

# Webinar

## Renewable Energy Strategies for Real Estate

Date: May 11, 2022

00:00:00 --> 00:00:03: Think it started. Welcome everybody. I'm very excited for this  
 00:00:03 --> 00:00:05: topic today. My name is Joe Anvik. I lead the  
 00:00:05 --> 00:00:09: carbon solutions in clean energy finance practice at Retech  
 Advisors,  
 00:00:09 --> 00:00:11: a consulting firm here in the DC area and welcome  
 00:00:11 --> 00:00:15: to ULI Webinar and Renewable Energy Strategies for real  
 estate.  
 00:00:15 --> 00:00:17: I think this is a very timely webinar given the  
 00:00:17 --> 00:00:20: massive uptick that we're seeing in deployment of both onsite  
 00:00:21 --> 00:00:24: and offsite renewable energy strategies and the commercial  
 real estate  
 00:00:24 --> 00:00:27: space so very excited to have you all with us  
 00:00:27 --> 00:00:29: and to have three kind of market leading organizations.  
 00:00:30 --> 00:00:32: We're driving a lot of that progress on the call  
 00:00:32 --> 00:00:34: with us today as well, so if you go to  
 00:00:34 --> 00:00:37: the next slide, Speaking of those panelists again, my name's  
 00:00:37 --> 00:00:40: Joe and Vic at Retech Advisors. We've also got Alex  
 00:00:40 --> 00:00:43: from Prologis, Vishali from Kilroy, and Eric from Rosh. Great,  
 00:00:44 --> 00:00:46: I'm going to do a little bit of introduction first,  
 00:00:46 --> 00:00:49: and then we're gonna give these guys a chance to  
 00:00:49 --> 00:00:52: introduce themselves and their renewable energy journey.  
 Let me get  
 00:00:52 --> 00:00:55: to that point so terms of agenda. I'll do maybe  
 00:00:55 --> 00:00:58: 10 minutes or a little less. A brief background on  
 00:00:58 --> 00:01:00: renewables in commercial real estate.  
 00:01:00 --> 00:01:03: There's been some very interesting and important trends that  
 have  
 00:01:03 --> 00:01:06: been happening over the last couple of years. We'll do  
 00:01:06 --> 00:01:09: a brief round of speaker introductions. I'll have some  
 structured  
 00:01:09 --> 00:01:12: question and answer with these folks and then we'll spend

00:01:12 --> 00:01:14: the bulk of the time on audience you and a  
00:01:14 --> 00:01:17: so a couple of logistical things for you. All to  
00:01:17 --> 00:01:19: note. One is that this webinar is going to be  
00:01:19 --> 00:01:21: recorded and a link's going to be sent around to  
00:01:22 --> 00:01:25: everyone afterwards. It will be placed on Uli's knowledge  
Finder  
00:01:25 --> 00:01:27: page, and then we also are, like I said, gonna  
00:01:27 --> 00:01:29: have plenty of time for Q&A at the end, so.  
00:01:30 --> 00:01:33: Please put your questions in the zoom Q&A function, not  
00:01:33 --> 00:01:36: in the comments. Let me repeat that again. Put it  
00:01:36 --> 00:01:38: in the zoom Q&A box, not the comments box, and  
00:01:38 --> 00:01:41: we will get to those questions. If your question is  
00:01:41 --> 00:01:45: for a particular speaker, please specify that person in your  
00:01:45 --> 00:01:48: question. If you would my final notice just to apologize  
00:01:48 --> 00:01:51: for my voice, I'm coming off a particularly nasty cold,  
00:01:51 --> 00:01:53: so I feel a lot better than I sound, but  
00:01:53 --> 00:01:56: if my voice cracks a couple of times, my apologies.  
00:01:58 --> 00:02:00: So if you go to the next slide here, the  
00:02:00 --> 00:02:03: thing that's bringing us all together today is the release  
00:02:03 --> 00:02:06: of the renewable energy strategies for real estate paper from  
00:02:07 --> 00:02:09: ULI, it was a report that I had the great  
00:02:09 --> 00:02:12: pleasure of reviewing as a technical reviewer and I think  
00:02:12 --> 00:02:14: is gonna be a great resource for the market as  
00:02:14 --> 00:02:18: the commercial real estate space looks to amplify and  
intensify  
00:02:18 --> 00:02:21: its deployment of renewable energy in the fullest sense. So  
00:02:21 --> 00:02:25: it's based on interviews with industry experts and with  
practitioners  
00:02:25 --> 00:02:27: and pulls in lots of other resources from.  
00:02:28 --> 00:02:31: Many other organizations. It's really the first report of its  
00:02:31 --> 00:02:33: kind, though at least the first one that I've seen  
00:02:33 --> 00:02:37: that specifically and comprehensively addresses how to  
tackle renewable energy  
00:02:37 --> 00:02:40: strategies in commercial real estate. And the goal is  
ultimately  
00:02:40 --> 00:02:43: to be very practical and help practitioners understand the  
business  
00:02:43 --> 00:02:46: case for renewables and then execute and deploy at scale.  
00:02:46 --> 00:02:49: So it provides some strategies around best practices. It  
provides  
00:02:49 --> 00:02:52: some great kind of definitions and background information for  
those  
00:02:52 --> 00:02:55: who are just getting started. Some project profiles on how  
00:02:55 --> 00:02:58: to initiate a renewable energy strategy both for on site

00:02:58 --> 00:02:59: and off-site.

00:02:59 --> 00:03:01: Solutions which we'll talk about in a minute and you

00:03:01 --> 00:03:04: can access it at that at that URL there. So

00:03:04 --> 00:03:06: please check it out. It's available now.

00:03:08 --> 00:03:09: If we go to the next slide, I'm only going

00:03:09 --> 00:03:11: to talk for a little bit. I want this to

00:03:11 --> 00:03:14: be mostly discussion, but a couple of basic concepts I

00:03:14 --> 00:03:16: want to introduce so that we're all kind of speaking

00:03:16 --> 00:03:18: the same language and to help folks who are kind

00:03:18 --> 00:03:20: of new to this space start to get up to

00:03:20 --> 00:03:22: speed. So let's talk a little bit about when we

00:03:22 --> 00:03:25: say renewable energy and commercial real estate. What do

00:03:25 --> 00:03:28: we really mean? What are the different deployment options that

00:03:28 --> 00:03:31: are available for renewables? I love this chart from resource

00:03:31 --> 00:03:33: energy. I can't kind of credit for this, but resource has

00:03:33 --> 00:03:35: a really great chart here that kind of shows not

00:03:35 --> 00:03:37: only the different renewable energy.

00:03:37 --> 00:03:40: Resource feels they how they compare to each other in

00:03:40 --> 00:03:43: terms of their greenness. Now we can debate this label.

00:03:43 --> 00:03:45: This might be a good topic for discussion about whether

00:03:45 --> 00:03:48: we agree with resource on these points or not, but

00:03:48 --> 00:03:50: I'm not necessarily saying we all endorse this, but I

00:03:50 --> 00:03:53: think it's an interesting way to think about the market.

00:03:53 --> 00:03:55: Basically, on the least green side of the equation you

00:03:55 --> 00:03:58: have just buying power from the grid and you have

00:03:58 --> 00:04:01: buying national renewable energy certificates not from a

00:04:01 --> 00:04:04: specific source,

00:04:04 --> 00:04:07: but from the general market. Then you have buying carbon

00:04:07 --> 00:04:08: offsets. Then you have buying regional or state specific

00:04:08 --> 00:04:11: renewable energy.

00:04:11 --> 00:04:14: Credits where you're buying them from your local region, or

00:04:14 --> 00:04:17: you're buying them from the state, for example, then you

00:04:17 --> 00:04:20: have offsite renewables from specific generations sources

00:04:20 --> 00:04:23: where you were buying power or buying the Recs from a named source

00:04:23 --> 00:04:26: that you can sort of identify. And finally the most

00:04:26 --> 00:04:29: green option is simply doing on site renewables, putting solar

00:04:29 --> 00:04:32: on your roof, doing geothermal etcetera, so I think that's

00:04:29 --> 00:04:32: a good kind of taxonomical way to think about all

00:04:32 --> 00:04:35: the options here. You're going to hear the panelists today  
00:04:35 --> 00:04:37: speak on a variety of these different options down at  
00:04:38 --> 00:04:38: the bottom.  
00:04:38 --> 00:04:40: There are a couple of key concepts to be aware  
00:04:41 --> 00:04:43: of is you're gonna hear us refer to racks or  
00:04:43 --> 00:04:46: emacs a lot, so those are essentially interchangeable terms.  
Recs  
00:04:46 --> 00:04:49: are renewable energy certificates that are sort of give you  
00:04:49 --> 00:04:52: the right to claim that you're producing or consuming green  
00:04:52 --> 00:04:55: power when a MW hour of green power is generated.  
00:04:55 --> 00:04:58: EECS is the more international terms, stands for energy  
attributes  
00:04:58 --> 00:05:01: certificates, but Rex is what they're typically called in the  
00:05:02 --> 00:05:04: US. One important concept when it comes to racks is  
00:05:04 --> 00:05:07: that some racks can be bundled and others are unbundled.  
00:05:07 --> 00:05:08: And we mean by that.  
00:05:08 --> 00:05:11: If they are bundled, they are sold alongside the underlying  
00:05:11 --> 00:05:14: power that they represent, so you were buying both kilowatt  
00:05:14 --> 00:05:17: hours and the green attributes of those kilowatt hours if  
00:05:17 --> 00:05:20: they are unbundled, you are buying them separately, so you  
00:05:21 --> 00:05:23: may still buy power from your utility, but you may  
00:05:23 --> 00:05:26: then go buy Recs from somewhere else. You're not actually  
00:05:26 --> 00:05:30: buying power, you're just buying the environmental attributes  
associated with  
00:05:30 --> 00:05:33: that power. So that's an important definitional thing to get  
00:05:33 --> 00:05:36: clear before we start going a little bit more into  
00:05:36 --> 00:05:38: what actually are the on site and offsite.  
00:05:38 --> 00:05:42: Renewable energy implementation options. But when it  
comes to on  
00:05:42 --> 00:05:44: site, there's a variety of ways to do renewable, solar,  
00:05:44 --> 00:05:47: and otherwise. You can simply own the system directly. You  
00:05:48 --> 00:05:50: can at least your roof, which is most common for  
00:05:50 --> 00:05:53: solar to a third party who owns and operates the  
00:05:53 --> 00:05:55: system. You can do a power purchase agreement where a  
00:05:55 --> 00:05:58: third party owns the system and sells the power back  
00:05:58 --> 00:06:01: to you. You can finance it through traditional means like  
00:06:01 --> 00:06:04: loans and leases, and then there's a variety of community  
00:06:04 --> 00:06:07: solar programs that are available to be both a host  
00:06:07 --> 00:06:09: and a consumer of the power from community solar.  
00:06:10 --> 00:06:12: Which we'll talk about a little bit more later, so  
00:06:12 --> 00:06:16: there's a wide range of finance and internship options, all  
00:06:16 --> 00:06:18: with their own pros and cons. And then in terms  
00:06:18 --> 00:06:21: of offsite options. So this is cases where you're trying

