

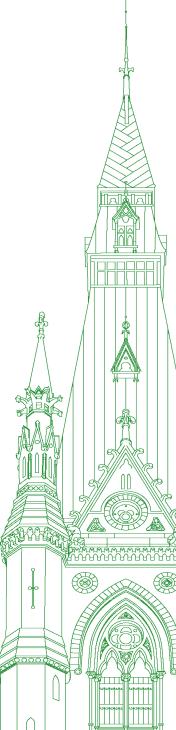
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Chair: Mr. Ali Ehsassi

Standing Committee on Foreign Affairs and International Development

Wednesday, October 25, 2023

• (1700)

[English]

The Chair (Mr. Ali Ehsassi (Willowdale, Lib.)): I call this meeting to order.

Welcome to meeting number 78 of the House of Commons Standing Committee on Foreign Affairs and International Development.

Today's meeting is taking place in a hybrid format pursuant to the Standing Orders; therefore, members are attending in person in the room as well as remotely by using the Zoom application.

I'd like to make a few comments for the benefit of members and our witness.

Before speaking, please wait until I recognize you by name. For those who are participating by video conference, click on the microphone icon to activate your mike, and please mute yourselves when you are not speaking.

You may speak in the official language of your choice. Although this room is equipped with a powerful audio system, feedback events can occur. These can be extremely harmful to interpreters and cause serious injuries. I would remind all the members that the most common cause of sound feedback is an earpiece worn too close to a microphone.

This is a reminder that all comments should be directed through the chair.

With regard to a speaking list, the committee clerk and I will do the best we can to maintain a consolidated order of speaking for all members, whether they are participating virtually or in person.

In accordance with the committee's routine motion concerning connection tests for witnesses, I am informing the committee members that all witnesses appearing virtually have completed the required connection tests in advance of our meeting.

Pursuant to Standing Order 108(2) and the motions adopted by the committee on Monday, January 31, 2022, and Tuesday, May 30, 2023, the committee resumes its study of the situation at the Russia-Ukraine border and implications for peace and security.

I would now like to welcome our witness. We have before us Dr. Geoffrey Wood, who is a professor at Western University.

Thank you very much for appearing before us, Dr. Wood; we're very grateful. You will be provided five minutes for your opening

remarks, after which we will proceed to take questions from the members.

Dr. Geoffrey Wood (Professor, Western University, As an Individual): Thank you.

I will just start with a very big-picture point of view, and then I'll focus down on some very specific issues.

The first is that we always talk about events; however, most events one has to deal with in the world are events that are repeatedly those of the human experience. I'll give you an example. Recessions, depressions and wars might be unwelcome, but there's a lot of experience in the world in dealing with them, and one knows the outcomes.

Obviously, across the world now we're dealing with events that do transcend past human experience, such as climate change. As you are all conscious, the range of consequences is enormous. We're even dealing with global pandemics and unrelated knock-on issues.

What this means is that when it comes to crises like Ukraine, the effects are greatly amplified because of the unusual times we are in. I'll give you an example. In the 1980s, there were periodic crop failures in the former Soviet Union, yet there wasn't as much of the risk of mass starvation in the world as there is these days. There's a lot more vulnerability in the global system.

We'll take the issue of Russian oil and gas exports. We are in a long energy transition. We know that as oil and gas usage is going up, the portion of it in the energy mix is declining. The last time we were in a long energy transition was the early 20th century, and how it played out was that it fundamentally rearranged the global deck chairs and led to a great deal of insecurity, depression and war. Again, one can see the amplification of effects.

What is particularly concerning today, obviously, is that the Ukrainian war seems to have entered a long period of stalemate, and with political developments potentially in the coming couple of years, which we can potentially anticipate, including south of the border, this does impart a further layer of uncertainty.

To sum up, because of great structural changes in today's world, the effects of crises that obviously would have previously had effects are greatly amplified. The food security implications are much greater than they would have been years ago—

(1705)

[Translation]

Mr. Jean-Denis Garon (Mirabel, BQ): I have a point of order, Mr. Chair.

The interpretation hasn't been coming through for a solid minute now

[English]

The Chair: My apologies, Dr. Wood. We're checking with the technicians, but evidently there are some connectivity problems on your end. If you give us a couple of minutes, we'd be grateful.

Dr. Geoffrey Wood: That's no problem.

The Chair: We'll suspend.

• (1705) (Pause)

• (1720)

The Chair: Welcome back, members. We will now resume our meeting on the study of the situation at the Russia-Ukraine border and implications for peace and security.

I would like to welcome our two witnesses.

We have with us Mr. Mark Winfield, who is a professor in the faculty of environmental and urban change at York University. He is joining us from Toronto.

From the Canadian Global Affairs Institute, we have Joe Calnan, manager, energy security forum, who is joining us from Calgary.

We're very grateful that you could join us.

You will each be provided with five minutes for your opening remarks, after which we will go to the members for any questions that they wish to pose to you. I would just ask, since you are doing this virtually, that you look at the screen, because when you're very close to your time limit, I will hold this card up. If you do see that sign, I would be grateful if you would wrap up your remarks as soon as possible. That's not only for your opening remarks; it's also in response to questions put to you by the members as well.

We will start with you, Mr. Winfield. You have five minutes. The floor is yours.

Dr. Mark Winfield (Professor, Faculty of Environmental and Urban Change, York University, As an Individual): Thank you, Mr. Chair.

I'm very grateful to have the opportunity to appear before you today. I would rather be here in person too, but the logistics were not going to work.

I'm going to dive right in and note that the unprovoked Russian invasion of Ukraine in February 2022 and the subsequent war are likely the most significant exogenous events we've seen affecting global energy markets and supplies since the 1970s.

The most prominent elements have been the shutdown of Russian natural gas and oil supplies to western Europe as a result of a combination of sanctions and embargoes, and this, among other things, has shattered European assumptions that economic ties to

Russia, particularly via energy, would make a war of the kind that's happened in Ukraine impossible.

These developments have major implications for energy and climate policy in Europe and North America. For Europe, this situation has raised major questions around energy security, geopolitical risks associated with non-endogenous energy sources, and challenges around climate policy and energy transitions. North America is less affected in energy security terms, but there are other outcomes there as well.

The European response has been twofold. One was a very short-term effort to secure supplies, particularly of liquid natural gas from international markets, and also to retain and marginally expand the roles of coal and, to a lesser extent, nuclear energy sources.

In the longer term, the intention is to double down on the existing energy transition in the theme of decarbonization and to emphasize the roles of renewables and energy efficiency. That's partially because these are energy sources that are not subject to geopolitical risk

From Canada's perspective, we have drawn considerable interest and pressure from our U.S., European and Asian allies as a potential geopolitically secure provider of primary resource commodities, particularly liquid natural gas, critical minerals and, to a lesser extent, hydrogen.

