maybe just switching gears a bit. This renewal pilot is really interesting. So I just kind of want to double-click on that for a second. I guess, based on the conversations you're having with some of your debt providers, what do you need to demonstrate to start getting some of that renewal value credit within the underwriting process? It seems like this is a pretty small sample size, and you're still kind of working through it. So how far are you in those conversations and what needs to be done in order to start getting additional credit as you come to market with future securitizations?

Danny Abajian

Yes. Great question. I think it's more track record, getting the numbers that continue to build. I think there's also obviously a variety of things we can pilot and test in this period where we have customers that have the long-term relationships with them. We can go back to different subsets of customers and test the effectiveness of what works. So, I think it's really continuing at it and building the track record. I think we're encouraged with the initial results. I think from a debt underwriting perspective, it's really the track record lengthening and the numbers building.

Andrew Percoco

Understood. Thank you so much.

Operator

Thank you. Our next question comes from the line of Julien Dumoulin-Smith with Bank of America. Please proceed with your question.

Julien Dumoulin-Smith

Thank you, operator. Good afternoon, team. Nice to chat with you guys. So, just kicking things off on cash and obviously, the ramp to meet your cash guidance. Can you talk a little bit about external financing needs beyond the sort of present context here? As you think about ramping up into that more ongoing sort of sustainable cash number, how does today's developments juxtapose against the ongoing needs presumably that you achieve by the end of the year here in terms of cash?

Danny Abajian

Yeah, I would say the exercise and the activity that we've been talking about is really about taking care of at the parent recourse level, the maturities, the amount of leverage. And then at the asset level, as we talked about with the warehouse pushing out for three years, the runway of warehouse financing in line with the strategy to maximize the non-recourse level. And all of that taken together is within the kind of backdrop of, obviously, more importantly, the cash generation picture and delivering into that later this year, which is looking on track.

Julien Dumoulin-Smith

Got it. Excellent. And then do you want to talk a little bit more about the volumetric breakdown here? I mean what stands out to me is your commentary on sales here, even at the start of the year, seems to reflect some -- as you use the word sharp uptick. Do you want to elaborate a little bit more geographically on what you're seeing out there? You talked about the enthusiasm from the field. How does that juxtapose against maybe some of the other data points that we're seeing about California specifically here, if you can elaborate. And obviously, it seems like that's really informing your second quarter expectations on installs, too?

Mary Powell

Yes, for sure, Julien. What we're seeing is the recent trends are positive. And as we talked about before, yes, we were managing through some changes in the context of policy in California, but the trends, particularly in California, are positive and growing. In fact, California is growing faster now than the rest of the country for us. So, we're feeling good about the build back in California.

And again, we're seeing really good results in other parts of the country. What you see with us largely is in Q1 is a result of what I view as really important prudent decisions we made on volume that, again, is just seeing its way through a quarter that traditionally always has lower volumes. So it's our -- it's a reflection of our disciplined focus on sustainable profitable growth. And that's, again, what drove up our net subscriber value that we talked about is really our execution of that.

Julien Dumoulin-Smith

Wonderful. Thanks, guys.

Danny Abajian

Thank you.

Operator

Thank you. Our next question comes from the line of Kashy Harrison with Piper Sandler. Please proceed with your question.

Kashy Harrison

Thank you. Good afternoon, everyone. Thanks for taking the question. So first one, just a quick financing strategy question. Mary, as you indicated, you exited the year with \$680 million in unrestricted cash, and it sounds like the cash balance is going to be higher by the end of 2024, given the cash gen commentary. So why pursue a convert rather than just pay it down since you would have had excess cash after the convert pay down?

Danny Abajian

Yeah, I think I'll take that. The exercise here is obviously with a few facilities involved across the stack, maturity extension, near-term liability management, that's been driving some of the timing of the layering of financings. I think we saw, again, the convertible bonds where they're trading looked very apparently dislocated to us. We did go ahead and purchase a bit of that. I think pricing moved during that few week process that we were repurchasing. But I think generally, it was the near-term focus on the liability management. We think that's prudent, extending out the maturities and then shifting for the balance of the

year with that behind us to cash generation and then optimizing the use of that extra cash as it arrives to maximize shareholder value.

Kashy Harrison

Fair enough. And then my follow-up question is on the cash generation target guidance that you reiterated. Can you just remind us what the sensitivities are to interest rates, all else equal? And then maybe part and parcel with that, I guess I would have thought the project costs would be maybe closer to 7% given recent securitizations and the drop in the benchmark rate versus the time of the last 3Q call. So I guess I'm just curious why your project finance costs only moved down 25 BPS relative to the last update? Thank you.

