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**Ella Kokotsis:** Thank you very much. Hello from Toronto, and greetings to all our international speakers, colleagues and our webinar participants. My name is Ella Kokotsis, I'm the director of accountability for the G20 Research Group based at the Munk School of Global Affairs and Public Policy at the University of Toronto. I am extremely honored and thankful at the invitation by the Council for Global Problem-Solving to moderate today's webinar on the G20's nature-based solutions to the climate crisis. Now since their inaugural meeting back in 2008, the G20, at the leaders' level, have recognized the power of nature-based solutions in the texts of their final communiqués, albeit in a limited way. And with the G20 convening in about eight weeks from now, our experts today are going to break down for us which specific nature-based solutions the leaders need to act on when they meet in Rome at the end of October. Now we know that in order to keep global temperature increases at or below one degree Celsius, we need to both reduce the sources that send those emissions up into the atmosphere but also expand the sinks that pull them down. At the moment nature is the only sink we have. So what are nature based solutions? The definitions do vary slightly by source but the EU describes these as solutions that are inspired and supported by nature. They're relatively cost effective, and they provide environmental, social, economic and biodiversity benefits by restoring natural and modified ecosystems. Now we all know the UN's August 8th IPCC report was just released and it confirmed that a host of proven affordable nature-based solutions are in fact available to us. Collectively, they play a really critical role in preserving a

livable planet. So today, we're going to hear from our distinguished experts across regions of North America, the Caribbean, Small Island States and also the BRICS countries, which include of course, Brazil, Russia, India, China, and South Africa. Our speakers will also offer their recommendations based on the policy brief they recently helped prepare for the Think 20 as part of their advisory work to the G20 leaders when they meet Rome. In order of presenters we will first hear from John Kirton, who among other positions is a professor of political science at the University of Toronto Munk School of Global Affairs, and the co-founder of the G20 Research Group. I am excited to announce that John and I, along with Brittany Warren, who I believe is in our webinar this morning, are in the final stages of our book on reconfiguring the global governance of climate change. It's going to print very soon, so please stay tuned. Following John we're going to hear from James Hospedales the founder of EarthMedic and Executive Director of the Caribbean Public Health Agency, and will then hear from Irina Popova, a researcher at the Center for International Institutions Research at the Russian Presidential Academy of National Economy and Public Administration, also known as RANEP. Now before we begin, I would like to take a brief moment to acknowledge our special guest Dinara Gershinkova, who's with us from the Sakhalin region of Russia, for over 15 years Dinara has been the governor's representative on climate and sustainable development for the Sakhalin region. She's a member of Russia's delegation at the UN's climate negotiations, and also sits on the UNFCC's Executive Committee on Technology. Dinara I know it's very late for you and Sakhalin so we're delighted that you can join us here today and welcome.

A very quick housekeeping note before we kick things off, I kindly ask each of our speakers to please limit if they can their remarks to about seven or eight minutes, so we have sufficient time for discussion with our other CGP members, as well as other invited guests. So without further ado, I'll now turn the microphone over to John Kirton, who's with us from Toronto and will speak about the G20's record on nature-based solutions, with particular focus on Canada and the United States. John, over to you.

**John Kirton:** Thank you Ella. Nature has long been a proven affordable solution to climate change. Preserving and promoting nature can now provide over 1/3 of the solution to keep global warming between 1.5 degrees above pre-industrial levels – the point beyond which we could all fry and die. But G20 leaders have done little to mobilize the power of nature to control the climate crisis we now face. Since 2008, they've included nature-based solutions in only four of their 94 commitments on climate change, and only one of their commitments on food and agriculture, and then none of their 161 commitments on energy. The G20 made its first nature commitment – it was on forest protection – in 2010. In 2012, it added another one on regenerative agriculture and agro-forestry. In 2019, at Osaka it made three on nature-based solutions in general, on indigenous peoples and on smart cities. Since then, it has done nothing, nothing in the last two years. G20 members complied with their nature-based commitments – those they made – at a level of only 67%. Two thirds. Forest production had 65% regenerative agriculture and agro-forestry 68%. Still, even with two thirds compliance, they have importantly helped control climate change. Their action on forest production has helped reduce, I estimate, 586 gigatons of carbon emissions. Their action on regenerative agriculture and agro-forestry helped reduce another 21 gigatons. North America's two natural superpowers by territory, the United States and Canada complied completely with these nature-based solutions commitments at 100%. Third place to Russia did at 75% but fourth placed China at only 25%. At their Rome summit on October 30<sup>th</sup> & 31<sup>st</sup>, G20 leaders should do six things as we detailed in our policy brief to the Think 20's taskforce on climate change, clean energy and environment. One: foster forests. Two: preserve peatlands, mangroves and wetlands. Three: conserve coasts, coral reefs, and oceans too. Four: clean cities by greening them. Five, raise renewables from reliable geothermal wave and tidal

