ELIZABETH So welcome to today's MIT Starr Forum, rebuilding Ukraine while it's still under fire. Today is September 18, WOOD: 2023, day 572 of Russia's brutal, full-scale war against Ukraine. I'm Elizabeth Wood, professor of Soviet and post-Soviet history and faculty director of the MIT Ukraine and MIT Eurasia programs. Carol Saivetz, senior advisor in the MIT Security Studies Program, is my cohost and will be comoderating the Q&A with me.

Before I introduce today's speakers, I want to thank our sponsors, the MIT Center for International Studies, the MIT Security Studies Program, and the MIT Ukraine and Eurasia programs, especially our organizers Michelle English and Sabina Van Mell, as well as our center director, Evan Lieberman.

I also want to say a brief word about the MIT Ukraine program, which is working to support Ukraine from MIT. In particular, I want to mention a new initiative, which we are calling the Global MIT At risk Fellows program, GMAF, which will bring five Ukrainian scholars at risk to MIT this spring and five more in the next academic year. For more information, please write to gmaf@mit.edu, which is G-M-A-F at M-I-T dot E-D-U.

As is our custom, we will have questions and answers at the end of the talk, so please feel free to use the Q&A feature on the bottom of your toolbar to type your questions. We will try to get to as many questions as possible. If you keep them short, that is much easier for us as moderators, since we have 400 people registered for today's talk.

And now it is my great pleasure to introduce MIT's own Simon Johnson, who in turn will introduce Oleg Ustenko, economic advisor to Ukrainian President Volodymyr Zelenskyy. Simon Johnson is the Ronald Kurtz Professor of Entrepreneurship at the MIT Sloan School of Management, where he is head of the Global Economics and Management Group. He has served as chief economist at the International Monetary Fund. He has served on the boards of Fannie Mae, the CFA Institute Systemic Risk Council, and the Congressional Budget Office's Panel of Economic Advisors.

Most recently, he coauthored the book *Power and Progress, Our One Thousand Year Struggle Over Technology and Progress,* with Daron Acemoglu. Daron Acemoglu will be speaking about that in person on Tuesday, September 26 from 5:30 to 7:00 in the Wang Auditorium on the MIT campus. So please, if you're at MIT, please come back for that.

Aside from Simon Johnson's six or seven other books, let me just mention his blueprint for the reconstruction of Ukraine, which he coauthored with a group of scholars in April of 2022.

So let me thank you, Simon and Oleg, for joining us today for this very important topic, rebuilding Ukraine while still under fire.

SIMONThank you very much, Elizabeth, for that introduction and for the great work that you and your colleagues areJOHNSON:doing, both in the MIT Ukraine program, and particularly with the new MIT Global At Risk Fellows Program. I hope
everyone will take a look at that and the details of what MIT is trying to do in a very constructive way to help
Ukrainians rebuild Ukraine, which is, of course, the topic of today's meeting, today's conversation.

We're very delighted-- obviously, the circumstances are terrible, with the prolonged invasion of Ukraine, but we're delighted under these circumstances that Oleg Ustenko could join us. Oleg, you can turn on your camera now. Oleg is a top economic advisor to President Zelenskyy. He's worked with the president for a long time now. And he's been very involved in Ukrainian policy making and policy discussions for, I think it's fair to say, decades. Oleg is, I think, one of the very best people we can speak with about the issues, both what's happening today, what needs to be done, particularly in terms of what the US can do to help and what other countries can do, and also what may come next in terms of the possibilities. And hopefully there'll be more rebuilding quite soon.

But first of all, Oleg, welcome to MIT. Welcome to the Starr Forum.

OLEG Thank you so much. Thank you, Simon, for this very nice introduction. And I have just to add that we've known
 USTENKO: each other since 1991, I guess. So, heh, pretty long period of time. Yes. And it's really my pleasure to participate in this great event. Thank you very much.

SIMONWell, let me now ask a couple of starter questions, Oleg, and then as Elizabeth said, we have lots of time for Q&AJOHNSON:from the audience, which Elizabeth and Carol will moderate, and they'll feed the questions to you and to me, if
relevant, but mostly to you.

So the first question is-- the topic is-- we're interested in rebuilding of Ukraine while still under fire. So let's begin with the basics and sort of the essentials. How exactly are the Ukrainian people surviving, and surviving with, from the outside, what looks like remarkable resilience, but how is-- how does economic life function, would you say, in Ukraine while you continue to remain under Russian bombardment? Even today, I believe there was a big attack-- attempted attack on Kyiv.

OLEGOh, yes, absolutely. I would probably say that when we are talking about survival under these conditions, I wouldUSTENKO:probably say about three important dimensions. The first one, obviously, everything related to economic
dimension, and here, we can talk about inflation, which is pretty high, but getting a little bit lower this year. And
we are expecting that it's going to be again lower next year. We

Are talking about pretty high level of unemployment. Also can be discussed later on, but just to give you a clue, we are talking about 90% of unemployment rate. We are talking about all these difficulties related to economic situation in the country when the country's GDP declined last year by more than 25%, one quarter. So basically this is the decline we experienced last year.

And on top of that, we have in the country somewhere close to 5 million internally displaced people. And you can imagine how many tasks should be decided and solved out because of this issue.

The other dimension-- I would say probably this is everything related to physical survival. Exactly as you were saying, almost each night we are experiencing attacks from Russia. And even this night, our people were forced to go to bomb shelters or to find a safer place. And it started at somewhere close to 3 o'clock, and then for one hour and a half hour, AM. And our people were not sleeping at that time.

