Payments Pros Podcast: Payments and the Solar Industry
Host: Josh McBeain
Guest: Andrew Thurmond

Josh McBeain:

Welcome to another episode of *Payments Pros*, a Troutman Pepper Podcast focusing on the highly regulated and ever evolving payment processing industry. This podcast features insights from members of our FinTech and payments practice, as well as guest commentary from business leaders and regulatory experts in the payments industry. From the BSA to EFTs, FinTech to RegTech, licensure to lending, Nacha to the CFPB and payment processing to debt collection, our team has you covered.

I'm Josh McBeain, one of the hosts of the podcast and associate at Troutman Pepper. Before we jump into today's episode, let me remind you to visit and subscribe to our blog, consumerfinanceserviceslawmonitor.com. Don't forget to check out our other podcast at troutman.com/podcast. We have episodes that focus on trends that drive enforcement activity, digital assets, consumer financial services, the Fair Credit Reporting Act, cybersecurity, high button labor employment law issues and more. Make sure to subscribe to hear the latest episodes.

Today I'm joined by my colleague Andrew Thurmond to discuss solar payment options. Andrew is a member of our firm's capital projects and infrastructure group, and focuses his practice on renewable energy, residential solar, utility scale solar, wind renewable energy, natural resources and other infrastructure commodities and financial corporate transactions.

Andrew, thank you for joining me today and I look forward to our discussion.

Andrew Thurmond:

Hey Josh, thanks for having me. I'm looking forward to this.

Josh McBeain:

All right, well, before we get into all the various options and how to pay for solar, let's level set for our listeners. When we talk about solar, what are we talking about financing or paying for? I mean, obviously I think solar panels, but what else is typically included in the solar project?

Andrew Thurmond:

We're really talking about residential solar here, what we call utility scale solar or distributed generation, DG. Those are different types of projects, they're bigger projects, so what we're really focused on today and with the financing aspects that we're focused on are residential solar. That can get expanded in a number of ways, but it's really just the equipment that goes on your roof and then the related equipment that causes the power to be able to connect to the grid.

Because if you think about solar, I know we're going to spend most of the time talking about payments, but there's this fun ... I don't know, I think it's fun, about residential solar that folks probably don't realize, is that you're not actually taking the solar that comes into your roof and then it doesn't really go directly into your system, it's not really the energy that you're using. It actually goes into the grid, so it goes to your utility and the utility still is sending you energy back as you always would with or without solar, and it just gets netted out of your bill is how they do the calculations.

So, the other piece of equipment is an inverter or a micro inverter that converts the energy from AC to DC and then sends it to the grid. So, that's also part of the solar system in addition to the panels on your roof and all the racking and stuff that secures the panels to your roof.

Josh McBeain:

That's fascinating. So the panels, actually they're producing power. You're not directly using that in your home, that's going to the grid and then you're getting typically a reduction in your monthly bill for that power that you're producing. Is my understanding correct as a layman?

Andrew Thurmond:

Yeah, and that's how it works in almost every state. There's certain off-grid things that people can do maybe that are a little different, but the vast majority of states and utilities in our country operate that way. If you've heard of net metering, that's really what that is all about. It's netting out. It's like looking at your energy meter and seeing how much energy did you produce versus how much energy did you use.

Josh McBeain:

Got it. Very helpful. Okay, someone might be interested in offering to put those panels and install those devices in a home, and it's my understanding that there's actually multiple different payment options to facilitate that transaction. Could you just maybe provide a high-level overview of what those options are?

Andrew Thurmond:

I view them as really three different buckets. If you're a homeowner, there's three different ways you can acquire a solar system on your own. You can finance it, so that's a loan or a retail installment contract or some other financing arrangement, where you will own the system, but you're paying an interest rate or some other rate over time for it, but you'll own the system.

Then there's an option where a third party can own your system, and those are leases or power purchase agreements, where you will get the benefits that we just talked about, the net metering, the energy benefits of solar, but you won't own the system and you won't get what's called renewable energy credits, which also add value to them.

The third way is you can just actually outright pay someone to install this. It's actually what I did for my house. Just like buying a deck or HVAC system or anything else like that, you can buy the solar system directly. Obviously, that's not really the focus of we're talking about, but that is one of the three options that's usually presented to folks as they are looking to buy solar.