power. And six: lower land use stress through plant-based diets and minimizing methane emissions from animal agriculture. And with those commitments, they should increase their compliance by doing five things that Brittany Warren suggests work: One: produce more ambitious nature-based commitments. Two: hold more meetings of climate change and environment ministers. Three: use strong politically binding language in their commitments. Four: refer to the United Nations Framework Convention on Climate Change. And five: stipulate timelines for compliance of six months or less, there's no time to lose. If they did these things, the beneficial impact on the climate would be huge. Fostering forests would reduce and protect 905 gigatons of carbon. Preserving peatlands would reduce and protect 1251 gigatons. Conserving coastal wetlands would save 56 gigatons. Greening cities by lowering landfill methane would save 2.5 gigatons. Increasing geothermal wave and tidal power would save 26 gigatons, and adopting plant-based diets would save 71 gigatons. So, preserve peatlands first, these numbers suggest, but foster forests first, to get the co-benefits of jobs, health and livelihoods too. For far more people live in the forests, than on the peatlands of the world. Thank you.

**Ella Kokotsis:** Thank you, John, for your thoughts and remarks and particularly for breaking down for us exactly what the G20 needs to do in Rome in October in order to mobilize the resources needed in order to address some of these nature-based solutions as they head into their Rome summit. Thanks, John. Next, we're going to hear from James Hospedales. He'll speak to us about nature-based solutions for a healthy Caribbean, Small Island Developing States and the global south. James, the microphone is all yours.

**James Hospedales:** Thank you Ella. It's hard to follow the John's very academic and precise act. So this is based on an adaptation of the T20 brief that was done for greening coasts. Climate change is killing people. It's killing living things and economies in ever-larger ways. In the 58 Small Island Developing States of the world and across the south. The G20 members directly suffer from this due to their Caribbean and other SIDS territories and the interests that they have in the south. United Nations and the G20 agree that the Caribbean and the SIDS are uniquely vulnerable to climate change with a lot of implications: health, migration, security, economic and environmental implications. There was a lot of emphasis on economy in the past. More recently, the realization of how big the health impact is, is becoming clearer. Small Island States have less room for retreat when you have extreme weather or rising sea levels. The Caribbean is particularly vulnerable and an interesting microcosm comprising 15 territories of G20 members, 15 independent countries, with 40 million people and 50 million visitors by air and by sea, mostly from the G20 countries. At the CARICOM, a UN pledging meeting in 2017 after hurricane Maria I remember the foreign minister for Italy saying that the SIDS are the litmus test for international development given their vulnerability. Warming oceans are harming our food security in SIDS. The wind the rain the storms are damaging, they not only cause direct death and sickness, vector borne diseases and but also they damage telecommunication, health infrastructure, flooding, so you have interruptions. Long after the storm ends you have disruptions in medical care and continuing higher levels of death. Climate change in the Caribbean region in other SIDS is leading to population displacement and forced migration. Looking in more detail at the IPCC regional reports, it's underappreciated that the mass migration from Venezuela including to the Caribbean islands has a significant climate factor behind it, they've lost four fifths of their glaciers, there's a lot less rain in the last 10 years. Within the Small Island States is a particular problem of obesity and non-communicable diseases. And these are very linked to climate change. In fact, this problem is across the south, dependence on fossil fuels and mechanized agriculture and motorized transport drives global warming because of the greenhouse gas emissions, but it also drives sedentary life, poor diet, obesity, diabetes, high blood

