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The Carbon Neutral Conversations series is a research collaboration between Royal Roads University and the University of Victoria.

**DIALOGUE**

Ann Dale

Hello everyone to the second research conversation for our SSHRC-funded project, “New Governance Arrangements for a Post-Carbon Society”. This keeps me awake at night. It's not even a post carbon economy, but a post carbon society. It's a big exploratory question that we're looking at.

I will be joined today by members of the research team from University of Victoria, and by my colleague Tad Homer-Dixon, who leads the Cascade Institute at Royal Roads University. I am moderating this session from the traditional unseeded lands at the Esquimalt and Songhees nations, his ancestors, and families. These lands have been a gathering place for thousands of years where indigenous people have shared stories, food, medicines, teachings, and knowledge. As a university, we owe a deep respect, and recognize this ancient lineage and hope to seek to uphold and sustain these lands as a gathering place for reconciliation.

Kate and I have been working on an inventory of the last 10 years of government legislation, regulations, incentives, and policies. The government last week moved ahead with their sustainable jobs’ legislation (Canadian Sustainable Jobs Act), and Budget 2023 that presented a Made in Canada Clean Economy Plan to compete with the US Inflation Reduction Act. Canada's carbon price is scheduled to rise to $170 a tonne by 2030. However, if a future government rolls back Canada's carbon price, the market value of low carbon energy and products could plummet. The risk of policy reversal can deter investors, and my interviews that I am leading several interviews - I've now completed over 21 expert interviews with people from diverse backgrounds and extensive-lived experience - about how when regimes change, the incoming regime, most of the time, cancel the previous regimes policies in spite of the evidence that it has been working. The Canada Growth Fund will have the ability to sign contracts for difference, which hopefully will be able to smooth out some of these reversals. Carbon contracts for difference are contracts, which guarantee at certain carbon or product price for companies. Again, our earlier research has shown the importance of being able to institutionalize or embed policy changes to offset huge swings in electoral regimes.

I suggest that when each of you begins to speak that you introduce yourself and briefly your work. Leslie, if you don't mind, can you talk about the lessons learned from our two case studies?

Leslie King

OK. Hi everybody. My name is Leslie King. I'm a professor of environment and sustainability at Royal Roads University, colleague of Ann, and I'm delighted to be working with all of you on this project. So, the project included a number of different case studies that we thought we could learn from to inform our recommendations about how governments can contribute to net-zero and a carbon neutral society. So, everybody, please interrupt me if you have ideas about lessons. We're lucky that we got the successes, and in fact, there's a couple of books on great policy successes that I recommend. The first one is by t’ Hurt and Compton (2019)[[1]](#footnote-1), but then Evert Lindquist, who is also a co-investigator on this project, in 2022, just last year, published “Canadian Policy Success”[[2]](#footnote-2), and the 1987 “Montreal Protocol on Substances that Deplete the Ozone Layer” is commonly recognized as one of those great policy successes.

So, what are the lessons from the Montreal Protocol and from Ann's case study on the Montreal Protocol? I think #1, it is simply raising the possibility of global and international action to address an immediate global threat. We've had other multilateral treaties, but this is the first truly global environmental treaty. It was unanimously signed and ratified by all the UN states, which to this day is a first, and it included a mandatory timetable. Now I'm going to go into some of the lessons. First, the lesson of raising the possibility of global action, also a mandatory timetable, and funding for developing countries to phase out CFCs until we could arrive at a complete ban.

Now, Susan Solomon[[3]](#footnote-3), who's the person credited with discovering the hole in the ozone layer, suggested that we need three Ps for policy success. The first P is *perceptible*, so the problem of CFCs in the atmosphere was relatively easily understandable unlike some others, we could name it, so it was *perceptible*. It included an immediate short term human health threat, skin cancer, cataracts, etcetera, caused by the thinning of the ozone layer and that made it *personal*. And that's the second P (personal) that Susan Solomon requires for success. And there were ready alternatives to be developed to replace refrigerants and aerosols, including HFCs, and so that fulfills her third P, a *practical* solution.

I think the Montreal Protocol also underscores the importance of science to inform policy, but not just science; the importance of scientist advocates, because it was the scientists who were really advocating that something had to be done immediately for this. And, you know, people were terrified, and they hopped to attention. I think another lesson is the need for long term money. The ozone hole did not heal overnight. In fact, it's still healing, but it's under threat from other forces, including greenhouse gases. And so now we have the Kigali Agreement[[4]](#footnote-4) to phase out HFCs, which are also being a substitute for CFCs powerful greenhouse gases. There's another interesting lesson from the Montreal Protocol for the academics among us, and that was a really interesting methodological issue: Susan Solomon was processing all of the data out of the Antarctic and. she saw a lot of rejected outliers. And you know when you're reviewing statistics, you tend to reject the outliers saying, “oh, they can't be true”, but she finally investigated those outliers. And it was the outliers that told the story of ozone loss, which I find fascinating.

