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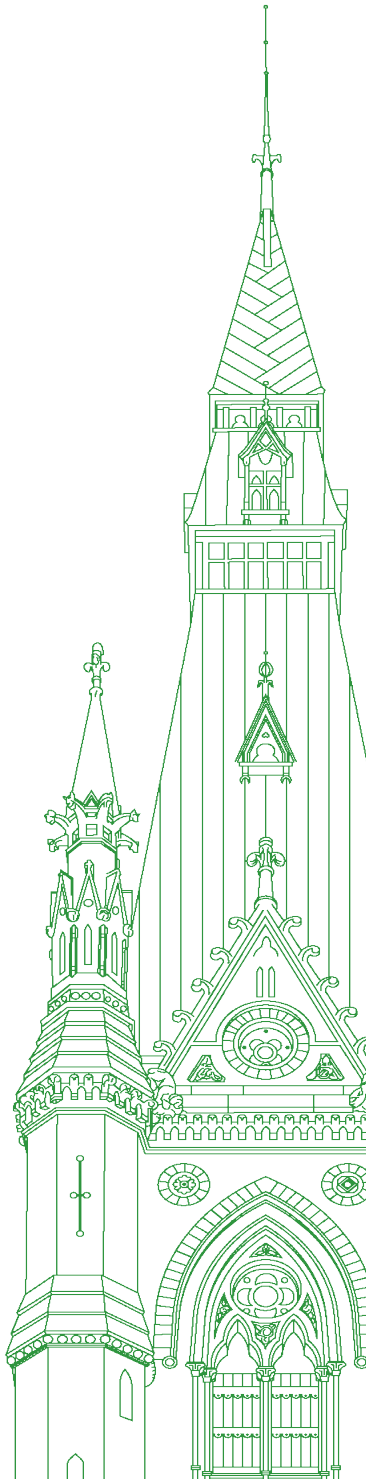

Chair: Mr. John Williamson

Standing Committee on Public Accounts

Friday, October 28, 2022

● (1305)

[*English*]

The Chair (Mr. John Williamson (New Brunswick Southwest, CPC)): We are ready to begin. Thank you for your patience.

I can see from the video camera that we have a full room. I apologize for not being there in person. This is a function of our lives outside of Parliament. We need to get home occasionally, or as frequently as possible.

[*Translation*]

Welcome to meeting number 35 of the House of Commons Standing Committee on Public Accounts.

Pursuant to Standing Order 108(3)(g) and the motion adopted by the committee on October 4, 2022, the committee is meeting today to study “Report 2, Greening Government Strategy”, of the 2022 reports 1 to 5 of the commissioner of the environment and sustainable development.

[*English*]

I'm going to welcome back our witnesses, who have all had a chance to make opening remarks.

I will be relying today particularly heavily on the clerk to help navigate questions, because I'm not able to see the floor as well as I would like. This is certainly a downside of having committees on Fridays. However, that is the Parliament we have been given, so we're going to try to make it work to the best of our abilities.

From the Office of the Auditor General, we have, returning again, Mr. Jerry DeMarco, commissioner of the environment and sustainable development, and Mr. Milan Duvnjak.

From the Department of National Defence, we have Mr. Bill Matthews, deputy minister; Nancy Tremblay, associate assistant deputy minister, materiel; and Saleem Sattar, director general, environment and sustainable management.

From the Department of Transport, we have Michael Keenan, deputy minister; and Ross Ezzeddin, director general, air, marine and environmental programs.

Finally, from the Treasury Board, we have Graham Flack, secretary of the Treasury Board of Canada; Jane Keenan, acting executive director, centre for greening government; and Malcolm Edwards, senior engineer, centre for greening government.

As I mentioned, they've all given their opening remarks.

I appreciate your coming back on relatively short notice to continue and then to conclude our examination into this Auditor General report from the commissioner of the environment and sustainable development.

We're going to start right away with questions. For the first round, we'll give each member six minutes.

I'm going to start with Mr. McCauley from the official opposition.

The floor is yours for six minutes.

Mr. Kelly McCauley (Edmonton West, CPC): Thanks, Mr. Chair.

I'm looking at Mr. Matthews and Mr. Matthews is looking at me.

We've had enough time to discuss things at OGGO, so I'm not going to go to you at all, Mr. Matthews. That's a shock, but it's all good.

I will start with Mr. DeMarco and Mr. Duvnjak.

As I asked the AG, how confident are you in the responses from the departments to your reports that we will actually see action and achieve our goals? Give me a zero to 10, zero being the usual and 10 being, good heavens, they're doing something.

Mr. Jerry V. DeMarco (Commissioner of the Environment and Sustainable Development, Office of the Auditor General): With the exception of the response to recommendation 63, we are satisfied with the full agreement from the Treasury Board and the two departments to all of the recommendations. We've also had a chance to look at their subsequent action plans that have been filed as well. Those responses, if acted upon, should go a long way toward getting them to the high number of eight or nine.

Mr. Kelly McCauley: What is your confidence level that they'll be acted upon?

Mr. Jerry V. DeMarco: Well, that's difficult to say. It depends on the will and the resources that are brought to bear on the implementation.

I think that question is best directed to the departments, in terms of their intentions and whether they have the resources to implement the action plans.

Mr. Kelly McCauley: Thanks.

I'm going to switch to Treasury Board.

Mr. Flack, I want to get on the record who is ultimately responsible for this program. It is Treasury Board, but we have heard constantly through the years that Treasury Board sets rules and then steps away and says that's where their responsibility ends.

In my understanding, Treasury Board is responsible, and is responsible for following up with the departments to ensure that these goals are being met. Am I correct?

Mr. Graham Flack (Secretary of the Treasury Board of Canada, Treasury Board Secretariat): Departments are individually accountable for each of their actions. The Treasury Board sets guidance around those actions but, for example—

Mr. Kelly McCauley: Do you have a role besides guidance? Does it end at setting the rules?

Mr. Graham Flack: It's more than that.

As indicated in the auditor's report, the department has provided tools that departments use to allow them to develop their plans. To analyze those plans, we developed the Open Government portal data reporting, which allows us to pull together all the data around those plans.

Mr. Kelly McCauley: What I'm trying to get at is we're several years into this process, so why does it take an Auditor General report to get us to this table to say that this is not being done? How do we prevent this from happening again?

Again, I understand Treasury Board is responsible, but where does your responsibility end? Do you make the rules, set the goals and then walk away?

● (1310)

Mr. Graham Flack: No, I think in this case we can see there has been tremendous progress, including on the actual emissions themselves, where we are several years ahead of schedule—

Mr. Kelly McCauley: I'm sorry. Are you ahead of schedule?

Mr. Graham Flack: In terms of the reported emissions on the 1 and 2, for the area where we had a 40% target for 2025, those are reporting ahead. I don't think this is a case of no action having been taken.

The first plan was 2017. The subsequent plan was 2020. With each subsequent plan, we increased the level of reporting. We've been following that plan. For example, the reason we had not planned to do—

Mr. Kelly McCauley: Okay. I'm just going to say Treasury Board "is responsible for leading and reporting on the Government of Canada's efforts toward low-carbon, green, and climate-resilient government operations. It is mandated to lead and coordinate, integrate knowledge, and track and disclose performance information."

Do you believe Treasury Board has been successful?

Mr. Graham Flack: I believe we're on a trajectory to get where we had planned to get, and each subsequent plan is getting us closer.

If I look at the first and second levels of emissions, on those we have good reporting. As planned, we will move to complete that in the third report. Yes, this is a journey. It was always designed to be a journey, as laid out in the original plans in terms of what we're doing. I don't want you to leave with the impression that had there not been an Auditor General's report, many of the things that were in here were already—

Mr. Kelly McCauley: I appreciate that. I appreciate what you're leaving us with. I just want to express concern that every single time we have departments in front of us in this meeting, goals are not achieved, but we're always told it's a journey. We heard horrific stories from Veterans Affairs with their failures seven years in, missing goals, but it's a journey. I want to ensure that this is not another example of saying, We're not going to achieve goals because it's a journey."

One of the comments from the AG was that they found the Treasury Board did not report some sources of federal greenhouse gas emissions. Why not?

Mr. Graham Flack: Because of the complexity in reporting.

