

*Kyle Saltsman:*

Hello and welcome to the 2021-2022 Better Buildings Webinar Series dedicated to bringing you the latest and actionable insights from leading industry experts. This annual series is a chance to explore the topics, technologies, and trends that effect your organization as well as efforts to accelerate energy efficiency adoption. We're gonna give just a quick moment as all of our participants filter in today and then we'll have a few housekeeping notes before we kick right into gear. So thank you all for joining.

All right. It's starting to look like our attending numbers are starting to stabilize. So let's go ahead and get started. Before we dive in there are a few housekeeping points that I like to cover. Please note that today's webinar is going to be recorded and archived on the Better Building Solution Center. We will follow-up when today's recording and slides are going to be made available publicly. Also, all attendees are in listen only mode, meaning that your microphones are muted. If you experience any audio or visual issues throughout the webinar please send a message in the Q&A accessible at the bottom of your Zoom panel.

We can go to the next slide. My name is Kyle Saltsman. One more slide please. My name is Kyle Saltsman and I'll be your moderator today. Along with Joe Indvik, I lead the financing sector for the Better Buildings Challenge, which includes the financial allies who participate in the Better Buildings Program. Prior to joining I spent the last five years working at one of the financial allies and I'm very excited to be speaking to you all today.

Next slide, please. Today we'll be discussing carbon and how organizations are using financing to track and reduce their carbon profiles. The need for organizations of all sizes to address carbon emissions is coming to increasing focus in recent years. No longer constraint to mission driven organizations, this cause being taken up by some of the largest corporations in the world. To date, nearly 40 percent of the Fortune Global 500 companies have declared public milestones committing to alter their carbon emissions and this trend is only accelerating. These commitments are not only ambitious in size, but they're also approximate in timing. Meaning that many pledges which are using 23 – 2030 as a key deadline year need to be taking actions today in order to be achieve these goals.

Next slide, please. To inform and support organizations joining this movement, DOE has created the Better Climate Challenge. This is a greenhouse gas emissions reduction program that enables Better Buildings participants to articulate meaningful carbon

reductions. Specifically partnering organizations are going to commit to reducing their scope one and scope two greenhouse gas emissions by at least 50 percent within 10 years and partners are also setting an energy efficiency target to support that typically at a 20 percent reduction of compared to an energy baseline.

The Better Climate Challenge also allows organizations, participating organizations, to share their progress and receive recognition for their successes as they achieve these goals. If you're interested in joining or learning more, please reach out to your Better Buildings account manager or if you're a new partner, please e-mail the Better Buildings inbox and at the end of this organization we'll have contact information available to you to do this.

You can go to the next slide. DOE is also working with these partners to create resources that detail reduction pathways for all types of buildings and plants along with real world examples of how these pathways are being implemented. We've collected resources to support organizations at any point in this progress to advance these objectives. These resources run the gamut from technical resources on subjects like target calculations, which technologies are most impactful in their carbon reduction potential, and advice on how to build and expand stakeholder support for taking action. You can access this hub on the home page of the Better Building Solution Center. We'll also be including a link to this hub after this presentation.

You can go to the next slide. I wanted to quickly highlight one of the resources that's available at this decarbonization resource hub, the carbon finance decision tree. There are a wide variety of internal and financing – external financing methods available to fund the project needed to change your carbon profile. If you're still figuring out how to pay for these capital projects this decision tree can help you see which approaches might best fit your needs, the needs of your organization, and the resources available to you.

It lays out some key questions for consideration when trying to navigate the variety of options available. For instance, whether or not your organization has sufficient capital on hand to realize all of your carbon savings opportunities simultaneously or if you're looking for opportunities to accelerate the rollout of these projects with a third party financing partner. Alternatively, if you're organization is interested in owning and installing and operating installed equipment on your own or if you're open to support from

a third party operator, there are certain financing modes that might be better suited to – best suited to meet your particular situations.

This decision tree comes also with a fact sheet further detailing each financing approach free to be able to learn more if you're curious about the full breadth of options available to you. If you go to the next slide, we'd like to start out by learning more about your experience financing carbon projects. So let's start off with a few polls using our interactive platform Slido for Q&A which will be easy to do for Q&A, polling, and feedback. If you can please now go to Slido.com on your mobile device or by opening a new window in your Internet browser. You can enter today's event code, hashtag DOE. You can use this space if you'd like to ask our panelists any questions and you can submit them at any time throughout the presentation. We'll be answering your questions at the end of the presentation.

You can also use this space to click thumbs up for questions that you want to have answered. That way we can focus on the most popular questions at the end of this presentation. So as you can see right now, people are starting to answer out this question. We first wanna see who here – just how many organizations have either completed projects already using finance and how you're going about it. I'm seeing a lot of organizations are focusing – looks like an even mix between internal and external financing of some form.

Some of you have prior experience with energy as a service. That's great. Our panelists say we'll be diving into some of the specifics around efficiency as a service and green bonds during their remarks. Cool. This is really interesting and it's great to hear that a number of organizations have already successfully completed some of the initial projects associated with our programs. Cool. That's really helpful background context. I'm confident that no matter where you are you'll learn something new about some of the other options for financing your projects as we go through this presentation.

