

Chris Chang-Yen Phillips ([00:03](#)):

Need to take the bus to work right now? It's free. Want to go for a walk? Pylons are up on Saskatchewan Drive and Victoria Promenade because former car lanes are being converted into trails for pedestrians and cyclists. Lots of things that seemed impossible in Edmonton are now just happening as part of our response to COVID-19 but more than that, some of these ideas have been floating around for years as ways to reduce our carbon emissions. I'm Chris Chang-Yen Phillips, writer, podcaster, correspondent for Taproot Edmonton and today I'm going to explore a question that a Taproot reader sent us. Are people thinking about this in relation to climate crisis and the need for a total system draw down or which people are thinking about this and how ready are we to really take on the whole picture? We're going to talk to a couple of people who are already thinking about it and we're going to start with psychology researcher based here in Edmonton.

Miranda Lucas ([00:55](#)):

Hello.

Chris Chang-Yen Phillips ([00:55](#)):

She patiently waited through some technical problems with my recorder.

Miranda Lucas ([01:01](#)):

Uh-huh (affirmative). Uh-huh (affirmative). I have had these issues with my GoPro. Hi, my name is Miranda Lucas and I'm a PhD student at the University of Lethbridge. My concentration is evolution and human behavior.

Chris Chang-Yen Phillips ([01:16](#)):

And you have done some pretty cool field research.

Miranda Lucas ([01:20](#)):

Yeah. Yeah. For my masters degree, I did field research in South Africa videotaping and observing wild vervet monkeys. And for my PhD I observed wild humans in art galleries observing their behavior in that space across the country.

Chris Chang-Yen Phillips ([01:45](#)):

So you know of what you speak when you talk about recording, what's going on out there.

Miranda Lucas ([01:52](#)):

I'm a keen observer. How about that?

Chris Chang-Yen Phillips ([01:57](#)):

Cool. Yeah. Okay. So I wanted your help to riff on this question that a taproot reader sent about COVID-19 and this wild time and also all the other things that we're dealing with with climate change. And the specific question was, are people thinking about this in relation to climate crisis and the need for a total system draw down or which people are thinking about this and how ready are we really to take on the whole picture? So I thought maybe you and I could talk about how ready are we really to take on the whole picture and what psychology can maybe tell us about that.

Miranda Lucas ([02:37](#)):

Well, so I've just been kind of reading up on it a little bit more to try and answer it in a more psychologically scientific way. And I was reading about like the Keeling curve, which shows this steady increase over time of CO2 emissions in our atmosphere, carbon dioxide. So the thing is when people see that and it's just a straight line cutting the graph in half, like imagine a perfect 45 degrees just going up and up and up. It's not exponential like it is when we see the COVID graph. The problem is that when we see that steady increase graph, when we're talking about the climate change crisis is we don't see that as a crisis. We see that as a slow increase over time that's just going to continue to slowly increase. But the thing is that we're at the top of that graph. It is a crisis because emissions have never been higher than they are right now.

Miranda Lucas ([03:47](#)):

So this interesting study that I think puts that point ... cross the T to make the point is this study came out today that says that the Southwestern United States is experiencing a mega drought and this is a once in a millennia kind of event. It's the most extreme drought they've ever experienced in the last 1,200 years. So it's major. We're at the top of it right now. So it's just interesting. It's paradoxical because we don't have that fight or flight response because when scientists are communicating the data about the climate change crisis, it just doesn't feel as immediate. It feels like this is something that we've been talking about for a long time. We know we have to do something, but that Keeling curve just continues to climb at the same rate. Whereas when we communicate about the COVID-19 crisis, the idea of something being exponential is terrifying and incredibly immediate.

Miranda Lucas ([04:54](#)):

If you think of something doubling every single day. If I gave you a penny and then tomorrow I doubled it and then the next day I doubled it. By the end of the month you would have over a million dollars, by the end of a month. It just happens so fast. So an exponential curve is just inherently more terrifying than a straight linear curve and that has a profound impact on how we internalize the immediacy of the issue.

Chris Chang-Yen Phillips ([05:27](#)):

Are we like biologically more tuned into exponential change? Is that what you mean? Or is it rapid change?

Miranda Lucas ([05:41](#)):

I feel like it's rapid change is the issue. When you say biologically, that also makes me think ... We know that COVID-19, it's a biological threat. It could make me sick, it could make my mom sick. That's a very real present thing. Whereas saying, "Oh the next generation will suffer." That doesn't feel as scary. It should, but it doesn't inherently feel as scary.

