

Webinar

ULI Toronto: NYC???s Local Law 97: North America???s Green Building High Bar

Date: September 28, 2021

00:00:29> 00:00:33:	OK, for those of you just coming in welcome before
00:00:33> 00:00:34:	we start,
00:00:34> 00:00:38:	we're going to run a quick video that announces our
00:00:38> 00:00:42:	upcoming ESG symposium on November the 4th and will send
00:00:42> 00:00:45:	you some more detail in the chat as well.
00:00:45> 00:00:46:	But if we could run that video.
00:01:16> 00:01:19:	Good afternoon everyone. My name is Richard Joy,
00:01:19> 00:01:25:	executive director of the Urban Land Institute or ULI Toronto.
00:01:25> 00:01:29:	Welcome. Considered the most progressive climate laws in North America,
00:01:29> 00:01:32:	nor New York City's 2019,
00:01:32> 00:01:36:	local law 97 is designed to aggressively reduce the city's
00:01:36> 00:01:38:	overall carbon emissions by 40%
00:01:38> 00:01:40:	by the end of this decade and 80%
00:01:40> 00:01:44:	by 2050. Targeting buildings in all asset classes,
00:01:44> 00:01:49:	future and existing. Aligned with the controversial Green New Deal
00:01:49> 00:01:49:	agenda,
00:01:49> 00:01:52:	local 97 is intended to be the cornerstone,
00:01:52> 00:01:57:	a cornerstone of outgoing. Their de Blasio's legacy.
00:01:57> 00:01:58:	But is such a standard,
00:01:58> 00:02:03:	achievable? And should Canadian missa pallet ease realistically embraced such
00:02:03> 00:02:03:	ambition?
00:02:03> 00:02:07:	Factoring economics, affordability concerns, etc.
00:02:07> 00:02:11:	We have set up our program today to learn some
00:02:11> 00:02:14:	more about this New York City law and explore these
00:02:14> 00:02:18:	questions in the context of the greater Golden Horseshoe.

00:02:18> 00:02:20:	As a Toronto region based organization,
00:02:20> 00:02:23:	we acknowledged the land we are meeting on.
00:02:23> 00:02:26:	Virtually is the traditional territory of many nations,
00:02:26> 00:02:28:	including the Mississauga's of the credit,
00:02:28> 00:02:31:	the NS now back, the Chippewa Hood,
00:02:31> 00:02:34:	masoni, the Wendet peoples and is now home to many
00:02:34> 00:02:35:	diverse First Nations,
00:02:35> 00:02:40:	Inuit and Metis people. We acknowledge that Toronto is covered
00:02:40> 00:02:43:	by Treaty 13 with the Mississaugas of the credit.
00:02:43> 00:02:45:	We are all treated people.
00:02:45> 00:02:47:	Many of us have come here as settlers,
00:02:47> 00:02:52:	immigrants and newcomers in this generation or generations past.
00:02:52> 00:02:56:	Importantly, this week ULI stands in solidarity with indigenous communities,
00:02:56> 00:03:01:	demanding action and accountability for the ongoing legacy of the
00:03:01> 00:03:03:	residential school system.
00:03:03> 00:03:06:	You will I stand, I apologize,
00:03:06> 00:03:09:	we acknowledge and honor those we also like,
00:03:09> 00:03:13:	but acknowledge and honor those who've come here involuntarily.
00:03:13> 00:03:17:	Particularly descendants from those who were brought here through enslavement.
00:03:17> 00:03:20:	To better understand the meaning behind this land acknowledgement,
00:03:20> 00:03:24:	we recommend four programs that we have uploaded to YouTube
00:03:24> 00:03:28:	and these links will be made available in the attack.
00:03:28> 00:03:31:	13,000 years of indigenous history in the GTA and why
00:03:31> 00:03:33:	it matters to planning and development.
00:03:33> 00:03:35:	Whose land and whose law?
00:03:35> 00:03:40:	Indigenous Toronto the stories are city paved over and colonialism
00:03:40> 00:03:45:	enslavement and abolition in the greater Golden Horseshoe.
00:03:45> 00:03:48:	A few house items housekeeping items before we start.
00:03:48> 00:03:51:	Everybody obviously will be automatically mute throughout the session.
00:03:51> 00:03:55:	To avoid audio interference. Closed captioning is available for this
00:03:55> 00:03:57:	session and you can access it by the button along
00:03:57> 00:03:59:	the bottom of the zoom platform.
00:03:59> 00:04:02:	If you have any questions and we encourage them,

00:04:02> 00:04:05:	please use the Q&A function or up vote questions by
00:04:05> 00:04:08:	pressing the thumbs up button and will have probably about
00:04:08> 00:04:10:	10 minutes at the end of this program.
00:04:10> 00:04:13:	For those, this is a recorded session at.
00:04:13> 00:04:16:	The recording will be sent to you after.
00:04:16> 00:04:20:	And if you want to take the conversation to social
00:04:20> 00:04:20:	media,
00:04:20> 00:04:24:	please tag us with the Twitter handle at Uli Toronto
00:04:24> 00:04:25:	or the hashtag.
00:04:25> 00:04:30:	Ask great questions. Today's event and all other UI programming
00:04:30> 00:04:34:	simply would not be possible without our annual sponsors,
00:04:34> 00:04:37:	and I'd like to say a major thank you for
00:04:37> 00:04:39:	all of them for that support.
00:04:39> 00:04:41:	Truly, now more than ever,
00:04:41> 00:04:44:	we rely on the support of these annual sponsors who
00:04:44> 00:04:47:	enable us to put on the quality program we do
00:04:47> 00:04:49:	to drive our mission to shape the future of the
00:04:49> 00:04:54:	built environment. For transformative impact in communities worldwide.
00:04:54> 00:04:55:	So again, to all of them,
00:04:55> 00:04:58:	we say thank you. An extra thank you to Cadillac
00:04:58> 00:04:59:	Fairview,
00:04:59> 00:05:01:	the annual sponsor of the UI Connect committee,
00:05:01> 00:05:06:	that's our committee that is comprised mostly of members under
00:05:06> 00:05:09:	35 and we think and and who's program who produced
00:05:09> 00:05:10:	this.
00:05:10> 00:05:13:	Program today and we'd like to thank them and the
00:05:13> 00:05:15:	committee for their activity.
00:05:15> 00:05:18:	A quick note on membership.
00:05:18> 00:05:21:	Uh, October 1st our head office,
00:05:21> 00:05:25:	I guess recognizing that that that you like Toronto,
00:05:25> 00:05:27:	and you're like Canada, has grown significantly.
00:05:27> 00:05:30:	We are now the largest chapter in the global environment,
00:05:30> 00:05:35:	but our membership prices are significantly lower than they are
00:05:35> 00:05:39:	globally and certainly tested the border.
00:05:39> 00:05:42:	And there's going to be a stepping up of the
00:05:42> 00:05:43:	prices on October 1st,
00:05:43> 00:05:47:	but you can save. That yourself from that increase for
00:05:47> 00:05:48:	at least a year,
00:05:48> 00:05:50:	no matter when your anniversary date is.

00:05:50> 00:05:53:	If you remember, if you're a new member to become
00:05:53> 00:05:54:	a member before October 1st,
00:05:54> 00:05:57:	but the prices will go up about 30%
00:05:57> 00:06:01:	on October 1st. To close that gap with the Canadian
00:06:01> 00:06:03:	membership value being so,
00:06:03> 00:06:08:	so great right now, please consider renewing or becoming a
00:06:08> 00:06:09:	member.
00:06:09> 00:06:13:	Enough advertising we're going to move now to our session
00:06:13> 00:06:17:	for today and I'm gonna say I'm gonna come back
00:06:17> 00:06:19:	in the Q&A session.
00:06:19> 00:06:23:	But it's now my great pleasure to introduce our moderator,
00:06:23> 00:06:27:	who in turn is going to introduce our panelists so
00:06:27> 00:06:30:	our our moderator is Sandra Oh Doll,
00:06:30> 00:06:34:	who's the Vice President of Social Impact and Sustainability
	at
00:06:34> 00:06:35:	Scotiabank?
00:06:35> 00:06:37:	So we agreed that will put the remainder of the
00:06:38> 00:06:40:	details in the chat for you to follow up.
00:06:40> 00:06:41:	Same with all the other panelists,
00:06:41> 00:06:44:	so with with very minimal introduction.
00:06:44> 00:06:46:	Sandra, it's my pleasure to hand it over to you.
00:06:48> 00:06:50:	Thank you very much, Richard.
00:06:50> 00:06:53:	Come yes, thank you and welcome to everyone who's joining
00:06:53> 00:06:54:	the session today.
00:06:54> 00:06:56:	I think it's it's going to be interesting.
00:06:56> 00:07:00:	I certainly found doing my own reading and speaking to
00:07:00> 00:07:02:	the panel is was fascinating,
00:07:02> 00:07:05:	so I'd like to introduce our four panelists and so
00:07:05> 00:07:09:	hopefully everyone's got their cameras on as well as the
00:07:09> 00:07:12:	you'll see their pictures up here on the screen.
00:07:12> 00:07:14:	So first we have Christopher,
00:07:14> 00:07:17:	Kate, and so Christopher is the partner and senior director
00:07:18> 00:07:18:	of Strategic.
00:07:18> 00:07:23:	That code green solutions. We also have Stewart debt field
00:07:23> 00:07:28:	Stewart is acting manager of public energy initiatives offer existing
00:07:29> 00:07:34:	buildings within the City of Toronto's Environment and Energy Division.
00:07:34> 00:07:39:	We've got Kirk Johnson. Kirk is president of Eco Efficiency
00:07:39> 00:07:42:	Consulting and last but not least,
00:07:42> 00:07:46:	we have Julia Langer. Julia is CEO of the Atmospheric
00:07:46> 00:07:46:	Fund,
00:07:46> 00:07:50:	also known as the Toronto Atmospheric Fund here in

4

	Toronto.
00:07:50> 00:07:55:	So for today's session we thought we would kick things
00:07:55> 00:07:57:	off with Chris of Code,
00:07:57> 00:08:00:	Green Solutions giving us an overview of how New York
00:08:00> 00:08:05:	City's local law 97 worth and following Christmas presentation will
00:08:05> 00:08:08:	then turn it over to a bit of a panel
00:08:08> 00:08:13:	discussion and some opportunities for the audience to ask
	their
00:08:13> 00:08:14:	own questions.
00:08:14> 00:08:17:	So with that, I'm going to turn it over to
00:08:17> 00:08:19:	Chris Caton and Chris.
00:08:19> 00:08:21:	We're looking forward to hearing.
00:08:21> 00:08:24:	More about local I97 over to you.
00:08:25> 00:08:27:	Sandra, thank you so much.
00:08:27> 00:08:29:	I will see if I can get my screen to
00:08:29> 00:08:30:	share properly.
00:08:30> 00:08:32:	That's always the first challenge.
00:08:37> 00:08:44:	Run. And switch. Does that look good?
00:08:44> 00:08:46:	Can you see the slides here?
00:08:46> 00:08:50:	Terrific, thank you Sandra. Thank you so much and thank
00:08:50> 00:08:54:	you to Richard and the ULI Toronto and ULI greater
00:08:54> 00:08:57:	for connecting me in New York City to the ULI
00:08:57> 00:08:59:	Toronto team. I'm really excited to be here.
00:08:59> 00:09:01:	I've spent a little bit of time in Toronto,
00:09:01> 00:09:04:	but probably not enough, and I've spent the last 13
00:09:04> 00:09:07:	years of my life in New York City before that.
00:09:07> 00:09:10:	About five years in Hong Kong and Madrid and Latin
00:09:10> 00:09:10:	America.
00:09:10> 00:09:14:	So you know, seeing? A lot of impacts of climate
00:09:14> 00:09:15:	change and loss.
00:09:15> 00:09:18:	A lot of really great work that you lie is
00:09:18> 00:09:20:	doing all over the world,
00:09:20> 00:09:23:	essentially to push climate. I have to admit finding quick
00:09:23> 00:09:24:	story about you.
00:09:24> 00:09:25:	Well, I when I was in architecture school I thought
00:09:25> 00:09:26:	you will.
00:09:26> 00:09:29:	I was only an environmental organization around real estate.
00:09:29> 00:09:31:	I had no idea, never touched any other topics of
00:09:31> 00:09:32:	real estate,
00:09:32> 00:09:34:	only the environment. So that's that's where you will.
00:09:34> 00:09:37:	I started for me back in College in architecture school.