00:06:21 --> 00:06:25: to invest in and or procure renewable energy from locations  
00:06:25 --> 00:06:27: that are not on the site of the property options  
00:06:27 --> 00:06:31: there include virtual power purchase agreements, which is similar to  
00:06:31 --> 00:06:34: a PPA but more of a financial arrangement where you're  
00:06:34 --> 00:06:37: essentially agreeing to get the Recs from a project that  
00:06:37 --> 00:06:40: is offsite rather than on site you can make.  
00:06:40 --> 00:06:44: Direct investments, direct equity investments in offsite renewables and buying  
00:06:44 --> 00:06:46: a piece of a solar farm or a wind farm,  
00:06:46 --> 00:06:49: for example. You can utilize a variety of utility green  
00:06:49 --> 00:06:52: power options in both regulated and deregulated markets where you  
00:06:52 --> 00:06:55: can just shift your utility contract over to green power  
00:06:55 --> 00:06:58: and then of course buying Emacs or Rex would be  
00:06:58 --> 00:07:01: considered an off-site option as well because those are coming  
00:07:01 --> 00:07:04: from non on site sources. Basically I know that was  
00:07:04 --> 00:07:06: a bit of a Tour de force but we're going  
00:07:06 --> 00:07:08: to be throwing around a lot of terminology here today  
00:07:08 --> 00:07:11: and I just wanted to give you some structure to  
00:07:11 --> 00:07:12: think about that.  
00:07:12 --> 00:07:14: And hopefully this will help you put some of the  
00:07:14 --> 00:07:17: comments that you see from the panelists into the proper  
00:07:17 --> 00:07:18: boxes. As we discussed this.  
00:07:20 --> 00:07:23: And if we go to my final introductory slide, we  
00:07:23 --> 00:07:25: are going to be. I should say that we are  
00:07:25 --> 00:07:28: going to be discussing primarily solar energy today. The report  
00:07:28 --> 00:07:31: from UI as well as a lot of the strategies  
00:07:31 --> 00:07:34: that we're going to be talking about apply beyond solar  
00:07:34 --> 00:07:37: as well. They can work for wind or geothermal, or  
00:07:37 --> 00:07:41: building integrated photovoltaics. Things of that nature, but simply by  
00:07:41 --> 00:07:44: virtue of most of the panelists having primarily focused on  
00:07:44 --> 00:07:47: solar, we are also going to focus on solar today.  
00:07:47 --> 00:07:49: So I just want to name that up front when  
00:07:49 --> 00:07:50: it comes to solar.  
00:07:51 --> 00:07:53: There are two important. If there's if you know sort  
00:07:53 --> 00:07:56: of nothing else about where the solar industry is headed.  
00:07:56 --> 00:07:59: Right now. There's two important things to know from the  
00:07:59 --> 00:08:02: commercial real estate perspective. One is that the costs of  
00:08:02 --> 00:08:05: solar energy have dramatically declined over the last decade,

so

**00:08:05 --> 00:08:08:** this is a great chart that I often referenced from  
**00:08:08 --> 00:08:11:** the National Renewable Energy Laboratory that shows the cost in  
**00:08:11 --> 00:08:14:** dollars per Watt for a 200 kilowatt commercial solar system.  
**00:08:14 --> 00:08:16:** As you can see, the cost has come down to  
**00:08:16 --> 00:08:18:** about 1/3 of what it was in 20 and 2010.  
**00:08:18 --> 00:08:21:** The other interesting thing to see here if you can.  
**00:08:21 --> 00:08:24:** That is that the majority of costs for installing solar  
**00:08:24 --> 00:08:27:** are now soft costs, so hard costs are the actual  
**00:08:27 --> 00:08:31:** equipment, the panels and the inverters and all the physical  
**00:08:31 --> 00:08:34:** plant and the soft costs are everything else. So labor  
**00:08:34 --> 00:08:38:** permitting financing all the other associated kind of rigore  
role  
**00:08:38 --> 00:08:42:** that goes into installing a solar project. So now soft  
**00:08:42 --> 00:08:45:** cost represents the majority of costs, which means that  
business  
**00:08:46 --> 00:08:50:** model, innovation and finding more streamlined and more  
efficient ways  
**00:08:50 --> 00:08:51:** to deploy solar.  
**00:08:51 --> 00:08:53:** It's sort of more important than ever to making the  
**00:08:53 --> 00:08:54:** economics work.  
**00:08:55 --> 00:08:57:** And then on the right hand side is a great  
**00:08:57 --> 00:09:01:** chart from the solar Energy Industries Association showing  
the growth.  
**00:09:01 --> 00:09:04:** The cumulative growth in solar deployment in the US  
economy  
**00:09:04 --> 00:09:07:** over the last few years. As you can see, the  
**00:09:07 --> 00:09:10:** growth has been massive. I think it's something like a  
**00:09:10 --> 00:09:12:** 40% year over year growth rate for the past decade,  
**00:09:12 --> 00:09:15:** which is pretty rare to see that for any economic  
**00:09:15 --> 00:09:18:** sector, or certainly for any energy generation sector and the  
**00:09:18 --> 00:09:22:** growth in commercial, which is what we're primarily  
interested in.  
**00:09:22 --> 00:09:25:** Residential and commercial has been right up there with  
utilities.  
**00:09:25 --> 00:09:28:** Scale, it has been a little bit spotty on a  
**00:09:28 --> 00:09:31:** year over year basis, but the general trend has clearly  
**00:09:31 --> 00:09:33:** been upward. So the take away here is if perhaps  
**00:09:33 --> 00:09:36:** you looked at solar 345 years ago and decided it  
**00:09:36 --> 00:09:39:** wasn't right for you for whatever reason, the combination of  
**00:09:39 --> 00:09:42:** the cost coming down, deployment rates going up, and all  
**00:09:42 --> 00:09:46:** the various financing and ownership models that are now  
available

00:09:46 --> 00:09:48: may mean it's time to revisit now because a lot  
00:09:48 --> 00:09:51: has changed in the last half decade. When it comes  
00:09:51 --> 00:09:54: to the economic and operational viability of solar and other  
00:09:55 --> 00:09:55: renewables.  
00:09:55 --> 00:09:57: In commercial real estate.  
00:09:58 --> 00:10:01: Hopefully that gives a a bit of background to set  
00:10:01 --> 00:10:03: the stage for us as we get into the conversation  
00:10:03 --> 00:10:06: here. That is all I had. So we're gonna think  
00:10:06 --> 00:10:08: we can pull the slides down and go ahead and  
00:10:08 --> 00:10:11: start with Q&A. So let's just as our first question.  
00:10:11 --> 00:10:14: If you could kind of briefly introduce yourself, just maybe  
00:10:14 --> 00:10:17: a minute or so about who you are, who your  
00:10:17 --> 00:10:20: organization is, what kinds of assets that you operate, and  
00:10:20 --> 00:10:23: then what your journey has been in terms of renewable  
00:10:23 --> 00:10:25: energy so far, and we can go from there. So  
00:10:25 --> 00:10:28: let's start with Alex and then Vishali. And then Eric.  
00:10:30 --> 00:10:35: Great thanks Joe. Good morning and good afternoon to  
everybody.  
00:10:35 --> 00:10:40: Glad to be here. Appreciate it from you. I lost  
00:10:40 --> 00:10:44: you lost Uli side Prologis is a owner of logistics  
00:10:45 --> 00:10:50: real estate globally. We have approximately a billion square  
feet  
00:10:51 --> 00:10:57: across almost 5000 customers and 11,000 units where our  
customers  
00:10:57 --> 00:10:59: rent space for supply chains.  
00:11:00 --> 00:11:04: Just the cold storage, uh, you know, the goods that  
00:11:04 --> 00:11:08: go through warehouses and my role within the organization is  
00:11:08 --> 00:11:13: on our global energy team where we're focused on helping  
00:11:13 --> 00:11:16: our building customers access renewables.  
00:11:18 --> 00:11:25: Electrify their facilities for future Automation, EV and electric  
vehicle  
00:11:25 --> 00:11:29: adoption and then at the same time look to reduce  
00:11:29 --> 00:11:33: load anywhere we can through LED lights.  
00:11:34 --> 00:11:38: Or other retrofits? Uh so their global energy team is  
00:11:38 --> 00:11:42: really intended to be a full stop solution for our  
00:11:42 --> 00:11:46: customers to to access renewables. And then at the same  
00:11:46 --> 00:11:51: time assist our real estate in developing solar storage and  
00:11:51 --> 00:11:53: other electrified infrastructure.  
00:11:59 --> 00:12:02: Hi good morning, good afternoon. I'm happy to be here  
00:12:02 --> 00:12:06: today. Thanks for having me. My name is Vaishali sampad.  
00:12:06 --> 00:12:11: I'm the director of sustainability and corporate social  
responsibility for  
00:12:11 --> 00:12:15: Kilroy Realty. Kilroy is a reach where a developer, owner

00:12:15 --> 00:12:19: and operator of primarily commercial office spaces and life science

00:12:19 --> 00:12:23: spaces with the presence in Seattle, Bellevue, Los Angeles, San

00:12:23 --> 00:12:27: Francisco, San Diego and now Austin, TX. So we're based

00:12:27 --> 00:12:27: solely.

00:12:27 --> 00:12:31: The United States. We have about 15 million square feet

00:12:31 --> 00:12:35: of stabilized assets or stabilized portfolio and about eight and

00:12:35 --> 00:12:39: a half million square feet in the development pipeline. So

00:12:39 --> 00:12:42: a lot of activity going on there. We are really

00:12:42 --> 00:12:47: deeply committed to sustainability, and in 2018 we actually became

00:12:47 --> 00:12:50: carbon neutral operating of our scope one and scope 2

00:12:50 --> 00:12:53: emissions by the end of 2020. And we did this

00:12:53 --> 00:12:57: through a combination of energy efficiency reductions on site.

00:12:57 --> 00:13:01: Renewable energy offsite renewable energy rec purchases and carbon offsets

00:13:01 --> 00:13:03: so I know we're going to get into that later

00:13:03 --> 00:13:06: today and I'm happy to discuss that with you guys.

00:13:07 --> 00:13:10: Live Australian team have touched on just about everything in

00:13:10 --> 00:13:12: that list of options that, uh, that I showed you

00:13:12 --> 00:13:14: guys really so excited. Excited to dive in and learn

00:13:14 --> 00:13:17: more about how you went about prioritizing that and then

00:13:17 --> 00:13:18: Eric class. But not least.

00:13:18 --> 00:13:22: Yeah, thank you. So I'm Eric Tolden. I'm the senior

00:13:22 --> 00:13:26: director of ESG for Washery where our primarily and multifamily

00:13:26 --> 00:13:29: Reit's, located in the Mid Atlantic here in DC and

00:13:29 --> 00:13:33: we have assets in Virginia, Maryland, DC as well as

00:13:33 --> 00:13:36: in the Southeast. We were a diversified rate as of

00:13:36 --> 00:13:38: two to three years ago.

00:13:38 --> 00:13:41: And we've actually made that transition over to a more

00:13:41 --> 00:13:45: of a pureplay multifamily. I also made that transition because

00:13:45 --> 00:13:48: I've been here for about 7 weeks before Wash Tree

00:13:48 --> 00:13:52: I was with Cushman and Wakefield with energy and sustainability

00:13:52 --> 00:13:55: for the continent of the US. So excited to be

00:13:55 --> 00:13:58: here and talk about washery and experiences with solar.