Chris Chang-Yen Phillips ([06:19](#)):

I think that the fear interacts in an interesting way with how people are deciding whether or not to wear masks right now. I just started wearing a mask when I go out and I have never before in my life worn a face mask just for going out on the street. I think part of what persuaded me to start wearing one was realizing that it's more effective for helping me not transmit something I don't know that I have then for ... It's more effective for keeping other people safe for me than it is for keeping me safe from other people. When I thought about it like that and I thought about all the beautiful grandmas in my life who I

might even indirectly interact with, that was one of the things that changed my mind. I think that is a fear based response of not wanting to be the person who it makes someone else's grandma's sick.

Miranda Lucas ([07:23](#)):

The other interesting thing about face mask wearing is that it communicates to everyone around you that you care and that you're a part of a community in the sense that you're all going through something together.

Chris Chang-Yen Phillips ([07:38](#)):

Climate change doesn't have as many ready symbols I think. A lot of the symbols are investments of thousands and thousands of dollars. Like getting solar panels or a Tesla car is pretty different than getting like some fabric assembled t-shirts out and sewing yourself a mask.

Miranda Lucas ([07:59](#)):

Yeah and I think too, the human story behind it, which is hearing who has died. We don't have those same kind of personal stories about climate change. Climate change is not affecting individual families in the same way when they are ... because they are in other parts of the world. They're just not as close to our hearts. It's more of an intellectual exercise than an emotional one.

Chris Chang-Yen Phillips ([08:32](#)):

Has anything surprised you about the response to COVID-19 from people in Edmonton, both as citizens and institutions?

Miranda Lucas ([08:43](#)):

I think I think about it more in the scale of Alberta and because I'm a total nerd like graphing and trying to do predictive models myself to understand when it might be safe for my kid to go back to day-home . So doing that predictive stuff and looking at how our province is doing relative to other provinces in the country. I think we're doing really well, but it's shocking to model something that's exponential versus linear, it really is. And trying to fit those models to something that's progressing at such a rapid pace, even though we're doing a good job. It's Oh, high Lil. I was just going to say it's terrifying but ... Okay, bye Lily. Okay. See ya. But we knew this might happen.

Chris Chang-Yen Phillips ([09:48](#)):

Oh, she's a sweetie.

Miranda Lucas ([09:48](#)):

She's very sweet. Anyway, just using the the researcher goggle tool that I have to try and know when it's safe for like my social network to broaden. Taking the advice of the government and everybody that's giving out advice, but at the same time taking the raw data and modeling it myself too.

Chris Chang-Yen Phillips ([10:17](#)):

Is this period of lockdown and pandemic response giving you any ideas of like cognitive loopholes or psychological tricks we could use on ourselves to help us see climate change as a crisis on this scale?

Miranda Lucas ([10:32](#)):

I hope so. I mean it would be great to show this this climate change, this Keel curve data differently. To show it in a way now that I feel like a lot of people around me are really interested in the daily number of cases and have we reached the top of the curve, so we're to a point where it's flattening. Because that means we can go out. So suddenly we have this new language maybe to talk to people to say, " You know that feeling that feeling of when you're almost at the top of the precipice of the curve? Well, when we reach the top of this Keeling curve, we fall off. We don't level off and then slowly decrease, we fall off. There's a point where we're not going to be able to walk it back."

Miranda Lucas ([11:22](#)):

And that's the issue with the climate crisis. When we get to the top, we can't fix it. That's the message that's not being communicated. And it's not about, and this is another thing, it's not about buying a Tesla instead of a Mercedes. It's not about changing all the light bulbs in your house because there's data that shows that those consumer changes, although they are great, all they have done is flattened energy consumption. What we need to do is we need to reduce. That means to go down. And so maybe in order to think about it in terms of how do you give up luxuries in order to see this reduction?

Miranda Lucas ([12:18](#)):

It's like me trying to convince my mom, "You don't need Alfredo sauce you want ... We're not going to the store just for Alfredo sauce. So there are other ways that we can do this." Do you know what I mean? I think also that, I heard this lovely Ted speaker say that technology is finally being used in a way that it was intended to. So sure, I think out of this period we'll see a lot more kids addicted to their screens. I think let's just give ourselves a little bit of wiggle room and forgive ourselves for that for right now. But also using technology to be creative and connect with people over large distances. And the thing that I'm most inspired by is seeing scientists collaborate on such a global scale in order to try to problem solve is really cool. I hope that those types of connections and seeing how quickly and easily and seamlessly and not competitively and aggressively and like, "I'm trying to one up you all the time."