00:09:37> 00:09:39:	So really glad to be here.
00:09:39> 00:09:41:	I will try to keep this brief on this presentation
00:09:41> 00:09:43:	so we can get into.
00:09:43> 00:09:45:	Some discussion and move that forward.
00:09:45> 00:09:48:	So as Sandra mentioned, I'm Chris Kate and I'm a
00:09:48> 00:09:51:	partner at Code Green and Senior Director of Growth Code
00:09:51> 00:09:52:	Green.
00:09:52> 00:09:54:	Just a little bit of context of kind of where
00:09:54> 00:09:57:	I'm coming from and how I see this law and
00:09:57> 00:09:59:	the involvement I've had in this law.
00:09:59> 00:10:02:	Based on my experience, both professionally and a lot of
00:10:02> 00:10:04:	pro bono work that I've done code.
00:10:04> 00:10:05:	Green is a consulting firm.
00:10:05> 00:10:09:	We do energy and sustainability consulting to the to the
00:10:09> 00:10:10:	real estate industry.
00:10:10> 00:10:13:	We have about 50 plus staff where based.
00:10:13> 00:10:14:	Primarily in New York City,
00:10:14> 00:10:17:	really with staff all over North America all across EU
00:10:17> 00:10:18:	S Some in Canada,
00:10:18> 00:10:20:	some in and some in Mexico.
00:10:20> 00:10:24:	But we provide really strategic portfolio and technical solutions to
00:10:24> 00:10:25:	building,
00:10:25> 00:10:28:	so we've really seen the types of initiatives that are
00:10:28> 00:10:32:	required in order to meet these types of stringent goals.
00:10:32> 00:10:34:	And that's really why the city asks us to be
00:10:34> 00:10:38:	involved with some of the negotiations and discussion around the
00:10:38> 00:10:39:	development of this law.
00:10:39> 00:10:41:	Because we've been involved with the real estate industry for
00:10:41> 00:10:42:	so long.
00:10:42> 00:10:44:	Supporting these types of initiatives.
00:10:44> 00:10:47:	That the building owners are are pushing for.
00:10:47> 00:10:50:	We do work with a lot of great large investors.
00:10:50> 00:10:53:	Many you align Members as well looking not only at
00:10:53> 00:10:54:	individual assets,
00:10:54> 00:10:57:	but portfolio wide. How do they push ESG initiatives forward
00:10:57> 00:10:59:	now over the last say two years?
00:10:59> 00:11:02:	How do you target net zero both at the individual
00:11:02> 00:11:05:	asset level but also as a corporate policy?
00:11:05> 00:11:08:	So again, that really does require us to look at
00:11:09> 00:11:10:	multiple geographies,

00:11:10> 00:11:14:	multiple jurisdictions to understand how these laws are impacting.
00:11:14> 00:11:19:	Both existing and potentially new buildings in New York.
00:11:19> 00:11:22:	Specifically, we have been working hand in hand with many
00:11:22> 00:11:26:	of the organizations that really create the pathway that that
00:11:26> 00:11:28:	real estate owners,
00:11:28> 00:11:31:	operators and developers need to navigate everything from the New
00:11:31> 00:11:33:	York City Mayor's Office,
00:11:33> 00:11:37:	which has the one that really overseas and actually writes
00:11:37> 00:11:38:	many of these laws.
00:11:38> 00:11:42:	Some of the programs that manage these types of policies
00:11:42> 00:11:44:	and create tools to allow compliance.
00:11:44> 00:11:48:	Like EU. S EPA Energy Star platform,
00:11:48> 00:11:50:	we are a Energy Star port.
00:11:50> 00:11:52:	Excuse me, Energy Star partner of the year for a
00:11:52> 00:11:53:	number of years now,
00:11:53> 00:11:57:	dating back to 2017 and many other organizations within New
00:11:57> 00:12:00:	York City on the building owner side between the building
00:12:00> 00:12:04:	Boehme and Rodney who really represent most of the building
00:12:04> 00:12:06:	owners and operators in New York City,
00:12:06> 00:12:09:	as well as the programs like Urban Green and Nicer
00:12:09> 00:12:12:	to that really are not just the the sticks that
00:12:12> 00:12:13:	the city puts out,
00:12:13> 00:12:15:	but some of the carrots in terms of the knowledge.
00:12:15> 00:12:18:	The financial incentives. So we've really helped to organize many
00:12:18> 00:12:21:	of and and work with many of the constituents that
00:12:21> 00:12:24:	really create the landscape that the building owners have to
00:12:24> 00:12:27:	navigate. So that's a little bit about us and me.
00:12:27> 00:12:29:	I'm an architect. By training.
00:12:29> 00:12:31:	I've been doing architecture for about.
00:12:31> 00:12:33:	l did architecture for about 12 years,
00:12:33> 00:12:36:	then real estate development and now sustainability consulting.
00:12:36> 00:12:39:	So I spend most of my time working with private
00:12:39> 00:12:42:	building owners to navigate these types of goals and targets,
00:12:42> 00:12:44:	but I spend probably about 20%
00:12:44> 00:12:46:	of my time pro bono working with.
00:12:46> 00:12:48:	Policy makers like the New York City Mayor's office,
00:12:48> 00:12:51:	so that's kind of how we've come to learn a

00:12:51> 00:12:54:	lot about how these policies are built and have our
00:12:54> 00:12:57:	own opinions about how they've all turned out.
00:12:57> 00:12:59:	So of course, they're still in the works,
00:12:59> 00:13:01:	so taking a little bit of a step back,
00:13:01> 00:13:02:	many of you probably know this.
00:13:02> 00:13:03:	If you're on this call,
00:13:03> 00:13:06:	but always like to start with some context globally.
00:13:06> 00:13:09:	Buildings represent about 40% of our carbon footprint.
00:13:09> 00:13:11:	That's not only in the operations,
00:13:11> 00:13:15:	but in both embodied carbon and the operations of buildings.
00:13:15> 00:13:18:	But in large cities. Like New York City,
00:13:18> 00:13:20:	I'm interested to know if it's similar in Toronto.
00:13:20> 00:13:22:	I believe it probably is.
00:13:22> 00:13:23:	Building is account for about 70%
00:13:23> 00:13:26:	of the carbon footprint in most large cities.
00:13:26> 00:13:30:	That's because transportation industry, many of these other areas are
00:13:30> 00:13:33:	just far smaller in these dense urban cores.
00:13:33> 00:13:37:	So when buildings represent such a high level high percentage
00:13:37> 00:13:39:	of carbon emissions in these cities,
00:13:39> 00:13:42:	when cities create these carbon action plans,
00:13:42> 00:13:45:	which are long term plans to reduce carbon emissions,
00:13:45> 00:13:48:	city building owners building developers.
00:13:48> 00:13:51:	Building operators usually have a very big role to play
00:13:51> 00:13:55:	in helping cities target those those initiatives and achieve those
00:13:55> 00:13:58:	ambitious carbon emissions initiatives.
00:13:58> 00:14:00:	I almost always start with a slide like this.
00:14:00> 00:14:03:	This is thanks to IMT the Institute for Market Transformation.
00:14:03> 00:14:06:	If you're not familiar with that organization,
00:14:06> 00:14:08:	imt.org is a great site.
00:14:08> 00:14:10:	They they do track a lot of these types of
00:14:10> 00:14:11:	policies around the US.
00:14:11> 00:14:15:	I think we're going to have to start increasing this
00:14:15> 00:14:18:	map so that we can see this more even outside
00:14:18> 00:14:18:	of the US.
00:14:18> 00:14:22:	But they are instrumental in supporting the development of these
00:14:22> 00:14:25:	types of policies and also our great resource to find
00:14:25> 00:14:28:	especially where the latest is on some of these policies.
00:14:28> 00:14:31:	This map has grown from just a few cities,
00:14:31> 00:14:33:	essentially that about 10 years ago,

00:14:33> 00:14:37:	New York DC started out by requiring just basic transparency
00:14:37> 00:14:40:	around energy use in buildings.
00:14:40> 00:14:43:	So just an annual process where every building owner of
00:14:43> 00:14:45:	a certain size has to submit in a years worth
00:14:45> 00:14:48:	of energy used to the city so the city can
00:14:48> 00:14:52:	get to. Understand the building stock and to understand the
00:14:52> 00:14:53:	energy use trends.
00:14:53> 00:14:57:	These types of benchmarking laws proliferated from New York and
00:14:57> 00:14:58:	DC to many,
00:14:58> 00:15:01:	many other locations. That was just the beginning of transparency.
00:15:01> 00:15:04:	These early laws did not require buildings to do anything,
00:15:04> 00:15:07:	they just to make any improvements.
00:15:07> 00:15:11:	It just required them to to share that information.
00:15:11> 00:15:14:	IMT as a brand new map which starts starts out
00:15:14> 00:15:16:	looking like this today.
00:15:16> 00:15:19:	Just as the benchmarking map did say 12 years ago,
00:15:19> 00:15:22:	this is the new map for performance standards.
00:15:22> 00:15:25:	So BEPS BPS building performance standards seems to be the
00:15:25> 00:15:28:	term of art these days that talks about these regulatory
00:15:28> 00:15:32:	limits and requirements on actual building performance.
00:15:32> 00:15:35:	So instead of just requiring a building owner to submit
00:15:35> 00:15:38:	their data to the city and publish that information about
00:15:38> 00:15:39:	their energy performance,
00:15:39> 00:15:43:	these types of regulations. Actually require buildings to hit a
00:15:44> 00:15:48:	minimum performance or bear some type of penalty or compliance
00:15:48> 00:15:49:	payment if they don't,
00:15:49> 00:15:51:	so I'm sure in the next you know it'll be
00:15:51> 00:15:52:	months,
00:15:52> 00:15:55:	not years. This map will look just like this map
00:15:55> 00:15:56:	does,
00:15:56> 00:15:58:	with many more jurisdictions, so New York City was one
00:15:58> 00:16:01:	of the first New York and DC are always duking
00:16:01> 00:16:03:	it out as to which one I think DC passed
00:16:03> 00:16:06:	the bill, but New York's went into effect sooner,
00:16:06> 00:16:09:	so we're often duking it out.
00:16:09> 00:16:11:	So I do have a couple comparisons here for some
00:16:11> 00:16:11:	context.
00:16:11> 00:16:16:	Again, this is being recorded so people can go back,
00:16:16> 00:16:17:	pause it, and look more in depth.

