

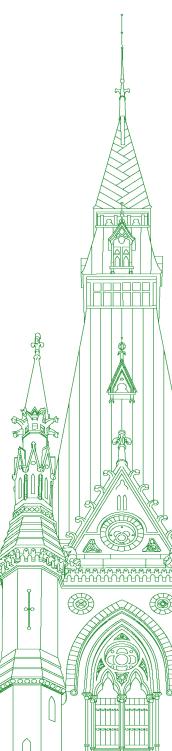
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• (1435)

[English]

The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): I call this meeting to order.

I welcome everyone to meeting number 34 of the House of Commons Standing Committee on Environment and Sustainable Development. Pursuant to an order of reference of Tuesday, May 4, 2021, the committee is meeting to study Bill C-12.

This is our third and last meeting with witnesses. Next week, we dive into the clause-by-clause amending process.

I know all the members know the modus operandi for committee meetings. For any witness who has not appeared before a parliamentary committee during COVID, we ask that you put yourself on mute when you're not speaking, and that when you are speaking, you address the committee through the chair.

Today we have four witnesses in the first half and then five witnesses in the second half.

We have with us, as individuals, David Wright, assistant professor at the law faculty of the University of Calgary; and Professor Corinne Le Quéré from the University of East Anglia. I believe she is in the process of joining the call.

We have Tara Peel from the Canadian Labour Congress, and we're expecting Mr. Toby Heaps from Corporate Knights.

We'll start with Mr. Wright for five minutes, please.

Professor David V. Wright (Assistant Professor, Faculty of Law, University of Calgary, As an Individual): Thank you, Mr. Chair. Good afternoon to all members of the committee.

My name is David Wright. I am an assistant professor with the faculty of law at the University of Calgary. Thanks so much for the invitation to speak to you today on this topic.

Let me begin by saying that it's refreshing to speak about climate with you today, because the weather in Calgary is absolutely putrid, with solid-state precipitation and single digits. It's better just to focus on climate today.

By way of background, my research is focused on environmental and natural resources law, with an emphasis on climate change. I'm a professor, but also a lawyer. I have been called to the bars of Nova Scotia, Nunavut and the Northwest Territories. I've been engaged in this field of climate law policy for about 15 years or so.

I was also with the office of the federal commissioner of the environment and sustainable development for five years, from 2011-16, and so I note with interest the revived role of the commissioner set out in Bill C-12.

Turning to Bill C-12, I'll begin by saying that in my view the bill represents a significant step forward in Canadian climate law and policy, and provides a much-needed basis for better coherence across the law and policy landscape. However, there are clearly areas for improvement.

My brief opening comments to you today will focus on three areas: one, federal-provincial jurisdiction; two, justiciability; and three, the role of the commission.

On jurisdiction, in practical terms, as you all know, Canada's Constitution is silent with respect to environmental matters, including climate change, and that results in overlapping jurisdictions between federal and provincial governments. The federal government has ample jurisdiction to act on climate change and to address climate change, and presently exercises that in a number of ways, including carbon pricing, as the Supreme Court spoke to just weeks ago.

The federal government also occupies a unique vantage point with respect to coordinating all jurisdictions of the federation. However, as the minister noted in his opening remarks to this committee on Monday, the federal government can't impose a top-down decarbonization agenda. It cannot, for example, compel provinces to take on any specific emissions reduction targets.

As such, a climate accountability statute like this can go only so far in terms of detailing what the entire federation can do to achieve Canada's emissions reduction commitments. It's clear that Bill C-12 was carefully drafted with a view to these constitutional and jurisdictional constraints, while the provisions focus almost entirely on federal measures. However, even with these constraints, in my view Bill C-12 can be improved in several ways and still respect the jurisdictional lanes.

First, the bill ought to be amended to make information about measures undertaken by provinces and territories a mandatory part of the emissions reduction plan required under section 10—and I can elaborate on that in the O and A.

Second, and similarly, I suggest adding explicit mandatory requirements for the progress reports and assessment reports that include contributions of the provinces and territories to bring those gas emission reductions. To be clear, those suggestions would impose no obligation on provinces, just information gathering activities on the part of the federal government. There's certainly no jurisdictional or constitutional barrier to that. Again, in the Q and A, I can get into the rationale behind those suggestions.

On justiciability, the key question here, really, is the extent to which Bill C-12 includes or invites accountability through judicial scrutiny and remediation, in addition to the obvious political, parliamentary and public accountability woven into the proposed regime. In short, there's unpredictability on this front given the bill's present form. The key question for this committee and for those engaged in revising the bill—and I don't envy you your line-by-line task next week—is the extent to which such unpredictability ought to be managed and the extent to which it can be managed.

Here's what I mean. It's fairly simple to clear this up by including an explicit provision that provides for judicial review and remedies with respect to any obligations under the act, and I understand that the committee has received several proposals on this. It's a relatively straightforward option. I recommend it. It would virtually eliminate the justiciability concerns that you've been hearing about.

From there, though, things get a little more complex—the alternatives are complicated—and that's really engaging in amendments to specific provisions to at least reduce the basis for a court to find all or part of the act not justiciable. As you're likely aware, there was a Federal Court case on point, on this matter, dealing with the Kyoto Protocol Implementation Act. That decision was affirmed by the Federal Court of Appeal.

In the interests of time I won't go into details—I'll leave that to the Q and A—but the upshot really is that the duties in the bill need to set out clear, mandatory language that provides courts with objective legal criteria to be applied. The bill does a reasonably good job of that, better than the KPIA did, but several provisions could be improved.

● (1440)

On a final note, in my final seconds, on the role of the commissioner, in my view, revival of this independent oversight role is a welcome feature of Bill C-12.

The office of the commissioner is a strong, credible, high-capacity office that can add value and contribute to the proposed transparency and accountability regime. I have a few small suggestions on that front, though, in relation to section 24.

In conclusion, in my view, Bill C-12, if it were to become law, would be an important, laudable step that will improve coherence across Canadian climate law and policy. However, as currently structured, it may not fully withstand shifting political winds—and really, that is the intention behind this initiative. In this way, the bill, as proposed, may not live up to expectations.

Thank you, Mr. Chair.

The Chair: Thank you very much, Professor Wright.

[Translation]

I see that Ms. Le Quéré has joined us.

Welcome back, Professor Le Quéré. This isn't your first appearance before the committee.

I'll ask you to give your opening remarks now. You have about five minutes.

Prof. Corinne Le Quéré (Professor, Climate Change Science, University of East Anglia, As an Individual): Thank you, Mr. Chair.

I'm sorry, but I was having technical issues.

[English]

Thank you very much for hearing me today. I would like to say a few words about the governance of climate action in Canada, which has not worked in the past.

I've worked in the United Kingdom and have an international perspective on this question. Bill C-12 needs to guarantee that current climate objectives will be met. As I think you know at this committee, I flagged, when I was here in March, that Canada is the only G7 country whose emissions did not decrease in the decade prior to COVID. The COVID crisis has led to a temporary decrease in emissions, but because these are not structural decreases, as soon as the confinement lifts the emissions will come back up, possibly even above previous levels.

However, on the good side, the experience of the last 15 years shows that many countries have successfully implemented sustained cuts in emissions. I mentioned that I have worked in the U.K. I've also worked in France and other countries in the past. What I have done in preparation for this meeting is compare Bill C-12 with the corresponding laws in place in the U.K., which has the Climate Change Act, and in France, which has the energy-climate act. I have found ways in which Bill C-12 could be considerably strengthened to play a role in 2021 in curbing emissions in Canada.

There are mainly two directions in which Bill C-12 could be strengthened: first, by injecting a sense of urgency and clear signals to the population; and second, by strengthening the independence of the advice received by government.

On the first point, Bill C-12 has little sense of urgency and misses out on the clarity of signals. This is really important for guiding private sector investments. The objectives and pace of governance are too slow to deliver on the 2030 targets in particular, but also on the longer targets. This could be rectified by reporting on progress every year to maintain a clear and up-to-date picture of progress so far, or the lack thereof. You should set a milestone for this decade, for 2025 or 2026. Do not wait for 2030, as this is too far for sending a signal. You should determine milestones at least 10 years in advance. Both France and the U.K. determine their milestones 12 years in advance, and the private sector knows long ahead of time what the direction of travel is. Finally, you should base milestone levels on the advice of the net-zero advisory group.

On the second point, expert, independent, evidence-based advice is critical for making this bill work. Critical evidence-based advice takes into account not only the global constraints, as the net-zero target for 2050 does, but also national circumstances. What is the starting point? Canada is a federation and this comes with a set of constraints. There is a very specific fuel mix in Canada, which is different from that of the United States, the U.K. and many other countries. This can and will be an ally for the implementation of action by the government and Parliament. This point could also be considerably strengthened in Bill C-12, in particular by mandating that membership of the net-zero advisory body be based on expertise, not representation—you want these people there for their insights—and by providing sufficient and protected resources for operations to both the commissioner of the environment and sustainable development, who makes the assessment of what has happened up to now, and the advisory body, which will make a recommendation for a policy going forward.

I want to end by saying that Canada has made a great step forward with this new climate target for 2030 and the net-zero objective for 2050, but it has a poor track record internationally in delivering on climate change. It is very visible, and it damages Canada. Bill C-12 and its implementation of climate action are very timely to rectify this course.

• (1445)

Thank you very much.

[Translation]

The Chair: Thank you, Professor Le Quéré.

We're also joined by Tara Peel, the health, safety and environment coordinator for the Canadian Labour Congress.

Ms. Peel, you have the floor.

[English]

Ms. Tara Peel (Health, Safety and Environment Coordinator, Canadian Labour Congress): Good afternoon, chair and committee members. Thank you for the opportunity to appear before you today.

The Canadian Labour Congress is Canada's largest central labour body. It advocates on national issues on behalf of more than three million working people from coast to coast to coast. Climate change is a vitally important issue for unions and all working people in Canada. That's why the CLC and Canada's unions welcome the Canadian net-zero emissions accountability act.

In the limited time I have, I will confine my remarks on the legislation to three areas: accountability mechanisms in Bill C-12, the just transition and the net-zero advisory body.

First, with respect to accountability, as others have said before me, Canada has never met a single climate target that it has set for itself. To break this pattern of missed greenhouse gas emissions reduction targets, we need a law that holds governments accountable for meeting its milestones, not for trying to meet them. Bill C-12 requires a rolling cycle of planning and reporting against the five-year milestones and the long-term targets. However, the bill provides too much leeway to set weak targets and issue plans with few details.

The act should set clear and firm obligations on the minister to meet or exceed robust minimum standards when setting targets and establishing emissions reduction plans. These plans need to contain robust modelling clearly demonstrating how the targets will be met. Accountability must be results-driven, not process-driven.

Additionally, there are inadequate accountability checkpoints in the crucial next decade. Bill C-12 uses milestone targets rather than carbon budgets. Compounding this, the commissioner of the environment and sustainable development would be required to prepare reports on the implementation of measures only once every five years. Now that the government has set a target for 2030, there is no justifiable reason not to hold the government accountable in 2025.

Finally, to remain aligned with the 1.5°C limit on warming, this legislation must require absolute reductions in greenhouse gas emissions, rather than relying on carbon offsets and hopeful technological solutions that will allow industry to continue to generate rising emissions.

I'll turn now to the just transition. The CLC appreciates the jobcreation focus that went into developing Bill C-12, and we don't expect this legislation to achieve all of the goals of the promised just transition legislation. However, in our view this bill should contain specific references to a just transition as an important driver of climate ambition. Concrete just transition plans for affected workers and communities are essential, not only so we can increase climate ambition, but also to ensure that our actions meet our ambition. The bill should recognize that meeting climate milestones will require robust plans for a just transition of the workforce.

Finally, I'll turn to the net-zero advisory body. This body is an important component of the bill; there is no question. It is composed of representatives of diverse communities, including indigenous communities, government, the labour movement, environmental organizations, industry and academia, all with their own expertise. We are pleased that the CLC's president, Hassan Yussuff, will represent workers on the advisory body.

In our view, though, the net-zero advisory body must be positioned to provide strong science-based guidance on pathways to achieving the five-year milestones. While the advisory body would provide important guidance on measures and strategies for meeting Canada's emissions reduction milestones, there is currently no clear role for the advisory body in monitoring, assessing and reporting on progress towards meeting Canada's targets. In our view, there should be independent and frequent detailed assessment of whether Canada is on track to meet its targets.

The CLC welcomes this legislation, which has the potential to change Canada's history of never having met our climate targets. Strengthening certain areas of the bill could put Canada on track to meaningfully contribute to the crucial efforts of limiting warming to no more than 1.5°C.

Thank you very much. I look forward to your questions.

• (1450)

The Chair: Thank you very much, Ms. Peel.

We'll now go to Mr. Toby Heaps, CEO and co-founder of Corporate Knights.

Mr. Toby Heaps (Chief Executive Officer and Co-Founder, Corporate Knights Inc.): Thank you, Chair.

The Chair: Do you have a headset, Mr. Heaps? Unfortunately, for the health and safety of the interpreters, witnesses must have headsets.

Do you have earbuds or something like this that might give appropriate sound quality? It's just that committees of the House have passed resolutions on this issue.

Mr. Toby Heaps: I'm sorry that I don't, but I just learned about this last night.

The Chair: I see. Perhaps you could follow the discussion and send us any comments.

We've passed a motion to the effect that we cannot proceed. We need interpretation, and the interpreters need the witnesses to have the appropriate gear.

Do you have any suggestions, Madam Clerk?

• (1455)

[Translation]

Ms. Monique Pauzé (Repentigny, BQ): Mr. Chair, I find this situation very unfortunate. If I remember correctly, the motion says that, in cases where the interpretation service isn't available, we should ask the witnesses to come back another time. However, there isn't any other time, since this is the last day for witnesses to appear.

I don't want to harm the health or safety of the interpreters. I don't think that I have a choice.

The Chair: Indeed. We passed this motion.

Ms. Monique Pauzé: We can't reschedule Mr. Heaps' appearance. It's impossible. That's what we should have done, according to the motions that we passed.

[English]

The Chair: We have a second panel later this afternoon, in about an hour. We'll try to squeeze you in. Is there any chance that you can get some earbuds or some kind of—

Mr. Toby Heaps: Yes. I think I can manage that. Thanks a lot.

[Translation]

The Chair: Do you agree with this solution, Ms. Pauzé?

