U.S.-Canada Energy Cooperation: A Conversation with Secretary Jennifer Granholm and Minister Jonathan Wilkinson

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FEATURING
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U.S. Secretary of Energy

Jonathan Wilkinson
Canadian Minister of Natural Resources

CSIS EXPERTS
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Good morning, good afternoon. Wherever you are in the world, welcome to CSIS. We’re delighted to be hosting two senior leaders from the United States and Canada to discuss crucial issues and the deep challenges we face in energy and climate change today. We sit at the precipice of at least two energy transitions, as I see it. The unprovoked invasion of Ukraine by Russia has thrown global energy markets into a bit of chaos, turmoil at least, as countries and companies are transitioning away from Russian energy supply – Europe especially.

But that’s caused real challenges. Brent crude prices sit about $100 per barrel, and U.S. gas prices are rising as our European colleagues are paying dearly for natural gas supply. These rising prices create new concerns over energy security, and the realignment that’s driving them away from Russian energy will introduce, perhaps, a new era of geopolitics of energy.

This is happening as it felt like the world was just starting to make progress on climate change. Last fall, after Glasgow, the IAEA reported that if all countries met the targets they pledged, that global temperatures would rise only 1.8 degrees centigrade over the pre-industrial by the end of this century. That would achieve the first goal of the Paris Climate Agreement. Such a projection would have been unthinkable 10 years ago.

So, we find ourselves at this confusing time. Climate action is commencing, but rising energy costs are painful for consumers in developed countries and dangerous for people in developing countries and the poor the world over. The success of climate action will depend on coordinated action, but the extent of cooperation is now uncertain.

We don’t know from our geopolitically riven world will keep seeking mutual benefit in the way that we’ve expected over the last 30 or 40 years. We’re really privileged to have two leaders who are considering these issues, amongst others I’m sure, with us today here at CSIS.

Jennifer Granholm is the 16th secretary of energy for these United States. She was formerly a two-term governor of Michigan and a professor of practice at the University of California, Berkeley. I also heard in my preparation that you’re an immigrant from Canada.

Mmm hmm.

Very happy to hear that.

And Jonathan Wilkinson is the minister for natural resources from Canada. He was elected a member of parliament in 2015 representing North Vancouver, an area near where I grew up here in the U.S. and dear to my heart, Sir.

I’d like to offer each of our guests a few minutes to start us off – comments or reactions to where I started our conversation, the challenges that we face today – and then we can get into a conversation about how our two countries are working together to address some of these challenges, as we look at these major global transitions.

Secretary Granholm, I’d love if you could get us started. What do you see as the principal challenges for the U.S. and Canada and the principal opportunities for our engagement?

Yeah, sure. Thanks so much. Thanks to CSIS for having us. Great to be here with Minister Wilkinson.

So, first of all, I think you started off by saying – by unearthing the global crises that impact
So, you’ve got the war in Ukraine, obviously. I think it’s really, really impacted us. I hope we can talk a little more about that.

Dr. Majkut: Yes, ma’am.

Sec. Granholm: Climate change, another crisis. COVID – and how coming out of COVID and the increasing demand for particularly, in this case, fossil fuels, which is crimped supply, and then supply chains overall. How do we build up the technologies we both want to see to address climate change when the supply chains are constricted?

So, to me, the opportunity is just so powerful to have a North American powerhouse of an alignment on clean energy deployment and technology development. And you know, I mean, I think the previous – a previous prime minister of Canada, Lester B. Pearson, who won the Nobel Prize for Peace, you know, stated that – in fact, I have a quote of his, which I’d like to read because it says, “Of all our dreams today, there’s none more important or so hard to realize than that of peace in the world. May we never lose our faith in it or our resolve to do everything that can be done to convert it one day into reality.”

And I raise that because I think that our – all of our desire for peace in the world so much of that can rest upon our movement to clean energy. As a colleague of ours in Ireland says – the Irish energy minister – says that no country has ever been held hostage to access to the sun or to access to wind. In fact, if we are successful in converting our energy to clean, it can create energy security not just for our individual countries, but around the world. We will not be under the thumb of petrol dictators, so it could be a great peace plan. And that, I think, is a great aspiration.