00:16:17> 00:16:18:	So I'm not going to read through all of these,
00:16:18> 00:16:20:	but I have a few cities here and I do
00:16:20> 00:16:23:	like to highlight kind of the areas and the structures
00:16:23> 00:16:27:	of these different policies across different cities just to get
00:16:27> 00:16:28:	a sense of what are some of these nuances.
00:16:28> 00:16:32:	What are some of these differences understanding,
00:16:32> 00:16:36:	typically within a city? What is the the building representative
00:16:36> 00:16:37:	carbon emissions?
00:16:37> 00:16:39:	What is the metric that that city chose to use?
00:16:39> 00:16:41:	There are a few options there.
00:16:41> 00:16:43:	The timeline. Of when this will go into effect,
00:16:43> 00:16:48:	whether or not offsite actions like purchasing renewable certificates or
00:16:48> 00:16:49:	carbon offsets,
00:16:49> 00:16:54:	if those are allowed. Understanding what the states renewable electricity
00:16:54> 00:16:57:	target is and what that regions renewable electricity target is,
00:16:57> 00:17:01:	because that really does impact how you are pushing building
00:17:01> 00:17:03:	owners to reduce carbon emissions.
00:17:03> 00:17:06:	Is it through moving to an all electric building and
00:17:06> 00:17:07:	electrification as it's called?
00:17:07> 00:17:10:	Or is it? Other means has a lot to do
00:17:10> 00:17:12:	with what that regions?
00:17:12> 00:17:15:	Renewable electricity target is in that timeline,
00:17:15> 00:17:19:	the fine structure. Again, cities have taken different approaches to
00:17:19> 00:17:20:	this and then the engagement process.
00:17:20> 00:17:23:	So for New York City you can see the stats
00:17:23> 00:17:24:	that are up here.
00:17:24> 00:17:26:	I do finally have to update the bottom of this,
00:17:26> 00:17:30:	which says the industry engagement process essentially came after this
00:17:30> 00:17:30:	law was passed.
00:17:30> 00:17:34:	So some other cities you'll see the engagement process was
00:17:34> 00:17:36:	really prior to the law being passed.
00:17:36> 00:17:40:	NYC essentially put the law on the books with with
00:17:40> 00:17:42:	this framework and then created a pretty.
00:17:42> 00:17:47:	A pretty robust engagement process with the industry experts,
00:17:47> 00:17:51:	not with average population but with industry experts to weigh
00:17:51> 00:17:52:	in on that process.

00:17:52> 00:17:54:	Washington DC is doesn't look terribly different,
00:17:54> 00:17:57:	but I will highlight here that instead of carbon emissions
00:17:57> 00:17:58:	per square foot per year,
00:17:58> 00:18:02:	Washington DC has chosen to use the EPA Energy Star
00:18:02> 00:18:05:	score as their compliance metric.
00:18:05> 00:18:08:	So not going to go into exactly all those nuances.
00:18:08> 00:18:10:	But Energy Star does account not only for your carbon
00:18:11> 00:18:11:	emissions,
00:18:11> 00:18:15:	but some other uses within the building and normalizes for
00:18:15> 00:18:18:	them so they do have the option of switching over
00:18:18> 00:18:20:	to a GHG metric in 2023 if they feel that
00:18:20> 00:18:22:	would be a help them align.
00:18:22> 00:18:24:	And hit their citywide targets.
00:18:24> 00:18:27:	Similar fine structure. If you look at this fine structure
00:18:27> 00:18:29:	over over the same course of time,
00:18:29> 00:18:32:	these are in the dollar to \$2 square foot fine
00:18:32> 00:18:33:	structure as well,
00:18:33> 00:18:36:	and they really did have a robust engagement process.
00:18:36> 00:18:41:	Boston actually just enacted past their law a week ago,
00:18:41> 00:18:43:	so a lot of this is brand brand new.
00:18:43> 00:18:47:	They did set their targets using GHT per square foot.
00:18:47> 00:18:50:	They are allowing some renewable certificates,
00:18:50> 00:18:53:	but only locally sourced, which is similar to New York
00:18:53> 00:18:53:	City.
00:18:53> 00:18:56:	Rule and then the fine structure is actually quite similar
00:18:56> 00:18:57:	to New York's.
00:18:57> 00:19:01:	You know, in a similar order of magnitude and that
00:19:01> 00:19:04:	payment actually will go into a fund to help fund
00:19:04> 00:19:05:	retrofit projects,
00:19:05> 00:19:07:	which is a great use of those types of funds.
00:19:07> 00:19:10:	It's not considered a fine or a violation.
00:19:10> 00:19:14:	It's considered a compliance payment that goes to fund other
00:19:14> 00:19:15:	types of upgrade projects.
00:19:15> 00:19:17:	So as you saw the,
00:19:17> 00:19:19:	there are variations and programs.
00:19:19> 00:19:22:	There are variations in the types of decisions they make
00:19:22> 00:19:23:	around each of these.
00:19:23> 00:19:26:	Usually that are crafted and the direction is comes from
00:19:27> 00:19:30:	how it aligns with the city or the region's broader
00:19:30> 00:19:33:	climate action plan and how they're trying to mitigate emissions.
00:19:33> 00:19:37:	Again, all of these pieces really need to work together

00:19:37> 00:19:41:	with relation to the current utilities that are available in
00:19:41> 00:19:42: 00:19:42> 00:19:44:	an area.
	What are those utility grids?
00:19:44> 00:19:46:	Can they be repurposed? How?
00:19:46> 00:19:49:	How are you? Working with everyone that supplies gas,
00:19:49> 00:19:52:	electricity, New York City has a central steam system as
00:19:52> 00:19:56:	well that building owners are working with to understand how
00:19:56> 00:19:57:	to decarbonize that too.
00:19:57> 00:20:00:	So these pieces are all very much in need to
00:20:00> 00:20:03:	work in concert and then one of the last pieces
00:20:03> 00:20:04:	time of use.
00:20:04> 00:20:06:	Carbon emissions is kind of the state of the art.
00:20:06> 00:20:10:	This question of wonder identifying if the carbon emissions of
00:20:10> 00:20:13:	the electricity grid is say worse in the middle of
00:20:13> 00:20:14:	the day,
00:20:14> 00:20:16:	'cause you're running peaker plants and some of these gas
00:20:16> 00:20:16:	plans,
00:20:16> 00:20:17:	but it may be. Better at night.
00:20:17> 00:20:19:	Maybe you're getting more wind,
00:20:19> 00:20:23:	and in those times, could you actually regulate compliance based
00:20:23> 00:20:24:	on time of use emissions?
00:20:24> 00:20:27:	So there's a lot of factors that go into making
00:20:27> 00:20:30:	a successful program so to jump into New York City
00:20:30> 00:20:30:	specifically,
00:20:30> 00:20:32:	this is a dense slide,
00:20:32> 00:20:33:	but I think it tries to.
00:20:33> 00:20:35:	I've tried to summarize kind of a long history of
00:20:36> 00:20:37:	New York City climate plans.
00:20:37> 00:20:41:	This is really specifically only to the building sector back
00:20:41> 00:20:41:	in 2005.
00:20:41> 00:20:44:	Under Bloomberg he created was called plan YC.
00:20:44> 00:20:47:	At that point they had a.
00:20:47> 00:20:49:	I guess it was 30 by 30 was that was
00:20:49> 00:20:53:	the the really big splash was let's reduce our carbon
00:20:53> 00:20:54:	footprint 30%
00:20:54> 00:20:56:	by 2030 from 2005 levels.
00:20:56> 00:20:58:	As you can see, that's been ratcheted up.
00:20:58> 00:21:00:	Then it became 40, then it became 80.
00:21:00> 00:21:02:	Now it's essentially carbon neutral by 2050,
00:21:02> 00:21:05:	so in that course of that history,
00:21:05> 00:21:07:	in 2009, a number of laws were passed in New

00:21:07> 00:21:10:	York City under what they called the green are the
00:21:10> 00:21:10:	greeter?
00:21:10> 00:21:13:	Excuse me, the greener, greater buildings plan.
00:21:13> 00:21:16:	I helped to work on that.
00:21:16> 00:21:18:	The development of those laws.
00:21:18> 00:21:22:	And that really paved the way and created the foundation
00:21:22> 00:21:23:	for the collecting.
00:21:23> 00:21:27:	The data that the city policy makers needed in order
00:21:28> 00:21:32:	to build an emissions compliance law like local on 97.
00:21:32> 00:21:35:	So it's really only because of both the energy data
00:21:35> 00:21:38:	that's been collected from what's called local law 84,
00:21:38> 00:21:43:	which is annual Energy Star benchmarking and the equipment level
00:21:43> 00:21:47:	data which is collected by local law 87 where buildings
00:21:47> 00:21:49:	have to do energy audits and.
00:21:49> 00:21:54:	Energy and HVAC mechanical equipment.
00:21:54> 00:21:57:	Uh, road maps and essentially equipment lists.
00:21:57> 00:22:01:	That information was pivotal in being able to develop a
00:22:01> 00:22:02:	law like local law 97.
00:22:02> 00:22:05:	There have been a lot of other laws that are
00:22:05> 00:22:07:	listed up here that have been kind of baby steps
00:22:07> 00:22:10:	to getting building owners to think about these types of
00:22:10> 00:22:13:	these ideas clearly local on 97 is really the major
00:22:14> 00:22:17:	milestone that says this is performance based.
00:22:17> 00:22:18:	We don't care how you get here,
00:22:18> 00:22:22:	but you need to hit this certain emissions by a
00:22:22> 00:22:23:	certain year.
00:22:23> 00:22:25:	So just a quick aside to understand a little bit
00:22:25> 00:22:26:	about the housing stock.
00:22:26> 00:22:28:	This made that the building stock.
00:22:28> 00:22:29:	This may come back to our just into our discussion
00:22:29> 00:22:30:	a little bit,
00:22:30> 00:22:33:	but to give you all a little bit of background
00:22:33> 00:22:34:	NYC essentially,
00:22:34> 00:22:37:	you know most of the buildings by count our multifamily
00:22:37> 00:22:38:	buildings,
00:22:38> 00:22:40:	but most of the you know the high rise buildings
00:22:41> 00:22:43:	are office buildings and that's what you think of the
00:22:43> 00:22:44:	New York City.
00:22:44> 00:22:46:	But about 2/3 of the square footage in 2/3 of
00:22:46> 00:22:50:	their missions actually come from residential and multifamily buildings.