So, in comparison with climate change and biodiversity loss, these issues are much more diffuse, difficult to understand, and impersonal and it is a future rather than an immediate threat that is rapidly catching up with us and arguably is here, especially looking at the forest fires this year in BC. And arguably, there are a limited number of chemicals and alternatives or the existence of alternatives to ozone depleting substances and CFCs were available and relatively cheaper. There were a limited number of industrial producers and a limited number, if ubiquitous, of consumer goods, refrigerants, and aerosols as available substitutes for ozone depleting substances.

Ann Dale

I'll introduce Tad if I may. Doctor Thomas (Tad) Homer-Dixon leads the Cascade Institute at Royal Roads University. Tad, you've been talking a lot lately about the concept of a polycrisis. Can you explain what this concept means and its implications for governance in Canada?

Tad Homer-Dixon

I'd be delighted to talk a little bit about the polycrisis for a few minutes. The Cascade Institute has initiated a project on polycrisis. Looking at the conjunction or convergence of multiple crises around the world, what some people have been calling a “perfect storm” of challenges humanity faces: a war in Eastern Europe, climate extremes and climate climate change, political polarization, democratic decline, biodiversity collapse. I mean, it's just a massive mess of problems. The problem with the “perfect storm” metaphor is that it implies that this is only a coincidence, an unfortunate convergence of things that humanity is dealing with. That if we just wait for a while, the problems will go away, and things will return to some form of normalcy. In the Cascade Institute we are arguing that there are deep relationships between a number of these crises that are causing them to synchronize and to occur simultaneously and reinforce each other's effects. But a lot of those relationships we don't understand effectively. Scientists and researchers, and policymakers don't understand those relationships. So, we're engaged in an analytical exercise to try to unpack the causal mechanisms of the polycrisis, and especially the mechanisms that might be leading to synchronization among these challenges. Why is it that everything seems to be going wrong simultaneously? Why is it that a number of global systems seem to be tipping in a negative direction?

The project is quite advanced now, we've just two days ago issued our Framework Paper[[5]](#footnote-5), which lays out our analytical framework for understanding these relationships. It's now online. It's the lead document on our homepage at cascadeinstitute.org. So that's the background of our research. The question you asked Ann about the implications of the polycrisis for governance in Canada it's enormously challenging. I've been speaking to senior policymakers; I did a deputy ministers breakfast in Ottawa recently talking about exactly that question. There are a series of things we can do in terms of adjusting our policy instruments, and there are things we can do in terms of adjusting the way we understand the world.

Starting from the latter, I think it's really important that policymakers, people in government, and those operating in the sort of number of governance institutions, need to approach the world with a complex systems’ frame, and need to understand that we are in a radically non-linear environment now, which means that systems have tipping points, and that there can be huge impacts, relatively small interventions or small events. I think there needs to be a tolerance for uncertainty within policymaking and within the government community that hasn't been adopted or in place before within these communities. What the American economist, the 20th century American economist Frank Knight, would have called “true uncertainty” or “deep uncertainty”, which implies that we can't effectively calculate the risks associated with various policy options, which is an enormous challenge for government. We're in a situation frequently now that Donald Rumsfeld characterized as a world of “unknown unknowns”, we don't even know what questions to ask. Things happen that we aren't expecting at all, or very few people have anticipated. That's a policy environment that is radically different and very demanding and makes government governance, much more difficult. So, adopting a complex systems frame that somehow accommodates uncertainty and takes into account uncertainty, understanding the risks of system flips, and the fact that once a social or economic or technological system is flipped into a new state; you're not going to get back to where you were; that's a concept that policymakers or complexity scientists call hysteresis. It's a practical irreversibility of the systems we're dealing with.

When it comes to sort of the democratic consequences for societies, what this means in terms of our democracies, I'm not sure we have a complete understanding of what the implications are because democracies don't deal well with uncertainty. People in general don't deal well with this kind of uncertainty, and it tends to produce a lot of fear and anger, and political and social radicalization. Within the Cascade Institute, we think the first thing we need to do is have a much better understanding of the of the causal mechanisms. We're hoping that it may be possible with a better understanding of those causal mechanisms of the polycrisis, that we can get more visibility on the horizon, and provide policymakers with more anticipatory foresight so that they aren't caught unawares as often as they have been in the past. We will try to reduce that degree of uncertainty try to change some of the “unknown unknowns” into known unknowns so that we can apply science and data to try to anticipate better the state the world in the future. I think there's a good deal of possibility that we can actually improve visibility on the horizon. We're arguing with policymakers that that is possible.