Dr. Majkut: Well, thank you for that invocation, Secretary. I’m not sure that I would say that the country of Ireland is not hostage to access to the sun, but it’s got plenty of wind. (Laughter.)

Sec. Granholm: Lots of wind. Lots of wind.

Dr. Majkut: Minister Wilkinson, you join us from Canada. You’re in Washington today. What’s the occasion of your visit, and how do you see the – and what’s the message that you’ve brought to D.C.?

Minister Jonathan Wilkinson: Well, I think the occasion of the visit – in fact, Secretary Granholm and I had an opportunity to chat yesterday a little bit about this – is to talk about exactly the issues that you raised in your opening statement, which is energy security and climate change. Those are intimately linked.

You often hear – certainly in Canada you hear, and I assume it’s probably the case in the United States – the two polar kind of views on this, which are energy security has come to the fore. It’s so important you should forget about climate change. And on the other hand, you have voices who say climate change is an existential threat. It’s so important that you should, essentially, forget about the energy security – at least as it relates to helping our friends in Europe.

And at the end of the day I think, you know, what people should expect of their public servants is that we’re thoughtful about these issues. There is a way for us to think about these things as being complementary, that we can work towards addressing the short-term energy security issues that have come out of Russia that are arising from shifts in geopolitics generally. I mean, there are certainly issues that have arisen over the past number of years with China as well that we’re going to have to be cognizant of as we move forward.
And we have worked to address those in terms of trying to increase short-term supply of oil and gas. And we are continuing to do that with partners in different parts of the world. But the transition to a low-carbon future is one that offers energy security, not just to North America but to our European friends as well. You know, people are very focused on the displacement of Russian oil and gas in the short term in Europe, but the voices in Europe are talking about accelerating that transition towards hydrogen and renewables.

And I think we have a lot in North America to offer them in the context of that transition. And we have a lot to offer each other in the context of actually making the steps forward that allow us to be more secure, from an energy perspective, but to make the steps forward also on the climate. And so we’ve talked about critical minerals, and hydrogen, and carbon capture and sequestration, and a whole range of things that North America has in abundance. And there is an opportunity for us to partner to ensure that we can do this effectively and fast.

Dr. Majkut: You mentioned abundance in North America. And I think – you know, I fully accept that we should talk about energy security in perhaps a new way, right, as we’re talking about energy transition at the same time that we have these, you know, short-term price spikes and tightness in markets. But, like, when you think about the U.S. and Canada. Over the last 10 or 15 years, because of technological developments, we’ve really become the – if you group the two countries – the powerhouse in hydrocarbon production and in export, particularly LNG out of the United States.

How do either – how do either of you view responding to immediate or medium-term energy challenges with higher production? And what are the guardrails we should watch out for when we think about not sacrificing climate outcomes, or even trying to improve climate outcomes at the same time we’re acting as a guarantor of our own and global energy security? Minister Wilkinson, is that something that you’re thinking about, from a Canadian perspective?

Min. Wilkinson: Yeah, we absolutely are. Both, I guess, domestically and internationally. We made the commitment to ramp up production of oil by about 300,000 barrels a day by the end of the year in order to actually address this short-term issue. Understanding that at some point the consumption of oil is going to decline as we deploy zero-emission vehicles. But in the short term, we have done that. But we did that in the context of our existing climate plan. Those emissions associated with the increased production are incorporated into our climate plan.

And with respect to gas, I think it’s actually an easier conversation because gas can transition to hydrogen. As long as you’re doing this in a thoughtful way, you’re addressing the upstream emissions with respect to extraction, you’re capturing the carbon as you actually reform the gas into hydrogen. You can actually think about gas as a transitional fuel to hydrogen. So when we look at LNG, and we are looking at LNG in terms of exports to Europe from the East Coast, we think about requiring those facilities to be ultra-low emission, using electricity to do the liquefaction process.

