BRICS Climate Governance in 2020

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BRICS Climate Governance

Climate change has been a central, continuous concern of BRICS summit governance since it started in Russia in 2009. Climate change has almost one fifth of the communiqués of the 10 regular BRICS summits held to date (see Appendix A). It reached an all time high of over 3,500 words the last time Russia hosted, at Ufa in 2015.

That year Russia also hosted the first BRICS environment ministers' meeting, which became an annual event. These ministerials always dealt with climate change. They were soon supported by a dedicated working group and platform.

BRICS summits have made 17 precise, future-oriented, politically binding commitments on climate change since they started doing so in 2010 (see Appendix B). They peaked with six when China hosted in 2011, then dipped, but rose to three in Brasilia in 2019.

BRICS summits and environment ministers meeting have focused on supporting the United Nations work on climate change, above all the G20 and UN summits' growing action on sustainable development, climate change and biodiversity. Most BRICS summit commitments have similarly supported the UN. But Russia's Ufa Summit in 2015 innovatively added BRICS co-operation among its members on food security, nutrition and agriculture to control climate change. Leaders promised a "Reduction of [the negative impact of climate change on food security and adaptation of agriculture to climate change [by] enhancing cooperation and continuing exchanging information and sharing experiences on relevant national policies, programs, plans and climate change adaptation and mitigation strategies."

The Current Climate Crisis

In 2020 climate change is the central crisis that the BRICS countries and global community confront. The recent reports of the UN's scientific bodies, led by the Intergovernmental Panel on Climate Change ([IPCC] 2018) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ([IPBES] 2019) show that global temperatures, greenhouse gas concentrations and emissions are rapidly rising to approach levels that will produce catastrophic consequences and several irreversible ones.

The costly consequences were seen in all BRICS countries in 2019.

Russia's vast Arctic regions warmed twice as fast as the global average, massive forest fires erupted, and Moscow had its warmest December ever.

China's greenhouse gas emissions had resumed their rise and its economic engines of Shanghai and Guangzhou will soon be submerged by the warming, rising seas and attacked by associated extreme weather events.

India's capital city of Delhi suffered unprecedented levels of the climate change intensified air pollution, that closed schools, factories and transport facilities and caused a spike in premature deaths.

Brazil's unprecedented forest fires in the Amazon, the critical lungs of the earth, burned 9,123 square kilometres.

South Africa and its neighbours warmed twice as fast as the global average, and had suffered since 2015 from a severe drought that almost drained Capetown dry of drinking water, scorched grazing lands and kept tourists away.

In response to this unprecedented climate emergency, the 2019 summits of the G7, G20 and UN tried but failed to control the crisis. It is now up to the BRICS countries at their St. Petersburg Summit in July 2020 to do so, by acting in a bigger bolder way than ever before.

BRICS Climate Change Capacities

BRICS countries have the capacity to do so. In 2018 the five BRICS countries accounted for 42% of global greenhouse gas emissions, with 36,573 MtCOs (see Appendix C).

China was the world's first-ranked emitter with 28% of the global total, followed in a distant second by the United States with 15%. Then in third and fourth came India with 7% and Russia with 5%. South Africa stood 13th and Brazil 14th with about 1% each.

Three BRICS members produced almost three-quarters (72.5 %) of the emissions of the world's top four carbon polluters. They ranked ahead of the G7 countries of Japan, Germany and Canada. South Africa and Brazil stood ahead of the United Kingdom, Italy and France.

The BRICS with 42% of global emissions produced almost double the G7 total of 24%.

Together BRICS members span the world's major climate zones, from Russia's Arctic, to Brazil's tropics, to South Africa's vineyards, China's deserts and India's mountain peaks.

Moreover, as the BRICS environment ministers themselves recognized at their meeting in 2016, "BRICS countries constitute significant parts of [the] world's population, land area and natural resources; thus the choices that we make have global significance."

A BRICS Climate Control Strategy in 2020

To mobilize these formidable capabilities in 2020, the BRICS regular annual summit, to be held in St. Petersburg on July 21-22 is an essential start. This is especially so because climate change is absent from the agenda of the G7 summit set by U.S. president Donald Trump as host, to be held at Camp David on June 10-12. This gives the BRICS the opportunity and the responsibility to lead the world. Moreover, the St. Petersburg Summit is but the start of a sequence of major global summits taking place in the second half of 2020 that enable the BRICS to broaden and build on their advances there (see Appendix D).

