Achieving Common Climate Change Goals through BRICS Cooperation

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BRICS SEMINAR ON GOVERNANCE 2021

Building Consensus and Confidence for BRICS Cooperation with a shared future





BRICS Renewable Energy/Climate Change Positions

2015	UFA Declaration – Committed to align with the United Nations Framework Convention on Climate Change (UNFCCC) Focus on energy efficiency Promote investment in renewable energies
2016	Goa Declaration – Welcome Paris Agreement Support for NDB Green Bonds Enhance cooperation on energy access and efficiency – need to scale up clean/renewable/affordable energies Principle of equity and common but differentiated responsibilities and respective capabilities
2017	Xiamen Declaration – Promote industrial cooperation in energy efficient technologies, energy access, security, affordability Support the role of the BRICS Business Council to promote cooperation
2018	Johannesburg Declaration - Promote cooperation in energy efficient technologies, energy access, security, affordability Established the BRICS Energy Research Cooperation Platform
2019	Brasilia Declaration - Established Terms of Reference of the BRICS Energy Research Cooperation Platform
2020	Moscow Declaration – Support Terms of Reference of the BRICS Energy Research Cooperation Platform

BRICS 2021



- Support for the Energy Research Cooperation Platform
- Support Partnership for New Industrial Revolution
- Release of
 - BRICS Energy Technology Report 2021
 - BRICS Energy Research Directory 2021

BRICS Energy Consumption per Capita

- Majority of energy is sourced from fossil fuels
- Both South Africa and China have significant dependence on coal per capita

BRICS Energy Consumption per Capita, 2018 (TWh p.c)



South African Commitments



- Increase access to affordable energy
- Stimulate Economic Development
- Transition to low-carbon economy
 - Reduce coal consumption by 50% by 2030 from 2009 levels
- Targeting a supply of 17,800 MW of renewable energy by 2030
- Increase Independent Power Producers to supply Renewable Energy
 - Via Renewable Energy Independent Power Producer Procurement Programme (REIPPPP)

China's Commitments



- Plan to lower carbon intensity by 70% by 2030, from 2005
- Promote Renewable Energy Production and Efficient Energy Consumption
- Renewables to account for 16% by 2020

How do we expand renewable energy knowledge sharing and cooperation in BRICS?

BRICS need to reduce reliance on fossil fuels, reduce GHG emissions and transition towards renewable energies

Cooperation and knowledge sharing is vital to accelerate this path

BRICS Energy Research Cooperation Platform must be expanded, integrating contributions from

- Local Governments
- Private sector through Renewable Energy Associations
- Academia

Need to engage Consulate Offices to drive partnerships at city level, through International Relations Ministries

- Facilitate dialogues
- Act as interface between RE Associations





• First meetings held in 2019, under Brazilian Chairship

• Promote

- Sustainable Development
- Sharing advanced energy tech
- Expanding cooperation in Educational programmes
- Exchanging data and information
- Create synergies between Academic Forum, BRICS Science, Technology and Innovative Initiative, Program of Economic Co-operation and New Development Bank.

BRICS

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15 October 2020

BRICS



BRICS RUSSIA | 2020

BRICS ENERGY REPORT

Key provisions

Need for BRICS Energy Cooperation



What can the BRICS offer and what do they need?

	Brazil	Russia	India	China	South Africa
Solar	Expand up to 2035, interested in heat resistant products	Needs components for photovoltaic installation		First in world of installed capacity	Has good locations for solar projects
Wind		Needs components like gearboxes, blades	Strength in gearbox manufacturing, tower construction. Supplies Brazil and China	Rapid acceleration of wind capacity	Has good locations for solar projects
Hydro		Needs telemetry systems, drilling hydraulic wrenches, etc		Ability to produce turbine engines for power plant	Rivers offer potential sites for new projects
Clean Coal		Will be expanding coal plants	Exploring, utilising carbon capture & storage (CCS) systems	Needs to promote CCS. Needs supply of high quality coal products	Plans to invest in CCS
Batteries	Expand energy storage and storage processing		Needs to decentralise storage		Southern Africa produces relevant raw materials, plan to expand manufacturing
Biomass/Biofu els	Has competitive advantage		Interested in collaborating in extracting biodiesel raw materials	Strength in utilising/recycling waste raw materials	Expansion could boost municipal revenue, sites available across country
Smart Grids	Mathematical models, IoT software systems	Needs digital modelling techniques,	Had success in Smart Grid tech	Advanced smart-grids	Need to expand transmission infrastructure
Energy efficiency		<u>t</u>	Had success in LED lighting	Have advanced energy-efficient equipment	
Other	ý	Needs industry safety techniques, Needs tech for arctic conditions	Strength in software development, engineering and consulting	Manufacturing engineering, chemical, light products	Need to expand component manufacturing and construction to create jobs. Policy framework needs development at local level

Role of BRICS Renewable Energy Associations

- Are non profit organisations
- Majority were launched in last decade
- Members are a mix of Private sector representatives, academia & regulators
- Protect fledgeling industry which competes against dominant energy producers
- Have deep local knowledge
- Disseminate information and knowledge
- Facilitate creation of new standards



Role of BRICS Embassy and Consulate Offices



- Consulate officials can engage on behalf of the sector
- Host dialogues
- Assist with language and cultural translation

Renewable Energy Associations / Consulate Officials - Knowledge Intermediaries



- Association can pool resources and have deep local knowledge and understand regulations
- Consulate offices can assist with language and cultural translations helping to build trust

science & innovation

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- RE Association acts as a buffer protecting interests of local sector
- Must build trust to commence knowledge sharing and partnership building



Recommendations

BRICS Energy Research Cooperation Platform must be expanded to include RE Associations, Local Governments and academic institutions

International Relations Ministries should engage their Consulate Offices to identify strategic partners, via RE Associations

Promote dialogues, exchange programmes, research agenda

BRICS NDB to make funds available for establishing knowledge partnerships, accessed via Consulate Offices





Thank you

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