# ENERGY (IN)SECURITY IN RUSSIA'S PERIPHERY



**JULY 13, 2017** 

Briefing of the Commission on Security and Cooperation in Europe

**Washington: 2017** 

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The Helsinki process, formally titled the Conference on Security and Cooperation in Europe, traces its origin to the signing of the Helsinki Final Act in Finland on August 1, 1975, by the leaders of 33 European countries, the United States and Canada. As of January 1, 1995, the Helsinki process was renamed the Organization for Security and Cooperation in Europe [OSCE]. The membership of the OSCE has expanded to 56 participating States, reflecting the breakup of the Soviet Union, Czechoslovakia, and Yugoslavia.

The OSCE Secretariat is in Vienna, Austria, where weekly meetings of the participating States' permanent representatives are held. In addition, specialized seminars and meetings are convened in various locations. Periodic consultations are held among Senior Officials, Ministers and Heads of State or Government.

Although the OSCE continues to engage in standard setting in the fields of military security, economic and environmental cooperation, and human rights and humanitarian concerns, the Organization is primarily focused on initiatives designed to prevent, manage and resolve conflict within and among the participating States. The Organization deploys numerous missions and field activities located in Southeastern and Eastern Europe, the Caucasus, and Central Asia. The website of the OSCE is: <www.osce.org>.

#### ABOUT THE COMMISSION ON SECURITY AND COOPERATION IN EUROPE

The Commission on Security and Cooperation in Europe, also known as the Helsinki Commission, is a U.S. Government agency created in 1976 to monitor and encourage compliance by the participating States with their OSCE commitments, with a particular emphasis on human rights.

The Commission consists of nine members from the United States Senate, nine members from the House of Representatives, and one member each from the Departments of State, Defense and Commerce. The positions of Chair and Co-Chair rotate between the Senate and House every two years, when a new Congress convenes. A professional staff assists the Commissioners in their work.

In fulfilling its mandate, the Commission gathers and disseminates relevant information to the U.S. Congress and the public by convening hearings, issuing reports that reflect the views of Members of the Commission and/or its staff, and providing details about the activities of the Helsinki process and developments in OSCE participating States.

The Commission also contributes to the formulation and execution of U.S. policy regarding the OSCE, including through Member and staff participation on U.S. Delegations to OSCE meetings. Members of the Commission have regular contact with parliamentarians, government officials, representatives of non-governmental organizations, and private individuals from participating States. The website of the Commission is: <www.csce.gov>.

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# **J**ULY 13, 2017

	Page
PARTICIPANTS	
Paul Massaro, Policy Advisor, Commission on Security and Cooperation in Europe	1
Dr. Peter Doran, Executive Vice President and Interim Director, Center for European Policy Analysis [CEPA]	2
Edward Chow, Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies [CSIS]	4
Andrian Prokip, Senior Associate, Kennan Institute; Energy Expert, Institute for Social and	-
Economic Research	$\frac{6}{7}$
Dr. Mamuka Tsereteli, Senior Fellow, Central Asia-Caucasus Institute	11

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### **JULY 13, 2017**

# Commission on Security and Cooperation in Europe Washington, DC

The briefing was held at 3:32 p.m. in room G11, Dirksen Senate Office Building, Paul Massaro, Policy Advisor, Commission on Security and Cooperation in Europe, moderating.

Panelists present: Paul Massaro, Policy Advisor, Commission on Security and Cooperation in Europe; Dr. Peter Doran, Executive Vice President and Interim Director, Center for European Policy Analysis [CEPA]; Edward Chow, Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies [CSIS]; Andrian Prokip, Senior Associate, Kennan Institute; Energy Expert, Institute for Social and Economic Research; Lyndon Allin, Associate, Baker McKenzie; and Dr. Mamuka Tsereteli, Senior Fellow, Central Asia-Caucasus Institute.

Mr. Massaro. All right. Let's get started.

Good afternoon, ladies and gentlemen. Thank you all for coming and welcome to today's briefing on energy security in Russia's periphery. My name is Paul Massaro, and I am the policy adviser responsible for economic and environmental issues at the Helsinki Commission.

Energy security is a crucial issue for the Organization for Security and Cooperation in Europe, or the OSCE.

The availability of energy supplies is a cornerstone of the economic viability of modern societies. There is an undisputable link between energy security and the stability of states in the 21st century.

Today we will focus on energy security in Russia's immediate neighborhood, post-Soviet Eastern Europe and the Caucasus.

Under the presidency of Vladimir Putin, Russia has used its neighbors' dependence on Russian energy supplies as a source of geopolitical leverage and has sought to keep these countries' energy sectors underdeveloped and corrupt.

Ukraine, Moldova and Georgia have all been targets of these tactics and will make up the case studies of today's briefing. Each one has reacted differently to Russia's energy influence, and each has experienced a different level of success. In specific, we hope to learn why the initiatives of these states have had such varied results and mine them for lessons on how best to achieve energy security in the future.

We are grateful to have such distinguished panelists with us here today. I look forward to hearing your thoughts and views on this important issue.

We'll kick things off with Peter Doran, the executive vice president and interim director at the Center for European Policy Analysis, or CEPA, where he leads the center's Energy Horizons program. Peter is a recognized expert on energy security as well as on Russia and Ukraine and transatlantic defense.

Second, we'll hear from Edward Chow, senior fellow at the Energy and National Security program of the Center for Strategic and International Studies, or CSIS. Ed is an international energy expert with more than 35 years of industry experience who has worked in Asia, the Middle East, Africa, South America, Europe, Russia and the Caspian region, so all over the globe.

Mr. CHOW. Not North America, though. [Laughter.]

Mr. MASSARO. Missing that one.

Ed has written extensively on the energy sector in Ukraine and its relationship to corruption in the country, the topic of his presentation today.

Following Ed, we have Dr. Andrian Prokip, senior associate at the Kennan Institute of the Woodrow Wilson Center and energy expert at the Institute for Social and Economic Research. He has authored over 50 peer-reviewed papers and op-eds and three books on energy and energy security.

Next, we have Lyndon Allin, associate at Baker McKenzie. Between 2011 and 2016 Lyndon spent five years working for the OSCE as a political officer in Moldova on various issues, including corruption, and in the energy sector. He was also previously the IREX embassy policy specialist for Moldova.

And finally, we have Dr. Mamuka Tsereteli, who joins us from the Central Asia-Caucasus Institute at the John Hopkins University School of Advanced International Studies, SAIS, where he is a senior research fellow. Dr. Tsereteli teaches classes on energy and security in Europe and Central Eurasia at American University and John Hopkins University.

Once all briefers have spoken, we will conclude with a Q&A session.

I'd like now to give the floor to our first panelist, Peter Doran, who will provide us with an overview of energy security in the 21st century, both generally and in the regional context of the post-Soviet space. Peter, the floor is yours.

Mr. DORAN. Thank you very much, Paul.

Before we get started, I absolutely want to thank you for the invitation to come here and speak and certainly for the Commission itself for targeting this issue and this question for discussion.

And the task before me today is actually to set up in many ways the scope of what we will be discussing today. Frankly, I think anyone here on this panel could probably do this and possibly even better than I. But I thought I would zero in on two specific points, the good news and the bad news, when it comes to energy security or insecurity in Russia's neighborhood.

By way of a little background, my organization, CEPA, the Center for European Policy Analysis, is the only U.S.-based American think tank dedicated exclusively to the countries of Central and Eastern Europe. We exist with a very clear mission, and that is to promote an economically vibrant, geopolitically secure Central Europe with close and enduring ties to the United States.

This is important in the context of energy security because without energy security, you cannot have countries that are economically vibrant or geopolitically secure. And their links to the United States are often tenuous at best. This has been enduring dynamic that we have engaged in for many years.

And when speaking on energy security in this part of the world, I often like to present a little thought exercise, especially for American audiences, in order to understand the true nature of the tensions and dynamics that countries in Russia's neighborhood must face, or at least have faced. I often invoke the idea of imagining the citizens of Denver, Colorado, having to chop down trees in their own public parks in the middle of winter because Mexico got into a fight with Canada over the shipment of natural gas deliveries. For many Americans, this seems like a mind-blowing, almost impossible scenario, but that is exactly what happened to the residents of Bulgaria when we saw the pivotal Russia-Ukraine gas dispute back in 2009.