St. Petersburg will be followed on September 21 by the UN High Level Meeting on UN75: "The Future We Want: Reaffirming our Collective Commitment to Multilateralism." In October comes the UN Biodiversity Convention's Committee of the Parties (COP) summit in Kunming, China. On November 9-20 the United Nation's Framework Convention on Climate Change Committee of the Parties 26th meeting in Glasgow is designed to improve the climate change control commitments the

leaders made at their Paris summit half a decade ago. Finally on November 21-22, in Riyadh, Saudi Arabia second BRICS summit of 2020 takes place, just before the full G20 one there.

For that G20 Summit, Saudi Arabia as host has set 22 priorities under three pillars (see Appendix E). For the first time in G20 history the summit priorities put the natural environment in a prominent place (Kirton 2019). Under the pillar of "Safeguarding the Planet," the six priorities begin with "managing emissions for sustainable development," including through "nature-based solutions such as reforestation." The second priority of combating land degradation and habitat loss is focused on minimizing "deforestation to conserve biodiversity and meet climate goals." The other priorities in this pillar are preserving the oceans, fostering sustainable and resilient water systems globally, promoting food security, and cleaner energy systems for a new era.

Environmental goals also arise directly in three priorities under the other two pillars, thus offering a foundation for an ecologically mainstreamed, synergistic approach. The pillar of "Empowering People" starts with scaling up efforts for sustainable development, including implementation of and accountability for the UN's 2030 Agenda and its Sustainable Development Goals (SDGs). It also contains tourism and its environmental impact. The pillar of "Shaping New Frontiers" starts with promoting space co-operation, to "contribute significantly to the protection of common global goods such as climate and the oceans."

The BRICS should address these G20 summit priorities by agreeing to take and promote the steps scientifically known to do the most to control climate change. Here an authoritative guide comes from Project Drawdown, which regularly report and updates the 100 most effective steps to control climate change (Hawken 2017). Twelve of its 20 most effective steps come from nature-based solutions, focused on food and forests. Indeed, among its top five steps, reduced food waste comes third, a plant-based diet fourth and tropical forests fifth (see Appendix F). Soon after, silvopasture ranks ninth, regenerative agriculture 11th and other forest steps 12th through 15th.

This list directly matches the G20 summit's priorities on food and forests, building on its inherited performance on climate change (see Appendix G). It also builds directly on the BRICS summits' emphasis on food security under Russian hosting in 2009 and 2015, and the 2019 Brasilia's Summit's initiative on the urban environment.

The BRICS St. Petersburg Summit should start by making commitments on forests and food. These are the core components of the nature-based solutions that can reduce greenhouse gas emissions by 37% (IPBES 2019).

Recommendations for the St. Petersburg Summit

1. Forests: Grow Trees

On forests, the BRICS central message should be to grow trees, by ending deforestation, accelerating afforestation, and expanding natural protected areas. This brings the double benefit of reducing a major source of emissions when forests burn and enhancing a major carbon sink when forests grow and are protected. This natural technology has been proven to work over many millennia past. Forests also bring many co-benefits for human health and for economic growth and diversification into high value-added sectors such as construction, infrastructure and tourism. The BRICS St. Petersburg and Riyadh summits should thus commit to:

a. Set and meet targets and timetables to reduce deforestation and enhance afforestation, in keeping with BRICS members' existing commitments to make the Kunming COP 15 on biodiversity a success.

- b. Create, enforce and support laws to replace all trees cut or destroyed by fire, pests, logging and other human activity, including agriculture (which is responsible for 73% of global deforestation).
- c. Substitute wood for carbon-intensive steel and concrete in construction and infrastructure.
- d. Substitute forest biochemicals (such as lignin in adhesives) for petrochemicals and plastics, in keeping with the recent BRICS commitment to reduce the plastic waste that flows from its rivers into the oceans.
- e. Educate industry and citizens about forestry's contribution to climate change control, as Sweden and Finland do.
- f. Create urban green spaces to support the BRICS 2019 urban agenda and the G20 smart cities work (Rojas-Rueda et al. 2019, Bowler et al. 2010). This would also reduce the need for refrigeration, which is the first-ranked climate control step on the Project Drawdown list.
- g. Create a BRICS international firefighting force for emergency response and rapid deployment when a member requests support from its partners to cope with abnormal acute outbreak events.