Miranda Lucas ([13:42](#)):

It's beautiful to see cooperation in such a crazy time where I think a lot of people were anticipating aggression and it turns out that that is not how we are inclined to behave. We are way more inclined to behave cooperatively to help each other and to come together.

Chris Chang-Yen Phillips ([14:05](#)):

That's Miranda Lucas from the University of Lethbridge and today ... Oops a phone call coming in.

Miranda Lucas ([14:11](#)):

Hey, I thought of two things.

Chris Chang-Yen Phillips ([14:13](#)):

Okay, one sec. Let me get my recorder. Okay, [crosstalk 00:14:17].

Miranda Lucas ([14:17](#)):

Okay, good? Okay. So one thing was the Southwestern United States drought, the mega drought that's happening right there is 40% worse because of human caused climate change. So that's why I brought that up in particular, I forgot to mention that it was ... Sorry Lily's out of the bath now. 47% worse

because of us. And the other thing is that Lily dumped an entire bottle of bubbles, a one liter bottle of bubble bath into the bath while we were recording.

Chris Chang-Yen Phillips ([14:56](#)):

Oh my.

Miranda Lucas ([15:00](#)):

Yeah and I didn't know until she came out just smelling very intensely of lavender. You're not going outside. You're naked. No, you're not going outside. Bear, you neither. Come on guys. Anyway, I just wanted to tell you that.

Chris Chang-Yen Phillips ([15:10](#)):

Okay, bye. So next up we're going to talk to a researcher at MacEwan University who studies these kinds of mass mobilization questions. Thanks so much for making time to talk to me.

Shelley Boulianne ([15:26](#)):

Oh, no problem. I don't normally have time to do stuff like this, but I guess when you're trapped at home, new opportunities present themselves.

Chris Chang-Yen Phillips ([15:37](#)):

Yeah, that's one way of looking at it. Yeah. Yeah.

Shelley Boulianne ([15:41](#)):

Hi, my name is Shelley Boulianne. I'm an associate professor in sociology at MacEwan University. Currently I'm the board of governors research chair at MacEwan and I do research looking at media, primarily digital media, but media and civic and political engagement.

Chris Chang-Yen Phillips ([16:02](#)):

How often are you putting on your researcher goggles these days when you're watching the public response to COVID-19 and how much are you just getting through it?

Shelley Boulianne ([16:12](#)):

Well, I would say I always have my research goggles on because the area that I teach is in research and statistics. So my primary duties are of course to do research and teaching at MacEwan. And so I'm always looking through that lens.

Chris Chang-Yen Phillips ([16:31](#)):

Well tell me what you're observing. What do you think are maybe some of the parallels you can see between the mass mobilization of action around COVID-19 and around climate change?

Shelley Boulianne ([16:42](#)):

Sure. I do see some parallels between the COVID-19 citizens responses and climate change responses. A lot of these parallels relate to problems that we see around collective action. So things that we observe in terms of people trying to engage in mobilization that requires large scale engagement. So it's difficult

to get any one person to incur the cost of an activity or the cost of participation, especially when the reward is something that everybody will enjoy. So it's considered a public good rather than an individual benefit. Basically, no one wants to make sacrifices unless they're assured that others will make the sacrifice for the common good.

Chris Chang-Yen Phillips ([17:29](#)):

That's interesting. Like what cues are do you think people are taking on whether other folks are making sacrifices too right now?

Shelley Boulianne ([17:39](#)):

Sure. So I've looked at a variety of motivations for people to change their behavior. For some people it's basically this motivation to do good. We studied the civic responses to the Fort McMurray wildfire. We saw that a large part of that motivation was just people wanting to help their community members and to give back and to basically do good in their community. So for some people, they will be motivated by this idea of being a good citizen or civic duty. So they want that. And other people, they're motivated by a variety of things. So some people are highly motivated by requests from family and friends. So if your family and friends tell you to stay home or if your family and friends tell you to take the bus in relation to climate change, then we see that this is a big factor in whether or not people change their behavior. And then there's another set of people who aren't necessarily motivated by those other drivers. But they will look at political leaders or they'll look at expert advice. And we have a great expert here leading the COVID-19 response in Alberta. And so for some people, these are the motivations to change their behavior.

Chris Chang-Yen Phillips ([18:57](#)):

Taking cues from scientists and public health authorities.

Shelley Boulianne ([19:03](#)):

Exactly, yes.

