Webinar

Green Finance Unlocked

Date: April 11, 2025

00:00:06 --> 00:00:09:	Welcome everyone, we'll get started in a few minutes.
00:00:09 --> 00:00:12:	Just waiting for folks to join the webinar.
00:00:20 --> 00:00:23:	Welcome everyone, we are getting started here.
00:00:25 --> 00:00:28:	We'll start the webinar in a few minutes just waiting
00:00:28 --> 00:00:29:	for folks to join.
00:00:29 --> 00:00:33:	You are in Green Finance Unlocked, a You Alive hosted
00:00:33 --> 00:00:34:	webinar.
00:00:34 --> 00:00:35:	Welcome.
00:00:44 --> 00:00:46:	If you're just joining us, we will get started in
00:00:46 --> 00:00:47:	a few minutes.
00:00:47 --> 00:00:49:	Welcome to Green Finance Unlocked.
00:00:49 --> 00:00:52:	We'll get started just a few minutes after the hour
00:00:52 --> 00:00:54:	waiting for some folks to join.
00:01:03 --> 00:01:04:	OK, welcome everyone.
00:01:04 --> 00:01:06:	We are ready to get started.
00:01:06 --> 00:01:08:	My name is Kara Kokernak.
00:01:08 --> 00:01:10:	I'm a Senior Director at ULI and I'll just be
00:01:10 --> 00:01:13:	up here for a few minutes today introducing this webinar.
00:01:13 --> 00:01:16:	We have a great webinar and very amazing panel.
00:01:16 --> 00:01:21:	This is Green Finance Unlocked focused on a recent ULI
00:01:21 --> 00:01:21:	report.
00:01:22 --> 00:01:26:	We have a great group of moderators and panelists.
00:01:26 --> 00:01:31:	Today we have Tamara George with our MY Lauren Moss
00:01:31 --> 00:01:36:	with Vornado, Sandeep Singh, IFC, Dan Street with Slipstream and
00:01:36 --> 00:01:39:	Usam Mohammed with Ryze Engineering.
00:01:39 --> 00:01:41:	And I'm going to just go over really quickly why
00:01:41 --> 00:01:44:	we're here today and give a little introduction about ULI
00:01:44 --> 00:01:46:	if you're joining the ULI webinar for the first time.

00:01:46 --> 00:01:49: And then I'm going to pass it over to Tamara

00:01:49 --> 00:01:52: George, our great moderator for the rest of the hour.

00:01:52 --> 00:01:56: So if you are unfamiliar with the Urban Land Institute,

00:01:56 --> 00:01:59: our mission is to shape the future of the built

00:01:59 --> 00:02:03: environment for transformative impact in communities worldwide.

00:02:03 --> 00:02:06: We do that through a variety of ways.

00:02:07 --> 00:02:10: I work in our Center for Sustainability and run the

00:02:10 --> 00:02:12: ULI decarbonization program.

00:02:12 --> 00:02:16: We really focus in the decarbonization program on research and

00:02:16 --> 00:02:17: thought leadership.

00:02:18 --> 00:02:21: We have content on making the business case for green

00:02:21 --> 00:02:25: building and the journey to net zero, which involves multiple

00:02:25 --> 00:02:28: strategies including green financing mechanisms.

00:02:28 --> 00:02:32: We also have our Greenprint community of practice, which is

00:02:32 --> 00:02:36: a collaborative of over 135 real estate owners committed to

00:02:36 --> 00:02:41: improving environmental performance of their buildings and their assets to

00:02:41 --> 00:02:42: Net 0 by 2050.

00:02:42 --> 00:02:45: I know we probably have some Greenprint members on the

00:02:45 --> 00:02:48: call, but they certainly are a part of our panel

00:02:48 --> 00:02:48: today.

00:02:49 --> 00:02:51: And then the last piece is local technical assistance.

00:02:51 --> 00:02:54: And I'm going to take just a couple more seconds

00:02:54 --> 00:02:57: on this because this is really our why this green

00:02:57 --> 00:02:58: finance primer came to life.

00:02:58 --> 00:03:02: So we have a program called the NET 0 Imperative,

00:03:02 --> 00:03:07: which is a series of on site technical technical assistance

00:03:07 --> 00:03:11: panels that work on a singular or very local issue

00:03:11 --> 00:03:13: with cities and communities.

00:03:13 --> 00:03:17: And often times out of these taps or technical assistant

00:03:17 --> 00:03:21: panels, the topic bubbles up that we realized we need

00:03:21 --> 00:03:22: to focus in on more.

00:03:23 --> 00:03:26: And that is how this green finance primer started.

00:03:26 --> 00:03:29: So sometimes it starts from thought leadership, sometimes it starts

00:03:29 --> 00:03:30: from a green community of practice.

00:03:30 --> 00:03:34: But this particular resource is interesting because it started from

00:03:34 --> 00:03:37: an on site tap where folks were really focused on

00:03:37 --> 00:03:41: the need for green finance mechanisms and understanding what they

00:03:41 --> 00:03:41: are.
00:03:42 --> 00:03:44: So today's agenda will do just that.
00:03:44 --> 00:03:49: We'll quickly look at the Green Finance Unlocked primer.
00:03:49 --> 00:03:51: I'll send a link so you all can look at
00:03:51 --> 00:03:52: that on your own if you haven't already.
00:03:53 --> 00:03:56: We'll go through some best practices on green financing mechanisms
00:03:56 --> 00:03:57: for your projects.
00:03:58 --> 00:04:01: And Lauren and Sandeep will run through some projects or
00:04:01 --> 00:04:04: some insights, and they were both involved in the development
00:04:04 --> 00:04:05: of the primer.
00:04:06 --> 00:04:09: And we'll talk about how you can use this primer,
00:04:09 --> 00:04:12: you know, day-to-day or on your projects in your in
00:04:12 --> 00:04:14: your organization or in your firm.
00:04:14 --> 00:04:17: So how to choose green finance mechanisms for your project.
00:04:17 --> 00:04:20: We'll get an overview of the beta program and some
00:04:20 --> 00:04:23: beta case studies and then we'll go through a panel
00:04:23 --> 00:04:26: discussion on if you have a project and it has
00:04:26 --> 00:04:31: these particular parameters, what are some green financing mechanisms that
00:04:31 --> 00:04:31: will work?
00:04:32 --> 00:04:34: I do want to note that you will not get
00:04:34 --> 00:04:35: the golden ticket today.
00:04:35 --> 00:04:37: We're not going to give you the one answer or
00:04:37 --> 00:04:39: the one mechanism that's going to work for your project.
00:04:39 --> 00:04:44: There's 19 mechanisms covered in this primer and there could
00:04:44 --> 00:04:46: be a combination of the 19.
00:04:46 --> 00:04:49: There could be, you know, one or two or maybe
00:04:49 --> 00:04:51: none, which is is not the best case scenario, but
00:04:51 --> 00:04:54: we really, really want to give you an opportunity to
00:04:54 --> 00:04:57: see all the different finance mechanisms we cover in this
00:04:57 --> 00:04:57: primer.
00:04:57 --> 00:04:59: It's up on the screen.
00:04:59 --> 00:05:01: You can use your phone and take a look at
00:05:01 --> 00:05:03: the QR code to look at that on your phone.
00:05:04 --> 00:05:06: And there's also a link on the bottom this webinar.
00:05:06 --> 00:05:10: And the recording will be shared to all registrants and
00:05:10 --> 00:05:11: participants.
00:05:11 --> 00:05:14: But now I'm going to hand it over to Tamara
00:05:14 --> 00:05:16: and you can take it away on a discussion of

00:05:16 --> 00:05:18: green financing strategies.
00:05:21 --> 00:05:21: Sounds good.
00:05:21 --> 00:05:24: Thanks so much, Kara, and good morning, everyone.
00:05:24 --> 00:05:26: Thanks so much for joining us.
00:05:26 --> 00:05:29: I'm Tamara George, I'm a manager at RMII work on
00:05:29 --> 00:05:33: our carbon free building steam and my focus is leveraging
00:05:33 --> 00:05:36: finance for building the carbonization.
00:05:37 --> 00:05:40: So today we will kick off with a conversation with
00:05:40 --> 00:05:44: two of our distinguished guests today, Lauren Moss from Vernado
00:05:44 --> 00:05:48: and Sandeep Singh from the International Finance Corporation.
00:05:49 --> 00:05:52: Lauren and Sandeep are both experienced practitioners.
00:05:52 --> 00:05:55: They were both interviewed and quoted in the primary that
00:05:55 --> 00:05:58: Kara just mentioned and explained how to choose green financing
00:05:58 --> 00:06:00: mechanisms for your projects.
00:06:01 --> 00:06:03: And they both have a wealth of knowledge about how
00:06:03 --> 00:06:05: best to finance real world green projects.
00:06:06 --> 00:06:09: Lauren and Sandeep, can I ask you for brief introductions?
00:06:10 --> 00:06:12: We can maybe start with Lauren.
00:06:13 --> 00:06:17: Thank you for having me and including Pornado in the
00:06:17 --> 00:06:18: Green Primer.
00:06:19 --> 00:06:22: I'm the Senior Vice President and Chief Sustainability Officer at
00:06:22 --> 00:06:23: Pornado Realty Trust.
00:06:23 --> 00:06:27: We're a public REIT mostly located in and around New
00:06:27 --> 00:06:27: York City.
00:06:28 --> 00:06:32: Commercial office and retail being most of us work that
00:06:32 --> 00:06:32: we do.
00:06:34 --> 00:06:36: So if you go to the next slide, I'll just
00:06:36 --> 00:06:38: give you a quick overview of Vornado.
00:06:38 --> 00:06:42: We have a commitment to carbon neutrality in 20-30.
00:06:42 --> 00:06:46: There are components of that journey to carbon neutrality, the
00:06:47 --> 00:06:50: first being at 50% reduction in consumption against a 2009
00:06:51 --> 00:06:52: baseline for our portfolio.
00:06:53 --> 00:06:56: The second being recovery, waste tea recovery, etcetera.
00:06:56 --> 00:06:59: Really thinking through how we run our buildings even more
00:06:59 --> 00:07:02: efficiently so that we don't have to take more power
00:07:02 --> 00:07:03: off of the grid.
00:07:03 --> 00:07:06: And the third is renewables, Recs and offsets.
00:07:06 --> 00:07:10: And that's really been the driver for the work that