Fast forward to today, and the game board is fundamentally changed. Europe has improved. Energy security at the tail end of these pipes from Russia has gotten remarkably better. The regulatory environment has improved, thanks to efforts like the Third Energy Package, which we can talk about, to make downstream customers further west in Europe more resilient and have more options to Russian gas imports. This is not necessarily the case for countries closer to Russia.

And here I think it is important to make our first important point. The energy world, though, is changing. Many of the talking points of politicians are fundamentally out of date. The old saying, if we recall, that we just can't drill our way to lower gas prices proved to be false. Russia's outdated monopolistic pricing business model is outdated. And given changes in the wider energy sphere, thanks to the abundance of new energy sources, we're even approaching a point where even mighty Saudi Arabia may someday encounter a situation where they run out of new customers for their oil before they ever run out of crude.

If the first point here is that we were bad and we're getting better, that's an important one to digest because we are now approaching something that would've been hard to imagine back in 2009 during the Russia-Ukraine gas crisis. And that is this: The world of energy scarcity is fast becoming something in the rearview mirror. The world of energy abundance is fast becoming the new normal. And that is a game-changer for Russia's neighbors on the question of energy security.

And the signs of this transformation are already underway. Many of us have already seen how Poland has just received the first shipments of liquified natural gas [LNG]. A similar dynamic is underway with Lithuania and the Baltic states. And even Hungary and Croatia have just signed a breakthrough agreement that will make possible the overland shipment of LNG to Hungary from an Adriatic entry point.

All of this is the good news. Now for the bad.

The bad news is that Russia is not taking this game-changing market shift lying down. Russia is fighting back, and it is fighting back through a very specific vehicle that has immediate ramifications for the country of Ukraine. And that, of course, I'm speaking of the Nord Stream 2 pipeline.

Now, we will probably talk a bit about the Nord Stream 2 pipeline, but I would put forward this: The Nord Stream 2 pipeline is not a commercial pipeline. Nord Stream 2 is a political pipeline with strategic ramifications for Ukraine. It is important for the Commission and members of the audience to remember: Right now Russia is in a military conflict with Ukraine. If it can complete Nord Stream 2, Russia is in a position to deny billions of dollars of transit revenues to Ukraine equivalent to around 10 percent of the annual Ukrainian budget. If money is the muscle of war, the ability to deny your opponent in war of the money to continue a fight against you—well, if Russia succeeds at that, that would give Moscow a tremendous advantage. This is the ultimate upside for Russia for Nord Stream 2.

It is also why it should be relevant for considerations of the Commission as well as U.S. policymakers, because if the United States is committed to advancing downstream energy diversification and free-market principles in Europe, promoting and supporting the independence of Ukraine, and being a leader and offering energy alternatives to monopoly suppliers like Russia, then pushing back against Nord Stream 2 has several significant advantages to what are core U.S. interests.

So if the good news for many of us is that energy is becoming more abundant, the bad news is that old monopolies are resisting this and finding ways to push back against it. I think it is a sobering takeaway that there is no time here for the United States or Europe to take this lying down or to assume that things will work themselves out if we stand on the sidelines. This is not a time for the United States, the Commission or anyone who cares about the things that matter to be assuming that doing nothing will produce good results.

Mr. Massaro. Well, thank you very much, Peter, for that great intro and an eyeopening analysis of what's going on in the world of energy security. I particularly love that analogy. I'll be using that one with my parents this weekend, I'm sure. [Chuckles.]

So next we have Ed Chow. Please, Ed.

Mr. Chow. Thanks, Paul, and thank the U.S. Helsinki Commission, as Peter said, for sponsoring this meeting and this briefing.

I guess I come to this from a slightly different perspective than Peter. I don't disagree with what Peter says, and he might even agree with me, that structural reform of the Ukraine energy sector is central to meeting the challenge that Russia does pose to Ukraine.

So let's review a little bit about what has happened in Ukraine since independence more than 25 years ago now. You have the legacy of the Soviet Union. And it's not just a matter of pattern of trade or infrastructure that preserves that pattern of trade but also a highly centralized and therefore political allocation of energy assets and energy supply.

An underdeveloped market economy in energy—so you don't have the market mechanism, for example, of market clearing pricing formulation, no security of property rights, or obligations, for that matter. And you have a terribly nontransparent system.

So the legacy for Ukraine is you have the highest energy-intensive economy in Europe—energy intensity right after independence that remarkably is a higher energy intensity than Russia itself. It has about twice the energy intensity of Poland, which—rather similar structural economy, highly dependent on gas imports, in spite of the fact that Ukraine enjoys favorable geology. Up until the 1970s, Ukraine used to export gas

to the Russian Republic. So there's nothing particularly under-resourced as far as Ukraine is concerned.

It also had tremendous transit advantage. Eighty percent of Russian gas going to Europe transited through Ukraine. That leverage has been eroded over time mainly because they've been hijacked by corruption at the highest level of Ukrainian Government. We're talking about presidents and prime ministers, not low-level petty corruption. We're talking about billions of dollars of economic rent that's been extracted by Ukrainian politicians from the energy sector.

You have political allocation of cheap energy and division of energy assets under control of various oligarchic groups. I have written elsewhere and I've said that Ukraine energy corruption is, in a way, the original sin of Ukrainian independence. It's easy enough to blame Russia. And there's plenty of blame to be placed on Russia: Russia seems to prefer weak and dependent neighbors rather than economically strong neighbors. But it's also been facilitated by the Ukrainian political class.

We've had a missed opportunity, the Orange Revolution, more than 10 years ago now, when vested interest groups in the energy sector became more entrenched, not removed. And of course energy corruption expanded to outrageous levels under Yanukovych.

Ten years after the Orange Revolution, we have a second golden opportunity called Euromaidan. And it's an opportunity not to be missed. There's no longer any disguising that Russia, at least under the current regime, is a threat to Ukraine.

The results of the current reform process is, shall we say diplomatically, incomplete. It still suffers under the lack of transparent regulation or market competition. No market competition, no transparent regulation. This results in the preservation of the incentives for corruption. Political change means reshuffling of the deck of energy assets rather than changing the business model altogether. So you continue to have energy inefficiency and shortages, chronic underinvestment in the energy sector because the market players are focused primarily on rent extraction, not value creation.

The difference is that Ukrainian society has fundamentally changed. Ukrainian civil society has changed. The population's expectations of economic outcomes have changed, even if the politicians' expectations have not. The old game is no longer acceptable to the general population. There will be a political cost to be paid if this continues.

The upside on energy sector reform is that Ukraine can very easily be self sufficient in energy. In fact, it can contribute towards European energy supply by higher efficiency gains in the domestic economy as well as higher domestic production.

Reform of the energy sector, which is going to be difficult, will release economic value, unlike, say, reform of the education sector or the health sector, which are equally corrupt but will cost money. The reform and restructuring of the energy sector would actually generate income for the government.

The transit leverage I'm afraid is gone forever. Given the adversarial relationship between Russia and Ukraine and Russia being the only conceivable shipper, it's only a matter of time before the transit leverage disappears altogether. And we can have a separate debate about Nord Stream 2 in the Q&A section.

Mr. Massaro. Looking forward to it.

Mr. Chow. What can the West do to help?

I would say the first thing is conditionality of Western assistance is very important. The reforms that have taken place, as limited as they have been, has been the result of

Western conditionality on economic assistance. I'm not particularly happy with today's news that the IMF is apparently taking land reform legislation off the table as a conditionality for the next tranche of IMF funding. But in the energy sector, that pressure needs to be sustained, in my view.

But beyond that, we need to help Ukraine with capacity building. It's not just a matter of money. It is the capacity to modernize policymaking in energy as well as business practices in energy.

I think there's been way too much made about U.S. energy dominance; that's the buzzword of the last couple weeks in Washington. U.S. energy exports is not a substitute for structural economic reform in Ukraine.