I'm going to be looking at this through two potential lenses. The first one is the capacity to actually make significant contributions, and the second is around the nature of the trade-offs and the risks from a climate, environmental, economic and indigenous reconciliation perspective that that might be associated with those pathways.

With regard to fossil fuels, part of the problem here in the short term is there is no real export capacity for oil or natural gas, or hydrogen for that matter, to Europe. All of the routes for natural gas and oil run through the United States. There are pipeline infrastructure projects under way, notably the Trans Mountain pipeline and the Coastal Gaslink pipeline, which might provide some export capacity, although those are very clearly oriented towards Asia.

It is also important to keep in mind that the European interest in LNG and fossil fuels is likely short term. The long-term plan is decarbonization, focused on renewables, and that may mean there isn't much of a market to justify major infrastructure investments on Canada's side.

There are similar questions around hydrogen and whether there is an economic rationale for hydrogen production in Canada and then export to Europe. It may be much more efficient to do electrolysis in Europe.

There is interest around critical minerals, although these markets are very fluid, and what role Canada will actually play at a global scale is still unclear.

Battery technologies and chemistries are also changing very rapidly in relation to electric vehicles.

The timelines for development of major new mineral projects, regardless of what happens with the Impact Assessment Act, are going to be long.

In terms of the key trade-offs, our fossil fuel export options, which are basically B.C. liquid natural gas and oil sands oil, are very carbon-intensive, and major export increases would raise questions about an ability to meet climate targets. The current plans would rely very heavily on carbon capture and storage, both for fossil fuels and natural gas, and also around hydrogen as well. There are ongoing debates about the effectiveness and the costs of that.

With regard to critical minerals, new extractive projects would be of very high impact. Much of the resources are in the boreal forest in the Hudson Bay and James Bay lowlands. These are globally significant carbon sink and storage sites, and also globally significant biodiversity sites as well. There would also be major implications in these regions for indigenous people and around reconciliation.

I think there are potentially lots of trade-offs in this conversation for Canada that we will want to think through very carefully, as the situation remains very fluid in terms of how energy markets are going to shake out in the long term.

(1725)

Thank you.

The Chair: Thank you very much, Mr. Winfield.

We now go to Mr. Calnan. You have five minutes for your opening remarks.

Mr. Joe Calnan (Manager, Energy Security Forum, Canadian Global Affairs Institute): Mr. Chair and members, thank you for the invitation to appear today.

In my opening remarks, I would like to emphasize that it is in Canada's national interest to support our allies and our European and Asian partners by providing them with access to Canadian energy.

Europe has been the primary target of Russian economic warfare through the manipulation of energy supplies and will require further assistance over the coming decades, not only to ensure that Ukraine wins this war but also to enable the reconstruction and integration of Ukraine into the European Union. If Europe fails to do so, in part because of our lack of support, the resulting Russian victory will undermine the international rules-based order that Canadian security and trade depend on.

I would like to underline three important points concerning Canada's role in the global energy system.

First, Canada is a firmly established player in the international supply of many fuels, including uranium, natural gas and, of course, oil. Our role in the security of the global energy system is often masked by our broad energy integration with the United States, but our influence will become more visible upon the introduction of major new energy export facilities in British Columbia.

Second, notwithstanding Canada's strong role in maintaining global energy security, the federal government can do more to assist the European Union in its REPowerEU plan and eliminate the influence of Russian fuels in Europe's energy systems.

Third, although Canada has a variety of policy options to assist projects meant to support Europe, Canadian foreign policy priorities do not guide private investment decisions. That said, the Canadian federal government has historically played a central role in improving the economics of strategic projects meant to further Canadian national interests.

These points are highly relevant when discussing Canada's future role in supplying energy to Europe.

Turning to the current situation in Europe, we should note that the European Union has proven to be unexpectedly resilient to cutoffs of Russian energy. We underestimated Europe's ability to adapt to sudden shocks and its commitment to reduce its energy usage in response to the crisis, as seen in its dramatic decline in natural gas consumption.

In sustaining much of the direct impact of Russia's economic war with the west, the countries of the European Union have demonstrated a deep resolve to defend Ukrainians from Russian aggression and to safeguard the international rules-based order. This resolve has come at a cost. The European Union's economic recovery from the pandemic has slowed dramatically as a result of the energy price spike. Energy price uncertainty has led energy-intensive industries in Europe to shift investment elsewhere. NATO's European members currently face the daunting prospect of helping to ensure Russia's defeat in Ukraine, followed by Ukrainian reconstruction and integration into the European Union, while undergoing persistent economic stagnation.

How can we assist our allies in Europe? To an extent, Canada is already helping. Current Canadian energy supplies provide a powerful buffer against supply disruptions for many fuels and critical minerals. Canada exports nearly as much oil to the United States as Russia exported to Europe prior to the beginning of the war. That said, the federal government can and should encourage the Canadian energy industry to do more, including on the supply of oil, liquefied natural gas, critical minerals and hydrogen.

The future of Canada's support for Europe depends on infrastructure and initiative. Canada has the resources required to meet Europe's needs, but these resources are far from where they are needed. For example, a major complication for LNG export out of the east coast is a lack of pipeline infrastructure connecting Canada's natural gas grid to the Maritimes. Efforts by the federal government to connect the maritime provinces with our gas grid could come with a triple benefit of improving local energy security, enabling the phase-out of coal-fired power stations and improving the case for LNG export.

Canada has a long history of federal support for nation-building infrastructure. Our resources can again be marshalled in support of our allies and partners on the other side of the Atlantic. All we need is the will.

Thank you again, and I'm looking forward to any questions.

• (1730

The Chair: Thank you very much, Mr. Calnan.

We will now go to the members for questions.

The first member up is MP Hoback. You have five minutes for the first round.

Mr. Randy Hoback (Prince Albert, CPC): Thank you, Chair.

Thank you, witnesses, for being here this afternoon.

I'm going to start off with you, Mr. Calnan.

You made some interesting statements at the very end about Canada's ability to actually react and fulfill the requirements in the marketplace. In light of what's going on in the Middle East—we see an escalation of that war—how much more would be required for Canada to come on to the world scene to fill any voids?

Mr. Joe Calnan: There are significant risks associated with the current conflict in the Middle East. There are currently many analysts considering the possible impact of the ramped-up enforcement of sanctions on Iran. This would occur in case there's a northern front opening for Israel, in which case there may be ramped-up sanctions on the export of oil from Iran, which is currently facing secondary sanctions from the United States. However, the full enforcement of these sanctions has been relaxed somewhat over the last few years, as efforts have been made to improve relations between the United States and Iran.