2. Food: Eat Plants

On food, the central message should be to eat plants from diverse crops and eat all of them grown for food. The BRICS St. Petersburg and Riyadh Summits should thus commit to:

- a. Reduce food loss and waste "from farm to fork," in accordance with SDG 12's target 3, by passing national legislation with targets, timetable and supporting measures.
- b. Shift subsidies from animal agriculture to plant-based production.
- c. Promote agroforestry and silvopasture,
- d. Promote crop diversity and discourage monocrops, which overuse chemical fertilizers, damage soil and pollute water.
- e. Research and promote organic farming.
- f. Encourage local food ownership, production and consumption, especially in culturally appropriate ways.
- g. Provide innovative financing, such as microloans, for smallholder farmers, including women and youth, that transition to agroforestry and diverse plant-based land use and that reduce their carbon footprint and enhance soil health and water quality.
- h. Endorse the eight principles on nature-based solutions of the International Union for the Conservation of Nature (see Appendix H).
- i. Uphold the United Nations Declaration on the Rights of Indigenous People principles on free, prior, informed consent and the land tenure right of local and Indigenous communities.

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Appendix A: BRICS Leaders' Conclusions on Climate Change

	V	/ords	Para	graphs	Documents				
Year	#	% total	#	% total	#	% total	# dedicated		
2009 Yekaterinburg	369	20.0	6	15.8	2	100	0		
2010 Brasilia	720	30.6	7	15.2	1	100	0		
2011 Sanya	553 22.7		7	21.9	1	100	0		
2012 New Delhi	1167 26.4		14	19.7	2	100	0		
2013 Durban	905	18.9	12	13.2	2	100	0		
2014 Fortaleza	2644	12.1	27	4.9	2	66.7	0		
2015 Ufa	3527	18.5	61	10.9	3	100	0		
2016 Goa	971	13.1	14	12.5	1 100		0		
2017 Xiamen	712	9.7	7	8.8	1	100	0		
2018 Johannesburg	1068	15	13	12	1	100	0		
2019 Brasilia	1020	16.4	11	14.5	1	100	0		
Average	1241	18.5	16	13.6	2	97	0		

Notes: Data are drawn from all official English-language documents released by the G20 leaders as a group. Charts are excluded

Words: "#" is the number of subjects related to climate change for the year specified, excluding document titles and references. Words are calculated by paragraph because the paragraph is the unit of analysis. "% total" refers to the total number of words in all documents for the year specified.

Paragraphs: "#" is the number of paragraphs containing references to climate change for the year specified. Each point is recorded as a separate paragraph. "% total" refers to the total number of paragraphs in all documents for the year specified.

Documents: "#" is the number of documents that contain subjects related to climate change and excludes dedicated documents. "% total" refers to the total number of documents for the year specified. "# dedicated" is the number of documents for the year specified that contain a subject related to climate change subject in the title.

The purpose of this report is to document all references to, or in other terms, all of what leaders concluded on climate change in official BRICS documents released at their summits. Inclusion terms are Adaptation, biodiversity, carbon, carbon dioxide (CO2), carbon capture and storage (CCS), carbon sequestration, climate change, climate change mitigation, climate finance, climatic change, Conference of the Parties (COP), Copenhagen Accord, deforestation, ecosystems, emissions, emissions reduction, environment, fossil fuels, Global Environment Facility (GEF), environmental degradation, environmental development, environmental stress, global warming, greenhouse gases, green development, green economy, green growth, green recovery, Intergovernmental Panel on Climate Change (IPCC), Kyoto Protocol, marine protection, mitigation, reducing emissions from deforestation and forest degradation (REDD), renewables, sinks, sustainable development, sustainable growth, United Nations Conference on Environment and Development (UNCED), United Nations Framework Convention on Climate Change (UNFCCC), United Nations Environment Programme (UNEP), UN High-Level Advisory Group on Climate Change Financing

The unit of analysis is the paragraph/sentence. There must be a direct reference to climate change or a cognate term. Cognate or extended terms can be used without a direct reference to "climate change" if they have previously been directly associated together in summit document history.

