

Webinar

ULI British Columbia: Climate Change and the Effects on Urban Planning and Home Building in BC

Date: November 08, 2022

00:00:07 --> 00:00:09: OK. I'm just going to give it some.

00:00:10 --> 00:00:12: Little less than a minute is.

00:00:13 --> 00:00:15: People join us. We've got a great turnout for today's

00:00:16 --> 00:00:16: event.

00:00:41 --> 00:00:44: OK, I think I'm going to go ahead and start

00:00:44 --> 00:00:47: so that we stay on schedule. My name is Rachel

00:00:47 --> 00:00:51: Thaxton. I am the communications chair here at UL ICBC.

00:00:51 --> 00:00:55: First, I wanted to do a land acknowledgement. I know

00:00:55 --> 00:00:59: that we're all joining from different areas of British Columbia.

00:00:59 --> 00:01:03: I'm in North Burnaby, so I'm on the unseated traditional

00:01:03 --> 00:01:06: territory of the Muslim and Squamish peoples.

00:01:08 --> 00:01:12: For those of you who are not as familiar, ULIBC

00:01:12 --> 00:01:16: is a nonprofit education and Research Institute.

00:01:17 --> 00:01:21: Members are from various professions and ULI is dedicated

00:01:21 --> 00:01:25: to

00:01:25 --> 00:01:30: excellence in city building. We would like to thank all

00:01:30 --> 00:01:33: of our sponsors who help to make these events possible.

00:01:34 --> 00:01:38: We have a great turnout for today's timely events on

00:01:38 --> 00:01:43: climate change and considerations that we need to keep in

00:01:44 --> 00:01:47: mind as we're planning cities, expanding cities, building

00:01:47 --> 00:01:48: homes.

00:01:49 --> 00:01:52: In our urban environments as we see various effects of

00:01:52 --> 00:01:53: climate change.

00:01:55 --> 00:01:58: And from there we will go to our three expert

00:01:58 --> 00:02:01: panelists.

00:02:02 --> 00:02:04: So I'm going to start by introducing our first panelist.

00:02:05 --> 00:02:07: It's Dylan Clark who is research lead.

00:02:07 --> 00:02:07: With the Canadian Climate Institute.

00:02:07 --> 00:02:07: Dylan, I'm going to pass it over to you. Thank

00:02:07 --> 00:02:08: you so much for being here.

00:02:10 --> 00:02:13: Thank you, Rachel, and and a pleasure to be here

00:02:13 --> 00:02:16: today. I'm really looking forward to the discussion that we're

00:02:17 --> 00:02:17: going to.

00:02:17 --> 00:02:18: Have.

00:02:18 --> 00:02:21: Umm, I'll start by acknowledging to the I am guests

00:02:21 --> 00:02:22: on the lands of the the coast.

00:02:22 --> 00:02:27: Salish people, the home to Musqueam, Squamish and Sailor Tooth.

00:02:28 --> 00:02:31: And as Rachel said, I am a research lead at

00:02:31 --> 00:02:36: the Canadian Climate Institute. My team's work focuses on

00:02:36 --> 00:02:41: climate change adaptation, so kind of managing the risks that

00:02:41 --> 00:02:44: are baked in or that are on our horizon.

00:02:45 --> 00:02:47: And for those of you that aren't familiar with the

00:02:47 --> 00:02:49: the Canadian Climate Institute.

00:02:50 --> 00:02:54: We are a a nonprofit, independent policy think tank. We

00:02:54 --> 00:02:59: focus on climate policy issues of of national importance. And

00:02:59 --> 00:03:03: over the last few years we've been my team's been

00:03:03 --> 00:03:06: working on a series of reports looking at the costs

00:03:06 --> 00:03:10: of climate change to the country, and in ways that

00:03:10 --> 00:03:15: we can reduce those costs through adaptation and by

00:03:15 --> 00:03:17: reducing

00:03:15 --> 00:03:17: greenhouse gas emissions.

00:03:18 --> 00:03:22: So for my few minutes today, I want to talk

00:03:22 --> 00:03:29: about 3 substantial market failures that are playing out

00:03:29 --> 00:03:35: across

00:03:29 --> 00:03:35: Canada. Our research at the Institute has shown that these.

00:03:35 --> 00:03:39: These failures are are really at the heart of many

00:03:39 --> 00:03:41: of the climate risks across Canada.

00:03:42 --> 00:03:43: And the first.

00:03:43 --> 00:03:44: Of those is.

00:03:44 --> 00:03:48: A very large information asymmetry. So in other words.

00:03:49 --> 00:03:54: A select few individuals and organizations have fairly good

00:03:54 --> 00:03:58: and

00:03:54 --> 00:03:58: access to information about climate risks, but most people

00:03:58 --> 00:04:03: and

00:03:58 --> 00:04:03: organizations across the country have very little access to

00:04:03 --> 00:04:04: that

00:04:03 --> 00:04:04: information.

00:04:05 --> 00:04:06: And to articulate this.

00:04:07 --> 00:04:12: My team analyzed, Umm, actually a number of real estate

00:04:12 --> 00:04:16: investment trust properties. So we.

00:04:16 --> 00:04:16: Looked.

00:04:16 --> 00:04:21: Through financial filings of 11 of the largest real estate investment trusts and.

00:04:21 --> 00:04:23:

00:04:24 --> 00:04:27: These RIT's you know the 11 of them have a market cap of 60 billion, so they're they're huge inventories of assets.

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00:04:32 --> 00:04:32:

00:04:34 --> 00:04:38: And we looked at where their buildings were again by looking at financial disclosures and we found about 1500 buildings

00:04:38 --> 00:04:44:

00:04:44 --> 00:04:45: across the country.

00:04:46 --> 00:04:51: These include commercial buildings, residential buildings and about 230 senior living facilities, all within those RIT portfolios. And I'm not going to name the specific ones, but I would venture to say that most of your institutions or personally you're going to have these within your, your kind of portfolios.

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00:05:02 --> 00:05:05:

00:05:06 --> 00:05:09: And So what we did when we found those properties is we we matched them up.

00:05:09 --> 00:05:10:

00:05:10 --> 00:05:11: With.

00:05:12 --> 00:05:18: Flood insurance maps, maps which getting back to that information asymmetry most of you do not have access to and we checked to see just how much flood risk these top REI's are exposed to. We found that 17% of RIT properties are in a 200 year floodplain. That's about 6% higher risk concentration than the average non. RIT property in the country, and this isn't just a legacy issue, these aren't legacy assets. In 2019, over half of those RIT. That we looked at. Actually added or acquired additional properties. In in flood risk zones. So information asymmetries are huge, a huge challenge in terms of mitigating risks.

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00:06:04 --> 00:06:09: The second market failure that we're seeing playing out across Canada when it comes to climate, climate risks and infrastructure development is is moral hazard. So moral hazard is is particularly dangerous because it's disincentivizes risk management. And one example of of moral hazard issue. Is is the.

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00:06:29 --> 00:06:31: Securitization.

00:06:31 --> 00:06:32: Of of mortgage bonds.

00:06:32 --> 00:06:35: So again, we looked.

00:06:35 --> 00:06:35: At.

00:06:35 --> 00:06:39: Specific kind of case studies to articulate this and and

00:06:39 --> 00:06:43: found that between 2017 and 2020 about 10% of of

00:06:43 --> 00:06:47: building permits issued within the City of Vancouver were issued

00:06:47 --> 00:06:51: for for new builds that are within a 100 year

00:06:51 --> 00:06:55: floodplain again using that flood insurance risk mapping.

00:06:55 --> 00:06:56: Umm.

00:06:56 --> 00:06:58: Those permits alone.