And we look at essentially engagements with European Union, with Germany, with other countries, around a transition to hydrogen. It starts with gas, and eventually it actually moves to hydrogen, to ensure that we’re actually accelerating the moves that we need to make from a climate perspective. But we’re doing it in a manner that is consistent with helping Europe with a very short-term crisis.

And folks in North America, I mean, I think often don’t understand the crisis that they face. Like, we face the affordability issues associated with high gas prices. It is a serious challenge for both Canada and the U.S. right now. But over there, they’re worried about heating their homes in the fall. They’re worried about being able to actually have enough diesel to take...
their groceries to the grocery store. Like, it is a whole different scale of crisis. And of course, Canada and the United States need to ensure that we are looking to try to help them and to respond to them. But it has to be a frame that also is consistent with addressing climate.

Dr. Majkut: Secretary Granholm, you said, I think, last week that we should think about this energy conflict as one that’s winnable with clean energy. That was in your opening comments as well. What’s the timescale for victory when we’re talking about winning a geopolitical contest with clean energy, right? Is that something that happens tomorrow, 10 years from now?

Sec. Granholm: Well, no, of course, it’s – but you have to accelerate today. You have to not let your foot off the accelerator as we are trying to address the immediate. And so really, I mean, to your point that you were saying earlier, this cannot be a zero sum. You have to have it as a both/and – the immediate and continuing to accelerate. So, you know, the president has a goal of getting to 100 percent clean electricity on the electricity grid by 2035.

So that means right now we have got to accelerate the deployment. And we’ve got a motto inside of our Department of Energy: deploy, deploy, deploy. It is – really we’ve got to get the technologies that we know are ready to go out. You know, we want steel in the ground, we want steel – you know, we want, you know, towers for offshore wind off-shore. We want to – and we want to accelerate the technologies that will continue to improve those.

But in the immediate, it is critical. And this is why the president has really pushed, for example, on helping to stabilize the prices globally by using the biggest tool we have, which is our strategic petroleum reserve. And that’s why, since November, he has authorized the release of 240 million barrels. Right now it’s a million barrels per day. You know, the Russian oil that has been pulled offline because, rightfully, of Canada’s decision not to buy Russian oil, our decision, other countries. Now the EU has stepped up. That means up to 3 million barrels per day have been pulled off that global market.

So how do we make up for that, help those – our European allies, but also continue to press on technologies that we know together – Canada and the U.S. – can work on that would help both us as well as our European and allies across the world.

Dr. Majkut: So one of CSIS’s annual projects is a map of energy trade between Canada and the United States. And the depth of our energy engagement is actually pretty impressive. And when you think about the president’s calls for clean energy, market integration and trade in electricity is probably a place where we could be doing more. But one of the challenges is it requires coordinated action on both sides of the border and agreement that that stuff should cross the border, and a framework for that to happen.

I know the IIJA, or the bipartisan infrastructure bill, had mechanisms to help resolve some of the challenges we’ve seen in the U.S., right? Like permitting the lines necessary to bring hydroelectricity down into the northeast from Quebec. There’s equal efforts to trade electricity in the west, in British Columbia, Alberta, Washington, Idaho region. You know, how is it going? Are we deploy, deploy, deploying these tools? And what are the barriers you’ve seen from the Department of Energy side of things?

Sec. Granholm: Well, the barriers have always been – on deployment of electricity, it’s always about the grid and it’s always about the local NIMBY permitting challenges that you see. So what the bipartisan infrastructure law did was give us the tool to be able to put some carrots on the table to see if we can bust through a lot of the challenges that have happened. There’s just a lot of low-hanging fruit in terms of a queue of interconnection, of projects that are ready to go, as well as we know that there is grid opportunity. But a lot of times, you know, as you probably know, grid lines – they’re not built on spec. And so there has to be offtake agreements.
And so the bipartisan infrastructure law allows the U.S. government to take a position of offtake so that those builders of transmission lines can feel some comfort that they are not going to be left holding the bag. And then we get paid back as they fill up the rest of the line. So it’s a revolving fund. It’s a new mechanism that we’ve never used before. In fact, we just announced this week that we are seeking requests for information about how the world likes to see it, and then this $2 ½ billion that we’re putting into those carrots to ensure that we can actually get transmission going.