On a positive note, we were able to target all these missiles Russians sent to us, but on a negative note, usually, they also send drones. And these drones, we were able to target 70% of these drones, and 30% were going to our ODS support. And this is a huge problem now for us because this is related, directly related, to our grain corridor.

And the third dimension, which is also extremely important, everything related to emotion survival and stage of our people now when you have number of people in our military. And then everybody has at least either close friend or family member who are in the army. And everything is extremely painful.

But despite all these facts, Ukrainians are looking forward to our victory. We are prepared for these difficult times. And people don't want anything else but the victory in this war. This aggression of Russia should be definitely stopped.

- SIMONWell, think you have certainly my personal admiration and admiration for a lot of people for the resilience andJOHNSON:the strength under these difficult circumstances. And now, again, our topic is rebuilding Ukraine while under fire,
so can you give us some examples, Oleg, of what can be rebuilt now? I think I've seen work done on-- emergency
work on bridges. Obviously, housing is very important. But also, what it's not possible to do while you're under
fire? So how much can be rebuilt now, and how much cannot be done?
- OLEG So basically, just to start, let me give you a couple of numbers. And the first number is the overall damage we USTENKO: experienced because of this Russian aggression. Aggression is on the level of \$750 billion US. If you add the indirect cost, then the price tag is going to be significantly higher. And it should be on a level of approximately of \$1 trillion US. Just to give you a clue of this number-- so we are talking about the country where the maximum GDP was received a year before this war in 2022, and at that time, our GDP used to be on the level of 200 billion US dollars.

You are absolutely right. When you are in a state of war, when-- to talk about rebuilding is difficult for those who are unfamiliar with our situation. But in our case, we are talking about three-- two parallel tracks. And the first track is so-called fast track recovery. And this fast track recovery is exactly related to the most, let's say, critical part of our critical infrastructure.

And you are absolutely right. Part of this work can be done now. Part of this work could not be even touched at this time. For example, when we are talking about our electricity supply, about our electrical infrastructure, which is critically important for the country, you can rebuild it, and you can fix the problem on the territory which is not under occupation.

But definitely the system is constructed in such a way that you have to rebuild it everywhere. And definitely, where you have these war conditions, it's next to impossible even to think about this kind of rebuilding.

Also, in terms of logistics, in terms of bridges, some of the bridges have to be rebuilt. They have to be repaired. However, still, we are talking about some parts of our territory which are close to those places where military operation is still ongoing, which means that rebuilding of the bridge or the road is not even logical because of these constant attacks of-- from Russian side.

However, there are some projects which might be done now. And here, we are talking about, for example, hospitals, because many hospitals were destroyed. And we are talking about not even a small hospital, but we are talking about hospitals in the big regional cities, close to 1 million people. So there, we definitely need to rebuild our hospitals. And we are starting these projects.

Some of the projects related, as I said, to electrical infrastructure. The most important one, because the winter is approaching, and for us, it's critically important to make sure that our people have heating in their houses.

So basically, when we are-- I mentioned these numbers, but when I'm talking about this fast track recovery-- so basically, our estimate that here we are talking about, the project somewhere between \$15 to 20 billion US. And this is what is urgently needed for Ukraine in terms of starting this project.

SIMONSo obviously, there's a lot of needs and a lot of pressing needs, Oleg. But one more question, and then we'll go toJOHNSON:the questions that Elizabeth and Carol mediate. So my question would be if you think about the priorities or the
most important tasks, how do you assign the severity or the urgency on things like stopping the war, rebuilding
bridges, bringing people back-- of course, you have a lot of refugees who are still outside of Ukraine as well as
the displaced people inside Ukraine.

So how do you think about the logic and the timeline and what needs to be done first? And what, perhaps, is essential, without which you can't have any other progress?

OLEGWell, I would probably say that fast track recovery is the crucial important at this stage. So the winter isUSTENKO:approaching, so people have-- we have to make sure that people will be able to survive during this cold time, so
we have to start all these projects immediately. And we actually started some of these projects now. And some
of these projects are ongoing since the beginning of the latest summer.

Obviously, everything related to battlefield is more than important because all the economic situation is-- at the end of the day, is dependent on our achievements and on the situation on the battlefield. So from this point of view, everything related to weapons and ammunition and all possible supports we are able to receive is crucially important. Those, I would say, two equally important priorities.

And then when we are talking about the rebuilding of the country, I don't want-- and I don't like, actually, when people are saying that, look, we have to wait until the end of the war, and then we can start the process of rebuilding.

No way. We are talking about a country which used to have, before the war, almost 40 million people. And just to understand that, the situation that-- I would say that roughly around-- somewhere between 5 to 6 million people are currently abroad, so basically they are hosted by our allies, actually, including the US as well, but mostly in Europe. These people are in Europe. And here, we are talking about not only children. We are talking about women and children who are currently abroad. And we have to make sure that these people are coming back to the country when the war is over.

But to bring your people back to the country, you cannot do that if you don't have a pediatrician, if you don't have a hospital, if you don't have a kindergarten, if you don't have schools because we have a number of cities which were especially under the Russian occupation, where we don't-- literally, where we don't have schools at all because Russians destroyed everything. So basically, we have ruins there and nothing else. And here, we are talking about bringing our people back.

So basically, from this point of view, some of the projects has to start now, even when we are in the process-when we are in the state of war. So basically, I would say that that fast track recovery is just really needed to be ongoing projects now. However, some of the projects from the bigger list, from the larger list, should be initiated also now before we would be even bringing our people back.

Thank you very much. OK, Carol turned on her camera. Do you have the first question, Carol?