00:06:59 --> 00:07:00: Had a total value of about a.

00:07:00 --> 00:07:06: Billion dollars. And so that's a huge financial liability that

00:07:06 --> 00:07:09: we know lenders generally sell.

00:07:11 --> 00:07:16: Through mortgages and mortgage securities transferring that financial risk to

00:07:16 --> 00:07:19: investors and and at the backstop by CMHC. So now

00:07:19 --> 00:07:23: if if physical risks were insured and disclosed, you know

00:07:23 --> 00:07:27: a properly functioning market, we would expect that the markets

00:07:27 --> 00:07:30: would price in that information.

00:07:31 --> 00:07:35: Into the security returns and risk disclosures. But most households

00:07:35 --> 00:07:40: in Canada do not have comprehensive flood risk insurance, and

00:07:40 --> 00:07:43: as I mentioned, very few investors have the data.

00:07:43 --> 00:07:44: To.

00:07:44 --> 00:07:45: Analyze.

00:07:46 --> 00:07:48: The risks especially.

00:07:48 --> 00:07:50: Once we bundle.

00:07:50 --> 00:07:54: The risks into mortgage-backed securities. So why is this a

00:07:54 --> 00:07:59: moral hazard? Well, you know generally the organizations who directly

00:07:59 --> 00:08:03: lend, not directly pay, if there is a catastrophic loss.

00:08:03 --> 00:08:07: And this is not pointing fingers, it's it's pointing out

00:08:07 --> 00:08:11: a a systemic kind of challenge and issue here. Institutional

00:08:11 --> 00:08:15: investors largely hold the risk in its backstop by the

00:08:15 --> 00:08:16: Government of Canada.

00:08:17 --> 00:08:20: So the final kind of market failure I wanted to

00:08:20 --> 00:08:21: chat about briefly here is.

00:08:22 --> 00:08:27: Umm, negative externalities. And this means that economic decisions.

00:08:28 --> 00:08:31: Are negatively impacting a third party.

00:08:32 --> 00:08:35: I want to bring this home on, kind of bring

00:08:35 --> 00:08:36: it back to people.

00:08:37 --> 00:08:41: Last summer, obviously for those of us living in in.

00:08:41 --> 00:08:43: DC we saw.

00:08:44 --> 00:08:48: Umm, just a heart wrenching disaster within 600 people died

00:08:48 --> 00:08:52: from from the June heat wave. The vast majority of

00:08:52 --> 00:08:54: those people died in their homes.

00:08:55 --> 00:08:59: I'm, I'm. I'm a renter in Vancouver and I am

00:08:59 --> 00:09:03: fortunate to live in in quite a nice building that

00:09:03 --> 00:09:07: was built in the 90s, but like most households in

00:09:07 --> 00:09:10: the Lower mainland on that are are renting.

00:09:11 --> 00:09:16: I don't have many options for keeping my apartment

00:09:16 --> 00:09:19: temperatures

00:09:19 --> 00:09:23: from rising into the high 20s or 30s during most

00:09:23 --> 00:09:24: summer days, and like most people and and Vancouver, I

00:09:26 --> 00:09:29: don't have a scene.

00:09:29 --> 00:09:29: So here's the challenge that the strata developer and my

00:09:30 --> 00:09:31: landlord.

00:09:31 --> 00:09:35: Don't experience the.

00:09:35 --> 00:09:38: Effects of heat that that I experience. And again, I'm

00:09:38 --> 00:09:42: not. I'm certainly not saying there's malice.

00:09:42 --> 00:09:47: But there is a market failure happening. In this example,

00:09:47 --> 00:09:51: you know, 300,000 renters in Vancouver are seriously

00:09:51 --> 00:09:52: implicated by

00:09:53 --> 00:09:55: by the decisions made upstream and outside of their their

00:09:56 --> 00:09:57: control.

00:09:57 --> 00:09:59: So I said today that I was going to talk

00:10:03 --> 00:10:04: about the role of policy.

00:10:06 --> 00:10:10: And and adapting the fund to change.

00:10:10 --> 00:10:14: My team is continuing to to analyze various policy options

00:10:14 --> 00:10:17: and and levers and pathways.

00:10:18 --> 00:10:21: But almost all of those policies we analyzed are designed

00:10:21 --> 00:10:25: to address one of these three market failures, so information

00:10:25 --> 00:10:27: asymmetry, moral hazard, and and negative externalities.

00:10:28 --> 00:10:31: And fixing these market failures is going to be really

00:10:31 --> 00:10:33: essential in order to address some of our largest climate

00:10:33 --> 00:10:34: vulnerabilities in the country.

00:10:34 --> 00:10:38: And in order to create kind of a stable economy,

00:10:34 --> 00:10:38: it's going to be imperative.

00:10:34 --> 00:10:38: That these. These.

00:10:34 --> 00:10:38: Failures are addressed moving forward. So with that, I'll

00:10:34 --> 00:10:38: thank

00:10:38 --> 00:10:41: you for the time and look forward to the discussion.

00:10:41 --> 00:10:43: Back to you, Rachel.

00:10:47 --> 00:10:48: Thanks very much, Dylan.

00:10:49 --> 00:10:52: I appreciate your time and and and insight.

00:10:53 --> 00:10:57: I'm going to pass to our second panelist now. This

00:10:57 --> 00:11:00: is Malcolm Shield. He is the VP of Sustainability for

00:11:01 --> 00:11:02: West Group Properties.

00:11:03 --> 00:11:06: And I will pass it over to you, Malcolm. Thank

00:11:06 --> 00:11:06: you so much.

00:11:07 --> 00:11:12: Thanks, Rachel. Appreciate it. Thanks all for taking the time.

00:11:12 --> 00:11:15: I think today the the thrust of of what I'd

00:11:15 --> 00:11:19: like to talk about is really decision relevance and how

00:11:19 --> 00:11:22: we make decisions in a world that is is clearly

00:11:22 --> 00:11:26: clearly challenged. The the world we find ourselves in right

00:11:26 --> 00:11:30: now is being challenged in all sorts of ways, whether

00:11:30 --> 00:11:33: it be from the war in Ukraine, whether it be

00:11:33 --> 00:11:37: from the pandemic supply chain and of course climate risk.

00:11:37 --> 00:11:42: Has been identified for a long time, but systemically we've

00:11:42 --> 00:11:46: we've really struggled to integrate that with with decision

00:11:46 --> 00:11:50: making.

00:11:46 --> 00:11:50: And so from a practical perspective even when we know

00:11:50 --> 00:11:55: that something is happening something's taking place

00:11:50 --> 00:11:55: whether that be

00:11:55 --> 00:11:58: related to the need to reduce emissions or adapt to

00:11:58 --> 00:12:02: a changing climate. How do we build that into into

00:12:02 --> 00:12:06: our business structures and I think it's critical to to

00:12:06 --> 00:12:08: recognize that that the past.

00:12:08 --> 00:12:11: Is no longer an indicator of the future. It's not

00:12:11 --> 00:12:14: just the fact that it's not a good indicator. It

00:12:15 --> 00:12:18: is no longer an indicator of the future that we're

00:12:18 --> 00:12:21: going into. And yet, when we look to our decision

00:12:21 --> 00:12:26: makers to make appropriate choices, how do they formulate

00:12:21 --> 00:12:26: those

00:12:26 --> 00:12:29: choices? A lot of it is predicated on historic data.

00:12:29 --> 00:12:34: It's predicated on lived experience. It's predicated on

00:12:29 --> 00:12:34: professional experience.

00:12:35 --> 00:12:37: And when we look to the future and we start

00:12:37 --> 00:12:39: to realize that.