Mr. Randy Hoback: Is it fair to say, then, that there is some risk there? It's definitely a price risk.

Mr. Joe Calnan: Certainly.

Mr. Randy Hoback: Again, we've done nothing in the last eight years to alleviate any of that risk. Is that fair to say?

Mr. Joe Calnan: Yes, that is fair to say.

There are around 2.1 million barrels per day of Iranian oil exports that are subject to these sanctions, but they are currently being exported nevertheless. If this oil is taken off the market, then there would be a substantial impact on global energy prices that would likely tip the world into a global recession. However, the possibility of this happening is slim, due to the major economic impacts that would likely occur.

Mr. Randy Hoback: If Iran is a major culprit in what's going on in the Middle East and is providing arms for Russia—I think that's fairly well proven too—the money that's made from the oil being shipped out of Iran is actually being used against Ukraine and is being used against Israel at this point in time. Is that fair to say?

• (1735)

Mr. Joe Calnan: Certainly you could say that the current exports of oil from Iran are supporting the Iranian regime and for sure providing opportunity to support Russia in its war on Ukraine, although there are major questions about whether Iran would be doing so anyway if the full pressure of sanctions were put on it again.

Mr. Randy Hoback: That's fair enough, but if Canada were able to increase its capacity to get oil to tidewater instead of just shipping it to the U.S., we could displace that and create a scenario in which there would be less reliance on Iran or other countries for oil requirements. That would definitely impact back into Europe, right?

Is that fair to say?

Mr. Joe Calnan: Yes. I'd say that the Trans Mountain expansion, which will provide around another 690,000 barrels per day into the Pacific market, could provide a good relieve valve for this cut-off of exports from Iran.

However, this wouldn't completely patch the hole. In terms of short-term infrastructure requirements that would be required in this front, it would be more likely that Saudi Arabia would step in to manage the loss of production from Iran. However, there are also concerns there around the possible goal of the Houthian insurgency in Yemen, which has previously attacked Saudi Arabian oil infrastructure. There's a possibility that something like that could happen again, if Iran chose to escalate this into a more regional conflict.

Mr. Randy Hoback: Europe could have a fairly cold winter if some things go wrong. Is that fair to say?

Mr. Joe Calnan: In terms of home heating in Europe, it currently has a—

Mr. Randy Hoback: I mean as far as energy requirements are concerned.

Mr. Joe Calnan: Pardon me?

Mr. Randy Hoback: I'm looking more at energy requirements. I just used the slang "cold".

Mr. Joe Calnan: Certainly there could be major issues when it comes to the supply of oil to Europe if something like this happened, so yes, there would be issues around the world.

However, as Iran primarily exports its oil to China, I think China would be the most heavily impacted right off the bat.

Mr. Randy Hoback: Okay.

If we look at.... I come from Saskatchewan, and nuclear energy—

The Chair: I'm sorry, Mr. Hoback. It's been five minutes. Thank you.

We now go to MP Chatel. You have five minutes.

[Translation]

Mrs. Sophie Chatel (Pontiac, Lib.): Thank you, Mr. Chair.

At the onset of last winter, we were very worried about the Europeans and whether they would be able to heat their homes. They went through a tough time. It's fair to say, the Europeans are resilient. A year later, we are again having to deal with this energy security challenge, as my fellow member pointed out. Winter's arrival is still cause for concern.

Could you talk about how the situation in Europe currently compares with the situation last year? Have countries in Europe managed to find other energy sources?

[English]

Mr. Joe Calnan: I'll take that question.

Yes, Europe in fact succeeded in finding alternative sources for natural gas and oil, and to an equal extent, I suppose, coal, although coal isn't so important as a component of Europe's energy system anymore. On a wide basis, coal was phased out as a major energy source in Europe. It is still a significant energy source, and we saw Europe begin to draw on the coal markets of Kazakhstan and South Africa last year.

In terms of the oil and natural gas situation, Europe has become much more heavily dependent on the Middle East for its supply of liquefied natural gas especially, and for oil. Most countries in the European Union—there are still a few countries that are holdouts on this front—do not receive any natural gas or oil through pipelines or overseas shipments from Russia. There is still a substantial role for Russian LNG, however, in Europe's energy imports.

• (1740)

[Translation]

Mrs. Sophie Chatel: Thank you.

I was also asking about Europe's energy security and independence. What progress do you see on that front, Mr. Winfield?

[English]

Dr. Mark Winfield: For Europe, I think it's important to separate the relatively short-term response to get through last winter and this coming winter, which has particularly put a very strong emphasis on accessing liquefied natural gas wherever they can get their hands on it. They are quite successful at that. In the longer term, the Europeans are quite clear about their emphasis on renewables and the energy efficiency side. I think they're very sensitive to the question of substituting one geopolitically risky energy source in Russia for another somewhere else, particularly in the Middle East.

It's very important to look at the European approach in the immediate crisis management that has taken place around supplies, and the longer-term picture of where things are going with their energy transition. In Europe's case, the convergence between decarbonization and energy security is very strong.

[Translation]

Mrs. Sophie Chatel: Thank you.

With the energy transition in Europe, how do you think Canada can best position itself as an economic partner in Europe's energy strategy?

[English]

Dr. Mark Winfield: There are multiple dimensions to that.

We're in a conversation about what that looks like. The Europeans have expressed interest in hydrogen, for example, although I think there are some questions about the economics of that. We've seen Europeans also being very interested in critical minerals. We saw that very much with Ms. von der Leyen's visit.

In my opening, I stated there were complications, particularly relative to other global suppliers. We need to think about how much we want to be put in the role of a primary resource commodity provider versus more value-added types of contributions on the European side.

[Translation]

Mrs. Sophie Chatel: Thank you.

[English]

Dr. Mark Winfield: We have to be conscious of trade-offs domestically as well.

[Translation]

Mrs. Sophie Chatel: I agree with you. I think we need both. We can't just let our natural resources leave the country. We have to process them here as well.

[English]

The Chair: Thank you, MP Chatel.

We now go to MP Garon. You have five minutes.

[Translation]

Mr. Jean-Denis Garon: Thank you, Mr. Chair.

Thank you to the two witnesses for being with us today.

Mr. Winfield, you said that Europe was interested in LNG in the very short term and that LNG wasn't necessarily a long-term solution for the European Union's energy security.

We've also heard from witnesses that Canada isn't yet equipped with the basic infrastructure required to supply the Europeans with the LNG that would improve their energy security in the short term.

I'm from Quebec, so I know that Quebec is an expert when it comes to hydroelectricity, renewable energy, wind energy and so on.

Solar and wind energy facilities in Ukraine have been destroyed. Is oil and gas all Canada has to offer to support the energy transition? Is that all we can offer as a country, or can we contribute to the long-term transition?