00:14:00 --> 00:14:03: Alright, sounds good. I guess that Rockstar panel excited to

00:14:03 --> 00:14:06: have you guys with us. Let's start from the basics

00:14:06 --> 00:14:08: here. So one of the most common questions that we

00:14:08 --> 00:14:11: hear from commercial real estate owners is where do I

00:14:11 --> 00:14:13: get started? How do I? How do I go about



00:14:13 --> 00:14:16: narrowing down the opportunity in My Portfolio? And let's start

00:14:16 --> 00:14:19: with on site renewables. Just to narrow us even further.

00:14:19 --> 00:14:21: So all of you folks have done some amount of

00:14:22 --> 00:14:24: on site renewable energy on your properties. How did you

00:14:24 --> 00:14:27: go about sort of screening your portfolio? Was there a

00:14:27 --> 00:14:30: way that you whittled down the property list based on

00:14:30 --> 00:14:30: location?

00:14:30 --> 00:14:34: The building type or leasing arrangement and what was your

00:14:34 --> 00:14:37: logic and approach there? Whoever would like to jump in

00:14:37 --> 00:14:38: and feel free?

00:14:42 --> 00:14:44: I can go ahead and start at so we are

00:14:44 --> 00:14:47: generating about 3 1/2 percent of our total energy

00:14:47 --> 00:14:49: consumption

00:14:47 --> 00:14:49: is coming from on site renewable so that kind of

00:14:49 --> 00:14:52: tells you that it's always. It's a little bit of

00:14:52 --> 00:14:54: a challenge for us to find it in our portfolio.

00:14:55 --> 00:14:57: I can tell you which buildings don't work out for

00:14:57 --> 00:15:00: us. It's our high-rise buildings. That's that one's really been

00:15:01 --> 00:15:03: difficult for us because we don't have the real estate

00:15:03 --> 00:15:07: and technology isn't there and doesn't really pencil out for

00:15:07 --> 00:15:09: us to have on site solar. We really look at

00:15:09 --> 00:15:10: kind of larger.

00:15:10 --> 00:15:12: Campuses we have a lot of solar in in our

00:15:12 --> 00:15:16: San Diego properties where we have campuses, lots of roof

00:15:16 --> 00:15:20: space and carports and surface parking so you know you

00:15:20 --> 00:15:23: have that ability to put that there and then in

00:15:23 --> 00:15:26: sort of our suburban markets in LA and San Francisco

00:15:26 --> 00:15:30: as well. We bring we have an energy consultant who

00:15:30 --> 00:15:33: we bring on to help do our feasibility study. So

00:15:33 --> 00:15:37: we've given them whole portfolios and regions to do studies

00:15:37 --> 00:15:40: and that's kind of how our approach to it has

00:15:40 --> 00:15:40: been and.

00:15:41 --> 00:15:43: You know that is with our sort of existing assets.

00:15:43 --> 00:15:46: Our new development. We do. We have a policy of

00:15:46 --> 00:15:49: doing feasibility study for all new development projects and

00:15:49 --> 00:15:51: the

00:15:49 --> 00:15:51: majority of them do have.

00:15:51 --> 00:15:52: Some amount of solar.

00:15:53 --> 00:15:56: And Michael, you mentioned that high rises tend to be

00:15:56 --> 00:15:58: more challenging. You talked a bit more about why is

00:15:58 --> 00:16:00: it the? Is it the roof space to to building

00:16:00 --> 00:16:01: area ratio essentially?

00:16:02 --> 00:16:05: Yeah, exactly that. I mean, you have sort of large  
00:16:05 --> 00:16:08: buildings, right? These are large, kind of hundreds of  
thousands  
00:16:09 --> 00:16:11: of square feet, but with not a lot of real  
00:16:11 --> 00:16:14: estate. I know that there is that you had mentioned  
00:16:14 --> 00:16:19: earlier. The building integrated photovoltaic cells, something  
we haven't explored,  
00:16:19 --> 00:16:23: kind of letting others explore that. That technology first, but.  
00:16:23 --> 00:16:26: In terms of the roof space, there it's there's roof  
00:16:26 --> 00:16:28: space, but then also the the you know there's a  
00:16:29 --> 00:16:31: lot of buildings around you so you don't have a  
00:16:31 --> 00:16:33: lot of solar right. You've got a lot of the  
00:16:33 --> 00:16:36: shading, so that kind of also impacts your ability to  
00:16:36 --> 00:16:37: to generate that power.  
00:16:38 --> 00:16:42: Yeah, to build officially we have some more mid rise  
00:16:42 --> 00:16:45: high-rise assets in DC. So really big factor for us  
00:16:45 --> 00:16:48: as well as my experience back in the day as  
00:16:48 --> 00:16:52: geography and what I mean geography. Not only how much  
00:16:52 --> 00:16:55: sun do you get, but what's the legislation and what's  
00:16:55 --> 00:16:59: the market like? DC's got a really strong solar rec  
00:16:59 --> 00:17:02: market, so it makes it so that you know even  
00:17:02 --> 00:17:06: smaller systems become pencil out financially a lot easier.  
You  
00:17:06 --> 00:17:08: have a very much a a legislative.  
00:17:08 --> 00:17:12: Environment which supports solar through a lot of different  
means  
00:17:12 --> 00:17:15: and so when we look at different assets, especially as  
00:17:15 --> 00:17:18: we expand into the Southeast, we're looking at not only  
00:17:18 --> 00:17:21: the type of building with the type of market we're  
00:17:21 --> 00:17:24: going into to understand, does this pencil out and a  
00:17:24 --> 00:17:27: lot of solar consultants out there can really easily help  
00:17:28 --> 00:17:30: you. Kind of whittle down if you have a very  
00:17:30 --> 00:17:33: lengthy or long list of buildings. What markets are probably  
00:17:34 --> 00:17:37: going to be more favorable if, especially if you have  
00:17:37 --> 00:17:39: very similar buildings in various?  
00:17:39 --> 00:17:42: Markets Massachusetts, New Jersey DC. These are all really  
top  
00:17:42 --> 00:17:45: markets when it comes to solar. It just gets a  
00:17:45 --> 00:17:48: little harder when you go out to places like Texas  
00:17:48 --> 00:17:51: where there's lots of sun, lots of space, lots of  
00:17:51 --> 00:17:53: roof, but lots of cheap energy too. And so it  
00:17:53 --> 00:17:56: makes it a lot a lot harder to pencil out  
00:17:56 --> 00:17:56: financially.

00:17:58 --> 00:18:00: And that that is actually true just to to build  
00:18:01 --> 00:18:03: on that. That's why it is, you know, favorable in  
00:18:03 --> 00:18:06: markets like San Diego where we do see the energy  
00:18:06 --> 00:18:07: costs are a lot higher.  
00:18:09 --> 00:18:11: Yeah, energy costs matter a lot and local as as  
00:18:11 --> 00:18:14: you touched on Eric, local rec prices are widely varying.  
00:18:14 --> 00:18:16: In the US, CDC is sort of. I don't want  
00:18:16 --> 00:18:19: to say notorious because it's great for people doing solar,  
00:18:19 --> 00:18:21: but it has like notoriously high local SRC prices, which  
00:18:22 --> 00:18:24: makes really defines the economics of doing solar projects in  
00:18:25 --> 00:18:27: DC. If you can say if you can sell those  
00:18:27 --> 00:18:29: racks into the local market. Same thing in lots of  
00:18:29 --> 00:18:32: other places as well that have kind of aggressive renewable  
00:18:32 --> 00:18:35: energy portfolio standards. So there's a huge amount of  
regional  
00:18:35 --> 00:18:38: variation. And Alex, how about how about you all in  
00:18:38 --> 00:18:39: terms of selecting?  
00:18:39 --> 00:18:40: Screening projects  
00:18:41 --> 00:18:45: yeah, all of the same. Uh, you know, challenges and  
00:18:45 --> 00:18:50: considerations that have been noted. Certainly utility policy.  
We've seen  
00:18:50 --> 00:18:55: huge variations in the willingness of utilities to participate in  
00:18:55 --> 00:18:59: net metering, which really allows us to take advantage of  
00:18:59 --> 00:19:03: the renewable value throughout the day and then at the  
00:19:03 --> 00:19:04: same time.  
00:19:05 --> 00:19:06: A big our.  
00:19:06 --> 00:19:10: Biggest limitation is actually physical. The life of the roof.  
00:19:10 --> 00:19:13: What material is that roof?  
00:19:13 --> 00:19:17: Does it have the structural capacity to allow for this  
00:19:17 --> 00:19:21: solar to be situated there for 15 or 20 years?  
00:19:21 --> 00:19:24: And so we spend a lot of time really mining  
00:19:24 --> 00:19:30: our database of properties looking at those physical  
attributes and  
00:19:30 --> 00:19:33: then trying to also tie that to the feeder or  
00:19:33 --> 00:19:38: the substation in which a project may interconnect since we  
00:19:38 --> 00:19:40: are starting to see grids.  
00:19:41 --> 00:19:45: You know very much at full utilization and that ability  
00:19:45 --> 00:19:49: to back feed and leverage the net metering becoming more  
00:19:49 --> 00:19:53: and more of a challenge for just getting projects approved.  
00:19:53 --> 00:19:57: So our our actual hit rate on approvals from utilities  
00:19:57 --> 00:20:00: has been decreasing as they have been running out of  
00:20:01 --> 00:20:03: the circuit capacity in a localized area.  
00:20:05 --> 00:20:06: Got it interesting.

00:20:08 --> 00:20:10: I guess while we're on the topic of local markets

00:20:10 --> 00:20:13: and I should remind the audience again please, I see

00:20:13 --> 00:20:15: some good questions coming in via Q&A. We're gonna get

00:20:15 --> 00:20:18: to those in just a second, but keep them keep

00:20:18 --> 00:20:21: them coming and again, please specify the panelists if your

00:20:21 --> 00:20:23: questions for a particular person. But while we're on the

00:20:24 --> 00:20:26: topic of local markets and kind of making the economics

00:20:26 --> 00:20:29: work locally, one concept that's come up a bit is

00:20:29 --> 00:20:32: rec arbitrage. So for those who aren't familiar with the

00:20:32 --> 00:20:34: term, it's a lot fancier than it sounds fancier than

00:20:34 --> 00:20:37: it actually is, but it's basically if you were generating

00:20:37 --> 00:20:38: renewable energy.

00:20:38 --> 00:20:40: Italy solar energy in a local market, you can sell

00:20:40 --> 00:20:43: those wrecks that that power generates into the local market

00:20:43 --> 00:20:46: where the prices are higher and then replace those wrecks

00:20:46 --> 00:20:49: with national Recs or cheaper wrecks from some other place.

00:20:49 --> 00:20:52: Do you still get the economic benefit of selling them,

00:20:52 --> 00:20:54: but you still get to claim that you're consuming green

00:20:54 --> 00:20:57: power or producing green power which the Rex enable you

00:20:57 --> 00:20:59: to do so for those of you that have experience

00:20:59 --> 00:21:02: with record vertrage, tell us about that. How did you

00:21:02 --> 00:21:04: go about making that decision to sell the racks and

00:21:04 --> 00:21:07: buy other Recs rather than simply retiring the reps that

00:21:07 --> 00:21:08: you produced?