00:12:39 --> 00:12:44: Under those conditions, our lived experience or professional

00:12:39 --> 00:12:44: experience doesn't

00:12:44 --> 00:12:47: apply. Historic data doesn't apply. How do we start to

00:12:47 --> 00:12:50: to to close that gap? And I'd posit that it

00:12:50 --> 00:12:53: that it really has to come down to values, whether

00:12:54 --> 00:12:57: Ness, not value, but values, because at some point we

00:12:57 --> 00:13:01: have to recognize that data is incomplete. No amount of

00:13:01 --> 00:13:04: additional analysis is going to get us to the point

00:13:04 --> 00:13:07: of certainty that we might seek and in a traditional

00:13:08 --> 00:13:09: decision making.

00:13:09 --> 00:13:12: Framework. So, so off the back of that what what

00:13:12 --> 00:13:15: does it mean to to build that into into decision

00:13:15 --> 00:13:19: making processes. So if I might share one slide that

00:13:19 --> 00:13:20: that puts this into.

00:13:21 --> 00:13:26: Into some level of context, the Insurance Bureau of Canada

00:13:26 --> 00:13:30: publishes each year report on on the losses within Canada

00:13:31 --> 00:13:34: and this slide and the the content has has been

00:13:34 --> 00:13:39: built over time. It's one you'll often see referenced in

00:13:39 --> 00:13:43: in climate change circles and it shows there that the

00:13:43 --> 00:13:49: catastrophic losses over 25 million and the loss adjustment

00:13:49 --> 00:13:51: expenses

00:13:51 --> 00:13:54: for for a series of losses.

00:13:54 --> 00:13:58: Going back to 1983 and it's pretty clear that that

00:13:58 --> 00:14:01: the last trend is increasing, but what is not clear

00:14:01 --> 00:14:05: from from the content here is that this is in

00:14:05 --> 00:14:08: short losses. You're absolute losses are depending on what

00:14:08 --> 00:14:11: you

00:14:12 --> 00:14:15: look at three or four times higher than this still.

00:14:15 --> 00:14:17: But also particular note is that of the 10 largest

00:14:17 --> 00:14:21: loss events lost years in Canada, seven of those have

00:14:21 --> 00:14:25: been in the last decade.

00:14:25 --> 00:14:30: And so particularly for for my industry when we think

00:14:30 --> 00:14:34: about real estate and that multi decadal approach, um

00:14:34 --> 00:14:38: understanding

00:14:38 --> 00:14:42: what the implications going forward are are particularly

00:14:42 --> 00:14:47: difficult.

00:14:47 --> 00:14:52: For us.

00:14:52 --> 00:14:52: And so in that sense, I think in a point

00:14:54 --> 00:14:58: to realize that that when we think about how to

00:14:58 --> 00:15:00: integrate information like this, we can't look at climate risk.

00:15:00 --> 00:15:04: And as I would say, a wholly new consideration. Climate

00:15:04 --> 00:15:10: change exacerbates existing risks. It tends not to introduce

00:15:10 --> 00:15:14: new

00:15:14 --> 00:15:18: risks.

00:15:18 --> 00:15:22: Potentially you could, you could speak to uh, climate

00:15:22 --> 00:15:26: migration,

00:15:26 --> 00:15:30: uh as a new risk, but from a more physical

00:15:30 --> 00:15:34: sense and certainly for for my industry that the physical

00:15:34 --> 00:15:38: risks around wildfire, flooding, extreme precipitation, they've

always existed, but

00:15:10 --> 00:15:13: it's very different landscape. And so it's a question of

00:15:13 --> 00:15:17: how do we build that into our business processes and

00:15:17 --> 00:15:21: business systems so that you're not upending how any company

00:15:21 --> 00:15:23: makes its decisions or or makes.

00:15:23 --> 00:15:27: Business choices because the people aren't, it's not going to

00:15:27 --> 00:15:31: be effective. We have to look at the systems that

00:15:31 --> 00:15:33: we already have in place and how we tweak and

00:15:33 --> 00:15:37: augment those. And so if I might share my screen

00:15:37 --> 00:15:40: once more, I'll walk through a little bit of content

00:15:40 --> 00:15:42: as as to what that means and how we can

00:15:42 --> 00:15:45: tie it to what is data-driven and and what is

00:15:45 --> 00:15:49: objective and then what is subjective. So when we think

00:15:49 --> 00:15:53: about risk it's, it's pretty straightforward on the face of

00:15:53 --> 00:15:54: it, it's likelihood.

00:15:54 --> 00:15:57: Multiplied by consequence. I just need to find 2 pieces

00:15:57 --> 00:16:02: of information, right? Well, not quite. The likelihood is ultimately

00:16:02 --> 00:16:04: a frequency. How likely am I to to see a

00:16:04 --> 00:16:08: particular event or occurrence? But how do we measure consequence?

00:16:08 --> 00:16:12: What are we thinking about in terms of consequence? Well,

00:16:12 --> 00:16:15: that's the impact of the event. And then the the

00:16:15 --> 00:16:18: measure of vulnerability. Not so much of my asset, but

00:16:18 --> 00:16:21: the people who make the most of my asset or

00:16:21 --> 00:16:22: use it.

00:16:22 --> 00:16:26: But then taking that a step further, what is vulnerability?

00:16:26 --> 00:16:30: It's the exposure to what is taking place, our sensitivity

00:16:30 --> 00:16:33: to it, IE what's the detrimental effect to me. But

00:16:33 --> 00:16:36: then also do I have the ability to to undertake

00:16:36 --> 00:16:40: a positive outcome, to try and reduce, reduce that detrimental

00:16:40 --> 00:16:44: effect. So there's an interplay between these two aspects and

00:16:44 --> 00:16:47: then finally taking it down to the to the final

00:16:47 --> 00:16:51: level exposure, we can basically put down to how intense

00:16:51 --> 00:16:53: is is the power or the hazard.

00:16:53 --> 00:16:56: That I'm subjected to and how long am I subjected

00:16:56 --> 00:16:59: to it for? The challenge with this is a lot

00:16:59 --> 00:17:01: of this is subjective.

00:17:02 --> 00:17:05: Like when we look back and previously impact, what is

00:17:05 --> 00:17:07: impact that comes down to to what's the level of

00:17:07 --> 00:17:10: service that I want to maintain. And then my ability

00:17:10 --> 00:17:14: to respond either positively or negatively to a situation is
00:17:14 --> 00:17:17: not the same for every individual. It's not the same
00:17:17 --> 00:17:20: for every group of people. And then there's the aspects
00:17:20 --> 00:17:22: to to when we look at risk that can be
00:17:22 --> 00:17:25: tied to data, the intensity, the duration, this can come
00:17:25 --> 00:17:28: from climate modelling of all sorts. And so I I
00:17:28 --> 00:17:31: would say that my point is at some point we
00:17:31 --> 00:17:32: have to start closing.
00:17:32 --> 00:17:35: The gap between these two here and that is driven
00:17:35 --> 00:17:39: by a value system and a values approach. You just
00:17:39 --> 00:17:43: end up being paralyzed through through analysis and looking
for
00:17:43 --> 00:17:47: more and more certainty and at some point as as
00:17:47 --> 00:17:51: individuals, as a corporation you need to make to choice
00:17:51 --> 00:17:54: on on how to close that gap. And really it's
00:17:54 --> 00:17:58: that perspective I think that comes from inclusive approaches
and
00:17:59 --> 00:18:03: bringing an entire organization along in the decision making
process.
00:18:04 --> 00:18:06: So with that I'll I'll pass it back and and
00:18:06 --> 00:18:09: very much look forward to the the conversation and the
00:18:09 --> 00:18:09: questions.
00:18:14 --> 00:18:17: Thank you very much, Malcolm. Appreciate that information.
00:18:19 --> 00:18:23: OK, our third panelist today, I'm going to introduce Bill
00:18:23 --> 00:18:26: Cunningham, Vice President of Community, business and
real estate at
00:18:26 --> 00:18:29: Van City. Bill, look forward to hearing what you have
00:18:29 --> 00:18:32: to say and I will pass the floor to you.
00:18:33 --> 00:18:36: Wonderful. Thank you, Rachel, and thank you for that land
00:18:36 --> 00:18:39: acknowledgement off the top of this presentation because I
too
00:18:40 --> 00:18:42: would also like to thank the Co Salish peoples for
00:18:42 --> 00:18:45: their caretaking of this land for time immemorial. And I
00:18:46 --> 00:18:49: pay my respects to elders past, present and future. As
00:18:49 --> 00:18:52: you stated, I am the Vice President of Community business
00:18:52 --> 00:18:54: and real estate with Man City. I'm not a client,
00:18:55 --> 00:18:58: scientist or environmental specialist of of any sort. I'm a
00:18:58 --> 00:19:01: business lender with over 25 years experience lending on real
estate to builders and developers.
00:19:01 --> 00:19:03: And in this context, I think that's that's OK because
00:19:04 --> 00:19:07: that experience is about assessing and mitigating risk when it
00:19:07 --> 00:19:10: comes to lending money.
00:19:10 --> 00:19:11:

00:19:12 --> 00:19:15: And climate risk is quickly rising to the top of

00:19:15 --> 00:19:18: the list of lenders we'll be paying attention to.

00:19:18 --> 00:19:21: When it comes to financing home building and real estate

00:19:21 --> 00:19:25: development with climate considerations, these will be driven by lenders

00:19:25 --> 00:19:28: net zero commitments, which are becoming more and more prevalent.

00:19:30 --> 00:19:33: Let me talk a little bit about net zero, because

00:19:33 --> 00:19:36: some folks in my industry get carbon neutral and net

00:19:36 --> 00:19:37: zero mixed up.

00:19:38 --> 00:19:42: Carbon neutral can often mean just measuring emissions and then

00:19:42 --> 00:19:45: purchasing an equivalent amount of offsets. Net zero is more

00:19:45 --> 00:19:49: than that though. Being net 0 means committing to reducing

00:19:49 --> 00:19:52: emissions as much as possible, and then only then can

00:19:52 --> 00:19:55: you use offsets to manage the remaining emissions.

00:19:57 --> 00:20:01: Density was one of the founding members of the United

00:20:01 --> 00:20:04: Nations Net Zero Banking Alliance Alliance. In fact, we were

00:20:04 --> 00:20:07: the only ones from Canada at the outset. Since then,

00:20:07 --> 00:20:10: Canada's big six banks have all signed on, as well

00:20:10 --> 00:20:11: as coast capital.

00:20:13 --> 00:20:17: In the net Zero banking alliance, there's 117 banks now

00:20:17 --> 00:20:22: representing over 41 countries accounting for 39% of global banking

00:20:22 --> 00:20:27: assets. That's just to_ that this is something that the financing

00:20:27 --> 00:20:31: world is really taking serious and it will drive lending

00:20:31 --> 00:20:33: decisions going forward.

00:20:34 --> 00:20:36: Let me attempt to pop up a slide here for

00:20:36 --> 00:20:37: a quick moment.

00:20:40 --> 00:20:42: And chat about the road to net zero.

00:20:47 --> 00:20:50: So the stages for financial institutions who have made net

00:20:50 --> 00:20:53: zero commitments are on the screen here. One is to

00:20:53 --> 00:20:56: state the ambition and to make that net zero.

00:20:57 --> 00:21:01: Commitment. In fact, in Canada, for all the major lenders,

00:21:01 --> 00:21:04: we can say check the net Zero Banking Alliance has

00:21:04 --> 00:21:07: members commit to being net 0 by 2050.

00:21:08 --> 00:21:11: Then cities commitment, I'm proud to say, is to be

00:21:11 --> 00:21:11: net 0 by 2040.

00:21:12 --> 00:21:13: The second step.

00:21:14 --> 00:21:18: Or is to establish government and oversight and measure and

00:21:18 --> 00:21:22: disclose your emissions. Again, check then city has done this,

00:21:22 --> 00:21:25: but so have many of the other Canadian banks that
00:21:25 --> 00:21:28: are involved in the net Zero banking alliance. Now this
00:21:28 --> 00:21:32: measurement is highly estimated. It's based on industry
averages. It's
00:21:32 --> 00:21:36: based on building averages and it's not quite at the
00:21:36 --> 00:21:40: level where it's actually accounting for the emissions of
distinct
00:21:40 --> 00:21:44: borrowers or distinct real estate assets that we're financing.
We
00:21:44 --> 00:21:44: all know that.
00:21:45 --> 00:21:47: We need better data and industry is going to play
00:21:47 --> 00:21:49: the biggest part of that and I'm going to come
00:21:49 --> 00:21:50: back to that in a bit.
00:21:51 --> 00:21:54: The next part is to establish and disclose near term
00:21:54 --> 00:21:58: emission reduction targets and the plans to get so. And
00:21:58 --> 00:22:01: again in that City's case, I can say check again
00:22:01 --> 00:22:04: not just Van City, I noticed very recently that RBC
00:22:04 --> 00:22:07: has also recently published their initial targets as well.
00:22:08 --> 00:22:12: Advanced City, we've set interim targets for 2025 and the
00:22:12 --> 00:22:16: reason we've done this 2050 seems like almost a generation
00:22:16 --> 00:22:20: away for many 28 years from now. Our targets of
00:22:20 --> 00:22:23: 2040 again 18 years into the future, which is why
00:22:23 --> 00:22:28: we've set interim targets to begin disclosing and reporting on
00:22:28 --> 00:22:29: those for 2025.
00:22:30 --> 00:22:34: And this is part of developing emission reduction strategies,
creating
00:22:34 --> 00:22:37: that sense of urgency. Here's where Vancity is. I'm going
00:22:37 --> 00:22:39: to talk a little bit more about some of these
00:22:39 --> 00:22:40: strategies in a second.
00:22:46 --> 00:22:49: I showed just the slide and I'll ask to be
00:22:49 --> 00:22:52: popped in the chat link. If you want to learn
00:22:52 --> 00:22:56: more about Van City in particular, you can check out
00:22:56 --> 00:23:00: the rethink.vancity.com address. It's got much more on some
of
00:23:00 --> 00:23:03: our emissions plans and strategies.
00:23:05 --> 00:23:08: So when it comes to measurement and data on emissions
00:23:08 --> 00:23:12: for borers, you know, look the banks, regulators, Ossipee has
00:23:12 --> 00:23:16: draft guidelines out in market now indicating that the
regulator
00:23:16 --> 00:23:19: is looking at mandating this type of measurement. That city
00:23:19 --> 00:23:23: is planning to work proactively with our boards and
members
00:23:23 --> 00:23:26: to gather this data. And there's a few different ways
00:23:26 --> 00:23:28: we're doing that. We're working.

00:23:29 --> 00:23:32: With open technologies to help set up members with

00:23:32 --> 00:23:36: free Energy Star portfolio manager accounts. This will link their

00:23:36 --> 00:23:40: utility bills, provide reports to Members that provide insights about

00:23:41 --> 00:23:44: their buildings how they stack up and how they might

00:23:44 --> 00:23:48: reduce emissions. We're also looking at launching in the coming

00:23:48 --> 00:23:52: quarters for our business borrowers a business emissions calculator. We're

00:23:52 --> 00:23:56: starting by running a pilot which is actually underway right

00:23:56 --> 00:23:59: now and again the benefit here is for Members.