00:22:50> 00:22:53:	So when you think about tackling carbon emissions across the
00:22:53> 00:22:54:	city,
00:22:54> 00:22:58:	we really have to tackle existing multifamily mid and high-rise
00:22:58> 00:23:03:	buildings to reduce carbon emissions of the existing housing stock.
00:23:03> 00:23:07:	These laws, local on 97 at the moment,
00:23:07> 00:23:12:	only impacts buildings, 25,000 square feet and above.
00:23:12> 00:23:14:	So the way local law 97 works just to get
00:23:14> 00:23:16:	into the little weeds and give us a little bit
00:23:16> 00:23:18:	of context for the discussion later.
00:23:18> 00:23:23:	Local 97 essentially put in place carbon emissions limits per
00:23:23> 00:23:24:	square foot.
00:23:24> 00:23:28:	For based on various building type usages and essentially they
00:23:28> 00:23:31:	did this by using leveraging all of that data they
00:23:31> 00:23:35:	had collected over 10 years and striking these two lines,
00:23:35> 00:23:39:	striking a 20th percentile line and striking and 80th percentile
00:23:39> 00:23:42:	line based on these types of functions that they saw
00:23:42> 00:23:44:	within the existing building stock.
00:23:44> 00:23:49:	So roughly the first deadline essentially impacts only buildings that
00:23:49> 00:23:53:	are the worst 20th percent of that type of building,
00:23:53> 00:23:56:	and this next performance. Period beginning in 2030 hits the
00:23:57> 00:23:57:	80th percentile.
00:23:57> 00:24:00:	So statistically speaking, if you're an average building,
00:24:00> 00:24:04:	you will be fine under the first performance period,
00:24:04> 00:24:06:	you will hit those limits,
00:24:06> 00:24:09:	but by 2030 you'll need to make reductions and then
00:24:09> 00:24:13:	beginning in 2035 they haven't announced yet what those targets
00:24:13> 00:24:14:	will be,
00:24:14> 00:24:19:	but the goal ultimately is carbon neutral by 2050.
00:24:19> 00:24:21:	So I have another slide in the moment to kind
00:24:21> 00:24:24:	of shows how you apply those limits to your buildings,
00:24:24> 00:24:26:	but some of the rest of the structure of this
00:24:26> 00:24:26:	law,
00:24:26> 00:24:29:	in addition to the emissions limits per property type,
00:24:29> 00:24:31:	are some other accommodations as you do when you get
00:24:31> 00:24:34:	into the weeds of this within the building stock in
00:24:34> 00:24:34:	your own city,
00:24:34> 00:24:38:	there's nonprofits, there's schools, there's public housing.
00:24:38> 00:24:41:	There's a lot of different types of buildings that they

00:24:41> 00:24:44:	had to create some different kind of different landing paths
00:24:44> 00:24:47:	for those various types of buildings you know,
00:24:47> 00:24:49:	based on age based on ability to pay.
00:24:49> 00:24:50:	Some of those other types of impacts,
00:24:50> 00:24:54:	so there are some alternative compliance for certain types of
00:24:54> 00:24:58:	buildings they are currently working on some adjustments and variances
00:24:58> 00:25:01:	depending on some of these heavier types of users.
00:25:01> 00:25:05:	It's phone switching. You know some of these really did
00:25:05> 00:25:07:	heavy data users and then the fine structure.
00:25:07> 00:25:13:	As I mentioned, they also did create two new governance
00:25:13> 00:25:13:	bodies.
00:25:13> 00:25:16:	One is the new office that this now reports into.
00:25:16> 00:25:18:	We call it the OBP office of Building Energy and
00:25:19> 00:25:22:	Emissions Performance and then this Advisory Board which is really
00:25:22> 00:25:25:	running this whole comment period which is happening now.
00:25:25> 00:25:27:	So just a little bit of nuts and bolts,
00:25:27> 00:25:30:	and then I've got some kind of ideas here on
00:25:30> 00:25:33:	kind of how are how we see the real estate
00:25:33> 00:25:36:	industry attacking this and approaching this.
00:25:36> 00:25:38:	That so in order to calculate your limit in a
00:25:38> 00:25:39:	specific building,
00:25:39> 00:25:42:	you essentially take the square footage of each of those
00:25:42> 00:25:44:	types of spaces within your building and multiply it by
00:25:44> 00:25:45:	the limit.
00:25:45> 00:25:50:	So you essentially ultimately get this prorated limit for your
00:25:50> 00:25:50:	building.
00:25:51> 00:25:53:	If it's a mixed use building.
00:25:53> 00:25:55:	And then the complicated part is then you also in
00:25:55> 00:25:57:	order to understand your emissions.
00:25:57> 00:25:59:	We've got a lot of questions people calling,
00:25:59> 00:26:01:	saying. How do I measure the emissions from my building?
00:26:01> 00:26:03:	Is it? Is there a meter that just tells me
00:26:04> 00:26:04:	my emissions is?
00:26:04> 00:26:06:	Do I go up to the roof and I hold
00:26:06> 00:26:09:	something up there and I measure this emissions coming out
00:26:09> 00:26:10:	of the building?
00:26:10> 00:26:12:	No to either one of those?
00:26:12> 00:26:16:	Essentially you take every utility that's being consumed at the
00:26:16> 00:26:19:	building and you have to multiply it by a factor
00:26:19> 00:26:23:	that converts it from its utility consumption into carbon carbon

00:26:23> 00:26:25:	emissions, or CO2. Equivalent as it's called,
00:26:25> 00:26:29:	so some of those are physical constants like oil and
00:26:29> 00:26:29:	gas.
00:26:29> 00:26:33:	Others are really based on factors out of your control,
00:26:33> 00:26:35:	potentially as a building owner,
00:26:35> 00:26:38:	which on the electricity front right now is based on
00:26:38> 00:26:41:	the renewable content that is in the grid.
00:26:41> 00:26:45:	So a more renewable, more renewable electricity grid will give
00:26:45> 00:26:48:	you a lower carbon footprint for the same amount of
00:26:48> 00:26:49:	energy used.
00:26:49> 00:26:51:	And then ultimately, for here in New York City,
00:26:51> 00:26:52:	the way this is written,
00:26:52> 00:26:54:	you take your emissions. You see,
00:26:54> 00:26:56:	if you're over or under that limit.
00:26:56> 00:26:58:	And for every metric ton of carbon per year that
00:26:58> 00:26:59:	you're over the limit,
00:26:59> 00:27:02:	you have this \$268 fund.
00:27:02> 00:27:03:	And then there are some adjustments.
00:27:03> 00:27:07:	They did create some directions that allow for some purchase
00:27:07> 00:27:10:	if you are over this limit and you are not
00:27:10> 00:27:12:	able to reduce your energy usage,
00:27:12> 00:27:14:	which drives emissions to get to these limits,
00:27:14> 00:27:18:	there are some essentially some adjustments that you can make
00:27:18> 00:27:21:	some off-site purchases at the moment you can purchase carbon
00:27:21> 00:27:22:	offsets for up to 10%
00:27:22> 00:27:26:	of your footprint, or you could potentially purchase these renewable
00:27:26> 00:27:27:	energy certificates.
00:27:27> 00:27:31:	At the moment there are no renewable energy certificates that
00:27:31> 00:27:32:	meet the laws definition.
00:27:32> 00:27:34:	In the market, so that's changing.
00:27:34> 00:27:35:	We do see some coming.
00:27:35> 00:27:37:	Potentially there was an announcement last week.
00:27:37> 00:27:40:	We could talk more about to bring more renewable electricity
00:27:40> 00:27:41:	into New York City,
00:27:41> 00:27:44:	but at the moment these two pathways we really tell
00:27:44> 00:27:45:	our building owner,
00:27:45> 00:27:49:	clients wait and see. Don't don't consider these as part
00:27:49> 00:27:50:	of your initial strategy.

00:27:50> 00:27:54:	Let's try to drive down energy use as your primary
00:27:54> 00:27:54:	strategy.
00:27:54> 00:27:57:	An example here that just just bring this home for
00:27:57> 00:27:59:	a specific building.
00:27:59> 00:28:01:	This is an actual client of ours,
00:28:01> 00:28:06:	1.1 million square foot. Building an average energy intensity
	average
00:28:06> 00:28:07:	carbon intensity is 30%
00:28:07> 00:28:09:	below the first limit, but it's 30%
00:28:09> 00:28:13:	above the second limit, resulting in about a \$400,000 annual
00:28:13> 00:28:14:	fine.
00:28:14> 00:28:17:	So if you put that into a savings calculator for
00:28:17> 00:28:18:	upgrades,
00:28:18> 00:28:20:	that really will accelerate your payback.
00:28:20> 00:28:24:	If you start to include these the avoiding these files.
00:28:24> 00:28:28:	So last couple slides here that this will go into
00:28:28> 00:28:30:	effect in May of 2025 2020,
00:28:30> 00:28:33:	four is actually the first year that will be measured
00:28:33> 00:28:34:	against these limits.
00:28:34> 00:28:37:	In 2025 you will submit and I will not read
00:28:37> 00:28:39:	through everything on the right side here,
00:28:39> 00:28:42:	but there are definitely some details within the law that
00:28:42> 00:28:45:	are being worked out by committee currently and then the
00:28:45> 00:28:47:	last two slides here are really just kind of my
00:28:47> 00:28:49:	commentary and I may want to put this back to
00:28:49> 00:28:52:	conversation and maybe we'll skip over some of this commentary,
00:28:52> 00:28:54:	but the main one really here is.
00:28:54> 00:28:57:	What this has meant in the real estate industry in
00:28:57> 00:29:00:	New York is that every discussion of every intervention in
00:29:00> 00:29:03:	the building always hinges and always touches on what the
00:29:03> 00:29:05:	impact on the carbon emissions will be.
00:29:05> 00:29:06:	It can be, you know,
00:29:06> 00:29:08:	tenant renewals, end of life upgrades,
00:29:08> 00:29:11:	cosmetic upgrades. Any of these discussions that you have
	in
00:29:11> 00:29:12:	a building,
00:29:12> 00:29:14:	new tenants moving in. What are we doing?
00:29:14> 00:29:15:	Oh, let's update the lobby.
00:29:15> 00:29:17:	What are we doing? We are always called in.
00:29:17> 00:29:20:	Everyone always has to be part of that discussion to
00:29:20> 00:29:23:	say how will this project impact the carbon emissions of
00:29:23> 00:29:25:	the building and how will it.

00:29:25> 00:29:28:	How will we? Be approaching or not approaching those limits
00:29:28> 00:29:31:	of local law 97 so I think I'll leave it
00:29:31> 00:29:31:	there.
00:29:31> 00:29:33:	I want to. I want to be able to get
00:29:33> 00:29:34:	into our conversation,
00:29:34> 00:29:35:	but as I said this,
00:29:35> 00:29:38:	the result of this law really is that carbon emissions
00:29:38> 00:29:41:	is now in the forefront of everybody's thinking when they're
00:29:41> 00:29:43:	designing new buildings.
00:29:43> 00:29:45:	When they're modifying existing buildings,
00:29:45> 00:29:47:	and when they're when they're buying buildings,
00:29:47> 00:29:49:	everyone is asking if you buy a building.
00:29:49> 00:29:50:	How does it compare to these limits,
00:29:50> 00:29:51:	and what does that mean for my?
00:29:51> 00:29:54:	For my purchase price? So thank you,
00:29:54> 00:29:56:	and I look forward to our conversation.
00:29:56> 00:29:59:	So I will stop sharing and give it back to
00:29:59> 00:30:00:	you.
00:30:00> 00:30:01:	Sandra, thank you so
00:30:01> 00:30:03:	much. Thank you so much.
00:30:03> 00:30:06:	Chris fascinating. So I have a couple of questions for
00:30:06> 00:30:08:	you and then I'm going to invite some thoughts and
00:30:08> 00:30:11:	comments from our other panelists as well.
00:30:11> 00:30:14:	And of course, we're inviting the audience to to weigh
00:30:14> 00:30:14:	in.
00:30:14> 00:30:17:	But Chris, I want to start with like we're really
00:30:17> 00:30:20:	curious about how something like this gets implemented.
00:30:20> 00:30:23:	And I I'm interested to know who were the Champions
00:30:23> 00:30:27:	and what was the a-ha moment that actually enabled this.
00:30:27> 00:30:30:	Poppin up in New York City because of course we
00:30:30> 00:30:35:	want to create that same magical combination that if we
00:30:35> 00:30:37:	can in other parts of North America.
00:30:38> 00:30:40:	Uhm, it's a great question.
00:30:40> 00:30:41:	There are a few pieces to this,
00:30:41> 00:30:44:	some more cynical than others.
00:30:44> 00:30:47:	One that the the pathway we've been on in
00:30:47> 00:30:51:	New York City with all the legislation that's been passed.
00:30:51> 00:30:52:	You know, going back. Like I said,
00:30:52> 00:30:56:	almost 15 years now. It was this unstoppable train,
00:30:56> 00:30:59:	so there was no end and even building owners and
00:30:59> 00:31:01:	we work with a lot of building owners,
00:31:01> 00:31:05:	some who are very old school and potentially you know,