00:21:08 --> 00:21:11: That's a good question, and and just I mean for

00:21:11 --> 00:21:15: a little clarification, if you look at groups like Energy

00:21:15 --> 00:21:18: Star. If you do perform rec arbitrage, you kind of,

00:21:18 --> 00:21:21: you still get the avoided emissions to your credit, but

00:21:22 --> 00:21:25: you lose your location based emissions credit, so you you

00:21:25 --> 00:21:29: can't and grasp some folks might be familiar with location

00:21:29 --> 00:21:32: based versus market based. You can still claim market based

00:21:32 --> 00:21:36: emissions avoidance, but you lose your location because you

00:21:36 --> 00:21:38: sold

00:21:36 --> 00:21:38: the way the rights and you bought.

00:21:39 --> 00:21:41: Right, so a great example is here in DC.

00:21:42 --> 00:21:46: The rec market is extremely strong and wrecks are worth

00:21:46 --> 00:21:49: a lot more than maybe when you're source them nationally,

00:21:49 --> 00:21:53: so a lot of folks like including Washery. Well, we're

00:21:53 --> 00:21:56: going to sell our Recs for our solar installations or

00:21:56 --> 00:22:00: our multifamily properties because of that strong rec market

00:21:56 --> 00:22:00: actually

00:22:00 --> 00:22:04: helps pencil out the finances of deploying solar on the

00:22:04 --> 00:22:07: roof. You have the opportunity to then go and buy  
00:22:07 --> 00:22:10: a cheaper rec from, say, West Texas so that you  
00:22:10 --> 00:22:12: still can have a wreck with that.  
00:22:12 --> 00:22:16: Power generation, however, you sold that location based  
rack and  
00:22:16 --> 00:22:19: so a lot of owners also get confused with this  
00:22:19 --> 00:22:22: because they say, well, you know technically on, you know  
00:22:22 --> 00:22:25: in Greg's been programs like that my I should have  
00:22:25 --> 00:22:29: zero emissions while you actually sold your emissions right  
away  
00:22:29 --> 00:22:32: and you bought various ones. And so the difference between  
00:22:32 --> 00:22:35: a market based emission which you can buy with a  
00:22:35 --> 00:22:39: local or national rec. And the difference between a location  
00:22:39 --> 00:22:42: based emissions which can only be on site really is  
00:22:42 --> 00:22:44: really is key. So we looked at it.  
00:22:44 --> 00:22:47: Financially, to help us pencil out the investment and the  
00:22:47 --> 00:22:48: strength of the rec market.  
00:22:49 --> 00:22:52: And then we report out as such. So when we  
00:22:52 --> 00:22:54: do our reporting out we we have to report out  
00:22:54 --> 00:22:58: both our market based and our location based emissions and  
00:22:58 --> 00:23:01: we want to make sure there's a clear difference between  
00:23:01 --> 00:23:03: those two because one uses Rex and the other uses  
00:23:04 --> 00:23:05: on site renewable energy.  
00:23:09 --> 00:23:12: Yeah, and I you know to dig in a bit.  
00:23:13 --> 00:23:16: For a lot, just really doesn't have a lot of  
00:23:16 --> 00:23:22: energy consumption. Despite this large footprint, our  
customers maintain their  
00:23:22 --> 00:23:26: their utility accounts. They have a direct relationship to  
purchase  
00:23:26 --> 00:23:30: that energy, and so when making ref decisions.  
00:23:30 --> 00:23:35: It is very much a consultative decision with our customers  
00:23:35 --> 00:23:39: to say what are your carbon accounting goals? How are  
00:23:39 --> 00:23:44: you classifying the energy that you're buying from the  
building  
00:23:44 --> 00:23:48: and we've seen a real spectrum from customers saying we  
00:23:48 --> 00:23:52: want the least expensive power possible. Sell the rec so  
00:23:52 --> 00:23:56: that we can subsidize the solar power and replace it  
00:23:57 --> 00:24:00: with a like renewable attribute a like rec.  
00:24:01 --> 00:24:04: At the same time, customers have said.  
00:24:04 --> 00:24:08: No, thank you. We are interested in having a bundled  
00:24:08 --> 00:24:13: wreck directly associated with the solar that you're producing  
at  
00:24:13 --> 00:24:14: the site.

00:24:15 --> 00:24:18: And so we make those decisions on a case by  
00:24:18 --> 00:24:23: case basis. Certainly in New Jersey, where the rec market  
00:24:23 --> 00:24:26: has been strong and we have a large presence.  
00:24:27 --> 00:24:34: We've seen the ability to dramatically subsidize solar power  
through  
00:24:34 --> 00:24:36: rec arbitrage.  
00:24:37 --> 00:24:41: And we've been in a unique position where some of  
00:24:41 --> 00:24:45: our customers on in other markets have not been interested  
00:24:45 --> 00:24:49: in their Recs and actually been able to use Recs  
00:24:49 --> 00:24:54: between projects to help solve customer pain points. And you  
00:24:54 --> 00:24:59: know, essentially create an internal market to deliver wrecks  
where  
00:24:59 --> 00:25:03: an end customer and end user can can claim them,  
00:25:03 --> 00:25:06: so it's really not a tried and true. We always  
00:25:06 --> 00:25:07: take one.  
00:25:07 --> 00:25:11: Approach, uh, it really comes down to corporate policy of  
00:25:11 --> 00:25:15: our customers and how they wanna count those renewable.  
00:25:15 --> 00:25:16: Attributes.  
00:25:16 --> 00:25:19: Interesting, it's quick, follow up. Have you noticed any  
patterns  
00:25:19 --> 00:25:22: among customers like are there certain sectors that are more  
00:25:22 --> 00:25:25: interested in a more aggressive rec strategy versus others or  
00:25:25 --> 00:25:27: kind of any? Any way you can sort of breakdown  
00:25:27 --> 00:25:28: that market meaningfully?  
00:25:29 --> 00:25:33: Yeah, you know we we have some of the largest  
00:25:33 --> 00:25:38: customers in the world is our in our footprint. At  
00:25:38 --> 00:25:42: the same time, the vast majority of our our customers  
00:25:43 --> 00:25:48: are actually local and regional companies that are trying to  
00:25:48 --> 00:25:51: find a path to. Net zero or as close to  
00:25:51 --> 00:25:56: their version of Net zero as possible and a lot  
00:25:56 --> 00:26:00: of this is mandated by their supplier relationships so.  
00:26:01 --> 00:26:05: The large organizations are having a very positive downward  
effect  
00:26:05 --> 00:26:09: on these more local and regional organizations. To say we  
00:26:09 --> 00:26:11: do expect you to meet certain standards.  
00:26:12 --> 00:26:17: We are seeing those standards being pretty lenient knowing  
that,  
00:26:17 --> 00:26:20: uh, in a lot of the country, it's not the  
00:26:20 --> 00:26:25: easiest to access renewables and so their goal is to  
00:26:25 --> 00:26:29: typically find ways just to have an on-site solar presence.  
00:26:31 --> 00:26:32: As opposed to.  
00:26:33 --> 00:26:38: Really getting into the accounting piece we're sitting with just  
00:26:38 --> 00:26:41: a lot of the smaller organizations. Step one is access

00:26:41 --> 00:26:45: solar and then step two will be quantify that and  
00:26:45 --> 00:26:48: begin to report out. So we expect here very soon  
00:26:48 --> 00:26:52: that every customer in our our portfolio is going to  
00:26:52 --> 00:26:56: have some need for renewable attributes of some kind.  
We're  
00:26:56 --> 00:26:59: going to do everything we can to reduce load. As  
00:26:59 --> 00:27:03: I mentioned earlier, reduce load in these facilities.  
00:27:03 --> 00:27:07: Uh, just through smart efficiency measures. But then for the  
00:27:08 --> 00:27:10: balance to the extent we can do on site or  
00:27:10 --> 00:27:14: offsite renewables first, that will be the priority. And then  
00:27:15 --> 00:27:18: from there really wrecks to fill in the gaps, and  
00:27:18 --> 00:27:21: while that is an arbitrage, it may be the only  
00:27:21 --> 00:27:25: way to really access renewables for some customers in parts  
00:27:25 --> 00:27:28: of the country where on site or even off site  
00:27:28 --> 00:27:29: renewable access is.  
00:27:31 --> 00:27:32: Of a pretty far away off.  
00:27:33 --> 00:27:36: Got it OK, that's helpful and I guess while we're  
00:27:36 --> 00:27:39: on the topic of tenants and customers here, maybe for  
00:27:39 --> 00:27:40: for Eric and Vishali.  
00:27:41 --> 00:27:44: So to what extent have you engaged tenants in your  
00:27:44 --> 00:27:47: in your solar or on site renewable energy strategy? I  
00:27:47 --> 00:27:51: mean, do you have tenants directly participating in  
purchasing renewables?  
00:27:51 --> 00:27:53: You talk about it as part of your kind of  
00:27:53 --> 00:27:56: engagement strategy. Kind of how do tenants factor in or  
00:27:56 --> 00:27:57: not factor in here?  
00:28:01 --> 00:28:02: You want to go first for Shelly?  
00:28:02 --> 00:28:05: Sure, no problem. Yeah, so for us? Well I guess  
00:28:05 --> 00:28:09: I should preface this by saying that our structure is  
00:28:09 --> 00:28:11: that we have a PA so we lease out the  
00:28:11 --> 00:28:15: space. You know the the rooftops and then purchase the  
00:28:15 --> 00:28:19: power from the developer to sell back to our tenant.  
00:28:19 --> 00:28:22: So that's kind of our structure. So with that being  
00:28:22 --> 00:28:26: said, you know we have found that developers are more  
00:28:26 --> 00:28:29: favorable to entering into these agreements.  
00:28:29 --> 00:28:33: When we, the landlord, are responsible for the utility bills,  
00:28:33 --> 00:28:36: so we tend to focus on buildings where we are,  
00:28:36 --> 00:28:40: you know, the owner of the utility bills and these  
00:28:40 --> 00:28:43: tend to be typically multi tenant buildings, and so in  
00:28:43 --> 00:28:47: that in those cases I think there's probably less tenant  
00:28:47 --> 00:28:51: engagement. I think we always are cognizant of the  
agreements  
00:28:51 --> 00:28:55: being at least break even if not favorable in terms