Josh McBeain:

Okay, that's helpful. So, I guess starting with the first one, finance, you mentioned a loan versus a retail installment contract. Obviously, there's a difference there. If someone was looking to offer one or the other, what would be some of the reasons why you ... if you're an installer or looking to provide this type of financing, why might you go with one or the other, just at a high-level?

Andrew Thurmond:

If you're a lender, I think it's really based on what you're able to do and offer. Loans I typically view as coming from banks, but it's really whoever has, I guess, a loan license or a banking type license, and that varies for states. Then for retail installment contracts or similar other non-loan, non-lender arrangements, that is also regulated by each state and there's licensing and obligations and things like that, but I view that as typically a lower bar to entry.

Certainly, it's different. There's different protections for each, there's different regulations, different requirements, but typically I think we all consider RICs, retail installment contracts, we'll call them RICs probably from here on out, as having a lower barrier to entry than loans.

Josh McBeain:

Yeah, that makes sense. A RIC would be potentially offered directly by a solar installer, or I guess is it also the case that a solar installer could offer a loan if they had the appropriate lending license?

Andrew Thurmond:

I think a solar installer could offer a loan if they had the appropriate lending licenses, if they had the banking licenses to do that. There are certainly players out there who are big enough to have the capital and the power maybe to have gone out and acquired whatever banking licenses they needed or loan licenses, and that might've depended on state.

They might pick just a random state out there that had the same or similar requirements to get either a banking license or a RIC license and they chose to get the banking license, because it provided them bread or protections or something.

Josh McBeain:

Okay.

Andrew Thurmond:

They certainly could go out and do that. I think typically those installers and other solar companies themselves are usually offering retail installment contracts, which we should say are the typical thing that the auto industry offers. So, if folks are unfamiliar with RICs, I think really what I've learned working in the residential solar industry is if you think about what you think of a car loan is, that's probably on the money what a retail installment contract is.

Josh McBeain:

Okay, let me ask you, are these typically secured or unsecured payment products for the homeowner?

Andrew Thurmond:

They are typically secured, but it's not your whole house that's secured. Usually, the security interest is just the system, and so you're not getting a security interest in someone's entire home where you would actually probably come in as the secondary secured interest anyways behind the mortgage holder, but you get a first priority interest in the system itself, which should be independent.

Josh McBeain:

Okay, so they're secured by the panels that go on the roof, and then if there's other equipment that I think you mentioned that you need to have installed to have the panels connect to the grid, that's what's securing the financing?

Andrew Thurmond:

Yeah, that's right.

Josh McBeain:

Okay, so that's the finance options. It's sort of a loan versus RIC, retail installment contract. The second option, I think you described it as third-party ownership and you mentioned leases or power purchase agreements. So, can you tell me a little bit more about that?

Andrew Thurmond:

So, this is a situation where say you don't want to put up some upfront capital or you want to have a lower monthly payment typically, you can have someone else own your system, a third party, there's a lot of third-party owners out there, and they can either lease the equipment back to you or sell you the power.

I'll go through both of them separately, but really why is there differences? In almost every state, it's dependent on the state law, and really that comes through the utility commissions and whether or not you're regulated by that utility commission, or if you're permitted to lease equipment or not. There's all kinds of individual state nuances going on. There's a handful of states that permit both PPAs and leases, but folks usually either choose you're a PPA state or you're a lease state.

Josh McBeain:

Interesting. For the people offering these products, they may not have a choice because of state law. They'll have to parse the state law to determine if they're going to provide a lease or a power purchase agreement, PPA. Is that correct?

Andrew Thurmond:

Yeah, that's right. There are certainly states where both are an option, but the characteristics will look similar in both of them really when you get down to it. My understanding is that most companies really just choose to offer one of the products in those states. Maine is a state where both are permitted.

Josh McBeain:

Okay.

Andrew Thurmond:

I don't believe folks are doing both leases and PPAs in Maine. Maybe they are, maybe they're willing to offer both. The documents themselves aren't structured that differently, but I think most financing companies or third-party owners like to just have one product and be consistent.