SIMON JOHNSON:

CAROL SAIVETZ:	Yeah. Actually, I want to take the prerogative and ask a question on my own, and then we do have a growing number of questions in the Q&A. It strikes me that there's a conundrum in all of this. I mean, you want to rebuild the electrical infrastructure, schools, et cetera, but they could get hit again tomorrow. So how are how is Ukraine hardening the targets, if you the potential targets, if you will, as it is doing this rebuilding so that you're not starting from day zero all over again six months from now?
OLEG USTENKO:	Yeah, very good point. So basically, there are, I would say, probably two major tracks we have to keep in mind when we are moving forward this agenda, especially about this electrical infrastructure. The first one is definitely everything related to military equipment. We need to have antimissiles, weapons, in order to be able to say what would be done in this sector.
	On the other side, there is also there is another possibility which is related to providing insurances for those kind of projects. And when we are talking about insurances, I mean here, precisely, I mean so-called war insurances. However, it's still ongoing discussion about this issue.
	However, again, we don't have any other choice. The other choice would be just to leave our country without electricity, and then meaning without heating. And in the winter, in Ukraine, at least in Kyiv, would be very similar to the one you have in Boston, maybe colder. Not a lot, but definitely colder. And now imagine that you are in Boston during the cold wintertime without electricity and without heat, and then the life is not going to continue. So this is really crucial.
ELIZABETH WOOD:	Yeah.
CAROL SAIVETZ:	Elizabeth, you go.
ELIZABETH WOOD:	Yeah. So we have 10 fabulous questions already. Just to start at the top, we have someone writing that he's just returned from rebuilding homes in Ukraine and has noticed a lot of PTSD, Post-Traumatic Stress Disorder. So do you have any thoughts on how rebuilding can help in terms of mental health?
OLEG USTENKO:	Oh, yes.
ELIZABETH WOOD:	People feeling better.
OLEG USTENKO:	Yeah, this is for sure. This is a direct relations. Imagine those people who just not even left their houses, but the houses were destroyed, and people really do not have any roofs above their heads where they can spend the rest of their life or even the closest days. And from this point of view, rebuilding of these kind of social infrastructure houses is critically important.
	However, when we are talking about rebuilding of houses, what kind of houses we rebuilding? Do we really need to have very small temporary apartments, or we really want to build brand new apartment complexes where they would have bomb shelters, where people would have enough space to continue their normal life?

So from this point of view, of course, it's critically important. And one more time, this is a very direct connection between the emotional state of those who lost their houses. And basically, you can imagine how huge this problem-- and even when we are talking about over-- across the country, we are talking about hundreds of thousands of people who are needed to have these new houses. So it's really a big project.

But it's not like a project which you can do from scratch. For example, what I mean-- if the city was destroyed, and here I'm thinking about some of the cities, some of the small towns in Donetsk or in Luhansk region. So the city is completely destroyed. How we are going to do this process-- are we going to rebuild houses in there, and then we will start thinking in terms of future jobs for those people, or we have to think everything in complex right now, and then decide what we do first and what we will be do on the second stage?

From my point of view, the houses definitely should be rebuilt on those territories which are fully under our control and where the risk of future destroying is significantly lower than on those territories which are closer to the frontline and where Russian [? side ?] [? back ?] and from artillery, not from missiles.

CAROL Great, thank you. One of our listeners asked about assistance from the outside in this rebuilding effort, saying that most of the conversations, certainly most of the media coverage, has been about, say, EU, US support for the military effort that Ukraine is making. Are there also conversations that you're involved in or that the Ukrainian government is involved in about some kind of coordinated aid effort during and after? Because you need help now, and you're talking about rebuilding in the middle of the war. You need help now, in addition to what will happen the day after a cease fire, God willing, is declared.

OLEG Well, this is a very good question. Look, when we are talking about the rebuilding of the country-- so one has to USTENKO: remember that we have-- I mean we, internationally, we have 350 or close to \$350 billion US of Russian central bank reserves which were arrested since the beginning of this invasion. On the top of that, you have somewhere close to \$100 billion US which were arrested or under the tracking now of the Russian nomenklatura or Russian elite, so which are also arrested.

> But one thing is to arrest this money, and another thing, and another point, is to have this finance available for Ukrainians. And here, here is, I would say, significant, I would say, not a slowdown, but I would probably formulate it in a way that we were expecting that at least part of this money would be available for Ukrainian rebuilding right now because this is exactly what we need to do right now, and at least when we are talking about fast track recovery, then at least this fast track recovery should be financed right now.

Look, and our economic conditions are definitely far away from the brilliant ones. Our budget deficit currently is 20% of our GDP. All the revenues we are receiving, all the revenues we are receiving in our budget, we are spending for our military and for our security. All the rest is financed by our allies, including, actually, the US.

This year, the budget deficit is on the level of almost 40 billion US dollars. 10 billion was financed, and is financed, by the US government, 18 billion by EU, 5 billion by IMF, and the rest is financed by other our allies and internationals.

And under these circumstances, when you have definitely this huge shortage of money, shortage of financing, it's even difficult to initiate big programs, even not the big, but I would say probably middle size in terms of financing programs to-- for rebuilding of Ukraine. And here, we are spending maximum which we can spend. And this maximum for this year, at least so far, was lower than \$2 billion US. So basically, \$2 billion US out of at least \$15 billion US which are needed for these kind of fast track recovery is definitely not a huge funds which can really make a difference.

So from this point of view, it's really crucially important to start using this money of Russian central bank which were arrested, as I said, since the beginning of invasion. So Russia have to understand that the end of the day that they have to compensate all these damages they've done in the country, in Ukraine. And eventually, just beginning of the process. Beginning of the process is starting to use these funds for building and for this fast track recovery.