00:28:55 --> 00:28:58: of the cost of utilities, right? We don't want to,  
00:28:58 --> 00:28:59: we're selling.  
00:28:59 --> 00:29:02: Like our tenants, we're not trying to spike our utilities,  
00:29:02 --> 00:29:04: and that's usually how they play out for us, especially  
00:29:04 --> 00:29:05: in California.  
00:29:06 --> 00:29:09: We have some cases where we have, uh, you know,  
00:29:09 --> 00:29:12: a single tenant in kind of a modified gross building,  
00:29:12 --> 00:29:16: meaning that they kind of manage most of the operations  
00:29:16 --> 00:29:19: that we pay the utility bills, and so with those  
00:29:19 --> 00:29:22: tenants, we're talking to one of them right now. We  
00:29:22 --> 00:29:25: will be responsible for entering into the agreement for the  
00:29:25 --> 00:29:28: PA, but then we will be able to retire those  
00:29:28 --> 00:29:31: wrecks. And because we keep the attributes for the rec  
00:29:31 --> 00:29:34: for the the generation and then that will they'll be  
00:29:34 --> 00:29:36: able to flow that into their ad.  
00:29:37 --> 00:29:38: Station for that building.  
00:29:38 --> 00:29:41: Gadget and quick follow up. They just came in from  
00:29:41 --> 00:29:43: the audience that I think is a really good question,  
00:29:43 --> 00:29:45: which is since you guys are a read and you're  
00:29:45 --> 00:29:47: the owner of the system. Under these PA's, did you  
00:29:47 --> 00:29:49: form it? Did you form a tears or a taxable  
00:29:49 --> 00:29:52: REIT subsidiary in order to capture the tax benefits? Or  
00:29:52 --> 00:29:53: how does that work from a tax perspective?  
00:29:53 --> 00:29:56: Yeah, so no. We are actually not the owner at  
00:29:56 --> 00:29:58: all, so that's yeah, so there's a developer who, sorry  
00:29:58 --> 00:30:01: I should have been more clear. The reason we don't  
00:30:01 --> 00:30:03: own it is because we're a week, so it doesn't  
00:30:03 --> 00:30:05: pencil out. We don't get the tax benefits. I don't  
00:30:05 --> 00:30:08: think the current TR that we have doesn't have the  
00:30:08 --> 00:30:09: appetite for solar.  
00:30:09 --> 00:30:12: Something that we've talked about maybe in the future, but  
00:30:12 --> 00:30:14: not at them at the moment, and so we don't  
00:30:14 --> 00:30:15: the the solar.  
00:30:16 --> 00:30:18: And Eric about you guys in terms of tenant engagement.  
00:30:19 --> 00:30:23: Yeah, so as since we're mostly a residential owner, obviously  
00:30:23 --> 00:30:27: we're going through construction right now. So beyond just  
after  
00:30:27 --> 00:30:30: the site or the panels are completed, we're going through  
00:30:30 --> 00:30:34: resident engagement because we have a lot of questions  
around  
00:30:34 --> 00:30:37: what is going on with our roof. Why are there  
00:30:37 --> 00:30:39: cranes in the middle of the city?



00:30:39 --> 00:30:42: Why is there noise? So a lot of our property  
00:30:42 --> 00:30:47: management is working with our residents to understand and  
notify  
00:30:47 --> 00:30:51: residents that this is what is occurring is what's happening.  
00:30:51 --> 00:30:54: The sites that we opted for solar are.  
00:30:56 --> 00:31:01: Basically whole building metering with tenant build back and  
so  
00:31:01 --> 00:31:04: we have that option to tie it in and reduce  
00:31:04 --> 00:31:09: our energy load even though we're selling the wrecks and  
00:31:09 --> 00:31:10: one of the the.  
00:31:11 --> 00:31:14: Positives of that is with Energy Star. For instance, with  
00:31:14 --> 00:31:18: your Energy Star score, your Energy Star score is based  
00:31:18 --> 00:31:21: off of your source energy. Use intensity, not your site's  
00:31:21 --> 00:31:25: energy use intensity. So basically it's by installing installing  
the  
00:31:25 --> 00:31:29: solar. We reduce our source EUI because we're reducing  
that  
00:31:29 --> 00:31:33: transmission loss. That generation related energy use. Even  
though our  
00:31:33 --> 00:31:37: site energy use intensity will remain unchanged because it's  
still  
00:31:37 --> 00:31:40: how much energy our site uses. So our energy store  
00:31:40 --> 00:31:41: star score.  
00:31:41 --> 00:31:44: Is expected to go up upon completion of this solar  
00:31:44 --> 00:31:48: projects, which is really great, especially here in DC because  
00:31:48 --> 00:31:51: of local legislation. Again, I bring this one up. DC  
00:31:51 --> 00:31:56: has the building energy performance standards, so which  
directly correlate  
00:31:56 --> 00:31:59: today with Energy Star scores? And so we have to  
00:31:59 --> 00:32:02: hit some minimums when it comes to Energy Star  
performance,  
00:32:02 --> 00:32:05: and so we need to get our Energy Star scores  
00:32:05 --> 00:32:08: up and continuously going up over the next. You know,  
00:32:08 --> 00:32:12: five 10-15 years to make sure we're always in compliance.  
00:32:12 --> 00:32:15: With DC Deps and one great way of doing that,  
00:32:15 --> 00:32:19: even though we are essentially selling off the location based  
00:32:19 --> 00:32:23: emissions rights, we are reducing our site source EUI by  
00:32:23 --> 00:32:26: directly using the energy produced by the panels in our  
00:32:27 --> 00:32:27: buildings.  
00:32:29 --> 00:32:29: Got it.  
00:32:29 --> 00:32:30: Got it helpful.  
00:32:31 --> 00:32:33: So it sounds like 7 weeks on the job you're  
00:32:33 --> 00:32:35: already getting questions like why are there cranes on my  
00:32:35 --> 00:32:35: building?

00:32:35 --> 00:32:37: Yeah, yes, I've already had calls about.  
00:32:38 --> 00:32:40: Being the life of an issue professional.  
00:32:42 --> 00:32:44: Well, we have so many good questions coming in. Let's  
00:32:44 --> 00:32:47: just go straight to audience Q&A and spend the last  
00:32:47 --> 00:32:49: 25 minutes on that. Thanks for the questions. Keep them  
00:32:49 --> 00:32:52: coming. One that I think is interesting for anybody who'd  
00:32:52 --> 00:32:55: like to take it. So the questions around how much  
00:32:55 --> 00:32:58: of a building's consumption can you reasonably offset  
through on  
00:32:58 --> 00:33:01: site renewables and solar in particular? I know there's a  
00:33:01 --> 00:33:04: lot of conditionals on that question. Depends on the building  
00:33:04 --> 00:33:06: type and the consumption profile, and lots of other things.  
00:33:06 --> 00:33:09: But one person was basically saying when they looked at  
00:33:09 --> 00:33:12: this, they've seen that solar is an essentially a fraction  
00:33:12 --> 00:33:13: of the actual.  
00:33:13 --> 00:33:16: Consumption of the building. What has been your experience  
in  
00:33:16 --> 00:33:18: terms of how much you're able to offset and what  
00:33:18 --> 00:33:20: some of the factors are that influence that?  
00:33:23 --> 00:33:25: Yeah, we we spent a lot of time thinking about  
00:33:25 --> 00:33:26: sizing especially.  
00:33:28 --> 00:33:32: As there are so many changes occurring with automation, the  
00:33:32 --> 00:33:36: impact of LED we have on site just electrification of  
00:33:36 --> 00:33:39: vehicles. And so where do you? Where do you land  
00:33:40 --> 00:33:43: when it comes to on site solar and our focus  
00:33:43 --> 00:33:46: tends to be inside the four walls? At least at  
00:33:46 --> 00:33:50: this point inside the four walls and taking a somewhat  
00:33:50 --> 00:33:55: conservative view on what our average consumption in the  
warehouse  
00:33:55 --> 00:33:57: is, after looking at.  
00:33:58 --> 00:34:03: Hundreds of warehouses. We've determined kind of an  
average consumption  
00:34:03 --> 00:34:07: profile and then looking at what our customers 80% offset  
00:34:07 --> 00:34:11: would be and how that reconciles compared to the average.  
00:34:11 --> 00:34:15: Traditionally with these behind the meter systems solving on  
site  
00:34:16 --> 00:34:19: load, we are long on roof space, typically only using  
00:34:19 --> 00:34:20: about.  
00:34:21 --> 00:34:24: 25 to 30% of my roof because the consumption is  
00:34:24 --> 00:34:28: actually not great enough to even warrant using the full  
00:34:28 --> 00:34:32: roof, so that limitation is not present. If anything we  
00:34:32 --> 00:34:36: we run up against not enough consumption to really make  
00:34:36 --> 00:34:41: a project worthwhile, and we've been doing everything we

can

00:34:41 --> 00:34:44: to to think about how to make our smallest system  
00:34:44 --> 00:34:48: size that we cut off even smaller. So we're looking  
00:34:48 --> 00:34:51: at even sub 300 kW systems now to be able  
00:34:51 --> 00:34:52: to assemble.  
00:34:52 --> 00:34:56: Batches of those uh, to help customers with lower uh  
00:34:56 --> 00:35:00: consumption in their facility. Because we, we believe  
everybody should  
00:35:01 --> 00:35:05: have every customer of ours should have access to  
renewables  
00:35:05 --> 00:35:08: on site if they're in a favorable state where the  
00:35:08 --> 00:35:11: policy makes sense and the roof can support it so.  
00:35:12 --> 00:35:16: That's totally the opposite. In the last touch facility for  
00:35:17 --> 00:35:20: us, where we're in a urban environment more akin to,  
00:35:20 --> 00:35:24: you know the the other portfolios we're talking about today  
00:35:24 --> 00:35:28: where we are light on roof space. And maybe there's  
00:35:28 --> 00:35:32: a lot of equipment on those roofs, and it's definitely  
00:35:32 --> 00:35:35: been a challenge we see. On the flip side of  
00:35:35 --> 00:35:38: needing to think through creative ways to.  
00:35:39 --> 00:35:43: Maximize the solar efficiency through larger panels on site.  
00:35:45 --> 00:35:46: Tends to be our approach.  
00:35:46 --> 00:35:49: Gotcha now Michael, I'm guessing that you don't have the  
00:35:49 --> 00:35:52: problem of too much roof. Not enough consumption at given  
00:35:52 --> 00:35:55: your asset portfolio. So how does that look from your  
00:35:55 --> 00:35:56: perspective?  
00:35:56 --> 00:36:00: Yeah, absolutely. I mean, I definitely say it's kind of  
00:36:00 --> 00:36:04: a mixed bag based on use type and you know,  
00:36:04 --> 00:36:08: as Alex mentioned, just you know footprint and so you  
00:36:08 --> 00:36:12: know where we're seeing kind of the least amount of  
00:36:12 --> 00:36:14: consumption is in our life science.  
00:36:14 --> 00:36:17: Basis so we are, you know, we're especially in our  
00:36:17 --> 00:36:21: new development. We a lot of the new development projects  
00:36:21 --> 00:36:24: are life, science and so consumption. Your UI is just  
00:36:24 --> 00:36:27: a lot higher than they are in office spaces, and  
00:36:27 --> 00:36:30: we're still putting solar there. That's really driven a lot  
00:36:31 --> 00:36:34: to by our commitment to being 100% lead. Golden lead  
00:36:34 --> 00:36:37: platinum certified of all of our new developments, which is  
00:36:37 --> 00:36:41: tied to executive compensation. And we tend to need solar  
00:36:41 --> 00:36:44: to to get to that platinum level. But the consumption  
00:36:44 --> 00:36:45: itself is probably.  
00:36:45 --> 00:36:48: Close to I think 7 to 10% depending on the  
00:36:48 --> 00:36:51: building. I'm definitely see a lot more.

00:36:54 --> 00:36:59: Solar consumption in kind of our office spaces, especially down

00:36:59 --> 00:37:02: in San Diego where we have like carports for miles

00:37:02 --> 00:37:06: and we just, you know, can generate a lot

00:37:06 --> 00:37:06: of solar.