00:07:10 --> 00:07:13:	we've been doing over at least the past 15 years
00:07:13 --> 00:07:14:	at 4 Natos.
00:07:14 --> 00:07:16:	If we go to the next slide, I thought this
00:07:16 --> 00:07:17:	was important.
00:07:17 --> 00:07:20:	And just so everybody knows, we have a sustainability report.
00:07:20 --> 00:07:23:	All of this information that you're seeing is in there
00:07:23 --> 00:07:24:	and it's on our website.
00:07:24 --> 00:07:28:	And one of the big components of the work that
00:07:28 --> 00:07:31:	we do to make decarbonisation a part of the puzzle
00:07:32 --> 00:07:37:	of financing, repositioning, acquisitions is to look towards incentives and
00:07:37 --> 00:07:38:	rebates.
00:07:39 --> 00:07:41:	We also spend a lot of time thinking through what
00:07:41 --> 00:07:44:	the actual savings have been from the projects we've done.
00:07:44 --> 00:07:47:	So we think it's really important to show how much
00:07:47 --> 00:07:50:	we have done, how we calculate that and be really
00:07:50 --> 00:07:53:	honest about the journey towards decarbonization.
00:07:53 --> 00:07:57:	If you go to the next slide, it will show
00:07:57 --> 00:08:02:	you we previously in 2021, completed a green bond offering.
00:08:02 --> 00:08:06:	This was to reposition 3 buildings in the Penn District.
00:08:06 --> 00:08:09:	Their existing buildings, I don't know if anyone's in around
00:08:09 --> 00:08:12:	New York City, but the Penn District is where Penn
00:08:12 --> 00:08:13:	Station is.
00:08:13 --> 00:08:16:	And we really looked at those three buildings and we
00:08:16 --> 00:08:19:	used a green bond offering mostly as a way to
00:08:19 --> 00:08:23:	demonstrate our commitment to the repositioning of these buildings.
00:08:23 --> 00:08:26:	We really tried to create a campus across the Penn
00:08:26 --> 00:08:29:	District where we have about 9,000,000 square feet of space.
00:08:29 --> 00:08:34:	So we focus on facade replacements, window replacements, mechanical system
00:08:35 --> 00:08:40:	upgrades, community engagement, public spaces, air quality and that using
00:08:40 --> 00:08:44:	the green bond offering, it's we used LEED gold as
00:08:44 --> 00:08:48:	the driver and that became the North Star, right, for
00:08:48 --> 00:08:49:	everything that we did.
00:08:49 --> 00:08:52:	And what that enabled us to do was to ensure
00:08:53 --> 00:08:57:	that sustainability was a thread through every single, every part
00:08:57 --> 00:08:58:	of the project.
00:08:59 --> 00:09:02:	If you go to the, I think final slide, we
00:09:02 --> 00:09:05:	try and this is again on our website, I feel

00:09:05 --> 00:09:09: like there's a lot of information to try and distill.
00:09:09 --> 00:09:12: But if you look at the Farley building, which is
00:09:12 --> 00:09:15: fully occupied by a single tenant, we did achieve LEED
00:09:15 --> 00:09:16: Gold mode score platinum.
00:09:17 --> 00:09:20: We really looked at Embody Carbon and all of these
00:09:20 --> 00:09:23: projects because we were retaining the essence of the buildings.
00:09:23 --> 00:09:27: At Penn One, we did 8000 plus window replacements that
00:09:27 --> 00:09:31: drives down the mechanical sizing, but also improves the acoustics
00:09:31 --> 00:09:32: for our tenants.
00:09:32 --> 00:09:35: At Penn Two, we did a full facade replacement.
00:09:36 --> 00:09:38: And again, all of this is on our website, so
00:09:38 --> 00:09:40: I'm not going to go through every single thing so
00:09:40 --> 00:09:41: you can see.
00:09:41 --> 00:09:44: But what it meant was that we were constantly evaluating
00:09:44 --> 00:09:47: projects not just from a sustainability angle, but from a
00:09:47 --> 00:09:51: financial angle, from an operations angle, how the buildings would
00:09:51 --> 00:09:54: perform once we did the work and how our tenants
00:09:54 --> 00:09:55: would react.
00:09:55 --> 00:09:58: And if you go to the final slide, I think
00:09:58 --> 00:10:01: we sort of try and translate that into more tangible
00:10:01 --> 00:10:06: or reasonable ways that everybody could understand the impact of
00:10:06 --> 00:10:07: the work that we've done.
00:10:08 --> 00:10:11: And we find that with our shareholders and our tenants,
00:10:11 --> 00:10:14: this is a really positive outcome and that the green
00:10:14 --> 00:10:18: bond that we issued allowed us to really differentiate the
00:10:18 --> 00:10:18: project.
00:10:19 --> 00:10:22: And again, it's a very public statement around the work
00:10:22 --> 00:10:24: that we're we are doing and that we're committed to
00:10:24 --> 00:10:27: doing on our journey towards decarbonization.
00:10:29 --> 00:10:29: I'm.
00:10:33 --> 00:10:34: Going to think turn it over to Sandeep.
00:10:36 --> 00:10:38: Thanks so much, Lauren Sandeep.
00:10:39 --> 00:10:39: Yeah, Thank you.
00:10:40 --> 00:10:41: My name is Sandeep Singh.
00:10:41 --> 00:10:44: I work with the International Finance Corporation, which is part
00:10:44 --> 00:10:46: of the World Bank Group.
00:10:47 --> 00:10:48: Maybe we can go to the next slide.
00:10:50 --> 00:10:53: World Bank Group, as you are probably aware is a

00:10:53 --> 00:10:59: large development finance institution comprising of these five entities focused

00:11:00 --> 00:11:03: on developmental impact in the emerging markets.

00:11:03 --> 00:11:05: In the developing economies.

00:11:05 --> 00:11:09: IFC is the private sector arm of the World Bank.

00:11:09 --> 00:11:12: So the rest of the World Bank IBRD specifically works

00:11:12 --> 00:11:14: with the governments in emerging markets.

00:11:14 --> 00:11:20: We work to activate the private sector for developmental impact.

00:11:21 --> 00:11:25: So essentially we are the largest development finance institution in

00:11:25 --> 00:11:27: the world that's focused on the private sector.

00:11:28 --> 00:11:32: And specific to the topic today, we are focused on

00:11:32 --> 00:11:37: climate finance and we have committed to about 35% of

00:11:37 --> 00:11:41: all our investments to be in climate finance.

00:11:41 --> 00:11:46: So in the last financial year 2024 IFC invested about

00:11:46 --> 00:11:50: $56 billion in climate and no not in climate all

00:11:50 --> 00:11:57: together and about 20 billion nineteen point something in climate

00:11:57 --> 00:12:01: as a whole of which $4.2 billion went into green

00:12:01 --> 00:12:05: buildings in different forms of mechanisms.

00:12:06 --> 00:12:09: So if you go can go to the next slide

00:12:09 --> 00:12:09: please.

00:12:11 --> 00:12:14: So the team that I work with is part of

00:12:14 --> 00:12:19: the climate Business Department, Green Buildings and Green Cities team.

00:12:20 --> 00:12:26: And to facilitate investments that IFC does and also to

00:12:26 --> 00:12:31: provide three tools which are metrics driven and focus on

00:12:31 --> 00:12:36: resource efficiency of buildings and cities.

00:12:36 --> 00:12:40: We have this tool kit of these three tools, Apex

00:12:40 --> 00:12:42: for green cities.

00:12:42 --> 00:12:46: Cities, as you probably are aware, are the epicenters of

00:12:46 --> 00:12:47: of emissions.

00:12:47 --> 00:12:50: 70% of global GHG emissions come from cities.

00:12:51 --> 00:12:55: Then there is Edge, which is about 10 years old.

00:12:55 --> 00:12:58: So off the three tools, that's the older one, more

00:12:58 --> 00:13:03: established one which is focused on the mitigation aspects of

00:13:03 --> 00:13:03: buildings.

00:13:03 --> 00:13:10: So essentially looking at resource efficiency and carbon emissions, I

00:13:10 --> 00:13:15: am Edge has certified about more than 100 million square

00:13:15 --> 00:13:19: metres across the world in 113 countries.

00:13:19 --> 00:13:20: That number keeps changing.