00:23:59 --> 00:24:03: And borrowers to understand their emissions and what are the

00:24:03 --> 00:24:07: opportunities for cost savings and emission reductions. It's this engagement

00:24:07 --> 00:24:10: with industry that is going to be key to meeting

00:24:10 --> 00:24:12: some of these emission targets.

00:24:13 --> 00:24:17: And then from there it's about working with those borrowers

00:24:17 --> 00:24:20: on climate transition plans. As I stated, I'm a lender,

00:24:20 --> 00:24:23: we're not the experts, but we know who the experts

00:24:23 --> 00:24:25: are. And so one of the roles we can play

00:24:25 --> 00:24:29: as lenders is to make introductions to those experts. In

00:24:29 --> 00:24:32: van Cities case, we're we're planning on supporting some of

00:24:32 --> 00:24:36: our Members showing leadership in this industry by setting them

00:24:36 --> 00:24:39: up so that they can develop climate transition plans based

00:24:39 --> 00:24:41: on the emissions data.

00:24:41 --> 00:24:42: That they've covered.

00:24:44 --> 00:24:48: We're looking at the commercial retrofit financing pilots again where

00:24:48 --> 00:24:52: we are directly financing those building and house owners that

00:24:52 --> 00:24:56: are are looking to retrofit their existing properties to reduce

00:24:56 --> 00:24:57: emissions.

00:24:58 --> 00:25:01: And then we're also looking at bringing together our network

00:25:01 --> 00:25:04: of resources in the climate industry, again to help our

00:25:04 --> 00:25:07: Members develop the strategies they need to do to reduce

00:25:07 --> 00:25:10: their emissions. And I want to just end by talking

00:25:10 --> 00:25:12: a little bit about how bad City is helping the

00:25:13 --> 00:25:17: most vulnerable populations prepare for climate effects, because the climate

00:25:17 --> 00:25:20: emergency will have the greatest impact on those who have

00:25:20 --> 00:25:23: actually contributed the least to it. In particular, this would

00:25:23 --> 00:25:27: include urban and remote indigenous communities, unhoused people's low income

00:25:27 --> 00:25:28: houses.

00:25:28 --> 00:25:30: Households and racialized people.

00:25:31 --> 00:25:34: So our commitment is to not only be net 0

00:25:34 --> 00:25:38: by 2040, but also help finance and equitable climate transition.

00:25:38 --> 00:25:42: And we're doing this by standing up nonprofit housing retrofit

00:25:42 --> 00:25:46: grants to nonprofits to offer strategic grants to many to

00:25:46 --> 00:25:49: help complete their own net zero plans for their buildings

00:25:49 --> 00:25:54: on reserve retrofit grants for those indigenous communities who are

00:25:54 --> 00:25:57: looking to reduce their emissions. And there's there's quite a

00:25:58 --> 00:26:01: bit more, but I really bring some of these examples

00:26:01 --> 00:26:01: forward.

00:26:01 --> 00:26:05: To show you that not only our lenders.

00:26:05 --> 00:26:09: Being forced to consider how to reduce climate risk. But

00:26:09 --> 00:26:12: they're actually more advanced in that we are in the

00:26:12 --> 00:26:16: stages of of implementing plans, working with our borrowers to

00:26:16 --> 00:26:20: help them reduce their emissions, to address the climate emergency.

00:26:21 --> 00:26:21: Thanks very much.

00:26:26 --> 00:26:31: Thank you, bill. I appreciate that information. Three wonderful panelists.

00:26:31 --> 00:26:35: The concept for the event came from a recent ULI

00:26:35 --> 00:26:40: research report. The organization identified climate change as a significant

00:26:41 --> 00:26:45: factor to consider as we move forward. Urban planning, home

00:26:45 --> 00:26:48: building of all types, and I think all three of

00:26:49 --> 00:26:54: you offered very different yet vital information to this discussion.

00:26:54 --> 00:26:58: We're fortunate today to have an excellent moderator who will

00:26:58 --> 00:27:00: walk us through a Q&A session.

00:27:01 --> 00:27:04: I'd like to welcome Laura Lynch with CBC Radio. She's

00:27:04 --> 00:27:07: the host of what on Earth? An award-winning journalist. Lots

00:27:07 --> 00:27:10: and lots of experience and a lot more specialty in

00:27:10 --> 00:27:14: the sustainability field than than I have certainly. So I

00:27:14 --> 00:27:16: lost it. Over to you, Laura, and I'll let you

00:27:16 --> 00:27:19: lead the Q and a dialogue from here. Thanks.

00:27:19 --> 00:27:21: So much. Thank you very much. And I just remind

00:27:21 --> 00:27:24: anyone else who's watching, if you have questions of the

00:27:25 --> 00:27:27: panelists, please pop them into the chat and and I
00:27:27 --> 00:27:29: will try to get to some of them as we
00:27:29 --> 00:27:30: go along.
00:27:31 --> 00:27:34: I actually just want to go in the reverse order
00:27:34 --> 00:27:36: of how all of you spoke. You all had really
00:27:37 --> 00:27:40: interesting things to say and and to be quite honest
00:27:40 --> 00:27:43: with you I kind of wish I wasn't here today
00:27:43 --> 00:27:46: I wish I wasn't sure Mel shake at the cop
00:27:46 --> 00:27:49: 27 meetings but we didn't have the money to go.
00:27:49 --> 00:27:52: I do know however that this morning the a high
00:27:52 --> 00:27:56: level group at the UN released its own recommendations
about
00:27:56 --> 00:27:59: net zero and private companies and and how the all
00:27:59 --> 00:28:01: of that is operating and.
00:28:01 --> 00:28:04: Needless to say, the belief is it's not operating very
00:28:04 --> 00:28:08: well that most private organizations, lenders for example, are
not
00:28:08 --> 00:28:12: being very transparent or are not actually living up to
00:28:12 --> 00:28:15: the promises they're making about getting to net zero. And
00:28:15 --> 00:28:19: one of the things that they are recommending is that
00:28:19 --> 00:28:22: it be regulated that government step in and regulate that
00:28:22 --> 00:28:27: kind of information sharing that private corporations such as
lenders
00:28:27 --> 00:28:30: or oil and gas companies are doing. And I'm wondering,
00:28:30 --> 00:28:31: Bill, how you view?
00:28:31 --> 00:28:35: That, if I'm not mistaken, Ben City does not lend
00:28:35 --> 00:28:38: to fossil fuel companies. Is that correct?
00:28:39 --> 00:28:43: That's correct, Laura. But most other lenders do. I I
00:28:43 --> 00:28:46: think you're right. The public policy is going to play
00:28:46 --> 00:28:50: such a huge part in all lenders getting their managed
00:28:50 --> 00:28:54: portfolios to net zero. So that type of information gathering
00:28:54 --> 00:28:57: and sharing I think is very important on this path
00:28:57 --> 00:29:01: in advance of any of that becoming mandated. We're working
00:29:01 --> 00:29:06: with our borrowers to actually voluntarily disclose, which is
what
00:29:06 --> 00:29:09: we've done. We've measured our missions, we've voluntarily.
00:29:10 --> 00:29:14: Disclosed, we voluntarily disclosed our targets and our early
plans
00:29:14 --> 00:29:15: to get there.
00:29:15 --> 00:29:18: You know, when I look at the lending industry, we're
00:29:18 --> 00:29:21: still fairly early in this net zero path. We're not
00:29:21 --> 00:29:26: climate or building specialists. We're well-rounded
generalists. And similarly there's

00:29:26 --> 00:29:29: an understanding that those in the real world, in the

00:29:30 --> 00:29:33: real estate sector, there are also fairly early stages about

00:29:33 --> 00:29:37: learning about client impacts, climate impacts of the built environment.