00:37:08 --> 00:37:11: Yeah for us. I mean we have right now solar

00:37:11 --> 00:37:14: in DC, you know again, mid high-rise buildings. Not a

00:37:14 --> 00:37:17: lot of roof space. I would say you really also

00:37:18 --> 00:37:21: want to consider your total energy use and spend at

00:37:21 --> 00:37:25: your building. So for instance, in both of our buildings

00:37:25 --> 00:37:28: we have electricity and natural gas, and so you know

00:37:28 --> 00:37:32: our electricity generated by solar panels might make up 20

00:37:32 --> 00:37:36: to 25% of our electricity use. But it makes up

00:37:36 --> 00:37:38: a fraction of that of our total.

00:37:38 --> 00:37:42: Energy use because we're not factoring in the heating load

00:37:42 --> 00:37:46: provided by natural gas, and so it really does vary

00:37:46 --> 00:37:49: depending on you know. Obviously the.

00:37:50 --> 00:37:53: The location and the size of the roof and your

00:37:53 --> 00:37:55: availability of panels and how much roof space are you

00:37:55 --> 00:37:58: willing to lose? As for lack of a better word.

00:37:59 --> 00:38:02: But I I would agree. You know some 20%.

00:38:03 --> 00:38:05: You know, probably closer in the 10s if that.

00:38:09 --> 00:38:13: Got it interesting difference. Just among this group, much less

00:38:13 --> 00:38:16: than the broader broader market, so question more of a

00:38:16 --> 00:38:20: broad question, I think is what tools or resources have

00:38:20 --> 00:38:24: you all found to be most useful in evaluating renewables

00:38:24 --> 00:38:28: for your portfolios? And I would extend that question to

00:38:28 --> 00:38:32: be both on site and off-site options. Are there particular

00:38:32 --> 00:38:36: papers or consultants or feasibility tools or other frameworks that

00:38:36 --> 00:38:40: have been most useful for you that you would recommend?

00:38:40 --> 00:38:42: Do to other similar firms.

00:38:45 --> 00:38:47: This is for procuring renewables.

00:38:48 --> 00:38:50: This can be for either. Do you know identifying and

00:38:50 --> 00:38:54: developing on site renewables or for or for procurement off-site,

00:38:54 --> 00:38:57: whichever? Whichever you'd like to focus on, but just generally

00:38:57 --> 00:38:59: any tools that you've found useful.

00:39:02 --> 00:39:05: Yeah, I mean, we're not. We're not solar experts, we're

00:39:05 --> 00:39:09: not renewable energy experts, so we have a consultant that

00:39:09 --> 00:39:11: we bring on board to help us kind of coordinate

00:39:11 --> 00:39:15: the feasibility studies. They got to bid for us. They  
00:39:15 --> 00:39:18: help us negotiate contracts along with our lawyers, so that's  
00:39:18 --> 00:39:21: been really helpful for us to make sure that we  
00:39:21 --> 00:39:22: get a favorable deal.  
00:39:24 --> 00:39:25: Consultants.  
00:39:25 --> 00:39:26: Sorry, sorry.  
00:39:27 --> 00:39:30: Sorry, we also use consultants when it comes to. I  
00:39:30 --> 00:39:35: mean, energy markets are extremely complex, especially  
when you gauge  
00:39:35 --> 00:39:39: out nationally and so by using energy market professional  
who  
00:39:39 --> 00:39:42: does this day in day out and also has relationships  
00:39:42 --> 00:39:45: with various developers and can help go out to bid  
00:39:45 --> 00:39:50: when it comes to developing and construction services can  
help  
00:39:50 --> 00:39:53: coordinate with rec sales or rec procurement? I mean the  
00:39:53 --> 00:39:54: rec markets.  
00:39:54 --> 00:39:57: Not necessarily something where I can just go out and  
00:39:57 --> 00:40:01: and buy Rex straight from a wind farm generator. Generally  
00:40:01 --> 00:40:04: you have to use a third party broker or consultant  
00:40:04 --> 00:40:06: and there's a lot of great ones out there that  
00:40:06 --> 00:40:09: can source Rex nationally or locally. And a lot of  
00:40:09 --> 00:40:12: them can also help with on site deployment.  
00:40:14 --> 00:40:19: Yeah, one of our biggest challenges is actually accessing our  
00:40:19 --> 00:40:24: customer utility data. We don't hold the meter utilities have  
00:40:24 --> 00:40:29: a direct relationship with their utility account holder, and so  
00:40:29 --> 00:40:33: some of the green button tools, the API tools that  
00:40:33 --> 00:40:34: help us access.  
00:40:36 --> 00:40:40: Almost real time meter data and and then we're able  
00:40:40 --> 00:40:44: to refresh that on a pretty regular interval is incredibly  
00:40:44 --> 00:40:49: helpful through the sizing and development process, but then  
also  
00:40:49 --> 00:40:53: through operations as we look to just reconcile.  
00:40:54 --> 00:40:59: Utility bills and make sure that our our system performance  
00:40:59 --> 00:41:04: is reflecting accurately on our customers utility bill. We rely  
00:41:04 --> 00:41:09: very heavily on that direct utility API connection to the  
00:41:09 --> 00:41:10: utility.  
00:41:12 --> 00:41:12: Got it.  
00:41:13 --> 00:41:16: That's great, helpful, and I see a couple of folks  
00:41:16 --> 00:41:20: asking for specific consultant recommendations, so maybe  
we can. Maybe  
00:41:20 --> 00:41:23: we can follow up with those folks afterwards, and if  
00:41:23 --> 00:41:27: you guys have a particular vendors you'd like to recommend,

00:41:27 --> 00:41:30: but the so a question around appraisals and valuations. So  
00:41:30 --> 00:41:33: how are you guys seeing the presence or the lack  
00:41:33 --> 00:41:37: of solar other renewables on site affecting property  
valuations?  
00:41:40 --> 00:41:41: Market.  
00:41:43 --> 00:41:45: Alex yeah.  
00:41:46 --> 00:41:47: If you want.  
00:41:48 --> 00:41:53: We recently began exploring with appraisers, actually.  
00:41:54 --> 00:41:58: What are market roof rents throughout the country? And we  
00:41:59 --> 00:42:03: we actually were not able to establish any comp database.  
00:42:03 --> 00:42:07: So you know, first and foremost I think the jury  
00:42:07 --> 00:42:09: is really out when it comes to.  
00:42:10 --> 00:42:15: What our market cash flows that a property owner could  
00:42:15 --> 00:42:19: expect. You know rental rates even for parking spaces or  
00:42:19 --> 00:42:25: trailer drops are really well established and documented and  
known.  
00:42:25 --> 00:42:30: Roof rents and even rents associated with standalone battery  
storage  
00:42:30 --> 00:42:34: assets are still bit, you know, in their infancy and  
00:42:35 --> 00:42:38: and not cataloged so you also have the the the  
00:42:38 --> 00:42:41: sum of conundrum of the terminal.  
00:42:41 --> 00:42:45: This of these renewable assets, is it a 20 or  
00:42:45 --> 00:42:48: 25 year system? But if it is, is your roof  
00:42:48 --> 00:42:52: going to last that long so all of these factors  
00:42:52 --> 00:42:57: really compound to taking up kind of a conservative view  
00:42:57 --> 00:43:01: on the NOI from the cash flow stream to the  
00:43:01 --> 00:43:06: building and then using conservative cap rates in the same  
00:43:06 --> 00:43:10: way we would cap a building based on and Ali,  
00:43:10 --> 00:43:12: you have to just discount it.  
00:43:12 --> 00:43:15: But it's an area that we are excited to be  
00:43:15 --> 00:43:21: collaborating with. The valuations and appraiser community.  
Just knowing that  
00:43:21 --> 00:43:25: more and more buildings will have these renewable assets  
on  
00:43:25 --> 00:43:29: site. There's, there's a lot of work to be done,  
00:43:29 --> 00:43:32: and we're excited to see more of a market establish  
00:43:33 --> 00:43:36: so that those prices are are better defined. We've also  
00:43:37 --> 00:43:40: seen you know through the SPAC markets, owners of.  
00:43:42 --> 00:43:46: Renewable assets on who are publicly traded or or who  
00:43:46 --> 00:43:51: have IPO seeing massive valuations so we're always stuck  
between.  
00:43:51 --> 00:43:55: What would Wall Street believe the valuation of this  
renewable  
00:43:55 --> 00:43:59: asset cash flow to be an enterprise value versus just

00:43:59 --> 00:44:04: it's another rental stream at your building? How would an  
00:44:04 --> 00:44:09: appraiser view it? Purely from the standpoint of building  
valuation  
00:44:09 --> 00:44:09: so?  
00:44:11 --> 00:44:12: Complicated, interesting.  
00:44:12 --> 00:44:13: Yeah, Eric.  
00:44:13 --> 00:44:16: How about you, yeah, I mean, I mean, Alex kind  
00:44:16 --> 00:44:18: of nailed it like it is complicated. Back when I  
00:44:19 --> 00:44:21: was at Cushman we couldn't get a good solid answer  
00:44:21 --> 00:44:24: on price per square foot for a roof rental space  
00:44:24 --> 00:44:27: on solar because we had a lot of developers approaching  
00:44:27 --> 00:44:30: industrial owners saying hey, I want to, you know, install  
00:44:30 --> 00:44:32: solar on your roof and you know I'll pay you  
00:44:32 --> 00:44:35: X amount per square foot and a lot of those  
00:44:35 --> 00:44:37: owners were said. Was that good? Is that bad? I  
00:44:37 --> 00:44:40: don't you know where? Where were the comps?  
00:44:41 --> 00:44:44: So it is is something where I feel like increasingly  
00:44:44 --> 00:44:47: people are getting smarter about it and more knowledge and  
00:44:47 --> 00:44:49: data points are coming out about it and.  
00:44:51 --> 00:44:54: For folks that that own the panels, I mean we  
00:44:54 --> 00:44:58: have to think about you know our disposition of these  
00:44:58 --> 00:45:01: assets. If we do in the future, you know what's  
00:45:01 --> 00:45:05: the value to that potential buyer. And I think that  
00:45:05 --> 00:45:08: really goes back to like everything else in the US,  
00:45:08 --> 00:45:12: being really regionally specific. So in DC, the value of  
00:45:12 --> 00:45:15: these panels you know is intrinsic and it is linked  
00:45:16 --> 00:45:19: to the DC legislation. And what the rec values are  
00:45:19 --> 00:45:22: and how that's going to probably go down with time.  
00:45:24 --> 00:45:27: You know, over the next 10 years, 20 years and  
00:45:27 --> 00:45:30: but being able to pass that that on to the  
00:45:30 --> 00:45:34: buyer as a potential revenue stream as well as avoiding  
00:45:34 --> 00:45:40: having to purchase an increasingly more expensive electricity  
from the  
00:45:40 --> 00:45:40: grid.  
00:45:41 --> 00:45:45: And as well as, secondly, the avoidance of penalties coming  
00:45:46 --> 00:45:50: out by these local municipalities. So with New York and  
00:45:50 --> 00:45:54: local on 97 with DC BEPS with Boston's hairdo increasingly,  
00:45:54 --> 00:46:00: municipalities are setting performance standards for all  
buildings, whether they're  
00:46:00 --> 00:46:03: residential, industrial or commercial office.  
00:46:04 --> 00:46:07: And being able to avoid penalties or fines by being,  
00:46:07 --> 00:46:11: you know, a lower emitter or a good energy performer  
00:46:11 --> 00:46:12: whichever 1.