Josh McBeain:

So, that's how it's presented to the consumer. So, we have finance, we have loans, we have retail installment contracts, RICs, where the homeowner would own the system. Third party ownership, leases, PPAs, these are all ways that someone could offer to pay for solar, get solar installed, they're different obviously. But you also mentioned that there was, I can't remember which one, but there was maybe a benefit to one or the other.

Andrew Thurmond:

It varies by state the value of this benefit, really by jurisdiction, but they're called SREC or Solar Renewable Energy Credits. I live in Washington DC, which is one of the most lucrative SREC states, it's really a public incentive to generate renewable energy. It's set up by the governments, usually through their RPS, their Renewable Portfolio Standards programs, where utilities are required to generate a certain amount of renewable energy or purchase the certificates from a certain amount of energy generated during a given year.

So, we would call that vintage. It's the SREC vintage is what that means, but it's really during a certain year the utility is required to purchase or develop a certain amount of renewable energy or pay a penalty, a per kilowatt hour, per megawatt hour penalty. That really sets the value of what the utility or whoever needs the renewable energy credit. It's not just utilities, that's an oversimplification, but whoever it is that needs the renewable energy credits is willing to pay. DC has a really high penalty; it's actually going to be going down over the years.

A while ago, Maryland had really high SREC and it was really valuable, but then it was so great and it drove innovation so much that they actually saturated the market and basically got more solar than they needed. So, then the SREC naturally went down, because there was just so much out there that the value was limited.

It's a third-party market, it varies per system. D.C., I think last I saw, it's about $400 per megawatt. One megawatt per SREC is how it's determined. I think those are right now about $400 per SREC in DC and that's I think the highest in the country, but a lot of other places you're looking at more $20 to $50 to $100 SREC. That's an annual generation for you and your system, that if you're a third-party owner, you're calculating in the benefit of your system of your financing product of what you can offer to lease or to sell the power for.

If you're looking at it from a third-party owner perspective, how much did this cost to get built? How much do I need to get back to get my return on investment, plus recoup the capital I spent? So, then you just do calculations, and you factor in the SREC as one of those factors. If you're a third-party owner, if you're doing the financing yourself, you're maybe not factoring in that as part of your equation, it's more probably an ancillary like, oh, this is great. I get this benefit to my system.

Josh McBeain:

Okay, so that benefit, it's going to vary by jurisdiction or by state it sounds like, and also by the owner or how the system was paid for, was financed. So, whether it's loan RIC, lease PPA, it may vary based on state law as well, so it's sort of a twofer.

Andrew Thurmond:

The value of the benefit won't vary. Really it runs with who owns the system-

Josh McBeain:

Okay.

Andrew Thurmond:

And so, who gets the value is what varies.

Josh McBeain:

Okay, so there's something to be thoughtful there when setting up a program or expanding a program to look at the state law and look at the options to see how they impact the payment options to get the systems installed.

Andrew Thurmond:

Absolutely.

Josh McBeain:

Now, everything you've mentioned, that's state law from an energy perspective, that's not state tax credits or federal tax credits, right?

Andrew Thurmond:

Right, that's different. There are all kinds of other credits out there. The most important one is the ITC, the Investment Tax Credits. Actually, if folks know about the IRA, the Inflation Reduction Act, there's been revisions to that on the value of the ITC and things like that. It's also a credit that runs with the owner of the system, and really roughly the federal credit is 30% of the value of the renewable energy system.

By the way, backing all the way up to what we first talked about the equipment, one thing that folks are really starting to look at and add is storage. The IRA was something that is now really pushing more storage on the market, so solar plus storage in the residential space is becoming a very hot topic, a very hot commodity. I bring that up, because your value of your solar plus your storage can get lumped in your ITC, so if you do solar plus storage, you can actually get the 30% tax credit on the full cost of everything there.

That takes a while to get. There's all kinds of exceptions and it's complicated, so you may not be able to qualify for the ITC. Financers, if you’re financing and part of your financing product is structured based on the ITC, either implicitly or expressly, you want to be very clear that not everyone can get the ITC, not every project qualifies.