In the original plans, the first and second plans, the aim was to capture the scope 1 and scope 2 emissions, which are relatively direct and easier to report. Scope 3 emissions are much more complicated to develop. They need methodologies around them. For example—

Mr. Kelly McCauley: Let me interrupt as I understand that. Do we have the mechanisms set up, then, or is this an impossible goal to achieve, and we need to reset and publicize that this is not going to happen?

Mr. Graham Flack: No, we are on track. Indeed, some of the levels of the scope 3 emissions, the travel emissions, have been reported for several years. We completed international work with some international partners. Since February, another huge piece of that, the procurement piece, has now been reported. We're working now on a third piece to that, which is commuting emissions. In a very methodical way, we've been building on those. We think it is achievable.

As committee members would know, on scope 3 emissions, where one draws the line at how far one goes is quite far, but if I contrast to the private sector, Bloomberg did a survey of 13,000 companies, and only 20% have—

Mr. Kelly McCauley: I'm short of time. I'm going to go to the last couple of questions.

There is the issue about Crown corporations—

The Chair: Mr. McCauley, you only have time for a quick statement. You're really out of time, so I'm going to cut you off there.

We'll turn now to Ms. Yip.

You have the floor for six minutes, please.

Ms. Jean Yip (Scarborough—Agincourt, Lib.): Thank you to so many witnesses for coming today on this important report. I think that climate change does not wait for anyone, so it's great to see all of you here today.

Mr. Flack, it's been indicated that the government is ahead of its targets in its greening efforts, which is always wonderful. What did the government do to exceed its previous targets on emission reductions?

Mr. Graham Flack: I'll turn to Malcolm, who's really the expert around this.

I think there's been good progress across departments in how we proceed, but I should highlight that the COVID context has, for many companies and governments as well, reduced emissions as a result of reduced activity. This is part of the improvement in the last two years, but there was steady improvement before.

Malcolm, as you're the expert in the area, maybe you want to comment on the progress that's been made and your confidence that we're tracking to stay above the 40% target by 2025.

Mr. Malcolm Edwards (Senior Engineer, Centre for Greening Government, Treasury Board Secretariat): Pre-COVID emissions from real property and conventional fleets were reduced by 34.6%. After the first year of the pandemic, they were reduced by 40.6%, so we did see a significant reduction due to COVID. We expect this year's emissions to lie between those two numbers.

Those emissions savings were achieved by retrofitting real property, procuring clean electricity, building zero-carbon buildings, and procuring zero-emission vehicles. We also have a commitment in the strategy to procure 100% clean electricity by 2025, so we're close to the 40% reduction. With the procurement of clean electricity, we feel quite comfortable that we'll meet the 2025 target we've established.

● (1315)

Ms. Jean Yip: One other recommendation stated that Treasury Board should develop an approach to track costs and savings to provide decision-makers, parliamentarians, and Canadians with sufficient information about the estimated costs and savings to achieve the 2050 net-zero target. It appears that Treasury Board disagreed.

Can you elaborate on why Treasury Board disagreed?

Mr. Graham Flack: Sure. I'll start, and then Malcolm can complete.

We have an approach. It's an approach used by our colleagues, the General Services Administration in the U.S., NASA and Harvard. It's an approach that looks, for example, at the energy retrofit area where you take a building at the front end, you cost in a detailed way the upgrades, and the savings that are going to emerge from those upgrades through a life-cycle cost analysis. That gives you up front when you are taking those decisions the costing that you need to be able to do that and calculate the greenhouse gas emissions.

In addition, we track greenhouse gas emissions by individual buildings in government. We have a methodology that is used by other leading international organizations.

Malcolm has been instrumental in helping that development. Maybe he can elaborate on this.

Mr. Malcolm Edwards: As I said, we focus on the upfront cost to enable decision-makers at the beginning of the project to know essentially the value and amount of carbon savings they're getting out of that project. It's based on a life-cycle cost analysis and total cost of ownership.

We recently met with the Canadian Institute of Quantity Surveyors. These surveyors are the professionals who cost, for example, real property projects. They're developing an international coalition with the U.S., U.K., and many other countries right now to develop an international costing standard on real property, which includes emissions reduction, which is very similar to the approach we've had in place now for a couple of years.

I'll give you a very quick example of what we do on real property. We essentially ask for the life-cycle cost over 40 years, which is normally the lifespan of a building before it gets retrofitted. We ask for the cost of business as usual if you build it to code. We ask for the cost of taking it all the way to zero, and we ask for the cost of being cost neutral. Cost neutral would be essentially by the utility savings we'd have over that 40 year period of time, and the cost of carbon we would be saving in terms of lower carbon fuels.

Very quickly, for fleets, we've looked at total cost of ownership. For light-duty vehicles, it's now more cost-effective for the government to buy an electric vehicle than a classic combustion vehicle, because you save 80% on fuel costs, save half on maintenance costs, and you don't pay any carbon taxes on it. It's actually more cost-effective now for the government to directly buy a low-emissions vehicle.

Ms. Jean Yip: Thank you.

Commissioner DeMarco, what should we expect to see in the next revision of the greening government strategy? What do you think we should see next?

Mr. Jerry V. DeMarco: We're expecting another version. We've had the 2017 and 2020, and I believe the next version will be 2023.

We would like to see, first of all, all of our recommendations implemented in the strategy, those that are directed toward Treasury Board. We would like to see some of the things that were optional in the first strategy to become mandatory, for example, Crown corporations, as Mr. McCauley was just talking about.

We would like to see a better grasp of scope 3 emissions, and a more robust approach to cost savings than what was just described by Mr. Edwards. That would contain the items in paragraph 2.62 of our report. For expenditures as large as this, the upfront costing is great and the savings are great, but in terms of being able to course correct, we would like to see more ongoing monitoring of progress, regular reporting, and so on.

Those would be some of the elements that we would like to see in the new strategy.

● (1320)

[*Translation*]

The Chair: Thank you. Sorry, but Ms. Yip is out of time.

We now go to Ms. Sinclair-Desgagné for six minutes.

Ms. Nathalie Sinclair-Desgagné (Terrebonne, BQ): Thank you, Mr. Chair. I'm sorry to see you're not in your usual spot.

My sincerest thanks to the many witnesses who are with us today.

My thanks to the commissioner for releasing this report, which casts serious doubt on the government's desire to meet its targets and make sure it has the tools to do so. Is the government setting itself up for success when it comes to meeting its own targets for reducing its contribution to global climate change?

A number of sections in the report suggest that the drop in greenhouse gas emissions, or GHGs, reported was attributable to the pandemic, as you pointed out in your answer to the member's question. Two things are missing right now to show that the government has the tools and the ability to meet its targets: meaningful answers and equally meaningful actions.

I have a lot of questions for the commissioner about his report, but first, I'd like him to quickly go over the main challenges he identified in his report. Then, I'll ask my questions.

Mr. Jerry V. DeMarco: All right.

For the Department of National Defence, we did not have assurance that it would meet its targets. The department, itself, said it needed additional funding to meet the targets. That's a case where the goals and targets, as well as the plan to achieve them, fall short. In order for the Department of National Defence to meet its targets, more details and probably more funding are necessary. That's one of the shortcomings we identified in our report.

Ms. Nathalie Sinclair-Desgagné: Did the department ask for more funding? Did it figure out how much additional funding it needed and submit a request to the Treasury Board?

Mr. Bill Matthews (Deputy Minister, Department of National Defence): As we've already indicated, the Department of National Defence has some work to do before finalizing its plans to reach its emissions targets for 2050. We could speed up our progress with more funding, but we have work to do to identify new ways of meeting the 2050 targets. We still have work ahead of us.

Ms. Nathalie Sinclair-Desgagné: When do you plan on doing that work, Mr. Matthews?

Mr. Bill Matthews: We will be doing it in the next few years. We have 25 years to reach the 2050 targets, and we are currently on track.

[*English*]

In fact, we're actually ahead of schedule for the next five years, but we have work to do to identify additional initiatives to reduce emissions across all three areas—vehicles and building retrofits but also the emissions caused by our planes, ships and other vehicles like that.

There's work to do. We have some time, but I think the importance of this report is that it does indicate where we are on track in the short term and where there's work to do in the long term, and we'll keep going.

[*Translation*]

Ms. Nathalie Sinclair-Desgagné: You say you are on track in the short term, but I'm sure you would agree that the pandemic is the main reason. I hope you wouldn't deny that.