pressure, and so on. In the Caribbean it has been documented that 3-8% of the gross domestic product. Much of this can be addressed through smart nature-based solutions, including a shift to more plant-based diet and active transport such as biking and walking. Those two measures would make a big population health impact, save costs and be better for the climate. Now in a sense, there's been of necessity of brutal necessity, a lot of adaptation for disaster response and recovery. But the longer-term resilience and mitigation that we now need, given 1.5 is almost upon us, is around access to financing, data and information to plan, and governance issues. How to how to coordinate across so many jurisdictions and different sectors. G20 members lead the world in the direct stake that they have in SIDS and across the south. For the Caribbean, I've already mentioned the US the UK, France, Netherlands, Spain, and through the European Union. Canada have capability and interest that could lead a G20 effort to demonstrably improve nature-based solutions in SIDS, address climate, and have benefits to population health and wellbeing and benefits to the economy. So the proposal at their own summit, they should commit to greening and restoring forests across the SIDS and the south coasts and living shorelines by expanding forests, mangroves, seagrass, coral reefs and coastal friendly infrastructure such as in Barbados, which is used for walking as well as for coastal erosion protection. We need better plant-based solutions, help with implementing them for gene bank, seed banks, heat resistant crops, and facilities for deploying or for sharing right after big disasters. One of the missing pieces is region-wide sustained educational programs so people understand better and appreciate the environment and understand their role that they have to play in it. G20 can mandate their institutions to strengthen governance with monitoring and research work of relevance to SIDS. Many of them already are involved with Caribbean institutions as well as North American institutions such as GIZ in Germany, we can together strengthen capacity for monitoring the state of nature-based solutions in SIDS. Improving access to financing is critical for the above to happen at speed and at scale. And it really is urgently needed: a multi-dimensional vulnerability index. There's been agreement on this in the UN and the G20 for a long time, it just hasn't happened. And that's really needed.

SDR for NBS swaps G20 members who don't need their new SDRs at the IMF, beginning with those who have territories in the Caribbean Pacific and other SIDS, could donate them to SIDS on condition they use say 50% for climate change control through nature-based solutions, which would have health co-benefits. Finally, supporting the Caribbean SIDS to apply some of the 11 or so international treaties and conventions to conserve and sustainably use mangrove forests. The core benefits of doing this would be many, switching to more plant-based diets and alternative transport, improving health and economic security reducing, health costs, improving food security as you improve the reefs and the health of the coasts' water quality, carbon capture, preservation of wildlife and reduction in the loss of biodiversity, better for fisheries and for the overall tourism industry in a more sustainable pace. Thank you.

**Ella Kokotsis:** Wonderful, thank you very much, James. So breaking down for us how the G20 have a direct stake in the Caribbean and other Small Island States, particularly as they consider what nature-based solutions they can provide at the Rome summit later this year. Thanks, James, for your comments. And now we're going to turn the microphone over to Irina Popova from Moscow who's going to speak to us on Russia and the BRICS potential as well as their challenges in both harnessing and implementing nature-based solutions Irina over to you. Thank you.