	a star a su a s
00:31:05> 00:31:07:	on the wrong side of some of these topics.
00:31:07> 00:31:10:	They knew this wasn't. Stop over train so when when
00:31:10> 00:31:12:	they looked at and I have it does go back
00:31:12> 00:31:15:	somewhat to politics when they looked at the politics in
00:31:15> 00:31:18:	New York in both in the city and the state,
00:31:18> 00:31:22:	there's really no chance that that even if somehow the
00:31:22> 00:31:26:	lobbying effort could kind of diminish or delay and immediate
00:31:26> 00:31:29:	effort to make these changes,
00:31:29> 00:31:30:	that it was never there was going to come back
00:31:30> 00:31:30:	again,
00:31:30> 00:31:32:	but it was. There's no way this was going away
00:31:32> 00:31:32:	forever.
00:31:32> 00:31:34:	So that's the cynical side of it,
00:31:34> 00:31:36:	which is like even even some of those folks who
00:31:36> 00:31:36:	said,
00:31:36> 00:31:37:	hey, can we avoid this?
00:31:37> 00:31:39:	They said there's no way.
00:31:39> 00:31:40:	We can avoid this forever,
00:31:40> 00:31:43:	so, but so that brought them to the table because
00:31:43> 00:31:45:	they couldn't just be the the you know,
00:31:45> 00:31:48:	the party of no, they actually said OK,
00:31:48> 00:31:50:	let's roll up our sleeves and let's let's discuss how
00:31:50> 00:31:52:	to make this better because there's no way it's going
00:31:52> 00:31:53:	to go away.
00:31:53> 00:31:56:	So I think that that tidal wave of energy and
00:31:56> 00:31:56:	like I said,
00:31:56> 00:31:59:	this unstoppable train meant that they had to get on
00:31:59> 00:32:01:	it or they were just going to get run over.
00:32:01> 00:32:03:	So it's great man, I like that one,
00:32:03> 00:32:03:	but
00:32:03> 00:32:06:	can you? Sorry, I just want to know who was
00:32:06> 00:32:07:	driving the train
00:32:07> 00:32:10:	driving the train. There are a lot of nonprofits.
00:32:10> 00:32:14:	There are a lot of sustainability groups in New York
00:32:14> 00:32:17:	City that advocate for energy advocate for the environment.
00:32:17> 00:32:19:	Some specifically in real estate.
00:32:19> 00:32:22:	Some more broadly outside of real estate,
00:32:22> 00:32:25:	there's EDF. There's NRDC there's ULI is Urban Green
	Council,
00:32:25> 00:32:30:	there's building energy exchange. There's a number of
	groups that
00:32:30> 00:32:33:	have really gotten a lot of support.

00:32:33> 00:32:34:	From a lot of the private enterprise,
00:32:34> 00:32:38:	right, there is definitely a private sector.
00:32:38> 00:32:42:	Leaders who know that we need to do this so
00:32:42> 00:32:46:	they're really championing those groups to lobby to discuss.
00:32:46> 00:32:49:	To bring this to the forefront of the discussion so
00:32:49> 00:32:51:	that policymakers know that it is a priority.
00:32:51> 00:32:54:	So it's kind of it's both private and public sector.
00:32:54> 00:32:55:	I would say both together
00:32:56> 00:33:00:	great. OK, thanks. I'm gonna actually ask Kirk question on
00:33:00> 00:33:01:	this front.
00:33:01> 00:33:06:	So Kirk. You've you've led the design and delivery of,
00:33:06> 00:33:10:	you know, millions and millions of dollars worth of green
00:33:10> 00:33:13:	incentive and market transformation projects across Canada.
00:33:13> 00:33:16:	You know the Canadian marketplace really well.
00:33:16> 00:33:19:	So when you listen to.
00:33:19> 00:33:24:	Chris is presentation and and with your knowledge of this
00:33:24> 00:33:25:	program.
00:33:25> 00:33:29:	How you know, does the building inventory differ a lot
00:33:29> 00:33:32:	in New York compared to Toronto,
00:33:32> 00:33:36:	and what are the takeaways and the learnings that we
00:33:36> 00:33:40:	can take from New York City's experience and apply them
00:33:40> 00:33:41:	in Toronto?
00:33:41> 00:33:47:	Any thoughts on that? I think you're on mute.
00:33:49> 00:33:50:	Great, great points,
00:33:50> 00:33:54:	that's better, that's better. Great question.
00:33:54> 00:33:59:	The landscape between Toronto and New York City and in
00:33:59> 00:33:59:	fact,
00:33:59> 00:34:03:	in fact, the Greater Golden Horseshoe area is similar on
00:34:03> 00:34:05:	the commercial side,
00:34:05> 00:34:07:	but on the large volume of buildings.
00:34:07> 00:34:09:	The large number of buildings there.
00:34:09> 00:34:11:	It's both in cases they're multi res,
00:34:11> 00:34:13:	but the multi res side.
00:34:13> 00:34:17:	There's a lot of low rise pre war buildings so
00:34:17> 00:34:21:	when you look at how these cities compare there's a
00:34:21> 00:34:25:	big demographic of real estate with Taz.
00:34:25> 00:34:28:	Very poor efficiency and fuel and things like that and
00:34:28> 00:34:31:	we don't have that issue in in Toronto,
00:34:31> 00:34:33:	so we're ahead on the technical side.
00:34:33> 00:34:35:	So there's basically three areas,
00:34:35> 00:34:38:	technical, financial and capacity building.
00:34:38> 00:34:41:	Number one is the actual inventory is different when you

00:34:41> 00:34:44:	go to a mid rise and high-rise situation.
00:34:44> 00:34:47:	Particularly on the multifamily, they're very similar in terms of
00:34:47> 00:34:49:	stock and style etc etc.
00:34:49> 00:34:51:	A lot of post war buildings and a lot of
00:34:51> 00:34:52:	work being done on that.
00:34:52> 00:34:55:	The second thing from a technology standpoint.
00:34:55> 00:34:56:	Is or a technical standpoint?
00:34:56> 00:34:59:	Is that the fuel sources they're using?
00:34:59> 00:35:03:	Steam and fuel oil as opposed to gas and hot
00:35:03> 00:35:04:	water,
00:35:04> 00:35:07:	and that is important because our big solution is heat
00:35:07> 00:35:10:	pump on electrification and they have an extra step that
00:35:11> 00:35:13:	they need to do that us in Toronto don't.
00:35:13> 00:35:15:	So there's a benefit to us there,
00:35:15> 00:35:18:	right? The third thing that I would say is it's
00:35:18> 00:35:20:	not so so much technical,
00:35:20> 00:35:21:	but it is a logistic issue.
00:35:21> 00:35:23:	And now it's feeding into the financial part of the
00:35:23> 00:35:24:	equation,
00:35:24> 00:35:26:	which is the majority of New Yorkers.
00:35:26> 00:35:29:	Don't pay for their utilities right?
00:35:29> 00:35:33:	As opposed to the majority of apartment dwellers in private
00:35:33> 00:35:35:	rental and condos etc in the City of Toronto and
00:35:36> 00:35:37:	especially in the commercial.
00:35:37> 00:35:40:	They all pay for their utilities by and large so
00:35:40> 00:35:43:	it really changes the split incentive conversation.
00:35:43> 00:35:47:	I'll quickly go through the rest of the financials and
00:35:47> 00:35:49:	that is that there is some.
00:35:49> 00:35:53:	There's different rent control policies within both environments and both
00:35:53> 00:35:56:	create some distortive regulatory issues where there's a.
00:35:56> 00:35:57:	There's a maximum that you can.
00:35:57> 00:36:01:	Invest in in a retrofit before you can't recover that
00:36:01> 00:36:03:	out of rent increases.
00:36:03> 00:36:05:	And even if there's affordability issues,
00:36:05> 00:36:08:	you want to make sure that those are addressed as
00:36:08> 00:36:08:	well,
00:36:08> 00:36:12:	right? So there's a lot of opportunities on the financial
00:36:12> 00:36:16:	business case for valuation improvements.
00:36:16> 00:36:18:	The markets are very hot in Toronto,
00:36:18> 00:36:21:	and there's a lot of transactions that are happening.
00:36:21> 00:36:25:	We're in a state where we have intergenerational wealth,

00:36:25> 00:36:28: 00:36:28> 00:36:31:	right? That is getting out of the real estate. Games, so there's a lot of sales being done from
00:36:32> 00:36:35:	
00:36:35> 00:36:39:	families into REITs or larger institutional investors, and so at those times assailing capitalization,
00:36:39> 00:36:41:	
00:36:41> 00:36:43:	there's some real opportunities there.
00:36:43> 00:36:44:	The last thing else talk about is on the capacity
00:36:43> 00:36:44:	building side,
	and. Taft has done some really great work on the accelerator side.
00:36:47> 00:36:48:	
00:36:48> 00:36:50:	They've put in the resources,
00:36:50> 00:36:51:	the capacity building and the financing.
00:36:51> 00:36:53:	The city's done a lot as well,
00:36:53> 00:36:57:	but New York has a green Bank that is operational.
00:36:57> 00:37:00:	They have one that is conducive for energy services and
00:37:00> 00:37:03:	service agreements and PP as especially 'cause we have a
00:37:03> 00:37:05:	lot of opportunities on district.
00:37:05> 00:37:10:	So there's some financing supports that aren't in Canada yet,
00:37:10> 00:37:12:	and specially in Toronto that we could build in.
00:37:12> 00:37:17:	Secondly, I would say there is things like BX.
00:37:17> 00:37:20:	And capacity building institutions that we don't have yet that
00:37:20> 00:37:25:	provide centers of communication and recourse for owners that are
00:37:25> 00:37:27:	interested in doing this work.
00:37:27> 00:37:28:	To be able to get up to speed on that.
00:37:28> 00:37:31:	So those are places where we are different and what
00:37:31> 00:37:33:	we can and can't pull from.
00:37:33> 00:37:37:	Well, thanks, well I'm actually gonna pull the thread on
00:37:37> 00:37:40:	the financing and turn it over to Julia.
00:37:40> 00:37:44:	So Julia, you know we just heard her talk about
00:37:44> 00:37:47:	a number of the areas where in New York and
00:37:47> 00:37:52:	Toronto are are quite different and thinking about the financing
00:37:52> 00:37:56:	side as we know, deep retrofits have the opportunity for
00:37:56> 00:37:59:	return on investment up to a point and but they
00:37:59> 00:38:01:	obviously require capital.
00:38:01> 00:38:03:	And Taft has a ton of experience.
00:38:03> 00:38:08:	In helping a fund. Projects fund demonstrations move the needle
00:38:08> 00:38:12:	to enable building retrofits and decarbonization,
00:38:12> 00:38:15:	so I actually have a double barrel question for you
00:38:15> 00:38:16:	is number one is,
00:38:16> 00:38:20:	where do you see the rule of the governments at
00:38:20> 00:38:24:	different levels and enabling all this and number two?