We were talking about this yesterday. There’s challenges clearly across borders. They – you know, Hydro-Quebec wants to make sure that they are able to deliver, you know, hydro power, and a state votes against it, and that state is a critical state to be able to make that connection to the northeast, it’s extremely frustrating because let’s left in the hands of – you know, of local interests which – you know, we should take local interests into account. But sometimes those local interests are funded by bigger interests that don’t have necessarily the big goal of getting to 100 percent clean electricity in mind. So those barriers we have to – we have to continue to work on and knock down.

But good news is we are totally aligned, and our countries are aligned. And, you know, we feel that the greater the interconnection that we can have between our two countries and, frankly, between Mexico as well – another really important player in North America – those, we’re going to continue to work on.

Dr. Majkut: Yeah. The value of this kind of infrastructure stacks up in the billions very, very quickly –

Sec. Granholm: Absolutely.

Dr. Majkut: – and creates a lot of economic opportunity on both sides of the border. Minister Wilkinson, do you have any comment on the – you know, when you think about energy transition from Canada, you have a – you know, as a – as a climate policy nerd, I’m, you know, jealous of the systems that have been able to have been built up there and how they relate to your goals. But you know, when you think about energy transition, you look at that – the depth of energy trade as it exists today, how do you think about economic integration with the United States 10 years, 20 years hence when we’re all trying to use a lot more clean power?

Min. Wilkinson: Well, I mean, certainly, you know, Canada and the United States do a lot of trading with respect to existing hydrocarbon resources. Somebody was – one of the senators I met with yesterday was telling me that I believe it’s 62 percent of oil that’s actually imported is Canadian oil, into the United States.

But I actually see on a go-forward basis enormous opportunities for us to actually deepen the collaboration on a whole range of issues. And certainly, the transmission of electricity is one. And while there were some issues with respect to the one state that Secretary Granholm noted, there was also an announcement just this week –

Sec. Granholm: Yes.

Min. Wilkinson: – or last week of a contract with New York to actually flow hydroelectric power. So we are making progress.

But I think there’s enormous opportunity for closer partnership on issues around things like critical minerals, which – you know, we cannot have an energy transition without thinking through and addressing the critical minerals issue, and that is certainly linked to the geopolitics. We cannot be dependent for critical minerals and processing on China in the same way
that Germany was for oil and gas on Russia. So there’s an enormous opportunity for us there and we have an abundance of resources, but we need to be thinking clearly about what we are doing, what our American friends are doing, how we’re actually thinking about processing and the downstream manufacturing of things.

There’s enormous opportunities in hydrogen as an energy carrier, and that’s both trade in that particular form of energy but it’s also about energy corridors and linking up hydrogen hubs to help to build the kind of domestic load that will enable us to actually move forward. So there’s a whole range of, I think, opportunities to allow us to deepen the cooperation and the partnership that we have had with the United States over the past number of decades.

Dr. Majkut: Well, I’d love to talk about critical minerals, if we can, for a moment.

Sec. Granholm: Great.

Dr. Majkut: I follow your Twitter, sir. I saw last week or two weeks ago was Mineral Week in Canada. You had this brilliant map of the resources available in Canada – cobalt, nickel, gold, copper, refining facilities. So maybe give us a little bit on how you see and what the – what the plausible tools are for working together to establish, you know, what from a U.S. perspective looks like a more resilient but a very friendly supply chain on the minerals necessary for energy transition.

Min. Wilkinson: Well, I think it starts with actually looking at the resources that we each have available. We have a list of 31 critical minerals. I think in the United States it’s about 29 or something like that. And of course, we have resources of all of those, but we’re not – we’re not in the same position with every mineral in the same way that the United States is not in the same position with every mineral. And so I think we each need to reflect on where we can actually help each other.

So, for example, I think the United States is looking at nickel and cobalt as resources where there are not a lot of domestic reserves. Rare earths may be something that Canada’s actually needing to find a source of from elsewhere. So there’s looking at how we can actually help each other from the perspective of minerals that we require.