**Irina Popova:** Thank you very much. Good afternoon or good morning dear colleagues depending on your location. So today, I would like to talk more about nature-based solutions from Russian BRICS, as these countries have a huge potential to develop and implement nature-based solutions, with benefits for the global scale and with the positive effects for the climate change mitigation and adaptation internationally. So, I would like to start with and actually dedicate the most of my time to Russia, because it's my native country, and I'm more involved in the process, and then we'll move on to the BRICS agenda, and our suggestion for the development of BRICS agenda for this issue. So, as we can see on the slide, Russia possesses huge forests and wetlands and peatlands reserves, which makes Russia what John calls a natural superpower, and thus, Russia has huge potential to develop nature-based solutions to climate change crisis with benefits on global scale. Russia is home to 25% of all the forest area in the world and 70% of the world's boreal forests. And it was estimated that globally these boreal northern forests sequester a lot of carbon dioxide per year, and Russian forests account for 1/3 of this amount. And the second asset that Russia possesses is vast areas of wetlands and various peatlands, which cover a large part of its territory, and we all know that they really help to absorb and also store the carbon dioxide. So this for reforestation, and wetlands or peatlands, conservation are the two main policies Russia has and the two main options Russia tries to currently implement. And on the official level in Russia advocates for including emissions and removals from forestry and land use policies into the nationally determined contribution targets. But unfortunately, despite all the potential Russia possesses, and the answers which can be found in nature, climate change now impacts Russia's nature, and threatens to undermine the nature-based solutions potential Russia. And we can see that Russia faces significant climate challenges, including the increased severity and frequency of extreme weather events. And here we can see last year's examples, they I think they're striking that during the same summer of 2020, we had the worst flood in a century in Siberia, and the worst wildfire in Yakutia. And this year, again, we have terrible Yakutia fires, which have gone through more than 4 million hectares of the forests and emissions since June totaled more than 500 megatons of carbon dioxide. So our forests not only lose their capacity to absorb, but become emitters of carbon dioxide. And the annual damage caused by extreme weather events, is estimated to cost a lot to Russia's economy. That's why this climate change challenge is becoming more and more obvious. And there's an understanding that Russia needs to harness the potential for nature-based solutions, and to revisit its forestry and land use policy, especially concerning the wildfires and prevention. And this year, we can call a breakthrough for the climate policy in Russia, because we have several important pieces of legislation and regulation. Some of them are adopted some of them awaiting approval, we have law on decreasing greenhouse gas emissions adopted in June, which is a great step forward because it's the first law of this type in Russia, and it envisages a national system for carbon dioxide emissions registration and monitoring, and also has provisions for the carbon reduction through the implementation of climate projects. But this law still doesn't have a real regulation, for example, in the form of carbon pricing. And you can say that it's really unambitious, unfortunately. And it will later be supported by further legislation if Russia wants to realize all the potential it has and to fight the climate change. And then we have two pieces of regulation waiting approval. It's the strategy for long term developments with lowering greenhouse gases emissions, which sets the target to limiting greenhouse gas emissions to 67% of 1990 emissions by 2030, taking into account emissions and removals from forestry and land use, and also a large part of the strategy is dedicated to ensuring the balance of forest reproduction, expanding the area forest protection and reducing clear-cutting. But again, the target set in this strategy is very unambitious unfortunately, and it lacks comprehensive policy on forest fires prevention and does not pay needed attention to the amounts of carbon dioxide emissions which wildfires produce, and it undermines the

absorption capacity of Russian forests. And then we have the concept for climate projects in Russia, which give Russian companies the opportunity to implement projects say in carbon capture, for example, for forest restoring, and include these emissions absorbed in the carbon footprint. But this regulation is still very unclear and of course, will be developed as the policy develops in the future. And now I would like to tell you a few words about some practical cases, with wetlands in Russia. As John mentioned, wetlands are very important for carbon sink. And here we have for two particular cases for Russia. It's the Ramsar Convention on wetlands which Russia joined in 1975. And by now Russia designated 35 wetland sites for the list of internationally important wetlands with total area of over 11 million actors. And another very interesting and important case is the restoring peatlands in Russia project, which is conducted with the German Development Bank, and also with the initiative Wetlands International. And this project gave great results with rewetted degraded peatlands, and testing new financing mechanisms. And a lot of Russia's area has its hazard status reduced from high to medium low. And also a one of the breakthrough projects we have in Russia now is the Sakhalin climate project. But I think I will not tell you now about it because we have in our discussion, the person who is the main inspiration and enabler for this project, Dinara Gershinkova, and I think that she will tell us a few words about the Sakhalin climate project later.

So now I will move on to the BRICS agenda and BRICS members' national efforts at reforestation and preserving the peatlands and wetlands. In general BRICS members made 29 commitments on climate change with the average compliance of 80%. And majority of these commitments were dedicated to the Paris Agreement implementation and no concrete collective commitments were made on nature-based solutions, which we think is a great loss because BRICS members have huge potential, for example, in forests. Russia, Brazil, China and India are among the top 10 countries by forest area and also on the national level. And in terms of international cooperation, BRICS members also committed to restoring their forests and to increasing its carbon sink, you can see here on the screen, different goals set by the BRICS members. I also have some cases by the end of the presentation and don't think I have time to dedicate more time on them, but maybe we can look at them later during our discussion. So taking into account the huge potential of the BRICS members, and that the BRICS as a group has in nature-based solutions for climate change, we think that BRICS leaders should include nature-based solutions into BRICS agenda. And they should publicly acknowledge the potential BRICS countries possess for the carbon absorption for global climate change mitigation. They should commit to harnessing this potential to tackle the climate change. And also it will be beneficial not only for the BRICS members but for the globe and the international community for the BRICS members to develop the cooperation on carbon dioxide absorption by wetlands and forests because countries face similar challenges and I we think that they can provide a great solutions with benefits for the global scale. Thank you for your attention.