Can you go to the next poll, please? All right. Next we'd like to learn more not only about the projects that you've completed and how you've completed them, but whether or not you've been measuring the impact of your projects. So you can go ahead and answer here. We can see – excellent. We've got a lot of organizations are using some type of an approach to track the ongoing impacts of their projects. That's a clean majority using either self-monitored approaches or third party verification approaches.

As we'll be discussing today, evaluating the real impact of these projects is a key part of the ongoing management of carbon initiatives. Then finally, can you move on to the third poll? Lastly, we'd like to learn more about you, the types of organizations that are joining us today. If you can quickly fill out the sector that best describes your organization and your interests, that would be very helpful. Let's see. We got a large contingent from plants and higher ed as well as some people joining from the support side both government and service provider.

Cool. So we've got a wide variety of people today. Like I said, I think that all of you are gonna be coming away with something new to learn. All right. Let's switch back to our present so we can get our speakers. We have a great line-up of presenters today. All three speakers are joining us from organizations that are themselves financial allies participating in the Better Buildings Challenge. I'm really excited for them to share their unique perspectives with you.

First we'll be hearing from Anastasia Beckett, who is the senior vice-president of business development at Metrus Energy. She leads the national team of business development managers covering commercial and industrial as well as MUSH markets. After her we'll be hearing from Guy Van Syckle, who is the director on the investment team at Hannon Armstrong where he supports clients with funding for a variety of energy efficiency, renewable energy, electric vehicle deployments, resiliency and sustainable infrastructure projects among other types of projects.

Finally, we'll be hearing from Greg Montgomery, who currently serves as the managing director at CleanSource Capital, a specialty finance affiliate of the Abundant Power Group. Greg is involved in the design and the administration of clean energy and environmental sustainability financing programs based on the CleanSource Saves platform and is the advising and structuring – for the advising and structuring of financings for clean energy and environmental sustainability projects and thank you, all three of you, for being with us today. Next slide, please. With that, I will head it off to Anastasia Beckett to quick us off. Anastasia?

*Anastasia Beckett:*

Great. Thanks, Kyle. Appreciate the introduction. We can go ahead and just go to the next slide. I guess just before we start wanted to say thanks everybody for joining and hopefully the panelists here say something useful that you can bring back to your organization. That's the goal today is really to provide information for all of you.

So we can go ahead and go to the next slide. So I'm from Metrus Energy. Just wanted to give you a quick overview of who we are and what we do. The Metrus develops finances and owns and operates large scale energy efficiency and water efficiency projects through our sustainable energy as a service model.

Our goal is really to help everybody reach their aggressive CO2 emission reduction goals through our solution and our customers are really any large energy user. So whether you're somebody from higher ed or Fortune 500 or a city, our solution can work for you. Our partners are leading ESCOs, contractors, and lenders who help us put together the projects and we've worked in 26 different states. We've been in business for 12 years. Our approach is really taking a holistic viewpoint of how our customers use their facilities and bundling different sites and measures together to achieve the aggressive CO2 emission reduction targets and then also we do a lot of ongoing carbon reporting and are helping to standardize the industry as well.

So next slide. So just wanted to touch on the project structure. It's really pretty simple. There's two contracts. There's one between Metrus and the customer and that looks a lot like a power purchase agreement, if you're familiar with that. The difference being that we – well, the similarity being that we fund the project a hundred percent. So it's an off balance sheet solution for the customer and then the customer agrees to pay us a portion of the savings over the duration of the contract. We also measure and verify all of the savings and that's actually how the billing is calculated. You'll only pay for the actually realized savings rather than some set level of expected savings. So I think that's a unique approach and really de-risk the projects for our customers.

And then in addition to that we have a contract with the ESCO partner or contractor who's gonna be designing and building the installation. That looks just like an EPC type of contract and that's where we're hiring them and paying them to provide those services. Next slide. So there's a few different things on this slide, but really what I wanted to focus on is the concept of bundling project scope and project sites. So what we do is, as mentioned, take a really holistic viewpoint of our customer's facilities. So what we do when we go in is listen to the customer.

Usually there's some sort of impetus to them wanting to do a project whether it's some sort of equipment failure that's their motivation on the facility side or they're just trying to hit their sustainability targets. We go in and take a look and see what is

appropriate for the way that they use the facility and also how we could put a project together to get them the most bang for their buck essentially. So we'll bundle project measures that have a really short, simple payback, something like lighting or water or variable frequency drives and use those savings to help pay for more complex measures so that there can be a really all encompassing project for the customer. We also bundle different sites together. So I have a couple of examples of that.

So if you could go to the next slide. So the first example is Daimler Trucks North America. This is a project that we did for a plant that they have in North Carolina. Really the reason that they wanted to do a project was twofold. It was to hit their sustainability targets, but also they had problems with their chillers. So they're getting to the end of life, wanted to replace those chillers.

That by itself can be a little bit difficult because it's a really long payback item. They're very expensive in terms of being able to replace that type of equipment. So what we did is we went out. They had said that they did lighting upgrades, but we found a lot more that we could do. Doing that helped them pay for the chiller, the cooling tower, and the control system upgrades. So it was a way for us to be able to get all the projects done that they wanted within one project.