Chris Chang-Yen Phillips ([19:07](#)):

What effects our trust in what those kinds of authority figures tell us?

Shelley Boulianne ([19:19](#)):

So well we judge the credibility of authority figures based on a variety of factors. But certainly we see in the response in Alberta, we do see that the chief medical officer is basically very highly regarded and she's doing a very good job managing the information flow and addressing citizens concerns around this pandemic. And so I think that adds to her credibility.

Chris Chang-Yen Phillips ([19:48](#)):

Is there anything you think, or what can we learn from COVID-19 about how to mobilize people to the scale of the challenge?

Shelley Boulianne ([20:02](#)):

Well, I think that again, coming back to these collective action problems, we have the similar challenge here, which is we need millions of people to do something in order to have an impact. And that is

certainly a challenge for people to incur costs at the individual level when we know that that impact is not a direct impact to them, but an impact on community. So we need millions of people to do something, whether that be stay home or take the bus in order to have an impact. So one of the key challenges is that we need to trust each other, that we are all going to share the cost of acting and have that burden or that sacrifice and we need to trust each other that we're going to do it. Then this is the way forward in terms of the pandemic. We all need to make that sacrifice. We need to trust that each other is going to make the sacrifice and this will contribute in the larger impact.

Chris Chang-Yen Phillips ([21:01](#)):

In Edmonton specifically, are there any manifestations we can ... that you physically see of how seriously people are taking this in Edmonton?

Shelley Boulianne ([21:15](#)):

Absolutely. So I'm actually in Sherwood Park. I do a lot of work with the Edmonton and I'm part of that broad metropolitan area of response. And one of the things that I've observed is people are setting up these community, very localized community groups on Facebook to help each other out, so help neighbors out. I believe this concept was ... It's an old concept, but it was revived in a Guardian piece about Canadians engaging in care mongering. So I see that and at the very local level here in Edmonton.

Shelley Boulianne ([21:50](#)):

This response doesn't surprise me. Again, thinking about the study we did about the Fort McMurray wildfire and Edmonton's reaction to it, Edmontonians were very highly engaged and had high levels of concern around people displaced by that wildfire. And so what I see is a continuing of this pattern of Edmontonians showing that they are very, very good citizens. They take care of each other. So in relation to the COVID-19 what we're seeing is people use social media to set up these very localized groups which basically help their neighbors whether they need somebody to go out and do grocery shopping for them because they have to stay home or they're in a travel related quarantine in their home. We see that people are demonstrating their care.

Chris Chang-Yen Phillips ([22:41](#)):

That is really lovely to hear. Also I keep thinking about it in relation to climate change and how physically distant some of the impacts of our actions are and how much harder it is to sometimes connect ourselves with someone who lives a meter above sea level in Kiribati versus someone who lives down the street. COVID-19 as a case study, is it giving you any ideas of how we might help people make those kinds of emotional connections or parallels of taking care of one another?

Shelley Boulianne ([23:28](#)):

Sure. I mean it's easy, I think, to care for one's neighbors because you see them regularly. You can see the impact of doing good. You have that good karma with your neighbors. I think it's easy to identify and to demonstrate care when you see it face to face. I think you're right. I mean it's harder when we're talking about climate change. We know that parts of Africa are going to be severely affected by climate change and it's hard to get some people to identify with those, basically the victims of climate change and to want to do something to help them. And so again, this is where we have to go back to this idea of being good citizens and contributing our part. Even though we may not know directly those people who are going to be the worst impacted by climate change. If we think about ourselves in this global

community, then I think that people can be motivated to act based on this wanting to do good and seeing that we're all part of this larger global community.

Chris Chang-Yen Phillips ([24:37](#)):

Some of your research has, has looked at how participation in public consultations and other deliberative dialogue exercises may or may not have a lasting impact in how engaged people are politically. What does that research maybe tell you or suggest about what lasting effects public participation in COVID-19 related like public health exercises might have in how civically minded or politically engaged people will be in a lasting way?

Shelley Boulianne ([25:14](#)):

I think that actually we might learn from this experience. In fact, if I was trying to mobilize people to act on climate change, I might think about people's response to COVID-19 and use some of the same strategies to motivate people. Again, if the motivation is to do good, then we should jump on that bandwagon and use that to motivate people to act on climate change.