00:13:20 --> 00:13:24: So every time I put it, it's already outdated.
00:13:24 --> 00:13:28: And then the third tool is on the resilience sites,
00:13:28 --> 00:13:32: again focused on buildings, but this is focused on adaptation
00:13:33 --> 00:13:37: and helping owners of buildings assess the resilience, which is
00:13:37 --> 00:13:41: basically we look at two things, the physical integrity and
00:13:41 --> 00:13:46: the operational continuity of the building in case there is
00:13:46 --> 00:13:49: a, there is a climate disaster or, or you know,
00:13:49 --> 00:13:50: exposure to hazards.
00:13:51 --> 00:13:54: So those three tools are all freely accessible.
00:13:54 --> 00:13:58: The USB is that they are focused on metrics, unlike
00:13:58 --> 00:14:01: other, let's say, you know, if I'm talking about Edge,
00:14:01 --> 00:14:06: which is a green building certification, The, the main differentiating
00:14:06 --> 00:14:08: factor is the context is always local.
00:14:09 --> 00:14:13: The focus is on metrics and the baselines are robust
00:14:13 --> 00:14:17: and, and you know, again, I said locally contextual.
00:14:17 --> 00:14:20: So those are the main things why we had to
00:14:20 --> 00:14:23: create something like this so that we can, you know,
00:14:23 --> 00:14:27: we, we can avoid transposing a Western standard onto emerging
00:14:27 --> 00:14:30: markets where it doesn't make sense.
00:14:30 --> 00:14:34: And and we take the mid and the bottom of
00:14:34 --> 00:14:39: the pyramid and help the whole ecosystem upgrade into a
00:14:39 --> 00:14:41: low carbon phase.
00:14:42 --> 00:14:43: So yeah, that's it from my side.
00:14:43 --> 00:14:44: Back to you, Tamara.
00:14:45 --> 00:14:50: Thanks so much, Sandeep and Lauren, for those introductions.
00:14:50 --> 00:14:53: We're all excited to have you today and would love
00:14:53 --> 00:14:56: to hear more about your experience and how it relates
00:14:56 --> 00:15:00: to insights and best practices relating to this primer and
00:15:00 --> 00:15:03: how to choose green financing mechanisms for specific assets and
00:15:03 --> 00:15:04: project types.
00:15:05 --> 00:15:07: So to start us off, I'd love to hear about
00:15:08 --> 00:15:12: what you've observed recently in terms of these innovative financing
00:15:12 --> 00:15:12: mechanisms.
00:15:12 --> 00:15:16: Did you see them work well anywhere, either in developed
00:15:16 --> 00:15:17: or developing markets?
00:15:17 --> 00:15:20: And if so, which would you like to see replicated
00:15:20 --> 00:15:20: the most?

00:15:25 --> 00:15:25: OK, I'll start.
00:15:25 --> 00:15:28: And then Sandy, I, I work in the developed market,
00:15:28 --> 00:15:29: so I'm not going to, I, I can't speak to
00:15:29 --> 00:15:30: what Sandy is doing.
00:15:30 --> 00:15:33: And he's doing it on a scale that is truly
00:15:33 --> 00:15:35: astounding and inspiring.
00:15:35 --> 00:15:38: I think what we see in the work that we're
00:15:38 --> 00:15:42: doing when you think through decarbonisation is a variety of
00:15:42 --> 00:15:45: mechanisms that go into creating almost the same kind of
00:15:45 --> 00:15:49: capital stack when you're thinking about the financing of your
00:15:49 --> 00:15:50: buildings, right?
00:15:50 --> 00:15:55: So whether it's driven because of building performance standards or
00:15:55 --> 00:15:59: regulation or is a voluntary determination that the organization has
00:15:59 --> 00:16:03: made, the critical component to it is to sort of
00:16:03 --> 00:16:06: think through how each asset is financed and to match
00:16:06 --> 00:16:09: that with how is it possible to do the work,
00:16:09 --> 00:16:09: right?
00:16:09 --> 00:16:13: Is it an existing asset with fully occupied, is it
00:16:13 --> 00:16:17: residential where there's access that you're going to have to
00:16:17 --> 00:16:18: negotiate?
00:16:18 --> 00:16:21: Can you do it on overtime?
00:16:21 --> 00:16:25: And so those financing mechanisms then become really important, right?
00:16:25 --> 00:16:28: So if you're looking at energy as a service where
00:16:28 --> 00:16:32: you're financing it, the sort of manufacturer or organization representing
00:16:32 --> 00:16:35: the manufacturer is going to come in and replace everything
00:16:35 --> 00:16:38: and run everything, which is a fantastic opportunity for lots
00:16:38 --> 00:16:41: of building owners that don't maybe have the capital to
00:16:41 --> 00:16:42: do it.
00:16:42 --> 00:16:44: And, or the, and they're not operating their buildings or
00:16:44 --> 00:16:47: they're needing support in operating their buildings.
00:16:47 --> 00:16:50: You see that a lot in schools and universities and
00:16:50 --> 00:16:53: things like that, that they're, this is a helpful way
00:16:53 --> 00:16:56: of ensuring consistent operating costs over a long period of
00:16:56 --> 00:16:56: time.
00:16:57 --> 00:17:01: Or there's a green bond because you can then use
00:17:01 --> 00:17:05: the sustainability work to reposition the property.
00:17:05 --> 00:17:07: So there's lots of ways you have to think through
00:17:07 --> 00:17:08: this.
00:17:09 --> 00:17:12: But we see, I think in the work that I've

00:17:12 --> 00:17:16: done previous there prior to Vornado Energy as a service
00:17:16 --> 00:17:19: was a really important product, product and opportunity.
00:17:19 --> 00:17:22: I think C Pace is growing a lot because of
00:17:22 --> 00:17:25: where it sits in the capital stack, right?
00:17:25 --> 00:17:27: It sits on a property tax bill as opposed to
00:17:27 --> 00:17:31: in the financing of the building, which sometimes makes it
00:17:31 --> 00:17:33: easier, sometimes it makes it harder.
00:17:34 --> 00:17:37: I think green bonds are really used by large organizations
00:17:37 --> 00:17:40: who are going out to raise huge amounts of money,
00:17:40 --> 00:17:40: right?
00:17:41 --> 00:17:43: It's not for a small project.
00:17:43 --> 00:17:46: So I think all of these pieces, which is why
00:17:46 --> 00:17:49: like looking at the financing mechanisms, it's about understanding the
00:17:49 --> 00:17:52: size of the property, where the property stands in terms
00:17:52 --> 00:17:54: of its financial viability.
00:17:54 --> 00:17:56: And also if you're looking to hold or flip that
00:17:56 --> 00:17:58: property will also come into effect.
00:18:03 --> 00:18:08: Maybe I can add the developing economies angle here and
00:18:08 --> 00:18:13: you know the lenses different for us the main motivation
00:18:13 --> 00:18:19: is impact, you know first the developmental impact overall and
00:18:19 --> 00:18:23: then within that climate impact as well.
00:18:23 --> 00:18:28: So we have been you know, using various mechanisms like
00:18:28 --> 00:18:35: sustainability, like finance, otherwise just straightforward green loans and green
00:18:35 --> 00:18:36: bonds.
00:18:36 --> 00:18:40: You know, we've been working with banks across emerging markets,
00:18:41 --> 00:18:44: you know, for instance like Bank Columbia, the the largest
00:18:44 --> 00:18:48: bank in Columbia, we help them issue a green bond.
00:18:49 --> 00:18:53: This was few years back and then they were able
00:18:53 --> 00:18:57: to subsequently issue three more rounds of green bonds which
00:18:57 --> 00:18:59: were then subscribed locally.
00:18:59 --> 00:19:02: So, so that's the main job of IFC which is
00:19:02 --> 00:19:05: basically paving the road where there is none and then
00:19:05 --> 00:19:09: letting private sector come in and make the impact.
00:19:09 --> 00:19:12: So we, if we do a lot of SLF, we
00:19:12 --> 00:19:16: do a lot of bank financing where the banks then
00:19:16 --> 00:19:21: have on lending programs, which are green financial products like
00:19:21 --> 00:19:25: green mortgages and green construction loans.

00:19:28 --> 00:19:31: To my mind, if, if you, if you're, if I
00:19:31 --> 00:19:35: had to recommend one instrument that is, that is my
00:19:35 --> 00:19:36: favorite.
00:19:36 --> 00:19:37: Of course, they're all needed.
00:19:37 --> 00:19:41: But I think green mortgages is probably from an impact
00:19:41 --> 00:19:46: perspective, the more important one because as you're probably aware,
00:19:46 --> 00:19:49: you know, I'll give you 2 sets of data.
00:19:49 --> 00:19:53: One is by the year 2060, the entire floor space
00:19:53 --> 00:19:57: that is there in the world today will be two
00:19:57 --> 00:19:57: X.
00:19:57 --> 00:20:00: So we will build the world one more time and
00:20:00 --> 00:20:03: 80% of that will come in emerging markets.
00:20:03 --> 00:20:06: So unless we help them get that right in the
00:20:06 --> 00:20:10: 1st place, you know the inefficiencies will get locked in.
00:20:11 --> 00:20:15: So, so, so that's one and of this of everything,
00:20:15 --> 00:20:20: but specifically the the second X that we're building 70%
00:20:20 --> 00:20:22: again is residential.
00:20:22 --> 00:20:27: So if we can address that segment, we can, we
00:20:27 --> 00:20:30: can you know, we have a large size of the
00:20:30 --> 00:20:33: overall emissions impacted.
00:20:34 --> 00:20:36: So you know, so that that's my favorite.
00:20:36 --> 00:20:40: One of the things that you know, talking about impact
00:20:41 --> 00:20:45: is a majority of that residential that I'm talking about
00:20:45 --> 00:20:50: is now these are small homes in emerging markets, self
00:20:50 --> 00:20:50: built.
00:20:50 --> 00:20:53: You know, the values are way less than what we're
00:20:53 --> 00:20:57: probably talking about here, you know, maybe 20 to $50,000
00:20:57 --> 00:20:57: a home.
00:20:57 --> 00:21:01: And how do you get them to take the necessary
00:21:01 --> 00:21:03: steps to, to become green.
00:21:03 --> 00:21:08: So we're piloting a program for under our edge project.
00:21:08 --> 00:21:11: We're piloting a program for self built homes in India
00:21:11 --> 00:21:14: and and that's working very well and that's kind of
00:21:14 --> 00:21:17: addressing the bottom of the the, you know, not the
00:21:17 --> 00:21:19: absolute bottom, but the next run.
00:21:20 --> 00:21:23: And and so those are the few things we can
00:21:23 --> 00:21:26: talk about a few other things like, you know, the
00:21:26 --> 00:21:30: more innovative ones like property link finance or or on
00:21:30 --> 00:21:34: bill financing, but we'll tackle those as we progress forward
00:21:34 --> 00:21:35: in this discussion.
00:21:35 --> 00:21:36: Back to you, Tamara.