Last week, we were in Ottawa talking to the Policy Horizons Canada Group[[6]](#footnote-6) in Ottawa, that's the federal government's foresight group and comparing methods trying to come up with better foresight methods and the standard scenario forecasting that most foresight groups engage in. There are some possibilities there, but you know I would leave the general question of what it means for governance open because I don't think we fully know. I think we can get a better understanding of what's happening in terms of these converging crises and the synchronization among them. But the implications for governance, well, that's a focus of the research that we're engaged in this project and that's why it's so important. If we knew the answers, we wouldn't have to do the research.

Ann Dale

And I'd be able to sleep better at night. Tad, can you discuss at all some of the better methods for forecasting? Is there anything on the immediate horizon?

Tad Homer-Dixon

Well, a lot of this is summarized in our paper that's now online. There are a whole series of sort of analytical conceptual moves in that paper that I think we'll find really useful in our research and our work together.

For instance, we identify eight basic global systems, and distinguish between them. We distinguish between vectors that carry signals between those systems, and conduits that are the connections themselves between the systems. But I think the most important innovation in the paper is something that we call the STC model for Stresses, Triggers, Crisis. We distinguish between long-term stresses that are relatively predictable and that can potentially be modeled, and short-term triggers that combined with stresses to produce a crisis. So, you need a stress or a collection of stresses building under the surface of a social or political or technological systems or world system. And then a trigger comes along, and the trigger might be something like a bankruptcy, a major corporate bankruptcy, or an assassination, or a drought somewhere.; relatively unpredictable stochastic events. We tend to get distracted by the triggers because those are the things that are in the news, but it's the long-term stresses that we should really be paying attention to, and they tend to get ignored. But you need both the stress and the trigger to produce a crisis, and so with that STC model, we then look at what various possibles combinations of stresses and triggers and crises in different systems that we build out, what we call sort of a grammar of causal mechanisms. Different possible ways stresses-triggers-crises across systems can combine and then we provide some examples of how those things can connect together. I think that's actually quite a useful conceptual move because it simplifies the modeling and the estimation problem. If you just focus on the stresses, the task of prediction of foresight becomes easier. The stresses that are building up in our world, and these include demographic change, climate heating, biodiversity decline and increased incidence of zoonotic viral disease, widening economic inequalities, political polarization, declining democracy and the like. We can model the relationships between these things much more effectively if we start ignoring the stochastic randomness in the system which arises from these trigger events. The next stage is to take this STC model and the data that we have on the stresses and plug those data into something called a “cross impact balance”.

A “cross impact balance” model, which basically allows us to look at the relationships to bivariant relationships between these stresses, and then build all those individual bivariate relations, so for instance between climate change or climate heating and economic inequality, say, between economic inequality and democratic decline, and you build out all those bivariate relationships and then enter them into a method called “cross impact balance assessment” and you can actually then look at the interactions across all of these bivariant relationships simultaneously. It's a really powerful method and we're just starting to explore how to use that. But we think that might actually provide a better sense for the changes in probabilities in the world; you know which combinations of crises are becoming more likely and which ones we don't have to worry about as much. It's that changes in the probabilities that we need to get a handle on. That's what's important for policymakers, and I think it's important for better governance.

Ann Dale

Sounds fascinating. Look forward to reading that paper Tad. Does anybody else have any last comments for Tad? I know he's so time constrained.

Tad Homer-Dixon

The question of governance is the next question, right? You can get all the modeling right and you get a better sense of the probabilities. But then what do you do? Governance is at the centre of that question of what you do.

Ann Dale

Yeah, exactly. I'll just leave you with the last thought, which I haven't had time to share. I've now completed 21 interviews with key actors across the country, with extensive government experience and civil society leaders, and one of my interviewees talked about when the Conservatives ended the 1974 Social Housing Act. And I would assume the ending of Social Housing Act and policies has got us exactly to where we are today. That one action, I can't prove that, but it's very, very interesting to me.

Tad Homer-Dixon

There is a path-dependency that complex systems scientists use that sometimes these decisions at crucial moments can have lock-in effects that persist indefinitely into the future. I think that's there's a really valuable work by scholars such as Paul Pierson around path-dependency that I think can inform discussions of governance really well. These decisions will get lost in the deep past and then somebody will remember “Well, you know so much depended on that particular event, so that particular moment and decision”.