Danny Abajian

Great questions. The first one is about -- 0.25 point is about 1 point in -- or about 75 basis points in advance rate move. I think we've gotten a little bit less rate sensitive as kind of the baseline of rates has stabilized higher. On an annualized basis, that's between \$40 million and \$50 million of cash generation change per 0.25 point of change in interest rates.

And on the second one, that's a fair observation. I would say the 7.5% does skew a little conservative relative to what we've been seeing in the market. I think there's a possibility we'd end up a tad lower on a subsequent transaction.

Operator

Thank you. Our next question comes from the line of Moses Sutton with BNP Paribas. Please proceed with your question.

Moses Sutton

Thanks for the question. I just have a follow-up to Kashy on the convert. Just to clarify, do you expect to repurchase a majority of the \$374 million 2026 convert? I get this is mostly a refi. I'm just trying to understand if the majority of that would be repurchased. And do you expect an arbitrage considering using a convert to buy a discounted convert? I'm trying to understand if there will be a pricing premium relative to the 2026?

Danny Abajian

Yes, I think I do want to just kind of refer you more to the press release. I think a repurchase was noted in the press release, and I think that's kind of use of proceeds. As to how much, I think that will come out in due time. We did note in the script that we could see leverage fall as a result of the transaction. It could go slightly up. But generally, that's the positioning on the range. But in either direction, not intending to be material.

Moses Sutton

Got it. That's very helpful. And I guess shifting to NEM 3.0. Mary, I believe you noted CA is growing faster for you now than the rest of the country, which is quite astonishing. I know it relates a lot to the storage attach rates. How much do you think it relates to the underlying NEM 3.0 return profile? We get that there's a lot of friction, 2.0 to 3.0. There was a lot of pull forward. So, it's really hard to get a real-time sense of the economics with eye-popping time of use rates, I'm curious if there is a misconception out there on how NEM 3.0 return looks?

Mary Powell

Yes, I mean, Sunrun, the story is our differentiation because we had expertise in storage. And so again, we innovated, as you know, with a product to grab customers as soon as possible, that shift product. And then we found that really what customers were wanting across California was whole home backup and we have great expertise in that. So -- and we launched, as you know, we called 2023 the year of storage, and we were going to -- we were leading with storage and our numbers show that that was a very effective strategy, particularly in California.

So California is for some, still probably a challenging market for companies that are selling solar only or who don't have this kind of differentiation. You also note, and it's correct that utility rates, there's nothing stopping the pressure on utility rates. So over time, that also is certainly helpful in the context of the Sunrun value proposition with our solar plus storage offering.

Moses Sutton

Excellent. Thank you. I'll pass it on.

Operator

Thank you. Our next question comes from the line of Michael Blum with Wells Fargo. Please proceed with your question.

Michael Blum

Thanks. Good afternoon. I wanted to go back to the program you have here to renew the contracts for customers. Can you just kind of walk through the process of turning those indications into actual signed contracts? And what are the plans to roll this program out more broadly to your customer base?

Mary Powell

Yes, great question. We're really excited about the early results. And as you know, we were really pleased to get this renewal pilot going. We have Paul Dickson here who's led this effort. So, Paul, why don't you address some of those questions.

Paul Dickson

Yes. Thanks for the questions. I think really the focus for us, obviously, as was mentioned in an earlier question around financing these assets and securitizing the full value that we're creating with these customers, but on these initial pilots, the focus is really for us in better understanding our consumers' needs and desires and interests. And as we've dug into doing customer pulling and now actually selling customer renewals, we're finding exactly what we hoped to find, which is customers love the product, they're eager to extend and renew.

And there's a whole host of avenues that we can take that with adding additional products and increasing rate or keeping where they are with their steady escalator. So there's a lot on the table for us as we open the store and extend it. But really, it's about understanding the assets that we're sitting on and taking full value of them and giving customers what they're looking for.

Michael Blum

Great. Thanks for that. And then you recently, as you noted, you switched from Home Depot to Lowe's. Just wondering if you can address the difference in the arrangements there? And just more broadly, maybe how you're viewing the different sales channels from (audio gap).