00:38:24> 00:38:28:	Is there anything on your wish list for the City
00:38:28> 00:38:32:	of Toronto that would help make task role and the
00:38:32> 00:38:37:	whole ecosystem of financing this stuff work more smoothly?
00:38:37> 00:38:37:	Hey,
00:38:38> 00:38:41:	thanks Sandra and thanks Chris for that presentation because we
00:38:42> 00:38:44:	always look for inspiration and best practice.
00:38:44> 00:38:48:	You know how we can sort of let you fail
00:38:48> 00:38:53:	fast so that we can go faster and really definitely
00:38:53> 00:38:58:	see a requirement and a carbon focus requirement as a
00:38:58> 00:39:01:	key driver. Our profile is a little bit different as
00:39:01> 00:39:05:	Kirk was saying and from the admissions perspective buildings are
00:39:05> 00:39:05:	about 50%
00:39:05> 00:39:07:	we I think we would probably have more industry.
00:39:07> 00:39:10:	Then New York City? Uhm,
00:39:10> 00:39:12:	yeah, so that's the balance is out,
00:39:12> 00:39:16:	but still it's it's half and UM,
00:39:16> 00:39:19:	and that and we we really need to get some
00:39:19> 00:39:24:	drivers that are actually going to really focus the mind
00:39:24> 00:39:28:	and focus the the activity on reducing carbon in that
00:39:28> 00:39:31:	space. And right now we have just like and it's
00:39:32> 00:39:32:	great.
00:39:32> 00:39:35:	We you know we incubated and and see if Toronto
00:39:35> 00:39:38:	and and the province actually moved ahead with the.
00:39:38> 00:39:41:	Energy and water reporting requirement,
00:39:41> 00:39:43:	but that's truly just information,
00:39:43> 00:39:45:	it's energy and you can do a multiplier or get
00:39:45> 00:39:46:	the coefficient.
00:39:46> 00:39:50:	So it's very it's. It's a good solid base for
00:39:50> 00:39:54:	us that that gives us some intelligence about where our
00:39:54> 00:39:58:	carbon is and we can build on this and use
00:39:58> 00:40:03:	it to you know to actually make some smart interventions.
00:40:03> 00:40:06:	And you know, like building on this analysis that that
00:40:06> 00:40:09:	Kirk was indicating of what kinds of buildings?
00:40:09> 00:40:10:	Where is the carbon like?
00:40:10> 00:40:13:	Let's use a follow the carbon approach and and just
00:40:13> 00:40:14:	start.
00:40:14> 00:40:17:	You know, moving strategically and the real opportunity here is
00:40:17> 00:40:20:	the multiple benefits and so I will get to your
00:40:20> 00:40:22:	point about the financing.
00:40:22> 00:40:26:	You know we there, there's jobs available in retrofitting and

00:40:26> 00:40:27:	their local jobs.
00:40:27> 00:40:29:	They're not jobs, and you know any other place.
00:40:29> 00:40:32:	They're right here, they're savings,
00:40:32> 00:40:34:	you know, at the at the utility,
00:40:34> 00:40:37:	and at the consumer level there's healthier buildings.
00:40:37> 00:40:41:	There's multiple benefits. Come and there's an opportunity to involve
00:40:41> 00:40:43:	a whole range of other players,
00:40:43> 00:40:48:	and including players that have capital and want to invest
00:40:48> 00:40:50:	it in with impact,
00:40:50> 00:40:53:	and there's no better impact,
00:40:53> 00:40:56:	you know, and everybody's talking about impact investing.
00:40:56> 00:41:00:	There's no better impact with a return on investment investment
00:41:00> 00:41:05:	with a return on investment and impact than than energy
00:41:05> 00:41:05:	efficiency.
00:41:05> 00:41:08:	It pays. It doesn't cost it pays,
00:41:08> 00:41:10:	and so. The real champ.
00:41:10> 00:41:14:	The real trick, as you were saying,
00:41:14> 00:41:16:	and we have a lot of experience with this,
00:41:16> 00:41:20:	is to structure appropriately to identify who the owners are
00:41:20> 00:41:22:	and what their what,
00:41:22> 00:41:26:	their opportunity for reduction is to try to do it
00:41:26> 00:41:29:	now rather than sort of in the future and sort
00:41:29> 00:41:34:	of disaggregate the savings so you know to optimize their
00:41:34> 00:41:37:	savings and you know, and there's nothing that focuses the
00:41:37> 00:41:38:	mind more than a fine,
00:41:38> 00:41:40:	so you know, looking to the future.
00:41:40> 00:41:42:	And saying, you know what's it?
00:41:42> 00:41:44:	Not what's going to happen in?
00:41:44> 00:41:47:	You know, 18 months, which is the usual sort of
00:41:47> 00:41:48:	business mentality?
00:41:48> 00:41:50:	What's going to happen in the first period?
00:41:50> 00:41:52:	The second period? The third period?
00:41:52> 00:41:55:	So that I can mitigate my risk financial risk and
00:41:56> 00:42:01:	and then structure investment opportunities based on availability of the
00:42:01> 00:42:04:	owners capital or third party capital?
00:42:04> 00:42:07:	We have utilities. We have the Canon Infrastructure Bank.
00:42:07> 00:42:10:	We've got so many players with capital.
00:42:10> 00:42:14:	Looking to invest that what's missing and this is what
00:42:14> 00:42:15:	Kirk was referring to.

00:42:15> 00:42:19:	Taft Retrofit accelerator is that concierge?	
00:42:19> 00:42:21:	And that's when I'm curious about Christmas.	
00:42:21> 00:42:25:	In terms of you know who's playing that concierge role?	
00:42:25> 00:42:27:	What can we learn from that experience?	
00:42:27> 00:42:30:	We've certainly shocked the world and in in terms of	
00:42:30> 00:42:32:	structuring the the retrofit accelerator,	
00:42:32> 00:42:37:	because that capacity that pulling together and stacking all of	
00:42:37> 00:42:41:	the financing and keeping the eye on the carbon.	
00:42:41> 00:42:45:	And the social as well as environmental and financial benefits	
00:42:45> 00:42:45:	is,	
00:42:45> 00:42:49:	you know, that's our opportunity that we shouldn't be squandering.	
00:42:50> 00:42:53:	OK, uhm. Thanks very much for that,	
00:42:53> 00:42:57:	Julia. Uhm, I guess some you know.	
00:42:57> 00:43:00:	I'm thinking now I'd like to.	
00:43:00> 00:43:04:	I'd like to put a question to Stewart.	
00:43:04> 00:43:08:	Stuart, when you think about the City of Toronto's strategy	
00:43:08> 00:43:08:	for,	
00:43:08> 00:43:13:	you know, net zero existing buildings which were very interested	
00:43:13> 00:43:14:	in at the bank.	
00:43:14> 00:43:20:	Actually, because a lot of people think that financed emissions	
00:43:20> 00:43:25:	in banking or all about our financing oil and gas,	
00:43:25> 00:43:30:	which is completely untrue. It's actually housing and buildings.	
00:43:30> 00:43:33:	So yeah, I don't see the protests in St telling	
00:43:33> 00:43:34:	us we should.	
00:43:34> 00:43:39:	Start financing peoples homes but it is the biggest part	
00:43:39> 00:43:39:	of them.	
00:43:39> 00:43:44:	In many cases that financed emissions for UM for banks	
00:43:44> 00:43:46:	and it's really challenging.	
00:43:46> 00:43:51:	So I was wondering about in the City of Toronto's	
00:43:51> 00:43:53:	net zero strategy.	
00:43:53> 00:43:56:	You know one of the top action items that I	
00:43:56> 00:44:01:	found really interesting was requiring annual energy and emissions performance	
00:44:01> 00:44:02:	reporting,	
00:44:02> 00:44:05:	and public disclosures, and it sounds to me like all	
00:44:05> 00:44:06:	of these strategies,	
00:44:06> 00:44:10:	including New York cities and certainly Taft,	
00:44:10> 00:44:13:	helping move the needle in Toronto.	
00:44:13> 00:44:18:	They all start with having good information characterizing the	

	problem.	
00:44:18> 00:44:21:	So just how hard is that kind of be to	
00:44:21> 00:44:23:	accomplish in Toronto?	
00:44:23> 00:44:25:	And are there lessons that we can learn from the	
00:44:25> 00:44:26:	way it unfolded	
00:44:26> 00:44:27:	in New York City?	
00:44:28> 00:44:30:	Sure, thank you very much for the question and again	
00:44:30> 00:44:33:	we would love to talk to you about the building's	
00:44:33> 00:44:33:	peace.	
00:44:33> 00:44:36:	'cause we we see this huge opportunity there.	
00:44:36> 00:44:38:	You know Chris was saying,	
00:44:38> 00:44:40:	you know, we we compare with Washington DC.	
00:44:40> 00:44:42:	I think we also like to compare with Vancouver,	
00:44:42> 00:44:45:	BC but also look at regions across the GTA and	
00:44:45> 00:44:48:	there's a lot of music policies that are doing great	
00:44:48> 00:44:51:	work in this space and really moving the needle.	
00:44:51> 00:44:54:	But that that you know,	
00:44:54> 00:44:57:	we're we're the strategy got adopted in July and we're	
00:44:57> 00:44:59:	in the weeds of the implementation,	
00:44:59> 00:45:02:	planning and considerations now. And you really hit the hammer	
00:45:02> 00:45:04:	on the head in that sense,	
00:45:04> 00:45:07:	and that data is really fundamental to this.	
00:45:07> 00:45:09:	And so, as Julie was saying,	
00:45:09> 00:45:12:	about 55% of emissions come from buildings,	
00:45:12> 00:45:14:	in particular close to 60%	
00:45:14> 00:45:17:	of that. 50% is coming from homes at 31%	
00:45:18> 00:45:21:	of the makeup and multi units at about 29%.	
00:45:21> 00:45:25:	And you know, we're lucky in the sense that we've	
00:45:25> 00:45:25:	had.	
00:45:25> 00:45:28:	We have had EWR be in the market,	
00:45:28> 00:45:29:	but that is again targeted,	
00:45:29> 00:45:34:	a relatively small subsection of buildings over the last little	
00:45:34> 00:45:34:	bit,	
00:45:34> 00:45:38:	and that the. The window is getting smaller,	
00:45:38> 00:45:40:	so we're getting more and more buildings recording so that	
00:45:40> 00:45:41:	that's good.	
00:45:41> 00:45:44:	There's progress there, but I think we really need to	
00:45:44> 00:45:47:	rapidly accelerate and get as much information as we can,	
00:45:47> 00:45:49:	and So what. Our strategy is basically saying is that	
00:45:49> 00:45:52:	we want to roll this out to a smaller subset	
00:45:52> 00:45:52:	of buildings.	

