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Presenters
Patrick Jobin, Senior VP, Finance and Investor Relations
Lynn Jurich, Co-Founder and CEO
Edward Fenster, Co-Founder and Executive Chairman
Tom vonReichbauer, CFO

Q&A Participants
Michael Weinstein, Credit Suisse
Brian Lee, Goldman Sachs
Mark Strouse, J.P. Morgan
Stephen Byrd, Morgan Stanley
Tristan Richardson, Truist Securities
Aric Li, Bank of America
Joe, Oppenheimer
Philip Shen, ROTH Capital Partners

Operator
Greetings, and welcome to the Sunrun Fourth Quarter 2020 Earnings Conference Call. At this time, all participants are in a listen-only mode. If anyone should require operator assistance, please press star zero on your telephone keypad. As a reminder, this conference is being recorded. It's now my pleasure to turn the call over to Patrick Jobin, Senior Vice President of Finance and Investor Relations. Please go ahead, sir.

Patrick Jobin
Thanks, Kevin.

And before we begin, please note that certain remarks we will make on this conference call constitute forward-looking statements, although we believe these statements reflect our best judgement 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 more inclusive discussion of risk and other factors that may cause our actual results to differ from projections made in any forward-looking statements. Please also note, the statements are being made as of today, and we disclaim any obligation to update or revise them.

On the call today are Lynn Jurich, Sunrun's Co-Founder and CEO, Ed Fenster, Sunrun's Co-Founder and Executive Chairman, and Tom vonReichbauer, Sunrun's CFO. And now, let me turn the call over to Lynn.

Lynn Jurich
We are pleased to share Sunrun’s fourth quarter results, progress against our strategic priorities, and outlook for 2021.

We ended the year with more than 550,000 Customers. 18% year-over-year growth, pro-forma to include Vivint Solar. We adapted swiftly to the dynamic environment during the year, improving our cost structure, increasing our market position, and strengthening our competitive advantages. The Vivint Solar acquisition expands our scale and solidifies our position as a top owner of solar assets globally with nearly four gigawatts of Networked Solar Energy Capacity.

I am excited to share our results for the first time as a combined company. In the fourth quarter, we added 23,500 customers. We saw continued improvements in our margins and beat the targets we set last quarter. The integration is progressing well with the team operating as a single organization. In 2021 we expect to significantly accelerate our growth rate to 20-25%, from a baseline scale that's already twice the next competitor, and with strong customer margins. At the same time, we will increase our competitive advantages through our unmatched sales reach, investment in customer experience, brand and talent, significant head start in batteries and grid services, and an improved cost structure from scale and synergies, which exceed our initial expectations.

The unprecedented winter storm in Texas last week that left more than three million people without power, yet again, exposed the current grid’s vulnerability and the superiority of local solar and batteries. During the extreme demand on the power grid our customers produced their own electricity from solar behind the meter and helped offset the need for additional blackouts. For each customer with Sunrun solar, we helped keep another homeowner’s power on. Furthermore, our customers with Brightbox were able to power through the blackouts and stay warm. Even customers with outages over 50 hours were able to power critical circuits uninterrupted, as the solar systems continued to generate energy and recharge batteries during the winter storm.

It is no surprise that our website traffic increased 350% over the past few days in Texas and our sales teams reported a record number of appointments in a single day. We saw a similar trend following the power shut-offs in California. Accelerating extreme weather events will continue to drive consumers to choose solar and batteries.

Nationally, we have now installed more than 16,000 Brightbox systems. The Vivint Solar attachment rates doubled in the fourth quarter, and we continue to expect Brightbox installations to accelerate and grow over 100% in 2021, despite expected constraints in battery supply.

Utilities invested more than $120 billion in capex last year, yet storms, heat waves and wildfires continue to prove that our centralized grid is failing. As utilities across the country spend more to upgrade infrastructure with their guaranteed rate of return, these costs are falling on homeowners. In December, PG&E announced that its customers will be hit with an average rate increase of 8% over the next two years to pay for improvements to reduce the risks that its equipment will ignite deadly wildfires. This is compounded by the fact that 71% of California homeowners say they think the pandemic has increased demand for electricity.

This dynamic is happening across the country, with retail utility rates in our markets increasing 3% per year on average for the last 15 years. Utility capital spending is forecast to continue to rise, which increases the value we can bring to customers and expands our addressable market. This month we launched in additional areas of Texas and Florida, including San Antonio and Miami, offering residents a way to power through outages and manage their energy costs.

Turning now to our sustainability efforts. We are proud to lead one of the fastest growing sectors in the American economy and the Vivint Solar acquisition enables us to accelerate job growth. The combined company now has approximately 8,500 full-time employees. We have committed to providing all of our employees wages of at least $15 per hour.
In the fourth quarter, we strengthened our talent communities with over 800 employees participating in our six Employee Resource Groups. In November, we announced four environmental justice initiatives to expand access to solar and its benefits. Sunrun was also the first solar company, and one of only 500 total companies, selected to be part of the Department of Defense Military Spouse Employment Partnership.