Paul Dickson

Yes. So, we like having a strong presence in a home improvement area for retail. And as we've been focused on cash generation and driving profitable growth, and evaluated the opportunity in Lowe's we found some really interesting and advantageous things about that as a host site, if you will. One being a really high homeowner demographic. And two, just the general reality that there's been far less solar presence in those retail sites. And although it's only been a few days of selling in that site, it's been really encouraging. So we're really excited about the consumer demographic and the relatively unpenetrated nature of it.

Michael Blum

Thank you.

Operator

Thank you. Our next question comes from the line of Tristan Richardson with Scotiabank. Please proceed with your question.

Tristan Richardson

Hi, good afternoon guys. Just a question on the cost reductions you're seeing on the equipment side. You mentioned 18% -- or greater than 18% off the highs. Is that just sort of what you're seeing today in terms of your product categories? And then also, you talked about realizing this over the next couple of quarters. We're hearing throughout the value chain the pricing pressure is not completed yet. So is there a possibility that that 18% over the next couple of quarters could end up higher than 18%?

Danny Abajian

Yes, great question. So, definitely, the 18% is being driven by actual pricing on procurement activity we are conducting in the market. The reason we are talking about it in a lag manner, again, is the amount of inventory we've been carrying on hand has been a little bit more sticky in terms of being above target. I think it's moving towards target over the next quarter or two as we've guided to over the last couple of quarters.

And as that moves through, we do have good line of sight into that greater than 18%. It could certainly be more. At this point, it's most heavily being driven by battery prices and module prices, which are the -- obviously the most significant part of the stack. But definitely, pricing has softened up a bit and remained that way, and there could be opportunity for a bit more.

Tristan Richardson

Appreciate it. And then just a follow-up, I think going in the same vein around the you said greater than 100 days maybe on last quarter and today, we're approximately 100 days. Does that reflect the uptick in sales activity you guys are talking about seeing here in 1Q? Or should we expect that to accelerate downward just given what you're seeing early in the top of the funnel?

Danny Abajian

Yes. So not yet reflected. And part of what brings it down is apart from just bringing down the gross dollars of inventory balance, the significant increase we are expecting in install activity that will follow our sales. And that's also in line with that kind of one to two-quarter guidance as our daily rate of installs will be much higher and our balance will be lower, we should naturally get to our target days.

Tristan Richardson

Super helpful. Thank you guys.

Danny Abajian

Of course.

Operator

Thank you. Our next question comes from the line of Joseph Osha with Guggenheim Partners. Please proceed with your question.

Joseph Osha

Hi, everybody. Two kind of interlinked questions. First, understanding that this convert was largely refi. Can you give us some ratio or set of limits that we can use to think about what the trajectory of recourse debt

for the company might look like? And in that vein, when you talk about the \$200 million to \$500 million in annualized cash generation by Q4 of this year, can you commit to us that that is cash generation that occurs without the benefit of equity or equity linked or recourse debt issuance? Thanks.

Danny Abajian

Yeah. Yes, to that second part. The cash generation here is really geared towards maximum use of non-recourse. So it's really implied here is a growing amount of non-recourse that is exceeding the cost to generate the originations. So that is the cash generation. That's obviously different. That's not a plan to raise more parent capital.

Joseph Osha

Okay. And on that first question, how can we think about what recourse debt? How we should think about that in action?

Danny Abajian

Yes. I think -- yeah. Obviously, with the transaction -- with the 144A transaction in the market, I will have to kind of reiterate pointing to that. But I'll kind of like reiterate the part of the prepared remarks, no material movement in either direction in the amount of like net parent leverage.

Joseph Osha

That is net recourse?

Danny Abajian

Recourse, correct.

Joseph Osha

Okay. Thank you very much.

Operator

Thank you. Our next question comes from the line of Philip Shen with ROTH MKM. Please proceed with your question.

Philip Shen

Hi all. Thanks for the questions. As it relates to renewals, I was wondering if you could share -- sorry if I missed it, but can you share from a renewal standpoint, the dollar or megawatt volume that could be up per year, this year, next year, and how that might scale thereafter? Thanks.

Danny Abajian

Yes. So, this year, we have no customers that are up for renewal. It's a proactive pilot. So we're reaching out to customers that in three to four years from now begin to start renewing. And so we're proactively talking to them to understand what those opportunities are.

Mary Powell

And in fact, renewing them early. So, again, like it is about learning and scaling. So, again, we're not at all thinking about this as something like we're going to sit here and wait for customers to renew. We're going to come up with programs and ways to meet their needs ahead of the end of their renewal period.