But then there’s actually discussions around how those things get processed and where they actually get processed. For some minerals, you are not going to need facilities in every country. And we need to be strategic about this, not just in the North American context but also with our friends in Europe and Japan and South Korea and Australia.

And there’s opportunities, then, in terms of the downstream, where, you know, the battery manufacturing, the electric vehicle manufacturing, other product manufacturing, where Canada and the United States have had a history of robust cooperation. I mean, the Auto Pact has been around since the 1960s and it’s been one example of enormously, you know, successful work that we’ve done together that’s benefited both countries.

Dr. Majkut: Yeah. Secretary Granholm, I know that this is something that DOE has been doing a lot of work on recently.

Sec. Granholm: Yeah. I mean, you mentioned cobalt and nickel, hugely important because we just – our geology doesn’t support as much of that. We have a little bit in Michigan, a little bit in Minnesota of nickel. But clearly, one of the issues we’ve been talking about. And the fact that they have some processing facilities already. We have none in the United States. And so the bipartisan infrastructure law gave us – we just sent out a funding opportunity announcement for actually doing processing in the United States. But we were talking
yesterday, you know, in light of the – for example, the really solid collaboration on autos, why not consider something that is more joint, whether it’s in partnership with the autos and in partnership with one another on processing?

And you know, Canada has got some best practices that we should be looking at. We shouldn’t be afraid of extraction if it’s done in a responsible way as well. And you know, historically – at least recent history suggests that we are – have not been open to it. Canada has been doing responsible extraction and processing. So, you know, there’s lessons but there’s also real partnerships that we can be doing on areas where we really need help.

Dr. Majkut: You know, Minister, one of the things that we do here at CSIS is we think about the political economy of energy transition. We’ve got a small research project on just transition that particularly looks at sort of like state-to-state, regional-to-regional cooperative learning. How does the – you know, let’s take this mineral supply chain, processing, and manufacturing supply chains as an example. How does that slot into, for you, a sense of establishing just transition, making sure that worker retraining programs and other things are done in a socially responsible way?

Min. Wilkinson: You know, the whole conversation around the just transition is an extremely important one. I think there’s actually two components. There’s issues around workers and communities that may be impacted through an energy transition, and then there’s how do you actually engage historically disadvantaged communities in the transition in a way that’s going to be economically beneficial for them.

And certainly, we are thinking a lot about that. We have regions of the country that are more dependent on hydrocarbon extraction than others, but those also are regions of the country where there are enormous opportunities going forward. And so when people talk about the just transition – we’re going through a process of developing legislation on just transition. But the question I often ask is: Transition to what? You need to actually, on a more granular level, at the regional level, be understanding what are the industries that you’re actually looking to pull forward.

And so we’re actually just in the next few weeks going to be launching a process on a – on a province-by-province, state-by-state level where we’re actually looking at: What are the three or four big opportunities for the province of Alberta, where it extracts hydrocarbons? What are the three or four opportunities in Quebec, which has a very different economy? And how do we actually ensure that we’re aligning resources and regulatory and permitting processes and engagement with indigenous peoples in a manner that can actually accelerate the development of these industries and ensure that we know what we’re trying to transition people to?

Certainly, critical minerals is going to feature prominently in many of those provincial conversations. But I would also say that there are – there are – one of the values of this, I think, is we get a chance to paint the picture for people about what the jobs of the future look like. And I will tell you that many of the jobs of the future don’t look very different from a skillset perspective than the jobs that exist today.

If you are developing a hydrogen production plant from natural gas, it doesn’t look a lot different than a refinery. Or a biofuels facility, it doesn’t look a lot different from a refinery. And so I think the opportunities are enormous, but we need to give folks comfort that we actually know where we’re going, and what are the skill-training programs and the community supports that are putting – being put into place to ensure that people successfully make that transition.

And the last thing I will say is we need to ensure that disadvantaged communities – and in
Canada, particularly indigenous communities – are engaged in this conversation. We need to ensure that they are benefitting from projects like critical minerals that are taking place on their traditional territories. We need to find ways from an economic perspective to get young indigenous peoples involved in the workplace. We’re all going to be struggling with the demographic challenges, and for us part of it is ensuring that indigenous peoples are part of this – not sitting on the side, but are actively part of it.