SIMONIf I could just add one point there, just to reinforce it, I think everyone should remember that while there haveJOHNSON:historically been instances of countries doing damage to their neighbors, first of all, what Russia has done to
Ukraine is a lot more damage than we've seen for decades, but secondly, Russia, because it's a big energy
exporter and because it has a historically current account surpluses, it has accumulated these very large
balances held in mostly dollars and euros outside of Russia. And those balances-- that's what has been frozen,
was frozen when the Russian full-scale invasion started in February of last year.

But this money absolutely can, and in my view, just echoing what Oleg said, should be used to provide compensation for the damage that was directly caused by Russia. Now, this is a very active policy discussion right now. This is not something that the G7 industrial countries have rushed into. But where else are you going to get the money?

As Oleg said, the scale of damage that's been imposed on Ukraine in a very clear, documented, massively public manner-- that damage far exceeds Ukrainian GDP. It's a large number even compared to what the Western countries are willing to provide. But Russia's own assets that were accumulated, and actually continue to accumulate since the invasion because they sell-- they make most of that foreign exchange by, as I said, by selling oil, still some gas, but mostly oil, to the world. That money, I think, is absolutely in play with regard to financing the rebuilding of Ukraine and the defense of Ukraine so that it cannot again be invaded by Russia.

 ELIZABETH
 Thank you both for those answers. In fact, Simon, I know you've been working on that this summer, doing a big

 WOOD:
 report on trying to recover some of those assets. Is there anything more you want to say publicly about the

 research you've been doing or-

SIMONI think the discussion is exactly where Oleg and I just put it, which is there's a pressing need. Where else are youJOHNSON:going to get the money? It's expensive, but we know who caused the damage. In fact, the Ukrainians have
meticulously documented precisely which part of the Russian military caused what kind of damage. And they can
trace it all back up the chain of command, so there's no ambiguity there.

I think the question, Elizabeth, is who will take this up in the G7 forum, who wants to lead on that issue. And as Oleg indicated, there has been some hesitation. I think the aid from the West has been generous. Don't get me wrong. But as Oleg said, the needs that Ukraine have are an order of magnitude larger than the Western countries are comfortable providing out of their own budgets. So how can you fill that gap, and how can you fill it now? You can absolutely use these resources that Russia accumulated and is holding currently outside its country, outside of Russia. ELIZABETH

So shall I ask another question from the audience?

WOOD:

CAROL I thought-- I didn't no. Go for it. Go.

SAIVETZ:

ELIZABETH Carol, you're doing a great job on asking the macro questions, and I've been focusing here on the micro ones. I
 WOOD: just want to also add a footnote on the housing question, that we have some amazing colleagues here at MIT in the urban studies and planning program who are working on housing.

They're going to get-- for anybody who's on this call who is from MIT, we're going to be having a course that's offered this spring, and probably more effectively in the summer in this-- a little bit this fall, and then the spring, to talk about rebuilding methods. It's a program called [UKRAINIAN], which in Ukrainian means "to love," and [UKRAINIAN] means "house," so it's house cohousing project. Very exciting, so for students who want to get involved in that.

But we have another micro question on renewable energies that I think is very interesting. Two questioners have asked what is your opinion on renewable energies in the context-- in this context? What about wind energy near the shore of the Azov Sea and the Black Sea during and after the war? And is it possible that the EU would help to sponsor and subsidize renewable energies and make a focus on that? You-- either of you want to comment on this question of renewable energy?

OLEG Oh, yes, absolutely. This is actually the discussions which we were holding in the country before this war. So
 USTENKO: basically, it was a course at the very beginning. It was a discussion. We were talking about wind energy. We were talking about solar energy. We were talking about all issues related to these points.

However, everything has changed dramatically since the beginning of invasion. And now it's very clear for everybody in Ukraine, and I guess also in Europe, at least this is the feeling which I have after these kind of discussions with our friends, that the era-- potentially, the era of fossil fuel is coming to its end. Of course, we can argue how long it will take and whether it's going to be for one more decade or it's going to be for a couple of more years, so it's going to be two decades. However, strategically, everybody understands that these kind of area is coming to the end.

And from this point of view, everything related to green technologies is extremely, extremely, extremely important and extremely valuable for Ukraine [? scenes. ?] Also, keep in mind that we were also quite dependable from oil and from gas we were receiving from Russia. Now, there is definitely--- it's a question of our survival to change the structure of our energy sector.

On the top of that, we are on our track to EU accession, and which also means that we would be able to implement all these new green technologies. And from this point of view, you know, I was even holding a discussion with our marketplace. And they welcomed these efforts very much. And they are prepared to continue investing into this sphere, into this sector.

And I see-- here, I can see really, very bright future for those projects in-- currently, actually, in Ukraine, but definitely in a post-war era. This is for sure.

CAROL Great. Thank you. We have a question that sort of tags onto my question at the very beginning. And it's more of
 SAIVETZ: a military question, so answer if you feel comfortable answering. If it puts you on the spot, I apologize. But the question was, is it worthwhile to invest in all this rebuilding now, before Ukraine takes the war to Russia, is my phraseology of it and everything. And certainly President Zelenskyy, either yesterday or today, threatened that-to threaten Russia, that if Russia again attacked the energy infrastructure this winter, that Ukraine would retaliate.

So if you're willing to make any comments about that kind of military balance, please, by all means, chime in.

OLEGOK. Thank you, Carol. Definitely-- and military is definitely not my territory. But from what I can say and what IUSTENKO:can share, you have to feel the mood in the country. And the mood in the country-- I mean, Ukraine is--
everybody believes in our victory. Then, of course, you are coming to the issue when we are going to have this
victory. Of course, everybody wants to have it the sooner the better, as soon as possible.