[English]

Dr. Mark Winfield: I think we have much more to offer, particularly in Quebec, for example, where there is very long-established expertise around energy storage. In particular, battery technologies are one area of note, as you also noted.

We have also been very successful in increasingly large-scale integration of intermittent renewables and also in the management and balancing of those, particularly in Quebec's experience with hydroelectric storage infrastructure, so there is expertise in multiple dimensions that Canada can contribute to this conversation. Indeed, those may turn out to be the more value-added components on the engineering and system management components, as opposed to just being a commodity resource provider in that process.

● (1745)

[Translation]

Mr. Jean-Denis Garon: Thank you.

You said that, with Europe speeding up its energy transition, it wasn't a stable and secure market for Canadian LNG in the long term.

In fact, Repsol, the Spanish energy company that owns the Saint John LNG receiving and regasification terminal, announced that exporting LNG from the terminal to Europe was not a viable project. Canada, meanwhile, is expanding the Trans Mountain pipeline, costing taxpayers a whopping \$30 billion.

Is Canada using the situation in Europe to justify infrastructure projects to transport fossil fuel—projects that will lead to further losses and turn out to be bad investments for Canada's economy and businesses in the long run?

[English]

Dr. Mark Winfield: I think there's an interesting conversation around this, for sure.

We certainly have heard lots of voices pushing for increasing commodity exports, particularly fossil fuels. As you highlighted with regard to natural gas, that's a challenge. We don't have any eastward export capacity. It actually goes down through the United States to the Gulf Coast, if it's going that way.

In theory, we will have natural gas export capacity on the west coast with the Coastal GasLink and various B.C. LNG projects. The challenges there, though, are significant around the economics. The expectation is that the infrastructure will serve Asian markets more than European markets. The B.C. LNG projects are very carbon-intensive; they are from fracked natural gas, as opposed to simple sweet gas.

As we've seen, there are also very significant divisions among the affected indigenous communities around those projects. This is a complicated—

[Translation]

Mr. Jean-Denis Garon: Thank you.

Sorry, I'm going to use the half a minute I have left to ask the other witness a quick question.

Mr. Calnan, you talked about the U.S. sanctions against Iran, which exports much of its oil to China. Iran is a member of the Organization of the Petroleum Exporting Countries, or OPEC, which controls the bulk of global supply.

Are you saying that only Canada, with its major pipeline projects, could supply what Iran wasn't able to export to China and that the other members of OPEC wouldn't be willing to make up the shortfall? I'm curious to hear your thoughts on that.

[English]

The Chair: Could I ask you to respond in less than 15 seconds, please?

Mr. Joe Calnan: I'd say that in this circumstance, it would certainly be Saudi Arabia that would make up a shortfall, because they have a significant amount of spare capacity and they've always taken their role as a balancer seriously.

However, I also need to push back on the idea that OPEC controls most of the world's oil production. It does not. OPEC controls around 40% of the world oil production. A large percentage—

The Chair: I'm afraid I'm going to have to cut you off, Mr. Calnan.

For the next question, we go to MP McPherson for five minutes.

Ms. Heather McPherson (Edmonton Strathcona, NDP): Thank you very much, Mr. Chair.

Thank you to the witnesses for being with us today.

I was quite interested, Mr. Winfield, in some of the things you were saying with regard to our obligations concerning climate change. If we were to use natural gas, it is very carbon intensive, and it doesn't necessarily adhere to UNDRIP and some of the other legislation that we have in place in this country. It would require an awful lot in terms of carbon capture technology to go forward.

Does Canada have that carbon capture technology at this point?

Dr. Mark Winfield: That's a matter of some debate. Deployed on the scale that might be necessary, the short answer would be no. In theory, there are investments being made in that space. The challenge with LNG especially, though, is that you have carbon emissions coming from multiple places. Part of it, at the moment, is that it looks like we're going to be using fossil fuels to do the liquefaction. You might be able to do CCUS there if the geology is right in the location in British Columbia.

The other problem, though, with the B.C. gas is that they rely very heavily on fracked natural gas, and the problem there is that it's is very hard to deal with through CCUS, because what you're largely dealing with is fugitive emissions like leaks from wells and leaks from the fracking process, and there is quite a lot of concern about just how much methane, especially, is released as a result of the development of those kinds of gas reserves.

We're not talking about a situation of just drilling a well into a sweet gas reserve. This is much more complicated. It's much more carbon-intensive in the extraction process itself, as well as in the processing.

• (1750)

Ms. Heather McPherson: I assume it's extraordinarily expensive to develop these new technologies.

Who, in your opinion, should be paying for the development of these technologies and the development of these resources, this carbon capture storage?

Dr. Mark Winfield: Again, this is a matter of some debate. I would tend to lean toward the industry, which, particularly given the scale of the profit margins currently in the fossil fuel sector, really should be bearing the primary cost here. That would be consistent with the principle of polluter pays.

We know that substantial support is being provided through the CCUS tax credit, but that has been a matter of some controversy. Many people have raised the question of whether that's appropriate at all, for a variety of reasons.

Ms. Heather McPherson: In your opinion, would you consider that an oil and gas subsidy?

Dr. Mark Winfield: I would. I know the definition that the government released in the summer is very carefully configured to "not", but when I talk to my classes about this, we certainly regard it as a form of subsidization of the oil and gas sector.

Ms. Heather McPherson: Thank you.

Mr. Calnan, I have a question for you as well. You spoke in your testimony about our not having the infrastructure in place to provide energy to Europe. That has not been developed.

I was in Germany. I met with the German Chancellor, the head of the chancellery, just last year, and they spoke about their need for short-term energy solutions. They were not interested in a longterm negotiation for long-term energy, because they were transitioning to renewables so rapidly as a result of the illegal invasion of Ukraine.

Could you tell me how long it would take to build the resources necessary for us to get Canadian energy to Germany, Ukraine and other European markets?

Mr. Joe Calnan: That depends on the political will as well as the involvement of private sector actors, because if you look at the original Enbridge Mainline pipeline—back then it was called something else, and I would be able to get that information to you—it took around two years to build the pipeline from Alberta—

Ms. Heather McPherson: I'm sorry to interrupt you, but you know the context that we're working in now with the different regulations we have to meet and the different provincial jurisdictions,

which we, of course, want to respect. In the 2023 situation, do you think it would take 5 years, 10 years or 15 years, if you had to guess one of those numbers?

Mr. Joe Calnan: I do know that Germany, when it was under pressure, built the Wilhelmshaven LNG facility in around six months. In all the LNG facilities that were planned in Germany at the time, they were all on, say, 10- or 15-year timelines, but they were able to accelerate this project. In cases when the national interest is decided, then you can move awfully quickly.