**Ella Kokotsis:** Irina, thank you very much for sharing your thoughts and ideas not only on the huge potential and challenges, Russia and the BRICS face in terms of their nature-based solutions for tackling climate change, but also the responsibility that they collectively share as stewards of some of the largest forested areas on Earth. So thank you very much for taking the time today to share your presentation with us. Now, looking at the time, we have about 25 minutes left for discussion. So I would kindly ask our intervenors to please introduce yourselves, your affiliation, and to also tell us what part of the world you're joining us from today. Dinara I could please ask



you to begin by sharing some of your thoughts and ideas on what you've heard today. I think we'd all very much welcome the opportunity to hear from you first, if you can, thank you.

**Dinara Gershinkova:** Good afternoon or other time period colleagues, I'm joined in from Sakhalin it's a far East region of Russia, close to Japan. As it was already mentioned Sakhalin is a pilot project for carbon neutrality by 2025. We set this goal last year, and are moving towards it. Recently, we assessed the potential of our forestry and just to illustrate how is important role of forests for carbon neutrality, it covers about 70% of the territory and contributes-- actually the forestry sector absorbs about 90% of anthropogenic emissions on the regional scale. So it plays a really huge role. And we dedicate special attention to forest management, also to explore new opportunities for nature-based solutions. Sakhalin is one of seven regions, which will work towards carbon polygons. It's a scientific project to explore options for various ecosystems and make control measurements. So we will have two polygons on seashores, and one on the ground. And also, nature-based solutions has been developed in urban areas, actually, in Russia. It's interesting that last year was adopted a new standard on green roofs. And this standard will be implemented also in the regional capital, in Yuzhno-Sakhalinsk. So that's all from me, and thank you very much for your attention.

**Ella Kokotsis:** Thank you Dinara, very much. I will now open the floor to any questions, opinions, thoughts from any of our interviewers? Dennis has his hand up. Dennis, over to you.

**Dennis Snower:** Well, I'd like to ask two questions. So one is, even though the climate crisis is very prominently in the news, among the nine planetary boundaries, it's certainly the only one that is being overstepped. Biodiversity loss is at least as important in terms of a threat. Land use is another planetary boundary that is in danger of being overstepped. And of course, the nitrogen phosphorus cycle would immediately be impacted as well. And so my question is, couldn't you make a much stronger case for nature-based solutions by including these other planetary boundaries in the discussion? And my second question is, do you think, turning towards policy proposals, there is a way of adapting carbon pricing rules to promote not only carbon taxes, but also carbon subsidies that would apply to climate-based solutions. And then so far as this pricing seems to be gaining a foothold in the public discussion, you think the subsidy aspect and negative carbon prices for nature-based solutions could have a role to play?

**Ella Kokotsis:** Thank you, Dennis, are you directing your questions to anybody in particular? Or can we just offer a response by anyone on the panel who is willing to take on your questions?

**Dennis Snower:** Well, in particular to John Kirton, but to the other presenters as well.

**John Kirton:** Let me start very quickly, your first question, it's an excellent point. And indeed, my numbers, my analysis, our policy brief, very much reached out into the other endangered realms of nature a passing planetary boundaries. Biodiversity, of course, loomed large, land use too. One sector, AFOLU it's lovingly called – agriculture, forests and other land use – themselves are estimated to provide, if we preserve them and use them properly, 37% of the solution, that's where that first number I used came from. And that I think, draws our attention. Before we get to Glasgow in November, right after the G20 Rome summit, we've got the equally landmark Biodiversity Convention Committee of the Parties in Kunming, China, in mid-October, now in virtual

form, with the in-person summit next spring. So clearly, we would want Rome to support Kunming as much as Glasgow. And of course, biodiversity as you suggest is actually disappearing more rapidly than climate change – or global warming – is increasing. That's why not just for its own sake, but also for its contribution to climate change control, we should put nature – biodiversity or by another name – first. As for carbon pricing, if China can start to do it, why not the United States, is the question on Canadian's minds.