However, everything-- everybody understands that everything is dependent on our militaries and on these great efforts of helping us from our allies, including the US. So from this point of view, we are very much sure that the victory is-- eventually is going to be in our hands.

However, does it mean that we shouldn't think about the rebuilding now because part of this is going to be destroyed? As Simon rightly pointed out, look, everything should be compensated by Russia. And if it's not enough or if it's not enough in terms of the funds which were frozen now or arrested now, then we have other possible sources of this kind of receiving these kind of compensations from Russia after the war is over.

If they continue to sell their oil, or if they continue to sell their gas or if they continue to trade internationally, then we will be able to find a way to partly use their revenues to compensate us for all the damage we received because of this aggression.

So in my view, if-- I mean, sorry for going to this kind of level, but if we invest \$1 million US to one energy project for rebuilding one of our energy objects of our infrastructure, and if Russians are going to destroy it again, it means simply that they have to compensate it in the future, \$1 million again. So basically, it's just going to increase the price tag they are going to pay at the end of the day.

But again, as I said before, we have to think about all these projects which are critically important for the country in order to make the country able to survive these difficult days. But one more time, I don't see any objectives why we should not start it now.

SIMONIf I could just add there by way of update, people may remember that last year, Secretary Yellen and othersJOHNSON:proposed to impose a price cap on Russian exports of oil. And there were many people who said that won't be
effective or it can't work and so on and so forth.

Actually, what we see now is that's been by far the most effective sanction, economic and financial type of sanction, on Russia because Russia is able to buy most of what it wants from the outside world, actually a lot of it through China right now. And the freezing of their foreign exchange assets that we already talked about had some shock value initially, but didn't have much lasting damage.

There is definitely some pressure on Russian public finances because the effective price of Russian oil has been pulled down by that price cap. Now, I think my view, and the view of some other people, would be you need to lower the price cap. You need to push further on making that effective.

But this all goes to Oleg's point, which is Russia makes its way in the world by selling energy. And most of this energy at this point is oil placed on tankers that are then driven to other countries. And that's a very wellobserved activity. These ships are watched every inch of the way by many people. So you know exactly what trade is going on.

And there certainly has been precedent situations when oil-exporting countries had to pay some part of their revenues in various forms of compensation. Iraq did this for a while in the 1990s, for example. Now, Russia is a different scale of problem. I understand that. But the effectiveness of the price cap, I think, is something people are and should be taking note of. And I think this definitely lends itself to the kinds of proposal that Oleg just put forward, which is Russia could pay not just out of its existing stock of assets, but also on a continuing, ongoing basis.

Of course, they might say, oh, we don't want to sell oil to the world. I don't think that would be the case because it's very cheap for them to pump oil out of the ground. It only costs about \$15 a barrel, and they can currently sell it for about \$60 a barrel. But if they did, of course, withdraw their oil, then they wouldn't have any way to afford imports, including the imports of missiles and missile parts. So I'm not sure we should feel too heartbroken about that.

OLEGAbsolutely agree with Simon. And I really believe that when there was-- when we imposed this price cap, it was**USTENKO:**really a very good movement in terms of making sure that Putin and his regime have a significant cut off of their revenues.

Obviously, if I may add, in terms of the price cap overall, obviously-- and I know that it's not related precisely to our topic, but in our view, what should be done next-- it should be a significant squeezing in this price cap level in the nearest future. And \$60, which was introduced from the very beginning, is definitely not enough.

And let me just remind all of you that from the very beginning of this G20 meeting, President Zelenskyy was very clear when he was saying that the price cap should be on a level of marginal production cost of-- for Russia, and which used to be at that time on a level of \$30 per barrel. And one can argue that it's even significantly lower and might be on a level of between \$10 to \$20.

So from this point of view, in order to get more money for compensation, and meaning for rebuilding of Ukraine, we have enough space in the future. [? Thank you, ?] [? Simon, ?] [? absolutely. ?]

ELIZABETH So let me ask a ticklish question, just because I think hearing your answer will help us all. Someone asks, how
 WOOD: much of the arrested Russian money that is planned to go to Ukraine has the Ukrainian government already received? And then the question comes in, what about accountability?

Of course, nobody's asking these questions of Russia, which could be equally [LAUGHS] studied in terms of corruption, waste, and inefficiency. But the speaker still has a good question. What about accountability? And I would broaden the question to say tell us more about President Zelenskyy's efforts to fight corruption. Again, how is he-- how can you prioritize that in the context of the war? What do you think about that? I can't even imagine on a practical level how you fight corruption at the same time you're fighting a war, but I imagine it is an issue, and I'd love to hear more about it, if you don't mind.

OLEG USTENKO:

Oh, absolutely. It's a very reasonable question. Actually, in terms of how much we receive from those arrested money, I'm not sure whether we received more than \$3 million US. I think that this is the latest number which I thought, so 3 million US dollars, not billion, million, US dollars out of \$15 billion, which is a minimum price tag for this fast track recovery. It's just nothing.

Everything related to accountability. Obviously, you are absolutely right. This is a very right question. And this question should be asked now, not when the program is going to be implemented in a full scale. Here, again, we are talking about huge money. We are talking about price tag of \$750 billion US. To make sure that all these money are utilized in the right way, and openly, effectively, it's not the interest of-- only of international communities, the interest of Ukraine and ordinary Ukrainians as well.

And from this point of view, everything related to the-- not even to the management system, but to the system of tracking each penny spent in these programs is crucially important. And from this point of view, actually, that's why there was initiative that the board, which would be doing tracking of all these rebuilding projects, should include internationals, basically, from all our allies.