It means that we have to engage civil society, which is the strength of the Ukrainian society, it seems to me, to support the process of reform and not just individual political leaders. Now, that's hard. That's very hard in our system because we tend to identify with personalities in our policy. But it seems to me that that's really inescapably important.

Without fundamental reform, there will be no major direct foreign investment in the Ukrainian energy sector. Ukraine will continue to attract the bottom fishers of the international oil and gas market as well as domestic rentiers. And so maintaining the momentum on reform is really critical in my mind. Reform is a little bit like rowing upriver: If you're not moving forward, you going to go backwards. That's an old Chinese saying, by the way. [Laughter.] So that's my recommendation—Washington should be keeping its eye on as far as Ukraine is concerned.

Mr. Massaro. Excellent. Well, thank you very much, Ed, for that very insightful overview of the original sin of Ukraine. I also really appreciated the emphasis on civil society. In my own readings and research, I've seen again and again that Ukrainian civil society is it. That's the comparative advantage. That's what we need to be focused on, and that's what they really have going for them.

So with that, I'd like to hand it off to a Ukrainian, Dr. Andrian Prokip. Thank you so much.

Dr. Prokip. Thank you. Thank you, Paul. Thank you, the Commission, for talking about such important issue. And that's an honor and pleasure for me to talk here today.

Mostly, I agree with previous speakers. They were talking about extremely important and interesting issues.

So briefly talking about Ukraine: A lot was done during the last three years. Necessary laws on energy markets were adopted. Energy supply started to be diversified. Being diversified, there was changing approach to pricing for final consumers. But much more, more, more and more have to be done in the nearest future in very quick way.

So energy reforms on the track, but those are too slow, and those are going too slowly. Necessary laws and amendments still were not adopted, not voted in the parliament. And those which were already voted still are not implemented at full extent. There is no significant increment in inland gas production. Country is still relying on foreign gas supplies. And I must say that the regulation regarding improving the conditions for gas extraction in Ukraine still wasn't changed. And beside this, country has got new problems with coal.

Another problem that is for Ukrainian energy, the cyberattacks. In the end of 2015 there was the first actually big successful cyberattack on Ukrainian energy which led to

blackout. And two weeks ago we had another attack; there was no blackout, but main energy companies were affected.

That's very important for Ukraine issue, those pipelines bypassing Ukraine, Nord Stream and Turkish Stream. And I agree that probably transit leverage will be lost in the future. And sure, that is a threat for Ukraine. That is a problem because interdependency between Ukraine and European Union will decrease, and that mean less interest in Ukraine for European Union, and that means more leverages for Russia to destabilize the situation.

But besides gas, Ukraine is also an important transmitter of coal and oil. And the situation is also not very good because Russia plans to bypass Ukraine in those supplies too. And in this case, I must say that in Ukraine, there is a perception that Nord Stream 2 is a great problem and threat for European Union, but actually, for European Union, it's not so big threat as Ukrainians think. And Ukrainians expect that Europeans will solve this problem. For me, that's not a good strategy.

So, talking about main threats in Ukraine—in the field of Ukrainian energy security, those are unpredictability of actions of Russia Federation. That's looseage of the status of important energy transmitter of gas, coal and oil. It's a lack of strategical vision in energy development for future. Those are non-transparency, and those are corruption, and those are inefficiency of regulators, including energy regulators. Those are depreciation of energy assets. Those are issues of affordability of energy services for final consumers and subsidizing of energy consumption. Extremely high energy inefficiency in the country; however, there are some objective reasons for this. Cyber threat. Problems with access of Ukraine to enter site extracted—located in Donbas. And extremely important problem and threat for Ukraine is relying on others when thinking about energy problems and energy security. So it's relying on U.S. It's relying on European Union. And it's postponing in taking steps inside Ukraine that would affect very good.

So I'm sure that the country should implement reforms very quickly. And a kind of help from outside, from European Union, from U.S., is desirable, but that is the help of giving advice in controlling the government, because government, president, parliament—because in some cases that is the only one leverage to pressure on authorities to continue implementing reforms.

So that was briefly about current status of energy security in Ukraine.

Thank you.

Mr. MASSARO. Excellent. Thank you very much, Andrian, for that in-depth look on what's going on there.

We would now like to move to the other two case studies, moving on from Ukraine, to talk about energy security in Moldova, another country in Russia's periphery, and Georgia. So first of all, we'll speak about Moldova. And I'd like to hand the floor to Lyndon Allin. Thank you so much, Lyndon.

Mr. Allin. Thanks a lot, Paul. And I want to thank you and the Commission for giving me the chance to speak here today. Interestingly, the last time that I spoke at one of these public briefings was almost six years ago to the day, and the title was I believe "Thawing the Frozen Conflict in Transnistria." Well, today I'll be talking again about Transnistria a little bit certainly because energy issues in Moldova very much implicate that protracted conflict. And now we have another protracted conflict which also has its own interesting energy issues in Ukraine, unfortunately.

I want to just provide a slight amendment to the kind introduction that Paul provided. When I was at the OSCE mission to Moldova and had the honor and privilege to serve there, my portfolio actually did not include economic and corruption issues. It's something that I certainly follow quite closely because there's quite a nexus with politics around those issues. But the OSCE mission to Moldova actually does not officially have a mandate to cover economic issues, which is I would say a longstanding and quite unfortunate deficiency because so many of the issues in that conflict are economic.

But let me turn to the topic of the day, energy security in Moldova. According to one recent authoritative publication, Moldova is among the most vulnerable countries in the world in terms of energy security. There's actually a private analyst firm that has assessed that Moldova is the ninth most risky country in the world in terms of short-term energy security. So that's—[laughs]—that's not great, not great company to be in. And of their total energy consumption, 98 percent is imported. And if you then consider electricity generation, which I will come to a little bit later, for the entirety of Moldova 70 percent of the electricity is generated in Transnistria. So that's quite some challenge for the folks in Chisinau to ensure that they're able to keep the gas-fired things fired and keep the lights on.

As with so many things having to do with Moldova, the problems are related to geography and history. If we look at the way the pipe goes, I would not purport to be as much of a specialist in the way pipes go as some of the folks on this panel, but one thing I do know is that Moldova has been lucky in the sense, for now, that Gazprom doesn't really have the opportunity to shut off the supply to Moldova because the pipe that goes through Transnistria and Moldova supplies a lot of consumers downstream. Now, what I understand to be the case is that if and when Nord Stream 2 and the southern project—I believe it's called TurkStream—are completed, then that would be a chance to do that. So that's something to look forward to. And I agree with Peter that, I think as with many energy infrastructure projects, there's a high political element, really, to any strategic energy infrastructure project just because the upfront outlays are so high.

So the options that have been considered in terms of gas for Moldova have been an interconnector with Romania. There has been a low-capacity interconnector opened in 2014. It is not able to meet anywhere near the full needs, but there is the hope that they'll be able to build up the transmission network around the interconnector in a way that would allow it to be a higher-capacity way to get gas into Moldova from the west, and not only from the east.

The other interesting issue—actually, I'll come to that later. In terms of own gas, there is a hope. At least an American company called Frontera Resources has the belief that there may be shale gas in Moldova, and in January of this year they signed a concession with the government of Moldova giving them exploration rights for a substantial portion of the country's territory. So it'll be interesting to see how that develops.

When we talk about the gas that comes into Moldova and the gas that Moldova sometimes struggles to pay for, it's critical to talk about the gas that goes to Transnistria. It would be interesting to see a study of the energy intensivity, if that's the right term, of the Transnistrian economy broken out separately. Certainly, I would posit that at the beginning—because it was similarly developed, on a much smaller scale of course, as Donbas as a sort of industrial center.

So what's happened over the years—and you'll see this figure referred to, frequently growing over the years—is that because Gazprom has continued to deliver gas to

Transnistria without requiring that that gas be paid for, the total debt—and it's disputed who is on the hook for that debt—Moldovagaz, and probably not the Moldovan state—that number is now over \$6 billion, which is quite a large amount for Moldova. Where does that money go? Well, first of all, that number is not necessarily a real cost number. So we have to think about how is that subsidy—because, in effect, it's one of the—probably the most important way in which Russia subsidizes the existence of Transnistria.