**Dennis Snower:** I think, with regard to the second, it would be worth having input from the T20 to encourage G20 countries to follow that course. Not sure whether anyone in the Council for Global Problem-solving or beyond is engaged in that, but it certainly seems relevant to this discussion.

**Ella Kokotsis:** Who would like to pose the next question? James, please.

**James Hospedales:** I was just going to react quickly on the biodiversity, commenting that the climate crisis is not only in the air, it's in the sea. Ocean climate is changing, and that's scary as well. And the biodiversity loss is connected very closely to one of the drivers: destruction of nature, particularly forest and wetlands. And the point I want to make from a public health point of view is that this is one of the drivers that we can expect more pandemics. Destruction of nature, ever increasing international travel, an older, less fit, human herd, and the increased heat driving multiplication of vectors and parasites and so on. We actually have in store for us more pandemics, and it's connected. They're all connected the climate crisis, land use, disruption of nature, so we really must stop destroying nature, particularly forests and wetlands to the scale that we are. But I think using those arguments does strengthen – to answer Dennis's question – strengthens greatly-- the population health, the biodiversity, strengthens the case for controlling climate.

**Ella Kokotsis:** James, thank you. And who would like to ask the next question to our panelists? for comments from our participants kindly raise your hand. James, did you have a follow up question? LaVerne.

**LaVerne Ragster:** Good morning. I'm in St. Thomas, US Virgin Islands. And I'm associated with the University of Virgin Islands and Yale and a number of other places. But my question to all the experts, is, how do you present your solutions? In the context of the same thing you're trying to counter continuously changing the number that says you can get benefits by maintaining the planet? How do we say that? Do we say we're able to offer a nature-based solution in the timeframe that allows it to make enough of a difference? Because if every year you get compounding climate change impacts, if you get fire and heat wave at the same time, you're losing the source that you're trying to use as a means of explaining why you should continue to protect or preserve a particular area. I ask that and acknowledge that all of the solutions that link directly to human health tend to bode well or better with people when they try to understand it. But I was just wondering how people made the case under those conditions?

**Ella Kokotsis:** Excellent question, and who would like to provide their thoughts or responses to Laverne?

**John Kirton:** To the last question, many dimensions, but in mine, I think G20 leaders, particularly when they've got so many demands, you know, COVID comes to mind. If they hear your bright idea, "what do I get?". And that's why I've tried to go from our recommendations delivered by - Think 20 are very well established **Ella**



**Kokotsis** in the process – You say “if you do it, and then comply with your commitments, here are the 1000 of gigatons, you will actually save”. And there's additional data showing what the cost is. Geothermal is cheap, tidal power is expensive, but how much you save over the long term, it's in the trillions. So if they're following the dollars, that's the case I think we should make. The other part of that is if you've only got nine seconds in an elevator with a leader, use the language of the street. The ones that voters do and they do when they're talking to them. You can go on about wet bulb temperatures and define it, but I find that the phrase “you know if you don't do it, we could well fry and die”, you know that they'll understand at least if they speak English.

**Ella Kokotsis:** Thanks, LaVerne. Thanks, John. Next question.

**Dennis Snower:** Saudi Arabia under its G20 presidency had the aim of planting or encouraging the world to plant a trillion trees. What has happened to that plan? How is it faring? And how is that doing relative to other commitments like the red initiative of the UN and other initiatives to encourage the planting of trees? John, would you be able to answer that?

