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 we
00:03:25 --> 00:03:28: really mean? What are the different deployment options that are
00:03:28 --> 00:03:31: available for renewables? I love this chart from resource energy.
00:03:31 --> 00:03:33: 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 specific source,
00:04:01 --> 00:04:04: but from the general market. Then you have buying carbon
00:04:04 --> 00:04:07: offsets. Then you have buying regional or state specific renewable
00:04:07 --> 00:04:08: energy.
00:04:08 --> 00:04:11: Credits where you're buying them from your local region, or
00:04:11 --> 00:04:14: you're buying them from the state, for example, then you
00:04:14 --> 00:04:17: have offsite renewables from specific generations sources where you were
00:04:17 --> 00:04:20: buying power or buying the Recs from a named source
00:04:20 --> 00:04:23: that you can sort of identify. And finally the most
00:04:23 --> 00:04:26: green option is simply doing on site renewables, putting solar
00:04:26 --> 00:04:29: 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 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 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 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 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 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 you're
00:49:24 --> 00:49:28: also a part of the community and helping support access
00:49:28 --> 00:49:33: to renewables for, you know, residential and nonprofit off takers,
00:49:33 --> 00:49:37: which is phenomenal and that really helps scale.
00:49:38 --> 00:49:40: I mean just in line I couldn't agree more in
00:49:40 --> 00:49:40: line with that.
00:49:41 --> 00:49:45: Legislation is the biggest pain point. That's the biggest hurdle
00:49:45 --> 00:49:49: of deploying renewable Florida was on the brink of phasing
00:49:49 --> 00:49:52: out net metering before Disantis just vetoed it. So I
00:49:52 --> 00:49:56: mean legislation can can make you renewables thrive. It can
00:49:57 --> 00:49:58: also kill it. And so.
00:49:59 --> 00:50:03: Legislation is is critical to making it be economically viable
00:50:03 --> 00:50:07: and feasible, as well as just, you know, incentivizing it.
00:50:07 --> 00:50:13: So providing those opportunities through legislation will essentially will be
00:50:13 --> 00:50:16: 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 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 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 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 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 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.