That gas, though, has to be monetized. So how is it monetized today? Today it's monetized through one of—in part the way it works is Tiraspoltransgas delivers natural gas to residential and industrial customers, charges the rates that it charges—highly subsidized low rates for residential customers; individually negotiated rates for industrial customers, which I believe are generally still lower than the—almost always still lower than the prices on the right bank or in Europe—and that money goes into an account called the gas account.

There's been some great work about this by some guys at IDIS Viitorul in Moldova, and I'll—if anybody's interested, I can send you the link to their recent study, which is fortunately in English, tracking the amount that has sort of accrued over the years. And so a number of years ago, when I discussed this with a Transnistrian de facto official, he said, oh, well, this is a way that we use to sort of fill in holes that we have from time to time in our budget, but more and more it's become actually a key way of making up the Transnistrians' budget. So a very, very important subsidy.

And the biggest source of gas revenue is the power plant that does produce some 70 percent of Moldova's electricity. That's called Moldova GRES. Sometimes it's referred to by Kuchurgan, the village that it's located in. It's owned by Inter RAO, which is a subsidiary of RAO UES. And it was originally designed to power all of the Moldovan SSR and parts of Romania, parts of Bulgaria, parts of Ukraine, so it has a huge capacity. So even though at the moment I think only 9 of 12 turbines are operational or something like that, it still has quite a substantial capacity to export. And it's exported to Romania, even, from time to time.

So what's been going on there is, up until April of this year, Moldova GRES was the exclusive supplier of imported electrical energy to Moldova. And last year, there were some—I'm not blowing anybody's cover here—there was very good investigative reporting that demonstrated that the pricing and the payment for that electricity involved some intermediary companies, which allegedly were linked to political figures on both sides of the revenue stream, both Tiraspol elites and Chisinau elites. That caused a bit of a stir. And in April of this year, when the tender came up, the tender for that imported electricity supply was won by DTEK, a Ukrainian company. A lot of folks saw that as a victory over this less-transparent pricing scheme, and a victory in the sense that it would not mean effectively subsidizing the budget of Transnistria. However, what's happened in the past month or two is that—and a number of sort of more-knowing people at the time said that this would happen—is that the Moldovans have begun purchasing again some electricity from the plant in Kuchurgan, from the Transnistrian plant. This may seem all like very minute details, but it is a very—I think a fantastic case study in the way in which energy security, geopolitics, and corruption and non-transparent procurement sort of roll into one in this region.

With electricity, there's also a plan to try to connect to the Romanian grid. That's a technical challenge and it's somewhat costly, although that is in process.

Let's see if there were any other key points. I don't want to take too much time.

Oh, yes. Also, if we consider the scenario under which Ukraine does supply Moldovan electricity, it's important to note, again, Kuchurgan power station [MGRES] and its sort of—the Soviet legacy of interconnected energy networks, that's the history part. And the geography part is that from Ukraine to Moldova, six of the seven high-tension electricity transportation wires go through Transnistria, and four of them actually go through the circuit at MGRES. So, in theory, it would not be good for the circuit because it's all, experts have told me, harmonized, and if you cut a part of it off it doesn't do well; the rest of the grid has instability. But in theory, this is an energy security issue for Moldova in the sense that Transnistria could cut that switch at some point in some kind of an escalatory thing.

In terms of recommendations, I won't be as ambitious as some, although I would agree with one thing that Andrian said about Ukraine, which is that in Moldova, like in Ukraine, there needs to be more of an effort to solve their own problems and not only look to foreign partners for the solutions. Funding, sure. Advice, sure. But there is a fatigue level with folks not solving their own problems, recognizing that these are difficult problems.

One of the recommendations that the IDIS Viitorul study put forward was that this figure, the \$6 billion plus figure of the gas debt that's often thrown around, that there be some kind of an audit of that figure. They claim that some of the amounts that have accrued there were actually gas that was paid for, gas that was not used in Transnistria but was used on the right bank, that the prices that were applied in calculating that debt may not have always been correct. That's an interesting proposal if Moldovagaz would be interested in opening its books for that.

And also, certainly, I think this is probably just almost a generic point in any energy security presentation, right—diversification of supply. I know that there is a wind power initiative in Moldova. I believe there are other sorts of renewable initiatives that are taking place there. You know, that obviously would be nice to increase the level of self-sufficiency from 2 percent currently.

That's all. I'll be happy to take questions and discuss further in the Q&A.

Thanks.

Mr. Massaro. Absolutely. And I'm sure we will have questions, seeing how complicated that all is. Very, very, very difficult to understand, especially for someone that hasn't spent a lot of time with the issue. We're very lucky to have you on the panel.

Mr. Allin. Slides. I wish there were slides.

Mr. Massaro. [Laughs.]

Mr. Allin. A lot of times you need a picture for this thing.

Mr. MASSARO. Yes, absolutely, absolutely. Well, thank you very much.

We'll now go to our final briefer, who will talk about the case of Georgia, a country that's generally thought to have achieved a modicum of energy security in Russia's periphery. So, with that, I'll hand it off to Dr. Mamuka Tsereteli. Thanks so much.

Dr. TSERETELI. Thank you, Paul.

Thanks to Helsinki Commission for organizing this timely event in times of some uncertainty of internal political process and Russian meddling in internal political process in the U.S. I think focusing on major issues and important issues is a priority.

One clarification: Central Asia-Caucasus Institute is no longer part of SAIS. We are part of American Foreign Policy Council, which is closer here. We decided, in these times of uncertainty, to move closer to the Capitol Hill. [Laughter.]

I'll make a couple of general points and then I'll move to the case of Georgia. I think we all agree that the Russian Federation has a strategic intent to limit the sovereignty of the countries of its neighborhood at all costs, and to maintain control over the foreign policy priorities of these countries. Russia uses an entire arsenal or spectrum of means to achieve this strategic goal, and this spectrum includes manipulating and then acting as an intermediary in the conflicts that Russia instigates and initiates; corruption of officials and manipulation that leads to high debts and consequent transfer of ownership of assets to Russian entities in the energy industry and infrastructure; economic blockades; military invasions like in Georgia in 2008 or Ukraine 2014,; annexation of territories like open annexation of Crimea—in Crimea's case and creeping, unheeding annexation in the case of Abkhazia and Tskhinvali Region in the case of Georgia.

Any weakness of the countries of Russia's neighborhood gives Russia, obviously, an opportunity to manipulate and take advantage to advance its objectives. Corruption is one weakness that Russia usually utilizes. I think the cases presented here are a real demonstration of that. But I think we should admit that that's also a reflection of those legacies of Soviet times, but even pre-Soviet time legacy of the Russian empire to have this corrupt practice.

In terms of energy security, I think all countries that are discussed here, they and other countries in Eastern Europe inherited two major problems. One is Soviet-style governance, with corruption at the core of major decision making, allowing easier access to infrastructure, free and lower prices for selected enterprises, special treatment of those selected enterprises connected to government officials and influential politicians, and so forth. And second, the energy infrastructure made all of these countries dependent on Russian energy sources because that's, again, a legacy of Soviet times.

Since the collapse of the Soviet Union and the independence of these countries, it was imperative for all these countries to get rid of these two major problems: infrastructure dependence, as well as governance issues. The Western institutions in assistance, as well as investments of Western companies, had a very important role to play in this process. But their efforts only could succeed if governments have political will to reform and implement those reforms.

All three countries of today's focus had identical systemic problems of the energy industry since the early 1990s. That's culture of corruption, non-payments and low collection rates by the state entities, attachment to Russian suppliers, operational inefficiencies, and so forth.

So let's review briefly the case of Georgia. I think there are several points that I'll make. Determination of the leadership of the country since the early days of independence to 1990s to closely corroborate with Azerbaijan and other major oil- and gas-producing countries in the Caspian region on development of market access infrastructure is another important element. It was an opportunity to put Georgia on the map of the major global energy companies, but also to diversify its sources of energy and to reduce dependency on Russia.