Ms. Monique Pauzé: Yes.

The Chair: Madam Clerk, does that seem like an acceptable solution?

The Clerk of the Committee (Ms. Angela Crandall): Yes.

The Chair: Perfect.

[English]

Ms. Elizabeth May (Saanich—Gulf Islands, GP): Mr. Chair.

The Chair: Yes, Ms. May.

Ms. Elizabeth May: I'm not a member of the committee. I find it really regrettable that a bill this important has only three sessions for witnesses. I just ask committee members to consider if a day couldn't be added to ensure that.... This is a really important piece of legislation. Obviously, we're really pressed for time to hear a range of witnesses. I put some names forward, and obviously they weren't chosen. I would just ask committee members to consider whether maybe they could add more time.

The Chair: We looked at all the suggested witnesses, did we not, Madam Clerk? They were all on that list that I saw and that everyone saw.

The Clerk: They were all sent to the analysts for consideration for the panels.

Ms. Elizabeth May: Of course I didn't see it, but I sent in a list of witnesses, and none of them is on the panel. I'll leave it to another time. I don't want to take precious time.

The Chair: The committee decided on nine hours of witness hearings. Obviously the committee can always change its mind. If somebody has a motion, it will be up to them to present it. For now I think we'll have to proceed.

I guess we go straight to questions at this point, and that will leave a bit longer for the second panel, because we will have six witnesses now.

We start with Ms. McLeod. Is that correct?

Mrs. Cathy McLeod (Kamloops—Thompson—Cariboo, CPC): Thank you, Chair.

Thank you to the witnesses.

Hopefully we will get a chance to hear from Mr. Heaps in the next panel, although it will then cut our opportunity for questioning a bit shorter.

I'm going to start with Mr. Wright.

I have spent the last five years on the indigenous affairs committee. I have spent very little time on this committee, but what is quite stunning to me is, first of all, that the officials indicated that there had been no dialogue with indigenous peoples in Canada prior to the tabling of this piece of legislation. If you look at the UN declaration, which the government says is a very important piece of legislation that it is moving forward, article 19 talks about the need to have those sorts of dialogues on issues that are important to indigenous peoples.

Does it surprise you that there was no formal consultation or conversation with Environment Canada? Is it appropriate, given the fact that the current government has said there's no relationship more important and that they're moving the UN declaration through? To me it talks symbolism, but it doesn't talk reality in terms of things that make a difference.

● (1500)

Prof. David V. Wright: This is not an aspect that I anticipated speaking about today, but I welcome the question.

To be completely candid, I have not been tracking that aspect of the bill's development. I do recall the minister mentioning discussions with some of the representative indigenous bodies and organizations on Monday, to some degree, but I haven't been following that, so I can't say.

From a legal perspective, the case law is somewhat uneven, but it is relatively clear on the point that there's no duty to consult in the formulation of legislation. We're probably not in the realm of being offside of the law. However, as you say, commitments to implement the UN declaration go beyond what the current law requires in Canada. It's evolving and becoming law.

I would expect that as the bill's development and refinement move forward, and particularly as plans are then issued under the law, if it becomes law, there would be robust collaboration, co-operation and consultation with indigenous communities and representative indigenous organizations.

Mrs. Cathy McLeod: One of the areas we've had a lot of conversation about over our time here and with the witnesses we've had is the advisory committee. The net-zero advisory body has already been struck, but even today we're hearing some different perspectives in terms of whether it should it be a scientific body or a representative body.

It was unfortunate that the government did not wait to hear from the experts on what that should look like; it has just proceeded. As I have said, there are some very important people there who are very well thought of throughout Canada, but is it the right mix for what we need to move forward? Going to the indigenous piece, yes, some representation has been chosen, but there's nothing that compels the government to do so.

Do you have any comments on that general issue and indigenous people's participation in this kind of net-zero advisory group panel?

Prof. David V. Wright: Yes. I have a couple of things.

I guess you have to start somewhere when it comes to putting together the institutional supports that this regime requires. It's not all that surprising that the minister put together this group, apparently on a volunteer basis, from what I understand, on Monday. If the bill becomes law, one would probably expect a more robust process and probably revisions to the terms of reference, and perhaps within that, some kind of competency matrix to make sure it does have the right makeup. Hopefully that will be based on some of the helpful input this committee has been receiving about the importance of diverse expert individuals and roles.

One option on that front, though, would be to look at some of the new provisions in the federal Impact Assessment Act and the Canadian Energy Regulator Act, which explicitly require a minimum of one indigenous person to serve on different advisory and expert bodies. That could be detailed at the statutory level, or it could be detailed at the below-statute level, in terms of reference or a similar instrument. That may be a recommendation this committee wants to consider. It may be a level of detail deeper than this statute goes, but it could be achieved, again, at the statute level or at the guidance and terms of reference level.

Mrs. Cathy McLeod: Is there still some time, Mr. Chair? I know that yesterday I kept going when I shouldn't have.

The Chair: You have 15 seconds. You can make a statement, if you wish.

Mrs. Cathy McLeod: My statement is that I am surprised at the distinct lack of any kind of formal process within Environment Canada for that indigenous inclusion, given its priority regarding relationships and the UN declaration.

[Translation]

The Chair: Thank you.

I'll now turn the floor over to Mr. Longfield.

[English]

Mr. Lloyd Longfield (Guelph, Lib.): Thank you, Mr. Chair, and thanks to the witnesses.

Mr. Wright, I'd like to continue with you.

There are a few areas I'm concerned with as I'm reading the legislation. One in particular is the constitutional relationship we have with the provinces and territories. You mentioned in your testimony the balance between setting legislation that has achievable targets and not imposing targets directly on the provinces and territories in terms of numbers.

Could you expand on that a bit? You mentioned that you could add a bit of detail there.

• (1505)

Prof. David V. Wright: Sure. At a general level, of course, there are jurisdictional constraints flowing from the Constitution with respect to how far the federal government can go. It has only so many constitutionally based levers to pull, and the present government has been using almost all levers available.

That does not get the country all the way to achieving the emissions reductions required. It will go a significant way, but not all the way, so there is no option other than to co-operate with provinces, and across provinces and territories.

The specific change I'd suggest to the bill is moving the permissive portion of subclause 10(3) up to the mandatory portion of subclause 10(1). To get away from the numbers and technical—

Mr. Lloyd Longfield: No, don't.

Prof. David V. Wright: —it's basically making the information on the contributions of provinces and territories to emissions reductions a mandatory part of the plans required under clause 10. You could leave the rest permissive under subclause 10(3), although there is sensitive territory to cover there with respect to indigenous governments as well.

Mr. Lloyd Longfield: Great, thank you. That's very helpful. I see exactly what you're talking about there, and that will be helpful as we do clause-by-clause. That's why I said "refer to sections" beforehand, because we will be doing that in our next meetings.

Also, with regard to the advisory board, I've been involved with not-for-profits—I've helped set up boards—and conflict of interest is always a concern. Sometimes you write into the bylaws that you have to leave your business at the door, but even then, if you're representing your business on a board, you have to be very careful about conflict of interest and management of that.

On the composition of the "advisory body", as it's being called in the legislation, how could you see us drawing from the skill sets that we need to draw from, particularly, let's say, on interprovincial relations with the federal government, but also as businesses?

We've had some lobbying organizations say, "Include me on the panel. I want to be on the panel." How would we manage the conflicts?

Prof. David V. Wright: It's easier said than done and the devil is always in the detail, to offer a few platitudes.

One option is to, first of all, make it explicit, so that there's legislative intent signalling that conflict of interest is a live issue that will be safeguarded against. Again, there is helpful language on that front in the recently amended Canadian Energy Regulator Act. Then it would be a matter of systems and practices to safeguard against that.

Disclosure can go a long way. As long as actual or perceived conflicts are disclosed and everyone consents to that—and that's sort of the price of admission, in this expert's view—then all can be above board and well.

Mr. Lloyd Longfield: Right. It's always the disclosure piece. I've had to do that many times myself.

When it comes to the Auditor General's office and the role of the commissioner of the environment and sustainable development, I also sit on the public accounts committee. Our clerk serves that committee too. We look at the action items coming from the audits as a very key part of the information we work with. The action items are in an early report that comes to Parliament, because that office reports to Parliament, not to government.

There is a governance piece there that I'd like to make sure we highlight in the legislation of the key role that audit team provides, including identifying action items when you're not meeting targets that you've been given through legislation.

• (1510)

Prof. David V. Wright: The way this would likely work in the offices of the environment commissioner—and I'm speaking from my present vantage point, not my previous vantage point—is that these would likely be performance audits, so value-for-money audits, non-financial audits. Within that area of the commissioner's work, there are, as you say, recommendations issued.

The way to perhaps modify Bill C-12 to ensure you get the meaningful recommendations you're looking for—assuming everybody wants this to be as strong on the transparency and accountability front as possible—would mean including language closer to that in Bill C-215, proposed on February 24 by the Bloc Québécois, which tied it to actually achieving the emission reduction targets. The present language in clause 24 is relatively loose, and so there is some text to revisit and pluck, perhaps, from Bill C-215.

Mr. Lloyd Longfield: Well, the government has invested in that office to get some specialists in environmental audits, so that piece would be done. It's just the accountability and transparency that you're saying we need to strengthen.

Thank you. That's very helpful.

The Chair: Okay, great. Thank you, Mr. Longfield.

[Translation]

Will Ms. Michaud or Ms. Pauzé be speaking?

Ms. Monique Pauzé: Mr. Chair, I'll take the floor.

First, I want to thank the witnesses for joining us this afternoon.

I'll turn to you first, Ms. Le Quéré.

You chair the High Council on Climate in France, you're a member of the Climate Change Committee in the United Kingdom and you've written IPCC reports. In my opinion, you're certainly one of the experts whom we should consult and listen to.

I've had the pleasure of hearing from you many times over the past few months. You also came to speak to us last March about the possibility of making the commissioner of the environment and sustainable development an independent officer of Parliament.

There doesn't seem to be any interest in this right now. My question is along these lines. The role of the commissioner is to look back and the role of the expert panel is to look forward. Ms. Le Quéré, what dangers do you foresee if the committee established in Bill C-12 remains as it stands and the commissioner doesn't change status to have the required independence? To what extent would progress be compromised?

Prof. Corinne Le Quéré: Thank you for your question, Ms. Pauzé.

In the bill, the monitoring of the measures implemented is quite weak. The commissioner of the environment and sustainable development is responsible for this monitoring. The commissioner is asked to submit reports fairly infrequently, meaning every five years. There isn't any real reason to wait that long to follow up on the legislation, policies and measures in place so that adjustments can be made quite quickly.

Making the commissioner of the environment and sustainable development an independent officer of Parliament could give the commissioner more independence. He could, for example, choose his own technical team and organize his work more independently and thereby pay more attention to results than to expenses.

Ms. Monique Pauzé: Okay.

You were on a panel with Lord Deben, the chair of the United Kingdom Climate Change Committee. You also talked about cross-cutting issues and climate issues.

You spoke about the possibility of the advisory committee reporting to the commissioner, rather than the minister. Do you think that this would help to gradually introduce an approach that runs all government decisions through an analysis grid to meet environmental goals?

Prof. Corinne Le Quéré: Yes, absolutely.

In my opinion, the current design of the legislation makes the advisory group too close to the minister, and the independence isn't quite visible enough. It must be at arm's length. The distance isn't very visible. As a result, the advisory group is too close to the government and too far from the commissioner of the environment and sustainable development, who monitors policy.

These two positions, the one that looks back and the one that looks forward, should be brought together. In addition, they would need to be supported by a very strong analytical technical team that could analyze the reasons for past shortcomings in order to make projections and support the advisory committee. That way, past reports and future recommendations would play a much stronger role.

• (1515)

Ms. Monique Pauzé: Would this ensure that all government decisions are analyzed in light of environmental goals, similar to the approach in France? You spoke about the matter this week or last week

Prof. Corinne Le Quéré: At this point in the implementation of climate policies, all government decisions must adhere to climate limitations. The government currently isn't taking ownership of these issues.

The legislation must provide a framework to ensure that the decisions that don't necessarily relate to the climate and the environment are as strongly geared towards carbon neutrality.

Ms. Monique Pauzé: Thank you. I have one last question for you.

In your opening remarks, you said that conveying urgency is part of transparency. I thought that this statement was quite strong. In terms of Bill C-12, you pointed out the lack of a number of critical components that would ensure long-term planning and accountabil-

ity, and that would make it possible to consider the full range of measures and plans to achieve the goals.

What's your position on the principle of transparency, including the importance of perhaps—as you spoke about earlier—more publicly available reports?

Prof. Corinne Le Quéré: In the United Kingdom and in France, each year, the two committees—the one that I chair in France and the one that I sit on in the United Kingdom—publish a report in June specifying the progress made over the year and any shortcomings. This is done by department, by ministry, by country and, in France, by region as well. This is the way that they operate. Their government must respond to these reports each year. This helps to maintain the urgency of the issue and make adjustments very quickly. You can't keep up that pace if you're issuing reports and making findings every five years.

Ms. Monique Pauzé: Thank you, Ms. Le Quéré.

The Chair: Thank you, Ms. Pauzé.

[English]

Mr. Taylor Bachrach (Skeena—Bulkley Valley, NDP): Thank you, Mr. Chair. I think I heard my name called.

Thank you to all of the witnesses. This has been a fascinating and very important conversation.

My first question is for Mr. Wright.

You talked a little bit about the role of the commissioner, and Professor Le Quéré also spoke to this in some detail. My question is whether the office of the environment commissioner, as it's currently set up, is adequately structured and resourced to perform an expanded role. Does it need not only to be made an independent officer of Parliament but also resourced in a much stronger way so that it can take care of what it could be tasked with under an expanded Bill C-12?

Prof. David V. Wright: Thank you for the question.

It's hard to speak to resources, and I will openly say that I am somewhat biased and that I think the office deserves more resources. I think its role as an independent oversight body is a valuable one and that it would benefit from additional resources.

I think what you may be getting at, though, is the relatively circumscribed role of the office, which was alluded to earlier. It plays a retrospective role. It really answers the question of how things have been going and does not answer the question of how things ought to go. The office does not have the authority to look at the merits of pathways forward.

There's a broader question of institutional structure. That aspect would require broader amendments, frankly, to the Auditor General Act to modify that role to adopt that "question the merits" type of approach. That's been debated since the inception of the office back in the nineties. Again, that's a broader discussion, perhaps for here or perhaps not for here.