Finally, we want to create a healthier environment for future generations by aggressively retiring fossil fuel plants. In 2020, our Networked Solar Energy Capacity prevented GHG emissions totaling an estimated 2.4 million metric tons of CO2e. In 2020, we installed more than 600 megawatts of solar to over 85,000 Customers. These systems are expected to prevent the emission of over 13 million metric tons of CO2e over the next thirty years.

Before I turn it over Ed I want to thank our fantastic team for another great quarter.
Over to you, Ed.

**Edward Fenster**
Thanks, Lynn.

Today I will touch on some recent federal political developments, our evolving capital structure strategy, and recap our robust capital runway.

Over the last year and quarter, we have advocated for, and achieved, numerous political victories, and we continue to enjoy tailwinds in this area.

On December 21st, the investment tax credit was extended for two more years. As before, this measure passed with bipartisan support, passing through a Republican-controlled Senate and signed by a Republican president. Taken in combination with our safe harbor capabilities, we now enjoy an investment tax credit of up to 26% through December 31, 2025.

That said, we are pleased that the Biden administration is demonstrating genuine interest not just in renewable energy, but also distributed energy and soft cost reduction. President Biden specifically cited home solar and batteries during last year’s debates as critical investments for rebuilding our energy infrastructure with clean technology. Given its track record of success and bipartisan support, we think a longer-term extension of the solar investment tax credit is probable. The Biden administration is also taking steps to support soft cost reduction through continued DOE funding for training and software development.

In addition, the Biden administration has begun releasing the funds previously appropriated by Congress for use in repairing and modernizing Puerto Rico’s electric grid. We believe this funding may open significant virtual power plant opportunities for us on the island, along with an expanded market for home solar and battery installations.

Meanwhile, a number of factors are combining to offer us several paths to reducing our capital costs even further. Our increased scale, market capitalization, and profitability following the Vivint Solar acquisition are opening new doors for us. Lenders and ratings agencies have taken note that our collections actually improved during Covid. We are also seeing an unprecedented increase in lender interest in green bonds, and just generally low costs of capital in most markets. We believe we can leverage these factors into an updated capital structure that will increase long-term cash flows available to our common shareholders. In part because the various strategies we are evaluating provide different combinations of cash upfront vs cash distributions over time, we are not providing 2021 cash flow guidance at this time. We will share updates on this strategy review over the next two quarters, however, as we finalize a course of action.

We continue to maintain a robust project finance runway that affords us the ability to be selective in capital market activities.
As of February 25th, closed transactions and executed term sheets provide us expected tax equity and project debt capacity to fund over 500 MW for Subscribers in 2021. We are clearing both the tax equity and credit markets at or near all-time low costs of capital.

I’ll now turn the call over to Tom.

**Tom vonReichbauer**

Thanks, Ed.

The fourth quarter capped off a transformative year for Sunrun. The Sunrun team continued to deliver sequential volume growth and margin expansion, while beginning the integration of Vivint Solar. The combination of continued operational improvements and strategic advantage from our increased scale have set up the company for a break-out 2021.

As we previewed on the last call, this quarter we have made various changes to our operating metrics, converging methodologies between Sunrun and Vivint Solar, and more clearly reflecting our business post-acquisition. On slide 8 of our earnings presentation, you can see a summary of the updates to nomenclature and definitions of the key metrics we use.

For example, we now refer to customers under lease or power purchase agreements as Subscribers given the long-term and recurring nature of our relationships.

We now refer to the present value of upfront and recurring cash flows from customers as Subscriber Value, instead of Project Value, and present it on a per subscriber basis, instead of per unit of solar energy capacity. ‘Per watt’ figures are still available in the supplemental materials, but presenting metrics on a ‘per customer’ basis better aligns to our cost and value drivers of the business.

We now present Subscriber Value and Gross Earning Assets using a 5% discount rate, reflecting the lower cost of capital environment and our continued ability to raise capital at rates well below 6%. Further, Net Subscriber Value also includes uncapitalized operating expenses within Creation Cost, harmonizing with Vivint Solar’s former reporting method and reflecting the increased mix of direct business as a result of the acquisition.

NPV is now referred to as Total Value Generated and represents the Net Subscriber Value multiplied by Subscriber Additions.

Net Earning Assets now includes both recourse and non-recourse debt, along with total cash. Megawatts Deployed is now referred to as Solar Energy Capacity Installed while Cumulative Megawatts Deployed is now referred to as the Network of Solar Energy Capacity.

We believe these changes improve the usefulness of the metrics we present and will make our business less burdensome to understand.

Turning now to volumes.

In the fourth quarter, Customer Additions were approximately 23,500, including approximately 18,800 Subscriber Additions.

Solar Energy Capacity Installed was 172 Megawatts in the fourth quarter of 2020, a 10% sequential increase from the third quarter, and 603 Megawatts for the full-year 2020. Our Networked Solar Energy Capacity was 3.9 Gigawatts at the end of Q4, an increase of 18% compared to the prior year.