Working with international financial institutions on creating the environment for foreign companies to operate in the Georgian energy sector was another important issue. Already in 1998 Georgia privatized the electricity distribution business. In Tbilisi, the capital city, the electricity distribution business was required by AES Corporation, an American company. And in very difficult circumstances and environment, the company started to implement very serious reforms, changing culture of non-payments and so forth, which is still existing in many, many other places. We can review the case of AES a little later if there are some questions.

Natural gas supply was a major issue at that time, and Georgia was solely dependent on Russian gas. And this factor was used several times by Russia to exert pressure on Georgia for gaining political benefits. There were cuts of supplies and so forth. Couple this discontent with the existing corrupt and dysfunctional governance at that time led to change of the government in 2003. The popular support for anticorruption measures and other reforms allowed the government to eliminate many regulations and licenses, and to conduct major reforms in police, education, government services, and the energy sector. Those are the sectors that were mentioned by Ed earlier as well. The new government had a mandate from the population and the political will to act on anticorruption measures in all those areas. And, by the way, they used that mandate very forcefully, sometimes too forcefully.

The new wave of reforms in the energy sector eliminated subsidies to industrial electricity users, liberalized prices for electricity, and eliminated any preferential treatment of the industrial facilities. Only entities who were paying their bills were able to receive electricity, and this allowed flow of money into the system. Again, Ed was mentioning that. And investments necessary for necessary repairs, upgrades, and new developments became possible with that funding coming into the state system.

In two years between 2004 and 2006, Georgia eliminated blackouts and every electricity user—by the way, prior to that some users—residential, hospitals, bakeries, others—were receiving electricity for only two or three hours per day. And in two years, between 2004 and 2006, Georgia eliminated blackouts, and every paying electricity user—residential or commercial—was able to have 24-hour electricity supply.

Mid-2000 was also the period when Baku-Tbilisi-Ceyhan oil pipeline started to operate. And then, 2007, the so-called South Caucasus natural gas pipeline also became operational. Since 2008, the major source of natural gas supply of Georgia has been Azerbaijan, thus eliminating Georgia's critical dependency on Russia.

Georgia continues the process of institutional integration, institutional reforms and institutional integration with European institutions. Georgia is signatory of association agreement with the European Union, signed in 2013, as well as a different comprehensive free-trade agreement also signed in 2014, finalized. Georgia has free-trade agreements with Turkey, other neighbors, and recently signed free-trade agreement with China, and is one of rare countries that has free-trade agreements with China at this point.

The point I'm making with this is that countries trying to [win?] institutional reforms and openness for trade and investment tries to integrate in global economic system, and energy reforms and energy security is a very integral part of that process.

I would like to end my brief comments on one, in my view, one very important issue. I think more needs to be done in terms of looking at the Black Sea area from the energy security perspective, and the interconnectivity of the countries in the Black Sea, both eastern shores and western shores. Several pipelines we have mentioned here, like TurkStream and some others, competing pipelines to the pipelines that are developing for

some time already and in the final stages of implementation, that system of pipelines that will connect Shah Deniz field in Caspian Sea all the way to Italy, passing through seven countries.

But as we see, Russia is trying to use its tools. That includes, obviously, diplomatic means, negotiations with the Turkish Government as well as the European Union, some of the members of European Union countries. I think in this environment, it's absolutely crucial and essential to focus more on—again, on the Black Sea connectivity in terms of energy. There are multiple options that exist that I think we should focus on them for the interest of particularly Eastern European countries, and Ukraine as well. I think that will help us to eliminate this long discussion of lack of natural gas. If we manage to build a pipeline from Turkmenistan via Georgia—Azerbaijan/Georgia—to the western shores of Black Sea—and under the circumstances, again, that Russia is discussing all those pipelines crossing Black Sea—I think it's feasible—at least technologically, to have this discussion. That would eliminate for good long-term discussion about Eastern European countries have alternative supply of natural gas coming from the Caspian region.

And also, this is only possible if there is a security dimension enforced in the Black Sea areas as well, because we know Russian presence increased in Crimea and so forth. And without that element being in place, this will remain, as we call it, a pipe dream.

Thank you.

Mr. MASSARO. Well, thank you very much, Dr. Tsereteli, for that fascinating overview of the Georgian energy security. Georgia remains such a hopeful example of what can happen in countries in the post-Soviet space.

You actually beat me to the punch in the Q&A session. My first question I wanted to ask about is Azerbaijan, and that's fascinating that you bring up how important the Black Sea area is. So we'll go ahead and move on to the Q&A session, and I'll start with one question.

Over the past decade, Azerbaijan has played a key role as an alternative energy supplier for the post-Soviet region. During the winter of 2006–2007, when gas exports to Georgia were halted by Russia for political reasons, Azerbaijani energy supplies helped to counter Georgian dependency on Russian energy supplies. Today, the Baku-Tbilisi-Ceyhan pipeline, as you state, the Baku-Tbilisi-Erzurum pipeline, and the Southern Gas Corridor pipeline are considered central to Georgian energy policy.

Azerbaijan has also stepped up cooperation with Ukraine since the outbreak of the conflict with Russia. According to official Ukrainian sources, during the first five months of 2017 Azerbaijan supplied 83.4 percent of all crude oil imported by Ukraine. Indeed, Ukraine's ambassador to Azerbaijan, Alexander Mishchenko, recently emphasized Azerbaijan's strategic importance as an alternative energy supplier, just as you have just now.

So, given this role as an alternative energy supplier, how does Azerbaijan fit into the equation for achieving energy security in the post-Soviet region? And if you could elaborate on what you just said, Dr. Tsereteli, and then also I'd like to direct this at Ed. And then anybody else who'd like to chime in afterward, that would be great.

Thanks so much.

Dr. TSERETELI. I think the strategic partnership that started between two countries, between Georgia and Azerbaijan in this case in the early 1990s, were crucial for energy independence of Georgia, building energy independence of Georgia. But I think Azerbaijan has a larger role to play for supply of energy to Turkey, to Greece, Bulgaria, and beyond,

going to Italy. Resources of Azerbaijan, natural gas as well as oil, are already exported to some of these countries. By the way, through the interconnector that exists between Greece and Turkey, there are occasions of selling of natural gas of Azerbaijan to Greece via the Turkish system, exchange of molecules and swap operations. So Azerbaijan has crucial role to play. Obviously, in the Georgian context, it has a crucial and decisive role, but its role is growing for other countries as well.

Azerbaijan also could play role of transit country, as I mentioned, for Turkmenistan. It already plays transit role for Turkmenistan, for Kazakhstan, for other countries. And, again, as Georgia and Azerbaijan have very important role to play for the transit of not energy cargoes, but also other cargoes, connecting Central Asia to Europe, or maybe China to Europe and India to Europe going forward.

So location as well as resources are an important factor in this discussion. Black Sea connectivity, again, trade with Ukraine and export to Ukraine is very essential and has, I think, a very important future.

Mr. Chow. I agree that Azerbaijan has a crucial contribution to play. Of course, it doesn't do this out of the goodness of its heart. I mean, it does it because it needs it also.

If you think of the Caspian as a wine bottle—this is a good Georgian analogy, Mamuka—[laughter]—Georgia is the cork that allows the wine to flow, the oil and gas in this case to flow to Western markets. So, without Georgia and other countries, Azerbaijan would be dependent on its neighbors like Russia and Iran to transit its oil and gas, which is not a very enviable position to be in.

But the other point to be made is the point that Mamuka also started making, which is that market integration is critical. Maybe Ukraine is a large enough market on its own, but Moldova and Georgia are not. In order to have world-class-scale projects to go, you need market integration. And market integration in Southeastern Europe is something that Russia doesn't want. I mean, let's face it: energy corruption is a tool for Russia to keep its neighboring countries dependent on it for energy, and to obtain kompromat on its various political leaders in the region as well. So, yes, you can get to Greece, but from Greece you need to get to Bulgaria, and from Bulgaria you need to get to Serbia, and onwards through the rest of the Balkans.