The last thing I would say is that there's perhaps a piece missing here. You have the retrospective aspect fairly well covered, although I would also suggest more frequent reports, probably two per five-year period—that is one of the amendments to clause 24—not once per five-year period. The missing piece is that prospective role, which means perhaps a bit more distance from the minister, to the previous point.

That role, under the Kyoto Protocol Implementation Act, was performed by the National Round Table on Environment and the Economy. The current Institute for Climate Choices fulfils some of that but not all of it, so there is an institutional missing piece here that ought to be discussed by this committee and thought through, because institutions matter in terms of holding governments to account.

(1520)

Mr. Taylor Bachrach: Thank you.

You also spoke a little bit about justiciability. At the risk of making either one of us say that word more times than we have to, could you expand a little bit on the changes, apart from the amendment, that would put specific reference to judicial review into Bill C-12? What other changes in language would you, as a lawyer, feel would be important in terms of the enforceability and potential legal challenges under the act?

Prof. David V. Wright: There is simple option A and complicated option B, so we're now on to complicated option B.

One proposal, or one suggestion, is to amend subclause 10(1)—that's the provision for the contents of the plan—to make it more detailed and more prescriptive.

This committee has heard proposals about explicit references to modelling and projections. I would recommend that as well, and generally the more detailed the better, because, again, what you're trying to set up in this statute are objective criteria that can be embraced by a court, interpreted by a court and applied by a court so that the court is not forced to move out of its comfort zone into determining policy matters.

The other specific suggestion is to add language to the effect that the federal government and the minister have a duty to "take all necessary measures to achieve the greenhouse gas emission reduction targets established under this act and elsewhere." Those specific words were heard earlier this morning or yesterday. Words really do matter, and those specific words—"take all necessary measures"—have been judicially interpreted and linked in Canada to a matter being justiciable. That may be helpful, and what form that may take is a new clause—probably a new clause 9 following clause 8—that is devoted to clarifying that there's a duty to take all necessary measures to achieve the targets that have been committed to.

Mr. Taylor Bachrach: I'll turn now to Professor Le Quéré.

We've heard from many witnesses about the need for a near-term milestone prior to 2030. I wonder if you could speak to the risk we run if we don't see a near-term milestone established within Bill C-12. What is the risk of not having that?

Prof. Corinne Le Quéré: The risk is that the urgency will not be recognized. You now have a milestone for 2030, and you're going to have to very quickly establish a pathway for that milestone in your mid term. Having a milestone, then, in 2025 makes very obvious to all actors across society, particularly in the private sector, what they have to do to assist in that pathway. I think this is extremely important. The year 2030 is way too far, especially if the reports of the commissioner are going to come as slowly as every five years.

Mr. Taylor Bachrach: You've done a lot of thinking about this. If you were going to put in a 2025 milestone with a sign or target to it, what would that be, percentage-wise?

The Chair: Be very quick, because we're over time.

Prof. Corinne Le Quéré: I would ask the net-zero advisory body to tell me.

Mr. Taylor Bachrach: Thank you.

The Chair: Thank you. These are very interesting questions and answers.

We'll go to the second round, starting with Mr. Albas for five minutes

Mr. Dan Albas (Central Okanagan—Similkameen—Nicola, CPC): Thanks, Mr. Chair. I'd like to thank all of the witnesses, but I'm going to pass my time to MP May.

The Chair: Go ahead, MP May.

Ms. Elizabeth May: I am grateful and surprised. Thank you, Dan.

I want to start with Professor Le Quéré.

You're obviously very familiar with the U.K. legislation and the French legislation on climate accountability. Would it be unfair of me to ask you about other nations' climate accountability laws, such as those of New Zealand and other countries? You're nodding, so it's not unfair.

Is Canada alone in the world at this point in bringing in climate accountability legislation with a first milestone year that would be a decade after passing the legislation? It seems to me that New Zealand and the U.K. brought in a first accountability moment within five years of their legislation passing.

• (1525

Prof. Corinne Le Quéré: It is certainly the case for the countries I know that the first objective is in fact almost too close. France set up an objective that started the year the legislation was passed, and the sense of urgency this brought has been really helpful in trying to accelerate action.

Ms. Elizabeth May: Looking at all other countries' legislation, it seems to me that there's a preference right around the world for having a body that's at arm's length from the minister in question and is designed around the expertise of the individuals serving on it, which rests very soundly on science as opposed to political objectives. Is that a fair statement?

Prof. Corinne Le Quéré: Absolutely, that's a fair statement, particularly with regard to the element of expertise. You want the people who sit on that panel to bring what they know works with regard to climate change. If you start to have representation, then you don't have an advisory body; you have a consultation body.

Ms. Elizabeth May: Thank you.

I want to turn to Ms. Peel from the Canadian Labour Congress, and I'm assuming that Ms. Peel is still here.

I don't think we've paid enough attention to the just-transition piece, I want to ask particularly about the work that was done by the coal sector special body co-chaired by Hassan Yussuff. Do you think we can do much with just transition within the rubric of Bill C-12, or do we really need to get going and have a separate piece of legislation brought forward?

Ms. Tara Peel: In the absence of that piece of legislation being brought forward, some recognition of that in Bill C-12, I think, is important.

When this climate accountability legislation was announced, the indication was that we would be setting five-year milestones while at the same time bringing in just-transition legislation to ensure a just transition of the workforce. In the absence of that legislation being introduced, we need something in this legislation to ensure that it is a component of the planning and the monitoring and the reporting, and actually the meeting of those milestones.

Ms. Elizabeth May: That's excellent. Thank you.

Professor Wright, again I want to get to the origins of the commissioner for the environment and sustainable development. I'm pretty sure I'm the only one who—well, I shouldn't say I'm the only one; I'm sure our chair remembers the 1993 Liberal Red Book, which promised that we would have—

• (1530)

The Chair: I do.

Ms. Elizabeth May: I know you do. We're the only ones here who remember all those hearings when Charles Caccia chaired the environment committee.

We discussed what we were going to do to create a commissioner for the environment and sustainable development. The idea of putting it within the Office of the Auditor General was somewhat controversial. We wondered if that would be enough. Would that work?

Given what we've learned over the decades, Professor Wright, I'll put this forward. I think we should have an independent environmental commissioner who reports to Parliament, as opposed to being inside the Office of the Auditor General. Do you have a view on that?

Prof. David V. Wright: It's a huge multi-decadal question, Ms. May, as you know. It's complicated and it goes in both directions.

One of the benefits of having the commissioner's office in the Office of the Auditor General is that it's well resourced and it has a lot of bench strength. It does not engage in policy debate, so it is able to build and maintain credibility on that front. That has also insulated the commissioner's office from the political wind. For ex-

ample, with the cuts under the Harper administration years ago, the NRT was cut but the commissioner's office was not cut, although perhaps some resources were reduced.

Those are all benefits of the existing model. If that mandate is cracked open and amended in a significant way, some of those benefits may be eroded or taken away.

You really have two options. One is, as you said, to expand the office and make it a completely independent agency or office of Parliament. The other is to create a new separate institution that is in the likeness of what you've all been discussing, so NRT 2.0, if you will, a National Round Table on the Environment and the Economy 2.0.

Ms. Elizabeth May: Yes, I think that's one of the losses, the loss of the national round table. I think Bill C-12 is weakened by essentially putting in a mini round table of multi-stakeholder concerns instead of an expert group. If we could recreate the national round table—but that's a topic for another day.

How much time do I have left, Mr. Chair?

The Chair: You have 10 seconds.

Ms. Elizabeth May: Okay. I thank Dan Albas again.

The Chair: Thank you.

Mr. Saini is next.

Mr. Raj Saini (Kitchener Centre, Lib.): Thank you, Chair.

Thank you to all the witnesses who are here today. It's really great to have all of you here and to hear your different perspectives.

Let me start with you, Professor Wright. You talked about coherence at the domestic level, but in November you wrote a blog post that said, and I quote, "The bill creates a direct link between international climate change reporting requirements and the domestic regime."

Could you expand on this?

Prof. David V. Wright: Yes. Thanks for the question.

As you all know, under the United Nations Framework Convention on Climate Change and the Paris Agreement, Canada has a number of regular reporting obligations in the form of annual emission inventories, such as for example, biennial reports that include projections of where the emissions are and where they're going.

Bill C-12 takes a step towards domesticating those obligations, so in many ways there is emerging alignment between those international reporting obligations and the creation of similar obligations on the domestic front. It's not a negative thing in many cases. This may be a cut-and-paste job of taking what's being submitted to the United Nations Framework Convention on Climate Change secretariat and putting it in the reports required under Bill C-12. I think that's a good thing. It reduces the reporting burden, but it also aligns and puts front and centre domestically what Canada is doing or perhaps is not doing.

Mr. Raj Saini: Let me turn to you, Ms. Peel, because MP May raised the question of a just transition, and I want to expand on that a little bit.

One thing we have seen with the advisory body is that we have a lot of diversity, and also with the addition of Hassan Yussuff. I am wondering what you think the importance is of labour having a seat at the table when we have that just transition so that it doesn't leave anybody behind.

Ms. Tara Peel: Workers right now are already feeling the impacts of climate change. We see just transition not only as a matter of fairness but also as a driver of ambition.

Sometimes we think about a just transition in very loose ways. Having workers at the table developing plans with employers and governments is the path to being more ambitious, so having labour at the table developing these plans is critical.

We know that when we talk about a just transition, it is not about slowing down progress: It is about making sure we have the ability to go as far as we need to, as fast as we need to, to avert the worst impacts of climate change, so—

Mr. Raj Saini: Actually, I'm glad you mentioned that point, because I want to elaborate. That was my second question.

How do we have that seamless transition for workers without slowing down the necessary steps that we need to get to net zero as quickly as possible?

Ms. Tara Peel: There are multiple ways to do that. I think much of that could be done in a just transition act that looks, sector by sector, at how you actually develop those plans.

We know it's possible for employers to make the decision that they're going to transition into 100% renewable, for example, and they're going to start from a position that there will be no involuntary layoffs: "If you want to come with us, we will make sure that you have the skills, training and the ability to come with us into this new emissions-reduction world." The decisions we make now will really impact whether....

The other piece of that, of course, is making sure that the new jobs, as we invest in emissions reductions, are good jobs with decent labour standards, and that they're good-quality, family-supporting, community-supporting jobs.

We want that. When you ask workers about what a just transition means to them, they want to know where the new jobs are, what they need to do access those jobs and where the place is for them in this new net-zero economy.

Mr. Raj Saini: Chair, that's a perfect segue to Mr. Heaps, if he is available.

The Chair: Sure.

He hasn't given his testimony, but go ahead.

Mr. Raj Saini: Can I ask Mr. Heaps a question?

The Chair: Of course you can.

Go ahead, Mr. Saini.

Mr. Raj Saini: Mr. Heaps, I read an article you wrote, I think last year in June. One of the things you mentioned was that a unified federal strategy would unleash almost \$30 trillion worth of opportunity.

Can you elaborate on the economic opportunities to make sure that businesses are well prepared when Bill C-12 is implemented? What are the opportunities for Canadian businesses, and why is a unified federal strategy very important to access those opportunities?

• (1535)

The Chair: Give a brief answer, please, Mr. Heaps.

Mr. Toby Heaps: At the top of the opportunities, first would be—

The Chair: Could you hold your mike up so we get less echo? There's a mike there, right?

Mr. Toby Heaps: It's here at my lips.

The Chair: I think it's a bit better. Thank you.

Mr. Toby Heaps: Thank you for the question. The top three opportunities would be the following.

First, it is not obvious for everyone in the building sector that Canada has 12 of the top 50 landlords in the world, the largest commercial real estate investors, starting at Brookfield and all the way down, in large part because of the investment from our strong pension funds, and we have the ability to export this low-carbon building technology through these portfolios that exist in Asia, Latin America and North America. It's a huge opportunity for us to export our green building prowess. That's number one.

Number two lies with Canada's huge land mass, both on the forest side and the agriculture side. If the world is hungry for sustainable food, we have a big opportunity to turn our agriculture sector into a carbon-positive source of food.

Lastly, on batteries, there's a huge opportunity. All the raw ingredients for batteries are—

The Chair: Thank you. We're a bit over time.

We will go to Madame Pauzé.

[Translation]

Ms. Monique Pauzé: Excuse me, Mr. Chair. Before I use my speaking time, I want to point out that, with Mr. Heaps' microphone, we still can't get any interpretation.

I want to know whether Mr. Heaps will be joining the second panel, perhaps with a different microphone, or whether this is happening now.

The Chair: No, that should happen after this round, when we get to the opening remarks of the second panel.

Ms. Monique Pauzé: So I can ask Mr. Heaps questions when we meet with the second panel.

The Chair: Exactly.

Ms. Monique Pauzé: Perfect.

My question is for Mr. Wright.

In November, I think, you conducted a preliminary review of Bill C-12 and brought up several things. You said that it was impossible to bind future Parliaments because of our democratic system, which we inherited from the United Kingdom, and our federal system.

You proposed earlier that part of subsection 10(3) be moved to subsection 10(1). Is there another solution, which would consist of reproducing the European Union Burden Sharing Agreement here? Would that agreement apply here?

[English]

Prof. David V. Wright: There are two levels of thinking along the lines of "binding" in this context. That's not a particularly helpful concept here, but let's tackle it.

First of all, this statute is legally enforceable, and that's represented or indicated by the mandatory provisions throughout. However, just like any law that the federal government enacts, it's open to a subsequent federal government to repeal that act, just as we saw with the initial federal environmental assessment statute. In that same way, future governments can repeal it, just as the KPIA was repealed.

With regard to the latter, on perhaps a more interesting and more practical level, this statute can only go so far, because it cannot impose emission reduction targets or specific budgets on a province-by-province level. Rather, the elephant in the room in Canada for decades has been the lack of formal agreement among all provinces, territories and the federal government with respect to who is going to reduce emissions by how much.

One option is to adopt what the European Union has adopted, which is, in some realms, called a burden-sharing agreement, but today is typically called an effort-sharing agreement, which sounds a little less scary, a little less burdensome. Either way, it is a negotiated agreement whereby all those jurisdictions—in Canada we have national jurisdictions and provinces—indicate explicitly what their contributions are going to be to emission reduction. Another way to think about it is that it's almost like a mini Paris Agreement within the Canadian federation.