There's new equipment requirements, there's certain requirements about timing that it gets synchronized to the grid and all kinds of things that solar installers should know, but you want to be very careful to not make any representations to a homeowner that, oh, your project will definitely qualify for the ITC. But it's a substantial driver of these projects because of how significant it is. 30% of a project's cost is a significant amount to get credited on your taxes.

Josh McBeain:

So, if you're going to set up panels and storage, you may have to think about, I want to do loans or RICs and the various state law implications or license or requirements or what have you of that. The federal tax credit is on top of those state law requirements and how you may or may not incorporate those tax credits into that financing. That's done on the front-end before you start offering it. I mean, that's what you're seeing it sounds like?

Andrew Thurmond:

Well, on the front-end is maybe not exactly the way it's done.

Josh McBeain:

Okay.

Andrew Thurmond:

It's something that folks in the calculation of their payment schedules. I think folks have these lump sum payments that come 18 to 20 months after a system is installed, which I think it's roughly attempting to say, hey, this is the time it will take. No matter when you installed it, January of the following year, you'll be able to get the tax credit by the next tax season, by the next April 15th. That gives you enough time to claim your tax credit.

If a financing takes into account the ITC, that's usually when a lump sum payment becomes optionally due or payments adjust or things like that. What folks don't want to do is assume that you will get the ITC on a RIC especially. You don't want to assume that a homeowner will get the ITC and just deduct 30% off of what they're financing.

Josh McBeain:

Right.

Andrew Thurmond:

That wouldn't be the way they would do it, because it's a credit that would go to the homeowner. You would need to account for it. If you're structuring everything, you do want to account for it, you need to know it exists, and there are great financial folks out there who experience with all their amortization tables and things like that who know how to do this.

Josh McBeain:

Yeah, and is the ITC something to consider if you're building one of these in leases or PPAs, or is it not relevant there?

Andrew Thurmond:

It is relevant. It's incredibly important, and it also runs with the owner of the system, so it is something that, just like we talked about, you want to factor in the SREC, the ITC is something that you would want to factor in. We don't really need to get into details.

Josh McBeain:

Yeah.

Andrew Thurmond:

We're going to say it over and over again, every state is different and even jurisdictionally some places are different, but there are state credits, state rebates, performance-based incentives is what we call a lot of them. There's a lot of stuff that really can factor into the state level tax incentives that are out there for producing solar projects. Those you really need to look at what state are you in and look at the full scope of the picture that's out there.

There's a number of really good federal government resources or SEIA, the Solar Energy Industry of America, they have a lot of good resources out there too. If you're looking for more state-specific information, you can find that there, but it's really so numerous and so vast that you want to look state by state.

Josh McBeain:

This sounds complex, and just to sort of summarize from what you're saying, you've got two finance options, loan or RIC. You've got two third-party ownership options, leases and PPAs. Both have implications for, we'll call them at a high-level, incentives or rebates. I know that's sort of a generic term, but there's incentives and rebates at both the state and federal level that may impact how one of those payment options would be set up or would be priced or offered to the consumer.

I'm also familiar, and correct me if I'm wrong, but there are also some states that have state law disclosures for these products. Is that correct?

Andrew Thurmond:

Oh, yeah, residential solar in specific is starting to become a more and more important and heavily governed topic in states. There are a lot of states that have distributed energy or solar generation or whatever they've called it. They have their own solar-specific laws, and those are really residential solar laws.

It's a lot of the sunny states, as you might expect, right? They're probably the first ones into solar, because they have the most sun. Actually, Nevada, two weeks ago, so we're recording in the middle of June, so the beginning of June Nevada passed a new law, a very controversial law amending their solar requirements and actually providing even more disclosures. Nevada was already one of the leaders in requiring numerous disclosures and a separate cover page and all kinds of things. Nevada recently amended that law even further to provide even more requirements.

So, there's a lot of things you have to jump through on the solar-specific side, and that's not even getting into just general you're doing a home improvement in someone's house, and if you're doing a financing, you're doing a loan or you're doing a retail installment contract, and those are already heavily regulated on a state-by-state basis. There's also this additional, hey, there's all this other solar disclosure stuff that you may or may not be required to comply with depending on what state you're in.