Leslie King

Tad prefigured a couple of my conclusions about these case studies. I'm not going to compare with our current issues as I did when I was thinking about this over the last few days, but I'm going to give you my bottom line, which is that we need a broader systems perspective, which I think Tad just said. Distributive leadership and more far-reaching societal transitions involving energy, transport, agriculture sectors and others. I think for all of our case studies, sometimes that sectoral focus, sectoral approach is responsible for their success, but at the same time is nowhere near enough and ignores other important factors. So, the second case study Ann wrote was “Getting the Price Right”[[7]](#footnote-7) and I'm just going to focus on the BC carbon tax, which is commonly viewed as a success story. And another of the co-PIs on this project, Katya Rhodes has just published a paper with Fairbrother in 2023 in Frontiers in Climate[[8]](#footnote-8) about the BC carbon tax; that makes interesting reading, I recommend it to you.

I think what we can take from the BC carbon tax are a number of lessons. One is the importance of leadership, and not just leadership, but the importance of doing the “right thing”, which is the normative piece of this puzzle in the face of public and conceptual criticism, plus accountability pressures that were raised by the Green Party. I think the Green Party played a pivotal role in the survival of the BC Carbon tax. I think the *quid pro quo,* in terms of tax breaks, the no-net increases in taxes was also pivotal. The attention to the regressive impacts and I think this is a lesson for all. Perhaps we can make the equivalent of funding to help developing countries phase-out CFCs is the equivalent of the fund to assist developing countries in adapting to climate change. In other words, understanding the distributional impacts of policy, and I've already mentioned, this distinction between sectoral and overall cumulative emissions, which is critical, the need for continuous improvement and, of course, ratcheting up the tax now at 50 bucks a ton, and Ann mentioned the federal and ratcheting up emissions reductions.

No matter how excellent the instrument - and everyone agrees that the carbon tax is an excellent instrument, and especially the economists love the carbon tax - but we still need public understanding and acceptance, so we need better communication, transparent accountability, and leadership. And most of all, we need to listen to the science. But I think one of the interesting suggestions of Rhodes and Fairbrother that I interpret is that the BC carbon tax acted perhaps as a lightning rod; that's my word, not theirs; deflecting criticism from other climate initiatives. So, for instance, while people were screaming about the Carbon Tax, the government was quietly going on about publishing Clean BC the Road Map, the Climate Advisory Council, the Clean Electricity Standard, the low carbon fuel standard, electric vehicles, etc. And the other suggestion that Fairbrother and Rhodes make is that perhaps the BC carbon tax is most successful at prompting the introduction of a national carbon pricing strategy. But of course, they also mentioned the powerful countervailing measures going on or dynamics going on in BC at the time, that limit the success of these initiatives, namely LNG (liquefied natural gas). Again, I just conclude that we need a systems perspective, a broader perspective, and many policy governance tools in our toolbox.

Ann Dale

And if I could add something, Leslie, I think the Montreal Protocol shows the importance of scientific consensus, because without that scientific consensus, the government isn't going to create innovative policies to address the solution.

Leslie King

Yeah, I did mention that as the importance of science, but the even more important scientist advocates. You're right. The consensus is critical. Because we all know how they've picked part individual scientists and made life hell for them, such as in England after the scandal during the crisis at the University of East Anglia when the scientists were accused of manipulating the data to indicate that climate change was real and worse than it really was – (the opposite was true).

Ann Dale

And then I hadn't thought of this. I don't think we put it in the case. Was, you know, if you look at the IPCC trajectory. It gained more social traction with the integration of the social sciences with the natural sciences.

Leslie King

That is absolutely right. That's absolutely right. That was a really pivotal moment in climate response. You're right.

Ann Dale

Thank you so much. Tamara, you're up next to talk about the wonderful case studies that you're leading. Do you want to talk about that a bit? And then each of your team can talk about what they're doing.

Tamara Krawchenko

Thank you, Leslie, and thank you Ann. All of these case studies complement my other cases, and we have a great team at the School of Public Administration of our students who are working on various aspects.

We have Sonja Zoeller, who is an experienced public sector leader specializing in communications strategy, development policy and program analysis, and issues management. She has worked in the British public sector for eight years and in Saskatchewan on a lot of different files and is doing her PhD right now at UVic, at our school, and her research focuses on social justice, social equity, and governance and policy making concerning urban homeless. She is doing a super interesting scoping review, which she will talk about. We looked, I mean we filtered through thousands of articles, and ended up with like, well, she'll tell you, around 35 or 38 on climate governance typologies. So how are we trying to understand these governance processes? How have we been sorting them?