So anything that blocks market integration—and corruption is one of those things that blocks market integration—for more than five years, we have been talking—maybe Doug knows exactly how long—we've been talking about a Greece-Bulgaria connector. And the EU has even devoted money to support a Greece-Bulgaria connector. But politicians on both sides of the border have not allowed a sensible market-integration project to go forward. This is why the energy corruption question is so important to talk about, because removing energy corruption, it's very hard to get market integration. Without market integration, it's very hard to get diversity of supply. The entire population of the Balkans is less than the population of Turkey. So how much diversification can each of those small markets have on their own? This is why corruption is such an important challenge to

Mr. MASSARO. Would anyone else like to speak on the topic of market integration or Azerbaijan? OK.

All right, I'll move on to my final question, regarding the very complicated situation in Moldova, actually. I understand that the planned extension of the Iasi-Ungheni gas pipeline to Chisinau is currently a major objective of Moldovan energy policy since

Chisinau consumes over half of Moldova's gas imports. However, the extension of the pipeline will only have positive effects if Romanian gas can enter the Moldovan market and compete with Russian gas supplied through Moldovagaz. If Chisinau attempts to allow Romanian gas to access Moldovagaz's networks, there is a possibility that Gazprom could recall debt that is owed by Moldovagaz amounting to about a whopping 65 percent of Moldova's 2014 GDP as a threat to Moldovan authorities. Is this threat realistic? And if so, how can Moldova respond to such a massive threat?

Mr. Allin. Thanks, Paul, for that—for that easy question. [Laughter.]

So it's an interesting idea. I will be honest and say that I had not heard that that debt is a weapon that could be deployed in this particular instance. But of course, when you have, you know, a large outstanding debt that's accrued over 20-some years hanging over a counterparty, you might decide that you're going to try to enforce it at any time.

I know that there have been various legal and arbitration proceedings around this debt over the years. And because I have not studied them in detail, I do not want to make a misstatement, so I will not try to list them. But what I do know is what would be the—what I would ask—because, with so many things—and you see this, unfortunately, the illustration of this is in these breakaway, separatist, whatever you want to call them, protracted conflict regions—is that it's not always about what exists on paper or what exists in international or other kinds of law. It's about what can actually be done.

And so what would Gazprom then do if they called that debt and Moldova didn't pay? Because what I understand to be the case—and again, I think some of the gentlemen here may be able to clarify this if I have a misunderstanding—is that it would not be viable for Gazprom to cut off Moldova because of the downstream customers that use that same pipe which provide much more substantial revenues than Moldova provides. Therefore, what would the enforcement be? That would be sort of my counter question, I guess.

But certainly, that's why I think it's important. And this is like so many things with these protracted conflict regions, the ones in Georgia as well. They sort of get ignored until something related to them happens and becomes a big deal. And this would certainly be a case of that.

I think, though, that again, this is a situation where—trying to be diplomatic—we can't simply blame Gazprom for the fact that that interconnector is not up and running, right? There are other people who probably could have done things a little bit faster. And so I would shy away from, as with—frankly, with a lot of things about Ukraine and Moldova, it's very easy to just say it's all the Russians' fault, and if only the Russians weren't here we could be doing just fine. Well, you guys all—we all know, probably many people in this room know, that is a valid argument in some cases, but in many, many cases it is used as an excuse for one's own deficiencies.

If I may just take advantage of a moment, I wanted to make one comparison which I think is interesting between a situation that exists in Georgia and one that exists in Moldova regarding hydro plants. So on the Enguri River in Georgia between Georgia and Abkhazia, there's a hydro plant which I understand still succeeds as a joint venture, and the electricity goes to both sides, right, of the conflict. So in Moldova, on the other—even though, right, that's the one that Russia has recognized, that is considered a harder case. But in Moldova, the Transnistrians have and use and even have upgraded in recent years—because I was able to visit it once, and quite an interesting thing to see—the Dubasari hydro plant, which apparently has enough capacity to supply almost all of

Transnistria's residential users, not their industrial power users. So it's an interesting comparison. And right-bank Moldova does not get any usage whatsoever of that power.

Mr. DORAN. Paul, can I jump in here real quick?

Mr. MASSARO. Yes. Please go ahead, Peter.

Mr. DORAN. Because Lyndon raised what I think is an organizing problem. When we talk about energy, it comes up a lot. And I think he's right. And this is ultimately the difference in how we approach energy.

A lot of times in these discussions in a European context, we talk about energy in terms of top down rather than bottom up. It's very easy to say, well, we just need an interconnector here or an interconnector there, and there's a political motivation here, let's do it. That was the death of the Nabucco pipeline. It made sense on paper, but the economic rationale was lacking.

This case that Lyndon's talking about in Moldova is a great test case or a great example for why you have to have the free market involved. Yeah, the Romanians have a lot of even traditional conventional gas. They could potentially have a lot of new offshore coming onto market. The problem for Romania is how to get those new volumes of gas to places where it's needed. It is very difficult to wave a magic EU wand and create interconnectors between countries. The Romanians have discovered this. They need private investment in large part to help propel these new interconnections. Moldova is one example. There are others.

Ed really made an excellent point. Ed, I want to amplify and echo that because on this issue of how do we solve these problems, top down versus bottom up on Ukraine, I absolutely have to echo that. When it comes to the Ukrainian energy market, this issue of reform and corruption perception and rent-seeking must be in many ways an existential priority for the Ukrainian Government. The Ukrainian soldiers can win every single engagement on the battlefield, but if the Ukrainian Government does not institute the kinds of reforms that are needed they will lose the faith of the Ukrainian people and they could lose their country in the long term. This is a very sobering dimension of the energy security question. And so, Ed, when you talk about the absolute importance of solving this issue, I'd have to endorse that 100 percent.

Mr. Massaro. Thanks, Peter.

Dr. Tsereteli, did you want to say something real quick? I saw——

Dr. TSERETELI. Just very briefly. The difference in Georgia's case is that the actual engineering construction and dam is on the Georgian control side, while turbines and operational facilities are on Russian-controlled side. And so they cannot live without each other, that's the kind of difference.

But just echoing all those issues that we have mentioned here, you cannot ignore fact that all of these three countries since early 1990s, and particularly Moldova and Georgia, were under tremendous pressure all the time because of the conflicts. You know, we're, in fact, in a status—state of war, with Russia being very active part of this conflict. And if European countries like members of EU could not resist and their officials couldn't resist corruption and coercion and so forth, can you imagine what type of leverages Russia has under situations like this?

Mr. MASSARO. Dr. Prokip? And then we'll open it up to the audience.

Dr. Prokip. Yes. Just a short remark to that, what Peter said about the necessity of conducting reforms in Ukraine. This is kind of strange station, yes? There are a lot

of strategical documents with aims, but not a lot is done. And there was an interesting situation this week, and Monday I was talking to some members of Ukrainian Parliament. And you know that it was strange to me, some of them were very happy that they had some discussions with some people from U.S. about possibilities to import U.S. liquefied gas to Ukraine. And consequently I asked about—so the first question was about the price, and the second question was that we didn't talk—we didn't talk about gas extraction in Ukraine. And then there was another question to those members of parliament, that two drafts of laws are now in Ukrainian parliament and wait to be voted to make better conditions for gas extraction in Ukraine. And you know what was the answer? I don't know, what should I do to make those bills voted? It's a problem of collective possibilities. And that's why I'm talking about a kind of pressure, because very good statements inside Ukraine, but unfortunately not a lot of actions.

Mr. MASSARO. Thank you, Dr. Prokip.

Could we take some questions from the audience now? Go ahead. We have a mic. Amelie, if you could take the mic up to this gentleman right over here.

QUESTIONER. I'd just like to ask, there's a lot of focus, obviously, on the gas component of things, the natural gas and the oil component of things. But, for example, there was a recent report in the Financial Times about how Rosatom is investing in a nuclear power plant in Turkey. So I was wondering if you could perhaps comment just briefly on the nuclear dimension of this region's energy security.