00:45:52> 00:45:56:	You know 25,000 square feet and above as soon as	
00:45:56> 00:45:57:	possible.	
00:45:57> 00:45:59:	That is because that's fundamental,	
00:45:59> 00:46:03:	so we cannot do the oldest remake commissioning work.	
00:46:03> 00:46:04:	We cannot do performance targets.	
00:46:04> 00:46:08:	We're really without that data and that fundamental and the	
00:46:08> 00:46:11:	other part of this is home energy labeling reporting.	
00:46:11> 00:46:14:	So there's more than 400,000 homes in the city,	
00:46:14> 00:46:16:	and so that's the next sort of target area in	
00:46:16> 00:46:16:	terms of that,	
00:46:16> 00:46:18:	data is getting that home data,	
00:46:18> 00:46:21:	and really, in that case we really need to work	
00:46:21> 00:46:25:	quite closely with the federal government to get that information.	
00:46:25> 00:46:27:	So I I think that's really key and I you	
00:46:28> 00:46:29:	know a couple of people mentioned,	
00:46:29> 00:46:31:	you know, I think we need to say where we're	
00:46:31> 00:46:34:	going and so that's what the strategy was really about.	
00:46:34> 00:46:37:	Articulating is that in the next few years this is	
00:46:37> 00:46:39:	this we're in transition.	
00:46:39> 00:46:41:	We're going to encourage. We're gonna ask people to do	
00:46:41> 00:46:42:	this voluntarily,	
00:46:42> 00:46:45:	but in 2025 we're going to start to do these	
00:46:45> 00:46:47:	things in a mandatory way so you know,	
00:46:47> 00:46:49:	this is a public document.	
00:46:49> 00:46:51:	You know this is a public discourse we're having.	
00:46:51> 00:46:53:	We really want to get it out there.	
00:46:53> 00:46:57:	That this is coming. Think what you know what's really	
00:46:57> 00:47:00:	exciting about New York and Julie alluded to this too,	
00:47:00> 00:47:03:	is you know New York being ahead.	
00:47:03> 00:47:04:	Having done this for 10 years,	
00:47:04> 00:47:07:	we will definitely be knocking on know New York store.	
00:47:07> 00:47:10:	Whether it's through C40 or or other organizations.	
00:47:10> 00:47:13:	Select where did things go right and where did they	
00:47:13> 00:47:13:	go wrong?	
00:47:13> 00:47:16:	Because I think that's going to be a real challenge.	
00:47:16> 00:47:20:	Is is articulating the value for this and as I	
00:47:20> 00:47:20:	said,	
00:47:20> 00:47:22:	I think there's different types of building owners,	
00:47:22> 00:47:24:	right? There's building owners who are our own lots of	
00:47:25> 00:47:25:	buildings.	
00:47:25> 00:47:28:	They have energy managers. Been really savvy about how to	

00:47:28> 00:47:31:	do this and then this building owners that don't.		
00:47:31> 00:47:32:	This is going to come as a shock and a		
00:47:32> 00:47:34:	surprise and we don't want that too.		
00:47:34> 00:47:38:	So I think really, really critical.		
00:47:38> 00:47:42:	Critical engagement with these building owners is is going t		
00:47:42> 00:47:44:	be key and I think for the city.		
00:47:44> 00:47:46:	The other thing is we don't want unintended consequences,		
00:47:46> 00:47:49:			
00:47:49> 00:47:51:	right? So I think we really need to think carefully about the equity impacts of these policies,		
00:47:51> 00:47:56:	in particular on multi unit residential properties,		
00:47:56> 00:47:59:	single family homes with a makeup that is already stretched		
00:47:59> 00:48:01:	giving our housing conditions.		
00:48:01> 00:48:04:			
00:48:04> 00:48:06:	So how can we make sure that yes with decarbonizing		
00:48:06> 00:48:08:	but we're not forcing people out of their homes and		
	so that's a key focus for the work going.		
00:48:08> 00:48:12:	Forward as well as understanding the equity impacts on on		
00:48:12> 00:48:16:	key building types and owners and tenants and residents as		
00:48:16> 00:48:16:	well.		
00:48:18> 00:48:21:	Yeah, you don't want to solve one problem obviously and		
00:48:21> 00:48:23:	create another problem that's so that's the whole.		
00:48:23> 00:48:27:	I guess the whole reason why sustainability is a thing.		
00:48:27> 00:48:29:	It's you've got to make sure you're keeping an eye		
00:48:29> 00:48:32:	at all the pillars of sustainability and not pushing so		
00:48:32> 00:48:34:	hard on one that you're you're playing whack a mole		
00:48:34> 00:48:37:	with the creating a host of other problems.		
00:48:37> 00:48:41:	I'm Chris. I'm gonna ask you come so when Stewart		
00:48:41> 00:48:43:	knocks on your door to say,		
00:48:43> 00:48:46:	uh, OK, you did this in New York City.		
00:48:46> 00:48:50:	It's 2025. We have to start moving to make this		
00:48:50> 00:48:50:	mandatory.		
00:48:50> 00:48:54:	Please Chris tell us which he would do differently now		
00:48:54> 00:48:56:	that you know what you know.		
00:48:56> 00:48:59:	What have you learned and what would you tell us		
00:48:59> 00:49:01:	to some of the things that are must do's and		
00:49:02> 00:49:04:	some of the things that are must not do so.		
00:49:04> 00:49:06:	If you had to sum up a couple in each		
00:49:06> 00:49:07:	column,		
00:49:07> 00:49:08:	what would you tell Stewart?		
00:49:09> 00:49:12:	First, I'd say, do you have a week so that		
00:49:13> 00:49:14:	we could sit down?		
00:49:14> 00:49:16:	So no, it's been really interesting,		
00:49:16> 00:49:17:	you know. And like I said,		

00:49:17> 00:49:19:	we we work with the city policymakers,	
00:49:19> 00:49:21:	but we also work a lot with the private sector	
00:49:21> 00:49:24:	who has to navigate these things so we actually get	
00:49:24> 00:49:25:	to see both sides of it.	
00:49:25> 00:49:27:	Some of the policymakers don't get the feedback if you're	
00:49:27> 00:49:28:	just a policymaker,	
00:49:28> 00:49:31:	you don't see how people try to comply with these,	
00:49:31> 00:49:32:	so we get to play kind of both roles there,	
00:49:32> 00:49:36:	which is great. There are a few things I would	
00:49:36> 00:49:37:	say.	
00:49:37> 00:49:40:	One is coordination and bringing all the right stakeholders to	
00:49:40> 00:49:40:	the table.	
00:49:40> 00:49:44:	I think like you mentioned Stuart that being public about	
00:49:44> 00:49:45:	where you're going.	
00:49:45> 00:49:47:	What is that broader goal you do need?	
00:49:47> 00:49:48:	As I mentioned the beginning,	
00:49:48> 00:49:52:	you'd need all these stakeholders to understand their part.	
00:49:52> 00:49:56:	You need to speak to the utilities you have to	
00:49:56> 00:49:58:	speak to building owners.	
00:49:58> 00:49:59:	All of them have a lot,	
00:49:59> 00:50:00:	a lot of impact on this,	
00:50:00> 00:50:03:	so if you you know if you don't know what	
00:50:03> 00:50:06:	the utilities direction is or what they're planning,	
00:50:06> 00:50:09:	you could be talking about one initiative and at the	
00:50:09> 00:50:10:	same time they're out.	
00:50:10> 00:50:12:	You know, asking for a new rate case to go	
00:50:12> 00:50:16:	increase infrastructure in a certain area that totally doesn't align	
00:50:16> 00:50:18:	with you know what what you've said this.	
00:50:18> 00:50:21:	This broader mission is so one is getting all the	
00:50:21> 00:50:22:	right people to the table.	
00:50:22> 00:50:26:	Other I would say is what 11 missing link that	
00:50:26> 00:50:27:	we have in our law,	
00:50:27> 00:50:29:	which is the energy audit law,	
00:50:29> 00:50:34:	local law 87, which is does require commissioning of systems,	
00:50:34> 00:50:37:	does require inventorying of mechanical systems.	
00:50:37> 00:50:42:	It excludes tenant equipment, which is just a gaping hole	
00:50:42> 00:50:44:	in all of our analysis.	
00:50:44> 00:50:49:	So when we're looking to analyze citywide opportunities for energy	
00:50:49> 00:50:50:	reduction,	
00:50:50> 00:50:52:	you know. Even in the office.	

00:50:52> 00:50:54:	So in multifamily it's almost all you know it's all	
00:50:55> 00:50:55:	tenant,	
00:50:55> 00:50:57:	right? You maybe have a boiler common,	
00:50:57> 00:50:59:	but the rest of the energy is all tenant,	
00:50:59> 00:51:01:	so that could be 80%	
00:51:01> 00:51:05:	tenant. And then in commercial buildings maybe it's fifty 6070%	
00:51:05> 00:51:08:	tenant, which just means you're missing all of the road	
00:51:08> 00:51:12:	map you need in order to find those opportunities for	
00:51:12> 00:51:12:	savings.	
00:51:12> 00:51:14:	So like we atco green,	
00:51:14> 00:51:16:	we do a lot of energy audits of buildings for	
00:51:16> 00:51:16:	local law.	
00:51:16> 00:51:19:	87 were always pushing the owners.	
00:51:19> 00:51:21:	The law only requires common area based building.	
00:51:21> 00:51:24:	System analysis, but we also think we should analyze the	
00:51:24> 00:51:28:	tenant systems because ultimately when you look back at that	
00:51:28> 00:51:28:	report,	
00:51:28> 00:51:31:	and I've analyzed a lot of that city level data	
00:51:32> 00:51:35:	so the city gets this inventory of every building,	
00:51:35> 00:51:37:	it has an inventory, but only of the common systems.	
00:51:37> 00:51:39:	It doesn't have an inventory of the tenant system,	
00:51:39> 00:51:43:	so when we're trying to develop citywide policies that can	
00:51:43> 00:51:48:	have the largest impact for major reductions were missing,	
00:51:48> 00:51:50:	you know how many buildings have window air conditioners?	
00:51:50> 00:51:53:	How many buildings have? All of those tenant controlled systems	
00:51:53> 00:51:54:	we have.	
00:51:54> 00:51:56:	We're totally flying blind, so one I would say in	
00:51:56> 00:52:00:	that sense make sure you're collecting all the data you're	
00:52:00> 00:52:03:	going to need and its whole building in order to	
00:52:03> 00:52:06:	drive that, that to find those opportunities for savings so	
00:52:06> 00:52:09:	that that's a really big piece of it,	
00:52:09> 00:52:10:	because like you said, Julia,	
00:52:10> 00:52:14:	the data collection process of benchmarking this and getting that	
00:52:14> 00:52:18:	information in that will be the foundation of your plans,	
00:52:18> 00:52:20:	because that's where you're starting.	
00:52:20> 00:52:21:	So I would say you know.	
00:52:21> 00:52:23:	That's probably the main one.	
00:52:23> 00:52:24:	Those two are the main ones you know.	
00:52:24> 00:52:28:	Collaborating in right? People to the table and making sure	