We're also joined by Sophie Kiernan, who is a Masters’ student in our school with a BA in History and Philosophy, and she is writing her thesis as part of this project. She's looking at specific regional economies that are oil and gas economies that are focusing on transitioning and how that is being encouraged to be done in a way that is just and how different interpretations of justice. And she's a policy analyst in Brussels working in environment and agricultural sector. And of course, anyone following this, the Just Transition mechanism of the European Commission is really important, and delivering a lot for regional policy, so that's fantastic insights for her to have as well.

And finally, we're joined by Marcel Ramirez, who is an economist with a master’s in economics and over 20 years of experience in public policy and public administration in Latin America. He's a PhD student here in Public Admin at UVic, researching how to improve public administration and institutions in Peru and is delving into a large number of cases that we identified that are also focused on decarbonization and that appear to be some leading practices. So, thank you, and welcome, everyone. I'd like first to go to Sophie and invite her to talk about her project and then Sonja for an update.

Sophie Kiernan

Thank you. Hi, I'm Sophie. I'm currently in Brussels right now, but my research is a comparative case study, which examines 3 different oil and gas producing regions like Tamara said, and they have all committed to reducing or phasing out their oil sectors. The regions identified are Esbjerg in Denmark, Taranaki in New Zealand and Aberdeenshire in Scotland. The oil and gas in these regions provides an important source of employment, and in all cases have committed to a just transition of their sectors.

Denmark makes an interesting comparative case study due to its status as a world leader in oil and gas transitions, and it's also the largest producer of oil to establish a final phase out date. It's committed to achieving net zero emissions by 2050, and these are formally enshrined in law and represent legally binding obligations. Denmark has also decoupled their GDP from energy consumption and GHPs, and they've cancelled all future oil and gas extraction in 2020. And in 2050, it will halt all oil extraction. Overall, Denmark has focused on renewable energy investments and collaboration with industry and unions to create a robust green economy.

New Zealand has explicitly committed to adjust transition of its oil and gas industry, integrating just principles into its proactive approach to the transition. They committed to a net GHG emissions reduction of 50% below gross 2005 levels by 2030. And there will be no further offshore oil and gas exploration permits granted: there will still be oil and gas expansion in their land-based regions. They've also integrated strategic government investments into new technology such as large-scale hydrogen, which can unlock decarbonization solutions locally. The government has focused on economic diversification and regional development. However, New Zealand does not yet have a long-term energy strategy in place and there is a lack of clarity surrounding the pathways to meet these targets.

Finally, Scotland, as a devolved government of the UK requires multi level government coordination to develop its transition strategy. Their oil and gas region produces 90% of the country's energy and they've committed to a 75% reduction of GHGs. But it still aims to maximize the oil and gas recovery they have, so the government has emphasized the importance of growing the green economy and innovation and has encouraged the creation of public private partnerships to help fund this transition.

All of the cases provide opportunities for policy learning and all share features of Canada's own position. Their approaches vary, but we can compare, we can understand what policy mix could work at the Canadian context.

Tamara Krawchenko

Thank you. Sophie. I think the point here is that there have always been transitions, and governments have managed these transitions. We know the management of coal transitions and that has been have been a big emphasis of just transition policy, in particular oil and gas transitions, however, they are really new. This is an area that's developing very, very quickly. It's quite interesting to see the structures and how different they are depending on the distinct regional economies that are being transitioned and the nature of the commitments. This is a really new and evolving area. Sonja, did you want to talk about the scoping review?

Sonja Zoeller

Thanks, Tamara. The main research question of our scoping review was what analytic frameworks and typologies have scholars proposed to describe climate governance networks? Then our secondary questions were what are the purpose and the underlying variables of each framework or typology?

We developed our search strategy in consultation with the reference librarian and searched for databases like Scopus Environment Index, PACE International and Web of Science. We did not use a time limiter, but we did limit to English only and we did not search the grey literature. We're still in the process of doing our analysis, but some of the high-level overview of the initial results are that our search strategy returned, as Tamara mentioned, a large number of articles: 1994. And then after a 2-stage screening process, we included forty articles in the dataset and the majority of those (78%) were written or co-authored by scholars affiliated with European institutions. All of the papers were published after 2005 and 55% were published after 2015.

Of our dataset, we found that 30% were conceptual and the remainder were empirical papers. And then the other thing that we've done so far is categorize the typologies in the papers by governance level. The largest grouping focused on governance crossing national borders, so we had transnational translocal and transnational networks; that was 32.5%. The second largest grouping focused on multi level governance just over 20%. Then the next level was subnational governance at 20%. And then only just over 10% focused on governance at the nation state level and the smallest group was actually global governance typologies, which was under 10% of all of the papers that we reviewed. So that's just kind of a high-level overview of what we found so far. But we're continuing to analyze what we have there in the data set.