00:46:13 --> 00:46:16: It really brings value to that asset because now if  
00:46:16 --> 00:46:19: we, you know sell a building, we can say well  
00:46:19 --> 00:46:22: we're compliant with DC BEPS you know through X date  
00:46:22 --> 00:46:26: because of our solar generation and our reduced energy  
usage  
00:46:26 --> 00:46:29: and all sorts of solutions, whereas building why may just  
00:46:29 --> 00:46:32: have to owners are becoming more buyers and more savvy  
00:46:33 --> 00:46:35: about. Well, you know in 10 years is this victim  
00:46:36 --> 00:46:38: going to be a building to be a victim of  
00:46:38 --> 00:46:41: what we call stranding like you are now outside of  
00:46:41 --> 00:46:43: the realm? Or the bounds of.  
00:46:43 --> 00:46:47: Allowed limits by the legislation you're being fined. You're not  
00:46:47 --> 00:46:50: meeting you, know the Paris Accords 1 1/2 degree or  
00:46:50 --> 00:46:54: two degree outlook. So you're building is becoming more  
stranded  
00:46:54 --> 00:46:57: in this increasingly carbon free economy.  
00:46:58 --> 00:47:00: Yeah, there's really anything from.  
00:47:00 --> 00:47:01: On that front.  
00:47:01 --> 00:47:04: 100% Echo what Alex and Eric were saying. I have  
00:47:04 --> 00:47:08: even asked kind of our finance team what the value  
00:47:08 --> 00:47:11: of solar is or the value of our renewable energy  
00:47:11 --> 00:47:15: systems are and they don't really haven't. We haven't really  
00:47:15 --> 00:47:18: done the exercise to get a clear answer. For that  
00:47:18 --> 00:47:21: I would just say though as you know, having that  
00:47:21 --> 00:47:24: we don't own the solar. You know, as Eric has  
00:47:24 --> 00:47:27: said, you really need to think about your disposition so  
00:47:27 --> 00:47:28: it's important.  
00:47:29 --> 00:47:32: To understand your contracts and make sure that they don't  
00:47:33 --> 00:47:35: have a negative impact on your ability to sell your  
00:47:36 --> 00:47:39: buildings. We've had seen instances where developers might  
try to  
00:47:39 --> 00:47:42: put in clauses where they might be able to interfere  
00:47:42 --> 00:47:45: with your sale of your building, so those kinds of  
00:47:45 --> 00:47:49: things are really important to be cognizant of, but everything  
00:47:49 --> 00:47:51: else I you know, I think we echo it depends  
00:47:52 --> 00:47:54: on the region. It depends on. You know your risk  
00:47:54 --> 00:47:57: of not having the solar panels and and being, you  
00:47:57 --> 00:47:59: know, getting penalized in the future.  
00:47:59 --> 00:48:02: So all of those come into play for play for  
00:48:02 --> 00:48:02: us as well.  
00:48:04 --> 00:48:07: Speaking of a little bit about pain points and risks,  
00:48:07 --> 00:48:09: so when it comes to deploying renewables and maybe we



00:48:09 --> 00:48:12: can focus on on site first, but I'm curious to  
00:48:12 --> 00:48:15: hear about offsite as well. What have been your biggest  
00:48:15 --> 00:48:17: barriers like if you could wave a magic wand and  
00:48:17 --> 00:48:20: change one thing about the world or about policy or  
00:48:20 --> 00:48:22: about your organization if you want to go there. If  
00:48:23 --> 00:48:25: you could change one thing that would enable you to  
00:48:25 --> 00:48:28: deploy renewables and faster rates, what would that thing be  
00:48:28 --> 00:48:30: and why is it a pain point?  
00:48:34 --> 00:48:36: I don't know like I don't know if this is  
00:48:36 --> 00:48:39: where this is available. I don't pretty sure it's not  
00:48:39 --> 00:48:42: available in California, it's more of community solar.  
00:48:43 --> 00:48:46: So having that availability I think would help us to  
00:48:46 --> 00:48:48: deploy it faster. We are we. Do you know our  
00:48:48 --> 00:48:51: utilities are also have their own net zero goals, so  
00:48:51 --> 00:48:54: that's helping us. The grid is getting cleaner faster, so  
00:48:54 --> 00:48:57: that helps us meet our renewable energy goals, but that's,  
00:48:57 --> 00:48:59: you know, a long time out and so having community  
00:48:59 --> 00:49:00: solar I think would.  
00:49:00 --> 00:49:01: Be.  
00:49:01 --> 00:49:03: The Magic wand I would.  
00:49:03 --> 00:49:03: Waive  
00:49:04 --> 00:49:07: and that was that was my number one as well.  
00:49:07 --> 00:49:09: Yeah, I would say.  
00:49:10 --> 00:49:15: It's a community. Solar allows scale, allows you to solve  
00:49:15 --> 00:49:19: your on site problems. If if our on site opportunities,  
00:49:19 --> 00:49:24: I should say with commercial anchor customers. But then  
00:49:24 --> 00:49:28: you're  
00:49:28 --> 00:49:33: also a part of the community and helping support access  
00:49:33 --> 00:49:37: to renewables for, you know, residential and nonprofit off  
00:49:38 --> 00:49:40: takers,  
00:49:40 --> 00:49:40: which is phenomenal and that really helps scale.  
00:49:41 --> 00:49:45: I mean just in line I couldn't agree more in  
00:49:45 --> 00:49:49: line with that.  
00:49:49 --> 00:49:52: Legislation is the biggest pain point. That's the biggest hurdle  
00:49:52 --> 00:49:56: of deploying renewable Florida was on the brink of phasing  
00:49:57 --> 00:49:58: out net metering before Disantis just vetoed it. So I  
00:49:59 --> 00:50:03: mean legislation can can make you renewables thrive. It can  
00:50:03 --> 00:50:07: also kill it. And so.  
00:50:07 --> 00:50:13: Legislation is is critical to making it be economically viable  
00:50:13 --> 00:50:16: and feasible, as well as just, you know, incentivizing it.  
So providing those opportunities through legislation will  
essentially will be  
really key and we couldn't think about it even more

00:50:16 --> 00:50:20: with the SEC rolling out. You know the fact that  
00:50:20 --> 00:50:24: we're going to be reporting out greenhouse gas emissions.  
We're  
00:50:24 --> 00:50:28: going to be reporting out climate change impacts.  
00:50:29 --> 00:50:30: On our you know.  
00:50:30 --> 00:50:33: SEC documents like so. One of the things we always  
00:50:34 --> 00:50:36: struggle with and not to go off on a tangent  
00:50:36 --> 00:50:40: here is the utility companies. We still struggle on getting  
00:50:40 --> 00:50:43: how much data we can get out of utility companies  
00:50:43 --> 00:50:46: at this point, let alone fighting. You know legislation to  
00:50:46 --> 00:50:49: allow or make utility. Companies provide us that data so  
00:50:50 --> 00:50:52: that we can properly report out to the SEC our  
00:50:52 --> 00:50:56: greenhouse gas emissions. So legislation is my number one.  
That's  
00:50:56 --> 00:50:59: the one thing that that holds us up or can  
00:50:59 --> 00:51:00: really accelerate us.  
00:51:01 --> 00:51:01: Was that?  
00:51:02 --> 00:51:05: And and just to add 1 quick thing, we have  
00:51:05 --> 00:51:09: seen some you know favorable legislation around solar or  
solar  
00:51:09 --> 00:51:15: readiness on sites requiring that new buildings have solar.  
Unfortunately,  
00:51:15 --> 00:51:19: we've also encountered in a lot of those same situations  
00:51:19 --> 00:51:23: the utility grid can't actually support anymore solar, so grid  
00:51:23 --> 00:51:29: modernization is critical and policy to support the utilities  
modernizing  
00:51:29 --> 00:51:31: to accommodate more renewables.  
00:51:31 --> 00:51:33: On the grid is is key for this all to  
00:51:33 --> 00:51:34: work.  
00:51:40 --> 00:51:43: Alright, lost my mute button as I was immersed in  
00:51:43 --> 00:51:45: Q&A questions, so we kind of touched on this already  
00:51:45 --> 00:51:47: or several of you did, but I wanna I wanna  
00:51:47 --> 00:51:50: double down on it a bit and a great question  
00:51:50 --> 00:51:52: here. Do you see a future where real estate companies  
00:51:52 --> 00:51:55: can become a solution provider for their tenants to fulfill  
00:51:55 --> 00:51:56: their ESG commitments?  
00:51:58 --> 00:52:00: To what extent do you see this as a value  
00:52:00 --> 00:52:03: add or a new business opportunity? And I know you  
00:52:03 --> 00:52:06: all are engaging with tenants in different ways, but kind  
00:52:07 --> 00:52:09: of in the say, 510 years from now where we  
00:52:09 --> 00:52:13: have this market matures. Our programs mature. What's the  
sort  
00:52:13 --> 00:52:16: of culmination of that? How can we be solutions providers

00:52:16 --> 00:52:18: to our tenants on their ESG commitments?

00:52:21 --> 00:52:24: Yes, so that's really a core function of our our

00:52:24 --> 00:52:27: day-to-day and and we were seeing a lot of issues

00:52:27 --> 00:52:31: with long term PA's and short term leases and and

00:52:31 --> 00:52:34: the mismatch associated there and decided just to take an

00:52:34 --> 00:52:38: ownership role in solar and so our core product is

00:52:38 --> 00:52:42: solar smart focused on helping our building customers

00:52:42 --> 00:52:44: access on

00:52:42 --> 00:52:44: site renewables. But we expect.

00:52:44 --> 00:52:45: This.

00:52:45 --> 00:52:50: Year to also begin supporting our customers with accessing

00:52:51 --> 00:52:52: off-site

00:52:51 --> 00:52:52: renewables.

00:52:52 --> 00:52:56: As well as, uh, renewable attributes and offsets because it

00:52:56 --> 00:52:59: is not easy for a lot of these smaller organizations

00:52:59 --> 00:53:02: who are in a local regional place to find the

00:53:02 --> 00:53:06: best providers at the best price. And so leveraging our

00:53:06 --> 00:53:09: scale and our commitment to this is our goal.

00:53:11 --> 00:53:14: Interesting, so a bit of a bit of a procurement.

00:53:14 --> 00:53:17: You know. The bulk purchasing solutions and procurement

00:53:17 --> 00:53:19: offerings and

00:53:17 --> 00:53:19: all of that kind of factoring in at the scale

00:53:19 --> 00:53:21: that you guys are operating at that's interesting.

00:53:22 --> 00:53:26: Yeah, leveraging our best practices from our ESG team and

00:53:26 --> 00:53:30: how they manage Prologis we will. We will be providing

00:53:30 --> 00:53:32: that to our customers.

00:53:34 --> 00:53:35: Got it about Kilroy and washery.