Next slide. Then here is an alternative case study. This is for a large Fortune 100 technology company who has distribution sites all across the United States. So they were really looking at their carbon emission reduction targets. So what we did for them was take a look at geographically what would make sense. So there's sometimes projects where it can be the same project scope. It's all lighting upgrades, but one site say in a state that might have a low cost to power like Iowa, perhaps, maybe doesn't pencil as well as a site that is in California that has a really high cost to power.

So what we do is we geographically put sites together that results in a net positive cash flow to the customer. So again, they're able to pick up these sites that they might not be able to fund it internally otherwise because of ROI requirement, simple payback requirements. So it's a really good way to really pick up scope so that you can hit your carbon emission reduction goals.

Next slide. So we provide a lot of ongoing support for our customers and part of that, as mentioned, is the measurement and verification that happens on an either quarterly or annual basis. This is just one simple example of the information that we provide

to customers in a presentation and then we can also provide the information in spreadsheets or however you wanna see it. We're really breaking things down. So you can see accumulative – from accumulative perspective here we break down the CO2 savings by each year and then also by measure.

So you can look at what does lighting do, what does the chiller do, and then we break it down again for scope one, two, and three emissions. So it's a really good resource for you to be able to track your projects and it also creates a baseline for you. So during the whole process of the design and installation we're creating a baseline scenario for you for your business as usual and that's what you can use to help with your benchmarking.

So next slide. So building on the concept of you've got a project in Iowa that has a low cost to power and you've got one in California that has a high cost to power, this is an interesting concept and our other panelist guy is gonna go into it in more detail because his company, Hannon Armstrong, created this concept. But this is something we like to look at with our customers too, is from a carbon perspective it's way more important to do projects in areas where the grid composition is a little bit dirtier where they're using coal or other dirtier sources of power to provide electricity for the grid. That's gonna have a lot more impact than doing a project in California or Hawaii where they have a really high mix of renewable energy already in the grid. So it's just an interesting concept that we utilize when we're reporting out for our customers.

Next slide. So we also use this when we're reporting out for ourselves for our own company. We think it's important because there are a few different reasons. Again, touching on a standardization here, it's important for companies, even the finance years, to be reporting out on the impact of our projects and doing that in a similar way so that customers or investors can take a look and be able to see an apples to apples comparison and see what's going on. This is becoming more and more important for companies like ours and then also for just other companies.

The SCC is looking to provide guidance on how to report out on these measures and I think that they're gonna be giving some preliminary guidance by the end of the year, maybe the beginning of next year. So it'll be interesting to see what that is, but looking at this in terms of really creating a framework that everybody can use so it's easy to understand and people can figure out what's what. I think that's important too because any time you standardize

things from a financial approach you're going to be getting lower interest rates. That's just how markets work.

So this is actually a very important thing that will benefit the whole ecosystem of sustainability. So I think that's the end of my presentation. I'd like to hand it over to Guy, who's gonna be talking a lot more about carbon count. So thank you all.

*Kyle Saltsman:*

Thank you so much, Anastasia. Just wanted to note, we've received a few questions in the Zoom chat. Thank you so much for sending them in. As a reminder, you can submit questions for the Q & A focus as well as the Q&A on Slido.com using the event code hashtag DOE. With that, I'll pass it over to Guy.

*Guy Van Syckle:*

Thanks, Kyle and thank you much, Anastasia, for kicking it off there. So excited to chat with everybody today. Thank you all for joining. If you wanna jump to the next slide here. So we can do one more or two more here. That's just all of our legal jargon we have as a public company. So you guys can have fun reading that later. We'll go one more. All right. So high level introductions. Guy Van Syckle. I'm a director on the credit investments team at Hannon Armstrong.

What we do is we find developers of sustainable infrastructure projects as they go around and build solar and wind and energy efficiency projects around the country. We fund the upfront cost and are paid back over time either by the savings or the electricity generated by those projects. So the way that we work is we sell stocks, we take those funds, and we go out and invest in a variety of projects. Those projects then generate revenue for us, which we then distribute back as dividends back to our shareholders.

So for us our key focus is exclusively investing in projects that reduce carbon emissions or have some other environmental benefit. You'll see there when we're talking about other sustainable infrastructure classes beyond your standard one in solar. We're talking about things like stormwater management, resiliency projects, and other things that basically enable us to further advance sustainable infrastructure and we fund about \$2 billion in projects a year.

So for us it's very important thinking about when we are both supporting our customers, which again are the big ESCOs and engineering firms out there, so Johnson Controls, Siemens, Honeywell, SunPower. I'm sure I've forgotten a couple and won't mention a couple that are on this call. So apologies. But as we're

doing that it's really important to think about how are we prioritizing and focusing on projects with substantial and measurable impact.

Next slide. All right. So for us we look at projects all around the country and again are supporting a variety of customers. So the people at the end of the day where our energy efficiency assets are being deployed are a variety of federal government facilities, commercial industrial clients, schools, hospitals. Really for us it's looking through to the credited counterparty, evaluating where they stand from that perspective, partnering with top engineering firms, and looking to fund that cost and getting paid back over time.