Mr. Massaro. Anyone would like to take that?

Mr. DORAN. Ed, if you want to. The Turkish question is an important one.

If you just ask for a comment, I would focus your attention on Russia's efforts to build a nuclear reactor about 40 kilometers from Vilnius, a U.S. NATO ally. There's a lot of questions about the safety and viability of this reactor. It is very close to about a million people. And to my knowledge, right now it is not being exposed to the kind of scrutiny under Russian and Belorussian construction that one would hope to see in the creation of a nuclear reactor. This is very dangerous for the lives of a million people nearby and a U.S. NATO ally like Lithuania.

The bigger issue, though, is that the creation of this reactor doesn't necessarily serve a commercial purpose. Like many things, Russia uses its nuclear power industry—government subsidies, sweetheart loans, political pressure—as a vehicle to achieve political objectives in its neighborhood. We've certainly seen that in Belarus and other places. So it's always important to view these arrangements through the lens of both commercial rationale as well as political or geostrategic objectives on Russia's part.

Mr. MASSARO. Would you like to say anything to that, Ed, or—

Mr. Chow. Well, you know, anyone who knows the history of Ukraine energy knows that nuclear plays an important role. We have a good case study not too long before the collapse of the Soviet Union. But even today nuclear power generates, what, 50 percent, aroundbouts, 52 percent of total electricity generation in Ukraine, most of that old Soviet technology. Up until recently, all their nuclear fuel came from Russia. Just in the last couple years, Westinghouse fuel has been qualified for use in Ukrainian reactors. So some of these things have improved somewhat.

But nuclear sector is another example of energy corruption in Ukraine. That sector has been controlled by important politicians in Ukraine for a very, very long time, which is the reason why it hadn't been restructured up until recently.

Mr. MASSARO. Great. Thanks, Ed.

Up here, Amelie. We have Doug, is that—all right.

QUESTIONER. Hi. Doug Hengel. I'm a former Foreign Service officer with the State Department.

The State Department has, and the U.S. Government in general has, put a lot of time and effort into European energy security over the years. I personally was very much involved in these things. And this went all the way up to Presidents Bush and Obama weighing in with leaders on these issues. You know, a lot of assistance has been given, capacity building, et cetera, advice to countries, pushing countries to do the right things in terms of their energy security, pushing Brussels to do the right things in terms of creating a common market, pushing against bad pipeline ideas like South Stream, et cetera, and Nord Stream now. But there's a limit to what the U.S. Government can do, and so I was glad to hear some of the comments over here. It takes political will in the countries involved, and some countries have done more than others, and so I was pleased to hear some of the comments Ed made about what Ukraine still needs to do and whatnot.

But, Peter, at the beginning you closed your comments with words to the effect of, doing nothing won't produce good results. And I took that to be a reference to the United States; maybe I'm wrong there. But what else at this point can the United States do? I mean, we can continue to push against things like Nord Stream 2, which I agree is a political project. The German reaction to date has been to tell us to go pound sand. So what more—we can't actually send people into the field to build the pipelines ourselves. I mean, a lot of progress has been made on interconnectors and all that.

But anyway, so my question is for you. What greater role, what more can the U.S. do than it has already done to date over the years on this issue?

Mr. Doran. Very briefly, I won't get into the host of legislative initiatives. A lot of folks in this room are very familiar with those.

But I will say this. President Trump can't pick up the phone and tell Chevron, hey, look, you need to do X in this country. That's just not the way the United States is. It is the way other countries are geared. So it's always a problem. It is a fundamental impediment from a policy perspective to make things happen in the energy world.

That said, I ascribe to the belief that it is old and in the foreign policy DNA of the United States, that it is part and parcel of the job of American diplomats overseas to first and foremost advance the interests—the commercial interests of America overseas. And I would encourage the new folks who are in place or coming into place at the State Department, for example, to do a better job in positioning themselves to advance U.S. energy interests overseas. There's nothing wrong with it. In fact, it goes back to the very founding of why we exist as a country, as a commercial trading state. And I would like to see that—many diplomats and Foreign Service officers, in their day-to-day, see this as a main part of their job, not a part of the job that we don't really focus on too much.

Mr. Massaro. Thanks, Peter.

We have a question right here.

QUESTIONER. Good afternoon. I'm Giorgi Tsikolia. I'm the Deputy Chief of Mission. I'm at the Embassy of Georgia.

My question is not directly related to Ukraine, but on energy security issue overall. The recent initiative by the Senate on the Iran sanction bill I am assuming it is correct, it has part of the bill where the U.S. Government is being forbidden in working into any

project where the Russian involvement is at hand. Unfortunately, there is one development—[inaudible]—Shah Deniz, with Russian involvement in the 10 percent stake of the Lukoil in the project is outwardly known. And having discussions with the companies on the project, it seems like that bill would hurt the countries through which the pipeline lies, and the U.S. companies first of all, and the project, which is probably the only alternative supply of energy to Europe because on the northern side there is no supply connections yet.

So my question would be: What would be the take of the Helsinki Commission? And have there been any discussions on that note? Because I saw a note that the majority leader today, that they are taking kind of matters in hand and they probably will be changing the language. But my question would be if there have been additional discussions, and is there hope that that language will be changed to the point where the bill will hurt Russia and at the same time help the countries in the region to achieve the great energy independence? It would be to your end and to Ed as well, from your perspective.

Mr. Massaro. Well, I'll start off by saying, great question. Unfortunately, I am not the Helsinki Commission. I'm the staff of the Helsinki Commission. And I direct you to speak with our members and send that question to their offices, and I'm sure it'll trickle down. So I'll go ahead and hand it off to Peter.

Mr. Doran. Or Ed.

Mr. Massaro. Or Ed.

Mr. CHOW. Yes. Thank you, Giorgi [ph].

Given that I have no responsibility at all, I can speak freely. [Laughter.]

Legislative sanctions are generally a very blunt instrument. It seems to me the Senate amendment to the Iran Sanctions Act was as much a signal to the Trump Administration that it needs to get its act together to do something about Russian aggression in this part of the world, and generally speaking executive actions are better designed to tailor the sanctions so they don't have the unintended consequences that's been much discussed in this town in the last couple weeks now. I'm hopeful that there will be a fix in the House version, if there is a House version, coming through.

But I really think it's incumbent on the executive branch to get engaged in this. And part of the Senate's frustration was that they've been waiting for the administration to act for most of the spring, and by June they couldn't hold off having a vote anymore. But a lot of these unintended consequences not only for BTC, but also for Central Asian projects that involve American companies, as well as other projects that maybe the Senate never intended to be affected but the broad wording of the amendment can easily be interpreted that those projects will fall under as well.

So my guess is that, in the typical Washington fashion, we'll muddle through and figure out a way of correcting the overreach that was probably unintended.

Dr. Prokip. Paul, can I comment on this? There is a precedent. Same consortium includes Iranian company. And there was an Iran Sanctions Act adopted several years ago, and that project was—

Mr. DORAN. Carved out, yeah.

Dr. Prokip. ——exempt from that sanction. There's a clause in the law. So there's a precedent specific projects can be exempted from the law as long as Senate, obviously,

agrees on that. There will be no need to invent something new. There is existing procedure that can be done.

Mr. Chow. But I certainly agree with Paul that members' attentions are needed.

Mr. MASSARO. Absolutely. Yes, please take that question to members' offices.

All right. Back there, please.

QUESTIONER. Hi. Chris Anderson [sp], ABPS News [ph].

Some news media have buttonholed Senator Corker in the hall back here about two hours ago to ask about this. And his view on this was that it was a technical issue that he had raised with Senator Cardin and with [Representative] Steny Hoyer, that they were thinking that this would be fixed and it wouldn't be a problem because they understood the difficulties this would be for an American company. So just FYI.

Mr. CHOW. Thank you.

Mr. MASSARO. Very helpful. We've got to get you a seat on the panel. [Laughter.]

All right, we had a question up here.