We ended Q4 with over 550,000 Customers and nearly 479,000 Subscribers, both growing 18% 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 the year, our Annual Recurring Revenue, or
ARR, stood at $668 million with an average contract life remaining of 17 years. That’s over $10 billion in revenue visibility just from customers we already have.

In Q4, Subscriber Value was approximately $37,400 and Creation Cost was approximately $28,300, delivering a Net Subscriber Value of $9,051.

While we are presenting metrics on a ‘per customer’ basis now, we appreciate that many investors have modeled per-watt metrics. These metrics can still be calculated if desired. For instance, Subscriber Value per watt of Solar Energy Capacity Installed for Subscribers was $5.07, or what we used to call Project Value. Net Subscriber Value per watt, or what we used to call NPV per watt, would be $1.23 in the quarter.

As discussed earlier, the changes we have made to the metrics resulted in some puts and takes. For instance, moving to a 5% discount rate increased Subscriber Values, while the inclusion of uncapitalized operating expenses within Creation Cost, aligning with Vivint Solar’s former method reduced the reported figure. We believe the changes that we have made are appropriate now given our increased mix of direct business following the acquisition of Vivint Solar, the financing environment, and improvements we have made to internal cost accounting for fleet servicing expenses. Under the prior methodology which we had provided guidance against last quarter, Net Subscriber Value would have been approximately $8,500, exceeding our target.

Total Value Generated, which is the Net Subscriber Value multiplied by the number of Subscriber Additions in the period, was $170 million in the fourth quarter.

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

Gross Earning Assets were $7.8 billion at the end of the fourth quarter, reflecting an increase of $3.6 billion from the prior year. Gross Earnings Assets is the measure of cash flows we expect to receive from customers over time, net of distributions to tax equity partners in partnership-flip structures, project equity financing partners, and operating & maintenance expenses, discounted at a 5% unlevered WACC. Net Earning Assets were $4.2 billion at the end of the fourth quarter, reflecting an increase of $2.1 billion from last year. Net Earning Assets is Gross Earning Assets, plus cash, less all debt.

We ended the fourth quarter with $708 million in total cash.

A simple way many approach valuation is to look at the value of the growth business of new subscribers Total Value Generated times a multiple given the growth prospects, plus Net Earning Assets which represents the value of existing customers and net debt.

A quick note on our GAAP income statement for the quarter and upcoming periods. There are a few one-time items along with purchase accounting treatment of Vivint Solar that depress near-term GAAP results. This quarter, operating costs included non-recurring acquisition and deal related expenses and restructuring costs of $25.3 million. Operating costs this quarter also include stock-based compensation expenses of $133 million, a significant step-up from prior periods. Consistent with purchase accounting standards under GAAP, the fair value of outstanding equity awards for Vivint Solar employees was reevaluated upon the closing of the acquisition, which resulted in a step-up of the value of such awards because of the higher stock price on the date of close. This results in an increase to non-cash stock-based compensation expense until such awards have fully vested. Additionally, the value of Solar Energy Systems was recorded based on a fair value assessment, which was approximately $1.1 billion higher than the book value at the date of the acquisition, and will result in additional non-cash depreciation expense over the estimated useful life of the assets, partially offset by a write-off of Vivint Solar’s Cost to Obtain Customer Agreements.

These purchase accounting adjustments have no effect on our cash flows and how we measure the performance of the business.
Turning now to our outlook.

As Lynn noted earlier, the integration with Vivint Solar is going exceedingly well. While we initially targeted $90 million in run rate cost synergies, we are now confident that we can realize $120 million in run rate cost synergies exiting this year.

We also believe our strengthening brand, investment in customer experience and product innovation, and expanded sales channels have us well positioned to capture strong underlying consumer interest for reliable, clean energy in the year ahead. Furthermore, the combination of our business transformation in 2020 and increased cost synergy expectations enables us to both invest in growth and maintain strong margins in 2021.

We forecast Solar Energy Capacity Installed growth to be in a range of 20% to 25% in 2021 for the full-year. Total Value Generated is expected to be over $700 million for the full year. While we are very focused on integration in the near-term, we expect a return to year-over-year growth in Solar Energy Capacity Installed in Q1, with accelerating growth thereafter. Similarly, because of seasonality in our business and the shape of our post-acquisition cost structure as synergies are realized, we expect to see slightly lower Net Subscriber Margins in the first half and higher margins in the second half of 2021.

As Lynn mentioned at the beginning of the call, consumer demand for alternatives to an old, expensive, and dirty energy infrastructure is increasing and we believe we have the products, business model, and operational capabilities to deliver against this demand in 2021 and beyond.

With that, let’s open the line for questions please.