But at the same time, the issue of anticorruption practices is also extremely important. Look, this was the issue in all our discussions, I would say, probably, over the last three decades, since the beginning of our independence, which we received in 1991. So at some point, the discussions were accelerated. At some point, the discussions were decelerated.

However, now I think that it's critically important in terms of the survival of the country. And surviving of the country would not be possible if you are not changing-- at the end of the day, if you are not changing the business climate in the country, from the economic point of view.

And part of this equation, in terms of the quality of the business climate in the country, is definitely everything related to anticorruption practices. And that's why it's now one of the, I would say, top-- I wouldn't say number one priority, but definitely it's in the top five priority in the country now, from the point of view that we have a huge demand and a huge pressure from the civil society in Ukraine to make sure that we are making progress in this direction.

The second one is everything related to our EU accession track. The third I would say, anchor here, is our collaboration with international institutions, such as IMF. And that's why if you try to find the same articles in each of these documents, you definitely see anticorruption practices.

So from this point of view, I would say that it's really extremely important. I'm not even talking that when corruption is decreased, when you are working effectively in terms of implementing of all these anticorruption-developing anticorruption architecture. Eventually, at the end of the day, you are going to have a budgetary effect as well. This is extremely important now for the country and in the future as well. So I do support this idea. And this is definitely one of the priorities of the president and the cabinet as well. That's why you can see now in the press [INAUDIBLE] so many cases of different anticorruption investigations all over the country. Yes, this is a huge and extremely important topic, definitely, for Ukraine. And we need to deal with this, not because of you, not because of the US, but because of ourselves, because of our citizens, because of our country, because we want to win this war.

CAROL Thank you. I'm going to try to lump two questions together. One of our viewers asked about what are in the plans
 SAIVETZ: in terms of mitigating environmental disasters caused by the war, and somebody else asked about the destruction of the dam. So the two in my mind are interrelated. And that obviously has to be a big piece of whatever reconstruction projects go forward.

OLEG From the very beginning of this invasion, our Ministry of Ecology was fixing all the damages we were receiving in
 USTENKO: this direction. But all of these damages we were receiving was almost nothing if you compare with the damage we received because Russians destroyed this Kahovka Dam.

And the consequences for environment was definitely very negative, and a huge one, and in terms of-- from a financial point of view, if I correctly remember the number, we are talking here about at least \$3 billion US of damage, which was received directly because of this Kahovka Dam for our environment. However, definitely the price tag is going to be significantly higher because a number of houses were destroyed, assets were destroyed, land was destroyed. Because here, we are also talking about agricultural land which was under the water during those times.

So overall, damage is huge. And there, what Russians are doing in our forests, when they are cutting our forests and when they use it for their own decisions, mainly military-driven decisions. So the same is related to animals, to wildlife, so the same. The damage is just huge one.

And the Ministry of Ecology is doing a lot of work to fix everything and to make sure that they have everything in order in terms of the [? line's ?] damage. And moreover, you need to know all this information in order to implement plans for rebuilding here as well. So basically, it's a part of the rebuilding of the country.

SIMONRight. And let me remind everyone, including people who are very concerned about the environment, that theJOHNSON:Russian invasion and continuing actions are directly damaged, and threatened further damage, to some major
nuclear power-- civilian nuclear power facilities.

And given that the Russian way of doing things includes destroying things and then claiming that other people did it, even though that's a blatant lie, I am very worried about what Russia will do under any circumstances, in various scenarios, with regard to these nuclear power stations. And I think that's something that really requires a lot of scrutiny and assistance from outside to make it clear to the Russians that that would absolutely not be acceptable and that the world will know what happened, and that that will come out, further come out, of their export proceeds.

I mean, I really don't think the Russians can be brought to their senses in many ways except through defending Ukraine and the military, but also through, appropriately and commensurate with the damage, levying compensation against Russian assets that are held outside of Russia. So if someone drives their car into a crowd and they kill people, that's at least vehicle manslaughter, and compensation is due to the victims who were killed by that car driver. That's a absolutely long-established principle of law, I think, in every country that has laws.

So Russia deliberately drove its military machine into Ukraine. It caused this massive damage. It could do even worse, so let's be quite clear on that. And they owe Ukrainians compensation. And they have the means to pay.

It's unusual that countries have the means to pay when they do this kind of damage, but Russia does. And it earns its living in the world, its foreign exchange, through selling to countries that buy its energy products. And we know who those countries are. We know how much they pay. We know where the ships are that transport this energy.

So all of that, both the historical proceeds, the stock of foreign exchange, and the continuing flow of earnings that Russia hopes to earn-- all of that can be appropriately taxed and used to rebuild Ukraine. And if you don't use that money, then I don't see what else-- where are you going to get the resources to help Ukraine rebuild sufficiently.

And I also don't see how you're going to stop Russia from doing something like this again because unless they see it coming out of their pocketbooks and coming out of their ability to maintain their society and to make war, I don't think they're going to really pay attention to anything that other people might call some sort of cease fire. I think the Russians will come again unless you change their incentives, and the easiest way to change their incentives is to change how we pay for energy and how much of that revenue flows back into the Russian Ministry of Finance.

OLEG Yeah, absolutely, Simon. And this is-- at the end of the day, it's the issue of justice, whether you want to have
 USTENKO: justice or you will allow somebody just to do whatever they want, without any compensation and meaning without justice, so it's an issue about justice.

SIMONI think it's very interesting, and Carol and Elizabeth could react to this, too, that the events of Bucha and theJOHNSON:documentation of the horrors of Bucha, which, of course, is just one microcosm of this entire awfulness-- but
there was something about that moment that really crystallized for outside opinion that this was beyond
anything that could be tolerated and beyond anything that was acceptable in the modern world or in and around
Europe.