00:21:37 --> 00:21:40: Now that is very interesting both and I, I like
00:21:40 --> 00:21:43: how you said Sandeep paving the road where there is
00:21:44 --> 00:21:47: none, because I think a lot of the time when
00:21:47 --> 00:21:51: it comes to innovative finance or innovative technology, it's really
00:21:51 --> 00:21:54: hard to get started and get going.
00:21:54 --> 00:21:56: And I would love to hear from both of you
00:21:56 --> 00:21:58: like how you see that happening.
00:21:58 --> 00:22:00: I know that you've both been in the field for
00:22:00 --> 00:22:01: a long time.
00:22:01 --> 00:22:04: Is there one piece of advice that you would share
00:22:04 --> 00:22:08: about how you get these mechanisms that can really help
00:22:08 --> 00:22:09: moved a needle?
00:22:10 --> 00:22:12: How you proliferate them?
00:22:12 --> 00:22:15: How do you get them to become more mainstream?
00:22:19 --> 00:22:23: I mean, I would from the private market side of
00:22:23 --> 00:22:28: things, I think the really important piece of this conversation
00:22:28 --> 00:22:32: for us has been to get our capital markets and
00:22:32 --> 00:22:38: asset management teams educated as to what sustainability means.
00:22:39 --> 00:22:43: And there's lots of different words used around sustainability.
00:22:43 --> 00:22:47: There's decarbonization, there's resilience, there's risk mitigation.
00:22:48 --> 00:22:51: I think we're seeing the insurance companies coming more into
00:22:51 --> 00:22:52: the conversation.
00:22:52 --> 00:22:55: So when we look at sort of an asset that
00:22:55 --> 00:22:59: we know either we want to acquire, we want to
00:22:59 --> 00:23:03: invest in, we want to reposition, we have a fine
00:23:03 --> 00:23:04: against etcetera.
00:23:06 --> 00:23:11: This work is being done at the sort of financial
00:23:12 --> 00:23:14: determination level.
00:23:14 --> 00:23:17: And the idea for what I'm doing is to try
00:23:17 --> 00:23:20: and ensure that we can meet the targets, right.
00:23:20 --> 00:23:23: So whether if it's C pace financing, because now the
00:23:23 --> 00:23:26: interest rates are sort of on on par with what
00:23:26 --> 00:23:29: we're seeing in the private market or it is energy
00:23:29 --> 00:23:31: as a service, which is in some ways a risk
00:23:31 --> 00:23:33: for us to give up control, right.
00:23:33 --> 00:23:37: Like where the risk points and how can I provide
00:23:37 --> 00:23:39: support in that conversation?
00:23:39 --> 00:23:44: Because banks have financed things traditionally in a very specific

00:23:44 --> 00:23:44:	way.
00:23:44 --> 00:23:49:	And to put any sort of any writer on that
00:23:49 --> 00:23:55:	or any extra metric creates a moment of risk that
00:23:55 --> 00:23:59:	we need to ensure we can meet.
00:23:59 --> 00:24:03:	And I think that the innovation is, is slow, but
00:24:03 --> 00:24:06:	I think we're seeing as we did the green bond
00:24:06 --> 00:24:10:	and, and met the targets, then it becomes like, oh,
00:24:10 --> 00:24:12:	we can do that again, right?
00:24:12 --> 00:24:14:	As we see our peers.
00:24:14 --> 00:24:17:	And I do think things like this Uli playbook come
00:24:17 --> 00:24:20:	into play because you then hear from people who've done
00:24:20 --> 00:24:20:	it.
00:24:20 --> 00:24:24:	So you can take that as a model and keep
00:24:24 --> 00:24:25:	going with it, right.
00:24:26 --> 00:24:28:	And as we see the banks come out with more
00:24:28 --> 00:24:32:	and more products actually pushing the real estate industry, it's
00:24:32 --> 00:24:36:	really exciting if they start to put in place, you
00:24:36 --> 00:24:39:	know, how can you measure money carbon in a project,
00:24:39 --> 00:24:40:	not just operational carbon.
00:24:40 --> 00:24:43:	So we are starting to see it and I think
00:24:43 --> 00:24:47:	it markets are you know have since COVID at least
00:24:47 --> 00:24:51:	been very complicated from an interest rate perspective.
00:24:51 --> 00:24:55:	But I do think we are start, we have seen
00:24:55 --> 00:25:01:	innovation in the financing tools and in acceptance of innovation
00:25:01 --> 00:25:05:	because traditional finance hasn't been as available.
00:25:06 --> 00:25:08:	And so I think scarcity is also that, whatever that
00:25:08 --> 00:25:12:	phrase is around scarcity and innovation, I think that's happened
00:25:12 --> 00:25:13:	a little bit.
00:25:16 --> 00:25:17:	Yeah, absolutely.
00:25:17 --> 00:25:20:	And I, you know, I think I'll kind of build
00:25:20 --> 00:25:23:	on what Lauren said and you know how you take
00:25:23 --> 00:25:27:	some things that's been done already and then help others
00:25:27 --> 00:25:30:	emulate that and and maybe adapt that to their context
00:25:30 --> 00:25:32:	and, and, and build on that.
00:25:32 --> 00:25:36:	And that's from a development impact perspective.
00:25:36 --> 00:25:39:	We what we are looking at as a World Bank
00:25:39 --> 00:25:43:	group is to take examples like property link finance is,
00:25:43 --> 00:25:47:	is a classic example, which is very effective and common
00:25:47 --> 00:25:48:	here in the US.
00:25:48 --> 00:25:50:	But in the emerging market, it's not been done.

00:25:51 --> 00:25:56: So in our recent engagement with Poison City in in
00:25:56 --> 00:26:01: Philippines, where we help the city develop an apex assessment,
00:26:01 --> 00:26:06: like a whole city view of what the possibilities are
00:26:06 --> 00:26:11: across different sectors and how they can reduce emissions.
00:26:13 --> 00:26:18: And they are now exploring how they can use a
00:26:18 --> 00:26:24: property linked finance mechanism to help the private sector move
00:26:24 --> 00:26:27: into low carbon phase.
00:26:27 --> 00:26:30: So that, you know, these things, once they are done
00:26:31 --> 00:26:33: and if they get done at A, at a city
00:26:33 --> 00:26:37: level through maybe not hard policies, but maybe as an,
00:26:37 --> 00:26:42: as something that's an incentive, they become very effective.
00:26:42 --> 00:26:45: And, and so those are things I mean, so, you
00:26:45 --> 00:26:50: know, just to clarify, I, I to the audience, property
00:26:50 --> 00:26:54: link finances is a mechanism where the financing is done
00:26:55 --> 00:26:59: at the property level and, and not the owner level.
00:26:59 --> 00:27:03: And you know, let's the owners change and and the
00:27:03 --> 00:27:07: and the debt obligation stays there with the property and,
00:27:07 --> 00:27:12: and and that enables or overcomes the mismatch of ownership
00:27:12 --> 00:27:16: versus long term tenure of these long long term payback
00:27:16 --> 00:27:18: periods of these retrofits.
00:27:19 --> 00:27:23: So then, you know, the other other one that comes
00:27:23 --> 00:27:28: to mind is on bill financing, which which is basically
00:27:29 --> 00:27:34: like in, in property link finance, the repayment is done
00:27:34 --> 00:27:35: through taxes.
00:27:35 --> 00:27:38: You know, when people get property tax bills, you know,
00:27:38 --> 00:27:41: they, there's a line item added there on bill financing
00:27:41 --> 00:27:43: is that through their utility bills.
00:27:43 --> 00:27:45: That's that's how the repayment happens.
00:27:45 --> 00:27:51: And so the World Bank supported in Mexico the Mexican
00:27:51 --> 00:27:56: utility CFE with the $250 million loan to to to
00:27:56 --> 00:28:02: implement an on bill finance program for replacement of old
00:28:02 --> 00:28:06: equipment, which was energy inefficient.
00:28:07 --> 00:28:11: So almost 2 million pieces of refrigerators and and old
00:28:11 --> 00:28:16: air conditioners were replaced through that program, which was an
00:28:16 --> 00:28:18: on bill financing.
00:28:18 --> 00:28:22: So the the beneficiaries would were able to pay back
00:28:22 --> 00:28:26: the the cost of the new equipment through an additional
00:28:26 --> 00:28:29: line item on their utility bills.
00:28:29 --> 00:28:32: So, so yeah, it's you know, the idea is to

00:28:33 --> 00:28:38: pick up these potential structures which are essentially a means

00:28:38 --> 00:28:39: to an end.

00:28:39 --> 00:28:42: And the end is to have large scale impact which

00:28:42 --> 00:28:46: becomes a structural change in the society from there on.

00:28:50 --> 00:28:50: Very true.

00:28:51 --> 00:28:53: So many mechanisms.

00:28:53 --> 00:28:55: There is a lot more to talk about when it

00:28:55 --> 00:28:56: comes to incentives, I'm sure.

00:28:56 --> 00:29:00: And I'm seeing some questions from the audience too about

00:29:00 --> 00:29:04: both of those aspects and you know, ultimately how to

00:29:04 --> 00:29:07: match capital with the pipeline and decarbonization need.

00:29:09 --> 00:29:11: So thank you for kicking us off with those thoughts

00:29:11 --> 00:29:12: and valuable insights.

00:29:13 --> 00:29:16: I think for now we will have to transition to

00:29:17 --> 00:29:21: our next section about bringing this primer and everything we've

00:29:21 --> 00:29:24: talked about to life via a specific resource.