Tamara Krawchenko

And we will get to that soon. And I think that what is so interesting about typologies is first of all, how they're conceived? How people come up with sorting. This and thinking about governance types but also what's missing and so you can kind of see basically from that overview where the literature focus is and where it might be missing and then the utility of this exercise in general, what is the benefit of a typology, how is it useful to our understanding of climate governance. So those are some of the questions we're grappling with. Thanks, Sonja. This has been a huge process complex process and we're getting. And Marcel, did you want to give an update on some of the case studies you're working on.

Marcel Ramirez

Thank you, Tamara. I've been working with three Canadian cases: BC, Ontario, and Alberta I've been working much of the time BC because it has been considered as a very well implemented or well-designed case. I've been using different kinds of sources, not only media articles or secondary sources because I want to get a good understanding of what the actual mechanisms were, how they were really implemented. One of the problems that I faced involved identifying good and not that good kind of sources because some of them can introduce more criticism. Some of them introduce more subjectivity to the analysis, so I wanted to use some sources that are more transparent so that the analysis would come from myself and not from the sources directly. The BC carbon tax, as an example is one of the issues that I'm dealing with, how following other jurisdictions (USA and California) were introducing this kind of legislation, and how this also influenced authorities in BC to actually carry on their own reform. Among these three cases, there is a big difference between how involved authorities at the beginning were and what the actual institutionalization process was. In some cases, there have been changes coming on and off. In the BC case, we have seen that the reforms have stayed throughout different political regimes. Those are the main issues that I've been looking at in these three different cases.

Tamara Krawchenko

So overall, with this research and combined with my own research where I'm working across a large number of countries including closely with Turkey, in Ireland and Canadian examples as well. We have a number of cases of how governance is structured, how governance matters in specific types of transitions such as oil and gas regions, and then the broader literature of how climate governance is actually being sorted by researchers over time.

Ann Dale

Marcel, Leslie and I were involved in a seven-year research project called “MC3 - Meeting the Climate Change Challenge” and we worked really, really closely with the Climate Action Secretary at the time. And when I was shocked, one of the key success factors I believe was they really introduced a suite of instruments, legislation, incentives, the Voluntary Charter. It was a really coordinated suite. And I think that was most effective. And I think that the work that Kate's looking at doing in terms of the inventory is showing that there is quite a suite now of instruments that the federal government has implemented over the last 10 years and one of the things that shocked me, and I maybe I shouldn't have been so naïve having previously worked in the federal government was how rapidly the policy landscape changed when the regime changed with Christy Clark. We went from, you know, having strategic partnerships between the academic community and the provincial civil servants to absolute silence, and they were forbidden to talk to us. So really, really small, but very, very impactful decisions that were taken and that impacted.

Leslie King

Even more remarkable that the carbon tax arrived.

Ann Dale

Remember it survived because it was revenue-neutral and many academics at the time argued that it should have gone into general revenues. That's where we learned about the importance of embedding or institutionalizing the policy changes so they can't be retracted, right? If they had gone into general revenues, the carbon tax would have been cancelled.

Marcel Ramirez

That's right. Yeah, fiscal policy is one of the most difficult to introduce and to perpetuate, and in this case neutral fiscal policies are the hardest to design. I think something like that is difficult to put down after a while.

Leslie King

The literature is suggesting now that the BC carbon tax actually is progressive rather than regressive, which is very interesting and probably again that is the reason why is responsible for its longevity.

Ann Dale

Maybe I will talk briefly about some of the preliminary results from the 21 interviews I've collected across the country.

Ann Dale

One of the first surprises to me is that I've yet to reach conceptual saturation. With 21 interviewees, so that shows the complexity of the issue that we're talking about in governments, each of them has brought a unique perspective. There is uniformity in all of them talking about the fact of incoming regimes canceling previous programs in spite of the evidence that they're working. Because they want to be seen to be branding policies and programs as their own and not of the previous administration. So that's kind of so counterproductive. It's mind boggling. And so then one of the questions I have is then, you know, and Tad touched on it and trying to get more science and more evidence to policymakers, but how to get more science and evidence to political decision makers? I think maybe even more crucial in our research.

Leslie King

And also monitoring the impacts of policy, we just don't do it. We don't do enough of it. We don't assess policies. If we can demonstrate the impacts of a policy, we're on more solid ground for keeping it.

Ann Dale

Yeah, and demonstrate the impacts previous to elections, right?