And I think that that injustice, that profound injustice, and the horribleness of those war crimes, will ultimately lead to proper compensation for Ukraine. I just wish that people would come to the realization sooner that Russia has to pay for the damage caused and be dissuaded with Putin, after Putin, whatever the future, Russia must be dissuaded from the idea that they could ever do this again, to Ukraine or any other country.

ELIZABETHYeah. Well, we have two related questions to that. One is, do you have any suggestions for diplomatic pressureWOOD:on Russia in addition to the economic pressure you're talking about? And then a question that I think is very well-
phrased-- Russia is doing a good job of slowly destroying its own economy. Are there economic tools besides
what's already been done to accelerate their kind of economic self-destruction? So, yeah. What do you think
about-- I know it's sort of out of the economic to ask about the diplomatic, but I'd be curious if you have thoughts
on pressures on Russia.

 OLEG
 Look, I think that all the doors should be open, including the all intentions in terms of diplomacy. But definitely,

 USTENKO:
 it's not-- it's not where we are able to move forward the agenda. Because Russians are trying to pull around everybody now.

Look, with this grain corridor, with the statements we heard and are hearing from the Kremlin, what they're saying-- these statements which were done by the Ministry for Foreign Affairs yesterday and this morning, when he's saying that Russia has nothing to do with the problems which Ukrainians are experiencing now.

So basically-- I mean, all these statements coming from Kremlin, at least publicly, shows that these guys are either not prepared to discuss and to move forward the diplomatic agenda, or they are trying to fool everybody around, showing that we just do not understand what's going on in Ukraine with all these Russian invasion and with all this Russian aggression.

So at the end of the day, I think that in terms of the economic situation, I would say that we are doing a lot, but definitely not enough. Russia experienced significant problems. I mean, their economy is experiencing significant problems.

However, it's not exactly what's supposed to be because they are employing, as we are saying it in Ukraine, a cockroach strategy. When all these sanctions were imposed on them, they are trying, as cockroach, to find any possible holes or loopholes to navigate under these new conditions. This is precisely what happened with their oil when they started to buy a shadow fleet, that they were moving their oil to India and to China increasingly, with increased-- significantly increased amounts.

For example, in India, India was buying Russian oil before the invasion, but at that time, in the overall structure, it used to be-- I mean, Indian's imports, it used to be somewhere close to 1% of the imports. Currently, it's 40%, or close to this number. 40% of their oil imports is coming from Russia.

So Russians are trying to find all these possible loopholes. So the more sanctions imposed in Russia would change the economic situation in the country because of course they have problems now, but this is definitely not enough, as we already discussed. Price cap should be squeezed. All loopholes should be closed. Grain corridor should be in place again. So we have plenty of things we need to do in this direction.

CAROLGreat, thank you. Actually, I was going to ask you about the grain because somebody asked us to ask you aboutSAIVETZ:the grain corridor. One of the things we haven't talked about yet is actually restoring the whole agricultural
sector of the Ukrainian economy. And clearly, Ukraine was a major exporter of grain, so it seems to me that there
are several questions.

One is specifically about the investment that needs to be made to meet-- needs to be made to repair the agricultural sector. The second is the more geostrategic one of opening up that grain export corridor. And I guess the third one is persuading the states of what we used to call the third world that this is not Ukraine's fault, that the shortage of grain in the world is not Ukraine's fault, and to try to rally support for Ukraine against the Russian embargo.

OLEG Thank you very much. We were actually thinking about this issue with Simon since the beginning of the invasion.
 USTENKO: And actually, I could probably use as a reference Simon's and mine doing the op-ed in *Los Angeles Times* a couple of weeks ago, probably one month ago. So it was precisely on this issue.

So what we are arguing with Simon is that Putin really-- I mean, you can see in some of these discussions that Putin is trying to substitute us on this grain market. However, in our view, this is not really a natural task he has in front of him. What he is trying to reach-- he is trying to make sure that the world is coming to full house. And under these new circumstances, he wrongly believes that he could manage the system under this house because of the hunger.

Look, Ukraine for decades used to be one of the most important producers, or even not a producer, but a huge exporter of grain to international market. Currently, we are expecting that our harvest is going to be on a level of at least 75 million tons of grains, which is actually more than we used to have last year. So basically, we can imagine that under these extremely difficult conditions, [? world ?] conditions, we were able to have a harvest even better than last year.

So basically, 75 million is what we are expecting to have this year. We have in our storages somewhere close to 8 million tons of grain from the previous year. So altogether, it's somewhere close to, let's say, 85 million tons. And our internal consumption this year, I would say, would not be more than 18, 18 million tons. So probably more realistically, let's say 15, but let's say 18 million because this is consumption, internal consumption, we used to have over the last decade, meaning that we are prepared to export to international market somewhere close to 70 million tons of grain, or-- yeah, close to 70 million ton of grain.

And definitely we are prepared to do that because of many reasons, and the first reason is that we fully understand that 500 million people are-- their lives physically dependent on whether we are able to move our grain to international market or we will not be able to do so.

And the second reason is definitely related to our economic situation because agriculture is 40% of our foreign exchange revenues. It's a significant portion of our GDP, which is on the level of roughly around 50% in the overall structure of our GDP. So this sector is extremely important one for us.

And we are not-- usually, before the war, we were moving somewhere between 5 to 7 million tons of grain monthly through the Black Sea. When this deal is closed, we are not able to move our grain through Black Sea. And the only way how we can do this is a land corridor. But the capacity of this land corridor is significantly lower. It would not be-- under the very best case scenario, it could not be more than 3 million ton monthly. And the demand is at least 7 million tons monthly. So basically, we have to double it.