00:29:24 --> 00:29:28: But I definitely look forward to hearing more from you

00:29:28 --> 00:29:30: during our second conversation and the Q&A.

00:29:31 --> 00:29:32: Thank you both.

00:29:33 --> 00:29:35: I for the next section, I will pass it to

00:29:35 --> 00:29:38: Dan and Hossum who will talk to us about the

00:29:38 --> 00:29:44: Massachusetts Clean Energy program developed resource called the Building Electrification

00:29:44 --> 00:29:46: Transformation Accelerator or Beta.

00:29:47 --> 00:29:50: Dan and Hassam, might I ask for introductions from you

00:29:50 --> 00:29:51: both?

00:29:53 --> 00:29:54: Wonderful.

00:29:55 --> 00:29:58: Thank you very much, Tamara and good morning or good

00:29:58 --> 00:30:01: afternoon to everybody on the call.

00:30:01 --> 00:30:03: My name is Dan Straight.

00:30:03 --> 00:30:05: I am a senior researcher at Slipstream.

00:30:06 --> 00:30:10: We are a nonprofit organization that works nationally with a

00:30:10 --> 00:30:15: mission to accelerate climate solutions for everyone, with a primary

00:30:15 --> 00:30:20: focus on and reducing emissions in the built environment equitably.

00:30:21 --> 00:30:23: So Hassan, would you like to introduce yourself?

00:30:24 --> 00:30:24: Sure.

00:30:25 --> 00:30:26: Good afternoon everyone.

00:30:26 --> 00:30:29: My name is Hassan Mahmoud and I'm a Senior Energy

00:30:29 --> 00:30:32: Engineer at Tri's where I've been for the past eight

00:30:32 --> 00:30:32: years.
00:30:32 --> 00:30:36: We're based on New England and we're primarily focused on
00:30:36 --> 00:30:41: sustainable building design implementation for existing buildings, and we support
00:30:41 --> 00:30:45: also the energy efficiency programs here in New England for
00:30:45 --> 00:30:46: multiple states.
00:30:46 --> 00:30:51: I personally support the massive programs for commercial industrial buildings
00:30:51 --> 00:30:54: and also try to have building owners as part of
00:30:54 --> 00:30:58: the program to implement energy efficiency electrification measures.
00:30:58 --> 00:31:01: I'm also part of the technical team for the Mass
00:31:01 --> 00:31:06: EC Beta project, which is driving education and recognition strategies
00:31:06 --> 00:31:07: across Massachusetts.
00:31:08 --> 00:31:12: Additionally, I've been conducting research on net zero energy optimization
00:31:12 --> 00:31:16: for commercial building retrofits across different climates as part of
00:31:16 --> 00:31:19: my PhD studies at UMass Amherst, and I'm excited to
00:31:19 --> 00:31:21: be part of this panel and look forward to today's
00:31:21 --> 00:31:22: discussion.
00:31:23 --> 00:31:23: Thanks, Dan.
00:31:24 --> 00:31:25: All right.
00:31:25 --> 00:31:25: Thanks, Rosa.
00:31:26 --> 00:31:26: Let's see.
00:31:26 --> 00:31:28: Can we move on to the next slide here please?
00:31:31 --> 00:31:32: All right.
00:31:32 --> 00:31:37: So as was mentioned, we are primarily going to be
00:31:37 --> 00:31:39: speaking about the beta program.
00:31:39 --> 00:31:44: This is a pilot program funded through the Massachusetts Clean
00:31:44 --> 00:31:46: Energy Center.
00:31:46 --> 00:31:53: Mass CC Beta stands for Building Electrification Transformation Accelerator and
00:31:53 --> 00:31:56: Slipstream is the project manager.
00:31:56 --> 00:32:00: Rise is an engineering firm as this was some described
00:32:00 --> 00:32:04: when and he among as well as other colleagues and
00:32:04 --> 00:32:08: some other providers are the ones who are actually out
00:32:08 --> 00:32:13: working with the building owners walking through the buildings and
00:32:13 --> 00:32:16: to create some of these strategies to move forward.
00:32:17 --> 00:32:18: Next slide please.
00:32:24 --> 00:32:27: So the project has three primary goals and those are

00:32:27 --> 00:32:33: all within an overarching objective of creating strategic and scalable
00:32:33 --> 00:32:39: decarbonization frameworks for a spectrum of commercial building typologies.
00:32:39 --> 00:32:43: I think one of the themes that was starting to
00:32:43 --> 00:32:48: emerge within the panel discussion earlier is that there there
00:32:48 --> 00:32:52: are a lot of innovative ways of doing financing and
00:32:52 --> 00:32:58: of doing decarbonization, but commercial buildings are such a diverse
00:32:58 --> 00:33:03: array of building stock and they have many different needs.
00:33:03 --> 00:33:06: There are a wide variety of types of owners of
00:33:06 --> 00:33:09: these very different buildings.
00:33:09 --> 00:33:13: And so that creates a really interesting challenge of how
00:33:13 --> 00:33:18: to significantly reduce emissions from all of these building types
00:33:18 --> 00:33:21: within the next next couple decades.
00:33:22 --> 00:33:24: So we know that.
00:33:25 --> 00:33:28: So one of the goals of the project is to
00:33:28 --> 00:33:32: create frameworks for different building typologies.
00:33:32 --> 00:33:35: The project is because it's funded through Mass CC and
00:33:35 --> 00:33:38: it's focusing primarily on the state of or only on
00:33:38 --> 00:33:40: the state of Massachusetts, I should say.
00:33:41 --> 00:33:46: And so the goal is to start from individual decarbonization
00:33:47 --> 00:33:52: plans for buildings that then become frameworks or Rd.
00:33:52 --> 00:33:56: maps that can be applied to other buildings within the
00:33:56 --> 00:34:00: same topology and to do so as cost effectively and
00:34:00 --> 00:34:03: straightforwardly as possible.
00:34:04 --> 00:34:07: So we know that even a strategic and least cost
00:34:07 --> 00:34:10: commercial decarbonization project is still challenging.
00:34:11 --> 00:34:15: So to support that work, there are also goals of
00:34:15 --> 00:34:20: seeking to develop recommendations related to policy as well as
00:34:20 --> 00:34:25: related to funding and financing to enable the acceleration of
00:34:25 --> 00:34:28: these types of upgrades around the state.
00:34:29 --> 00:34:30: Next slide, please.
00:34:35 --> 00:34:39: So there are, I covered some of this already, but
00:34:39 --> 00:34:43: for each project, each property that the team works on,
00:34:43 --> 00:34:49: we create an individualized decarbonization plan for that building, how
00:34:49 --> 00:34:53: to take them from where they are now down to
00:34:53 --> 00:34:58: fully electrifying or nearly fully electrifying, as well as the
00:34:58 --> 00:35:01: enabling measures that go along with that.
00:35:02 --> 00:35:05: And these plans then create case studies and templates that

00:35:05 --> 00:35:09: can be reputable and scalable to other buildings within the

00:35:09 --> 00:35:10: same technology.

00:35:11 --> 00:35:17: As noted, we're also identifying the enabling policies and financing

00:35:17 --> 00:35:22: mechanisms that building owners can work to leverage in order

00:35:22 --> 00:35:26: to make these plan, put these plans into action.

00:35:26 --> 00:35:30: One thing I would like to call out is for

00:35:30 --> 00:35:35: anyone who is on the webinar today who owns commercial

00:35:35 --> 00:35:40: property and commercial property includes multi family that is so

00:35:40 --> 00:35:45: we are still looking for participants and I Wassam and

00:35:45 --> 00:35:49: I we can put our e-mail addresses in the chat.

00:35:49 --> 00:35:53: And if you happen to be have property in Massachusetts

00:35:53 --> 00:35:56: and are interested in learning more, please do reach out

00:35:56 --> 00:35:59: to us directly and would love to love to talk

00:35:59 --> 00:36:00: with you.

00:36:01 --> 00:36:02: So next slide please.

00:36:02 --> 00:36:11: So this is an overview slide of the process that's

00:36:11 --> 00:36:12: used.

00:36:13 --> 00:36:18: Start with a detailed site analysis by folks like Hossam

00:36:18 --> 00:36:24: that identify understands the current energy and emissions performance, building

00:36:24 --> 00:36:30: benchmarks that against several different standards identifies the efficiency and

00:36:30 --> 00:36:34: other enabling upgrades that are needed, as well as the

00:36:35 --> 00:36:40: putting together a plan for electrification and decarbonization of the

00:36:40 --> 00:36:42: building as a whole.

00:36:43 --> 00:36:47: To support that we there's a significant capital planning element

00:36:47 --> 00:36:52: to that, we create a road map for financing opportunities

00:36:52 --> 00:36:56: aligned with other planned upgrades for the building and potential

00:36:56 --> 00:37:01: investment triggers that the property owner may encounter within the

00:37:01 --> 00:37:05: coming years that could be leveraged in order to really

00:37:05 --> 00:37:08: optimize the financing pathway.

00:37:08 --> 00:37:13: Together, this becomes a holistic plan that prepares for implementation.

00:37:14 --> 00:37:17: With that, I'll once again put a call out for

00:37:17 --> 00:37:20: inviting participation and I'll hand it off to Hassan to

00:37:20 --> 00:37:23: talk about a couple of the properties that I use

00:37:23 --> 00:37:24: work with.