Philip Shen

Yes, I totally get everything you said, and I understand the renewals are not for some time, but was wondering if you guys had a view as to what the volume might be. That's -- I'll move to the second

question here. With your flat 24-megawatt guide as a backdrop, you know, our work with Freedom Forever, which I believe is one of your largest, if not largest dealers suggest they may be growing 60% to 100% year-over-year.

So our estimates suggest that they might -- may have contributed 250 megawatts to your business in 2023. In 2024, this could be closer to 380 megawatts and as they're splitting their volume between you and EverBright. So our rough numbers suggest that they might be adding, what, roughly 130 megawatts to your megawatts in 2024 of your roughly 1 gig.

So given that you have guided flat year-over-year, can you give us some color on what is happening with the rest of the business, if they're growing 130, perhaps our assumptions on the freedom situation are off the mark, maybe correct us if we're wrong. But maybe share with us what's going on with the rest of your dealer business year-over-year.

And from a direct standpoint, how is that business going -- is your direct business -- I know on slide 20 -- six there -- slide six, it shows that you have a direct business growing really well. But I was wondering where Freedom is categorized. Are they categorized in the affiliate program there or partner? Or is that in the blue Sunrun direct bar. So, if you can share some more color on that would be fantastic. Thanks.

Mary Powell

Yes. So that's what I was going to point you to is slide six, which really gives you a very clear picture of how we see '24 currently. And yes, Freedom Forever, who has been a partner for quite a long time, a valued partner, shows up in the affiliate partner installations category. Currently, no affiliate partner is over 10% of our volume. And yes, you're right, we're seeing our direct business growing nicely.

Operator

Thank you. Our next question comes from the line of Brian Lee with Goldman Sachs. Please proceed with your question.

Brian Lee

Hey everyone. Good afternoon. Thanks for squeezing me in. I know a lot's been covered here on the call, but maybe just one for me on this slide 20, where you're talking about the different levers and assumptions on the cash flow generation. You mentioned it's going to be lumpy throughout the year.

But can you give us a sense for, I guess, what are maybe milestones, events capital raises, etc., that would give you and maybe in what time frame, more visibility as to whether you hit the low, mid, high end. I mean, it seems like if I just parse through some of this, you're already tracking well above the storage mix that's embedded here in the assumption.

I think you mentioned to a prior question, the 7.5% might be a bit conservative already here starting the year. So just trying to understand, one, the puts and takes, but also the timeline as to when that view kind of crystallizes as we move through the year? Granted it's going to be lumpy on a quarter-to-quarter basis. Thank you.

Danny Abajian

Great question. So, I'll start -- I'll maybe highlight a few of the factors on the page. On volume, I think we talked about directionally throughout the year, picking up sequentially, considerably throughout the year, and implied there is hitting that 15% year-over-year mark in the back half of the year. Of course, we also highlighted that the year-over-year comps in the first half won't look as good. We do have the Q1 sequential decline really pacing out of that, gives us a very decent return back on operating cost leverage in the business. And as we get that, that will be trending well.

The backup storage mix, we believe we will exceed based on the remarks. The ITC adders (ph), we're a little bit shy of about 34%. I think we have pathways building, again, in that kind of Q3, Q4 timeframe to getting more of it. I think the two factors there would be more geo-targeting where it relates to energy

communities and low income. And of course, on domestic content, the onset of that as the regulations get crystallized.

And then capital costs, obviously, in a range, we are giving the range at the moment and saying 0.25 point is between \$40 million and \$50 million. So there's north of 100 basis points of cushion from high end to low end of range as respect to capital costs.

Brian Lee

All right. Appreciate the color. I'll pass it on. Thank you.

Operator

Thank you. Our next question comes from the line of Colin Rusch with Oppenheimer. Please proceed with your question.

Colin Rusch

Thanks so much. Could you guys talk about the maturity of the VPP modernization, obviously, with the incremental deployments of energy storage. Just want to get a sense of on a portfolio level, how you see that value potentially increasing the NPV of the portfolio?

Mary Powell

Yes, we're really pleased with the PGD. I'm sure you saw the press release that we did with that program, where 8,500 customers participated in a program over a number of months. We think it sets up a really good framework for future virtual power plant structures that we do. That really results in like a view that over time, it would be a net subscriber value of about \$2,000.

Colin Rusch

Fantastic. And then just you mentioned labor efficiency and both on the sales and installation front, I just want to get a sense of order of magnitude you're expecting to see over the course of the year and the cadence of that efficiency as we go throughout the year.