Operator
Thank you. We'll now be conducting a question and answer session. If you’d like to be placed in the question queue, please press star one on your telephone keypad. A confirmation tone will indicate your line is in the question queue. You may press star two if you’d like to remove your question from the queue. For participants using speaker equipment, it may be necessary to pick up your handset before pressing star one. One moment please while we poll for questions. Our first question today is coming from Michael Weinstein from Credit Suisse. Your line is now live.

Michael Weinstein
Hi, thanks for the question. Hey, Ed, I think you guys talked about some interest picking up in green bonds going forward. Is that something you could talk more about, maybe alternative forms of financing beyond the ABS issuances that we’ve all gotten--starting to get used to?

Edward Fenster
Sure, that's a great question. And what I think I was trying to say, there’s just a lot of investor interest generally on the lender side in loans from, you know, ESG, you know, companies, and in renewable energy. I think, you know, our company is so obviously an ESG company that actually getting a green rating of a bond may not make a difference to the cost of capital.

But given the scale of the business and the market cap, you know, we have a lot of opportunities for ways to raise capital, including subordinated debt that, you know, might be at various different places in the capital structure, might be rated, and will probably be, you know, likely significantly cheaper than the places we've been going historically for that capital. So, that's a process of investigation and discovery that we're going through. We do have a number of interesting options there. And as I teased, you know, I think we'll be updating you all with further information in the next quarter or two there.

Michael Weinstein
Alright. And I think you said you're still working on your cash flow strategy or cash use strategy for this year. Can you give us a little more color on that, and what the timing is that you--the timing of when you think you'll be able to give guidance?

**Edward Fenster**
Sure. So, I think again in the next couple quarters we'll know more. As I was trying to suggest on the call, you know, we could capitalize the business with, you know, two different--take an example, two different credit instruments. You know, one might cost X percent, one might cost a little bit more than X percent, and they would have different advance rates.

So, what we're trying to do is figure out what's the optimal long-term strategy for the company, how much do we want to borrow today versus leads for cash flows for distribution tomorrow. And as we maximize those two, you know, sort of co-solve for the best possible solution on those two dynamics. And they have some impact in the amount of cash that shows up today. But if there was less cash run up today, it'll be offset, obviously, by significantly more cash coming over time. And we'd like to further flesh that out before giving particular guidance on it.

**Michael Weinstein**
That makes sense. And one last one for me, and that's, what are you hearing from Biden administration, or you know, from the Democrats in terms of timing of when we might see additional--an additional ITC extension, or--and maybe some of the other initiatives they're thinking about? I mean, battery tax credits, perhaps tax credit refundability, etcetera.

**Edward Fenster**
That's a great question. I do think it is more likely to be in the second half. There are obviously a lot of different ways these sorts of bills can move forward. They can move forward in spending bills, infrastructure bills, dedicated bills. Sometimes, you know, you use the bill that's in front of you rather than the bill you want. So, I think--like, we've often said when it comes to predicting federal policy, it's difficult to make a prediction based on any particular piece of legislation in any very discrete moment in time. But we definitely do think that, you know, over the next three to 14 months, there's a really good possibility of some interesting developments.

**Michael Weinstein**
Okay, great. Thanks, guys.

**Lynn Jurich**
Thank you.

**Operator**
Thank you. Our next question today is coming from Brian Lee from Goldman Sachs. Your line is now live.

**Brian Lee**
Hey, guys. Thanks for taking the questions. Good afternoon. Maybe first off, just a clarification, because I know you're changing some of the naming conventions and different things based on the release. The 20 to 25% growth targeted in install capacity for 2021, that's off of the 603 megawatts in 2020, so you know, roughly low to mid 700 megawatt new growth in install capacity for '21? Just wanted to clarify if anything's changed in that convention.

**Tom vonReichbauer**
Yeah, no, Brian, you're correct. The 20 to 25 is off the 603 baseline.

**Brian Lee**
Okay, great. So you haven't changed that, great. And then, a second question related to that is, you know, maybe my math is wrong, or again, I might have the wrong naming convention. You mentioned 700
or greater than 700 million of value generation against, you know, this over 700 megawatts of new subscribers in 2021.

So, on a dollar per watt basis, I know you don't want to stick with that convention, but it's less than a dollar, or would seem to be around that range. Why would that be falling given, you know, the cost synergies are being raised here, the new PV5 versus PV6 convention? Again, maybe I'm missing something here, but you did a buck-23 here in 4Q, so wondering why that number might be coming down in '21?

Tom vonReichbauer
Yeah. Good question, Brian. So, you know, first we're providing full year guidance here on aggregate margin dollars. And we think that total value generated of more than $700 million is a really strong result. You know, that's more than our Q4 result annualized, which seasonally, Q4 tends to be our best performing quarter of the year. 2020 also had the benefit of, you know, sort of full year of 30% ITC from our Safe Harbor investments. And so, you've got some shift there. Obviously, there's a range of outcomes there on volume. And then, you know, we're saying more than 700 million, so also a range of possible outcomes above that.

You know, we're also seeing an acceleration in total growth here, moving to, you know, 20 to 25 percent year-over-year performance, which will be one of our fastest growing years in recent history. So, part of this, you know, we're investing in some of that growth while also being able to maintain, you know, a really strong margin profile.