One of the things given our diversity of both projects and places where we invest, it's very important to think about how are we comparing those and reporting on them in a way that is useful to our investor base, which I think matches well with how the underlying customers, the corporates are trying to think about prioritizing projects. So we can go to the next slide. All right. And when we're thinking about that, as Anastasia mentioned, we use a methodology called carbon count, which is effectively trying to get to a levelized measure of what's the bang for your buck in terms of carbon based on a thousand dollar unit of investment.

So the way we do that is we look at, all right, if we are investing in an energy efficiency project under an energy as a service agreement with, let's say, a large automotive manufacturer. We're gonna look at what does the installation of the new lighting and HVAC equipment and controls do to reduce the consumption at that site. We then look at what is the grid mix. So this is something that we pull from the EPA, the EPAE grids resource that says what is the emissions factor in that particular region. That gives us the numerator of this equation where we say this is the number of metric tons being reduced on an annual basis by this particular project and then we divide that by the capital cost project.

So again, that brings you back to a bang for your buck measure and this is impacted as you see there at the bottom both by the technology type that we're deploying as well as the region in the country. Now from our perspective, this doesn't make residential solar not worth the investment. There are a whole host of other reasons why we invest in those spaces, but it's a way of framing concepts around what is most impactful and how companies can start thinking about if we have a limited amount of time, limited amount of budget, how can I start organizing my priorities.

Next slide. And this is something that we do here. We offer a sustainability report card to all of our investors that lays out what has been the impact across all of the projects, all the investments we've made over the course of the year trying to get as comparable and transparent and accountable with how we report. And so that's something that has offered a level of, I think, confidence to our investors about the importance of all this. Similarly, I think it's something that can offer a level of confidence to corporates and commercial clients and certainly state and local officials as they think about trying to measure the impact of their initiatives.

People are spending a whole lot of time working to decarbonize, but it's really important to offer your contingents a look at, "How did we do? How did we come out on the goals and how efficient were we in that process?" Certainly also that can be something that can be used to address policy and other initiatives. Next slide. So this is one tangible example of how this is becoming more and more useful for corporate, this type of bang for your buck assessment. You're now seeing, and I'm sure a number of folks on the call work for organizations, where there is an internal carbon price and that's something that we're now seeing like 10 to 30 percent of the top US companies out there.

And one of our client's grid point actually has been using that as it relates to one of their particular clients, Walgreens, and a number of their other clients in looking at using basically carbon count as a selling point. So that has been a nice point not only for customers to start thinking about this is how I prioritize projects and think about the impact, but also for ESCOs and developers to market their initiatives and different projects.

Next slide. All right. Then finally, as we transition into what Greg will be talking about on the green debt side, one thing that we do that helps us offer the lowest cost and capital to our clients is we look to bundle up our projects into green debt offerings that we can then place on the market and are starting to see really oversubscribed – oversubscribed basically means excessive demand for green debt products, which then further drives down our cost of capital and our ability to offer the lowest cost of capital to our customers. So this has been a really interesting transition. Something on all of these bonds, we put a carbon count on those bonds, which again, has been very well-received by the market.

Have gotten third party ratings from Moody's and S&P as it relates to us complying with the green bond principles which basically

states the things that we are spending our money on and investing in are positive from an environmental standpoint. We are performing the necessary reporting requirements, but it has been a very promising shift in the market to see how much demand there is for this type of green product and that you actually are starting to see pricing benefits associated with being very transparent in your reporting and making sure that there is quality green projects backing your debt. So this a high level look at what we've been doing on that front. With that, I'll go ahead and wrap it up and we can pass it over to Greg.

*Kyle Saltsman:* Wonderful. Thank you, Guy. And for our final speaker we'll be hearing from Greg Montgomery. Greg, you can take it away.

*Greg Montgomery:* Great. Thank you, Kyle and Guy, thanks for the lead up to the green bonds. If you'll go to the first slide. So just in looking at the Slido poll it looks like no one has used green bonds to finance one of their carbon reduction projects. So I will assume little knowledge and I'll just provide a quick overview. First, a little bit about myself. As Kyle said, managing director CleanSource Capital based here in Charlotte, North Carolina where it's mostly finance affiliated power group and we design and administer financing programs using our savings platform which is a two stage underwriting process.

We both underwrite the project on the front end of – would fit whatever program is sponsoring the project and then also the credit to make certain that it's financeable in the marketplace. We've done 134 projects over time through the Saves program across four jurisdictions, \$275 million in direct funding that supported \$632 million in project financing which – and we track the metrics associated with those projects, 225,000 megawatt hours reduced, 146,000 metric tons. This is on an annual basis and also we track jobs from an economic impact as well.

We've been transitioning or expanding these programs to include green bonds because of, as Guy mentioned, increasing demand in the marketplace on the buy side for sustainable and green financing in support of issuers sustainability environmental programs as well as the mandates of these purchasers and their investor clients to invest into climate change and green infrastructure. So green bonds have emerged as a financing tool to finance green projects where the bonds are verified, certified. It's meeting a certain framework and we'll talk a little bit about that more where the framework ensures that the proceeds of the bonds are being used for the green

projects in furtherance of the environmental policies and goals of the issuer in fighting climate change.