Mary Powell

Yes, I mean, we're really pleased with the efficiency gains we've seen across the business. I would say in the installation area, particularly where that productivity has really resulted in some great benefits, you know, CAC as a percent of subscriber value is coming down. Obvious -- and that is happening despite the distortion created by some of the mix change.

So, yeah, we're really pleased, particularly as, again, we've moved to a solar plus storage company. So that also, as you think about productivity gains and you think about the gains we've had, where we are, in essence, having our folks selling two products, installing two products. So, yes, we've been really pleased by the results we've seen around our kind of maniacal focus on cost in the business.

Operator

Thank you. Our next question comes from the line of Maheep Mandloi with Mizuho. Please proceed with your question.

David Benjamin

Hi, this is David Benjamin on for Maheep. I have a question on the convert. Can you please talk or give a little bit of color around the timing? I understand that it's for the refinance, but the converts due in 2026 doesn't go current until 2025. So just any color you could provide around that would be helpful. Thanks.

Danny Abajian

Yeah, I think really in early getting out ahead and early liability management exercise, the revolver was the same thing, the warehouse was the same thing. I think we like the market conditions. We have obviously good depth, especially -- I'm not addressing the convert directly, but across the capital spectrum. I think just deep pools of capital available to us and just wanting to be exceptionally timely in handling all of that.

Operator

Thank you. That concludes the time that has been allocated for Q&A. You may now disconnect.

Forward Looking Statements

This communication contains forward-looking statements related to Sunrun (the "Company") within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, but are not limited to, statements related to: the Company's financial and operating guidance and expectations; the Company's business plan, trajectory, expectations, market leadership, competitive advantages, operational and financial results and metrics (and the assumptions related to the calculation of such metrics); the Company's momentum in its business strategies including its ESG efforts, expectations regarding market share, total addressable market, customer value proposition, market penetration, financing activities, financing capacity, product mix, and ability to manage cash flow and liquidity; the growth of the solar industry; the Company's financing activities and expectations to refinance, amend, and/or extend any financing facilities; trends or potential trends within the solar industry, our business, customer base, and market; the Company's ability to derive value from the anticipated benefits of partnerships, new technologies, and pilot programs; anticipated demand, market acceptance, and market adoption of the Company's offerings, including new products, services, and technologies; expectations regarding the growth of home electrification, electric vehicles, virtual power plants, and distributed energy resources; the Company's ability to manage suppliers, inventory, and workforce; supply chains and regulatory impacts affecting supply chains; the Company's leadership team and talent development; the legislative and regulatory environment of the solar industry and the potential impacts of proposed, amended, and newly adopted legislation and regulation on the solar industry and our business; the ongoing expectations regarding the Company's storage and energy services businesses and anticipated emissions reductions due to utilization of the Company's solar systems; and factors outside of the Company's control such as macroeconomic trends, bank failures, public health emergencies, natural disasters, acts of war, terrorism, geopolitical conflict, or armed conflict / invasion, and the impacts of climate change. These statements are not guarantees of future performance; they reflect the Company's current views with respect to future events and are based on assumptions and estimates and are subject to known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from expectations or results projected or implied by forward-looking statements. The risks and uncertainties that could cause the Company's results to differ materially from those expressed or implied by such forward-looking statements include: the Company's continued ability to manage costs and compete effectively; the availability of additional financing on acceptable terms; worldwide economic conditions, including slow or negative growth rates and inflation; volatile or rising interest rates; changes in policies and regulations, including net metering, interconnection limits, and fixed fees, or caps and licensing restrictions and the impact of these changes on the solar industry and our business; the Company's ability to attract and retain the Company's business partners; supply chain risks and associated costs; realizing the anticipated benefits of past or future investments, partnerships, strategic transactions, or acquisitions, and integrating those acquisitions; the Company's leadership team and ability to attract and retain key employees; changes in the retail prices of traditional utility generated electricity; the availability of rebates, tax credits and other incentives; the availability of solar panels, batteries, and other components and raw materials; the Company's business plan and the Company's ability to effectively manage the Company's growth and labor constraints; the Company's ability to meet the covenants in the Company's investment funds and debt facilities; factors impacting the home electrification and solar industry generally, and such other risks and uncertainties identified in the reports that we file with the U.S. Securities and Exchange Commission from time to time. All forward-looking statements used herein are based on information available to us as of the date hereof, and we assume no obligation to update publicly these forward-looking statements for any reason, except as required by law.