And then, the last bit I'll note is that the 20 to 25 percent is total megawatt growth. But when you turn it into per customer, the mix between lease and cash loan may move around the mix across different channels and move around a bit, too. So, really, thinking about it on a per subscriber basis, not a per customer basis, if that's helpful.

Lynn Jurich
Yeah. Just to put a fine point on it. The calculation would be definite. It would not be under $1 a watt. It would not apply under $1 a watt.

Brian Lee
It won't come out under $1 a watt. Okay. And maybe, Tom--

Lynn Jurich
--Correct--.

Brian Lee
--On that, you did 9,000--you know, a little over 9,000 per subscriber in Q4. Is that--I might've missed it during the early part of the call, but is there a guidance range for--is it 9,000 through the balance of '21? Is it going up to 10? What number or range should we be thinking about for per subscriber value generation?

Tom vonReichbauer
Yeah. No. We didn't provide any color on the per subscriber amount but rather the aggregate, you know, dollars of margin generated, which we think is really the best way to think about it. You know, I did mention that because of the timing of realization of some of those synergies, as well as the natural seasonality that we have that, you know, we'll be lower than the average in the first half, a little bit higher than the average in the second half, and accelerating, especially as we see those synergies realized throughout the year.

Brian Lee
Okay. Thanks a lot. I appreciate the color. I'll pass it on.
Lynn Jurich
Thanks, Brian.

Operator
Thank you. Our next question today is coming from Mark Strouse from J.P. Morgan. Your line is now live.

Mark Strouse
Yeah, good afternoon. Thank you very much for taking our questions. Just following up on Brian's question there, kind of more longer term on the value per subscriber.

Under PV6, you had talked about the $8,000 per household growing from different buckets. You know, the cost synergies from Vivint, grid services, energy storage, which I think in the past you had talked about that number getting somewhere in the low to mid teens over time.

Now, under PV5 and a little bit higher starting point from 4Q with over 9,000, I'm just curious if you can give an update on that bridge.

Tom vonReichbauer
Yeah. So, a couple of things I'll note here. As I mentioned in the context to Brian there, you know, Q4 tends to seasonally be, you know, our highest performing quarter of the year on margin. So, you know, not the direct linear point to extrapolate from, but definitely proud of the improvements we made there and being above $8,500 or around $8,500 under the prior methodology.

Then, as we move to PV5, as I mentioned, that has positive impacts than the inclusion of, you know, these non-capitalized costs that Vivint had included previously, which is more reflective of our direct businesses. Those are all really incurred on that side. Bring that number back down a bit.

I think the--you know, the walk from there, you know, we, one, you know, believe that we're able to continue to hold really strong margins here while also investing and accelerating our growth at scale. So, you know, we're now providing guidance on growth of, you know, higher than what we had previously estimated. And so, some investments there and continue to invest in--you know, in our brand and technology and differentiate it from the pack.

Long-term, I think also the other things we've talked about continue to hold quite well. So, as we deploy more batteries into the mix, you know, those are margin accretive for us. The grid services opportunities also continue to be, you know, margin accretive as we win more agreements and deploy contracts there.

And then, cost synergies as well, you know, and those will be heavily realized throughout 2021 here. So, certainly expect, you know, our yearend 2021 margins to be better than the average year. And exiting and continue a really strong position.

Mark Strouse
Okay. That's helpful. And then, just a quick follow up to that. I mean, the Vivint synergies at 120 now instead of 90. Just confirming those are still entirely cost synergies. And then, if so, can you just give a bit more color into what's driving that?

Tom vonReichbauer
Yeah. Yeah. So, those are cost synergies that we're referring to here. You know, as we dug in deeper and now have, you know, going on almost five months of integration under our belts, you know, we're able to get a lot more confidence on what we're going to be able to deliver. And we saw improvements really up and down the entire cost stack there, sales, operations, G&A, definitely a bit more in some of the corporate overheads.
And then, also, you know, our higher growth expectations for 2021 provide additional leverage against fixed cost and in some of our negotiations that are taking place to drive more cost synergies. So, seeing it, you know, sprinkled across, but you know, happy to have given the update here from 90 up to 120.

**Mark Strouse**
All right. Okay. I'll take the rest offline. Thank you.

**Operator**
Thank you. Our next question is coming from Stephen Byrd from Morgan Stanley. Your line is now live.

**Stephen Byrd**
Hi, good afternoon. Thanks for taking my questions.

**Lynn Jurich**
Of course.

**Stephen Byrd**
Just going back to the questions around federal legislation and--were fairly bullish about storage getting a separate tax credit. Would you mind just talking a little bit further just sort of the impacts, whether it be from the customer side in terms of adoption rates? Because already, you know, the demand appears to be very high, Lynn, as per your comments here.