You can't set that out in Bill C-12, but you can create a sort of portal that recognizes that this might be happening. That could be included in, for example, subclause 10(1), with information about provinces and territories. You can at least create the platform and consistency for that kind of burden-sharing agreement.

The last thing I would say is that this is almost like a pan-Canadian framework circa December 2015, but with emission reduction targets signed by all jurisdictions.

• (1540)

The Chair: Thank you.

Mr. Bachrach is next.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

I have a question for Ms. Peel that follows the questions of my colleagues around a just transition.

The federal government promised a just transition act at the same time as the climate accountability legislation, but we've seen very little progress towards that. When the minister appeared before this committee last week, I asked him a question, and in his answer, he was quite noncommittal about the current status of that initiative. He did allude to some conversations and consultations going on with labour.

From your perspective, have you seen any sort of movement or progress on the government's side that gives you a sense that it's serious about bringing forward a just transition act as promised?

Ms. Tara Peel: Well, it's difficult to speak to intention. I will say that yes, there are discussions happening, conversations happening. It likely would have been preferable to have these two pieces of legislation proceed in tandem so that we have the milestones that drive the just transition and the just transition that drives the ambition to reach those milestones. I think that is the ideal way it would work. At this point, it exists in the minister's mandate letter. I certainly know that my boss is in discussions frequently, but there isn't, to my knowledge, any move to formalize the introduction of that legislation.

That promise, I think, was very meaningful to workers. It was also meaningful to people in the labour movement who care a lot about climate ambition, want us to get there, and want to know how fast and how far we have to go. The challenge of not having concrete just transition plans is that people are vulnerable to those forces that would have us slow down and turn back.

As I said, it's hard to speak to intention. There are certainly conversations happening, but we look forward to seeing this legislation.

Mr. Taylor Bachrach: Which other countries have led the way when it comes to just transition?

Ms. Tara Peel: I would say that Canada certainly took a leadership role when we implemented the just transition task force for Canadian coal power workers and communities. As you know, that was co-chaired by CLC president Hassan Yussuff. I was fortunate to be a member of that task force. Meeting with these workers was very meaningful. I don't want to talk too much about that project, because it's a different project, but it's importantthat there is still work to be done on the recommendations of that task force.

Scotland is doing some interesting work on just transition. New Zealand is doing some interesting work. There are very sector-specific examples in Australia.

The Chair: Thank you. That gives us an idea.

Go ahead, Mr. Albas.

Mr. Dan Albas: Mr. Chair, I will be sharing my time with Elizabeth May, if I could pass the floor to her.

The Chair: Of course.

Ms. Elizabeth May: Coming back to the question of justiciability, I want to go to Professor Wright on this.

It's a pretty modest change, but one of the amendments I'm thinking of bringing in would be to change the wording so that the minister "must" meet the target. I would like your thoughts on it. It's not a full framework for how you would hold a minister to account, but it would set up the possibility for at least going through administrative law to Federal Court for mandamus.

I wonder if you have any thoughts on that. There certainly are more elaborate ways that other countries have brought forward, but as a modest amendment, what would you think of that?

Prof. David V. Wright: Thanks for the question.

In the absence of dedicated provisions that provide an avenue for judicial review and remedy, that's a decent option, and it would signal to the courts that there is an overarching duty to meet the targets. There are a couple caveats, though.

One is that it is difficult for the federal government to include such a blanket provision, because it implicates the provinces. It's quite clear that the federal government cannot completely go it alone, so some qualifying language in such a provision that says something like "subject to constitutional constraints" or "take all federal measures necessary" may be helpful.

The last point is that in terms of justiciability, the courts will read the statute in its entirety. A provision like that, even if it's far away from the rest of the other relevant provisions, will signal to the courts an intention of the legislature to have judicial oversight.

• (1545)

Ms. Elizabeth May: Thank you.

If there's time, I'd like to ask Professor Le Quéré about the way the EU goes about what Professor Wright mentioned earlier as "effort sharing" or "burden sharing".

As a Canadian climate activist since the mid-1980s—that's how long I've been working on climate, so I'm a complete and utter failure—it's always struck me as remarkable that when we come back from Kyoto or from Copenhagen, we don't actually put together a national plan, whereas the EU comes back and says, "Okay, who will do what? Let's split this up. Let's get it done."

Can you describe the EU process and how they've managed to do so well as a collection of nation states in observing a target that applies to the whole bubble?

Prof. Corinne Le Quéré: The EU process is very much mimicking the Paris Agreement itself. They have their central objective, which is pushed by the different nations as what is seen as the fair contribution for the European Union. Then countries are invited to say and to argue why their contribution is going to be such-and-such. It's in this argument that countries set their basis for why they should have the target above the target or below the target. Then this is negotiated afterward, as a process.

Giving the countries themselves the voice to argue their case is very powerful in that respect.

Ms. Elizabeth May: Mr. Chair, do I have time for another quick one?

The Chair: You have a minute and 40 seconds.

Ms. Elizabeth May: Fantastic. I'll go to Professor Wright, then.

It's certainly one of the mysteries of our federation, as a confederation of Canadian provinces, territories and the federal government, that we're not as able to split out the responsibilities as independent nation states do within the European Union, and this has been a historical weakness.

In looking at Bill C-12, I really support your amendment to bring in subclause 10(c) to the list of things about which we must report.

Can you think of other means, perhaps modelling on the EU, by which we can ensure that our provincial, territorial—and, I would also think, municipal—orders of government are involved in saying that this is how we take apart this challenge and get at it in each order of government?

Prof. David V. Wright: Again, it is difficult to build that within the four corners of a statute like this. Probably the best you can do is to make sure the statute is consistent with it and has some kind of portal or crosswalk to some kind of Canadian emissions effort-sharing agreement that runs in parallel.

The risk in trying to incorporate some requirement to achieve some kind of effort-sharing agreement within the statute is that—and this is a bit cynical, but you'll appreciate it—it would build in a veto. If this act required the federal government to execute some kind of effort-sharing agreement with all provinces, any province would then immediately be able to say that it's not going to sign it and it's not going to engage.

The Chair: Thank you.

The time is up, unfortunately.

We'll go to Mr. Baker.

Mr. Yvan Baker (Etobicoke Centre, Lib.): Thanks very much, Mr. Chair.

Thank you to the witnesses for being here today. I'd like to direct my questions to Professor Wright as well.

Professor, I really want to continue along the lines of what you were just speaking about really. Earlier in response to one of the other members of the committee, you spoke about this burden-sharing agreement or a Canadian Paris agreement, as you alluded to it. I like that analogy. To me, one of the things that it highlights is the challenges in coming to that agreement. We all know how difficult it has been to come to these global climate agreements and how, in many cases, many folks have felt that they haven't set the bar high enough.

Do you have any thoughts on how we could build that agreement? I ask this in the context of our having recently seen legal challenges by some provinces in the context of the price on pollution, which ultimately went to the Supreme Court.

I am wondering how you think we could, practically speaking, come to an arrangement that would be ambitious enough to support what we need to do to reduce emissions.

Prof. David V. Wright: It's the quintessential "easier said than done situation", but we haven't really tried in a meaningful way, at least not in the last decade. Commencing that conversation across federal-territorial-provincial governments is the important first step in putting those numbers forward. You could even have a first go in a Kyoto-like pledge system, in which everyone comes to the table and says, "Look, this is what's possible."

What's different now from a decade or so ago, including under the Kyoto Protocol Implementation Act, is that you do have a clear federal policy and federal intentions that are aligned with this act but you also have an emerging recognition right across the country, including in the west, that we are, like it or not, on a path to decarbonization. All one has to do is look at the IEA report from just a couple of days ago.

The fundamental difference between Canada and somewhere like the EU is in the economic makeup of the country. Canada's oil and gas sector is such a significant part of the economy that it has made that conversation a non-starter. That is changing, and everyone recognizes that right across the country, so the table really is set to have that conversation toward that kind of effort-sharing agreement in a way that it hasn't been before.

That may sound a little bit rosy, but really there are not many other options. It's time to tackle the elephant that has plagued Canada's implementation of climate commitments for decades.

(1550)

Mr. Yvan Baker: I appreciate that very much, and it may be rosy, but I appreciate the degree to which you're more optimistic now than you would have been 10 years ago. I appreciate that you underline the direction in which we're moving on this, and where folks across the country are moving on this.

I want to change gears a little bit and talk about targets.

One of the things I wonder about is the need to establish targets in this legislation. As I think about the setting of targets, no matter which government may be setting them, it's one thing to set a target and it's another thing to deliver on it. There is a tremendous amount that has to happen, and you've just talked about the complexity and the difficulty of working with the provinces to achieve that.

Even if we separate that out for a moment and from what is within the federal government's mandate, there is a tremendous amount that has to be done and planned and organized and coordinated. With regard to this bill, I am just wondering about your thoughts on the timelines for setting targets. What are your thoughts about the time horizon, the every-five-year time frame? Is that appropriate? What do you think?

Prof. David V. Wright: I don't disagree with a lot of the submissions you've heard on that, which have said that five years is okay, but it ought to be 10 years. Also, it is an iterative process and, of course, those targets can be amended.

What, to me, has been lost a little bit lost in some of the evidence before the committee is that there is an embedded target in the statute, which is net zero by 2050. It's a long way away. It's ambiguous. It could introduce unlimited use of offsets, which may be problematic, but it's at least there and there are requirements, essentially to be on track towards that throughout, which is a good thing. There is no open-endedness. It's all engineered toward that ultimate end point, which is a good thing.

The provisions could be more prescriptive and detailed with respect to making sure we do get there.

Thank you.

Mr. Yvan Baker: Thank you very much.

The Chair: I want to thank all of the panellists.

We're going to take about a seven-minute break and reconvene at 4 p.m. In the meantime, the clerk will connect members of the next panel. Mr. Heaps will stay on the line.

Again, thank you for your contributions and for a stimulating discussion.

I'll mute my mike and shut off my video, and we will gather again in about six minutes. Thank you.

The Chair: Welcome to the second half of our meeting today.

We have with us, as individuals, Dr. Madhur Anand, professor at the School of Environmental Sciences and director of the Guelph Institute for Environmental Research at the University of Guelph; and Dr. Sarah Burch, associate professor in the department of Geography and Environmental Management at the University of Waterloo, and executive director of the Interdisciplinary Centre on Climate Change. From the Canadian Chamber of Commerce, we have Dr. Aaron Henry, senior director of natural resources and sustainable growth.

[Translation]

From the Fédération des travailleurs et travailleuses du Québec, we're joined by Denis Bolduc, general secretary; and Patrick Rondeau, union advisor, Environment and Just Transition. From the Trottier Energy Institute, we're joined by Normand Mousseau, scientific director and professor, Department of Physics, Université de Montréal. Obviously, Mr. Heaps is here with us. I'll start with Mr. Heaps, because he has been waiting for some time to give his opening remarks.

Mr. Heaps, you have the floor for five minutes.

[English]

Mr. Toby Heaps: Thank you. It's a pleasure to be here. I'm going to make two general brief points.

The first point relates to reporting. As Peter Drucker, the management theorist, once said, "What gets measured, gets managed." Hopefully this act includes a provision for the Minister of Finance to issue an annual report regarding the federal public administration's preparedness and management of the risks and opportunities of climate change.

It would be a major improvement if this part of the bill were clarified so that it explicitly includes the Bank of Canada; the major pension funds in the federal remit, including the PSP and Canada Pension Plan Investment Board; and the Canada Post pension plan, among other Crown corporation pension plans. I would encourage more guidance on what that report should include. In my view, it should include an assessment of those institutions against the same target that we are holding Canada to, which is the net-zero target of below 2°C and close to 1.5°C, if possible. Benchmarks are good for assessing these institutions against these frameworks and levels, and it would be a big shot in the arm for all of these institutions—

• (1605)

Ms. Ya'ara Saks (York Centre, Lib.): I'm sorry to interrupt, Mr. Chair, but there is no interpretation for our members.

The Chair: We'll have to stop there.

I think you said you had two points to make, Mr. Heaps. Those were the two points, were they not?

Mr. Toby Heaps: No.

The Chair: Unfortunately, we don't have interpretation, so we're going to have to keep it—

Mr. Toby Heaps: Can you hear me better now?

The Chair: Yes, I think so.

How do the interpreters feel about this?

Let's try it to see what happens.

Mr. Toby Heaps: The first point is for the Minister of Finance's annual report to include the federal financial institutions that I mentioned.

The other point, a subpoint, is for the Minister of Finance's annual report to include the percent of major suppliers to the federal government for net-zero alignment. There are about—

The Chair: Madame Pauzé has her hand up.

[Translation]

Can you hear the interpretation?

Ms. Monique Pauzé: No, there still isn't any interpretation. Given that Mr. Heaps has many good things to say, I'm a little frustrated

The Chair: Okay. It's unfortunate, but he still had the opportunity to make two important points.

[English]

Mr. Heaps, unfortunately, we don't have interpretation and the committee can only proceed with interpretation, so we're going to have to stop here.

Mr. Toby Heaps: I can confine it to 30 words, if I can have 30 words.

The Chair: No, I think we'll have to stop there, unfortunately, because the interpreters can't hear properly. I'm sorry about that.

Next is Dr. Madhur Anand, professor at the School of Environmental Sciences and director of the Guelph Institute for Environmental Research at the University of Guelph.

Dr. Madhur Anand (Professor, School of Environmental Sciences and Director, Guelph Institute for Environmental Research, University of Guelph, As an Individual): Thank you to all of the members of the committee for this opportunity, and a special hello to MP Lloyd Longfield.

My name is Madhur Anand. I am a professor in the School of Environmental Sciences at the University of Guelph. My own research has examined the impacts of climate change on ecosystems in Canada and world-wide, and also how human behaviour and social dynamics can determine the success of climate change mitigation. Our research, some of which was just published yesterday, shows that a growing number of national-level climate agreements can tip the balance towards achieving global targets.

I'm also director of the Guelph Institute for Environmental Research where researchers across all seven of our colleges—engineers, ecologists, mathematicians, artists and economists—are all working on the interdisciplinary challenge of climate mitigation. No one group or sector will be able to solve it on its own.

Canada has not met its obligation to reduce emissions according to international climate agreements. This may very well be because we lacked legislation such as Bill C-12. Research on over a hundred countries world wide shows that passing a new climate law is correlated to reduced emissions, so there's hope here. This act is essential.