00:29:37 --> 00:29:41: So building up that knowledge base and generating that buying

00:29:41 --> 00:29:43: is a very key part of that and then I

00:29:43 --> 00:29:45: think once we got a foundation of that.

00:29:45 --> 00:29:50: Then things like mandated disclosure and public policy initiatives really

00:29:50 --> 00:29:53: do play a key next step in this journey.

00:29:53 --> 00:29:56: OK. I don't know if either one of you, Malcolm

00:29:56 --> 00:29:59: or or Dylan want to weigh in on that as

00:29:59 --> 00:30:00: well.

00:30:01 --> 00:30:03: Let's leave that out for you, no.

00:30:03 --> 00:30:07: OK, I'm happy to. I I think certainly from West

00:30:07 --> 00:30:12: groups perspective we don't see the climate conversation or sustainability,

00:30:12 --> 00:30:17: sustainability more broadly as say a unique selling point or

00:30:17 --> 00:30:21: a differentiator for us. We absolutely believe and there is

00:30:21 --> 00:30:25: a need for built forms to change and in all

00:30:25 --> 00:30:28: respects and and we believe in in a rising tide

00:30:28 --> 00:30:31: floats all boats and we want to see.

00:30:31 --> 00:30:34: The industry in its entirety move and respond to the

00:30:34 --> 00:30:38: challenges and compared to some real estate companies where we're

00:30:38 --> 00:30:41: very modestly sized. And so the the role that we

00:30:41 --> 00:30:44: can play in moving an industry I wouldn't say is

00:30:45 --> 00:30:47: to be understated, but we need to find ways to

00:30:47 --> 00:30:50: to affect a larger change and that is also the

00:30:50 --> 00:30:54: role of government. It doesn't necessarily need to be through

00:30:54 --> 00:30:58: regulation and I'm not talking about the specific case, but

00:30:58 --> 00:31:01: government has a role to convene a conversation.

00:31:01 --> 00:31:04: And guidance here that is the the role of government

00:31:04 --> 00:31:08: is to steer society through through its biggest questions. And

00:31:08 --> 00:31:11: we, we don't obviously wish to be at a competitive

00:31:12 --> 00:31:15: disadvantage to an uneven landscape. And so I think that

00:31:15 --> 00:31:18: there is certainly a role for government in in changing

00:31:19 --> 00:31:21: how the conversation is taking place.

00:31:21 --> 00:31:24: OK. I just follow up with with the second question

00:31:25 --> 00:31:28: for you Malcolm. I noticed that just in the last

00:31:28 --> 00:31:31: few days the state of Washington has passed a a

00:31:31 --> 00:31:32: bill requiring.

00:31:32 --> 00:31:35: All new residential construction from July forward to be built
00:31:35 --> 00:31:38: only with electric powered heat pumps. And I'm wondering what
00:31:38 --> 00:31:41: you think of that and and that's also, that's also
00:31:41 --> 00:31:43: for you Dylan, because I think that may be the
00:31:43 --> 00:31:46: kind of policy ideas that you're talking about, but I'm
00:31:46 --> 00:31:49: not sure. But Malcolm, can we start with you? Does
00:31:49 --> 00:31:51: that seem like a good way forward?
00:31:52 --> 00:31:56: I think my word of caution always when I hear
00:31:56 --> 00:32:00: actions like this is I don't like to see government
00:32:00 --> 00:32:05: being technology specific. I want government to be
00:32:05 --> 00:32:10: technology agnostic
00:32:10 --> 00:32:14: and regulate the outcomes that it wishes to achieve. Leave
00:32:14 --> 00:32:18: it to industry to establish how to meet that, how
00:32:18 --> 00:32:22: to respond, how to be more dynamic and attain the
00:32:22 --> 00:32:25: target rather than regulating the technology itself.
00:32:25 --> 00:32:29: Please set up that target so that it screens out
00:32:30 --> 00:32:31: some obvious non starters and certainly we don't don't take
00:32:32 --> 00:32:35: issue with that.
00:32:35 --> 00:32:38: Would say for clarity, in BC we have ample clean
00:32:38 --> 00:32:43: supply, reliable grids. I I do think BC is well
00:32:43 --> 00:32:46: primed for electrification, but in general I think government
00:32:46 --> 00:32:50: needs
00:32:50 --> 00:32:53: to be technology agnostic. Leave it to industry to to
00:32:53 --> 00:32:53: figure out how to achieve, achieve the goals that government
00:32:55 --> 00:32:58: wishes, wishes to try and try and strive.
00:33:00 --> 00:33:03: For.
00:33:03 --> 00:33:04: Yeah, I agree with with Malcolm generally, I think.
00:33:05 --> 00:33:07: What we see as the role of of.
00:33:08 --> 00:33:13: Public policy here is is.
00:33:14 --> 00:33:18: Again to to drive those.
00:33:19 --> 00:33:22: Contracts forward and create pathways different pathways
00:33:22 --> 00:33:26: for.
00:33:26 --> 00:33:29: Individuals, industry, lower orders of government to to meet
00:33:30 --> 00:33:30: those
00:33:32 --> 00:33:32: broader goals and objectives. So Umm, you know, certainly
00:33:32 --> 00:33:36: my
00:33:36 --> 00:33:37: teams looking at heat wave impacts, that's one of the
00:33:37 --> 00:33:37: areas of research we're working on now.
00:33:37 --> 00:33:37: Umm.
00:33:37 --> 00:33:37: A policy?
00:33:37 --> 00:33:37: That that you know could be explored, that would make
00:33:37 --> 00:33:37: maybe up a level would.

00:33:37 --> 00:33:38: Be.

00:33:38 --> 00:33:39: Around.

00:33:40 --> 00:33:45: Kind of mandatory safe temperatures for housing and then you

00:33:45 --> 00:33:50: would let industry builders, developers figure out how they're going

00:33:50 --> 00:33:54: to design for that standard. So I think that's generally

00:33:54 --> 00:33:58: the path we see forward most, mostly for climate risks.

00:33:59 --> 00:34:01: OK. Dylan, I'm just going to stay with you for

00:34:01 --> 00:34:04: a SEC. We have a first question from people who

00:34:04 --> 00:34:07: are tuning in. This is from Matt Strand. Dylan, do

00:34:07 --> 00:34:10: you know of any municipality in Canada or globally that

00:34:10 --> 00:34:13: is publicly disclosing climate risk to the public? I don't

00:34:13 --> 00:34:15: think I know of anyone and we've done, we've done

00:34:15 --> 00:34:18: this, covered this before and the and Matt says I

00:34:18 --> 00:34:21: appreciate the reluctance given that if the risk is disclosed,

00:34:21 --> 00:34:25: the municipality is responsible for managing those risks more actively.

00:34:25 --> 00:34:26: Do I have that correct?

00:34:28 --> 00:34:33: It's a really important question and a lot of attention

00:34:33 --> 00:34:34: has gone into.

00:34:35 --> 00:34:39: Risk assessments over the last three or four years within

00:34:39 --> 00:34:40: this this space.

00:34:41 --> 00:34:45: We've seen that the the province of BC published its

00:34:45 --> 00:34:49: first risk assessment in in 2019. Other jurisdictions have been

00:34:49 --> 00:34:52: doing kind of these climate risk assessments as well.

00:34:53 --> 00:34:57: And and a few municipalities certainly some of the Lower

00:34:57 --> 00:35:01: mainland Surrey has been a leader in this area for.

00:35:01 --> 00:35:01: A.

00:35:01 --> 00:35:05: Decade Calgary, and I've been 10, have just completed some

00:35:05 --> 00:35:07: kind of modeling work, too.