QUESTIONER. Hi. I'm wondering if you would be able to focus on sort of a lower form of energy, on the food and water security crisis that's kind of plaguing the region, maybe specifically in Central Asia, and maybe any policy recommendations that you have specifically for the gendered outcomes that have happened in the region.

Mr. Massaro. Anyone specific that you'd like to target that question at?

QUESTIONER. Maybe Dr. Mamuka. That's maybe your specialty.

Dr. TSERETELI. It's not my specialty, but I'll try to answer. [Laughter.]

First of all, it's beyond the scope of this panel. I think it's more the issue for Central Asia than the Caucasus, but it's also an issue for the Caucasus somewhat.

But I think going forward there are some studies done, by the way, by the World Bank and some other international financial institutions, and projections of how some of the climate changes and other factors could influence water security in Central Asia. Probably it makes sense not to go into deep discussions right now, but maybe I'll refer you to go to and look at those studies. There will be impact of—I mean, there are several dimensions. There's a political dimension there. There's, obviously, environmental dimension there. And when I talk about political dimension, I mean that control of the water resources in some cases are in the hands of one government, and some of the resources are also used by other governments, and there are planned hydropower facility constructions in different countries that impact, obviously, neighbors.

Maybe I'll just stop here. It's a long and complicated issue, probably, I won't address it here. [Laughter.] Thank you.

Mr. MASSARO. You've opened a Pandora's Box.

Yes, please. Go ahead, Lyndon.

Mr. ALLIN. This is not necessarily responsive to your question, but if we're talking about issues with water security, I know that there—and I'm sure Andrian knows more about this—there has been some friction between Ukraine and Moldova because of a large hydro plant that Ukraine wants to build that's upstream from the river that flows through Moldova. So it's a growing issue.

Dr. Prokip. A short note?

Mr. Massaro. Yes, please.

Dr. Prokip. Regarding border security, many mini hydro in Ukraine, in 1970s, there were thousands of mini hydro, but now it's about 146 operating in Ukraine. And mostly those are not built because local societies oppose building mini hydro because they say that that will badly impact upon access to water and the quality of forests.

But actually, those were operating in 1970s. The problem that those first mini hydros built in Ukraine were built without keeping to all standards—environmental standards, first of all—and that impacted very badly on development of mini hydro in Ukraine.

Mr. MASSARO. Well, excellent. Somehow they did relate it to energy security again. Very nice.

Any other questions? Oh, OK. Great.

QUESTIONER. Ben Schmitt, State Department Energy Bureau.

I have a question for Peter, and maybe Ed can chime in as well. I've been working on European energy security for the better part of a few years now, and one of the things that I've noticed in the past, I guess, especially six months, but especially over the past year, has been the prevalence of a lot of especially Russian-sourced but other sources of misinformation, especially from outlets like RT, Sputnik and Moscow Times, et cetera, et cetera, who make it difficult to advance policy that's actually fact-based and -oriented because, again, all of these energy security projects and European energy security is based on physical infrastructure, again, that has statistics and actual numbers and very scientifically and technically founded statistics backing up what policy decisions can help drive and solve geopolitical issues.

So, to that extent, U.S. opposition to Nord Stream 2, for example, has just in the past few months been turned around and said, look, the U.S. is only opposed to Nord Stream 2 to sell U.S. LNG, which is fully false narrative. Obviously, we've been supporting European energy security for 30 years on a bipartisan basis and had numerous projects that have no U.S. investment. And again, because that's a diversionary pipeline, it wouldn't even open a market for the U.S. were it stopped. So how do you counter this sort of misinformation and make sure that fact-based narratives keep going in this space?

Mr. Doran. Ben, I really want to thank you for that because actually your office is one of the—the energy folks at the State Department are an example of a great team that tries, in my opinion, to fulfill the mandate that I believe citizens would expect of them, advancing U.S. interests overseas.

On the question of Russian propaganda in the energy space specifically, my organization, CEPA, for several years now has had an ongoing effort. You can go to infowar.CIPA.org to see how we have been active in analyzing, assessing, exposing, and ultimately rebutting fake narratives, toxic Russian propaganda that is injected into the Western media space.

Specifically on this question of Nord Stream 2, I will be very clear on this: Nord Stream 2 has become a vehicle for Russian propaganda. If you're interested, afterwards you can come up and you can talk where I tell everybody now we have published analysis on this, where we look at point by point, myths and facts about what the Russian Government, Russia's commercial proxies, and economic constituents that have a financial incentive in Nord Stream 2 have been saying about Nord Stream and exposing that to the cold light of reality. And what happens is those myths about Nord Stream 2 shrivel and die very quickly.

We've produced some reporting on this. It has informed much of my presentation here today. Afterwards I'll give you a link if you want, but it's all available at CEPA.org.

The bigger issue, though, is that this problem is not going away. What we can do about it is to be very clear in understanding that the old terms of debate, where you can have your own opinions but you're not free to have your own facts, that is yesterday's dynamic. Today, the debate has become muddled, it's become confused. And the antidote, in my belief, is to be very clear about what is and is not true when it comes to fake narratives about Nord Stream 2.

Mr. Chow. Ben, I would suggest that you and the State Department should support Peter's think tank, as well as mine—[laughter]—in making sure that there's good fact-based analysis, objective analysis out there. But I agree with you that this is a problem.

On June 25th I was sitting in my hotel in Tbilisi, flipping channels and watching Greek television documentary on TurkStream. Now, that's pretty expansive coverage by Russian propaganda, sitting in Tbilisi on a Greek television channel talking about the lay barge that just entered the Bosporus and started laying pipe for TurkStream. So I agree with you. And the only way of doing it is to make sure that good information doesn't get pushed out by bad information.

But the other point I would make—and this is not a problem for the career U.S. government officials—but we also have to be mindful that we don't let our political leaders exaggerate with empty promises, like U.S. LNG exports is going to substitute for Russian gas and solve—you're right, that's not what the official policy is, but there are people who left those Ukrainian parliamentarians with the notion that that's an option. As market reform that leads to market development that actually allows a LNG regasification terminal to become bankable in Ukraine, it's a much more important conversation if Ukraine is going to achieve energy security.

Today I heard that U.S. anthracite is going to be the solution for Ukrainian coal shortage this winter. Well, you know, I'd like to make America great again too, but we have to put a certain amount of reality.

So when our political leaders also play into that game, I don't think that's helpful. We need to distinguish between what we say, which is based on good analysis and facts, against Russian propaganda that's based on false news.

Mr. MASSARO. Would you like to speak real quick? If we could keep it short. We're at the end of our time.

Dr. Prokip. Very short.

Mr. MASSARO. But I'd like to give everyone an opportunity, so please go ahead.

Dr. Prokip. Sure. There was a follow-up question regarding Nord Stream 2, but we have—we are out of time, so——

Mr. MASSARO. Great.

Lyndon?

Mr. Allin. Yes, just briefly. I think, just like it was said that we can't send people to build pipelines into the field, we can't or we would like to think we can't and don't make up facts, and we can't give politicians in other countries suitcases of cash. However, other geopolitical actors can and do those things. So the big dilemma for U.S. foreign policy in a more realist-feeling world and in a world—especially in a region that encounters a lot of scarcity, which drives this corruption at its root—is how can we compete, right? How can we compete when people are not—you know, they would rather have a

lower gas bill than feel good about the values? I think that's a dilemma. I don't have a solution. There are some initiatives on countering misinformation and fake news, not to use a term.

But I think it's, candidly, a really, really big challenge, countering state-run businesses who are willing to take a loss. And then you have to ask yourself, how much does this region matter to the U.S.? How great is the U.S. interest, and what we are willing to commit in terms of subsidies for the things that have to be subsidized versus the country that we position ourselves in rivalry with to now? They may be willing to commit more. So this is a challenge.

Mr. MASSARO. Well, thank you very, very much to this terrific panel.

Before we end, I'd like to make a plug for a Helsinki Commission briefing next week on Russian kleptocracy. Same place, same time, same handsome moderator. [Laughter.]

And, with that, the briefing is concluded. Thank you. [Applause.]

[Whereupon, at 5:05 p.m., the briefing ended.]

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