So best practices we'll talk about are to have a framework to have the bonds reviewed against that framework and then reporting, which is subject matter of this webinar today. So just a little bit of background on green bonds, the international capital market association saw the need to have a standardized framework so that both issuers and purchasers could have a harmonized way to address this market and they published the green bond principles in 2014 to bring sub-standardization in the market.

They wanna make sure that the proceeds are being used for an eligible project under the environmental program of the issuer that the project was selected with that program in mind to achieve environmental sustainable policies and goals and that the proceeds are being used for the project and then reporting on the use of the proceeds and the projects impact over time. Then a best practice is once you have these principles in place it's for a third party to review the issuance of the bond against those principles to make certain that the bond comports and then can be labeled as green bond in the capital markets, in the offer documents and then over the life of the bond as it trades.

The benefits that have accrued from having these principles put in place is, as I said, the buy side and the sell side have come together on what is a good practice. It creates certainty in the capital markets and objectivity, but there's also a growing practice of standardized and the templates and the metrics for reporting, as you saw with Hannon Armstrong's tool, the carbon count. And there's increasing focus on the part of the issuers to have these bonds further their policies and then also transparency on regular reporting gives assurance that helps the market to grow.

So if you'll go to the next page you can see that the market has grown considerably since the voluntary green bond principles were post in 2014. The first green bond was done in 2012. ICMA saw the need for standardization transparency to publish the principles. So the market has grown seven fold from 2014 through 2020 approaching close to \$300 billion in issuance in 2020 and this year in 2021, half way through the year the market was already at \$200 billion. So we're looking at another record year this year for green bonds over \$1.1 trillion issued to date. In the United States it's a top issue of green bonds with \$52 billion in 2020. And as this demand continues to increase, the execution on the placement of

the bonds is improving and that is resulting in some transfer favorable pricing.

As books get over subscribed then there is the opportunity to decrease the pricing, which is to the ultimate benefit of the issue in the long run. So if we go to the next slide. One of the best practices that is emerging is to establish a framework for the issuance of green bonds so that the bonds can be independently reviewed and verified or certified as qualifying as green bonds in the course of that framework.

A typical framework will have three overarching design principles. It will have the policies and goals that are being supported, the environmental sustainability policies and goals. It will set forth the type of projects that are to be funded in furtherance of those policies and goals and then it incorporates the green bond principles into the framework to provide that surety that the marketplace is looking for about the use of proceeds, how the projects were evaluated, selected how the proceeds are being expended on the project and then reporting on both those expenditures as well as the ongoing impact based on a set of metrics that are designed for each particular project.

Again, the third best practices emerging is to again have these bonds reviewed against that framework to buy some assurance. So if we go to the next slide, the project evaluation selection is important part of any green bond framework so that again, the marketplace can see how the issuer chose the project and how it's supporting the policies and goals that are a part of the framework and what they will be reporting on. And so examples given this audience, the Better Building Challenge, example of type of projects oriented towards the real estate market would be energy efficiency goals, renewable energy reduction goals, and the greenhouse gas emissions goals as well as other certifications or ratings.

If we go to the next page, the reporting on the projects really is – there's three-fold. There's the pre-issuance information just about the framework and process itself. That's reporting to the market so that the buyers can understand what are the issuer's policies, goals. How are these projects in support of those goals? Then the post-issuance use of proceeds ensure that the proceeds of the bonds are used for the project that's been selected and then the ongoing standardized and regular impact report, that's both qualitative in terms of description of a project and what the expected impact is and then actual quantitative.

You define metrics up front that you wanna measure on an ongoing basis with a preidentified measuring methodology and then there's annual – a measurement of the actual forms of the project against those metrics so that the market can see how the project is performing and then that is reporting on an annual basis to both the issuer and the purchasers. In the resource file there is a copy of the voluntary green bond principles that we discussed earlier as well as the ICMA's handbook for harmonized framework for impact reporting which is a document that was recently put together in the last year or two by a group of stakeholders in this marketplace to try and arrive at the standardize framework for reporting.

This handbook for harmonized framework is the most frequently used. There's NPSI position paper also has a framework for reporting on the impact. If you'll go to the next slide. So the type of metrics that would be measured and reported in association with the green project financing green bonds, it's relatively straight forward. Most green bonds that are reporting and it's becoming best practice to do the annual impact. I think roughly 60 percent of the green bonds now do annual impact reporting and that's been increasing significantly over the last couple of years.

So there will be two to three metrics that are measured. It can get more complicated just depending on what the issuer is wanting to achieve and hold out to the marketplace. If it's renewable energy it's gonna be the absolute kilowatt hours generated in capacity of the project. Energy efficiency would be reduction and the greenhouse gas emissions based on the displacement of the energy taken from the grid using a methodology is such as you heard Guy talk about.