Mr. Bill Matthews: There's no doubt that our operational activity was reduced during the pandemic. Of course, that had an impact. We believe it led to a 7% reduction in emissions.

[*English*]

We have factored that into our calculations, and we know that our operational tempo will go back up, so we can't take too much credit for the 7% reduction, because of COVID activities. That's been factored in.

[*Translation*]

Ms. Nathalie Sinclair-Desgagné: If everyone had stayed healthy and no one had gotten COVID-19—so, in an ideal world—what percentage of emissions reductions would you have achieved, do you think?

[*English*]

Mr. Bill Matthews: Mr. Chair, I think that even without COVID, we were still on track to meet the 2025 target ahead of schedule. With the 2050 target I mentioned, that 7% is kind of our estimate of the impact of COVID.

I believe it was said in the report that we think we'll achieve a 63% reduction by 2050. With additional resources, we've identified up to 83%. That leaves a gap, so we still have some work to do.

● (1325)

[*Translation*]

Ms. Nathalie Sinclair-Desgagné: Very well. Thank you.

Commissioner, had there not been a pandemic, how many departments would be on track?

Mr. Jerry V. DeMarco: It depends on whether we're talking about scope 1, 2 or 3, so direct emissions, indirect emissions or all emissions, including those produced by Crown corporations. For that reason, I couldn't give you a specific number.

It's true that, for scope 1, departments are on track, as illustrated in exhibit 2.2 of the report. That's just one aspect of all the emissions, however. Scopes 1 and 2 represent roughly 2 megatonnes, while scope 3 represents about 5 or 6 megatonnes. As you can see, there's still a lot of work to do.

Something else I should mention is covered in paragraph 2.4 of the report. While it is true that there is still time before 2050, the more quickly the reductions in emissions occur, the greater the benefit to the environment will be given how long GHGs stay in the atmosphere.

Ms. Nathalie Sinclair-Desgagné: Yes, it's a cumulative effect.

Mr. Jerry V. DeMarco: That's why it's not acceptable to say that there's still a lot of time. This is a climate crisis.

Ms. Nathalie Sinclair-Desgagné: Yes.

The Chair: Your six minutes are already up, Ms. Sinclair-Desgagné. Time is flying today.

[*English*]

Mr. Desjarlais, you have the floor now for six minutes, please.

Mr. Blake Desjarlais (Edmonton Griesbach, NDP): Thank you very much, Mr. Chair, and, of course, all of us miss that you're not here with us today.

I want to thank all the witnesses for being present with us again. I know the last meeting.... It's tough when we have the testimony and then have a bit of a break, but we've now returned to this. I want to thank everyone here for their time.

I want to thank the commissioner for his report.

This is a pretty large issue for Canadians, particularly in relation to the pandemic. The pandemic has certainly changed how the government and regular Canadians look at their own emissions. We've seen across the country and the world a global reduction in greenhouse gases because of the pandemic and reduced activities.

I think it was Mr. Matthews who mentioned that the percentage was calculated into the 40.6% reduction.

Can you explain the methodology and how you calculated that 7% of emissions, beyond the pandemic reductions?

Mr. Bill Matthews: Certainly. I can start and other colleagues may wish to weigh in.

Essentially, we know our operational tempo was down—workers in buildings, actual activity with our vehicles, and things like that. Travel was way down. It's back up this year to about 80% of prepandemic. That was the data that went into it. TBS, as was already mentioned, provided departments with some models and tools, but I'm not sure.

Saleem, do you want to add details about the methodology itself?

Mr. Saleem Sattar (Director General, Environment and Sustainable Management, Department of National Defence): Prior to the pandemic, our emissions at National Defence were at 31%, and then we saw them go up to 38%. That's where the 7% gap is.

The COVID impact versus the impact from emissions reduction initiatives is hard to attribute or allocate. There's no question. The reduction in operational activity tempo contributed to that 7%, but we're also confident that the measures we've taken to reduce emissions are also contributing to that reduction.

Mr. Blake Desjarlais: This is the hard part for me to grasp, and if it's hard for me, I think it's going to be difficult for Canadians to understand.

I heard Mr. Flack talk about your being on track. A member from the Liberal bench did as well. That sounds great and all, and it should be a good lesson for Canadians. However, my fear is that it's because of the pandemic. Without a strong rubric to calculate that.... I don't think Canadians can trust that these reports are, in fact, accurate if we don't understand the methodology. How you're actually measuring the reduction due to COVID versus your actions is a difficult question, I understand, considering this is a very rare moment.

Commissioner, in your perspective, and in your review of this—beyond COVID's reduction in activities across the government—is the departmental plan for Defence, which you reviewed, sufficient for hitting their 2025 targets?

Mr. Jerry V. DeMarco: Is that for Defence?

Mr. Blake Desjarlais: Yes.

Mr. Jerry V. DeMarco: I think they themselves have indicated that, with current resources, they are only in the 60% range, and with—

Mr. Bill Matthews: His question was about 2025.

● (1330)

Mr. Jerry V. DeMarco: It was about 2025. I'm sorry. Thank you for that clarification.

That is best directed at the department.

The trend line is going the right way. We have the paragraph in the report indicating the progress being made. We're even able to attribute it to certain particular initiatives, including energy costs in Alberta, for example. I think the trend is going the right way on the scope on emissions. If they implement and have the resources they need to implement, they should be on track.

Mr. Blake Desjarlais: When I'm thinking about on track and I'm thinking about how Defence.... Defence is an incredibly important ministry in Canada. Particularly and unfortunately because of climate change, we're actually asking the Department of National Defence to do more. I can anticipate that your activities within the Department of National Defence will increase.

My colleagues and I have seen that just recently, of course, in the emergency debate on the issues in Nova Scotia and the Maritimes. We've seen huge climate disasters there. We've seen massive climate disasters in British Columbia. We've seen massive climate disasters across the Prairies with drought and wildfires.

I imagine that your activities and your asks to be deployed are going to increase. Without a credible or better form of response to these natural disasters, it's going to be the Department of National Defence. It's going to be your planes and your equipment that's deployed more frequently.

I'm not exactly confident that you're going to hit those targets based on the fact that climate change.... We're already in a climate battle. How do you imagine your increased activities as climate change continues to ravage our country? How are you going to imagine it and build that into your prediction to be able to hit that target?

Mr. Bill Matthews: Mr. Chair, there are a couple of points.

One, we're very confident about 2025. With COVID or without COVID, we were on track, and in fact ahead of schedule.

Mr. Blake Desjarlais: What about climate change?

Mr. Bill Matthews: I'll come back...yes.

In terms of the activity and the draw on the Department of National Defence in terms of responding to domestic climate change-related events, we have seen the trend go up, up, up. When we do look at our climate change plans.... Our plan is more comprehensive than that. It's our buildings, the retrofitting of them. We are the biggest landlord in Canada. The vehicles we're procuring are now largely electric or hybrid.

Mr. Blake Desjarlais: But 2050?

Mr. Bill Matthews: By 2050.... We still have some work to do, as I indicated. We have plans in place that we're confident will get us part way there. To get us all the way there, we still have some additional work to do.

I think one of the things that will be interesting to track as time goes on, when you look at the fuel consumed by ships and planes, and those things, is how much greener it will get. That will certainly have an impact in terms of the footprint from our operations.

Mr. Blake Desjarlais: Thank you very much, Mr. Matthews.

That's my time.

The Chair: Thank you very much.

That is spot-on.

Turning to our second round now, MP Kram, you have the floor for five minutes, please.

Mr. Michael Kram (Regina—Wascana, CPC): Thank you very much, Mr. Chair.

My questions will be mostly for the representatives from the Department of National Defence.

Is it fair to say that it is not realistic for National Defence to reach its 2050 net-zero reduction targets and that we should start talking, acting and planning accordingly?

Mr. Bill Matthews: No, I don't think that's fair at all, Mr. Chair. I think the fact that we're ahead of schedule for the 2025 target of 40% is a good indication.

As we have indicated, we have plans that we are confident will get us to 63% by 2050, and with some additional money to 83%. But then that leaves a gap. The question is, what are you doing about that gap?

As I had mentioned, we have a bit of time, but as was mentioned by the Auditor General's office, time is important on this file.

I think one of the questions we should come back to at this table in years to come is, what are your plans to get there by 2050 and have they developed? That's a fair question.