The remainder of my comments have to do with clause 10 of the bill, which describes the contents of the emissions reduction plan. This is because we simply cannot afford to reach clause 16 of the bill, which is failure to achieve targets. We know that time is short to head off a cascade of climate tipping points and the nation isn't going to get a second chance to do this right.

Regarding targets, found in paragraph 10(1)(a), the bill proposes using "the best scientific information available". Emission targets will be very hard to detect without sustained scientific work in measurement, monitoring and modelling. The unaggregated data collected by various sectors need to be accessible to both scientists and the public.

Regarding scenario planning to meet the targets, assumptions about human behaviour and societal uptake of technological change must be very explicit and realistic. Our own research shows that social learning, incentivizing behavioural change and evolving social norms can influence the projected peak of global temperature by as much as one degree Celsius.

Emissions targets need to account for both social-cultural processes and political speed bumps. This could also include consequences of missing targets early on, the effects of which will be cumulative and even harder to mitigate.

Regarding paragraph 10(1)(b), which is "a description of key emissions reduction measures", Canada needs to see the writing on the wall. A fossil fuel-free global economy is inevitable. The sooner Canada acts, the easier it will be to participate in the economy of the future instead of languishing in the past. We have evidence from over a dozen measures that have been effective in other countries at reducing emissions for the energy sector and much of this technology already exists.

Here, I want to focus on some other measures that are usually overlooked, namely land use changes including sectors of agriculture and forestry. Measures need to include not only just new emissions, but also carbon sinks. In other words, it is the way we manage cover crops, grasslands, peatlands and forests, and avoid land degradation. These are all things that can help us achieve our targets.

Alas, no new political or scientific measure can succeed if it does not have social approval. This brings me to my comments on paragraphs 10(1)(c) and 10(1)(d) on strategies.

Rapid societal change is possible. We have seen with the pandemic how willing the public and the private sectors are to work together for a common goal and to adopt new behaviours if they understand the risks and the benefits. The strategies should therefore demonstrate the economic, social and environmental benefits of emission reductions, so people and sectors can see the net benefits for Canada.

In developing its strategies, the government must consult not only with natural scientists and economists, but also with social scientists and those working across the arts both within and outside of academia and with indigenous groups, all of whom are able to help us change the language, the culture and the narrative around climate change mitigation.

Thank you.

(1610)

The Chair: Thanks very much. That was five minutes on the dot.

Dr. Burch.

Dr. Sarah Burch (Associate Professor, Department of Geography and Environmental Management, University of Waterloo, Executive Director, Interdisciplinary Centre on Climate Change, As an Individual): Hello, Mr. Chairman and members of the committee. Thank you very much for the invitation to speak today at this critical turning point in the history of Canada's response to climate change.

My name is Dr. Sarah Burch. I'm an associate professor and Canada research chair in sustainability governance and innovation at the University of Waterloo. I'm also the newly appointed executive director of its Interdisciplinary Centre on Climate Change, which is a hub of over 100 faculty, scientists and students who ex-

plore the unfolding consequences of climate change and the solutions to it.

I'm a lead author of the United Nations Intergovernmental Panel on Climate Change's sixth assessment report, which, as you know, is currently under way. This is the largest scientific collaboration of its kind, and our assessments directly inform international negotiations on climate change, as well as national, provincial, state and even municipal climate change planning around the world.

As a person who focuses on transitions to low-carbon resilient communities, I'd like to take this time to add my voice to the chorus of scholars, advocates, business leaders, youth, indigenous knowledge holders, and decision-makers who know that Canada can demonstrate real leadership on this issue.

None of this will be new to you, but I'd like to clarify what we know for sure.

We know that climate is already changing. This isn't a problem for other people elsewhere at some distant point in the future. We know that our own activities and the burning of fossil fuels are largely responsible for those changes. There are impacts such as flooding, stress on ecosystems, loss of species, drought, extreme weather events, heat waves and fires, and we are seeing evidence of these impacts now, here in Canada.

This is a human issue, not simply an environmental one. Marginalized communities will suffer the most under a changing climate. We have seen this as the COVID pandemic has unfolded. Pre-existing inequalities were exposed and deepened as a result.

So what do we do?

The ambitions set out in the Paris Agreement will not be met without transformative levels of greenhouse gas reductions in synergy with actions that protect us from the impacts of climate change. Incremental greenhouse gas reductions, such as those obtained through modest efficiency gains in a system still fundamentally dependent on fossil fuels, will not lead to reductions of the pace and scale required to constrain warming to 2°C or less.

As we know, between 1990 and 2019 Canada's total greenhouse gas emissions increased by around 21%, and they decreased by only around 1% between 2015 and 2019. The Intergovernmental Panel on Climate Change, however, has clearly demonstrated that we have to cut emissions in half by 2030 if we're to avoid the most costly and irreversible effects of climate change. Given Canada's historical contribution to greenhouse gas emissions and our exceedingly high per-capita emissions, it's our responsibility to meet and exceed this call by the IPCC.

The U.K. has pledged to reduce greenhouse gases by 78% by 2035, in fulfillment of the statutory obligations laid out in its 2008 Climate Change Act. This is exciting, but it's not what interests me. Much more important is the progress it has made so far: Emissions in the U.K. have fallen by 51% since 1990. Likewise, Germany has committed to reducing its emissions by 65% by 2030, and the U.S. has now recently committed to a 52% reduction below 2005 levels by 2030. The stories behind progress in these countries are more complex than those targets would suggest, of course, but collectively they convey ambition and urgency.

However, targets, as we've seen, are insufficient. They're not in and of themselves action. Specific scalable policies and actions are required to deliver on those targets, along with clear mechanisms for assessing whether we're doing what we said we'd do. We have to hold ourselves accountable.

Furthermore, the cost of unbridled climate change vastly outstrips virtually any estimate of the cost of transitioning to a low-carbon economy. We must, however, recognize that some sectors and communities will bear a larger share of the burden of that transition. In a just transition, the costs of climate change mitigation are shared rather than placed heavily on marginalized communities and workers in certain sectors. These communities can be beneficiaries of the transition to a low-carbon resilient economy rather than collateral damage.

Pulling out specific points in relation to Bill C-12, my suggestions are as follow.

• (1615)

Bill C-12 should set a clear and achievable 2025 milestone so that we know sooner rather than later whether we're making progress. It should legislate a more ambitious emissions reduction target of at least 50% by 2030 to align with IPCC recommendations

It should make clear who's responsible for reaching objectives and exactly how they'll reach them. There's a crucial missing link between objectives and measures.

It should clearly define a more robust role for the net-zero advisory body to help set this target, as well as review, assess and report on progress.

It should ensure that a just transition is supported federally, explicitly seeking synergies between adaptation, which means protecting ourselves from the consequences of climate change, and mitigation, which means dealing with the causes, while lifting the burden of the transition from marginalized communities.

Thank you.

[Translation]

The Chair: We'll now turn to Mr. Henry from the Canadian Chamber of Commerce.

Mr. Henry, you have the floor for five minutes.

[English]

Dr. Aaron Henry (Senior Director, Natural Resources and Sustainable Growth, Canadian Chamber of Commerce): Thank you.

Chair and honourable members, it is a pleasure to appear before the environment and sustainable development standing committee to share my comments on Bill C-12. Thank you for the invitation.

For those I have not met, my name is Aaron Henry. I am the senior director of natural resources and sustainable growth at the Canadian Chamber of Commerce. The Canadian Chamber represents over a quarter of a million businesses through our network.

I'd like to start by simply saying that in principle the Canadian Chamber is supportive of Bill C-12. However, we believe that there are some details within the legislation as it's proposed, as well as some mechanisms of execution, that could probably benefit from greater clarity and improvements to strengthen the confidence of Canada's business community in the act.

I would like, though, to start with what we see as a potential value of Bill C-12. I think in many respects it dovetails with some of the comments by the other speakers today.

If developed well and in consultation with Canada's business community, I think this bill could lead to greater policy, certainly in Canada. I think it could create stronger and mutual trust among government, business and Canadians in the pursuit of our efforts to decarbonize.

As many other speakers on this committee have noted on other days, we have a history of setting climate goals and failing to meet them. Not only does this undermine our efforts to meaningfully contribute to global efforts to combat climate change, but it poses a risk to Canada's leadership on the global stage and to its reputation. Also, from the business perspective, it creates a risk for paradigm swings in Canada's policy environment. This takes place as successive governments introduce new measures and more stringent regulations to close ground on lapsed targets. That, in itself, creates uncertainty for an investment environment. It makes it harder for businesses to adapt and cope, and to know where they stand. That, in turn, creates additional financial and political risk for Canadian businesses.

As such, in principle, legislation that increases the transparency and accountability of our efforts to achieve net zero has significant value, especially given that we are discussing policy choices that take shape over the span of decades.

With that said, the chamber recognizes the value in making a few improvements or changes to the legislation. The first is that we acknowledge that climate change has many different dimensions to it. How we approach net zero will have consequences that go beyond simply reducing emissions. There are implications for social inclusion. There are implications for Canada's economic prosperity and labour forces and for rural communities. As some of the witnesses who attended yesterday will attest, there are even public health dimensions.

In short, not all of the pathways to net zero are created equal. Some pathways will carry higher trade-offs than others. Some of them will achieve the desired environmental outcomes, but at the unnecessary expense of other social and economic factors.

While the goal of reducing emissions falls squarely within the remit of Environment and Climate Change Canada, I think those other dimensions demand the attention of other ministers for whom those issues fall within their portfolios. For that reason we'd like to make the suggestion that rather than having the minister approve a five-year plan, that should actually be a Governor in Council decision and made with cabinet.

At the same time, we are concerned that, as described, this legislation doesn't really give full consideration to the economic opportunities and consequences that are attendant to pursuing net zero. The goal of developing sectoral decarbonization strategies has the potential to create closer collaboration between government and industry to ensure greater policy certainty, but there are currently two gaps that I think need to be closed to achieve this.

First, there needs to be a clear economic lens built into the legislation. This lens should set parameters to ensure that the sectoral strategies developed by the proposed advisory body adhere to those parameters such as economic competitiveness, job creation, international opportunities for emission reductions, and the potential export advantages in commodities and clean technologies that Canada can leverage. At a minimum, there needs to be an economic lens that makes the criteria through which different sectoral decarbonization strategies are selected transparent and clear for all concerned stakeholders.

Second, we feel that a very high task has been placed before the net-zero advisory board. It's simply that having 15 people to successfully develop decarbonization plans for multiple economic sectors over multiple years is a big challenge. I think that challenge seems even greater given the absence of the direct inclusion on the advisory board, or through other mechanisms within the act, of industry expertise in developing these sectoral strategies.

Our recommendation would be that the legislation be amended to ensure that industry stakeholders—the stakeholders who are closest to the technological and business opportunities to lower emissions for their sector—are given a clear and formal role in developing sectoral decarbonization strategies.

• (1620)

Finally, we do have some concerns about the scope of the legislation—I think that's already been raised—and how exactly it will interact with provincial jurisdictions and the climate ambitions set by provincial governments. It would be helpful if there were some

amendments that would clarify how the targets set by provinces will be integrated into this act. This will be critical in calibrating offset policy and carbon credit creation. It will be very important to ensure greater technological certainty around technologies that are eligible for offset creation and pass the test of additionality. Without strong coordination—

[Translation]

The Chair: Thank you.

We'll now move on to the Fédération des travailleurs et travailleuses du Québec.

Will Mr. Bolduc or Mr. Rondeau be speaking? Will you share the five minutes? It's up to you.

Mr. Denis Bolduc (General Secretary, Fédération des travailleurs et travailleuses du Québec): Thank you, Mr. Chair.

My name is Denis Bolduc. I'm the general secretary of the Fédération des travailleurs et travailleuses du Québec, or FTQ. I'm joined by Mr. Rondeau, a union advisor for the Environment and Just Transition. I'll be giving the presentation.

I want to acknowledge all the committee members.

The FTQ has 600,000 members spread across all economic sectors and all regions of Quebec. Our members work in some of the most carbon-intensive industries, including cement, steel and mining. A number of them work directly in the energy sector.

I can say without bragging that the FTQ is the union organization in Quebec most committed to the fight against climate change. In 2013, we started a process of reflecting on climate change. We've had a standing committee on the environment in place for several years. We've also taken part in a number of parliamentary proceedings in Quebec City and in several key events on climate change and the just transition. Since 2015, a FTQ delegation has attended the COP meetings. We'll be there again this year, in Scotland, for the COP26.

Canada is committed to achieving carbon neutrality by 2050 and is also committed to taking action to limit global warming to 1.5 degrees Celsius. The FTQ is pleased with the federal government's willingness to take serious action to fulfill its commitments. We understand that this is at least the intention behind Bill C-12. However, we doubt that the measures in this bill will achieve the carbon neutrality goals. A change in direction is needed.

The International Energy Agency released a very good report this week. This report shows that we can achieve the goal of keeping global warming below 1.5 degrees Celsius without compromising the economy—which is important—if governments commit to moving away from new hydrocarbon production projects.

In our opinion, the energy transition and the achievement of the carbon neutrality sought by Bill C-12 systematically require a transformation of our economy, but also of our jobs. The transition must be planned and it must include the people directly affected. We must ensure respect for the economic and social rights of workers, the sustainability and viability of jobs and the sustainability of communities in the transition. Governments must put in place just transition mechanisms in all workplaces involved. Carbon neutrality legislation must be accompanied by just transition mechanisms based on social dialogue. In our view, they go hand in hand.

In terms of provincial jurisdictions, the issues of respect for jurisdiction, engagement and constraints with provinces are often complex. We can easily assume that things will be no different this time around. Canada must address this issue quickly, while respecting provincial jurisdictions. Above all, the implementation mustn't be delayed because of constitutional wrangling. We suggest that you begin discussions with the provinces now.

I'll talk about the advisory committee proposed in the bill. The government must receive decision-making advice from a credible and competent advisory committee that's free of conflict of interest.

In Quebec, the advisory committee on climate change is composed of 12 people, nine of whom are from the scientific community. That's nine out of twelve people, so three-quarters of the committee. This is totally different from the proposal in Bill C-12. The bill proposes that only one person out of 14 would come from the scientific community, while four people would come from fossil fuel companies. We're concerned about this.