**John Kirton:** I wish my two colleagues in Switzerland who are in the lead on that were here to answer. Let me just say that's a relatively easy one to do. Because everybody understands what trees are. They've seen them, they live in them, they enjoy them, or they use them. So it's much more comprehensible per the last question, then peat, even though peat is more potent, and there are now so many initiatives to plant more trees throughout the G20 and beyond. And I suspect we'll get a big boost from Kunming at the Biodiversity Convention. China has just launched a major new program to plant large numbers of new trees. Two final points, maybe three: our specific recommendation that led our T20 policy brief was support for Restor, which connects all the dots, so everyone can see what you should plant where, when, and who would finance it. So they know their money is best spent. And that's a very low-cost solution to give a more reliable, even a daily answer Dennis to your question. One could focus on Africa, the great green belt across Africa, moving out in a major way. So the South is already there. The final point is governance, you know, which multilateral organization from the 1940s is responsible for the world's forests, on which we don't have a convention. Even though it was a promise in 1990. The answer is the Food and Agricultural Organization, they've come a long way since 1945 but at their basis, part of their organizational DNA, they see forests as a provider of food and agriculture, which is why we've had so many decades when the global governance's incentive is to cut the trees to grow food from agriculture, exactly the opposite of what we need to do. So maybe it's time for this as a thought experiment, an intergovernmental convention, not just on desertification, or biodiversity, or climate, but on forests, too.

**Ella Kokotsis:** Thanks, john. I see Gianluca has his hand up if you wouldn't mind telling us your affiliation Gianluca and where you're joining us from today, that would be super, thank you.

**Gianluca Grimalda:** Yes. Hello, everyone. I'm joining from Kiel. I'm a senior researcher at the Kiel Institute for the World Economy. I enjoyed very much the talks and thanks for convening this meeting. I have two questions. One, maybe is for the panelists, but more general to all the attendants. So I think what we are witnessing here, with respect to climate change – so the stalemate that we are witnessing – can be can be explained in terms of the difference in the costs and the benefits that individual countries are have from climate changes. So for instance, not being an expert I must say on environmental issues specifically, but what I know is a for instance,

that Russia would stand to benefit the overall by some moderate increase in temperatures because of the the crops productivity would go up. And of course countries like Saudi Arabia will benefit by going on exploiting and Brazil has, we are seeing that the deforestation rate in Brazil has never been as high as today. So what Scott Barrett from Columbia University says in his book on international agreements is that when we have these situations in which costs and benefits are misaligned, the only possibility to reach an agreement is to achieve alignment of incentives. And the one way if not the only way to reach alignment is by having bilateral transfers, which basically means that the countries that stand to lose more should basically pay countries that standard to lose less or even benefit from climate change. So I wonder whether this proposal could be embedded into the portfolio of proposals that we as a members of the T20, or as members of the CGP, could put forward? There are also other proposals, for instance, John Romer proposed I think, a clever idea: since the main reason of the stalemate, is basically the competition in terms of growth between the US and China. So what he suggests is that you basically propose an agreement in which the current difference in GDP between the US and China is kept constant under the agreement that both countries decarbonize at the rate that is needed to achieve the commitments with climate change agreements. And the second question, I think, is particular to James. So I was wondering what is the status with respect to assigning status of a climate refugees to people, like people living in a Small Island Developing States that are forced to migrate because of the existential threat of climate change on their livelihoods? Thank you.

**Ella Kokotsis:** Thanks, Gianluca. Maybe we'll start with Dennis, the second question first, Dennis, if you can provide your thoughts?

**Dennis Snower:** I'm not in a good position to enlighten anyone through my thoughts. But I was wondering, with Gianluca's idea on bilateral transfers, can be mimicked through trading or emission rights, and whether that has been explored anywhere. Does anyone in this group have any thoughts on that? Because emission rights is something that is an accepted mechanism and although emission rights, very different consequences from carbon and greenhouse prices, they would address this particular issue. Anyone have anything to say about whether emission rights can do that job and whether it's been tried?

**John Kirton:** Can I reflect on that but could I ask Irina, I guess the first part of the last question is global warming good for agriculture in Russia? A cold dark northern country like Canada on the other side of the North Pole. Irina?