Mr. Michael Kram: On page 8 of the report is chart 2.2. It says that for National Defence, the RCMP and the Coast Guard, there's been only a 0.6% reduction from the 2005-06 baseline year. I don't understand how it can be realistic when we're down by only 0.6%.

Mr. Bill Matthews: You may have to ask the commissioner to speak to the report first, and then I can chime in.

Have you found it?

Mr. Jerry V. DeMarco: Are you looking at the first two cells in exhibit 2.2?

Mr. Michael Kram: That's right.

Mr. Jerry V. DeMarco: If you go back to paragraph 2.7, it's the difference between departmental emissions and national safety and security fleet emissions. They're definitely on track with the departmental emissions. As Deputy Matthews just indicated, it is a challenge with respect to national safety and security fleet emissions in terms of ships, planes and so on. That's something they can speak to as to their plans for that.

Cell one is just about the departmental emissions outside of national safety and security fleet emissions.

● (1335)

Mr. Michael Kram: Let's expand on that a little bit. According to the Pentagon, the F-35 fighter jets are expected to be in use until the year 2070. What's going to happen in the year 2050? Are we going to ground the F-35 fighter jets? How would that possibly work?

Mr. Bill Matthews: No. I think the question is that when you look at the assets employed for national security purposes, they are outside of what I'll call the core departmental emissions. As I've indicated, there's lots of discussion with industry about what you do to make those types of fuels more efficient, more green, but that's work still to come.

One of the key things you look at from a defence perspective is operational requirements. The military and the air force would obviously need planes to fly, and so I don't view grounding fleets as an option on that front. It's more a question back to industry; that is, what can you do to make your products greener as time goes on?

Mr. Michael Kram: Okay, but if the F-35 fighter jets can't get to net zero by 2050, then we don't achieve our goal.

Is that accurate?

Mr. Bill Matthews: Do you want to....?

Mr. Saleem Sattar: When we established that target with Treasury Board on national safety and security emissions, we realized that it would be harder to get to net zero by 2050 on the military side. They gave us some flexibility by allowing us to use carbon credits, carbon removal and carbon capture technology. In 2050, if we're still flying with fossil fuels, we're going to need to find a way to offset or capture those emissions.

Let's be clear. That doesn't mean we don't do anything. We're going to look at cleaner fuels, cleaner platforms and cleaner operations, but if we're still burning fuel, we want to be able to offset that gap to net zero.

Mr. Michael Kram: Okay.

Similarly, the navy is in the process of procuring 15 new frigates. Those frigates are supposed to last until the 2080s. Again, are we accepting that it is not realistic for the frigates to get to zero emissions and are we looking at purchasing carbon offsets in the open markets for those as well?

Mr. Bill Matthews: I think it's a bit of a repeat, Mr. Chair, of the same answer, which is that we hope and encourage industry to do better to make fuel consumption more green. That being said, if we are still burning those fossils fuels, then it's the same answer: we have the credits option.

Mr. Michael Kram: Okay.

It's looking as though in 2050 we're going to be buying a significant amount of carbon offsets then. Can you explain to the committee how that will work? Do we have the market in place already that DND is planning on writing the cheque to? How will that work?

Mr. Saleem Sattar: The market is—

The Chair: I'm afraid that is the time. I hope we can come back to that question. That is the time for now.

We turn now to Mr. Fragiskatos.

You have the floor for five minutes.

Mr. Peter Fragiskatos (London North Centre, Lib.): Thank you, Chair.

Thank you to the officials for being here.

The question I have will go to National Defence and to Transport.

Recommendation 2.88 states that both of these are advised to develop “a risk management approach that defines significant risks and corresponding mitigation measures”. I see that the recommendation has been agreed to.

I'd like to hear from both National Defence and Transport on where progress is on that. Perhaps we can begin with Mr. Matthews.

Mr. Bill Matthews: Certainly. Mr. Chair, work is under way. Obviously, if you're dealing with anything relating to targets in the future, you want to have a sense of how realistic your plans are and what your risk mitigation measures are in case they aren't working out as anticipated. We have a road map coming up that includes a risk assessment. December 2023 is kind of a target we have in mind to finalize that risk assessment.

Saleem could probably add more details.

Mr. Saleem Sattar: That's correct. We're looking at risks and opportunities and costs to get to 2050. In the next year or so we'll have decarbonization plans for both the real property portfolio and the national safety security fleet. That will give us what we call a road map to 2050.

Mr. Michael Keenan (Deputy Minister, Department of Transport): Mr. Chair, at Transport Canada, like our colleagues at DND, we are working on drafting both our carbon neutral road map, which lays out our plans to 2050, and the risk management strategy.

While the carbon footprint is much smaller, Transport is a bit like DND. We're unique in government in the sense that for most departments, the carbon footprint comes from buildings. In Transport the vast majority actually comes from the transportation fleet. In fact, the majority is from ferries.

One of the key strategies to achieve the targets is actually switching to lower-carbon fuels. There are some very promising developments in broader industry with respect to the development of low-carbon fuels but that also represents a risk. That would be one of the key risks.

A second issue in terms of dealing with our largest source of emissions is that the current procurement of new ferries through Davie shipyard is going to create a step-wise improvement in fuel efficiency and create opportunities. They are designing diesel hybrids, so there will be some electric propulsion involved. The inevitable construction issues and ensuring that the construction of the new ferries stays on schedule will be key issues and key risks that we're managing in terms of improving how we stay on the carbon road map.

● (1340)

Mr. Peter Fragiskatos: Thank you very much.

Still on recommendation 2.88, it says there ought to be an effort made to “continually identify new activities that will contribute significantly to emission reductions and prioritize them based on risk”. I want to go to the second part of that: prioritizing based on risk.

What methodology do you use to carry out that prioritization?

I'll go first to Defence and then I'll go to Transport again.

Mr. Bill Matthews: Mr. Chair, the basic concept on this would be to look at the likelihood of success around an initiative and also the payback you would get if it is realized. You can basically plot out a chart that says if it succeeds, here's the bang you get for your buck and how risky it is. When you develop your plans and the road map, they include the risk assessment that would indicate which of the initiatives are more likely to succeed or also are more likely to be on schedule. You then prioritize your investments because there will only be investments here.

Saleem, do you have anything to add?

Mr. Peter Fragiskatos: We have about 50 seconds.

Mr. Saleem Sattar: No, I won't add anything.

Mr. Peter Fragiskatos: We'll go to Transport then.

Mr. Michael Keenan: Very similarly, Mr. Chair, the strategy is calibrated on risk. Risk is a key determinant, but it's not the only one.

For example, if we have a choice of two things to invest in and they're going to have about the same scale of emission reductions or moving us towards carbon neutrality, but one is riskier than the other, that would give us the methodology to take the less risky one.

However, there will be times when the risk measure framework will allow us to take on more risk to try out new technologies and new procedures because the prospect of emission reductions is worth the risk. It allows us to better calibrate the risk reward in this transition. We do have to take some risks and we do have to try some new technologies in order to hit that carbon neutral target we're striving for.

Mr. Peter Fragiskatos: Thank you, Mr. Keenan.

The Chair: Thank you very much.

[*Translation*]

Go ahead, Ms. Sinclair-Desgagné. You have two and a half minutes.

Ms. Nathalie Sinclair-Desgagné: Thank you, Mr. Chair.

My questions are for the Treasury Board Secretariat officials. I'd like to know why the majority of scope 3 emissions weren't reported. I also have some general questions about the strategy.

It's clear from the commissioner's report that rather important sources of GHG emissions were omitted, and that independent reviews were completely lacking. A number of departments didn't even publish results, and even when results were published, the underlying data were questionable. Frankly, I find the strategy, itself, questionable.

I have a number of questions I'd like to ask, but I'm going to zero in on the fact that Crown corporation emissions weren't included in the analysis. They are major GHG emitters and, obviously, a huge arm of the federal apparatus.

Everyone knows that Crown corporations are independent and all that. I don't want to hear that. I want to know why the data for Crown corporation emissions weren't included in the strategy.

Mr. Graham Flack: As you mentioned, Parliament created Crown corporations, which are unlike other federal institutions and sometimes have boards of directors that are different. Treasury Board rules usually don't apply to Crown corporations.

Ms. Nathalie Sinclair-Desgagné: Isn't that in itself a problem, Mr. Flack?