Compiled by Alissa Wang (2009–2015), Maria Marchyshyn (2016–2019).

Appendix B: BRICS Commitments on Climate Change

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Summit	Number of commitments	Percentage of commitments
2008 Yekaterinburg	0	n/a
2010 Brasilia	2	12%
2011 Sanya	6	35%
2012 Delhi	1	6%
2013 Durban	1	6%
2014 Fortaleza	0	n/a
2015 Ufa	1	6%
2016 Goa	1	6%
2017 Xiamen	2	12%
2018 Johannesburg	0	n/a
2019 Brasilia	3	18%
Total	17	100%*

Notes:

n/a = not applicable

 $Includes\ core\ climate\ change\ commitments;\ excludes\ related\ climate\ change\ commitments.$

Compiled by Brittaney Warren, January 3, 2020.

^{*}all percentages rounded up

Appendix C: Top 20 Countries Emissions Contribution 2018

Country	Territorial emissions in MtCO ₂	% global total
China	10,065	27.52
United States	5,416	
India	2,654	7.26
Russia	1,711	4.67
Japan	1162	
Germany	759	
Iran	720	
Korea	659	
Saudi Arabia	621	
Indonesia	615	
Canada	568	
Mexico	477	
South Africa	468	1.27
Brazil	457	1.24
Turkey	428	
Australia	420	
United Kingdom	379	
Poland	344	
Italy	338	
France	338	
Global total	36,573	100
BRICS Total	15,355	41.98
G7 Total	8,960	24.49
Top 20 Total (G20-Argentina + 2)		

Notes:

2018 data from http://www.globalcarbonatlas.org/en/CO2-emissions. Compiled by Brittaney Warren, January 3, 2020.

Appendix D: Global Summits 2020

Date	Group	Event	Location	Comments			
June 10–12	G7	Summit	Camp David, United States				
July 20–22 September 21	BRICS	Summit High level	St. Petersburg, Russia New York, United	12th summit "BRICS Strategic Partnership for Global Stability, Shared Security and Innovative Growth" Priorities include terrorism, crime, energy security, scientific collaboration, NDB, UN coordination. The Future We Want:			
	Nations	meeting	States	Reaffirming our Collective Commitment to Multilateralism			
October	UN Biodiversity	Conference of the parties	Kunming, China				
November 9–20	UN Climate	Conference of the parties	Glasgow, Scotland				
November 21	BRICS	Informal summit	Riyadh, Saudi Arabia				
November 21–22	G20	Summit	Riyadh, Saudi Arabia	15th			

Appendix E: The G20 Riyadh Summit Priorities

Empowering People

- · Unleashing access to opportunities
- · Supporting employment transition in a changing world of work
- Women's empowerment
- Scaling up efforts for sustainable development
- Fostering education for the 21st century
- Enabling person-centred health systems
- · Boosting financial inclusion of women and youth
- Tourism as a force for human-centred economic growth
- Trade and investment cooperation

Safeguarding the Planet

- · Managing Emissions for Sustainable Development,
- · Combating land degradation and habitat loss
- Preserving the oceans
- Fostering sustainable and resilient water systems globally
- Promoting food security
- Cleaner energy systems for a new era

Shaping New Frontiers

- Promoting space co-operation
- Enabling the digital economy
- Finding a global solution to tax challenges from the digitalization of the economy
- Utilizing technology in infrastructure
- Developing smart cities
- · Addressing the entry of bigtech in finance
- Combating corruption

Note: The nine explicitly ecological priorities are in italics

Appendix F: Project Drawdown Top 20 Climate Solutions 2017

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1.	Refrigeration	89.74
2.	Wind turbines (onshore)	84.60
3.	Reduced food waste	70.53
4.	Plant-rich diet	66.11
5.	Tropical forests	61.23
6.	Educating girls	59.60
7.	Family planning	59.60
8.	Solar farms	36.90
9.	Silvopasture	31.19
10.	Rooftop solar	24.60
11.	Regenerative agriculture	23.15
12.	Temperate forests	22.61
13.	Peatlands	21.57
14.	Tropical staple trees	20.19
15.	Afforestation	18.06
16.	Conservation agriculture	17.35
17.	Tree intercropping	17.20
18.	Geothermal	16.60
19.	Managed grazing	16.34
20.	Nuclear	16.09

Note: 12 of top 20 are food and forests (in bold).