Ms. Heather McPherson: Mr. Winfield, would you agree with the assessment that it could be done very quickly, in six months or something like that?

Dr. Mark Winfield: No. The import infrastructure is much more straightforward in terms of regasifying the liquid natural gas. To export, there is an enormous infrastructure that has to be constructed. You have the actual wells themselves, which are mostly in northwestern British Columbia, and the plays that are significant here. You'd then have to build the pipelines from there to the B.C. coast. You would have to build liquefaction facilities in British Columbia as well. We're starting to do that, but there's a lot to be done there.

Given the complexity, I'm not sure those kinds of time scales are really feasible around those kinds of resources.

Ms. Heather McPherson: I certainly hope Ukraine is able to be victorious much sooner than 15 years.

Thank you very much. That's all for me.

The Chair: Thank you, MP McPherson.

We will now go to MP Aboultaif.

• (1755)

Mr. Ziad Aboultaif (Edmonton Manning, CPC): Thanks to the witnesses for appearing before the committee this afternoon.

To both of you, in terms of a number of years, what would shortterm and long-term energy supplies look like?

Mr. Joe Calnan: Mark, would you like to go first?

Dr. Mark Winfield: Sure.

I would generally put short-term in a five-year time frame. Longer term, we're sort of talking a decade. We've also now, with Europe, seen a very short-term time frame wheen they had to deal with getting through this past winter, and they have somewhat more structure this winter, so there are variations. I would put short-term generally as a five-year window.

Mr. Joe Calnan: I'm sorry, but are we talking about just Europe's energy, or are we talking about global?

Mr. Ziad Aboultaif: It's generally speaking.

Mr. Joe Calnan: Generally speaking, the recent world energy outlook from the International Energy Agency was released, and depending on the scenario you look at, you can have major differences in terms of what the global energy system looks like in the future.

Under the STEPS scenario, we see a major decline in the use of coal globally, and this is partially or largely due to commitments made in COP26 in Glasgow to phase out the use of coal for electricity. Oil and natural gas flatline around 2028-2029, but they remain at elevated level right up until the 2050s. For oil it's a little less than 100 million barrels of oil demand per day, maybe around 97 million. That's under the STEPS scenario.

However, under the Announced Pledges Scenario, you have gradually diminishing demand. I believe it goes down to around 50 million barrels per day by 2050. Under the net-zero emissions scenario, you have demand for oil go down to around 25 million barrels per day by 2050.

Mr. Ziad Aboultaif: Thank you.

I'm from Alberta, and there are carbon capture technologies and hydrogen projects in my electoral district. There are very promising technologies in Alberta, as there have always been, in the field of energy supply, and carbon capture has been one of them.

Short-term is five years and long-term is 10 years. I think we were looking for longer than that. Five years for Europe is now a very long time due to the current situation and the developments in the Middle East.

The question is this: How much can Canada do in five years to invest in carbon capture versus looking at other areas where we don't have any hope—for example, with some other sustainable products that might be available there? Should we bet on only the winning horse and try to invest in areas where the government is sitting in order to achieve this goal?

Mr. Joe Calnan: Something that I'd like to underline is that carbon capture and storage is not exclusive to oil and gas. It's actually a technology that will be required for many different forms of decarbonization. For example, the decarbonization of cement will likely involve the use of carbon capture. The decarbonization of steel is also expected, at least to a certain extent, to be reliant on the use of carbon capture when hydrogen is not an option. There are many industrial applications in which carbon capture could be very useful.

To be frank, carbon capture and storage is a very expensive technology. Currently, it hasn't really achieved the sort of scale that solar panels, wind turbines and other emissions reductions technologies have achieved.

That isn't to say that it can't reach that level. Maybe around 25 years ago, it was unlikely that anybody would have the idea that an electrical grid could be run off solar, because solar panels were for satellites out in space. They were very expensive and very high tech. However, we achieved scale on those and were able to drive down the cost very effectively, and now they're looking like the future of our electricity grids.

Mr. Ziad Aboultaif: Dr. Winfield, would you like to weigh in on this?

Dr. Mark Winfield: I'm somewhat less enthusiastic about CCUS, because we have not seen a demonstration of anything approaching the scale that would be required to make a difference on the climate side. Cost remains a big problem. There are questions about effectiveness and how sequestered things really are.

Then the other big problem is the question of geology. You can't do this in large parts of the country. If you were going to do CCUS in Alberta, it's probably relatively well suited. In somewhere like Ontario or Quebec, geological candidates are, to put it mildly, rather more limited. Those are factors. I'm concerned that we have an awful lot of eggs in the CCUS basket at the moment.

(1800)

The Chair: Thank you. I'm afraid you're considerably over time, Mr. Aboultaif.

We'll now go to Mr. Zuberi. You have five minutes.

Mr. Sameer Zuberi (Pierrefonds—Dollard, Lib.): Thank you, Mr. Chair, for bringing us together, and thank you to the witnesses for being here today.

I want to ask some questions around global stability beyond Europe, with respect to what's happening, for example, in Africa and the Americas with the current war and within the global south. In terms of energy security, what do we see in Africa and the Americas? Can you shed any light on that?

Mr. Joe Calnan: After the Russian invasion of Ukraine and the related spike in energy prices, there were major cascading effects throughout South America and in Africa. Since many countries in both South America and Africa follow policies of subsidizing energy for their citizens—these are very popular policies, and this would be mainly for things like diesel, cooking oil and other aspects like that—African countries were very fiscally interested in cheap energy.

Following the invasion and the spike in the price of energy, we saw dramatic increases in the price of energy that were borne by governments—not just by individual people, but by the governments themselves. Many of these governments came under extreme fiscal pressures. This has led to many governments that were nearing bankruptcy having to approach the IMF and the World Bank for short-term loans in order to cover their losses. The IMF specifically, I believe, has demanded fairly severe fiscal programs to cut back on these sorts of energy subsidies. Of course, whenever any of these countries cut back on these sorts of energy subsidies, they often see riots, protests in the streets and general instability.

For example, in Nigeria, the government was forced to reduce fuel subsidies. There was major instability following that, and major examples of fuel theft, which were actually reducing government revenues even more, since Nigeria is a member of OPEC and has a state-owned energy company. In general, if these rising energy prices are bad for Europe, they're even worse for the global south.

Mr. Sameer Zuberi: Thank you.

Dr. Winfield, if you want to add anything, feel free. If not, that's fine too.

Dr. Mark Winfield: I would emphasize that I'm not an expert on energy matters in Africa. I do think it is important to keep in mind that the capacity of governments in Africa, and certainly in Latin America, to cope in the way that Europe did is much more limited. That leads to greater political fragility. The capacity to undertake the kind of structural transition in energy markets that Europe is pursuing is a huge challenge in Africa or Latin America.