00:35:09 --> 00:35:10: But I think.

00:35:10 --> 00:35:10: As.

00:35:11 --> 00:35:11: This kind of gets.

00:35:11 --> 00:35:14: Back to what Malcolm was talking about here we we

00:35:14 --> 00:35:17: have a, a, a growing understanding of what the risks

00:35:17 --> 00:35:17: are.

00:35:18 --> 00:35:20: But at the end of the day.

00:35:21 --> 00:35:25: There is a need for more adaptive management and there's

00:35:25 --> 00:35:29: always going to be uncertainty in terms of those risks

00:35:29 --> 00:35:31: and part of the the key here in terms of

00:35:32 --> 00:35:33: moving forward is.

00:35:34 --> 00:35:34: Umm.

00:35:35 --> 00:35:36: Figuring out.

00:35:36 --> 00:35:38: How to?

00:35:38 --> 00:35:42: Implement policy in a world where there is uncertainty and

00:35:42 --> 00:35:46: risk. Disclosures are an important step, but that's not going

00:35:46 --> 00:35:50: to solve the problem. So I'm not aware of municipalities

00:35:50 --> 00:35:54: that are disclosing I'm I know there are some that

00:35:54 --> 00:35:58: are doing risk assessments. There's a fine line, perhaps

00:35:58 --> 00:36:01: semantics

00:35:58 --> 00:36:01: between the two, but it's a step forward. It's not

00:36:02 --> 00:36:03: the the final step though.

00:36:04 --> 00:36:06: And I said so. I'm sorry. Not Ian, forgive me,

00:36:06 --> 00:36:08: Malcolm, I said. You're nodding your head. Did you want

00:36:08 --> 00:36:09: to weigh in?

00:36:10 --> 00:36:13: Yeah, I think it's part of the challenge that we'll

00:36:13 --> 00:36:16: always face is that the list list of physical climate

00:36:16 --> 00:36:20: hazards is extensive and it varies hugely based upon which

00:36:20 --> 00:36:24: we know which municipality we're talking about, where it

00:36:24 --> 00:36:27: situates

00:36:24 --> 00:36:27: itself in Canada, and even down, right down to the

00:36:27 --> 00:36:31: specific property level itself, there's this this full spectrum of

00:36:31 --> 00:36:36: information that needs to be managed. And unfortunately,

00:36:36 --> 00:36:39: unfortunately, generalities

00:36:36 --> 00:36:39: don't work when you're when you're looking to understand

00:36:40 --> 00:36:40: your

00:36:40 --> 00:36:40: risk.

00:36:40 --> 00:36:45: More importantly than your responses to that risk, it's.

00:36:46 --> 00:36:49: The the level of insight needed is, is significant and

00:36:49 --> 00:36:52: that places a lot of burden on on all the

00:36:52 --> 00:36:55: different parts of of the chains when we look to

00:36:55 --> 00:36:57: to what it means to to look to our urban

00:36:57 --> 00:37:02: form, what's built, what's where, how it's transferred, who's

00:37:02 --> 00:37:04: paying

00:37:02 --> 00:37:04: for what, so on and so forth.

00:37:05 --> 00:37:08: Oh, great. I have another question from Wendy Waters to

00:37:08 --> 00:37:12: everyone. I'm not sure who would want to tackle this.

00:37:12 --> 00:37:16: It's fairly specific. What are some solutions you've seen or

00:37:16 --> 00:37:16: used?

00:37:16 --> 00:37:19: Uh, to retrofit multifamily buildings for air conditioning while

00:37:19 --> 00:37:22: also

00:37:19 --> 00:37:22: trying to keep their emissions down. Why do I feel

00:37:22 --> 00:37:25: like we're going back to heat pumps and not overloading

00:37:25 --> 00:37:27: the electrical system in the building or the grid in

00:37:27 --> 00:37:30: the local area, which typically wasn't built to manage higher
00:37:30 --> 00:37:33: electricity loads? Anybody want to take that on?
00:37:34 --> 00:37:38: It's clear that in BC in particular electrification, the
00:37:38 --> 00:37:42: replacing of fossil fuel furnaces and air conditioners with
00:37:43 --> 00:37:46: heat pumps is low hanging fruit. That that's a solution
00:37:46 --> 00:37:51: that's there, that's implementable today. And those that have
are
00:37:51 --> 00:37:56: already benefiting from reducing their emissions, keeping
their their their
00:37:56 --> 00:38:00: buildings either cool or hot as required. But they are
00:38:00 --> 00:38:03: part of a building is a system, it's a network
00:38:03 --> 00:38:05: the heating and cooling.
00:38:05 --> 00:38:08: Only one component of it, there's building materials. So
we've
00:38:09 --> 00:38:12: seen the the testing and use of different building materials,
00:38:12 --> 00:38:16: the way that buildings are insulated, glazing on windows for
00:38:16 --> 00:38:20: example. These are all areas that are available. There's
technology
00:38:20 --> 00:38:24: available today to minimize emissions, so it's not just the
00:38:24 --> 00:38:27: electrification and I often hear about the concerns of.
00:38:27 --> 00:38:27: You know.
00:38:28 --> 00:38:31: We're we're not going to have enough electricity to support
00:38:31 --> 00:38:34: the totality of electrification that's needed. Well, then part of
00:38:35 --> 00:38:35: the solution is.
00:38:36 --> 00:38:39: Upgrading those grids and upgrading that as well. It's not
00:38:39 --> 00:38:42: just throwing up our hands and saying we can't handle
00:38:42 --> 00:38:45: this, therefore we shouldn't do it. The current technology is
00:38:45 --> 00:38:50: that electrification is the lowest hanging fruit to reducing
emissions,
00:38:50 --> 00:38:53: and we're we're a far ways away from overloading, at
00:38:53 --> 00:38:55: least here in the British Columbia context.
00:38:56 --> 00:38:56: Anyone else?
00:39:00 --> 00:39:03: Yeah, I I think it's a really important piece and
00:39:03 --> 00:39:07: some of my colleagues at the Institute are are working
00:39:07 --> 00:39:09: on a project over the next year to look at
00:39:09 --> 00:39:12: heat pumps and the transition to heat pumps.
00:39:13 --> 00:39:16: So I think there is a really important piece there.
00:39:18 --> 00:39:20: I I do also want to point out that you
00:39:20 --> 00:39:24: know whether we're talking about reducing emissions or
adapting at
00:39:24 --> 00:39:27: the end of the day we're, we're we're talking about
00:39:27 --> 00:39:29: protecting people and.
00:39:30 --> 00:39:33: Those 600 people that died last summer would not have