We believe that science should guide government decisions, not corporate interests. The current composition of the committee opens the door to conflicts of interest. Solid rules will be needed to guard against this possibility.

With respect to accountability, the bill calls for evaluation milestones every five years. We're wondering about the date of the first milestone. In our view, a first report card in 2030 is much too far in the future.

• (1625)

I will conclude by telling you that what worries the FTQ most is the complete lack of transition planning. We see this as an indication that carbon neutrality will happen without workers and their communities. Without them, it cannot work. We need to include just transition mechanisms in the bill now.

The Chair: Thank you, Mr. Bolduc.

We now turn to Professor Normand Mousseau, Department of Physics, Université de Montréal.

Mr. Normand Mousseau (Professor, Department of Physics, Université de Montréal, Scientific Director, Trottier Energy Institute): Hello. I am a professor of physics and the scientific director of the Trottier Energy Institute, or TEI. It is truly an honour for me to be here. Good afternoon to all the members of this committee and its chair.

I have been working on energy and climate governance issues for over 15 years. I was co-chair of the Commission on Energy Issues in Quebec in 2013-2014. I co-authored the proposal that led to the

founding of the Canadian Institute for Climate Choices, and I actually sit on its board of directors.

The TEI is leading the Energy Modelling Initiative at the federal level with support from Natural Resources Canada. This initiative aims to structure the modelling capacity in Canada to support decision-makers. I work a lot on all kinds of initiatives that try to build structure into Canada's ability to move forward.

The TEI also publishes the Canadian Energy Outlook. We are currently working on our second edition, which models carbonneutral scenarios. These reports will be available in a few weeks. What emerges is the immense challenges of meeting carbon neutrality targets and the absolute inadequacy of the measures in place, both federally and provincially. Basically, it is impossible to move in this direction with the measures in place today. I would also say that carbon neutrality is a big game changer in terms of how we do transformation in terms of intermediate goals. We absolutely have to keep the end goal in mind: zero emissions. Any trajectory and any decision has to be consistent with that end.

A few years ago, I piloted the Le climat, l'État et nous initiative, which aimed to transform environmental governance in Quebec. Rest assured, I failed completely. Environmental governance in Quebec is unfortunately not on track to achieve its goals either.

I worked with several stakeholders, among others. We looked at several models abroad, so you won't be surprised to find some similarities with the statement that Corinne Le Quéré presented earlier. Indeed, I have worked with her on several occasions over the years.

Bill C-12 is essential, but clearly insufficient. There are significant gaps in it that make it impossible for us to achieve our goals or get where we want to go, even though those things are important. I don't want to go back to that, so I'm going to talk about a few other issues

The first issue is data. It's important to prepare progress reports to indicate where we are. Yet data in Canada on greenhouse gas emissions are published at least two years after the fact. It is absolutely impossible to manage a transition and assessment with data that is consistently too old. It is imperative that this bill include a requirement to produce data on a monthly or quarterly basis, at most, as is done with employment data and other essential data in Canada. Without this, we are working in the dark. There's no way to assess the quality of the measures that are put in place. We're going to mess up completely.

We also need a clearer horizon. I completely agree with Professor Le Quéré that we need to set intermediate milestones in the longer term—5, 10, 15 years in advance. This will allow industry and investors to understand where we are in terms of regulatory transformation. These milestones need to include sectoral targets that will facilitate guidance. Thirty years is really too far away for many policy-makers, investors and industries.

In addition, we absolutely need to have better accountability. If this bill has a major flaw, it is this. Indeed, if we can assess neither the capacity nor where we are going, nor what we have done so far, we cannot get there.

The next issue is similar to one of the recommendations we made at the Quebec level a few years ago. It is imperative to elevate the status of the Commissioner of the Environment and Sustainable Development to that of a senior official who answers directly to Parliament. This will allow the commissioner to use different approaches and tools than the Office of the Auditor General, including the ability to evaluate not only programs, but their relevance to the achievement of objectives. He would be able to conduct a much more integrated evaluation of environmental actions, not just based on an accounting approach such as that developed in the Office of the Auditor General.

Annual progress reports are also needed. Again, five years is not enough. We see that abroad. When we just have 30 years left to achieve our goals, we need to make sure that the billions spent year after year are really moving us in the direction we want to go. These reports need to include not only progress at the federal level, but the full picture of what is happening from a Canadian perspective.

• (1630)

We need more independent and responsive boards. Currently, in Canada, there is the Canadian Institute for Climate Choices. There is also the Net-Zero Advisory Body. These two bodies could work together, but they are both insufficient at present. The Canadian Institute for Climate Choices does not have enough flexibility or teeth. It has no legislated existence and no direct access to Parliament.

I think my time is up.

• (1635)

The Chair: You are not the only one who goes over your allotted time. You will be able to continue the conversation during the question and answer period.

We are beginning the first round.

Mr. Albas, you have the floor.

[English]

Mr. Dan Albas: Thank you, Mr. Chair.

I'd like to say thank you to all of our witnesses for your testimony and expertise. We certainly appreciate your sharing it with us, and with all Canadians.

I'm going to direct most of my questions toward Dr. Henry from the Canadian Chamber of Commerce. Dr. Henry, you seem to be saying a number of things.

We've heard Peter Drucker in various quotations that we're paraphrasing here that, ultimately, what gets measured matters.

When you were talking about how the plans right now only look at the emissions side and not necessarily at the social or the economic impact side, that creates a bit of a blind spot, because not all plans are equal, I would imagine. A plan could lower emissions but seriously hurt the economy. A plan could meet our emissions targets and grow the economy.

Having that balance is an important factor. Would you not agree?

Dr. Aaron Henry: Yes. That would be our position. I think there is definitely consensus that's where we want to go. We want to get to net zero by 2050.

There certainly are better ways to do it, and there are more costeffective ways to do it. One of our concerns is making sure that those considerations are integrated into the bill.

One thing that's very clear from the IEA's report, and from other accounting firms and others who have weighed in on this, is that while the costs of not transitioning are incredibly high and we need to make that transition, the reality is that the upfront capital needed to make an economic transition is also considerable. We're talking \$5 trillion over the period. Some estimates are about \$15 trillion in terms of new energy capacity and another \$14 trillion in upgrades for grid modernization globally by 2030 alone.

The key component to that, of course, is that you need to be able to develop policy that allows for the investment in all of those projects. In many cases, it's upfront capital that gets realized later. It's sensitive to interest rates. There is a whole series of considerations that need to go into play to actually mobilize that capital.

I think that's what we're looking for, that policy certainty, to make sure the ambition is there but we're actually getting below 60,000 feet, down to the level that allows us to realize how we're going to create the momentum for that. There are going to be some net-zero pathways that are going to leave us positioned to do so, and others that I think won't.

Mr. Dan Albas: You mentioned the necessity of having the private sector invest. I think the orders or scale of magnitude that I've heard, for example, in our EV study, are that we would require 7.5 Site C equivalents to be able to electrify our transportation grid.

Would you be in favour of having some sort of assessment of the electric grid in Canada and what steps it can do to manage the increased demand?

Dr. Aaron Henry: I think that kind of study is important. Those are going to be the types of inquiries that I think are going to have to be made throughout the different sectors of this bill.

When we're thinking about decarbonization strategies, that relates to the resource sector; it relates to buildings, to manufacturing. All of those sectors are going to need to have the kinds of reports that ensure we're positioning those sectors to be economically strong to help carry the burden of that transition. It's going to come down to private sector capital to move the needle on these things.

Mr. Dan Albas: Thank you very much.

Along the theme that not all plans are equal, I would say that not all teams are equal; maybe because I've watched too many Hollywood movies where sudden action needs to be taken.

It's usually a team of diverse views that are able to come together with a better result. That might be pipe dreams here, but at the same token, to have one minister that is going to put 15 individuals forward doesn't seem to me to be a proper thing. I would much prefer a whole-of-government approach.

Would you much rather see with the advisory board that perhaps you would have, as was suggested yesterday, different ministers suggesting some participants on it, so that we have a cross-disciplinary viewpoint from a whole-of-government approach?

Dr. Aaron Henry: That's not a recommendation that we formally made, but I think that having different ministers put forward appointees on the advisory board is a good measure to make sure that you really do get the diversity of perspectives. As said, the transition to net zero is going to have social dimensions. It's going to have economic dimensions and, of course, environmental dimensions. It's going to have health dimensions as well. You basically do need to make sure that you have the views in place that allow you to articulate those dimensions in a plan.

• (1640)

Mr. Dan Albas: My colleague, Cathy McLeod, has raised the subject of indigenous consultation a number of times during this study. The government apparently didn't consult with any indigenous groups, yet there are many first nation communities that have economic reconciliation agreements and who are putting forward their own projects. Do you believe that one of those groups—perhaps the Minister of Crown-Indigenous Relations—might also be able to contribute names towards the panel?

Dr. Aaron Henry: Yes, absolutely. I think that's a really good suggestion.

Mr. Dan Albas: Okay.

You've mentioned some of the impacts that would happen because not all provinces have the same energy footprint, so you believe that there should be more reporting of some of the impacts on certain regions. Do you also think that there should be a fair summary of all provincial actions towards net zero, given that the federal government doesn't have exclusive jurisdiction in this area?

[Translation]

The Chair: I would ask you to answer the question quickly.

[English]

Dr. Aaron Henry: Coming to that second component, I think the interaction with provincial governments is crucially important, and I think we've heard different recommendations on what that could look like

From a business-side perspective, one thing that we're hearing repeatedly and that I think is being put forward is that carbon pricing and the creation of carbon offsets is something that is going to draw in capital for these projects and draw in that interest. It's really important to have close collaboration with the provinces simply because, if there's a shift, you might jeopardize the additionality of those carbon credits. Therefore, being able to actually make sure

that net-zero strategies and what gets declared business as usual are actually—

The Chair: Okay, we'll have to stop there.

Ms. Saks, you have six minutes, please.

Ms. Ya'ara Saks: Thank you, Mr. Chair.

Thank you to all of the witnesses who have joined us this afternoon. There is much to be discussed and much to learn as we go through this process, so thank you for your interventions today.

I was very interested in the comments by both Dr. Burch and Dr. Anand with regard to the societal buy-in—if you want to call it that—or collaboration as we move towards net-zero emissions and the impacts that we have to consider in getting societal change to take part in reaching net zero. We are creatures of habit, as I've said many times during this study, and it takes all levels, from the individual up to the federal government, to make sure that we all work together towards reaching net zero.

Bill C-12 certainly answers the urgency that Canadians have put forward to us on climate change, and we certainly hope that Bill C-12 displays the ambition that we want to put forward. We appreciate all of your contributions to making sure that we do have the ambition of Canadians as we do this.

Dr. Anand, I'd like to ask you about the impacts we're already seeing on the environment and the ecosystems from climate change. What will be the ecological consequences if we don't achieve net zero?

Dr. Madhur Anand: These impacts have been extremely well reported and articulated in a number of reports that the IPCC has put out over the years. In Canada, there's virtually no ecosystem that has not already been affected by climate change over the past decades. I'm not going to give you a big lecture, but I will just quickly tell you a few points.

Our northern ecosystems are the ecosystems that are most rapidly changing because the effects of warming on those systems are most extreme, acute effects, so our peatlands.... We've seen the melting of permafrost. Our boreal forests are also seeing and increased frequency and intensity of insect outbreaks, which are often exacerbated by stressors related to climate change. Our aquatic systems are seeing stresses in terms of productivity and water quality. Yes, the list can go on and on. Essentially, we're losing species. We're losing productivity. We are losing carbon sinks that many of these ecosystems provide, which, of course, comes into this equation.

One of the arguments that I would have made in my comments is that it's really, really important to consider the changes that we're already seeing, the effects that we're already seeing, in terms of the urgency, but we're there now. We're there now. We have an act, so that's good, but it will be really important in the development of the plans to ensure that we continue to conserve and restore [Technical difficulty—Editor] degradation of those ecosystems, the least of which is because they contribute to carbon sinks. However, of course, they provide a lot of other ecosystem services to humanity.

• (1645)

Ms. Ya'ara Saks: Thank you for your answer. It's very clear that in this entire process we're going through, so many levels are interrelated. We can't look at just one piece of the puzzle. We need to look at all of the pieces.

Dr. Burch, I'm a former small business owner. Businesses try to plan ahead and are often faced with challenges, such as how well do we plan when there are transitions happening on the table? I know how rewarding it can be to have a business and want to grow—and also want to be part of this transition that we're proposing with Bill C-12. As we transition to net zero, how can we support small businesses in the transition and empower them to take advantage of economic opportunities?

Dr. Sarah Burch: Thank you so much for this question.

I get the sense that over the course of our conversations in this country around what to do about climate change, for the last decade or two, we tend to focus on what government can do. When we talk about the private sector, it's large corporations, for obvious reasons. Their greenhouse gas emissions are enormous and they are a really important piece of the puzzle. But when it comes to small and medium-sized enterprises in this country, individually their greenhouse gas emissions are small, but collectively they are enormous. If they are not supported in the process of the transition, we will have no hope of reaching these ambitious targets.

What we are seeing in our research is kind of exciting. We're finding from the small firms that do see social and environmental good as central to their purpose, alongside profit—and sometimes it ranks higher than growth and a dominant profit motive—that they are implementing greenhouse gas reduction strategies that are much more ambitious and creative than you might see in the larger firms. We're seeing reductions of 30% or 40% in a couple of years in small firms.

That's exciting. However, looking across the landscape of Canadian small businesses, they lack the capacity. They often have a very narrow profit margins. They might not have the technical skills outside their clear domain of the good or the service they provide. I think it's crucial to engage those small firms across the country by building capacity for sustainability transitions and decarbonization within small firms so that they don't fall by the wayside, as they have certainly over the last year and a half related to COVID. Technical skills building is really crucial among small firms, and I think that will help to accelerate the transition.

The Chair: Thank you.

Madame Pauzé.

[Translation]

Ms. Kristina Michaud (Avignon—La Mitis—Matane—Matapédia, BQ): I'll take it from here, Mr. Chair.

The Chair: Very well.

Ms. Michaud, welcome to the committee. You have the floor.

Ms. Kristina Michaud: Thank you, Mr. Chair.

I'd like to welcome the witnesses.

I thank you for being here.