Mr. Graham Flack: That's the model used most of the time. It stems from Parliament's decision to create Crown corporations that are independent and, as such, are closer to an organization you would find in the private sector.

In budget 2020-21, the Minister of Finance indicated that Crown corporations should follow the model recommended by the Financial Stability Board's Task Force on Climate-related Financial Disclosures. That's the model Mr. Carney recommends for all private corporations when taking into account, and reporting on, their environmental impact. Those rules will apply to Canada's Crown corporations.

That said, Mr. Edwards created a community of interest with Crown corporations to help them take advantage of our tools. As we indicated to the commissioner, we will be consulting Crown corporations. Given their independence, we have to go about it the right way. As you know, some—

● (1345)

Ms. Nathalie Sinclair-Desgagné: That's fine.

The Chair: Thank you, Ms. Sinclair-Desgagné. You're out of time.

[*English*]

Mr. Desjarlais, you have the floor for two and a half minutes.

Mr. Blake Desjarlais: Thank you very much, Mr. Chair.

I want to turn to the Treasury Board as well in relation to the scope 3 emissions.

I think it's important for me and for Canadians to know, in your words, what the scope 3 emissions are. How are they being monitored to date? What are the plans to continue to monitor them?

Mr. Graham Flack: I'm going to turn to Malcolm in a minute because he's the expert, as the engineer.

Scope 3 is more challenging than the other emissions because you often need to develop methodologies to be able to assess them. The easiest one for us to do is travel and we've been reporting that since 2018, I think.

The next one was trickier. Malcolm can describe the international group of experts we put together to help, but it was procurement. That one we have now been publishing since February.

The third one that we're tackling is commuting costs. That's a study with U of O and some others. It's an area where the methodologies have to be sound.

Malcolm, maybe you can describe where we are on this and what's next.

Mr. Malcolm Edwards: Sure.

To answer what scope 3 emissions are, it's probably easier to say what scope 3 emissions are not. Scope 1 emissions are fuel reburn, so gasoline, natural gas, etc. Scope 2 emissions are from energy we use indirectly: electricity. We have scope and control over that because we can decide how much gasoline and how much electricity we use. Scope 3 emissions are from all those indirect things: if we fly somewhere, if we use a service. Other companies are creating those emissions. Because those emissions are indirect and are created by somebody else, it makes measurement of them more difficult.

We have been tracking those emissions, and we have basically worked with an association out of the Université de Montréal called Polytechnique and two Swiss universities. They have looked at our procurement over three years, and they have basically helped us develop those procurement-related emissions. It's true that we had not published it, but we have now taken the information and put it on the web.

As the secretary mentioned, too, we're looking at commuting because in the hybrid environment, people are working from home and they're working from the office, so it's more sophisticated. We need to understand the global emissions, how much you emit working from home compared to the office.

Mr. Blake Desjarlais: Thank you very much for that.

Quickly, Commissioner DeMarco, in your review of these scope 3 emissions, do you feel there's a need to actually have a standardized framework to measure these, or are you satisfied with the work that is being done with the partner in Montreal?

The Chair: Give a very brief answer, please.

Mr. Jerry V. DeMarco: Following international standards is something we would support as well.

Scope 3 emissions of the government are often the scope 1 emissions of the airline industry or the building manufacturing and so on, so they are traceable. It's just a matter of having a consistent framework.

The Chair: Thank you very much.

We will turn now to Mr. Genuis.

You have the floor for five minutes.

Mr. Garnett Genuis (Sherwood Park—Fort Saskatchewan, CPC): Thank you, Mr. Chair.

The Prime Minister talks a lot about encouraging others to reduce emissions. I was looking for information about his own personal emissions, including, for instance, through travel.

My understanding is that, despite the fact that he travels often with DND, which would suggest that it should be categorized as scope 1 emissions, based on my understanding of it, at least, this information is not available. Is there concrete information available about the use of emissions associated with the Prime Minister's work and how much that is increasing or decreasing?

Mr. Graham Flack: I'll turn to Malcolm. I think we report emissions, the total emissions, from flights. I don't think we break it down to an individual flight by an individual person.

Malcolm, maybe you could help.

Mr. Malcolm Edwards: Sure.

We track it on a departmental basis, so we don't itemize. We basically get aggregated data from each department on its travel on an annual basis.

Mr. Garnett Genuis: Okay, so, with regard to the Prime Minister's Office, do we have that data, or is it broader than that even?

● (1350)

Mr. Malcolm Edwards: We basically only track the public service, so we don't track ministers' travel or MPs' travel. We just track on a departmental and agency basis.

Mr. Garnett Genuis: Okay. I guess I'm asking this: Under which department are you tracking the Prime Minister's or individual ministers' travel? Would it be under their departments or, in the case of the Prime Minister, the PCO?

Mr. Malcolm Edwards: If he flew on a Defence plane, that would be part of, as you said, the scope 1 emissions of that plane. The national safety and security emissions that National Defence reports to us wouldn't be itemized out.

Mr. Garnett Genuis: Okay, so, there currently is no way of pulling out the data on the level of emissions being produced by particular public figures or whether those are going up or down. That data is not available.

Mr. Malcolm Edwards: No, and we are also careful about the information we report and how we disaggregate it for safety and security reasons, too. We have to be aggregated to a certain level just to protect—

Mr. Garnett Genuis: Right. I mean, the Prime Minister's itinerary is extremely public, though. There might be rare exceptions, but surely privacy or security wouldn't be the barrier in terms of knowing the level of emissions produced by his travel, given the publication of the itinerary, right?

Mr. Malcolm Edwards: Yes, at [*Inaudible—Editor*], we don't itemize travel to that extent.

Mr. Garnett Genuis: Okay. I guess it's a worthwhile point to maybe consider because I think the public wants to see politicians who talk about these issues also reveal whether or not they are leading by example. There certainly has been a lot of discussion around this.

I want to also ask about, in terms of the Defence department's current projections to 2050, the discussions around the fact that your current projections suggest a gap and that, on the current track, you will not achieve net zero by 2050. Therefore, the proposal is to offset that through the purchase of carbon offsets in 2050.

Do you have a projection of how much money the government would spend as part of our defence budget in 2050 to purchase offsets if we were to stay on the current trajectory?

Mr. Bill Matthews: It's a bit of a complicated answer, Mr. Chair.

I think when I was referring earlier to the targets where we need additional measures to meet those targets, that was for departmental operations. Let's put aside for a moment the ships and planes, the national security types of assets. On the 63% that we're currently on track for with existing measures, that's for operations. That's buildings, vehicles...not the national security types of assets.

I think there's still some work to be done by industry to see what kind of fossil fuel improvements they can make in terms of what you fly an F-35 with and what you fuel a ship with. As was mentioned, to the extent that those do not get reduced—and it's hard for me to speculate that far ahead—there is the option to purchase carbon credits. I have no sense at this stage of what the cost might be around that market.

Mr. Garnett Genuis: Okay, but just to put a finer point on this, the plan of the government seems to be—other than speculative technologies that haven't been developed yet—to purchase carbon offsets.

I would like to know—and if you don't have this answer, I'd appreciate it if you could report back to the committee—how much money the Government of Canada is planning to spend on carbon offsets in 2050, because that money comes out of our defence budget. It comes out of money that could otherwise be spent on keeping Canadians safe. I don't anticipate that Russia, China or Iran will be spending their defence budgets on carbon offsets, and it would be worth knowing where those carbon offsets would go. I'd appreciate a follow-up in writing with some of that information.

Thank you.

The Chair: Okay. That's noted. Thank you.

Ms. Atwin, it's nice to have you here today. The floor is yours for five minutes.

Mrs. Jenica Atwin (Fredericton, Lib.): Thank you very much, Mr. Chair. It's nice to see a fellow New Brunswicker leading committee today.

I'm joining you from unceded unsurrendered Wolastoqey territory here in Fredericton, New Brunswick.

It's certainly an honour to be part of this conversation today, and I thank all the witnesses for their important testimony.

I believe my initial question would be best suited for Commissioner DeMarco.

Several other countries—France, the United Kingdom and the United States—have implemented their own plans to reduce greenhouse gas emissions generated by their national governments. Is there any collaborative work or are there any best practices being shared to work on emissions reductions?