00:37:26 --> 00:37:28: Thank you, Dan, next slide please.
00:37:30 --> 00:37:33: So as part of the beta program, we have put
00:37:33 --> 00:37:40: together multiple plans, decomposition plans for multiple types of buildings.
00:37:40 --> 00:37:44: And we thought maybe bringing two of those plans to
00:37:44 --> 00:37:48: life here through the webinar as case studies.
00:37:49 --> 00:37:52: Because, you know, part of the program and part of
00:37:52 --> 00:37:55: the assessment and the strategic plan is trying to also
00:37:55 --> 00:37:59: find ways of financing either through incentives or, you know,
00:38:00 --> 00:38:04: traditional financing or green financing for our building owners.
00:38:04 --> 00:38:08: So the first case study, which is located in Boston,
00:38:08 --> 00:38:14: it's typical Boston mixed-use building with groceries and offices.
00:38:15 --> 00:38:20: It's an old building like many buildings here in Massachusetts
00:38:21 --> 00:38:22: built in 1899.
00:38:22 --> 00:38:26: You know it had some a major innovation sense 55,000
00:38:26 --> 00:38:27: square feet.
00:38:28 --> 00:38:31: It has an age ageing HVAC system that's consists of
00:38:31 --> 00:38:36: gas fired boilers, windows, you know, envelope also that needs
00:38:36 --> 00:38:40: replacement for Windows and need improvement over the next few
00:38:40 --> 00:38:44: years for the roof as well as well as replacing
00:38:44 --> 00:38:45: some of the gas.
00:38:45 --> 00:38:48: RT US the building ownership is a non profit community
00:38:48 --> 00:38:52: Development Corporation that owns a few buildings in this area
00:38:52 --> 00:38:55: and it's managed by a commercial research provider.
00:38:56 --> 00:39:00: They do have some reserve funds for some of the
00:39:00 --> 00:39:05: replacement and capital projects and they mainly the revenue is
00:39:05 --> 00:39:09: mainly from their commercial lease and tenant rents.
00:39:09 --> 00:39:13: And the future goals for this program was to eliminate
00:39:13 --> 00:39:16: the use of natural gas and meet the Berdo benchmark.
00:39:16 --> 00:39:20: And a Berdo is the building ordinance in Boston, which
00:39:21 --> 00:39:24: has benchmarks set for the next, you know, 25 years
00:39:24 --> 00:39:29: until 2050 to decrease the emission of commercial buildings.
00:39:29 --> 00:39:30: Next slide, please.
00:39:34 --> 00:39:37: As part of the road map, We call the road
00:39:37 --> 00:39:38: map for the conversation.
00:39:39 --> 00:39:42: We look at the business as usual, business users mainly
00:39:42 --> 00:39:46: kind of doing the same, you know, placing like for
00:39:46 --> 00:39:48: like not trying to improve what you have.

00:39:48 --> 00:39:54: So that's usually the baseline efficiency and baseline scenario that
00:39:54 --> 00:39:55: we look at.
00:39:55 --> 00:39:59: In this case, you know, replacing the gas boiler with
00:39:59 --> 00:40:02: other gas fired boiler, replacing RT us with gas fired
00:40:02 --> 00:40:07: RT us, replacing the windows with baseline code windows, double
00:40:07 --> 00:40:11: pane windows and replacing the roof with code compliant standard
00:40:11 --> 00:40:12: roof.
00:40:12 --> 00:40:15: In our case, the proposed case or the optimised scenario?
00:40:17 --> 00:40:20: Is what we call it is a scenario where we
00:40:20 --> 00:40:24: try to improve on the business as usual case and
00:40:24 --> 00:40:29: at the same time decarbonize and typically we would look
00:40:29 --> 00:40:33: to decrease the load through blood reduction measures.
00:40:33 --> 00:40:37: So in this case here, we're trying to have an
00:40:37 --> 00:40:40: immediate replacement of the boiler with an air to our
00:40:40 --> 00:40:43: heat pump since the boiler is at the end of
00:40:43 --> 00:40:47: its use of life, same with the windows and then
00:40:47 --> 00:40:50: have replaced the RTU over a number of years and
00:40:50 --> 00:40:51: the roof.
00:40:51 --> 00:40:54: So the financial challenge here and as you can see
00:40:54 --> 00:40:57: in the graphs like we have quite a bit of
00:40:57 --> 00:41:02: incremental cost difference between the business as usual case which
00:41:02 --> 00:41:06: they have the reserve funds for and the proposed case
00:41:06 --> 00:41:10: which we are proposing to improve the building efficiency also
00:41:10 --> 00:41:13: to meet the future BIRDO benchmarks.
00:41:13 --> 00:41:16: So, but the challenge is divided into two like immediately,
00:41:16 --> 00:41:19: because they actually need to replace the boiler like now.
00:41:19 --> 00:41:22: So they need a quick mechanism for financing a command,
00:41:23 --> 00:41:26: the cost difference of 700,000 to replace the heat pump
00:41:26 --> 00:41:27: and the windows as part of it.
00:41:28 --> 00:41:33: And then they also need a future financing mechanism to
00:41:33 --> 00:41:37: replace the heat pump RT us which they have many
00:41:37 --> 00:41:38: on the roof.
00:41:38 --> 00:41:41: So it's going to be a long process, long term
00:41:41 --> 00:41:44: process to replace all of the RTU.
00:41:44 --> 00:41:48: So they need like 470,000 in incremental cost difference by
00:41:48 --> 00:41:50: the year 2029.
00:41:51 --> 00:41:54: That will result in 60% energy savings.
00:41:54 --> 00:41:58: You know, if they do the implementation for both measures.

00:41:58 --> 00:42:00: Can we move to the next slide please?
00:42:01 --> 00:42:02: So that's the first case study.
00:42:02 --> 00:42:05: It's more commercial building.
00:42:05 --> 00:42:08: The next case study is a multi family residential building.
00:42:09 --> 00:42:13: Also you know typical to the new angle area with
00:42:13 --> 00:42:15: red brick structure 1969.
00:42:15 --> 00:42:20: So you know very little insulation since it's been the
00:42:20 --> 00:42:22: at the time the floor area is 3.
00:42:23 --> 00:42:28: That's a building complex with three identical building with total
00:42:28 --> 00:42:31: floor area of 7 to 2000 and each building is
00:42:31 --> 00:42:34: served by a gas fired steam boarder.
00:42:35 --> 00:42:37: It has central heat and it has through the AC.
00:42:38 --> 00:42:41: The owner is an affordable housing developer and it's managed
00:42:41 --> 00:42:43: by a professional real estate property manager.
00:42:45 --> 00:42:48: They don't have a lot of capital funds reserved actually
00:42:48 --> 00:42:51: for replacing the heating system, even though it's the end
00:42:51 --> 00:42:53: of this life and all upgrades are funded through rental
00:42:53 --> 00:42:54: cash flow.
00:42:54 --> 00:42:57: Again, this is also based in the Boston area.
00:42:57 --> 00:42:59: So it had the future goals was for them to
00:42:59 --> 00:43:01: meet the Virgo benchmarks.
00:43:01 --> 00:43:02: Next slide, please.
00:43:06 --> 00:43:07: Yeah, same business.
00:43:07 --> 00:43:10: We look at the business as usual which replacing the
00:43:10 --> 00:43:13: border with a gas marked boiler and then the proposed
00:43:13 --> 00:43:16: case is replacing the border with an air Tor heat
00:43:16 --> 00:43:17: pump system.
00:43:18 --> 00:43:19: In this case it's very expensive.
00:43:19 --> 00:43:21: It's such a distribution system.
00:43:22 --> 00:43:24: Distribution system needs to be upgraded as well.
00:43:24 --> 00:43:27: We have a very large incremental cost difference between the
00:43:27 --> 00:43:29: businesses, your case and proposed case.
00:43:31 --> 00:43:32: It needs a replacement over the next few years.
00:43:32 --> 00:43:33: So I still have time.
00:43:33 --> 00:43:36: It's not immediate, but they don't have any means of
00:43:36 --> 00:43:37: financing right now.
00:43:38 --> 00:43:41: And you know, they're also interested to see what's available
00:43:41 --> 00:43:44: in terms of, you know, traditional or green financing mechanism.
00:43:45 --> 00:43:47: So I'll hand it over back to Dan.

00:43:50 --> 00:43:50: Thanks.
00:43:51 --> 00:43:51: Yeah.
00:43:51 --> 00:43:52: Thanks, Wassam.
00:43:52 --> 00:43:56: And I think our next slide just kind of recap
00:43:56 --> 00:44:01: some of those financing challenges that Wassam outlined for the
00:44:01 --> 00:44:02: 2 case studies.
00:44:03 --> 00:44:07: And I don't know if we can perhaps leave this
00:44:07 --> 00:44:11: up, but we have for case study one, there is
00:44:11 --> 00:44:16: an immediate need for, for financing as well as another
00:44:16 --> 00:44:20: financing need over the next five years or so.
00:44:21 --> 00:44:26: And then for case study two, there's a challenge looking
00:44:26 --> 00:44:29: at like we have a five year time horizon and
00:44:30 --> 00:44:35: different building type and but looking at you know significant
00:44:35 --> 00:44:41: incremental cost possibly without the energy cost savings to help
00:44:41 --> 00:44:42: support that.
00:44:43 --> 00:44:46: So I think with that, we're going to transition back
00:44:46 --> 00:44:48: into some panel discussion.
00:44:50 --> 00:44:50: Yeah.
00:44:50 --> 00:44:53: Thank you so much, Dan and and Hassam for that
00:44:53 --> 00:44:57: overview and for summarizing the financing challenges so well, bringing
00:44:57 --> 00:44:59: all of our panellists back together.
00:44:59 --> 00:45:03: It would be great to hear how financing solutions can
00:45:03 --> 00:45:06: best match real world demand like this, what you just
00:45:06 --> 00:45:07: presented.
00:45:07 --> 00:45:11: And in other words, what financing solutions would be applicable
00:45:11 --> 00:45:12: to these challenges specifically.
00:45:13 --> 00:45:15: So Sandeep and Lauren, maybe we'll start with you and
00:45:15 --> 00:45:16: see if you have any thoughts there.
00:45:19 --> 00:45:21: I mean, I think one is, I would say 1
00:45:21 --> 00:45:23: is amazing work that they're doing.
00:45:24 --> 00:45:27: And these owners are incredibly lucky to have this kind
00:45:27 --> 00:45:30: of work being done to show them pathways forward, which
00:45:31 --> 00:45:33: is the first huge hurdle, right?
00:45:33 --> 00:45:36: So, but I also think it shows how hard it
00:45:36 --> 00:45:39: is to do this right, that this is a complicated
00:45:39 --> 00:45:40: process.
00:45:40 --> 00:45:43: I think when you look at commercial buildings, there are
00:45:43 --> 00:45:47: some very sort of standard ways that that potentially could
00:45:47 --> 00:45:47: work.