00:53:37 --> 00:53:40: Yeah, I mean we are, you know, as building owners

00:53:40 --> 00:53:43: we're on the kind of upstream of their value chain

00:53:43 --> 00:53:46: of our tenants and our tenants. Have you know they're

00:53:46 --> 00:53:49: they're come from a lot of the media and the

00:53:49 --> 00:53:52: tech sectors? They have their own carbon neutrality goals

00:53:52 --> 00:53:55: and

00:53:52 --> 00:53:55: they really drive us to make the decisions that we

00:53:55 --> 00:53:58: make to help them meet their goals. You know, we

00:53:58 --> 00:54:02: have, as I mentioned earlier, we are carbonates, operating of

00:54:02 --> 00:54:04: our scope one and scope 2 emissions. So this is

00:54:04 --> 00:54:07: all of our, you know, electricity and gas that's paid

00:54:07 --> 00:54:08: for bike.

00:54:08 --> 00:54:11: Away, but these are in, you know it covers all

00:54:11 --> 00:54:14: the buildings that our tenants are are located and so

00:54:14 --> 00:54:17: this helps them to meet their goals and they're asking

00:54:18 --> 00:54:21: us where you know where our utility is coming from

00:54:21 --> 00:54:24: and you know, just making sure that they are, you  
00:54:24 --> 00:54:26: know carpentry, operating of their scope 3.  
00:54:26 --> 00:54:26: So.  
00:54:27 --> 00:54:29: I'm curious to hear if you are you sort of  
00:54:29 --> 00:54:32: proactively messaging that to your tenants. They're gonna  
engagement strategy,  
00:54:32 --> 00:54:34: or are you? Or is it kind of a reactive  
00:54:34 --> 00:54:36: responsive thing if they ask and talk more?  
00:54:36 --> 00:54:38: About no, yeah, I think it's.  
00:54:38 --> 00:54:41: When we became when we made the commitment publicly,  
we  
00:54:42 --> 00:54:44: sent a message out to our tenants. We send memos  
00:54:45 --> 00:54:47: out to our tenants a couple times a year, kind  
00:54:47 --> 00:54:51: of giving them updates on our sustainability programs and  
where  
00:54:51 --> 00:54:54: we are. And our SG and and our goals and  
00:54:54 --> 00:54:57: accomplishments. And so we did. Sort of we market this  
00:54:57 --> 00:55:00: to the tenants in our multi tenant in multi tenant  
00:55:00 --> 00:55:05: buildings because this doesn't cover those triple net buildings  
where  
00:55:05 --> 00:55:07: the the tenants pay the bills and then yeah as  
00:55:07 --> 00:55:09: they we get a lot of questions.  
00:55:09 --> 00:55:13: Especially lately lots of tenants who are, you know, asking  
00:55:13 --> 00:55:17: for the utility data we give them access to Energy  
00:55:17 --> 00:55:20: Star portfolio manager. We let them know that you know  
00:55:20 --> 00:55:23: these buildings are carbon carbon neutral.  
00:55:23 --> 00:55:23: So.  
00:55:25 --> 00:55:29: Yeah, we were engaging with our residents around well, so  
00:55:29 --> 00:55:32: it really depends on how our building metering is set  
00:55:32 --> 00:55:35: up to the amount of impact that we can directly  
00:55:35 --> 00:55:39: have. But we certainly are communicating with our residents  
and  
00:55:39 --> 00:55:42: as an individual resident, a lot of or residents just  
00:55:42 --> 00:55:45: aren't aware of programs that might be out there. In  
00:55:45 --> 00:55:49: DC. There's a lot of clean choice options that residents  
00:55:49 --> 00:55:51: can opt into, but a lot of our residents are  
00:55:51 --> 00:55:55: directly metered with the utility company, so for us they're  
00:55:55 --> 00:55:56: scope 3 emissions.  
00:55:56 --> 00:56:00: And we don't necessarily see their bills get their bills,  
00:56:00 --> 00:56:04: know how know their energy performance and states like  
Virginia.  
00:56:04 --> 00:56:08: It's really hard to even get aggregated data sometimes for  
00:56:08 --> 00:56:12: our buildings that have various individually needed residents.  
What we

00:56:12 --> 00:56:16: can do is educate not only residents around energy performance

00:56:16 --> 00:56:20: and greenhouse gas emissions. However, you know in some markets

00:56:20 --> 00:56:23: you know a lot of times, like in DC, Clean

00:56:23 --> 00:56:26: Choice, DC and other various options where as a resident.

00:56:26 --> 00:56:29: My own utility bills I can opt to go for

00:56:29 --> 00:56:32: more renewable energy now there is a cost to that

00:56:32 --> 00:56:34: and so how can we work with suppliers and clean

00:56:34 --> 00:56:38: choice to figure out the best means of getting that

00:56:38 --> 00:56:41: to residents who don't necessarily want to see a drastic

00:56:41 --> 00:56:44: increase on their utility bills but also want to be

00:56:44 --> 00:56:47: part of the solution when it comes to reducing greenhouse

00:56:48 --> 00:56:50: gas emissions in their local area? So a lot of

00:56:50 --> 00:56:54: it is education based and then obviously when it comes

00:56:54 --> 00:56:56: to the physical attributes of the building.

00:56:56 --> 00:56:59: Can we do turnovers or or upgrades? We're bringing LED

00:56:59 --> 00:57:03: lighting. We're bringing energy to our appliances and we're trying

00:57:03 --> 00:57:05: to make it as easy as possible for residents to

00:57:05 --> 00:57:06: save energy.

00:57:07 --> 00:57:09: Beautiful well that hour went fast. I feel like I

00:57:09 --> 00:57:12: talked to you guys for a couple days straight about

00:57:12 --> 00:57:14: this stuff. I got one more question but thank you

00:57:14 --> 00:57:16: for a great panel and just to echo, I heard

00:57:16 --> 00:57:19: several folks say in the chat. This was a great

00:57:19 --> 00:57:21: discussion and I agree. So thank you. But my closing

00:57:21 --> 00:57:23: thought if you could in 30 seconds if you would

00:57:23 --> 00:57:25: know we have a hard stop here as you look

00:57:25 --> 00:57:28: to the future. What's the thing you're most excited about

00:57:28 --> 00:57:31: as far as the potential for renewable energy and commercial

00:57:31 --> 00:57:34: real estate? You can't say community still because we already

00:57:34 --> 00:57:37: talked about that something other than community. Solar. 30 seconds.

00:57:37 --> 00:57:38: You go.

00:57:40 --> 00:57:41: I'll go first.

00:57:42 --> 00:57:43: Yeah.

00:57:43 --> 00:57:46: Yeah, I can jump in and say it. It is

00:57:46 --> 00:57:52: really exciting when you have trucking organizations you know. Meal

00:57:52 --> 00:57:58: meal kit companies, medical supply device folks, logistics companies, all

00:57:58 --> 00:58:03: calling and asking for the same thing which is help  
00:58:03 --> 00:58:07: with achieving some level of their goal towards net zero  
00:58:07 --> 00:58:12: and just that common consciousness towards these  
objectives.  
00:58:13 --> 00:58:16: Is really exciting and it it is ramping at a  
00:58:16 --> 00:58:20: much faster pace than we've ever seen in the past.  
00:58:20 --> 00:58:23: And so you know, as long as we can keep  
00:58:23 --> 00:58:29: renewable deployment at scale and that there's the  
workforce to  
00:58:29 --> 00:58:34: install these the systems at scale, the opportunities appear  
really  
00:58:34 --> 00:58:38: endless at this point and it's just exciting for that.  
00:58:38 --> 00:58:43: That common objective of all these kind of disparate.  
00:58:43 --> 00:58:47: Organizations, yeah, you're here, Eric. And then Michael gets  
the  
00:58:47 --> 00:58:47: last word.  
00:58:48 --> 00:58:51: Yeah, I mean I was gonna say similar to what  
00:58:51 --> 00:58:55: Alex said. I mean, residents are more pleasingly more  
interested  
00:58:55 --> 00:58:59: in in greenhouse gas and climate change, and being part  
00:58:59 --> 00:59:02: of the solution. And so how can we do that?  
00:59:02 --> 00:59:06: Would we? We're seeing a lot of changing technology. We're  
00:59:06 --> 00:59:09: seeing our assets a lot more EV vehicles or electric  
00:59:09 --> 00:59:13: vehicles. So how do we make sure the challenge of.  
00:59:13 --> 00:59:17: Building the infrastructure necessary to meet the growing  
demand of  
00:59:17 --> 00:59:21: the electrification of vehicles. Because we're seeing a lot  
more  
00:59:21 --> 00:59:24: in our buildings and our and our apartment buildings, while  
00:59:24 --> 00:59:26: also greening the grid.  
00:59:26 --> 00:59:29: It's going to be really tough because to Alex's point,  
00:59:30 --> 00:59:32: a lot of grids aren't ready for that much load  
00:59:32 --> 00:59:34: to come on, and so it's going to take a  
00:59:34 --> 00:59:37: really big investment and a push for us to push.  
00:59:37 --> 00:59:41: You know, policy and regulation to improve our infrastructure  
when  
00:59:41 --> 00:59:43: it comes to our electrical capacity.  
00:59:46 --> 00:59:48: Yeah, I'm going to. I agree with Alex and Eric  
00:59:48 --> 00:59:50: as well, but I kind of want to add a  
00:59:50 --> 00:59:53: little bit more to that as we're sort of trying  
00:59:53 --> 00:59:55: to accelerate quickly to. Net. 01 of the things that  
00:59:55 --> 00:59:58: we have to consider, I think is also carbon capture.  
00:59:58 --> 01:00:00: I know it's not really renewable energy per se, but  
01:00:00 --> 01:00:03: you know something that we are one of the challenges

01:00:03 --> 01:00:06: we face. As I mentioned earlier, our life science spaces  
01:00:06 --> 01:00:08: E is really high. They still use gas lines. I  
01:00:08 --> 01:00:11: don't see that coming out of our building soon. Really,  
01:00:11 --> 01:00:13: the only way to get to net zeros without gas.  
01:00:13 --> 01:00:16: So the other option is maybe carbon capture and other  
01:00:16 --> 01:00:17: sort of technologies.  
01:00:17 --> 01:00:21: To help us address you know our our our sources  
01:00:21 --> 01:00:24: of power. As the grid gets cleaner.  
01:00:27 --> 01:00:29: OK, I love it. A lot of reasons to be  
01:00:29 --> 01:00:32: excited. It's a fun time to be doing what we  
01:00:32 --> 01:00:34: do. I think I think we would all agree to  
01:00:34 --> 01:00:37: be in the kind of the zeitgeist that we're in  
01:00:37 --> 01:00:41: towards. Net zero and renewable energy deployment right  
now. So  
01:00:41 --> 01:00:44: thank you guys for a very timely panel. Just as  
01:00:44 --> 01:00:47: a reminder, go ahead and check out the ULI report.  
01:00:47 --> 01:00:51: It's at [www.uli.org](http://www.uli.org) renewable energy. All one word smushed  
together,  
01:00:51 --> 01:00:54: and that once again, Alex Eric Vishali. Thank you so  
01:00:54 --> 01:00:54: much.  
01:00:55 --> 01:00:55: At the time this was great.  
01:00:56 --> 01:00:57: Thank you.  
01:00:57 --> 01:00:58: Thank you everybody.

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