Mr. Jerry V. DeMarco: Colleagues from Treasury Board will be able to elaborate on this, but Canada is part of a group of countries that is seeking to lead by example in greening government. We've listed some in paragraph 2.5 of our report, but there are several dozen.

Perhaps Treasury Board could elaborate on that.

● (1355)

Mr. Malcolm Edwards: Yes. We basically have partnered with our colleagues in the U.S. Our equivalent in the U.S. is called the Council on Environmental Quality. It's based out of the White House.

In the spring of this year, we announced something called a greening government initiative. That's a collaboration of, I think, up to 50 countries right now, where we're sharing best practices, guidance and so on. At the last meeting we had in September, the President of the Treasury Board opened the meeting. It focused on fleet activities. Canada, Norway and I believe Israel presented on how they're doing it to decarbonize their conventional fleets.

Mrs. Jenica Atwin: That's excellent. Thank you very much.

It's going to take all of us, I think, for this grand project that we're undertaking.

I'd like to direct my next question to Mr. Flack.

Would you happen to have any recommendations, advice or insights into what the House of Commons may do to green its operations in taking our own responsibility in this piece?

Mr. Graham Flack: I hesitate to give advice to the House of Commons.

I can say that there's one project in which you may be interested in terms of how the Commons is actually heated and cooled: an upgrade to the heating facility that's near the Supreme Court of Canada. That is being converted to a facility that will be just about exclusively powered through hydroelectric power from Quebec. There's also a major upgrade of the pipes to increase their energy efficiency. That will be a major step forward in greening the heating and cooling of the House. That's an example of something where the rest of the government's facilities are able to help.

I think what I've learned from folks like Malcolm is just taking a systemic approach at the structural level when you have the opportunities to make the change, as you did in developing this building at the West Block. It's very difficult to get significant efficiencies when you're retrofitting. It's when you're doing a major structural change to the building that you want to really go to the max so that you can get the 40-year benefit out of those savings.

That's why I think very core to the Government of Canada meeting its emissions—and buildings are obviously a huge part of that—is that as each building comes up for its life-cycle renewal, just taking the maximum opportunity to invest in that zero capability is really critical, because that opportunity doesn't come along very often.

Mrs. Jenica Atwin: Excellent. Thank you very much.

Finally, Commissioner DeMarco, what challenges have you found in implementing the greening government strategy that may be resolved through Parliament, such as regulations that may need to be amended?

Mr. Jerry V. DeMarco: Those are decisions for Parliament to make, but one example, arising from a question a few minutes ago, is Crown corporations. Obviously, Canada is a shareholder of Crown corporations. It chose that vehicle for those lines of business. As a shareholder and the lawmaker, obviously, Canadians and Parliament can require Crown corporations to be subject to the greening government strategy. TBS itself could only encourage Parliament, or executive action could be used as an example of requiring something to be done instead of just encouraging it.

That would be one example.

The Chair: That is the time. Thank you very much.

We go now to our last round. It will probably be our last round before the time is eclipsed.

Mr. McCauley, you have the floor for five minutes, please.

Mr. Kelly McCauley: Great.

Mr. Flack, I want to follow up on comments about Crown corporations. CPPIB's massive investments in developing countries are not especially known for having any care for the environment. Are we tracking those at all? Should they be part of this?

Mr. Graham Flack: One of the reasons we need to do consultations on the Crown corporations is that, as you indicated, with the investment vehicles the government has, including CPPIB, there are questions on how they should be measuring emissions, or the emissions of the corporations—

● (1400)

Mr. Kelly McCauley: But we're not tracking them at all.

Mr. Graham Flack: Right now, that is not being tracked. That's one of the things, based on the commissioner's recommendation, that we've committed to go back and consult on. I would say that for all of those investment vehicles, that's part of what the international task force is working on—

Mr. Kelly McCauley: I'm going to interrupt, because I have a couple of quick questions for you.

I know that the public accounts just came out. I looked and I wasn't able to find it, but then I didn't look that carefully. Do we break out how much we're paying per year for carbon offsets? Have we projected what it's going to be in carbon offsets to reach our goals?

Mr. Graham Flack: The projection point, as Bill indicated, will depend on how the technologies develop. For example, on the building front—

Mr. Kelly McCauley: Is it separated in the public accounts, or would you provide to this committee what we paid last year for those?

Mr. Malcolm Edwards: Thank you for the question—

Mr. Kelly McCauley: It's a simple yes or no. Do we have them?

Mr. Malcolm Edwards: We currently do not use carbon offsets, so they would not appear in the public accounts.

Mr. Kelly McCauley: Okay. So we're not buying anything right now. This is a future plan.

Would you be able to provide to the committee, for squadrons 412 and 437 that do the VIP flights, the last 10 years, say, of the emissions from those flights?

Mr. Malcolm Edwards: That would be a question for National Defence and whether they could break that out from individual flights.

Mr. Kelly McCauley: Mr. Matthews...?

Mr. Bill Matthews: We'll have to take that one back, Mr. Chair, to see if we can get the data.

Mr. Kelly McCauley: Okay.

I have a quick question for you. Has DND done a study or looked at whether there's any degradation to our ability for our forces to run their operations as we look at carbon neutrality? Are we putting our men and women at risk by saying we'll use this fuel for the T26 or the F-35?

Mr. Bill Matthews: At this stage, Mr. Chair, operational capability is still paramount at Defence. There there have been no decisions or assessments of things that would put the force at risk. The investments to date have all been around things like building greening and buying electric vehicles—so no operational impacts.

Mr. Kelly McCauley: I know that DND is the largest building owner in terms of square footage. Can you ballpark me on this? How much is from our buildings' operations in Canada and how much is for national security operations abroad?

Mr. Bill Matthews: Saleem, are you able to take that? If not, we'll have to come back.

Mr. Saleem Sattar: We don't break it down by deployed operations versus domestic. We'll have to look at that.

Mr. Kelly McCauley: Should we not be doing that? Like, how are we going to get to net 50 if we can't...?

Mr. Saleem Sattar: The challenge is where you buy your fuel. If you're in deployed operations and you're buying the fuel as part of a joint mission, we wouldn't account for that consumption or those emissions.

Mr. Kelly McCauley: It sounds like you're saying that if the fuel to run a frigate is not bought here, there are no emissions.

Mr. Saleem Sattar: Yes, it's a scope 1 for the country that sold it to us, as opposed to who's burning it. We'll have to look at whether we can disaggregate it based on where we buy the fuel.

Mr. Kelly McCauley: Okay.

Transport, just very quickly, how much of your plan to get to net zero is going to, not be held hostage by, but rely on innovation? How much of your cars and trucks, etc.? How much is going to be relying on future innovation?

Mr. Michael Keenan: That's a great question, Mr. Chair.

Mr. Kelly McCauley: It's not a criticism. It's a reality for your department.

Mr. Michael Keenan: Some of it is coming from just changing management practices. Some of it is coming from adopting different kinds of equipment. It's a mix. I'll give you two examples quickly.

In our national aerial surveillance program, we have a series of Dash 7s and Dash 8s that fly to find and prosecute polluters at sea and also to protect whales. We're beginning to shift some of the missions from a Dash 8 to a drone. We can't switch all missions, but we're switching some. We get the same information for the same purpose and—

Mr. Kelly McCauley: Can I interrupt quickly? How much is going to rely on future innovation and how much is going to rely on updating, perhaps, fleets like you just mentioned?

Mr. Michael Keenan: That's a great—

The Chair: Mr. McCauley, I hate to do this, but your time is up again.

I'll turn now to Mrs. Valdez.

Welcome to the committee. You have the floor for five minutes.

Mrs. Rechie Valdez (Mississauga—Streetsville, Lib.): Thank you, Mr. Chair.

I'd like to thank all the departments and witnesses for joining us today for this study.

I'll begin by directing my questions to the Department of National Defence.

Deputy Minister Matthews, you mentioned in your opening the magnitude and scale of the infrastructure work involved to reduce emissions with the older buildings, bases and wings.

What risk factors do you need to take into consideration to reduce the greenhouse gas emissions?

● (1405)

Mr. Bill Matthews: When we're looking at bases and wings and the infrastructure there, it's largely a question of investing to do energy refits. In some cases, it's to actually tear down old buildings and replace them with new. To date, Mr. Chair, we've seen about $145 million invested in military housing for green upgrades and around $50 million in energy performance itself. We've demolished some old buildings, as I mentioned.