Appendix G: G20 Climate Change Performance

	Domes	tic policy								Decision			Development of global			
	mana	gement	Deliber	ation	Direction setting n					making	De	governance				
	(0		Words							S	Compliance		Inside		Outside	
Summit	# compliments	% compliments	#	%	Financial stability	Globalization for all	Priority placement	Democracy	Human rights	# commitments	Score	% assessed	Ministerials	Officials	References	Bodies
2008 Washington	0	0%	64	1.7	0	0	0	0	1	0	-	-	0	0	0	0
2009 London	0	0%	64	1.0	0	0	1	0	0	3	-0.10	33% (1)	0	0	1	1
2009 Pittsburgh	1	5%	911	9.7	0	0	4	0	0	3	+0.86	33% (1)	4	0	10	5
2010 Toronto	1	5%	838	7.4	0	0	0	1	0	3	+0.42	100% (3)	0	0	3	3
2010 Seoul	2	10%	2,018	12.7	0	0	2	1	0	8	+0.05	50% (4)	5	3	20	11
2011 Cannes	2	10%	1,167	8.2	0	0	0	1	0	8	+0.38	37% (3)	2	0	11	7
2012 Los Cabos	0	0%	1,160	9.1	0	0	0	1	0	6	+0.59	50% (3)	1	5	6	5
2013 St. Petersburg	1	5%	1,697	5.9	0	0	1	0	0	11	-0.17	27% (3)	0	3	10	7
2014 Brisbane	0	0%	323	3.5	0	0	0	0	0	7	+0.51	71% (5)	0	0	4	2
2015 Antalya	0	0	1,129	8	0	0	0	0	0	3	+0.70	85% (1)	1	1	5	3
2016 Hangzhou	0	0	1,754	11	0	1	0	1	0	2	+0.58	100% (2)	1	3	5	4
2017 Hamburg	0	0	5,255	15	0	0	1	1	1	22	+0.62	14% (3)	0	11	26	9
2018 Buenos Aires	0	0	532	6	0	0	0	0	0	3	+0.57	79% (2)	0	0	3	3
2019 Osaka	0	0	2,034	31	1	1	0	0	0	13	NA	NA	1	1	10	9
Total	7	n/a	18,946	n/a	1	2	9	5	2	92	n/a	31	15	27	114	69
Average	0.78	4%	1,353	9.3	0.1	0.1	0.88	0.4	0.1	6.6	+0.38	69%	1.1	1.9	8.1	4.9

Notes:

Domestic political management: all explicit references by name to the full members of the summit that specifically express the gratitude within the context of climate change of the institution to that member. % complimented indicates how many of the 20 full members received compliments within the official documents, depending on how many full members there were that year.

Deliberation: the number of times climate change is referenced in the G20 leaders' documents for the year in question. The unit is the paragraph. % refers to the percentage of the overall number of words in each document that relate to the climate change.

Direction setting: The number of times the concepts of financial stability, globalization that benefits all, democracy and human rights are referenced in relation to climate change. Priority placement refers to the number of times climate change is referenced in the chapeau or chair's summary.

Delivery refers to the compliance score for climate change commitments. % assessed is the percentage of climate change commitments measured. Numbers in parenthesis refer to energy commitments.

Development of global governance: Inside refers to the number of references to institutions inside the G20 in relation to climate change. Outside refers to the number of external multilateral organizations related to climate change. The unit of analysis is the sentence.

Appendix H: IUCN Nature-Based Solutions

Nature-based solutions:

- 1. Embrace nature conservation norms (and principles);
- 2. Can be implemented alone or integrated with other solutions to societal challenges, including technology and engineering solutions;
- 3. Are determined by site-specific natural and cultural contexts that include traditional, local and scientific knowledge;
- 4. Produce societal benefits in a fair and equitable way that promotes transparency and broad participation;
- 5. Maintain biological and cultural diversity and the ability of ecosystems to evolve over time;
- 6. Applied at a landscape scale;
- 7. Recognize and address the trade-offs between the production of a few immediate economic benefits for development, and future options for the production of the full range of ecosystem services; and
- 8. That nature-based solutions are an integral part of the overall design of policies, and measures or actions, to address a specific challenge.