That is part of the reason we have the loss and damage issues in relation to climate change and issues to provide capacity in the global south to try to manage these kinds of transitions.

Mr. Sameer Zuberi: Thank you.

I have a minute and a half or so. I'm curious in terms of Canada's contribution and how we can help the world with respect to shifting to cleaner energy and renewable energy.

Do you have any insight on what we can provide as a country to the rest of the world when it comes to cleaner and renewable energy sources?

• (1805)

Dr. Mark Winfield: There are a number of areas where we have considerable expertise, although we've lost some ground not just on energy sources but also on the energy efficiency and energy productivity side.

We have some very interesting utilities in Atlantic Canada, of all places, that do very interesting energy efficiency work. We had quite a successful program in Ontario as well, until 2019.

We have developed considerable capacities in the development, operation and design of renewable energy technologies and their large-scale operation and integration into energy systems, particularly in Alberta, Ontario and Quebec, and to a certain degree in the Maritimes as well. We have quite a lot to offer in this space beyond raw commodity resources.

Mr. Sameer Zuberi: Thank you.

Mr. Joe Calnan: If I could just jump in on that as well—

The Chair: I'm afraid we're out of time for this round.

We will go to Mr. Garon. You have two and a half minutes.

[Translation]

Mr. Jean-Denis Garon: Thank you, Mr. Chair.

Mr. Winfield, back in March, the European Parliament reached a deal with the Council of the European Union requiring that at least 42.5% of Europe's energy consumption come from renewable sources by 2030, while targeting 45%.

Canada's carbon management strategy is to invest heavily in large-scale carbon capture projects, using public money. That's not a last resort, as was the case for steel and cement. The government is calling for large-scale investment in order to massively raise production—in other words, raise emissions—to then export that production to Europe to supposedly ensure its energy security.

In light of the deal reached in Europe, isn't Canada's strategy completely out of step with the reality in Europe? Aren't we barking up the wrong tree?

[English]

Dr. Mark Winfield: It's not inconceivable. The Europeans are moving very quickly on, and already have moved on, a very large-scale integration of renewables. You're seeing 40% to 50% of energy output in major European countries coming from wind and solar principally. There are other sources as well. That seems to be where the Europeans are heading strategically. They've kind of been burned, as it were, for having relied on an external energy source around their transition.

There's a kind of convergence of climate, energy security and energy transition in Europe, which is quite different from how we are thinking about things in Canada. Their perspective is very much one of a fossil fuel consumer, as opposed to a producer. That has very strongly informed their strategies, with the additional experience of geopolitical risk around this situation.

In Canada, our dynamics are different, but the need to decarbonize is just as imperative. As I've said, I do worry that we have an awful lot of eggs in the CCUS basket. For a variety of reasons, that raises some very significant risks in my mind.

Mr. Joe Calnan: Sir, can I jump in here?

The Chair: Yes, you can, very briefly, for less than 15 seconds.

Mr. Joe Calnan: It's just a comment on the outlook for European energy.

Shell, Total, I believe, and Eni have all signed 27-year agreements to procure Qatari natural gas, LNG, from 2026, which will bring them beyond 2050 in terms of importing LNG. The idea that natural gas would be completely absent from Europe's energy system past 2050 is not true.

The Chair: Thank you, Mr. Calnan.

We next go to MP McPherson. You have two and half minutes.

Ms. Heather McPherson: Thank you very much, Mr. Chair.

I'm going to follow up on some of the questions of my colleague Mr. Zuberi.

Canada has a \$5.3-billion international climate finance commitment that supports developing countries that are, and I quote, "hardest hit by climate change", and it includes a thematic focus on clean energy transition and coal phase-out.

Mr. Winfield, perhaps I'll start with you. How effectively do you think Canadian international assistance is in addressing energy insecurity in developing countries, knowing that the guardrails here are clean energy transition and coal phase-out?

Dr. Mark Winfield: I would have to admit that this is somewhat beyond my immediate area of expertise in terms of where the international assistance has been going.

In general, one would expect the investments to emphasize relatively distributed resources, because they're appropriate in scale and capital intensity in responding to the energy needs in those sorts of locations. It makes sense to be doing household community-level things as opposed to large centralized infrastructures, I think, in many contexts.

(1810)

Ms. Heather McPherson: Thank you.

You also spoke a bit about this massive transition in Europe as a result of, I guess, being weaned off Russian energy.

This question is actually for you, Mr. Calnan. Do you find it strange that there's a massive transition to renewables in Europe and a massive transition to renewables in our development dollars, and yet in Alberta we have put a pause on renewables? Do you find that incongruent in any way?

Mr. Joe Calnan: I don't tend to comment on more political matters, but I'd say that there's nothing that by nature goes.... There's no logical incoherence in having a country that has a significant amount of renewables in its energy system as well as being a major energy exporter in the form of hydrocarbons. Norway, for example, is one of the most advanced countries in the world in terms of decarbonization, and yet it is a major and very strong exporter of both natural gas and oil.

Ms. Heather McPherson: Of course, they also haven't paused renewables, though, have they?

Thank you.

Mr. Joe Calnan: No, they have not.

The Chair: Thank you.

For our next round, members are provided four minutes.

We start off with MP Chong.

Hon. Michael Chong (Wellington—Halton Hills, CPC): Thank you, Chair.

Thank you to our witnesses for appearing.

In March of 2022, Minister Wilkinson, in response to the energy crisis resulting from Russia's invasion of Ukraine a month earlier, agreed to incrementally increase oil and gas exports in 2022 by a 300,000 barrels-a-day equivalent, 200,000 of which were oil and 100,000 of which were natural gas, in order to displace gas from authoritarian states like the Russian Federation. At the time, industry experts—industry executives in Alberta—indicated that they could easily double that number if required. The pipeline capacity and the production capacity were there to do that to 600,000 barrels

I note that at the same time in 2022, President Biden authorized the release of 217 million barrels of oil from the strategic petroleum reserve, which works out to about 600,000 barrels a day.

This year, in effect, the administration turned a blind eye. It was deliberate policy. It has been widely reported in the New York Times and in the Washington Post. The administration turned a blind eye to the sanctions on Iran, beginning in late December of last year and throughout this year, that allowed Iran to increase its

oil production by some 700,000 barrels of oil a day. Now that it's coming to an end because of what's happening in the Middle East, the Biden administration announced last week, on Wednesday, that it had lifted sanctions and issued a permit through the treasury department lifting sanctions on Venezuela to produce what is expected to be about 200,000 barrels of oil a day going forward.

Do you not think that Canada should be supplying these barrels of oil to our closest trading partner and ally in lieu of the strategic petroleum reserve releases, after the lifting of sanctions on a pretty brutal regime in Venezuela and a blind eye being turned to increased output from the Islamic Republic of Iran?