If you go to the next slide, these are just some examples taken straight out of the harmonized framework of publication. We're showing what would be representative reporting templates for a renewable energy project or energy efficiency project. So you can see they're just – this is the name of the project, what the dollar amount finance and how that was spread out maybe across the portfolio projects and such to single project financing, what the lifetime of the project is, what's the expected annual generation, what's the capacity. Then the greenhouse gas reduction and the same thing with energy efficiency except for obviously it's the annual energy savings versus generation.

So reporting doesn't have to be complicated. It can be fairly straightforward and actually the more straightforward and simple it is, the more transparent, the more certainty it provides in the marketplace. That's what the green bond market is endeavoring to do is working towards standardization, simplicity, and to bring confidence so that like Anastasia said, with that confidence comes investment dollars that follow. That helps to reduce the pricing is the demand and confidence grows in the market. So I'll stop there. And you can see where green bonds can play a very important role in helping to bring this type of reporting to the marketplace.

*Kyle Saltsman:*

Excellent. Great. Thanks so much for that content. We're now going to shift into the Q&A portion. We're gonna leave this slide up for just a second as it has the log in information to be able to access the field for submitting questions to the Q&A. We're gonna start going through some of the questions. So again, thank you all of our speakers today for that excellent information. To kick us off, we're gonna start with a question about carbon counts. So this is for either Anastasia or Guy. "Have you seen any interesting patterns when comparing or contrasting the carbon count in different projects either by technology, region, project size, or building types? Any trends there?"

*Guy Van Syckle:*

Sure. I can chime in there. It's definitely really interesting. So not surprisingly the projects with a faster payback have a higher carbon count because basically savings are highly correlated with emissions. Savings basically tie into megawatt hours reduced. So your classic lighting, controls, those types of projects are quite impactful. Now what you do see is that the bigger the project is, often times you're getting some economies of scale there particularly on the renewables front.

So you see obviously with utility scale solar, having a higher carbon count than rooftop solar. Again, this doesn't necessarily mean like one is inferior to the other, one is better than the other, but just considerations more broadly because obviously as Anastasia said it's really important to start thinking about how do you basically take the savings offered by a lighting project and by just a standard controls project and use that to start paying for the longer payback items like your heavy boiler upgrades or heavy HVAC repairs or roof repairs or things like that. So that's one way that we think about, but there's certainly a diversity across a variety of project types.

*Kyle Saltsman:*

Interesting. And just a quick follow-up question on that, Guy. If an organization has already completed some of those low hanging

fruit projects or the ones that would help combine with other longer term payback projects, do you have any advice on how organizations are in that kind of a situation trying to think about the intersection of these projects?

*Guy Van Syckle:* Sure. Yeah. The one way that we deal with that from a financier's perspective is basically extending the financing term. So it seems there's a tendency to keep it pretty short in the five to seven range. We do energy efficiency financing that go out 20, 25 years and that really lets you get to those deeper payback type projects. It can be in the 15 year range. When you're using that longer payback theory to pay down those heavier – those more expensive upfront costs that can definitely be a way of if you've already capitalized on your shorter payback items.

*Anastasia Beckett:* Right. 1 thing to add on that too is that I think it's been our experience that when we do go in and do an investing grade audit we almost always find some other low hanging fruit. So that's why it's important to have the holistic viewpoint and not go in just saying, "Oh, we're gonna only look at lighting or HVAC." Really looking at things 'cause a lot of times customers aren't necessarily considering water, for example, and that can be a really good resource and a way to put a better project together.

*Kyle Saltsman:* Interesting. Next question, I'm gonna start with you, Anastasia. It's about electronification, which is, "Have you had indirect experience with electronification projects or any recent trends in the space of electronification that you think would be important to explore?"

*Anastasia Beckett:* Sure. Yeah. It's definitely trending. We get a lot of questions about this and it is something that we can do. It's a little bit more of a unique approach. Sometimes it's maybe electronification of some equipment, but not the entire building. We've definitely done projects like that. Then the biggest issues with it is a lot of times there's not a lot of monetary savings associated with just looking at the pure replacement of the asset. In those cases, there's a variety of things you can do. You can bundle it like if in saying you can bundle it with other sites also.

So there's a way to balance it out that way and pick up savings from somewhere else and apply it towards electronification projects, but then you can also look at it in terms of maybe some stipulated savings that would be applied to it. If you have something like an internal carbon tax, for example, that can be very helpful. And then you can assign some value to the

electronification itself and include that as the savings in the project.

*Kyle Saltsman:* Interesting. Yeah. Would you mind just elaborating on the carbon tax program just in case that's a new concept for anyone attending?

*Anastasia Beckett:* Sure. It's just a way to look at if a company is really trying to reduce emissions it's a way for them to motivate people, I guess. It's a little bit of a stick approach rather than a carrot approach, but it motivates people because internally when you're – say you've got a manufacturing plant, internally you're gonna get taxed if you're using, like an internal tax and have to pay more to the corporate entity if you're – if you've got a dirty plant than you would if you were very efficient. So it's a way for, I guess, internal motivation in projects.

*Guy Van Syckle:* And the one other thing I'd add to that as well – that's well said, Anastasia – is that it's basically corporates looking to starting to hedge and manage their risk around further carbon regulation and so getting ahead of that internally as states as the US, as there start to be border adjustment tariffs, how do you get ahead of that and make sure you're preparing for potential policy headwinds that are gonna eventually come in and effect your business model.