And it's very easy to say that the capacity should be doubled, but in practical terms, it's really very difficult to do in such a short run. So from this point of view, it's extremely important to reopen this Black corridor. But maybe Simon can elaborate on that.

SIMONWell, I think the-- yes, of course, the grain corridor is of fundamental importance to the world. I think, Elizabeth,JOHNSON:it's really-- and Carol, it's really striking that there's a number of countries around the world, as you said, in Africa,
for example, but also other places, that seem to be siding with Russia and failing to understand that by doing
that, they're just encouraging Putin to take these actions that will disrupt the grain trade and push up prices.

And that is deeply, deeply unfortunate. I guess South Africa has said some things that are sympathetic to Mr. Putin, although I noticed that in the recent BRICS meeting in South Africa, Mr. Putin didn't go because there's an international arrest warrant for him, and South Africa would have been obliged under their own laws to arrest him had he showed up for that summit meeting. So there's a remarkable degree of dissonance around the world, and I'm not going to speculate on why these countries are taking these positions. But I think it's completely counter to their own interest. I think it's Russia that's causing the damage, Russia that's disrupting the flow of grain. Russia wants to push up the price of grain and blame it on Ukraine.

And that's the same-- it's the same attitude, it's the same strategy, as we talked about, in terms of causing damage and then blaming other people. And it really needs to stop. And the only way to stop it is by dramatically shifting the incentives, including the financial incentives, against the Russian state so they don't feel that they-- that they know they're not going to get additional revenue when they do these incredibly damaging and awful things.

ELIZABETH Yeah. We're coming to the end, but I wonder whether this is an area where there could, again, be more
 WOOD: diplomatic pressure on-- for India, clearly their bottom line is how to feed their people, and they want the cheapest resources. And China is trying to break the US domination of the world by taking cheaper things from Russia.

Do you think there's pressure that could be put on those countries, on South Africa, India, Iran? Iran is supplying all the drones, so I just-- I guess my last question would be, are there any ways to pressure the world on this? I've been very interested in the whole idea of getting Russia kicked out of the Security Council of the UN or expanding the UN. I don't know. Anyway, I'm just curious about last thoughts on that. And then Carol gets one last question, and then I think we have to end. [LAUGHS]

CAROL I was just going to thank everybody, but I like your question, so let's run with that one. [LAUGHS]

SAIVETZ:

OLEG Look, when there was this meeting in Moscow of African leaders, when they met Putin and when Putin announced USTENKO: that, look, we are prepared to supply you African countries with 1 million tons of grain, there was a very interesting reaction of President Cyril Ramaphosa, who said very clearly something along the line that, hey, heh, we don't need this kind of deal. What we really need-- we need to make sure that the world is supplied with the grain.

So basically, all these dirty games which Putin is trying to play with the world, and actually, what he is trying to play with the grain, exactly the same what he was playing with energy resources. It's very obvious for everybody that it's just a game and nothing-- and more-- not more than that. Look, he was promising to supply African countries with 1 million tons of grain. They destroyed, they destroyed, since the break in this Black Sea grain corridor-- they destroyed somewhere close to 400,000 tons of our grain, which was enough to feed at least one million and a half people in the world, including, actually, African countries.

So we are talking here about, again, kind of unrealistic messages sending by Putin and his cronies to the world. And it's very obvious for everybody that they are playing these games. And these statements, which were coming from President of South Africa, was very clear about that. It's very understandable for everybody.

But if it's a question, do we have more to do on this, including diplomatic efforts? I think that, yes, we can try. But the latest meeting of President Erdogan, who currently visited Putin in Sochi, actually, the city on the Black Sea, was, again, obvious. To reach this deal with Putin is, I would say, not even difficult, but probably almost next to impossible.

CAROL SAIVETZ:	So it is my, I guess, sad duty to call this to a close. I'd like to thank both Oleg and Simon for giving us their time and their insights into all these interwoven, it seems to me, issues that have to do with the rebuilding of Ukraine. I am sorry if we did not get to all of the questions. According to the bottom of my Zoom screen, there are 39 comments and questions, and obviously, we had only an hour and 15 minutes. So thank you both very, very much. I have found this really insightful in thinking about the interrelationships of the question about corruption, which has been in the papers the last couple of days, thinking about what are, as Simon's phrase was, changing the incentives for Russia so that perhaps the Russians would be willing to come to the table and hoping that there is peace at some point to save Ukraine. And hopefully Russia will understand that it cannot do this again. Maybe I'm being naive. We are in the process of planning more seminars. There will be another one this semester that we're in the process of working on. And then there will be one around the February 23rd/24th date to "commemorate" is a terrible word. To observe what looks like it's going to be the second anniversary of the beginning of the war, so stay tuned to all the announcements and everything. I'd like to thank Elizabeth. I'd like to thank CIS and SSP. And I would definitely like to thank our speakers for an absolutely wonderful discussion about all of the problems facing Ukraine and Ukrainian society today. So thank you both.
OLEG USTENKO:	Thank you very much.
ELIZABETH WOOD:	Thank you so much. Really fantastic seminar. Super.
OLEG USTENKO:	Thank you. And I forgot to mention it from the very beginning, but I really appreciate that you are opening this Ukrainian MIT program. Really very kind of you. Thank you so much. Really appreciate it.
ELIZABETH WOOD:	Great.
CAROL SAIVETZ:	Thank you both. Bye.
ELIZABETH WOOD:	Take good care.
OLEG USTENKO:	Bye-bye.
ELIZABETH WOOD:	We're going to keep on working.
CAROL SAIVETZ:	Stay safe. Definitely.
	[MUSIC PLAYING]