Josh McBeain:

Right. Typical financing, as our listeners probably know, comes with disclosures. Credit cards have disclosures, regular loans or RICs have disclosures, but we're saying solar, it's rapidly evolving with additional disclosures. So, you'd have all the typical financing disclosures and then a solar-specific disclosure that would also have to be provided, and these are rapidly evolving and changing for the states. Even the states that have them, they're updating them, so it's a very active space.

Andrew Thurmond:

Very active space. When we talk about disclosures in solar, sometimes we mean in the contract disclosures like your TILA disclosures and things like that, similar to that, they're in contract requirements. Oftentimes it's actually standalone, hey, you need to produce a separate document that's separate from your PPA, that's separate from your lease, that's separate from your purchase agreement or your RIC. It's you need to provide a packet to the homeowner that says X, Y, and Z.

A lot of it, I know it's really onerous for folks if you're dealing with it right now, but as a homeowner, as a consumer and myself too, I think about it, and it does help to simplify, hey, what am I buying here? What am I financing? I think some of the requirements, they're not always everyone's favorite, but a lot of it is trying to boil down to, hey, provide a summary of what is going on here, what are the terms, what is the solar system that this person is buying?

Josh McBeain:

Okay, that makes sense. It sounds like states are still trying to figure it out, since there's updates being made to current law.

Andrew Thurmond:

There will always be updates to these types of laws. I think at least for a very long time solar is going to be something that is constantly evolving, folks are learning more about, getting better at. The reason for that, what we didn't get into, which is a little different than probably what folks listening are used to is the solar industry is a little bit of the Wild Wild West.

It's very great. Producing renewable energy is great, but folks are going into individuals' homes and getting them to sign up to these type of contracts, and because of that, the amount of scrutiny on that by attorney generals is great, because you can get someone who is great and well buttoned up and knows everything that they're doing, and is properly presenting everything, or you can get someone who is kind of lying through their teeth and just trying to get a sale.

It's hard to know from an attorney general's perspective or a state perspective or even a financing party's perspective exactly what you're getting. That's part of the reason for all these disclosures is just there are some bad apples in the industry that have caused regulators to look into practices.

Josh McBeain:

Okay, interesting. So on top of everything we've discussed, it's also heavily scrutinized and will continue to be so going forward, it sounds like. That's a lot on paying for solar. Anything else, Andrew, you think that I failed to ask you?

Andrew Thurmond:

I could talk to you for hours about the actual parts of the solar, I find that the most interesting, right? I'm a renewable energy lawyer really at my heart, so I could talk about that for hours. But on the financing part of it, I think the other parts that are interesting are junk fees. That's just a general topic I think everyone listening to this is probably having to deal with.

Josh McBeain:

Yeah.

Andrew Thurmond:

Those are scrutinized in this industry like they are in every other industry, so you just have to carefully scrutinize whatever fees you are charging. No matter if it's your PPA, a lease, a RIC, a loan, your fees are going to be scrutinized by state and by product.

Josh McBeain:

I guess to sum it up, what I'm hearing from your expertise is that you have traditional financing options. You mentioned a RIC is very common in the auto space loans, people are familiar with loans. You have more nuanced options like power purchase agreements, and then there are all the standard issues we see, and the CFPB's been on a warpath on junk fees.

All of those finance issues still apply to this space, but there's additional energy credits and disclosures and laws and scrutiny applied to this consumer finance space or this payment space on top of all of the normal things, which makes it pretty complicated.

Andrew Thurmond:

Yeah, it's pretty complicated, you nailed it. Everything in a normal financing, plus you're adding in renewable energy, solar type of restrictions too. That is what makes it complicated, that is what makes our jobs so fulsome, right? We're so busy, because we're constantly working on all of these things, because if you're doing 50 states plus DC, plus maybe Puerto Rico and other jurisdictions out there, there's a lot to cover. Yeah, there's a lot to know out there and a lot to pay attention to.

Josh McBeain:

Andrew, I want to thank you for joining me today and thank you for all of your expertise. This is an interesting space and I want to thank our audience for listening today's episode. Don't forget to visit our blog, consumerfinanceserviceslawmonitor.com, and subscribe so you can get the latest updates. Please make sure to also subscribe to this podcast via Apple Podcast, Google Play, Stitcher, or whatever platform you use, and we look forward to next time. Thank you.