*Kyle Saltsman:* Yeah. We definitely see transition risk as a highly motivating trait to – for some of the organizations adopting carbon reduction strategies. Greg, I got a question in here for you, which is, "When it comes to some of the metrics traits on green bond issuances, what happens if the reported metrics show an under or nonperformance? Does this present a potential additional risk spectrum for organizations issuing a green bond?"

*Greg Montgomery:* No. You would have the appropriate disclaimer language. It would just reflect poorly on the issuance and on the issuer. So it could impact the price in the bond and the secondary market, particularly if it retains that green bond label and the original purchasers wanna resell it. But it also could impact the creditability and reputation of the issuer for a future issuance. There's no – your counsel can protect you from legal responsibility.

Again, I think people would rather know that a project is underperforming than not and find out about it secondhand than at the marketplace. So that creditability could help an issuer particularly if they take corrective measures to improve the performance. Again, that's part of what the transparency and accountability is all about, right?

*Kyle Saltsman:* Yeah. Fair. And how would you phrase – given the similarities between a green bond issuance and more standard debt vehicles, how would you pose the primary benefit of doing it through – doing a capital raise through a green bond of issuance versus a standard debt?

*Greg Montgomery:* It's the features that you would consider its advantages for a bond issuance anyway, larger size, longer term, less covenants. But it's also just the increasing number of participants in the capital markets that are looking for this. So the ability to drive demand and improve price. There are many finances where bonds would not be appropriate, where it'd be better to do green bank debt or other types of financing is as you've heard on the webinar here today. So it bonds a purpose in the marketplace and it just happens that if they're in support of a framework with an environmental sustainability program then they can be labeled green to help associate demand in the marketplace for these type of environmental financial instruments.

*Kyle Saltsman:* Got it. So you're saying there's unique demand for lending into these type of projects that wouldn't express themselves through standard debt, but would through green bonds?

*Greg Montgomery:* Well, it's just when you would use bonds and in any type of project finance typically there are larger issuances just because of the fix cost associated with it.

*Guy Van Syckle:* And I can just give an example of that. So someone like Black Rock is a purchaser of Hannon green bonds and the fact that our bonds are denoted with a green classification then also have that carbon count reporting on them allows Black Rock to then meet its broader ESG demands and drop it into its portfolio funds that have now committed billions of dollars to funding green projects. So it's basically a way of satiating all of these financial commitments that are coming into the market, but also making sure there's a good deal of accountability as they do that.

And one thing that we did recently was a \$100 million commercial paper issuance, which basically is a very short term green bond.

*Greg Montgomery:* Interesting.

*Guy Van Syckle:* So a month to three months, but that's also tapping into a different demand of the market. So all of those funds just go to fund all of our construction accounts and things like that. But that's what

you're seeing is with all these emerging funds they need a place to put those dollars and so you wanna make sure there's a high degree of transparency and accountability to that.

*Kyle Saltsman:* Interesting. Great. Thank you. Anastasia, let's start with you for this next question. So someone was asking how each of your organizations works with owners who have maybe completed a building project or two and are now looking to expand through third party partner to focus on rolling this out to multiple sites.

*Anastasia Beckett:* So the question is that they've already done a couple of sites and they're wanting to expand their say, manufacturing footprint and acquire other sites?

*Kyle Saltsman:* Yeah. That's right. They've done it at a single building and are now trying to figure out how to get it from that one building to many buildings.

*Anastasia Beckett:* Oh, okay. So they've done like a pilot project potentially and are looking to expand that to all of their facilities. Okay. Got it. Yeah. That's what we specialize in. So what we would do is take a look at the different facilities that they wanna roll out, look at what measures would be right for those different facilities. We usually do a preliminary audit that gives us some sense of where we should be looking in terms of asset composition and then it really depends on the type of buildings.

So if they're all something simple like office space or a distribution center or something like that, that might be a little bit of a different approach than if it was all bespoke manufacturing. That would probably have a little bit more unique characteristics to the composition of the project makeup. Like for example, we just did a very large manufacturing plant for a brewer. That's gonna be a very different project composition than it is for an office. We take care of all of it, bundle it together.

So we usually will finance it in say \$20 million tranches at a time or so and roll it out in coordination with the construction efforts. 'Cause a lot of times you don't want construction in every single facility at the same time either. So you don't wanna create a mess for everybody. Really it's the same method for looking at that pilot site. You're just applying it to more sites. So it's actually pretty simple. Sometimes there's a little bit of a difference. If the individual sites have their own PNL you have to work a little bit more closely with the site personnel in those cases, but it's really the same approach.

It's just as easy to do a \$20 million multisite project as it is to do one pilot that's tiny. So that's the end answer there is it's the same – it's an easy approach and you're going to get lower interest rates if you do more sites. So it makes a lot more sense to do a \$20 million multisite project than a \$300,000.00 one site project.