Dr. Majkut: You’ve both mentioned hydrogen. We’re running low on time, but I want to make sure that we cover it.

We have this, you know, hydrogen hubs program here in the United States. It’s going to be making significant investments in sort of trying to seed an ecosystem, is how I might phrase it, for hydrogen. I know that hydrogen’s become a priority for Canada as well. From either of you, what’s the – what’s the sense of how hydrogen actually flourishes, right? Are we going to be buying it from Canada, Madam Secretary? Are we going to be selling it to Canada? Are we going to be working together to sell it to the world? What do you see as the outlook here?

Sec. Granholm: Here’s what I can say, is that I know that all of our counterparts across the world are looking at hydrogen as a major solution for clean, dispatchable baseload power. And so because we don’t – because nuclear is clean dispatchable, hydroelectric is clean dispatchable, and you know, solar and wind, obviously, are intermittent and batteries can help to make them more clean dispatchable, but hydrogen is really hugely promising.

So our effort in the United States, of course, through these hydrogen hubs we have $9 ½ billion that we will be putting out in a competition which will require a match on the part of industry. So that will leverage additional opportunities. People see a whole hydrogen economy flourishing in different parts. And of course, there’s different fuel sets, if you will, for hydrogen. You can have hydrogen that is clean hydrogen from nuclear. You can have clean hydrogen from renewables. You can have clean hydrogen from natural gas.

So, you know, we are looking at all of those pieces. And we also are looking to the future in terms of bringing down the cost of hydrogen. Right now, the reason why the government is stepping up is because we want to ensure, through these demonstration projects, that it can be commercially viable. And that it can be used in a way that it can be exported. So maybe it’s converted to green ammonia, because the existing infrastructure for export, you know, of ammonia is ready to go. So, you know, those questions are going to be answered over the course of the next few years.

But one of the things that we’ve done as well is to say, all right, we’re looking into the future. How do you bring down the cost of hydrogen – of clean hydrogen? You must bring down the cost of the electrolysers that make clean hydrogen – zero-carbon emitting hydrogen. And so we’ve had the hydrogen earthshot, we call it, which brings down the price of hydrogen to $1 for one kilogram within one decade. So both in the present as well as in the future, we believe that hydrogen can be an enormous solution to climate change. And we believe that we will be exporting, and we will definitely be partnering.

It’s one of the areas that we decided we are going to partner on. Yesterday we sent an MOU for partnership on clean energy. And one of the things that is necessary is making sure the standards across countries are similar for hydrogen, so that we don’t have pockets of differing solutions that don’t interconnect.

Dr. Majkut: The flashing red light in in my eye. So I – my heart sinks, but I have to give each of you a brief moment for any final words. My only statement is, thank you very much for coming to CSIS today. Thank you for your service.
Min. Wilkinson: Sure. Well, thank you for the opportunity to be here today. It’s always a pleasure to be with Secretary Granholm. We’ve had the opportunity to talk about a number of these issues over the course of the past months. I think one of the – one of the benefits associated with the energy security challenge is that we have seen, coming out of the Ukraine – terrible Ukraine situation, is that we actually have been having many more of these conversations on an international basis.

And I think that will help us in terms of moving this discussion forward with respect to both short-term and long-term energy security, but also the conversation about how this is commitment – this is connected to a continuing commitment to addressing the climate issue. Which hasn’t gone away. It is an existential issue. I will tell you, my youngest daughter talks to me about it all the time. It is something for her generation that is existential. It is about their future. So I think that Canada and the United States working together can make enormous progress. And part of it is about accelerating that progress, and then working with our partners in Europe and elsewhere to ensure that we’re doing the things that just have to be done.

Dr. Majkut: Great. Thank you.

Sec. Granholm: And in great American fashion, I foot-stomp everything he said. (Laughter.)

Dr. Majkut: Thank you kindly, both. And until next time. Thank you to our audience. We are signing off.