Shelley Boulianne ([25:44](#)):

So I think that we learned through these processes and right now people are very much community minded. They understand how we may live in a local community, but our actions have global ramifications in terms of the spread of the pandemic. We already have some of the messaging about how to stop the pandemic and some of these messaging about how to limit the spread are also tactics that would work to limit climate change. So things like restricting air travel, thinking about energy consumption, all of these things can be mobilized in terms of trying to address climate change. So again, if I was part of that movement to try to get people to act on climate change, I would definitely learn from COVID-19 and see what's working and not working in that respect.

Chris Chang-Yen Phillips ([26:38](#)):

All right. Is there anything else that you wanted to share with me?

Shelley Boulianne ([26:43](#)):

No, again, I just have this message that I've seen it before in the local studies that we've done in Edmonton. Again, the one you mentioned with the climate change and getting people involved in consultation. I'm just always impressed by Edmonton as a standout community in Alberta in terms of caring about others, but also their ability to take action and to do what's good, what the civic good is.

Chris Chang-Yen Phillips ([27:09](#)):

That was Shelley Boulianne from MacEwan University. We may be a city where people want to pitch in and support each other, but we're also the capital of a province whose economy is utterly dependent on oil. Right now we've got a provincial government with a laser focus on supporting the oil industry. So how much room is there to learn from COVID-19 and take this opportunity to draw down on our emissions in Edmonton?

Chad Park ([27:33](#)):

You do hear people saying, "Well look, when we slow down the economy, like we are now that that is good for the climate, for our efforts to adjust climate change." Personally I don't view it that way and I actually don't think most people view it that way.

Chris Chang-Yen Phillips ([27:49](#)):

This is Chad Park, lead animator with Energy Futures Lab. Chad works with businesses and communities in Canada to help them focus on sustainability and he is definitely not someone who's thrilled with why our greenhouse gas emissions have temporarily dipped.

Chad Park ([28:03](#)):

Even if there's a sort of temporary reduction or slowing of the pace of our emissions right now because of the economy that doesn't inherently change the dynamics and the structure and the trajectory of our current economy. So that's why I think it's important that we not frame this as we need to slow our economy down like we're doing right now. Rather, it's more like we need to find the opportunities that will position us well for a low carbon emissions future and to be successful economically in that future.

Chris Chang-Yen Phillips ([28:41](#)):

We talked about the unique feeling of everybody being focused on COVID-19 right now. It's weird to be in a time where it feels like everyone is focused on one issue.

Chad Park ([28:50](#)):

That's right. Yeah and the other thing is that the response involves everyone. It's one thing to all be paying attention to one issue, but also we're all forced to change our daily patterns and our frames of reference and so on altogether, which is ... Yeah, I guess that's why everyone's referring to it as very unprecedented.

Chris Chang-Yen Phillips ([29:18](#)):

Is that gap in collective focus and attention and work, how optimistic are you that that is something that will carry you through to climate challenges?

Chad Park ([29:34](#)):

I am hopeful. I think, I mean even before the COVID-19 crisis, I think we're a rising consciousness about the need to address climate change. At the same time we also saw a lot of polarization on these issues, energy and climate issues and kind of intersections among them. So it's interesting because in our work with the Energy Futures Lab, we found pre-COVID that polarization is actually one of the biggest barriers to progress. And interestingly, it was also one of the things that most people could agree on, even though a lot of people disagree on the details of what should happen and so on. Most people, no matter what kind of viewpoint they're advocating are frustrated with how polarized things have gotten on that issue. Because no matter objective you're trying to achieve the fact that things are so polarized makes it hard to achieve that objective.

Chad Park ([30:41](#)):

So we found that that was actually a useful way to get really diverse people together to talk about it. So I think their COVID crisis means that that polarization isn't as front and center right now on climate and energy issues, but I still think it's very much below the surface. And what the COVID crisis has shown is

that it's possible to rally people on a grander scale to the challenges. So in that sense, I'm hopeful. I'm also conscious of the fact that all the challenges associated with climate change have not gone away, even if they are not as front and center right now in the last few weeks.

Chris Chang-Yen Phillips ([31:33](#)):

We're in such a complicated situation in Alberta right now. Provincially, our oil and gas production is about half of our greenhouse gas emissions right now, but also that sector has been hit really hard both by the COVID-19 crisis and the drop in the price of oil. How does this affect your vision maybe of what a post-COVID-19 plan should be for Alberta to draw down our emissions?