The other thing I would flag is that at every base and wing we've put in an energy manager. They are responsible for identifying energy savings opportunities on bases. Some of them cover off multiple bases, but every one has one.

A final point that I should have mentioned earlier is that we do now have an example of our first net-zero building. It is in Gagetown, New Brunswick. We've had some New Brunswick mentions here today.

Those are the types of things we look at. It's no risk to operation. It's just a matter of time and money to either upgrade or replace the inefficient buildings we have on base and wing.

Mrs. Rechie Valdez: You kind of answered my second question.

Taking that a little bit further, can you share with us what the higher or urgent priorities are? I believe you mentioned in your opening that there are 20,000 buildings. That's a lot. How are you prioritizing which buildings or infrastructure need to be first or be considered?

Mr. Bill Matthews: It's based on output and also the ability to actually get the work done. Some buildings, frankly, are very difficult to upgrade.

The other priority I'd flag is the purchase of green energy. Some of the commitments we have.... Obviously, we don't produce our own electricity, so we're reliant on the market. Getting agreements in place in all provinces to allow us to buy green electricity is certainly a priority as well.

Saleem, do you have anything to add there?

Mr. Saleem Sattar: No, I have nothing to add to that.

Mrs. Rechie Valdez: Thank you very much.

I'm directing these questions now to the Department of Transport.

Mr. Keenan, can you describe what plans Transport Canada has to decrease GHG emissions from your fleets, since 80% of the emissions come from there?

Mr. Michael Keenan: I'll be happy to, Mr. Chair. That's a great question because that is exactly the challenge we face.

Every fleet has its own strategy. For vehicles on road, we're moving to zero-emission vehicles. I believe we have zero-emission vehicles for 30% of our on-road fleet. I think we're the number one in the Government of Canada. The Treasury Board can correct me if I'm mistaken.

The big one is ferries. That's the biggest source of emissions. A key part of the strategy is the procurement of two new ferries for the eastern ferry service. They're currently being designed and we're working with the shipyard to optimize design to reduce fuel consumption and carbon emissions as a result.

Those would be two examples of significant changes, both in terms of equipment and practice.

I'll actually just complete the example with the national aerial surveillance program. We run a fleet of aerial surveillance for environmental purposes. We're beginning, where we can, to swap a Dash 8 mission for a drone mission.

For example, with some of the whale surveillance off of New Brunswick—we're having a New Brunswick theme here today—we find that we're able to do some of those whale observation missions with drones, which is as or more effective than the Dash 8. Every hour on mission for the drone is a 96% reduction in carbon emissions in terms of the fuel burn relative to a Dash 8.

Where we can swap the mission, it's a great example of a management practice that reduces our carbon emissions quite significantly.

Mrs. Rechie Valdez: Thank you, that is all very exciting stuff.

On a similar train of thought, can you also share what types of risk factors you need to take into consideration as well as we transition to a greener future?

Mr. Michael Keenan: Because we have so many emissions from our transportation fleet, while it's different in composition, it's a similar challenge to DND's. One of the key risk factors, for example, in some of our aircraft is actually the transition to.... You can change the mission or reduce the hours, but it's the transition to a sustainable aviation fuel.

That's an interesting one, because we see the opportunities for a reasonably economic transition towards sustainable aviation fuel are getting better by the year. There is a lot of risk—

The Chair: Thank you. I agree it's interesting, and I hope someone will come back and ask you more about it. You've certainly piqued our interest.

[*Translation*]

We now go to Ms. Sinclair-Desgagné for two and a half minutes.

Ms. Nathalie Sinclair-Desgagné: Thank you, Mr. Chair.

I'd appreciate it if you could keep your answers short.

We discussed the importance of including Crown corporations in the greening government strategy. I have a simple question for you, Mr. Flack. Do you think Crown corporations should be covered by the greening government strategy and be required to have their own strategies?

● (1410)

Mr. Graham Flack: It's appropriate that the government would ask Crown corporations to come up with strategies using the mechanisms I described. If it were to flow from our report, we would have to hold consultations, as we committed to doing.

Ms. Nathalie Sinclair-Desgagné: I have the same question for Mr. DeMarco.

Do you, as commissioner of the environment and sustainable development, think the strategy should apply across the board, to departments and Crown corporations alike?

Mr. Jerry V. DeMarco: Yes, of course. As I said, that's how the government chose to organize things, but it's a whole-of-government approach. In order for the greening government strategy to work, the system has to be consistent across all facets of the federal government.

Ms. Nathalie Sinclair-Desgagné: Before I wrap up, I have a brief comment, and I think it's worth mentioning. I've heard it said a few times today that there was still time to meet the targets by 2050. That's a shame. What's important to keep in mind is that, in 2050, our children will be grandparents or older parents, depending on their health. If we don't move faster, it will be too late by then.

The work to implement a sustainable development strategy as important and as rigorous as this has to be done on a daily basis, piece by piece, starting now, with various milestones leading up to 2050. My hope is for better data collection and concrete measures to implement the strategy because those things are very important.

I'll give you an example of a concrete measure. The Government of Quebec committed to reducing GHG emissions and electrifying 100% of light-duty vehicles and 25% of pickup trucks. That is a clear and specific commitment by the Quebec government.

Will the Government of Canada go that far? Unfortunately, I don't think we'll get the answer to that today, but soon, I hope.

The Chair: Thank you.

[*English*]

Mr. Desjarlais, you have the floor now for two and a half minutes.

Mr. Blake Desjarlais: Thank you very much, Mr. Chair.

Thank you very much again to the witnesses. I think this is our final round. Thanks for being present on this important discussion.

I just want to lead off on what my honourable colleague from the Bloc just mentioned in relation to how critical this strategy is for the leadership of the government.

I think when we talk about a whole-of-government approach, we have to really account for the circumstances the government as a whole is approached with. One of them, of course, is the innovation challenge. We've heard from multiple ministry officials today about how the innovation challenge is present, so when we're contemplating or even imagining what 2025, 2030 or 2050 will look like, I'm concerned that we do not have a strong enough or robust enough system to give Canadians the credit they deserve in terms of stability for this plan. I just want to make that thought very present, especially as it relates to the Ministry of National Defence.

This is nothing against the ministry's own plans, but it's particular to the actual condition that's facing the ministry. You're being asked consistently, and at an increasing rate, to deploy your services on behalf of Canadians across the country, in particular to combat climate emergencies as they arise. These are increasing in both severity and cost, so it's incumbent upon the government, I think, and upon members of the opposition to ask what this strategy could look like in 2050 and whether the ministry would agree that it's time we actually preserve the mandate of the ministry of defence, which is to ensure we have national security, rather than so often relying on the domestic deployment of your services.

I think it's going to change how you develop green strategies, particularly when it comes to fuel. Some fuels are more dangerous to deploy overseas than, for example, domestically. Some fuels are going to be more challenging to actually obtain overseas than they are domestically. I see a gap, a growing concern with how the actual greening of the government strategy, which is important, can affect the Ministry of National Defence mandate.

I think it's important that the government understand this really important piece, because I think it leads to the next question, which I think, for parliamentarians, is an interesting one, and that is on the creation of a new form of force that can actually deal with domestic climate change disasters. This is something I hope the Ministry of National Defence knows about.

Mr. Matthews, by your own description, is this a threat to your plan?

● (1415)

Mr. Bill Matthews: Thank you for the question.

I think two things.

One, the department has, indeed, noticed an increase in tempo in terms of the number and frequency of responses to domestic events. It is something we factor into our operations, both domestic and abroad.

I don't think it will totally answer the question posed by the member here, Mr. Chair, but I think it might be worth my colleague Nancy spending two minutes talking about the plans the navy and the air force have to decarbonize in early days. I think it would be worth it.

The Chair: I am going to have to not allow that just because the member's time has expired. Another member might come back to you on that, or we could request that you perhaps submit something in writing. We could do that, but I'm afraid I just don't have that time to allot.

I'm going to turn now to—

Mr. Blake Desjarlais: Mr. Chair, could we get that in writing? Did you say we could get that in writing? Yes? That would be perfect.

The Chair: If you could provide some background information to the committee, that would be very, very helpful.

I'm going to turn now to MP Kram.

You have the floor for five minutes.

Mr. Michael Kram: Thank you, Mr. Chair.

I would like to continue with the witnesses from National Defence.