00:45:47 --> 00:45:50: The owners could look at C pace if it's available
00:45:50 --> 00:45:53: in the OR in the municipality that they're working in.
00:45:53 --> 00:45:57: We've, you know, just in looking across the country, CPS
00:45:57 --> 00:46:00: has been a great opportunity to put to read to
00:46:00 --> 00:46:04: add financing for sustainability projects and the interest rates are
00:46:04 --> 00:46:08: comparable to what you can find in the market today.
00:46:08 --> 00:46:10: And then they sit on the property tax bill as
00:46:10 --> 00:46:13: opposed to adding to the capital stack.
00:46:13 --> 00:46:16: And there's been a lot of concern around mortgage by
00:46:16 --> 00:46:20: sort of the banks and getting educated as to where
00:46:20 --> 00:46:22: CPS sits in the financing stack.
00:46:22 --> 00:46:25: But I think that's actually been worked out and most
00:46:25 --> 00:46:28: of the banks are much more comfortable with AC pace
00:46:28 --> 00:46:28: like product.
00:46:29 --> 00:46:32: As I think you know, you start to look at
00:46:32 --> 00:46:36: incentives and what's available first to drive down the cost,
00:46:36 --> 00:46:36: right?
00:46:36 --> 00:46:42: Most municipalities especially where there are some building performance standards
00:46:42 --> 00:46:44: or regulations around performance.
00:46:44 --> 00:46:48: Do you tend to have some kind of either financing
00:46:48 --> 00:46:52: product from the state or the locality and or they've
00:46:52 --> 00:46:56: created pools of cash to our pool, pools of financing
00:46:56 --> 00:47:00: in order to move the products and projects forward to
00:47:00 --> 00:47:01: drive down the cost.
00:47:01 --> 00:47:06: It's really the delta right between going from a replacement
00:47:06 --> 00:47:10: in kind to a more efficient or better version that
00:47:10 --> 00:47:13: helps to meet the targets of the locality.
00:47:13 --> 00:47:17: And so we've seen that in in and around most,
00:47:17 --> 00:47:22: many, many urban areas and, and states that their tent.
00:47:22 --> 00:47:26: There are utility programs to drive down the cost of
00:47:26 --> 00:47:30: these replacements because it helps the utility companies to provide
00:47:30 --> 00:47:32: resilient service to their clients.
00:47:32 --> 00:47:36: So I would say that they not knowing the financing
00:47:36 --> 00:47:39: of these organizations, but I do think that C Pace
00:47:39 --> 00:47:44: state financing options and incentive programs from utilities are really
00:47:44 --> 00:47:46: the place that we start.
00:47:47 --> 00:47:50: I also would say I always add in the cost
00:47:50 --> 00:47:54: of non compliance right there's we know there's a cost
00:47:54 --> 00:47:57: of energy going up consistently across the.

00:47:57 --> 00:47:58: Country.
00:47:58 --> 00:48:02: But there is a cost to non compliance which are
00:48:02 --> 00:48:06: the fines and how that plays into not doing anything.
00:48:06 --> 00:48:10: It's a really important call out to help make decisions.
00:48:17 --> 00:48:18: Sandeep, anything to add to that?
00:48:21 --> 00:48:25: No, I think, I think Lauren covered it pretty, you
00:48:25 --> 00:48:27: know, comprehensively, yes.
00:48:30 --> 00:48:34: If I could add one thing there, I, I'd really
00:48:34 --> 00:48:37: like to to echo what Lauren was.
00:48:37 --> 00:48:40: Some of the things that Lauren was sharing there are,
00:48:40 --> 00:48:44: I anticipate that there are a number of folks on
00:48:44 --> 00:48:47: the call who own properties in multiple markets.
00:48:47 --> 00:48:51: But I think there is a lot of value in
00:48:51 --> 00:48:56: understanding the vocation specific opportunities.
00:48:56 --> 00:48:59: Lauren mentioned the utility incentives.
00:48:59 --> 00:49:01: Those are certainly going to vary by geography.
00:49:03 --> 00:49:06: Some of the C pays typically is they're enabled, they're
00:49:06 --> 00:49:10: not enabled at the state level and then further enabled,
00:49:10 --> 00:49:13: they're not enabled at a county or municipal level.
00:49:14 --> 00:49:19: And so understanding the specific ecosystem of financing that's that's
00:49:19 --> 00:49:23: out there, I think also, you know, different types of
00:49:23 --> 00:49:28: properties have different types of resources available to them.
00:49:29 --> 00:49:33: And you know, the second case study is an affordable
00:49:33 --> 00:49:39: housing property and there are a number of competitive grant
00:49:39 --> 00:49:44: programs out there that can pay a significant portion of
00:49:44 --> 00:49:49: the share of decarbonization or affordable multi family properties.
00:49:50 --> 00:49:54: Those aren't available necessarily everywhere, but there they are in
00:49:54 --> 00:49:57: some places, and it's definitely worth checking that out to
00:49:57 --> 00:49:59: see what those opportunities are.
00:50:03 --> 00:50:04: Absolutely.
00:50:04 --> 00:50:05: Thank you for adding that.
00:50:05 --> 00:50:08: Dan and Lauren completely agreed on the incentive part and
00:50:09 --> 00:50:10: understanding the ecosystem.
00:50:12 --> 00:50:15: On the flip side of that, Hassam and Dan, maybe
00:50:15 --> 00:50:16: a question for you.
00:50:16 --> 00:50:19: In your work with Beta and elsewhere, what do you
00:50:19 --> 00:50:22: usually hear from building owners about how they plan to
00:50:23 --> 00:50:26: fund the decarbonization projects that Beta outlines for them?

00:50:26 --> 00:50:29: Are there any common attributes of the types of financing
00:50:29 --> 00:50:31: options and which owners seem interested?
00:50:34 --> 00:50:36: I think for me that what I'm seeing so far
00:50:36 --> 00:50:39: with the beta project that we have completed is they
00:50:39 --> 00:50:41: are have there are they have a lot of challenges
00:50:41 --> 00:50:44: and their first question is, you know, we need more
00:50:44 --> 00:50:46: information on financing.
00:50:46 --> 00:50:49: The first thing that jumps in mind is they usually
00:50:49 --> 00:50:53: try to take advantage of the incentives available to them
00:50:53 --> 00:50:56: on grants on a local and state level and even
00:50:56 --> 00:50:57: on federal level.
00:50:57 --> 00:50:59: So they, you know, trying to bring down the cost
00:50:59 --> 00:50:59: of the project.
00:50:59 --> 00:51:02: I think that's, you know, their main interest in the
00:51:02 --> 00:51:04: beginning and then they're trying to look at like low
00:51:04 --> 00:51:05: cost financing.
00:51:06 --> 00:51:08: I think that's the most common theme.
00:51:09 --> 00:51:13: But you know, this is kind of, you know, innovative
00:51:13 --> 00:51:15: work that we're doing.
00:51:15 --> 00:51:19: A lot of clients that we're working with building owners
00:51:19 --> 00:51:22: has not, you know, even considered this before.
00:51:22 --> 00:51:25: So we're trying to also, you know, teach them and
00:51:25 --> 00:51:28: show them, you know, what mechanism they can take advantage
00:51:28 --> 00:51:30: of to implement this work.
00:51:30 --> 00:51:32: You know, since this is kind of, you know, for
00:51:32 --> 00:51:34: the most part, it's new to them.
00:51:38 --> 00:51:38: Great.
00:51:38 --> 00:51:39: Yeah.
00:51:39 --> 00:51:44: I think additionally to whatever way understand which upgrades can
00:51:44 --> 00:51:49: be aligned with other recapitalizations or larger upgrades in which
00:51:49 --> 00:51:53: might need to be completed and kind of over one
00:51:53 --> 00:51:57: off and there are different financing solutions for each of
00:51:57 --> 00:51:58: those options.
00:52:02 --> 00:52:02: Great.
00:52:02 --> 00:52:05: And do you have a sense, any and all of
00:52:05 --> 00:52:07: you, this is a question for everyone.
00:52:08 --> 00:52:12: Primers like this come into play as very useful as
00:52:12 --> 00:52:16: overviews of many different financial mechanisms.
00:52:16 --> 00:52:20: There's no lack of ideas out there for how to
00:52:20 --> 00:52:24: finance these projects, but do you have a sense whether