Chad Park ([32:05](#)):

Yeah, one of the other things that we have found all the way along is that everyone wants to be part of the solution and it's natural for people to react defensively if they feel they're being accused of her painted as being part of the problem. So I think a lot of the reaction in Alberta is I guess is against let's say more aggressive climate policy and action stems from that and a fear of what it might mean for the future. For example, the industry and so on. Whereas in our work, what we've found is that we've got lots of people from oil and gas that are part of the Energy Futures Lab and are knowledgeable and are engaged in being part of the solution. And that's part of the story that doesn't get told as much when it's painted as in either or, yes or no. You either support oil and gas or you support action on climate change.

Chad Park ([33:16](#)):

So I think this situation we're in now is just more urgent evidence of the need to take a future focused lens to the decisions we're making in the short term. In that sense, that doesn't mean we need to choose something. It doesn't mean only that we need to choose something other than oil and gas to focus on it. It partly means that we can ... We need to reimagine and think about what could be the role of oil and gas in the transition to a low carbon emissions future. There's lots of work happening in the province on, that, on just a different set of priorities and initiatives that uses best of our ... that industry of those resources and so on and uses all that to develop new opportunities and new industries.

Chad Park ([34:13](#)):

I feel that the COVID-19 crisis has actually opened the door wider and sort of opened people's gaze a little wider to both the urgency but also the opportunity of a kind of different thinking and new ideas in that sense.

Chris Chang-Yen Phillips ([34:30](#)):

There's an interesting window here where provincial and federal governments are both trying to decide how to spend stimulus dollars and what industries to spend them on. You've co written a piece about ideas for our economic recovery. This piece was written about a month ago. So you talked about ideas like investing in hydrogen and geothermal and a couple of other industries. What signs are you seeing of where those stimulus dollars are going in Alberta?

Chad Park ([35:05](#)):

Well, I mean just last week we of course heard from the federal government about the support for cleaning up the oil Wells and the investment in methane emissions reduction. So that I think was a good example of that. The article that we wrote described opportunity area at five different opportunity areas

where we could leverage our historic and existing strengths in oil and gas for future opportunities. So less about how can we get the industry back to where it was and more like, how can we invest to make sure that we are well positioned for the future. It's hydrogen geothermal where we can use all the skills, lots of the skills of oil and gas. Lithium or we can develop a resource that's relevant for a low carbon emissions future from the wastewater of oil and gas drilling. And leveraging our, our artificial intelligence skill sets and capabilities to solve challenges in the energy industry.

Chad Park ([36:15](#)):

Another one that a lot of people in Alberta haven't heard as much about it, but I find really exciting is Bitumen Beyond Combustion. And this is a program of Alberta innovates that's really looking at the opportunities to develop alternative uses for our bitumen and resources beyond burning them. And for example, carbon fibers is a great potential opportunity there with potential for a huge market. And what I really love about that is it turns what so far has been a liability of our resource, it's carbon intensity in from a liability into an asset. So those are the kinds of things I think that we see great opportunity in. There's some of the ideas that have been developed and nurtured along in that collaborative space at the Energy Futures Lab. It feels to me like this is an opportunity to really try to accelerate the development of some of those kinds of ideas.

Chris Chang-Yen Phillips ([37:21](#)):

Are those ideas being taken up by anybody yet? In the month since this piece was written-

Chad Park ([37:26](#)):

Yeah.

Chris Chang-Yen Phillips ([37:26](#)):

... Are there good signs of this some of these ideas being taken?

Chad Park ([37:30](#)):

Oh, okay. Yeah. I mean, first of all I should say all of the ideas that are featured in that are being worked on and developed by actual Alberta organizations, whether they're companies or private companies, government institutions and so on. These aren't just pipe dream ideas, these are things that people are actually working on. Then in terms of the interest, since the piece was published, we had an incredible response to that article and so much so that we decided to host a virtual conference on it, which we did on Thursday. We were thinking that we might get a hundred or 200 people that might come and learn more about the ideas that were presented there. But without really even promoting it, we immediately had 350 people signed up and had or more than a hundred people on the waiting list. Just judging based on that, our sense is that there's a real appetite right now for these kinds of ... First of all, learning more about them, but also finding opportunities to contribute to them.

Chris Chang-Yen Phillips ([38:52](#)):

That was Chad Park, lead animator with Energy Futures Lab in Edmonton. Thank you for sending in your questions Taproot readers. You can check out our whole collection of COVID-19 coverage at taprootedmonton.ca. This story is part of Taproot's contribution to Covering Climate Now, a worldwide journalism initiative to bring more and better coverage to climate change. I'm Chris Chang-Yen Phillips. Thanks for listening.