Let's say it's the year 2050. The F-35 fighter jets are still in the air, and we're still sailing our frigates, but we don't have a way to fully decarbonize them. What does the carbon offset market look like for those military assets?

Mr. Bill Matthews: Mr. Chair, I think it's too early for us to speculate about what the market might look like in 2050. I think, if it's relevant, we can have Nancy talk about the decarbonization plans, but in terms of comments in the market, it's too early to say.

Mr. Michael Kram: With all due respect, I would like to stick with the carbon offset market.

I would like to make sure I understood an answer to Mr. McCauley's question a bit earlier about the location of fuel purchases for the frigates.

It was my understanding that if the fuel is purchased in Canada, it counts against Canada's emissions, but if the fuel is purchased in another country, it counts against that other country's emissions. Is that correct?

Mr. Saleem Sattar: To be clear, we are tracking only fuel purchased by DND and the Canadian Armed Forces.

Mr. Michael Kram: Okay. Is that from Canada or from other countries as well?

Mr. Saleem Sattar: I don't have that information right now.

Mr. Michael Kram: Okay. If we could get that answer in writing, that would be very helpful. Thank you.

Mr. Saleem Sattar: Sure. Yes.

Mr. Michael Kram: Let us just think about this for a minute. Let's say it's 2050, and we have to meet our zero-emission targets, and a war breaks out, and we have to bomb an enemy oil refinery or something like that. How does that work? Do we have to plant so many trees based on how many enemy oil refineries we bomb? How could that possibly work?

Mr. Bill Matthews: I think the methodology we're talking about today, Mr. Chair, is around the impact from the operations. I can't speculate on how one might count for that type of event. I'm not sure the methodology has evolved that far, but we're very much focused on tracking our own emissions from operations and, as I have mentioned, we still have some work to do on that.

Mr. Michael Kram: Fair enough. I'll be curious to see how that plan shapes up.

If we go back to page 23 of the report and paragraph 2.78, it says:

> We found that National Defence's carbon plan aligned with the emission reduction targets outlined in the 2017 strategy, but that the actions in the plan were not detailed enough to indicate how the department would achieve the 2050 target.

I'll give you the opportunity now to elaborate on if there's anything else that needs to be said other than we're waiting for the new technologies and we're going to go into the carbon offset market if need be.

Mr. Bill Matthews: I have a little more detail. I think the message here is that we have more planning to do to identify more actions to get us there. I think the report is accurate that there are some plans that we still have to come forward with to identify how we will make 2050.

I'm thinking of more energy refits of buildings and the things we've already talked about today in terms of getting there, and you'll see the road map, the risks and all the things we've already talked about today be articulated over the next year to show how we intend to get there.

Mr. Michael Kram: Thank you very much.

In the time I have left, I'd like to turn to the representatives from the Treasury Board.

Could you speak to the projected costs per year of the net-zero plan?

● (1420)

Mr. Malcolm Edwards: We've had departments do decarbonization plans for their real property. We brought in an expert to aggregate those. Over a 30-year period to 2050, the incremental cost is $3 billion to decarbonize. That represents about one per cent of what we'd spend on real property over that period of time normally without decarbonization.

Mr. Michael Kram: Mr. Chair, how much time do I have left?

The Chair: You have about 40 seconds.

Mr. Michael Kram: I'll turn it over to my colleague Garnett Genuis.

Mr. Garnett Genuis: Thank you, Mr. Kram, for your generosity.

I just want to follow up on my earlier questions about VIP travel.

Could the committee please be provided with information about the emissions associated with VIP travel, with the Prime Minister's and ministers' broken out specifically, with comparisons over time, let's say over the last five years?

Can we be provided with that information?

Mr. Bill Matthews: Mr. Chair, we'll take a look and see what we can provide based on our records.

Mr. Garnett Genuis: Thank you.

The Chair: Thank you, and that is the time.

I will turn now to Ms. Yip.

You have the floor for five minutes, and this will be the last question.

Ms. Jean Yip: I'm happy to turn it back to the greening government strategy.

This question is directed to Mr. Flack.

Some departments in the report do not have a set date for the release of their greenhouse gas emissions reduction and net-zero plans. Why is that, and what will Treasury Board do to ensure these plans get released?

Mr. Graham Flack: Malcolm can speak about it a bit more, but we've taken a staged approach.

For the real property plans, which are the plans you're talking about, we started with the departments that represent the overwhelming bulk of emissions, 81% of emissions. There were eight departments. Those plans are completed. The plan was that, in the greening 3 plan, which will be next year, we would move to have the additional 19 departments have their plans in place.

Because the methodologies had to be developed and approved, we've been phasing it in by starting with the departments that represent the most emissions and then proceeding to the other ones that can do that.

Malcolm, are there other things you want to add?

Mr. Malcolm Edwards: I think you gave a pretty clear response. We also made a commitment to the management action plan, to clarify that in the next greening government strategy, to actually put a commitment in as to when those plans will be in place.

Ms. Jean Yip: Thank you.

Is there any collaborative work or are there best practices being shared with other countries to work on this emissions reduction?

Mr. Flack?

Mr. Graham Flack: Yes. In fact, I thank Malcolm and the team. I'll point out that the greening government team is a small team of about a dozen people. They, along with the United States, have been co-chairing an international group, a greening government group which they've set up and pioneered with over 50 countries to do this type of sharing.

One of the reasons this takes time is that in many cases, we're developing new methodologies. We want them to be standardized according to international practices. Those are not necessarily all there for governments. That's why we've taken this approach of an international coalition, to move quickly and learn from others, and, frankly, to advance the progress in other countries, as well. That is one of the reasons that one of Malcolm's sidelines is taking questions from other governments, provincial or international, about the best practices we've applied, and similarly trying to learn from them, in terms of what they're doing.

That's one of the reasons this has had to go in steps with the three strategies. Not all of the pieces, including the way to quantify in a viable way scope 3 emissions, were well understood. If we have different governments taking very different approaches to measure this, it will be very difficult from a comparability perspective to know where it's going.

That's been the approach with this learning, and I think we're proceeding well. I completely take the point on speed being of the essence, as the commissioner did. We are trying to move it forward as quickly as we can, but part of that is using international practice to be able to accelerate the work.

Ms. Jean Yip: Can you give me an example of a best practice that we've taken from another country and used?

Mr. Malcolm Edwards: We've been talking with countries about embodied carbon, which is the carbon in construction materials. We essentially have to extract the materials, process them, then put them in our buildings. That has a carbon footprint.

We've been working with the U.S. Council on Environmental Quality and the General Services Administration in the U.S. to look at their equivalent to the greening government strategy, their executive order and the plans and processes they are putting in place. We're especially interested in partnering with the U.S., because a lot of our markets are North American.

● (1425)

Ms. Jean Yip: Thank you.

Mr. Keenan, do you think the net-zero emission target for 2050 is realistic or achievable, given your present plans?

Mr. Michael Keenan: Mr. Chair, I think the net-zero 2050 plan is ambitious and will require a lot of effort and innovation, but, given the pace of innovation we're seeing in low-carbon technology and how rapidly that's evolving, we believe there's a feasible pathway. Not every element of that pathway has been nailed down yet, but it's changing in the right direction every year.

Ms. Jean Yip: Would you say we're on target with the timelines?

Mr. Michael Keenan: I would say, like DND, that we have not figured out every last change to get us to net-zero 2050, but the rate of progress and evolution of the carbon-neutral road map is such that I think we're on a pathway to get us there.

The Chair: Thank you very much. I appreciate everyone sticking pretty close to the time today. In some cases, members have even timed themselves. That's always helpful.

I want to thank all the witnesses for appearing today. I believe everyone was here in person. That is superb. That's another sign we're getting back to normal.

Before I suspend the meeting, I have a few things to say.

First of all, I'll excuse the witnesses.

Thank you, again, for coming back a second time.

For members of Parliament who are virtual, as I am, we're going to log off and log back on. You have a few minutes to do that, but please do that right away, because we have a hard stop at the top of the hour.

Mr. Clerk, could you have the technician look for me? Because of my IT set-up here...it's not my office or devices. I might log in as a guest again, so they might need to flip me over like they did before. You might not see me, but I have the in camera coordinates. I'm going to use them, but it might not come up as my name again. They can switch me over, but they need to look for me.

We'll see you all in a few minutes.

[*Proceedings continue in camera*]