00:52:24 --> 00:52:26: folks are familiar with them?
00:52:26 --> 00:52:30: Do owners know about financing mechanisms available to them?
00:52:31 --> 00:52:33: Do you guys encounter a lot of need for education
00:52:33 --> 00:52:36: or is it that people mostly know what they are
00:52:36 --> 00:52:38: but are not sure how to get them?
00:52:40 --> 00:52:43: I would just, from our perspective, say that we know
00:52:43 --> 00:52:45: some of it and not all of it.
00:52:45 --> 00:52:47: And the beauty of a primer like this is it
00:52:47 --> 00:52:50: allows you to start a conversation that is inclusive of
00:52:50 --> 00:52:52: so many different options.
00:52:52 --> 00:52:55: And I do think it's incumbent upon, and I say
00:52:55 --> 00:53:00: this all the time, the engineers, the architects, the owners,
00:53:00 --> 00:53:04: the asset managers, the sustainability people to be asking the
00:53:04 --> 00:53:05: questions.
00:53:05 --> 00:53:07: This isn't something that gets resolved in a day or
00:53:07 --> 00:53:08: a week.
00:53:08 --> 00:53:11: This is something that requires planning, just like any sort
00:53:11 --> 00:53:15: of capital project requires planning, whether or new construction project,
00:53:15 --> 00:53:17: it has to be a part of the conversation.
00:53:17 --> 00:53:20: And I think the idea that you could say there
00:53:20 --> 00:53:23: were 29 options or whatever there are, but let me
00:53:23 --> 00:53:26: narrow it down to the six that might be relevant
00:53:26 --> 00:53:30: and actually have the option and the opportunity to evaluate
00:53:30 --> 00:53:33: what's best for our project from a risk perspective, from
00:53:33 --> 00:53:38: a compliance perspective, from an availability perspective is invaluable because
00:53:38 --> 00:53:41: I don't know that anybody's an expert, all of these
00:53:42 --> 00:53:42: things.
00:53:42 --> 00:53:44: And what we're trying to do is especially when we
00:53:44 --> 00:53:47: transition the market, although Sandy might be an expert in
00:53:47 --> 00:53:49: all of this is what in the work that he's
00:53:49 --> 00:53:50: doing.
00:53:50 --> 00:53:53: But you know, as we transition the market, it's the
00:53:53 --> 00:53:57: responsibility of everybody involved in these projects to try and
00:53:57 --> 00:53:59: grow knowledge and awareness.
00:53:59 --> 00:54:01: So we keep moving forward, right?
00:54:01 --> 00:54:04: Like that is the best thing we can all do.
00:54:07 --> 00:54:08: Just saying hello I'm.
00:54:09 --> 00:54:11: Popping on here really quick because we have about 5

00:54:11 --> 00:54:13: minutes left and we have a lot of questions in
00:54:14 --> 00:54:14: the Q&A.
00:54:14 --> 00:54:16: So if it's OK, we can shift to some of
00:54:16 --> 00:54:18: the Q and AI think we'll answer some of those
00:54:18 --> 00:54:21: questions, but wanted to give the audience a chance to
00:54:21 --> 00:54:23: get their questions answered.
00:54:23 --> 00:54:25: There's a whole bunch and we will answer them if
00:54:25 --> 00:54:27: we don't get them after the webinar.
00:54:27 --> 00:54:29: But there was a few that I thought were really
00:54:29 --> 00:54:30: interesting.
00:54:30 --> 00:54:34: There's one from Anonymous, but is asking that they're a
00:54:34 --> 00:54:39: member of sustainability team and working with the investment in
00:54:39 --> 00:54:42: asset management teams, but wants to hear some insight on
00:54:43 --> 00:54:47: what evidence is usually required to obtain green financing, particularly
00:54:47 --> 00:54:50: around showcasing decarbonization efforts.
00:54:51 --> 00:54:55: So other than obtaining LEED certifications, what are these programs
00:54:55 --> 00:54:59: looking for to prove the financing will render the asset
00:54:59 --> 00:55:00: sustainable?
00:55:01 --> 00:55:03: So what what do you need to do to prove
00:55:03 --> 00:55:05: that Yes, I am decarbonizing the building.
00:55:05 --> 00:55:06: I think that's a great question.
00:55:06 --> 00:55:07: So.
00:55:07 --> 00:55:09: Typically you have targets along the way.
00:55:09 --> 00:55:11: It's not just I mean it may be just get
00:55:11 --> 00:55:13: to decarbonization.
00:55:13 --> 00:55:16: However, you the first thing I would say is define
00:55:16 --> 00:55:21: decarbonization in your financial documents and how you determine because
00:55:21 --> 00:55:25: decarbonization can mean lots of different things.
00:55:25 --> 00:55:27: There is market based.
00:55:29 --> 00:55:32: So I would just say to determine your definition of
00:55:33 --> 00:55:36: decarbonization, what we have seen is that when we have
00:55:36 --> 00:55:40: whether it's lead gold or an emissions reduction or EUI
00:55:40 --> 00:55:43: reduction with lead it's very simple.
00:55:43 --> 00:55:45: You show them the documentation, right.
00:55:45 --> 00:55:49: For our other tools where we maybe are looking at
00:55:49 --> 00:55:53: emissions or EUI, we have to use a resource that
00:55:53 --> 00:55:58: is determined in the documentation to be agreeable to both
00:55:58 --> 00:56:02: the bank and to the owner and a mechanism in
00:56:02 --> 00:56:04: which to assure that.

00:56:04 --> 00:56:07: So it might be your SBTI target, it might be
00:56:07 --> 00:56:11: your annual sustainability report where you use GRI and and
00:56:11 --> 00:56:13: you have it assured.
00:56:13 --> 00:56:16: So I would the only advice I would give to
00:56:16 --> 00:56:20: everybody in that is that you can choose, you can
00:56:20 --> 00:56:25: work with the financing agent to determine what works for
00:56:25 --> 00:56:25: you.
00:56:25 --> 00:56:29: But just to be very clear in the definitions upfront
00:56:29 --> 00:56:33: of what that means and what you can and will
00:56:33 --> 00:56:37: provide also, you don't want to add to your annual
00:56:37 --> 00:56:42: reporting a cost to demonstrate compliance that maybe you don't
00:56:42 --> 00:56:43: already do.
00:56:43 --> 00:56:48: So it's a really important discussion to have and thoughtful
00:56:48 --> 00:56:52: with your asset manager also and what you're already doing
00:56:52 --> 00:56:55: at that asset to demonstrate compliance.
00:56:59 --> 00:57:04: Any other thoughts there before we move on there?
00:57:05 --> 00:57:08: There are some questions about utilizing C Pace as a
00:57:08 --> 00:57:09: financing tool.
00:57:09 --> 00:57:14: Sandeep or Lauren Dan Hassam, do you have any thoughts
00:57:14 --> 00:57:16: on C Pace we?
00:57:16 --> 00:57:18: Haven't seen a massive uptake in New York City.
00:57:18 --> 00:57:21: This is relatively new but we have seen it around
00:57:21 --> 00:57:25: the country and I bet Dan and Hassam can speak
00:57:25 --> 00:57:25: to it better.
00:57:26 --> 00:57:30: But it is a great tool if it works, yeah.
00:57:32 --> 00:57:35: One of the one of the great values of it
00:57:35 --> 00:57:40: is that it can be, you know financed typically a
00:57:40 --> 00:57:45: pretty good spread of measures, but and do so outside
00:57:45 --> 00:57:50: of you know while leaving the primary mortgage or other
00:57:50 --> 00:57:57: financing mechanism alone not needing to otherwise interfere with that.
00:57:57 --> 00:57:59: So I think I'm thinking about that in terms of
00:57:59 --> 00:58:04: what measures, what components of a decarbonization project it could
00:58:04 --> 00:58:06: could finance, it can be really helpful.
00:58:08 --> 00:58:09: Great.
00:58:09 --> 00:58:12: And then I think our final question that we have
00:58:12 --> 00:58:16: time for this is actually a question from Lucas at
00:58:16 --> 00:58:16: RMI Tamara.
00:58:16 --> 00:58:20: So we've got some teammates on the call and Lucas
00:58:20 --> 00:58:25: asks related to the different aspects of sustainability, can Lorne

00:58:25 --> 00:58:29: or Sandeep speak to more strategies you've seen to bring
00:58:29 --> 00:58:32: non energy benefits into the valuation processes?
00:58:40 --> 00:58:44: Maybe I can, I can get some perspective from IFC
00:58:44 --> 00:58:47: side and, and not necessarily it's a answer to the
00:58:47 --> 00:58:52: valuation question, but we definitely do look at various other
00:58:52 --> 00:58:53: Co benefits.
00:58:53 --> 00:58:57: You know that, you know, it may be, it doesn't
00:58:57 --> 00:59:02: have to be necessarily linked to only GHG emissions or
00:59:02 --> 00:59:07: or you know decarbonization, but you know, other benefits if
00:59:07 --> 00:59:12: and when IFC books set an investment, those other things
00:59:12 --> 00:59:16: can make the case better for potential investees such as,
00:59:17 --> 00:59:20: you know, is it helping gender in some way?
00:59:20 --> 00:59:25: Is it helping other developmental impacts.
00:59:25 --> 00:59:29: So we look at the whole picture and then make
00:59:29 --> 00:59:31: our investment decisions.
00:59:36 --> 00:59:36: Great.
00:59:36 --> 00:59:37: Thank you.
00:59:37 --> 00:59:39: And we are just upon the hour now, so I
00:59:39 --> 00:59:42: really appreciate everyone's time.
00:59:42 --> 00:59:47: Moderators, panelists, participants, We did get a lot of Q&A.
00:59:47 --> 00:59:49: I have copied them over and we will try to
00:59:49 --> 00:59:53: answer them individually or if you had a specific question
00:59:53 --> 00:59:56: to a panelist, their emails were just on the slide
00:59:56 --> 00:59:56: prior.
00:59:56 --> 00:59:59: And you will also be sent a survey in a
00:59:59 --> 01:00:03: few days time along with a link to the webinar
01:00:03 --> 01:00:05: recording and all associated resources.
01:00:06 --> 01:00:07: With the webinar.
01:00:07 --> 01:00:10: So again appreciate everyone for being here today.
01:00:10 --> 01:00:12: Have a good rest of your Friday and see you
01:00:12 --> 01:00:13: soon.
01:00:13 --> 01:00:14: Thanks all.
01:00:15 --> 01:00:15: Thank you.
01:00:15 --> 01:00:16: Bye.
01:00:16 --> 01:00:16: Bye.