I really enjoyed your opening remarks. It is refreshing to hear that the economy and the environment are intrinsically linked, especially when it comes from the economic sector. There is often a fear that the economic sector doesn't want to get involved, but you are proof that it does. As Mr. Henry said earlier, the cost of not doing the energy transition will be even higher than the cost of doing it. So I thank you for wanting to make the transition.

I'll address Mr. Bolduc to start.

Mr. Bolduc, you said that you had some doubts about our ability to meet the national GHG reduction targets. I totally agree with you. Achieving carbon neutrality is a pretty ambitious target. That doesn't mean we should drop that target. We absolutely need to have ambitious targets, but the way we act must go hand in hand with achieving those targets. You mentioned that, quite rightly. I feel I should mention it again. The study report released earlier this week by the International Energy Agency, or IEA, noted that it is commendable that countries want to be carbon neutral by 2050, but that this requires that we stop all oil and gas projects. We know that the gas industry in Canada will grow by at least 30% by 2040. So I have a hard time imagining how we're going to meet our targets if we continue on this path. Certainly, with Bill C-12, the government has a responsibility, but so does the industry.

How do you see this collaboration between the two, then? Do you think the government is taking the right approach in proposing this bill?

Mr. Denis Bolduc: Those who believe that the future is in hydrocarbons are definitely wrong, in my opinion. We shouldn't wait until we've pumped out all the oil on the planet before we start acting. The study report published by the IEA this week is interesting. We learned that the energy transition will create 14 million jobs, but that 5 million jobs will be lost in the fossil fuels sector. That's what I read. According to my calculations, 14 million minus 5 million equals 9 million. So 9 million jobs would be created if we go forward with the energy transition.

I shared this with you in my opening remarks. We at the FTQ are very concerned about accompanying all the players in the field in this energy transition, that is, the workers, first and foremost, of course, but also the companies and the communities in which they are located. It is therefore this just transition approach that must absolutely be put in place. That said, however, we do not find it in the bill

● (1650)

Ms. Kristina Michaud: You mentioned the creation of the Réseau intersyndical pour le climat. You're really proactive about this and always show sensitivity to workers to ensure support.

Do you think the government is ambitious enough and willing to put forth the necessary effort, not only through Bill C-12, but also in its approach to reducing greenhouse gas emissions, to show support for all sectors and all players in the field, as you say, out of concern for the workers you represent?

Mr. Denis Bolduc: There is no question that the target needs to be higher than 35% or 40%. Many set the target at 60%. In my view, it should be as high as it can be, as long as it is achievable and the efforts are made with a view to a just transition, as I said earlier, for workers and communities.

The Unifor union, which is affiliated with the Fédération des travailleurs et travailleuses du Québec, or FTQ, still represents several thousand members in the hydrocarbons sector. The union is not shy about calling on the government to set a target of 60% by 2030.

Therefore, I think we need to be ambitious and give ourselves the means to achieve our goals. Many have said it, and the FTQ agrees, the longer we wait, the more painful it will be.

Ms. Kristina Michaud: I agree. Thank you, Mr. Bolduc.

Ms. Anand, I would like to hear from you on this. I could see you nodding and saying earlier that, for Bill C-12, the Minister of the Environment has to rely on the expertise of scientists and what they say.

At the moment, the target range that the government has set for itself is a 40% to 45% reduction. I think the scientific community is talking more like 60%.

Is the fact that the targets are in the bill important to you? In your opinion, are they sufficient?

[English]

Dr. Madhur Anand: I think it would not hurt to have the targets in the bill. A lot of the discussion about what they should be has already taken place. It's true that if we look at international panels and agreements, the targets are higher for Canada, and certainly I agree with the comment that targets should be achievable. However, this is a matter of articulating in the plan a target that is achievable. I think the higher the target, the better, and 60% should certainly be what we aim for. It will get us there faster. That way, if we do fall short to 45%, it's better than falling below 45%.

In terms of-

The Chair: Go ahead for another 10 seconds.

Dr. Madhur Anand: Okay. In terms of hearing from scientists, yes, there should be an ongoing discussion. In the development of the plans for this bill, we need to have some more scenario planning and modelling that includes the—

The Chair: Okay, thanks. It's a tough job to cut people off. It hurts me more than it hurts you.

Mr. Bachrach.

Mr. Taylor Bachrach: Thank you, Mr. Chair, and thank you to our witnesses.

I'll direct my first question to Dr. Burch.

Dr. Burch, something you said in your introductory remarks caught my attention. You mentioned this idea that modest efficiency gains are not going to be enough to get us even to the 2030 target. It made me think about the way we talk about the magnitude of change that's going to be required. The question in my mind is whether the sense of urgency and the way that government communicates it to the people of Canada are sufficient to really give them a sense of what's going to be required over the next nine years, which to me seems like a blink in time.

Do we need to convey more of a sense of urgency and really be honest with Canadians about what a 45% decrease in emissions would like in our country? Is that a clear question?

• (1655)

Dr. Sarah Burch: It is, yes. Thank you.

I would say that we need to be much more creative and, as you said, honest in conveying the depth of change that's required to meet targets of this ambition level. As we all have reflected already many times, we've failed to meet targets in the past, so deep changes are required.

I think this comes down to essentially our vision of the future. What does a decarbonized Canada look like? There are a lot of different ways it can and should look. There isn't just one vision. I think it's really important to open up that conversation so we have a broader diversity of visions, not just of the end goal, but also the pathways to get there, so those visions don't end up being sort of deeply conventional. I'm concerned that when we talk about what the future looks like, we essentially want to retain the fabric of our communities, the structure of our cities and our lifestyles exactly as they are, but we flip the switch and the power is produced a different way.

What we're describing here in terms of a net-zero Canada by 2050 is a much deeper transformation than that.

Mr. Taylor Bachrach: Thanks for your answer. I agree whole-heartedly.

I'm curious about the balance between short-term actions and longer-term policies. It seems there are some policies that take years to put in place. The price on carbon, as you know, we've been talking about for many years now, and it's only just starting to take effect. Of course, it will take a while for it to really kick in at levels that make a substantive difference.

When we look at a 2025 target, the idea is that we need ambitious action over the next four years, which is like a heartbeat. What are the actions that you feel the federal government needs to focus on in order to make a substantial difference in the next four years? What are the policy areas that can spool up that quickly?

Dr. Sarah Burch: Thank you. That's a tough question.

I really appreciated the conversation that came prior to this, about burden sharing between the federal government and the provinces. I would also add to that, of course, municipalities. There's a crucial role for cities to play here in taking short-term actions to help deal with transportation and residential emissions. We need to start thinking about the fact that every new building we build has a 30- to 50-year or greater lifespan, so every decision we make on the building front that locks us into a high-carbon pathway is a failure. That's a challenge we have to then undo later on.

In the building sector, for instance, it's not just about those new builds. We have to scale up retrofits of existing buildings to a pace that is completely unheard of. The existing building stock in residential and commercial buildings has to be transformed within the next decade to deliver these deeper reductions by 2030.

That is crucial. Supporting municipalities that have these tools like land-use planning and zoning, and provinces that work on the building codes, to really target those transportation- and buildings-related emissions is crucial.

Others, such as Professor Mousseau, might talk more to the energy system.

Mr. Taylor Bachrach: I have a lot of questions about that specific topic you're talking about, home retrofits. I just retrofitted a 1968 split-level house to zero-emissions heating and cooling, and the process made me think a lot about how far we are from achieving the acceleration in the rate that we need to be at to retrofit a substantial percentage of the housing stock. It's a little bit depressing to think about how far we have to go in order to actually really make that happen.

Perhaps next I'll turn to you, Mr. Bolduc. You mentioned the just transition, and I'm wondering, first, if you could speak to how you feel Bill C-12 should be amended specifically to reference the just-transition elements, and, second, whether it's enough to add some amendments to Bill C-12 or whether we need the government to deliver on its promise to create a stand-alone just-transition act.

● (1700)

[Translation]

The Chair: Please respond briefly, Mr. Bolduc.

Mr. Denis Bolduc: Thank you for your question.

Currently, in Quebec, we are working jointly with the Conseil du patronat du Québec to convince the Minister of the Environment to create a working group on just transition, which would include union partners, employer partners and, obviously, some of the ministries involved. This is an important part of putting in place just transition measures.

On the ground, the FTQ is trying to organize laboratories that we call "just transition laboratories." For example, we are currently approaching a microbrewery about how we can capture CO2 back into production to produce a carbon neutral beer.

The Chair: This sounds like a good idea. Unfortunately, I have to interrupt you, but I'm keeping your carbon neutral beer idea.

[English]

Mr. Taylor Bachrach: I liked where he was going, Mr. Chair. I think I'll—

The Chair: Yes, so did I, but there are rules, Mr. Bachrach, even in those cases.

We'll go to the second round, starting with Mr. Jeneroux.

Mr. Matt Jeneroux (Edmonton Riverbend, CPC): Thank you, Mr. Chair.

As much as I'd like to continue to explore that, I have other questions for the witnesses.

I do want to start with you, Dr. Henry. You got cut off in your opening comments right as you were about to talk about, I believe, the targets set by provinces and how those are managed. The chair has a difficult job. We've been at this now for nine hours, I believe. He's doing a good job at managing all this.

I'm hoping you can perhaps expand on what that provincial element contains.

Dr. Aaron Henry: Thank you so much for the question.

Yes, absolutely, we've already seen in the design of Canada's climate policy that a number of policies get designed federally that do have provincial implications. In some cases, there are duplications, as well. A few examples include the work that went into creating methane equivalencies. There were the cases, for instance, in creating a federal clean fuel standard and provinces already have clean fuel standards of their own. There were the differences between the federal output-based pricing system as well as provincial systems for heavy emitters.

All those are cases where it's actually quite important to coordinate with the policy frameworks that are put in place in provinces. The one risk, if there's a lack of coordination, is duplication. You might end up regulating and essentially pricing, in some cases, the same molecule twice, which of course is a challenge. It also goes back to these principles of accounting that skew that.

The other issue that I think we're trying to see ahead on is that there is a lot of growth here in terms of trying to establish carbon markets. One key component of carbon markets is that we do need a national protocol that makes it clear what the conditions are to create an offset credit. One thing that does come into play is lists of technologies that are included in a base business-as-usual scenario—these are not considered able to produce additional carbon credits or emissions, simply because they're going to happen anyway because that technology's been tagged—versus technologies that are eligible for credit creation.

If there isn't certainty around that between the federal government and the provinces, it actually creates a lot of risks for the investment environment. You're going to have a hard time attracting companies based on that portion of the business model if there isn't certainty that those carbon credits can be guaranteed and recognized by both provincial and federal governments. That's an example of the potential complexities there.

Mr. Matt Jeneroux: That transitions into what I thought was your other point, which I'm hoping you could expand on.

I think you touched on those paradigm swings in policy-making and the potential financial and political risks in your opening comments. Can you expand a bit more, so we have some good balance in testimony to go from?

Dr. Aaron Henry: Absolutely. I think when we approach something like Bill C-12, that's something everyone is looking for in the business community. They're looking for more confidence in terms of what these decarbonization strategies will look like. They're looking at the ability to know what sorts of emission reductions they're going to have to make as an industry, and then as an individual company.

I'll be honest that one thing that's stuck with this conversation is to set the limit as high as we possibly can. I think that's great for an ambition side, but that's really challenging policy for any company to know what they need to do to actually meet those regulations and make those reductions. It is simply going to be a swinging or moving target.

I think the challenge we face is that, of course, if the measures are not in place and agreed upon and we can't actually achieve them, we might find that more stringent measures get introduced by a successive government that's playing catch-up on the mandated target. If we get into that world, the policy environment is going to change radically.

We've been very happy to see a convergence around, potentially, the types of tools that can be used as effective climate policy amongst the federal parties, understanding that different parties might use those tools in different ways. Having that kind of consensus is very helpful for businesses as they look ahead.

When businesses look to something like Bill C-12, they are hoping for greater clarity on that policy regime and that there's not going to be a sudden shift. If we're not actually realistic—it doesn't mean not ambitious—in grounding this in what we can do in these sectors and instead we're creating floating targets, that is going to knock business confidence significantly, which means the capital's not going to be there to make these projects run.

• (1705)

Mr. Matt Jeneroux: Because I gave the chair a compliment at the beginning, I think he'll have a bit of leeway in my final 10 seconds here.

I want to quickly ask a follow-up from my colleague Mr. Albas's question.

Do you think there's merit in amending the bill so that cabinet makes the decisions in terms of who belongs to the panel, and to go a little further and include departments like Industry, Labour and Finance at the table?

The Chair: Give a quick answer, please—a yes or no.

Dr. Aaron Henry: Yes.
The Chair: Okay, good.

We will go to Mr. Bittle, for five minutes, please.

Mr. Chris Bittle (St. Catharines, Lib.): Thank you very much, Mr. Chair.

I'd like to turn to the FTQ.

Perhaps you can expand on your carbon dioxide and beer answer and explain more about the role that labour will play in the path to net zero. What are the opportunities you're seeing for your members?

[Translation]

Mr. Denis Bolduc: If I may, Mr. Chair, I will let my colleague Mr. Rondeau answer that question, as he is very active in the field.

The Chair: Of course.

Mr. Rondeau, you have the floor.

Mr. Patrick Rondeau (Union Advisor, Environment and Just Transition, Fédération des travailleurs et travailleuses du Québec): Thank you, Mr. Chair.

The opportunities are linked to a just transition. It's as simple as that. That's why we want robust just transition mechanisms to accompany the legislation. In terms of the previous question, we want to see just transition principles or mechanisms mentioned in the legislation itself. This was promised by the current government during the last election to facilitate the engagement of workers. The purpose was to engage them in a social dialogue and include them in the discussions while clearly establishing the process and the funding required, as well as indicators of success.

All of this can only be done by allowing worker participation. That is to some extent what our colleagues at Unifor put forward about a week ago. They set the bar very high by saying that if workers are not part of the solution, they will become the problem. A just transition is often seen as based on a principle that prevents energy transition. The opposite is true. If we encourage working men and women to contribute to the search for solutions, we will achieve the energy transition much more quickly.

I'll give you one last example. In Saskatchewan, workers from the refinery field have retrained and entered the geothermal field. So it is possible. We just need to get these people involved and change the paradigm. That way, we'll get results.

[English]

Mr. Chris Bittle: Thank you so much.

I'd like to turn to Dr. Henry. This is kind of a broad question, so feel free to expand.