00:39:34 --> 00:39:37: died if they had air conditioning or heat pumps. And
00:39:37 --> 00:39:39: so I think we have to.
00:39:40 --> 00:39:40: Umm.
00:39:42 --> 00:39:47: Start thinking about that counterfactual and you know and
likelihood
00:39:47 --> 00:39:49: there is going to be.
00:39:50 --> 00:39:53: Multi pronged approach here where some buildings get
retrofits or
00:39:53 --> 00:39:56: feet pumps, but we also can't shy away from the
00:39:56 --> 00:39:59: fact that some of the people are are just going
00:39:59 --> 00:40:02: to need an air conditioning unit in their apartment to
00:40:02 --> 00:40:03: make it a livable environment.
00:40:06 --> 00:40:09: Yeah, I think for from my perspective it is about
00:40:09 --> 00:40:13: a more integrated and sophisticated conversation with BC
Hydro as
00:40:13 --> 00:40:17: to what future electrification looks like in our urban centres.
00:40:17 --> 00:40:21: We've got generation capacity broadly speaking, we've got
transmission to
00:40:21 --> 00:40:24: get it into our urban centers. Once it gets into
00:40:24 --> 00:40:28: there, it is difficult. The the grid, the distribution system
00:40:28 --> 00:40:32: is is certainly challenged and electric vehicles are not going
00:40:32 --> 00:40:36: away. The move towards heat pumps is not going away.
00:40:36 --> 00:40:39: The the need for AC is not going away. What
00:40:39 --> 00:40:41: is it? What is the the role of smart grids?
00:40:42 --> 00:40:47: What's the role of local generation, distributed generation
currently with
00:40:47 --> 00:40:50: NBC, it's really there's there's not a lot of benefit
00:40:50 --> 00:40:54: to be seen from from doing rooftop solar systems of
00:40:54 --> 00:40:58: significant scale. There's vast amounts of warehouse roof
space that
00:40:58 --> 00:41:03: is perfectly primed for significant PV generation potential.
And so
00:41:03 --> 00:41:05: I think it's a case of how we how we
00:41:05 --> 00:41:06: make.
00:41:06 --> 00:41:08: The most of them were integrated system.
00:41:08 --> 00:41:11: And then there this may not, this may seem like
00:41:11 --> 00:41:14: a minor step to do, but it certainly works in
00:41:14 --> 00:41:17: some locales. And that is the this evolution of simple
00:41:17 --> 00:41:20: thing like reflective white paint on buildings that can keep
00:41:20 --> 00:41:24: buildings cooler as well. There's other smaller things to be
00:41:24 --> 00:41:28: done, but you're right, it's a incredibly complicated question. I
00:41:28 --> 00:41:30: I just want to get another one in here. How
00:41:30 --> 00:41:33: do we gather and share data more effectively so that

00:41:33 --> 00:41:37: the average Canadian understands the impacts of climate change and

00:41:37 --> 00:41:39: what needs to change to protect people?

00:41:39 --> 00:41:43: In places as we move to more extreme weather, that's

00:41:43 --> 00:41:46: to everyone. So who wants to take that? I think

00:41:46 --> 00:41:49: that that that maybe Dylan should start us off there

00:41:49 --> 00:41:52: because you were talking about that.

00:41:54 --> 00:41:55: Yeah, it's a.

00:41:55 --> 00:41:58: This is another live conversation and and certainly we've seen

00:41:58 --> 00:42:01: the federal government moving to this area with their.

00:42:03 --> 00:42:08: Canadian Center for Climate Services, so CCCS under Environment Canada.

00:42:11 --> 00:42:13: You know, I think there's never going.

00:42:13 --> 00:42:16: To be a one stop shop for all of the

00:42:16 --> 00:42:20: different data, there's a huge continuum of data needs and

00:42:20 --> 00:42:24: users and we've also seen a lot of consulting firms

00:42:24 --> 00:42:27: really grow in this area in terms of, you know,

00:42:27 --> 00:42:32: engineering firms ability to look at climate data and think

00:42:32 --> 00:42:35: about that as they design new infrastructure.

00:42:37 --> 00:42:39: So I think, I think this is an area where

00:42:39 --> 00:42:43: we're seeing improvements. There is not going to be, I'm

00:42:43 --> 00:42:46: not confident there'll be a silver bullet ever and in

00:42:46 --> 00:42:49: this area and I think it's just going to take.

00:42:50 --> 00:42:53: Time for kind of the the data users to grow

00:42:53 --> 00:42:57: familiar, more familiar with with what's out there and how

00:42:57 --> 00:43:00: to use it. I know a lot of or there's

00:43:00 --> 00:43:03: a number of groups across the country that are are

00:43:03 --> 00:43:08: kind of setting up certificate programs for individuals that are

00:43:08 --> 00:43:12: interested in in gaining these tool sets on the job

00:43:12 --> 00:43:15: and I think that's an important area as well.

00:43:16 --> 00:43:18: Bill or Malcolm, if you want to weigh in, we've

00:43:18 --> 00:43:20: got just a short amount of time left.

00:43:23 --> 00:43:24: I see I've inspired you to speak further.

00:43:26 --> 00:43:29: I mean I'm just going yes that I think public

00:43:29 --> 00:43:32: policy as I stated earlier plays such a huge role

00:43:32 --> 00:43:36: in this and and the the collection and disclosure of

00:43:36 --> 00:43:39: data is is 1 where I do see various levels

00:43:39 --> 00:43:42: of government playing a role. You know when I look

00:43:42 --> 00:43:46: at things like energy labeling of homes and buildings that

00:43:46 --> 00:43:49: may be one that you we're going to need some

00:43:49 --> 00:43:53: some government direction and enforcement a lot of this data

00:43:53 --> 00:43:55: is out there we just don't know how.

00:43:55 --> 00:43:56: To.

00:43:56 --> 00:44:00: Collect it and bring it together. Uh, so these aren't

00:44:00 --> 00:44:04: insurmountable tasks. It's just that motivation to to make it

00:44:04 --> 00:44:06: happen and and I, you know, I do think that

00:44:07 --> 00:44:10: government is going to be the catalyst in many cases.

00:44:11 --> 00:44:13: Malcolm, I see your audio cut out. Are you back?

00:44:13 --> 00:44:14: Are you able to speak to us?

00:44:16 --> 00:44:17: I guess.

00:44:17 --> 00:44:20: Not sure. OK, well, I think we're going to leave

00:44:20 --> 00:44:23: it there. There's a few more questions and observations in

00:44:23 --> 00:44:25: the chat, but I don't think we can get to

00:44:25 --> 00:44:27: them, Rachel, because I think we're running out of time

00:44:27 --> 00:44:28: here.

00:44:32 --> 00:44:35: Hi there. Thank you so much, Laura. I appreciate that

00:44:35 --> 00:44:38: moderation. And for all of the panelists for participating in

00:44:38 --> 00:44:40: the dialogue, I think we go on for quite a

00:44:40 --> 00:44:43: while. I see there's quite a few questions here. So

00:44:43 --> 00:44:44: like I said, this is a.

00:44:46 --> 00:44:48: A topic that is extremely timely. I was saying I

00:44:48 --> 00:44:51: was gardening in the backyard with my children in the

00:44:52 --> 00:44:54: heat a few weeks ago and we look out the

00:44:54 --> 00:44:57: window and they're screaming and delighted over the snow.

00:44:57 --> 00:45:00: So

00:45:00 --> 00:45:03: I don't know whether to cry or laugh when I

00:45:03 --> 00:45:06: see that. So we are seeing you know, such extreme

00:45:06 --> 00:45:09: changes in in weather and in in our air quality

00:45:09 --> 00:45:12: here in British Columbia. So thank you so much to

00:45:12 --> 00:45:15: the experts, all four of you, for being here today,

00:45:15 --> 00:45:16: for being a part of this dialogue and for sharing

00:45:16 --> 00:45:20: your expertise and insight.

00:45:16 --> 00:45:20: With us, we appreciate it very much. These events are

00:45:20 --> 00:45:24: extremely, extremely insightful to our audiences and our

00:45:24 --> 00:45:28: community. So

00:45:28 --> 00:45:31: thank you again and we encourage you to join you

00:45:31 --> 00:45:34: Li events. Check out the website, have a look to

00:45:35 --> 00:45:38: see what's coming up. A lot of education knowledge on

00:45:38 --> 00:45:41: you can find on the website ULIBC. And yes, thank

00:45:41 --> 00:45:42: you all for being here and I'll sign off from

00:45:43 --> 00:45:43: here. Thank you so much.

00:45:43 --> 00:45:43: Thank you.

00:45:44 --> 00:45:45: Thanks, Laura. Thanks, Rachel.

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