**Irina Popova:** Yes, I can address this particular issue. Although for a very long time in Russia, there was this official discourse that Russia will benefit from climate change. We want the weather to be warmer, we want our vast frozen territories to become suitable for agriculture. But during the last several years, when the challenges and the threats of climate change became more and more obvious, it became clear that actually the threats outweigh the benefits. And Russia cannot control the slight growth of temperature. Maybe the slight growth of temperature would benefit Russia and its agriculture. But we cannot control this increase. So it is a consensus here. And it's reflected in the strategy for the long-term developments with low greenhouse gas emissions, that the threats outweigh the benefits. And that's why Russia needs the active climate policy. And in the most progressive scenario in the strategy – not the basic one, unfortunately – the system for the emissions trading is supposed to be implemented in Russia. Maybe to reflect on the issue of the emission trading systems. I have

some of the perspective as I dive into some of the EU's emission trading system and their proposals and already existing system of this cooperation and combining of the two systems with Switzerland. And actually, the idea of having multiple emission trading systems connected through some global agreements or through some bilateral agreements is a great one because emission trading system helps to reduce emissions, it's the most cost efficient way to do it. So the conditions when the countries can exchange the climate project's results, or when one country can realize climate projects to reduce greenhouse gas emissions on the territory of the other state would actually be really beneficial. But of course, it all happens in theory and in practice, major players, major G20, players will have to implement the carbon pricing mechanisms and preferably emission trading systems, then come to an agreement and align them. And this will provide the opportunity to lower the emissions there. It's most cost efficient to do it. But of course, we are very far from it. But I think we, I personally believe that we should go to that direction.

**Ella Kokotsis:** Irina thank you and Dinara, you wanted to respond? Dinara, we'll hear from you. And then I think we'll close things off cleanly.

**Dinara Gershinkova:** I would like to add to Irina's comments to say that 76% of Russia's territory is permafrost. So when it melts it's a great risk to many, many economic sectors. So climate change is mostly about risks for us, even though in some sectors might be seen some positives, maybe short term signals. And carbon pricing, I believe, is rather a signal, not just complete decision, it's a signal to implement technologies for emission reduction or for adaptation. So it's important to have these technologies available and to share knowledge about available technologies among various countries.

**Ella Kokotsis:** Thanks Dinara. And because we're at 1102 I think we'll just end at this point, just a reminder that the presentation will be shared with all the conference participants. So we'll have that posted, and then we'll share the link as soon as we get that. I want to extend a very special thanks to our panelists and participants and the Council for Global Problem-solving for convening today's session. I think we can all agree that the time is really right for the G20 to more carefully consider how nature-based solutions can be mobilized to fight climate change this year. I'm hopeful that your T20 policy brief will be taken into account by the leaders when they meet in Rome. We've heard the potential for the G20 and the BRICS to lead the charge on these nature-based solutions. We know the potential as we've heard is enormous, given the sheer size of the forests, the wetlands, the peatlands and the oceans, as James reminded us, these countries manage but also the rules and the challenges the G20 in the BRICS face, collectively in terms of representing the largest polluters on Earth. So I think we're all going to be very carefully tuning in and focusing our attention at the leaders level meeting in October and then a month later, of course in COP 26 in Glasgow to see how nature-based solutions are managed in their negotiations and conclusions, and perhaps as a recommendation or suggestion that this group perhaps convene following COP 26, to assess how the team's policy recommendations on these nature-based solutions were taken into account. Thank you very much.

**Dennis Snower:** Good. And I'd like to thank you, Ella, enormously and Katharina and I also wish to encourage all members of the Council for Global Problem-solving to find a way of circulating papers that are relevant, complimentary to the work that we just heard. We'd obviously be very keen to post all of this work, once it's in the public domain, on the G 20 insights platform, on which we gather lots of the most important proposals that

have been made by the T20 over the past few years. There's a very vibrant exchange between the Council for Global Problem-solving and the G20 Research Group, which has done an amazing job of gathering G20 documents comprehensively. And Katharina and I would like to make one final announcement, which is that the next workshop of the CGP will be on October 12. And it will be on international financial architecture, with Jose Serrate and Franco Bruni and Akshay Mathur, who will be presenting a totally different topic. But we do hope, as you Ella had mentioned, that John and his band of active researchers may be willing to come back and report on what's actually happened and think of the way forward, particularly in the light of the G20 presidency moving to Indonesia and India, where the governance incentives are quite different from those that we face now and consequently, would deserve serious attention. Therefore, Katharina and I would like to thank you all for joining and hopefully we will see you in our next workshop.