Leslie King

Yeah, I've been interested in and hearing what some of these people that you interviewed had to say.

Ann Dale

It's been really a fascinating exercise and I'm hoping to have access to a key minister who comes from the NGO sector, very, very activist, and then into a key political position. The question that I would be asking him would be, given your prior experience and given your experience now, give us your vision of how government should be reformed. If it was serious about a carbon neutral society. But you know, access is everything so we'll see if I can get the access to this particular individual that I want. I guess again, I'm rather naive.

Then, of course, there's the lack of relationships now that exist between the political level and the civil service that used to exist in the past. So then of course, risk taking was even more they would take risk because you had a relationship between a deputy minister and their minister. And then when chiefs of staff were introduced, and deputy ministers no longer reported to ministers but rather to chiefs of staff then you no longer had the trust and the relationship to be able to really take risks. You could characterize a period of time when the Federal Civil Service became risk averse rather than risk oriented as it may have been in the past with more progressive policies.

The one question I keep asking myself, I mean there are answers to it, but we had a policy in the 1950s, policies in the 1950s in the 1960s that were designed to build a vibrant middle class; and they were successful. And then we moved - and partly as a result of neoliberalism -, to no longer having those policies, you know, and the emphasis on the individual and I think there is some connection between that and the rise of populism. You know where people now no longer have trust in government to be fair and to distribute in a just fashion; that has been lost. And I just found out from a conversation at the university that at the latest polling is showing besides the declining trust in governments, for the first time, there is now a declining trust in universities. So that has even more grave ramifications for democracy. I believe. I'm sort of speaking very generally now.

Leslie King

Well, it's interesting because I have a student defending his PhD thesis on Monday. And just almost beside the point, he's working on energy transitions. And almost beside the point, he asked a question about who people trusted for information about the energy transition and government was the bottom of the pile. But academia did not fare very well either, which I thought was very sad and interesting because, you know, if we're to have faith in science and have science support our transitions, if we don't trust the scientists then we're in trouble.

Ann Dale

Agreed. And you know I've done a little experiment, and a lot of academic study the influence of science on policy making and decision making. But I truly believe that if something is ideological, it doesn't matter what the science is; it's not going to change anything. As you know, a lot of the research that I've tried to do in the last 10 years is through research curation, research dissemination and knowledge and events such as this to try to get the knowledge out to the wider publics. I don't have any answers to that because that reinforces the fact that programs are ended simply because the regime changes so one of the things we're going to try and explore more is how to institutionalize, how to embed these policy changes so that they can't just be reversed. You know, just because of ideology.

Leslie King

And could I ask Tamara, I'd like what you said about the dynamics of these case studies all being interrelated. I wonder if it's too soon to ask you about some of those lessons in dynamics across the case studies that you're very familiar with now.

Tamara Krawchenko

Yeah, sure. I'm looking at industrial and energy transitions in lots of different countries. I am often looking at the nature of those transitions, the social fabric, how they play out, the types of coalitions that are formed to manage transition policy processes, the governance frameworks and coalitions, and the policies that are used among these interventions. There is no one recipe. There are really different types of transitions in different types of places.

Something we have large research is for instance on coal transitions. Coal transitions have often happened in rural adjacent or even near urban regions that are more economically diversified. Transitions in rural remote communities that have less economic diversification are a whole other order of scale. There are places that have capacity, places that have less capacity. But what I'm coming to focus on a lot is the role of regional development. How do people understand what's happening to them in their communities related to their jobs, where they live and the conversations that need to facilitate? You can call it a transition or not, but the decarbonization of the economy and society, everyone's feeling it.

In some places, for instance in Denmark, where there is flex security model where there is a very, very strong form of tripartism and where the transition there's a clear winner with the offshore wind industry, there's a certain way to manage that is quite sort of obvious from a policy and governance perspective. In places where there is no clear winning replacement industry, where the strategy might be economic diversification, the conversations are much broader. And what I think we've seen, and what the literature confirms, is that these social dialogue processes and bottom-up governance and regional development are fundamental to how those transitions are managed and conversations about what our economy is, what our community is and what it can be in the future.

The Taranaki framework from 2050 is an interesting example because the government of New Zealand has created a just transitions unit to help places that are transitioning, manage these processes, and they adopted a regional development approach. They funded very, very broad conversations with hundreds of people across the community and came up with action plans, 12 action plans that are now being implemented by all the people who were involved. One of those action plans is expressly about evaluation and how they measure success. I think that's a really interesting process. It's complex, it involves lots of people. You know, a lot of these recipes have to do with capacity. In places that don't have capacity, what then is the role of government in supporting and strengthening capacity? That's a big question and identifying assets and opportunities for the future.