But just--would you mind just providing a little more color? If we did see a standalone tax credit for storage, how would you sort of think about that impacting your business? I presume the value per customer could--so, the net subscriber value, I guess, could go up. But would you mind just talking further to that?

**Lynn Jurich**
Sure. And let me open with, you know--so, we, you know, do believe that the growth rate of 100 percent installed this year is we will be equally able to achieve that. And from a demand standpoint, it would be even higher. It's just we are absolutely seeing, you know, some battery constraints. I think that's no surprise to anybody with connector shortage and just, you know, manufacturing generally.

You know, so, we're--you know, do think that we're well positioned given just the competitive environment with the long-term contracts that we have and with the fact that, you know, suppliers (INAUDIBLE) has the--you know, the market leader that's going to put in, you know, good long-term order profile.

But you know, what we've really seen is that the--because of the constraints in supply, the battery prices to the end consumer really haven't dropped to match where the input prices are. So, you know, in the short-term, I think the demand for (AUDIO GAP) would far exceed 100 percent growth. But, you know, even if--the challenge really is we'd get more providers into the mix, which I think we will. But I think, you know, that's not, you know, a next quarter or two issue.

You know, it'll take, you know, a few quarters for that to happen. And then, that'll be prime to really unleash growth.

I think as we mentioned in the call, in Texas, just as one kind of early anecdote, the website traffic increased 350 percent just overnight, just to give you, you know, some indication what we're seeing on the ground.

**Stephen Byrd**
That's very helpful. And I guess stepping way back over a multi-year period of time, let's put the constraints on storage aside, which I know is easy to say and I know there are a lot of practical issues. But as you think about the importance of storage over time, what do you think is likely to be kind of the
consumer preference for storage? You've talked a lot in the past about attach rates. I just want to make sure I'm thinking over a multi-year period of time. What kind of trends are you seeing there in terms of likely adoption rates? I'm guessing very high. But just to make sure I thought--

**Lynn Jurich**
--Very high--

**Stephen Byrd**
--About that correctly.

**Lynn Jurich**
Very high. It'll roll out a bit, you know, different geographically based on just local value proposition. And in a place like Hawaii or California or, you know, northern California, it's 80 plus percent. You know, and, you know, places where there's real resiliency issues and/or really high power prices and/or time of these attach rates. So, that will drive very high attach rates.

It is our belief that as you can get the unit cost down to, you know, four or $5,000, you know, it's going to be pretty ubiquitous because if you--you know, the early indications around how much revenue you can get off of grid services is, you know, $2,000 plus. You know, the net kind of outlay for that battery of just a couple thousand dollars we think will be exceedingly attractive for the benefit that it brings for resiliency.

So, you know, our--internally, you know, it's our vision that pretty much every single one of our solar systems should have battery attached to it, you know, over the medium term.

**Stephen Byrd**
Yeah, that's helpful. And the data from the grid in a place like Texas certainly does see to reinforce that view. That's all I had. Thank you.

**Lynn Jurich**
Great. Thank you.

**Operator**
Thanks. Your next question is coming from Tristan Richardson from Truist Securities. Your line is now live.

**Tristan Richardson**
Hey. Good evening, guys. Appreciate the opportunity for questions. Just a quick question with respect to your comments on activity in Texas. Should we think of that near-term as primarily a storage standalone service offering? I think we generally think in Texas as a low-cost retail power state. Is that still generally the case? Or can--or should we generally expect penetration to accelerate there?

**Lynn Jurich**
You mean, of the solar plus the battery?

**Tristan Richardson**
Right.

**Lynn Jurich**
Yes. I would--no, I believe that it makes more sense to pair the solar battery. So, you know, just to use the--you know, an example. We had many--you know, multiple customers who had multi-day outages. And so, the battery was able to run through the night and then recharge the next day with solar. So, we had, you know, customers who lost power and were uninterrupted for 50 hours.

You know, so, you want the solar aspect to--you know, for the rechargeability and the--and, you know, the pricing on the solar piece is really quite competitive. I think we've sold that 10-to-11 cents a kilowatt hour.
in Texas. And it's already competitive with many of the traditional rate plans. Plus, I think the fact that it's a fixed price, we'll also be that much more attractive now given that, you know, people who really were--you know, really felt the pain on some of these pass-through variable rate plans.

**Tristan Richardson**
That's helpful. And then, just with respect to the weather in Texas, could we see anything from a disruption perspective to the downside? Whether it just be, you know, temporary outages or--you know, I know the install base is relatively low there. But anything that we could expect to see disruption-wise in the first quarter?

**Lynn Jurich**
No. That's good. You know, the top (AUDIO GAP) resilient. I mean, even if you look back to--you may remember this more than I do, but even with, you know, super high winds in Hurricane Andy, I mean, we had almost zero maintenance issues.

**Edward Fenster**
And this is Ed. And maybe just to expressly state it. None of our customers are on floating rate plans and we have no exposure as a company to wholesale power rates as well.