I know you've touched on this, but do you agree that more information, through the reporting process, will be helpful to Canadian businesses as we move toward net zero?

Dr. Aaron Henry: More information is always helpful. Of course, it has to pertain to the details of what that information is going to look like. It's also, though, the input that we're really trying to put stress on.

When you look at an advisory body that's being proposed, I think it's going to have the ability to get to that 100,000-foot level in terms of its recommendations and what it's thinking about, and how it will plan the decarbonization strategies. The reality is that to make these reductions in a way that maximizes the efficiency of the reductions, ensures good jobs and ensures sustainable communities means you're going to have to include the people who are in the industry who know what the business models look like and who understand how the technologies can be applied.

Information out is great, but I think there is a need for a consultation process, so that the people who are going to be managing these different industries, through these strategies, are heard and are able to communicate what would need to happen to be able to scale some of these technologies or change these business models in a way that moves us toward these goals. I think that's something that isn't clear right now—where business is going to come in—and maybe an economic lens in the legislation will help to encourage that kind of input.

• (1710)

Mr. Chris Bittle: Thank you so much.

I'll move to Dr. Anand.

I really liked your suggestion in terms of consulting beyond academia—that society needs to be consulted in a broader way. With the news, especially when I watch it, and in speaking with constituents, there seems to be only a narrow focus on a few issues.

I was wondering if you could expand on your comments on further consultation and consulting beyond academia.

Dr. Madhur Anand: Yes. I think there should be consultation, definitely, but also engagement and communication. That can be a two-way street and it should be a two-way street.

Some of my thoughts on that have to do with looking at how people behave and looking at societal trends and societal changes. I know these are things government and business already do, but a lot of data that can be gained from those domains can then feed into our scenarios. There have been a few examples of unpredictable outcomes of how people might respond to interventions.

There's a bit of that in COVID. For the most part, I think, in terms of what the pandemic showed us, I was actually quite surprised at how quickly people responded to the required interventions that had to be taken and the changes in their lifestyles and behaviour. The same—

The Chair: We have to stop there. I'm sorry. **Mr. Chris Bittle:** Thank you so much.

He's a tyrant. He's also our caucus chair. He does the same thing to us there as well.

I appreciate it.

The Chair: Again, I'm sorry about that. We were over time, and into extra time.

[Translation]

Ms. Pauzé, you have the floor.

Ms. Monique Pauzé: Mr. Chair, I will be sharing this short two-and-a-half-minute period with Ms. May.

My question is for you, Professor Mousseau. You recently published an article with Professor Corinne Le Quéré in which you talked about improving governance.

I would like to know how you, as an expert and scientist, reacted to the composition of the committee presented by the minister.

I would ask that you respond quickly to give Ms. May some time.

Mr. Normand Mousseau: In my opinion, there is still a lack of scientists and independent people around the table. The members are all volunteers. Now, when you're a volunteer and you're paid by an industry or a company, it's hard to be completely independent. That's one thing.

In some other committees, a stipend is provided. This allows members to determine what their task is and separate it from others. Another important aspect is that the secretariat, as it is structured now, is located at Environment Canada. This means that the secretariat is not independent. It is imperative that this committee be completely independent. The people who do the work behind the scenes also need to be separate from government.

The Chair: Ms. May, you have the floor.

[English]

Ms. Elizabeth May: Thank you so much.

My question is for Professor Burch.

Professor Burch, I want to confirm something with you. You talked about the U.K. target being 78% by 2035. That's against 1990 levels. Is that correct?

Dr. Sarah Burch: It sure is.

• (1715)

Ms. Elizabeth May: Compared with Canada, where we're aiming at 40% to 45% below 2005 levels, we're not on the same graph. We're somewhere else.

Dr. Sarah Burch: That's right. Neither is the United States, basing its targets on a 2005 base.

Ms. Elizabeth May: If I have time.... I'm in a quandary. If this bill were to pass the way it is now, I think there's a risk that it would actually be dangerous, because it sets a target of net zero at 2050. Without the near-term target, could this bill actually be harmful?

Dr. Sarah Burch: I think a near-term target is crucial. The baseline shuffling is one way of obscuring the level of ambition that we are claiming we're reaching for. It's easy to lose that nuance, but by choosing that more recent baseline, we're masking all those years that our emissions were going up, so that reduction by 2030 or 2050 is much more modest.

I am absolutely of the mind that a near-term ambitious target is an important part of the process.

The Chair: Thank you.

Mr. Bachrach.

Mr. Taylor Bachrach: Thank you, Mr. Chair.

Dr. Burch, we've heard from several witnesses over the course of the past couple of meetings who have urged us to include economic indicators in Bill C-12. I'm wondering what your view is on this.

Dr. Sarah Burch: That also is a big question. It was interesting to watch the discussion unfold earlier about the phrase we all toss around, that what we can measure, we care about. I think that's an unfortunately reductionist view of the world. There are lots of things that are really important to Canadians that we do a very bad job of measuring.

The economic side of the transition is an important set of markers, certainly, to ensure that those folks whose livelihoods are tied up in a fossil-based economy will be transitioned in a just and equitable way towards a lower-carbon economy. However, beyond the economic indicators, there's more information that provides important signposts of whether or not we are progressing toward a future that's desirable for Canadians.

Mr. Taylor Bachrach: What would some of those other markers or other indicators be that you think would be important to consider?

Dr. Sarah Burch: Indicators that help us understand the health of our ecosystems and give that voice to non-human nature are crucial. I think it's important to understand equity and inclusivity as some of the dimensions of a transition that we think we are all driving towards. Public health is a really important indicator as well. We could not see that in a more striking fashion than we have over the last year and a half.

This brings me back to something that is very near and dear to my heart, which is that I think there's robust evidence to suggest that a transition towards a decarbonized economy can deliver on multiple priorities simultaneously, not just reducing greenhouse gas emissions but many others as well.

Mr. Taylor Bachrach: Thank you.

Mr. Chair, I imagine my time is almost up. I was going to ask Mr. Bolduc about the advisory body and—

The Chair: What's the question?

Mr. Taylor Bachrach: Well, I'm just wondering what his ideas are around moving towards expertise versus interests to make up the committee, but I'll ask it down the road.

The Chair: No, it's okay.

Please answer very quickly, Mr. Bolduc: expertise or diversity?

Mr. Taylor Bachrach: How do you ensure the shift towards expertise from interests?

[Translation]

Mr. Denis Bolduc: Of course, scientists need to be on this committee to guide the government, but workers also need to be represented on the committee, which I think is already in place. We need employers and businesses, but primarily scientists, to be on it.

The Chair: Thank you.

[English]

Mr. Redekopp.

Mr. Brad Redekopp (Saskatoon West, CPC): Thank you, Mr. Chair.

I just want to pick up on that subject. I worked for many years in industry, building things—farm machinery and then, later, housing. One of the reasons I got into government is that it's pretty much accepted that government does things rather inefficiently and slowly. It serves a purpose, no doubt, but compared to business.... Business can be very expert at getting things done, like we were just speaking about.

Dr. Henry, I just want to get your opinion on this. You mentioned an economic lens, and that's what Dr. Burch was just speaking about. Dr. Burch also said that we need skills-building in our smaller enterprises and a broad diversity of visions. On the other hand, Mr. Bolduc said that we shouldn't have any corporate interests on the advisory board, for example.

In order to get the capital released and in order to actually get things done when we come up with a plan that all of us are so expert at coming up with—the actual execution of that plan and implementing that plan—I believe we need people who are from the business world and actually know how to get things done and can get them done. What is your perspective on that in this legislation? Are we missing that, somehow, in this legislation?

• (1720)

Dr. Aaron Henry: I might also just suggest that the dichotomy suggested between interest and expertise is potentially a bit of a false one. There are people who can be experts and also be interested and come from different spaces. There's no reason someone from labour couldn't be an expert. There's no reason someone who's come from industry couldn't also be an expert and so on and so forth—just to put that in place.

This is the concern that comes into play. I'm not quite sure if there is a mechanism here that really allows for the alignment of whatever decarbonization strategies are developed by the advisory board with the business community that can essentially execute on those strategies.

There are two points there. To be able to execute on the strategy, we need to make sure the strategy itself is granular enough and is couched where businesses are actually situated, where the opportunities lie. What can actually be achieved? That's the recurring concern that we have: There needs to be some way to ensure that any decarbonization strategies that are developed are developed with a view for public health, with a view for social inclusion and with a view for workers' rights, as well as in consultation with industry, which is going to have to carry this forward.

I would just go back to that point. If you want to get to that level of granularity, you really need to have some type of mechanism that ensures that the advisory board goes through a very rigorous consultation process or that industries are, in fact, represented on the advisory council. If, potentially, each decarbonization strategy group becomes its own miniature committee, I'm not sure exactly what the mechanism might look like, but currently it's not there.

Mr. Brad Redekopp: Thanks.

You mentioned policy certainty earlier on. I'm thinking about the most recent goalpost movements we've seen. We originally had a target of 30%, and then we had a major carbon tax increase, and then the target went to 36%, then up to 45%.

The minister told us that he consulted widely before moving this target from 36% to 45% in that three-day period. Did he consult with you or any of your members, that you're aware of, on those targets moving around?

Dr. Aaron Henry: I can't speak for the members and whether or not they were consulted. We were not. From our vantage point, it was a bit of a surprise to see the goalposts moved overnight.

That's still another element that we'd like to see. There are a lot of different companies in Canada that have pledged to become either net zero or carbon neutral. They're starting to develop their blueprints. There's still a need to bring those plans into closer orbit with the public policy that's in place. There's some encouragement with something like the net-zero accelerator as a policy plan, but I think there's going to have to be stronger alignment and coordination between business and industry on this to meet these goals.

Mr. Brad Redekopp: What are the implications for business when these goalposts change like that overnight?

Dr. Aaron Henry: They're significant. It essentially means that you might have had an emissions reduction strategy that no longer meets the goal that the government sets. It creates ripple effects where there are concerns. We've moved from, say, a 30% benchmark now, to 40%, to 45%. Well, how is that going to be achieved? Are we going to see more stringent policy? Does it mean that certain investments we've planned and made are no longer as attractive as they previously were? Does it mean that financial markets will not allocate capital to those projects?

On the lower level, down to less gravity, it's even a concern for small and medium-sized businesses, which are seeing a carbon price of \$170 per tonne. These are groups that, as I think you've mentioned, are key to Canada's climate change strategy but generally don't have the resources and the sort of expertise—

The Chair: Thanks.

Mr. Longfield, you have the floor.

Mr. Lloyd Longfield: Thank you, Mr. Chair. I've been very patient in wanting to have my turn, and I have the last turn.

First of all, I want to say thank you to the witnesses, in particular to Dr. Anand from Guelph. Congratulations to Dr. Anand on your recently announced nomination for the Governor General's award for your book of poetry, with two other Guelph authors.

There is a story, and that's where I'm going with this. I have an English degree and a math minor. There is a role for this story. You were just finishing a sentence bridging what we're learning from the story of COVID and how that might apply to climate change.

Before I go to the comment you were going to make, I'm thinking of this advisory board we're talking about in this bill as being something like the National Advisory Committee on Immunization or the Public Health Agency of Canada, something that's created outside of government to solve problems on behalf of Canadians but connected to government through some governance.

Could you comment on the importance of the stories we're learning from things like COVID or the previous pandemic we went through?

● (1725)

Dr. Madhur Anand: One thing I said towards the end of my opening comments is that something we really need to see are some new narratives for climate change. The reason for that is, I think, that the lack of progress we're seeing is because we're stuck in old, wrong narratives. We have old-fashioned ideas or wrong ideas about everything like the impacts, but I think, most importantly, about what the benefits are for moving through some of the pathways towards net zero. The benefits of that are just not being communicated as well to society. Whether you call that honesty or whether you look for creative ways to do that, it doesn't matter. Ultimately, those are the benefits of that.

Part of that has to do with imagining pathways that we can't imagine. It's something that artists are really good at doing. There is a role for that group as well here. Storytelling is also a very important component, as far as I understand it, within indigenous communities. It's a part of how they manage their systems and sustain their own communities, and I think it's a very important thing.

Mr. Lloyd Longfield: Yes. Legislation does something. It doesn't solve the problems. It creates conditions under which problems can be solved. A lot of Canadians would look to us and say, "Well, fix it." We can pass legislation, but let's do it in a way that allows for groups like this advisory board that's being created in this legislation to consider things like indigenous stories, or what we learned in COVID that did or didn't work. When politicians get involved and start fighting each other.... We had a panel of grade 12s, and one of them said to me, "If you'd stop fighting each other and fight climate change instead...." Politicians are fighting each other instead of fighting problems like climate change.

Maybe I'll go over to you, Dr. Burch. I have a minute left. You alluded to having multiple problems solved through legislation like this. I'm thinking of environmental racism. I'm thinking of helping to make sure this legislation doesn't make a bigger gap between people who have access to clean water and clean air and businesses that can buy clean water and clean air through carbon credits. Could you comment on that, please?

Dr. Sarah Burch: Sure. I would say that, as you say, legislation can't do everything, but it plays a crucial role in framing a problem. When we bring the justice element and the co-benefits strongly into the narrative, we have a better chance of solving those problems. One way to help do that would be this. I put a plea out there to have not just natural scientists and physical scientists on the advisory board, but also social scientists.

Mr. Lloyd Longfield: Thank you.

We have an intermediate goal with 2030. We've negotiated internationally. We know that we are making that more aggressive, although maybe not as aggressive as others would like to see. I think you also commented on the importance of having intermediate goals as well as long-term goals.

[Translation]

The Chair: Thank you.

We have arrived at the end of our session today.

I would like to thank the witnesses for their insights and expertise on an issue that we all know is critical to the planet and to our country. It made for a very interesting discussion.

Committee members, the testimony phase of our work on Bill C-12 is now complete.

We were planning to have two two-hour meetings next week, but due to all sorts of constraints and unforeseen circumstances, we're going to have one four-hour meeting on Wednesday of next week. There will be breaks, obviously, and the meeting will be at 3:30 p.m. on Wednesday. We will be doing clause-by-clause consideration of the bill.

With that, I am ready for a motion to adjourn.

(1730)

[English]

Mr. Dan Albas: I so move.

[Translation]

The Chair: There seems to be a consensus.

I wish the witnesses, committee members, clerk, analysts, and technicians a good evening. Until next time.

The meeting is adjourned.

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