That's my question.

Mr. Joe Calnan: Yes, I'll comment on that.

Certainly the relations between Canada and the United States on energy are a major issue for Canada. That is part of why the Trans Mountain pipeline is very important for Canadian national interests going forward. That's not to say that the United States isn't our best friend, but you shouldn't rely on your best friend for everything.

To take the example of the Keystone XL pipeline, which was—how do I put this?—stopped by the Biden administration on his first day in office, I'd say that at this point—

• (1815)

Hon. Michael Chong: Industry executives said at the time, in March of 2022, that they could easily double up exports of oil and gas under existing pipeline and production capacity, from 300,000 to more than 600,000 incremental barrels of oil equivalent a day.

I guess my question is this: Should we have not, as a country, worked with our closest trading partner and ally to supply them with those incremental barrels, instead of their having to drain the SPR or go to Iran and Venezuela for these incremental barrels?

That's my question.

Mr. Joe Calnan: I'm sorry. I'm not sure if I have the information on why we did not increase production by that much.

Dr. Mark Winfield: We don't control production in that way. I mean, if there's a market there, and a capacity to export, then the commodity is exported—

The Chair: Thank you—

Hon. Michael Chong: I would just say that Mr. Wilkinson did interfere in the market in that way to allow for these 300,000 incremental barrels of oil equivalent a day in order to respond in March of 2022 to the European energy crisis.

Thank you.

The Chair: Mr. Chong, that's over four minutes. Thank you.

We now go to Mr. Oliphant for four minutes.

Hon. Robert Oliphant (Don Valley West, Lib.): Thank you, Mr. Chair.

I want to thank the witnesses for helping us with this study early on. I also want to thank the analysts for the notes for this meeting. I found them very helpful.

I'm putting my old accountant hat on for today. It's the second time in a week. It's scary. I want to start by saying that I'm proud of Canada as an energy producer. I'm equally proud and convinced that we can become a green country with a lower carbon footprint while we produce energy for the world. I am pro pipeline, against other forms of transportation. I am pro helping Ukraine beat Russia in the current conflict. I am pro helping Europe with their energy problem.

All of that being said, I want to follow up on Mr. Garon's questions around the business case. I am actually a profoundly free market person. When he talked about the Spanish company Repsol making a decision to not continue, announcing that exporting LNG from the terminal to Europe was not a viable project, it made me look at the whole issue of the business cases that are involved here.

My question is this: What do you believe the business case is for private sector expansion of energy, given that our goals as a society are also to have a greener future?

Dr. Mark Winfield: That's a complicated question.

Part of the challenge, of course, is that governments are still intervening very aggressively in support of fossil fuels and subsidizing them in multiple different directions. I think there remain embedded policy contradictions in terms of where we're going.

We're not necessarily leaving that to the marketplace. We are still intervening quite significantly in favour of fossil fuels. The estimates on the extent of subsidization of the fossil fuels sector in Canada vary. I see figures of anywhere from \$3 billion or \$4 billion up to \$18 billion a year, depending on how you count. Some people would count Trans Mountain on top of that.

To come back to the LNG aspect, there have been persistent questions about the economic rationale. Certainly, going east doesn't seem to work, very simply, and going west is trickier.

Hon. Robert Oliphant: On that, I'm really struggling with the business case. What was also mentioned were the profits that energy companies have been reaping, particularly since the higher and inflated prices. Is that profit is being being used for the good of Canada? Are they investing in infrastructure? I believe they should be engaged in investing in their own infrastructure. Where are the profit levels? Are they making money? Are we subsidizing? Why would we want to subsidize further when the markets may not actually be there?

Dr. Mark Winfield: I think these are very good questions.

The fossil fuel sector, at the moment, is very profitable. There are very good questions about the targeting of government support and subsidies and where that is taking us and what sorts of pathways it may be embedding.

• (1820)

Mr. Joe Calnan: Could I jump in here as well?

I feel as though the treatment of calculations of subsidies doesn't take into account the fact that Canada's energy industry, particularly

oil and gas, operates under a tax system that is fundamentally different from what applies to most businesses in Canada, particularly when it comes to the royalty taxation that provinces impose on the energy industry. That taxation is a fairly substantial portion of provincial incomes, especially in Alberta, British Columbia, Saskatchewan, and Newfoundland and Labrador.

Royalties-

The Chair: I'm afraid you're out of time, Mr. Calnan.

[Translation]

Welcome, Mr. Trudel.

You may go ahead for two and a half minutes.

Mr. Denis Trudel (Longueuil—Saint-Hubert, BQ): Thank you, Mr. Chair.

[Technical difficulty—Editor] I don't share any of the Liberal member's optimism or agree with his assessment of Canada's energy policy, and I probably wouldn't agree the position of my Conservative friends on the subject either.

According to an article in *Le Devoir*, Canada's fossil fuel subsidies totalled \$38 billion U.S. last year. That was in 2022. According to an International Monetary Fund study, the bulk of that amount is "due to undercharging for global warming and local air pollution."

Even though demand for fossil fuels is expected to peak in the next decade, Canada keeps making gargantuan investments in yesterday's energy.

How do you explain those investments, which, I repeat, are huge?

In 2022, the top five oil companies raked in \$200 billion in profits.

How do you account for the fact that Canada continues to invest this many billions of dollars in an industry of the past?

[English]

Dr. Mark Winfield: I think that's a good question.

My political scientist answer, in part, is that they are institutionally embedded incumbents. They have very close relationships with some provincial governments as well.

I think the underlying question is very valid, particularly in the context of commitments around climate change and energy transition. The continued subsidization of the fossil fuel sector is one that raises an awful lot of questions. There are debates about how you do this and how you account for that.

One also has to keep in mind that visible subsidies are only part of this. As we've been reminded in Alberta, there is also the question of accumulated liabilities over abandoned wells and things like that, which have to be taken into account as well. It's unclear how that's going to be covered, other than, ultimately, through the tax-payers of Alberta.

Therefore, we have to keep a very broad perspective on the different forms of subsidization and support that may occur in a sector. The ones that may be most visible may not be the most important.

[Translation]

Mr. Denis Trudel: A lot of experts say—

[English]

The Chair: I'm sorry, Mr. Trudel.

We'll go to Ms. McPherson for two minutes.

Ms. Heather McPherson: I'm going to reiterate that as my colleague Mr. Oliphant said, I feel like the math doesn't add up. We don't have the infrastructure in place. We simply don't. We can't overlook the fact that attempts to get that infrastructure in place have cost Albertans a lot. Jason Kenney wasted \$1.5 billion on a bet that the Keystone XL pipeline would go through. We're also seeing the industry laying off workers. Right now, Suncor is laying off 1,500 workers in our sector, despite the fact that they have massive profits and continue to increase their outputs. Absolutely, if we had the energy east project and the capacity to do this, there would be a real argument for it.