**Lynn Jurich**
Yes, correct. Thank you.

**Tristan Richardson**
That's helpful. Thank you, guys, very much. Appreciate it.

**Operator**
Thank you. Next question today is coming from Aric Li from Bank of America. Your line is now live.

**Aric Li**
Hey, good afternoon. Thanks for taking the question. So, just wanted to touch upon the growth guidance again. So, if 20, 25 percent growth megawatts for full year '21, could you, one, talk about your expectations for broader resi-solar market growth? And two, your long-term annual growth expectation, is that still 15, 20 percent as we step into '22?

**Lynn Jurich**
Great question. I think it's--you know, this year is so dynamic just given, you know, the COVID situation and the cost of capital and new entrants and things that I think it is our--you know, so, I think we believe it's too early to call what the market growth rate will be.

We feel confident in our market position in that we will be a share taker. We feel confident that we're able to hit, you know, 20 to 25 percent growth. So, I think that those are the statements we would make on that.

I do think that, you know, one of the other things we're very encouraged by is this growth rate is clearly an acceleration for us and we're doing it at large scale now. So, you know, if you look at the scale of Sunrun, we're, you know, twice as large as the next competitor, you know, doing an integration. And yet, we're accelerating growth, which makes us--you know, gives us a lot of confidence that, you know, potentially the growth rate could exceed what we had quoted historically. But, you know, too early to call that right now.

**Aric Li**
Got it. And for storage, just to clarify on expectations. How many Brightbox units would your greater than 100 percent growth guide equate to? Is it, like, greater than X units?

**Lynn Jurich**
We--.

Aric Li
--And also, on storage--mm-hmm.

Lynn Jurich
We have--.

Aric Li
--Sorry. I'll let you clarify first.

Lynn Jurich
Oh, sure. We've had--we disclosed that we have 16,000 in operation, but we have not given the last year specific number.

Aric Li
Okay.

Lynn Jurich
So, 16,000 of that are in solar cumulative.

Aric Li
Got you. And then, just in terms of--I know you mentioned equipment supply constraints for storage, but how much of a constraint is the longer lead times to install storage currently? We're hearing that it's taking a good amount longer to, you know--for an installer to get the storage in, and that's leaving some installers to prioritize solar only.

Lynn Jurich
Yeah. I think that's--thank you for pointing that out. I think that's why we really like to have a channel go to market strategy. I think it's--we have been very effective, and I think we're the only company that has both dealers as well as our own direct sales inflation workforce. I think, you know, part of being able to have that direct sales and install channel is that you're able to train your people, get up the learning curve, you know, suffer maybe a few growing pains that happen. And that's, I think, why we are out to such a fast start on storage versus the long tail.

So, yes, it's a--.

Aric Li
Okay--.

Lynn Jurich
--More complicated product. You know, it's--it does--you have to educate installers. You have to educate permitting departments. But we've already, you know, been through that, which is why, again, when we--when battery constraints loosens up, when prices come down to where they should be, we believe we're really primed to accelerate our lead there.

Aric Li
Got it. And one last question from my end and I'll take the rest offline. But just in terms of the shift that you talked about towards expanding customer advantages with over 558,000 customers to upsell to now, what is your timeline for pursuing these upsell opportunities? Is this something that we should expect to see in the middle of the year?

Lynn Jurich
In terms of specifically going back and retrofitting batteries or other things?
Aric Li
Yeah, batteries--.

Lynn Jurich
--Is that your question--?

Aric Li
--And other things that you've mentioned.

Lynn Jurich
Yeah. You know, that is certainly an opportunity. We have not prioritized that today. We've prioritized new Brightbox installations, one, because, you know, again, there's, you know, some constraints and it's just way more efficient to do it all the same time. And because we believe the technology is improving so much that the retrofit option that'll be available to consumers will be, you know, much better in the coming quarters.

So, we do expect that that'll be a part of our plan this year, but--you know, the retrofit, but it has not been the corporate priority so far.

Aric Li
Got it. Thank you.

Lynn Jurich
Thank you.

Operator
Thank you. As a reminder, that's star one to be placed in the question queue. Our next question is coming from Colin Rusch from Oppenheimer. Your line is now live.

Joe Beninat
Hey there. It's Joe on for Colin. Circling back on the policy discussion, are you seeing any potential for cash in lieu of tax credits that could potentially be included in any of the federal spending bills this year?

Edward Fenster
Great question. This is Ed. Yeah. This is a topic that some have been lobbying intensely on and we've not really been part of that effort. I would be surprised if that sort of policy is enacted into law, but it's certainly--you know, it's certainly possible.

Joe Beninat
Got it. And then, on the new geographies, it sounds like the Texas rollout is going really well. Does it make sense to move into any additional geographies looking into 2021?

Lynn Jurich
Good question. I do think you will see that. The ones we announced this quarter, again, were San Antonio and Miami were two expansions that we have recently announced. And just as you continue to--you know, the fact that utility rates are continuing to rise and the fact that are our costs are continuing to decrease, more and more markets are opening up and getting competitive.