00:52:28> 00:52:30:	you're collecting all that right data.	
00:52:30> 00:52:32:	Those those to me and also I would say and	
00:52:32> 00:52:34:	we've tried it in New York,	
00:52:34> 00:52:37:	even though this law doesn't go into effect until 2025	
00:52:37> 00:52:41:	is get building owners to start measuring that that energy	
00:52:41> 00:52:42:	usage.	
00:52:42> 00:52:44:	It sounds like Kurt, what you're saying is that there's	
00:52:44> 00:52:46:	more direct payment of utility bills.	
00:52:46> 00:52:49:	There's more visibility. I was listening to a podcast yesterday,	
00:52:49> 00:52:53:	said homeowners spend 8 minutes a year thinking about their	
00:52:53> 00:52:54:	utilities.	
00:52:54> 00:52:56:	8 minutes for the whole year.	
00:52:56> 00:52:59:	Thinking about the utilities so they have no idea what	
00:52:59> 00:53:00:	they used.	
00:53:00> 00:53:01:	I have no idea what they spend,	
00:53:01> 00:53:03:	it's just you know your bill comes in.	
00:53:03> 00:53:07:	It gets paid so that the the homeowner side of	
00:53:07> 00:53:11:	things and getting awareness I would say is another piece	
00:53:11> 00:53:15:	and the last piece I'll say is that that that.	
00:53:15> 00:53:18:	The peer pressure that's that's as part of this,	
00:53:18> 00:53:20:	I've been surprised it's actually interesting,	
00:53:20> 00:53:23:	little tidbit that there's there's two laws right now that	
00:53:23> 00:53:26:	we're that we're talking to clients about one.	
00:53:26> 00:53:27:	Is this carbon emissions law,	
00:53:27> 00:53:30:	which could have huge penalties come in 2025.	
00:53:30> 00:53:32:	The other is a law that makes you put a	
00:53:32> 00:53:34:	letter grade for energy on your front door,	
00:53:34> 00:53:38:	which has no no penalties for having a bad grade.	
00:53:38> 00:53:39:	It's just on your front door.	
00:53:39> 00:53:43:	Clients are more worried about that letter grade on their	
00:53:43> 00:53:46:	front door than a potential \$1,000,000 fine.	
00:53:46> 00:53:50:	In 2025, because that peer pressure of the CEO,	
00:53:50> 00:53:52:	the penthouse owner in it,	
00:53:52> 00:53:53:	this is multi family also,	
00:53:53> 00:53:56:	right? So it's the penthouse owner and the brand new	
00:53:56> 00:53:56:	condo.	
00:53:56> 00:54:00:	It's the CEO of a financial institution who walks into	
00:54:00> 00:54:03:	their Class A office that they're spending 150 bucks,	
00:54:03> 00:54:06:	a square foot on, and it says energy grade D	
00:54:06> 00:54:09:	on the front door they call the owner that they	
00:54:09> 00:54:11:	call the CEO of the of the landlord and say	

00:54:11> 00:54:14:	what in the world? Why do I have a D?	
00:54:14> 00:54:16:	You said this was a Class A building.	
00:54:16> 00:54:18:	That they're more concerned with those letter grades than they	
00:54:18> 00:54:19:	are about these emissions limits,	
00:54:19> 00:54:23:	so I would say never underestimate the competitive spirit.	
00:54:23> 00:54:24:	Again, this is a New York thing,	
00:54:24> 00:54:25:	but I presume it works in real estate.	
00:54:25> 00:54:30:	Most places. Never underestimate the competitive spirit and that kind	
00:54:30> 00:54:32:	of peer communication around these things.	
00:54:32> 00:54:35:	So doing this behind closed doors,	
00:54:35> 00:54:38:	it will have much less effectiveness than doing it out	
00:54:38> 00:54:39:	in the open.	
00:54:39> 00:54:40:	With that kind of peer pressure.	
00:54:42> 00:54:43:	I just jump in on something.	
00:54:43> 00:54:46:	Yeah please. 'cause utilities	
00:54:46> 00:54:48:	you know and this sort of eight minutes is an	
00:54:48> 00:54:49:	interesting statistic.	
00:54:49> 00:54:51:	I mean, not only do people spend very little time	
00:54:51> 00:54:52:	thinking about it,	
00:54:52> 00:54:56:	they actually don't know what's in their utilities and and	
00:54:56> 00:54:59:	we have a particular situation like it.	
00:54:59> 00:55:03:	You know, I look at the the transformed to plan	
00:55:03> 00:55:08:	and any any plan for decarbonizing in cities and decarbonizing	
00:55:08> 00:55:11:	buildings is includes electrification,	
00:55:11> 00:55:13:	right? This is. In every city,	
00:55:13> 00:55:16:	in every jurisdiction, so you know,	
00:55:16> 00:55:21:	moving from gas, heating or oil like fossil fuels to	
00:55:21> 00:55:22:	electricity,	
00:55:22> 00:55:26:	because we can make zero carbon electrons and and so	
00:55:26> 00:55:30:	the carbon intensity of the grid is a really key	
00:55:31> 00:55:36:	factor that will allow or undermine building owners ability to	
00:55:36> 00:55:40:	meet those targets. And so obviously you know we're New	
00:55:40> 00:55:42:	York City and operates,	
00:55:42> 00:55:44:	I presume within the New York State.	
00:55:44> 00:55:47:	Electric grid and in fact you know even a broader	
00:55:47> 00:55:49:	North American grid.	
00:55:49> 00:55:53:	There's Quebec Hydro now going to go to New York	
00:55:53> 00:55:57:	City and and we have a situation where the forecast	
00:55:57> 00:56:02:	is for the carbon intensity of the grid to increase	
00:56:02> 00:56:04:	by like 4 to 500%	

00:56:04> 00:56:08:	because gas fired generation is increasing.	
00:56:08> 00:56:09:	I mean, we phased out coal.	
00:56:09> 00:56:10:	We made some great gains,	
00:56:10> 00:56:12:	but now we're going in the opposite direction.	
00:56:12> 00:56:14:	So I'm curious how this is.	
00:56:15> 00:56:19:	Playing into the situation in New York City and and	
00:56:19> 00:56:23:	that you know the real estate sector's response to to	
00:56:24> 00:56:27:	you know what they buy from the grid.	
00:56:27> 00:56:29:	Like do they have control or do they have a	
00:56:29> 00:56:29:	say?	
00:56:31> 00:56:33:	Chris, I'm gonna give you one minute to answer,	
00:56:33> 00:56:35:	one minute to answer, and then we're going to have	
00:56:35> 00:56:38:	to turn it back over to Richard because we're actually	
00:56:38> 00:56:39:	going to have to wrap things up.	
00:56:40> 00:56:41:	So what I will say,	
00:56:41> 00:56:43:	and this sort of quick two part answer that what	
00:56:43> 00:56:44:	I will say is that yes,	
00:56:44> 00:56:47:	that piece I said originally coordination with the utility must	
00:56:47> 00:56:48:	be a part of this,	
00:56:48> 00:56:49:	especially if you're talking about emissions.	
00:56:49> 00:56:50:	If a law was based on,	
00:56:50> 00:56:53:	say, EU energy use intensity,	
00:56:53> 00:56:54:	it could just be within the building,	
00:56:54> 00:56:57:	but if you know you have to have coordination with	
00:56:57> 00:56:59:	the utility currently there was a lot of discussion to	
00:56:59> 00:57:01:	pin down what those emissions.	
00:57:01> 00:57:04:	Factors will be what that renewable content will be and	
00:57:04> 00:57:07:	the other I'll say is that it has broadened their	
00:57:07> 00:57:10:	horizons of our building owner clients to not just think	
00:57:10> 00:57:11:	about what they're doing with in the building,	
00:57:11> 00:57:14:	but how they impact the broader context of where they're	
00:57:14> 00:57:15:	buying that energy.	
00:57:15> 00:57:16:	So in that sense, it's good.	
00:57:16> 00:57:19:	It's broadened their exposure, but it has made them accountable	
00:57:19> 00:57:21:	for some things that are outside of their immediate control,	
00:57:21> 00:57:23:	so it is a huge part of this puzzle.	
00:57:25> 00:57:28:	Thank you so much. Come I have a million more	
00:57:28> 00:57:31:	questions and in my mind and I'm sure that the	
00:57:31> 00:57:36:	other panelists would love to pepper each other with questions,	
00:57:36> 00:57:39:	but we are essentially out of time and so I	

00:57:39> 00:57:42:	want to say thank you to everyone for that.	
00:57:42> 00:57:44:	And I want to turn it back over to Richard	
00:57:44> 00:57:46:	for some wrap up remarks.	
00:57:46> 00:57:52:	Thank you Sandra. That was brilliantly executed discussion and to	
00:57:52> 00:57:55:	the point about having a million more questions.	
00:57:55> 00:57:57:	That's what we're here for.	
00:57:57> 00:58:01:	We are going to be unpacking these these many,	
00:58:01> 00:58:05:	many questions and we just really applaud the leadership of	
00:58:05> 00:58:10:	of New York City and other US jurisdictions for setting	
00:58:10> 00:58:13:	up a very nice high bar for the work that	
00:58:13> 00:58:16:	that is is being done here in Toronto.	
00:58:16> 00:58:18:	And there's some incredible leadership here as well.	
00:58:18> 00:58:23:	Led by the city led by by Taft and others.	
00:58:23> 00:58:26:	And so we're going to.	
00:58:26> 00:58:30:	Our audience here can expect us to be unpacking those	
00:58:30> 00:58:33:	very questions in the coming weeks in fact,	
00:58:33> 00:58:35:	and and obviously into the long term.	
00:58:35> 00:58:40:	We've talked to Stuart about that and we're looking forward	
00:58:40> 00:58:45:	to really digging into Toronto's July legislation that that that	
00:58:45> 00:58:51:	really dictates a very interesting future shift for both existing	
00:58:51> 00:58:54:	future and existing buildings. You see on the slide here	
00:58:54> 00:58:56:	a number of other slides that are.	
00:58:56> 00:58:59:	There are other other events that are coming and hopefully	
00:58:59> 00:59:02:	you'll have a chance to talk into to these as	
00:59:02> 00:59:03:	well.	
00:59:03> 00:59:06:	We always have a large variety of programs.	
00:59:06> 00:59:10:	The annual trends program is a must attend for everybody.	
00:59:10> 00:59:14:	Very, very interesting report that will be revealed in two	
00:59:14> 00:59:18:	weeks time and and discuss later that week.	
00:59:18> 00:59:20:	The geography of jobs is fascinating.	
00:59:20> 00:59:24:	Program are Curtner Urban leadership program is still taking applications	
00:59:24> 00:59:26:	for mid career professionals.	
00:59:26> 00:59:28:	This is that six year really,	
00:59:28> 00:59:31:	really popular program. If you are a mid career professional	
00:59:31> 00:59:32:	or know some,	
00:59:32> 00:59:36:	please join this program. I'm now at time.	
00:59:36> 00:59:39:	So with that I have to thank Christopher so much	
00:59:39> 00:59:43:	for doing this Sandra for leading their conversation.	
00:59:43> 00:59:46:	Kirk Julia Stewart. Thank you and have a great week	
00:59:46> 00:59:48:	and will talk to you very soon.	

00:59:48> 00:59:48:	Bye bye.
00:59:49> 00:59:51:	Thank you all. Thanks
00:59:51> 00:59:53:	very much. Who's pleasure? Bye bye.
00:59:54> 00:59:56:	Thanks everybody by day
00:59:56> 00:59:57:	later.

This video transcript has been machine-generated, so it may not be accurate. It is for personal use only. Reproduction or use without written permission is prohibited. If you have a correction or for permission inquiries, please contact .