Leslie King

That's great. I love your idea that “one size does not fit all”. I also love your idea of starting on the ground because that's where the rubber hits the road, so to speak. And you know when we did our MC3 work, that's why we really focused on local government because this is where the feedback loops happen and this is where actually policies live or die, so I think that's great. Wonderful. Thank you.

Tamara Krawchenko

I might mention too that while we have a Climate Accountability Act federally, and in some provinces like in British Columbia, one of the election promises of the current Trudeau government was to have a Just Transitions Act. Now they changed the name; it's called the Sustainable Jobs Act, but it was the draft of Bill C50 was released on June 15th. And that does create an accountability framework for just transition. It outlines principles and it also emphasizes a regional dialogue approach with the creation of these regional energy tables. A lot of this structure is being created now and the success of those regional dialogue tables in places like Alberta and Saskatchewan, where they're not agreeing to come to the table at the moment, but transitions are happening anyway. I think it's really interesting to see what is happening.

I'm happy to see Canada adopt an independent Commission, a minister responsible for transitions, essentially, I mean, they're using a different terminology, but if you read the bill, that's what it is. And an independent Commission of Expertise to hold to account. And that's a really nice complement to the climate legislation, because it's really focused on this as a sociotechnical transformation and the importance of bringing along communities and especially indigenous rights holders.

Ann Dale

Is there any evidence, Tamara in any of the cases about the connection between just transition and the adoption of a universal basic income?

Tamara Krawchenko

Well, no, I mean not directly. I think what you see in a in a country such as Denmark is that within industries that are transitioning that the types of issues that come up and the types of conflicts are really highly mediated by the fact that they have a strong Social Security model and flex security system, where employment and compensation for retraining and access to educational support is just so strong.

In other countries what I see is that those are one-off interventions that are designed as a transition hub model or as specific supports. It is useful in countries that have a broader social supports, and I'm not relating this just to basic income, but it does provide an income, a livable income, while you're doing retraining and that really seems to have facilitated a lot of the concerns that exist in other places where transitions are happening, I looked in the Danish case and in other cases, I've really looked for discontent in media articles and among labour unions and so on. And I just did not see that kind of discussion as I have in other countries.

Ann Dale

Interesting. OK. Thank you. Well, just anybody have any other comments, ideas, suggestions, question.

Leslie King

Thanks, I think. This is the point at which we would be answering the audiences’ questions. I am feeling that lack very strongly. I'm missing that dialogue. I don't have anything more and I'm happy to bring this to a close if nobody has anything else.

Ann Dale

And we will once Marcel has cleaned up. The recording we will then post it on the website.

Leslie King

And yeah, I think we should have a little chat about how to attract an audience for the next one of.

Ann Dale

Yes, I think we should. We use Facebook advertisements.

Leslie King

Thank you. Thanks, everybody. That was fascinating and we enjoyed the discussion. Audience or not. Thank you.

1. 't Hart, Paul, and Mallory Compton (eds), Great Policy Successes (Oxford, 2019; online edn, Oxford Academic, 24 Oct. 2019), <https://doi-org.ezproxy.library.uvic.ca/10.1093/oso/9780198843719.001.0001>, accessed 21 June 2023. [↑](#footnote-ref-1)
2. Lindquist, Evert & Michael Howlett, Grace Skogstad, Geneviève Tellier & Paul ‘t Hart (eds.) *Policy Success in Canada: Cases, Lessons, Challenges*. (Oxford University Presse2022), at 10.1093/oso/9780192897046.001.0001. [↑](#footnote-ref-2)
3. <https://thebulletin.org/premium/2023-05/interview-with-susan-solomon-the-healing-of-the-ozone-hole-and-what-else-we-can-learn-from-atmospheric-near-misses/> [↑](#footnote-ref-3)
4. <https://www.canada.ca/en/environment-climate-change/news/2017/11/canada_ratifies_globalagreementtoreducepowerfulgreenhousegasesan.html> [↑](#footnote-ref-4)
5. https://cascadeinstitute.org/technical-paper/global-polycrisis-the-causal-mechanisms-of-crisis-entanglement/ [↑](#footnote-ref-5)
6. https://horizons.gc.ca/en/home/ [↑](#footnote-ref-6)
7. <https://www.carbonneutralitycanada.ca/s/Dale-King-Getting-the-Price-Right-FINAL.pdf> [↑](#footnote-ref-7)
8. <https://www.frontiersin.org/articles/10.3389/fclim.2022.1043672/full> [↑](#footnote-ref-8)