So, I do think 2021 will be a year where you will see more new market expansions than we saw previously.

Now, our--you know, the growth targets that we put out there do not require us to--you know, any sort of massive geographic expansion. It's more sort of same store. So, that would be incremental to the stated growth target.
**Joe Beninat**
Got it. If I could sneak one more in on the storage side. Are you seeing anything on the technology development front that would enhance the virtual power plant capability?

**Lynn Jurich**
Just the fact that the grid keeps going down, that's the primary one. I mean, it--you know, I think it's just the--as we announced, you know, earlier in the quarter, the program, for example, that we announced in southern California, that is, I think, born out of these rolling blackouts. And so, you know, I think there's just more regulator interest and more necessity for--you know, for utilities to be coordinated to be able to dispatch the battery at, you know, a moment's notice when the grid compacts.

**Joe Beninat**
Great. Thanks so much.

**Lynn Jurich**
Thank you.

**Operator**
Thank you. Next question today is coming from Philip Shen from ROTH Capital Partners. Your line is now live.

**Philip Shen**
Hey, guys. Thanks for taking the questions. From an absolute dollar standpoint, how much grid service revenue do you think you could generate in '21? And then, how do you think that trends as we get into '22 and '23?

**Lynn Jurich**
So, the--you know, we've announced 12 grid services programs, which we believe we're far--we know we're far and away the lead on. And we really been working on, hey, how do we open up as many grid services markets in as many geographies as we can? Open up--you know, so that we're able to get access. So, sort of like we're kind of building the foundation and building the--you know, building the market.

The programs that we've announced, for the most part, have been, you know, in terms of just are--at our scale now, they're not huge contributors to, you know, the near-term financial results.

So, when they do become big contributors, which we expect they will, we will definitely start to provide more color there. But for now, it's really a--you know, it's still more in sort of--I mean, I would say beyond pilot because we have, you know, a decent amount of assets committed, but it's still in its, you know, sort of early innings.

**Philip Shen**
Okay. Thanks, Lynn. And as you think about the percentages you're seeing--

**Lynn Jurich**
--Let me clarify one point there because, you know--.

**Philip Shen**
--Sure, go ahead--.

**Lynn Jurich**
--In the past, we have talked about an additional $2,000 per customer being directionally--you know, the value that we think would net to Sunrun after any sort of customer enticement or any sort of other fees that you have to pay to operate. And that still has, you know, no--there has been no change to that outlook.
Philip Shen
Okay. Great. And just as a kind of question of refinement. In terms of your contracts that you have with your clients, lease PPA contracts, what percentage of those have the capability to allow you to provide grid services and generate that revenue? Are we talking about half of the contracts or the vast majority?

You guys have definitely demonstrated leadership here and want to just understand over time, you know, how does this ramp and if you have that legal capability to--you know, is that box, you know, checked, for example, to give you that ability to ramp up nicely?

Lynn Jurich
Ed, Tom, maybe you were--I wasn't quite following the question.

Edward Fenster
Yeah. I think the question is without express subsequent customer permission, about what percentage of our customer contracts would allow for enrollment in grid services?

And I think the answer to that is certainly over the last several years on the, you know, legacy Sunrun side of the house, they all have. I think we still feel like, you know, working with our customers is maybe the better course of action. But it's a very, very material number of customers.

Lynn Jurich
Correct.

Philip Shen
Great. Okay. Thanks, guys. I'll pass it on.

Lynn Jurich
Thanks, Phil.

Operator
Thank you. We've reached the end of our question-and-answer session. I'd like to turn the floor back over to management for any further or closing comments.

Lynn Jurich
All right. Well, thank you, everybody. And we'll talk to you again in another quarter. Take care.

Operator
Thank you. That does conclude today's teleconference. You may disconnect your line at this time. And have a wonderful day. We thank you for your participation today.

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 impact of COVID-19 on the Company and its business and operations; the Company’s financial and operating guidance and expectations; the Company’s business plan, 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 the company’s business strategies, expectations regarding market share, 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 ability to manage supply chains and workforce; factors outside of the Company’s control such as macroeconomic trends, public health emergencies,
natural disasters, and the impacts of climate change; the legislative and regulatory environment of the solar industry; and expectations regarding the Company’s storage and energy services businesses, the Company’s acquisition of Vivint Solar (including cost synergies), and anticipated emissions reductions due to utilization of the Company’s solar systems. 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 impact of COVID-19 on the Company and its business and operations; the successful integration of Vivint Solar; the availability of additional financing on acceptable terms; changes in the retail prices of traditional utility generated electricity; worldwide economic conditions, including slow or negative growth rates in global and domestic economies and weakened consumer confidence and spending; changes in policies and regulations including net metering and interconnection limits or caps; the availability of rebates, tax credits and other incentives; the availability of solar panels, batteries, and other components and raw materials; the Company’s ability to attract and retain the Company’s relationships with third parties, including the Company’s solar partners; the Company’s continued ability to manage costs associated with solar service offerings; 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 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.