*Kyle Saltsman:* That makes total sense. I think to wrap it up for our final question, so I'll give each of you a chance to respond to this one starting with you, Greg. So in one sentence, can you take a stab at articulating either a recent change or a need to change? Be it a technology, policy, frameworks, what have you, that you think it's gonna have the biggest acceleration impact in terms of more organizations actually reducing their carbon emissions.

*Greg Montgomery:* I think it's these 2030, 2050 carbon reduction goals and the motivation there. You asked me one sentence, so this is gonna be a long sentence. In the advent of really holistic planning. You're starting to see that across institutions, municipalities, governments where they are doing comprehensive planning up front to commit to technologies, programs that are gonna reduce the carbon footprint. I think those goals are very commendable.

*Kyle Saltsman:* Cool. Let's go to Guy next and then finish up with Anastasia.

*Guy Van Syckle:* Sure. So I think getting into a very regimented cadence of how you're gonna roll this across your organization in thinking about this not just being managed by the sustainability or the manager, but having a holistic thought on how do you do this most efficiently. One of the things we're seeing with all these corporates out there is – and these are Fortune 100, Fortune 500 manufacturers and such, is they try and basically fit these projects into their existing how they buy equipment and random widgets and it's different than that.

You really should be thinking of this, I have a goal to do energy efficiency projects. I need to have a contract that I can do this under officially as to pose to try to squeeze into equipment purchase orders. That's the biggest one we've seen just on the ground getting things done. It's great to see the initiatives. It's important to make sure they're actually pushed down to the implementers and the acquisition levels for the people that are running these various sites and facilities.

*Kyle Saltsman:* Cool. Thanks. Anastasia?

*Anastasia Beckett:* Sure. I agree with both sentiments there. Particularly on the procurement side, it's important for the financial folks at organizations to be involved in these projects early and have it come from that rather than come from procurement because it's not like buying pencils. It's like a totally different process. So that usually runs a lot smoother. Something I'd say also in terms of organizational planning, that's super important. It's great to see the 2030 goals, but at some point you need to take action and energy efficiency is going to be a part of any plan. So there's no real reason to wait to do it. I think that we have time is of the essence. We got to do projects in order to hit those goals and you got to start now.

*Kyle Saltsman:* Yeah. And Greg just reflected in each of your answers that these changes are all internal to organizations that don't require an exogenous change, that everyone is set up now to be able to do these holistic types of programs. Cool. So if we can bring up the slides again. We've got a couple additional closeout slides here. So first wanna talk about the Better Buildings Webinar Series. This webinar was part of the 2021-2022 Better Buildings Webinar Series. As you can see, we have a great line-up of presentations all the way through April. You can visit the Better Building Solution Center to learn more about each of these sessions and to register.

The next webinar, will you go to the next slide, please? We hope you'll join us on November 16 for the next webinar titled Cleaner, Better, Faster, Stronger: Industrial Adoption of Renewables. Join this webinar to learn more about renewable energy technologies and their benefits as well as a wide range of purchasing options that can benefit US industrial organizations in particular. Go to the next slide for additional resources. If you're interested in learning more about some of the topics we discussed today I encourage you to download our additional resources handout from the Zoom chat box.

This handout contains links to the resources on the Better Buildings and from our speakers and it's accessible today, though all of these resources will also be available when the slides are published soon. With that, I'd like to thank our panelists very much for taking the time to be with us today. Feel free to contact the presenters directly by using the contact information listed here if you have additional questions or if we weren't able to address your questions during the Q&A period.

I encourage you all to follow the Better Buildings initiative on LinkedIn and Twitter for the latest news. You can find our handles

by the respective icons on the lower left hand of the screen. Lastly, you will receive an e-mail notice when today's recording slides and transcripts are available on the Better Building Solution Center. Thank you so much for your time and have a great day.

*[End of Audio]*

## Additional Resources

Learn more about the topics discussed on the webinar by visiting the resources below.

### Better Buildings Resources

- External Financing for Carbon Reduction Projects [Fact Sheet](#)
- Internal Financing for Carbon Reduction Projects [Fact Sheet](#)
- [Carbon Financing Hub](#)

Explore more resources on the [Better Buildings Solution Center](#)

### Other Resources

- 2020 Metrus Energy [Impact Report](#)
- [Federal Funding Opportunities for Local Decarbonization \(FFOLD\)](#)
- Greenbond Impact [Reporting Metrics and Databases](#)
- Post Issuance [Reporting](#) in the Green Bond Market 2021
- Metrus Energy: Sustainable Energy as a Service [Video](#)
- Green Bond Principles Voluntary Process [Guideline Document](#)
- Green Bond Principles [Handbook](#): Harmonized Framework for Impact Reporting
- Hannon Armstrong CarbonCount® [Tool](#)

## Up Next in the 2021-2022 Better Buildings Webinar Series

### **Cleaner, Better, Faster, Stronger: Industrial Adoption of Renewables**

Tuesday, November 16<sup>th</sup> from 11 – 12 pm ET

This webinar will navigate the renewable energy market by providing background on renewable technologies and their benefits, as well as a wide range of purchasing options, that can benefit U.S. industrial organizations.

[Register here](#)

## Follow Better Buildings on Twitter and LinkedIn



@BetterBldgsDOE



company/better-buildings