So far today, I've heard nothing that has changed my mind. We are living in a climate crisis. We have laws in this country, like UN-DRIP. We have provincial jurisdictions. We are a federated system, so I think this whole conversation—which was supposed to be about how to help Ukraine, despite the fact that our discussions have had very little to do with Ukraine today—is problematic, because Canada isn't in a position right now to help Ukraine. We can look back at why we should have been in a different position than we are, but....

Mr. Winfield, is there any rationale for us to be thinking Canadian energy is a solution to helping Ukraine at this point? What am I missing?

Dr. Mark Winfield: The question of how to help Ukraine is a complicated and broad one. At this stage of the game, I would suggest that the energy dimension.... The numbers we're talking about represent very small portions of total global energy supply in terms of oil, for example.

Probably where Canada can help Ukraine the most is in other spheres—diplomatic and otherwise—as I am increasingly concerned that we're not paying enough attention to what is happening in Ukraine and the situation on the ground there because of developments in other parts of the world, in other places.

That is a very broad answer.

I would not argue that the energy dimension is the most central thing in terms of supporting Ukraine at this stage.

• (1825)

The Chair: Thank you, Professor Winfield.

For the final round, each member is provided four minutes, with the exception of Mr. Trudel and Madam McPherson, who have two minutes each.

We start off with MP Epp. You have four minutes.

Mr. Dave Epp (Chatham-Kent—Leamington, CPC): Thank you, Mr. Chair.

Thank you to the witnesses for being here—

Hon. Robert Oliphant: May I just ask how long we're staying?

The Chair: This is the final round.

Hon. Robert Oliphant: We were going to 6:30. Did the committee already agree to go longer?

The Chair: This was going to take 10 minutes, but because there were all sorts of delays—

Hon. Robert Oliphant: But we also have other commitments....

The Chair: So members don't want to do a final round?

Hon. Robert Oliphant: I'd prefer not to.

Ms. Heather McPherson: I would prefer not to. I don't think we should.

Mrs. Sophie Chatel: I think it's scheduled to finish at 6:30, and we should finish on schedule. There are four minutes.

The Chair: Are we all okay?

Go ahead, Mr. Chong.

Hon. Michael Chong: Mr. Chair, why don't we just give a round to the members who haven't had a chance to talk but wish to?

The Chair: That was my initial intention, but it seems that the other members are not in agreement.

Hon. Michael Chong: The clock runs out at 6:30, so we have three minutes left.

The Chair: Mr. Chong, it is already 6:30.

Hon. Michael Chong: No, it's 6:27.

The Chair: I'm looking at the clock.

Hon. Robert Oliphant: I am happy to give Mr. Epp three minutes, even though, on principle, I don't think we should—

The Chair: Okay, Mr. Epp, you get four minutes since that's what I initially said.

Mr. Dave Epp: Thank you, Mr. Chair.

Thank you to the committee for allowing me this opportunity.

Because Canada was not in a position to fill some of the void created with Russia's invasion, or chose not to, sources then were secured from Qatar, Venezuela and other places. Obviously I think we all know the geopolitical risk that's associated there, particularly now with Hamas's actions in Israel, etc., and the risks that could increase there.

Professor Winfield, I'm going to go back to your opening statement. If I heard you correctly, you stated that when Europe continues its path or goes back to its decarbonization process, there was no geopolitical risk in that process. I want to challenge that statement.

Obviously, you've identified nuclear. EV would be part of that whole transition. Where are those critical minerals coming from? Is there no geopolitical risk in sourcing them from Africa or other places? I find that statement lacks a bit of credibility.

Dr. Mark Winfield: I didn't say there would be no geopolitical risk; I said that the European Union is very sensitive to the question of geopolitical risk around energy supplies and other things.

The approach around material flows in Europe is very interesting. We actually just published a study this week on electric vehicle batteries, mostly on end-of-life questions. One of the things that is quite interesting with the European Union is the emphasis on circularity—on recovering materials from end-of-life batteries, for example, and feeding them back into supply chains within Europe—precisely because they are sensitive to these risks.

All of these things are ultimately internationally traded commodities, and that is part of the source of the risk. A particular example is the war in Ukraine, but other factors can be at work that affect the prices—particularly of minerals, for example—that are also beyond the control of the EU, and they're being very—

Mr. Dave Epp: I do want to get one other question in.

I'll go to Mr. Calnan.

Obviously China is a big factor in that other question, but, Mr. Calnan, I will go somewhere else.

You also mentioned that in Europe there was a rapid decline in their use of natural gas. Were other energy sources substituted for that, or did they simply go without?

• (1830)

Mr. Joe Calnan: In some cases, it was substituted. For example, they were able to substitute diesel for natural gas or coal, but in many other cases, it just implied a reduction in industrial output in particular. Most of the declines in natural gas consumption in Europe were from industrial production, and that's mainly because many European countries were subsidizing households for their own natural gas consumption and effectively supporting the market for households at the expense of industry.

Mr. Dave Epp: That hurt their economy.

Thank you, Mr. Chair.

The Chair: Does that conclude your questioning, Mr. Epp?

Mr. Dave Epp: You gave me three minutes, right? **The Chair:** I gave you four minutes. I leave it to you.

Mr. Dave Epp: Thank you very much.

The overall question is this: If our infrastructure had been in place, how much could Canada have helped both our European allies and Japan, which has also come calling?

Go ahead, Mr. Calnan, please.

Mr. Joe Calnan: It depends on how much infrastructure we're assuming here, I suppose.

If we're talking about achieving the level of oil sands production that some people were talking about 30 to 40 years ago, then certainly Canada would be one of the largest producers of oil in the world. Well, we are already one of the largest producers of oil, but we could be producing far more.

In terms of natural gas, we don't have the same sort of natural gas reserves as the United States or Russia has, but we do have a significant amount of natural gas that could have been.... More LNG facilities on the west coast certainly could have been approved. Well, they were approved, but the economics wasn't quite there to allow for all of them to go through. The economics of projects is highly influenced by all sorts of factors, such as the cost of pipelines. Regulatory factors and many different things go into the economics of whether projects will go forward.

Yes, Canada could have been helping a lot more. On the question of whether we could have completely replaced Russia, I don't think that was ever really in the cards, but certainly Canada could have helped more.

The Chair: Thank you very much, Mr. Epp.

At this point, allow me to thank our two witnesses.

Mr. Winfield and Mr. Calnan, thank you very much for your time and for sharing your expertise with us.

If members of the committee are in agreement, can we adjourn the committee?

Thank you.

This meeting stands adjourned.

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