

Road Map for BRICS Energy Cooperation up to 2025

General provisions

BRICS cooperation in energy, as in other fields, is based on the principles of equality, respects for national sovereignty and the interests of participating states. This Road map does not contain any legal obligations; it will complement existing arrangements among the sides without affecting agreements reached with the third parties.

The cooperation will be undertaken on the voluntary basis, in the spirit of mutual assistance and trust. All participants, including state and non-state stakeholders, will act in good faith and remain committed to the goal of strengthening cooperation. The decisions will be taken jointly, on the basis of consensus.

This Road map is aimed at building strategic partnership of the BRICS states in the energy field through appropriate coordination of policies, promotion of energy trade, investments and research as well as technological cooperation. It provides for use of various BRICS mechanisms and close interaction between stakeholders including government agencies, business, expert and academic communities.

The Road map proposes a staged approach and assumes that specific projects will be determined by interested stakeholders as a result of in-depth analysis of interests, possibilities and obstacles on the road towards joint endeavors in the energy field. In principle the Road map is intended to cover five-year cycle; however the pace of reaching results will depend primarily on participants' engagement.

The first stage will be devoted to continuation of joint analysis of the energy sector of the BRICS countries, identification of the most promising new technologies which attract the interest of companies of the BRICS states and developing mechanisms for collaboration, including institutionalization of the BRICS Energy Research Cooperation Platform. The first two tasks will be

accomplished through preparation of joint studies which will also contain a review of national plans for the development of energy sector.

During **the second stage** the BRICS countries will identify the needs and challenges they face in ensuring energy security and developing energy industry and determine areas where intra-BRICS cooperation can help in feasible ways to find optimal solutions. They will also consider means to enhance the role of BRICS countries in the global energy agenda.

At **the third stage** the participants will agree upon on specific areas and forms of cooperation in order to facilitate the advancement of the national energy systems and energy transitions, promote research, development and deployment of advanced technologies, expand trade in energy-related goods, and create favorable conditions for mutual investments. The member states may also identify international energy issues where their positions coincide and find ways to promote BRICS countries' interests in international fora.

Implementation of the Road Map

Possible cooperative actions could include, among others, the following

- joint analysis of the global and national energy sector development
- elaboration of evolution scenarios of the global energy landscape
- joint assessment of the best options for intra-BRICS cooperation in the energy
- development of mechanisms for promoting joint projects
- collaboration in research, development and deployment of advanced energy technologies
- exchange of information and best practice on policies, regulations and standards
- exchange views on the improvement of legal basis to promote BRICS energy cooperation
- identification of opportunities for collaboration between interested stakeholders
- promotion of mutual trade in energy-related goods, including equipment
- facilitation of mutual investments in the energy sector
- coordination in international fora as appropriate

The implementation of the Road map will be led and coordinated by the Committee of Senior Energy Officials, which is entitled to take decisions, formulate proposals for the Ministers of Energy and report to them on the results.

Practical work would be carried out mostly within the framework of the BRICS Energy Research Cooperation Platform. The Platform's Terms of Reference provides the participants with a broad mandate for cooperation in different areas. Other existing mechanisms, including the Energy group of the Business Council, Science and Technology Initiative, BRICS Think Tanks Council are valuable partners in the implementation of the Road map. The New Development Bank could also be invited to support joint energy projects.

Areas of cooperation

At the first BRICS Senior Energy Officials meeting held on 20-21 February, 2020 in Moscow the sides agreed on the Priority areas of cooperation within the BRICS ERCP according to the BRICS countries' priorities in energy sectors' development. The list of priority areas could be further amended upon request of the delegations.

Cross-cutting issues

1. **Research on energy sector development of BRICS countries** including energy production and consumption, the evolution of the energy mix, achievements and challenges in the development of the national energy systems, plans and forecasts will help to identify common interests and the best ways for promoting mutually beneficial cooperation.
2. **Technology** is the key for building efficient, resilient and sustainable energy industry. Technological cooperation will be essential part of collaboration in all areas in accordance with the participants' needs and interests.
3. **Digitalization**. The BRICS members are actively deploying digital technologies to increase efficiency, flexibility and reliability of the national energy systems. The BRICS countries could benefit from joint development of emerging technologies such as virtual reality, integrated data analysis and AI and others.
4. **Energy efficiency** is a powerful tool to boost productivity and economic growth and emissions reduction Exchange of best practices, join research and efforts towards popularization of the energy efficient way of life will unleash the significant potential for increasing energy efficiency in the BRICS countries.
5. **Capacity-building**, including training of personnel, institutional development, student, academic and experts exchanges will be important part of collaboration in various areas, creating additional opportunities for enhancing BRICS energy cooperation.

Sectoral cooperation

6. **Coal.** Even though the share of coal in the energy mix of BRICS countries varies considerably, they all use coal, have abundant coal reserves, and will continue to use coal efficiently in power generation and industries. Joint assessment of development of the coal sector could be useful for both exporting and importing countries for planning production and supplies. Ecological factors and needs increase the importance of introduction of new technologies both in the areas of coal mining and cleaner use of coal.

7. **Natural gas, including LNG.** Natural gas remains affordable and relatively clean fuel. Significant increase of natural gas demand and widening of the usage of natural gas, in particular in power generation, industry, transport and households, are expected in the BRICS states. Great potential for cooperation in natural gas sector among BRICS countries is obvious including exploration, production, ensuring stable supply, reliable transportation and development of infrastructure for pipeline gas and LNG trade.

8. **Renewable energy** is progressing rapidly due to its environmental advantages as well as growing affordability. The BRICS countries can benefit from exchange of best practices and advanced renewable energy technologies, joint analysis of challenges related to the rapid increase of the share of renewables in the energy mix and expansion of the distributed generation.

9. **Bioenergy and biofuels** enhance energy production in sustainable way. It can play important role for development of rural areas and protection of the environment. Joint analysis of economic and environmental benefits of bioenergy and sharing of best technologies will promote BRICS global leadership in this area.

10. **Sustainable transport** is essential for economic growth, promotion of connectivity and the well-being of people. The BRICS states may jointly consider ways to improve transport systems and decrease environmental footprint by encouraging wider use of gas, biogas, biofuels, introduction of EV and other advanced transport technologies.

11. **Smart grids** will make electricity production and distribution more flexible with the application of modern information and communication technologies. It becomes increasingly important given the rapid growth of renewables and distributed generation. Cooperation in this area will increase efficiency and reliability of the BRICS states national energy systems.

Items of the Road Map for BRICS energy cooperation up to 2025

№	Action	Results/Outcomes	Timeline
I. Development of the BRICS countries' national energy systems through deepening intra-BRICS cooperation			
1	Preparation of a joint report on the BRICS countries' energy sector within the ERCP framework on the basis of national contributions	Report	2020, update 2023
2.1	Developing the BRICS Energy Research Cooperation Platform, including launching the work streams activities, forming the list of focal points and experts for each priority areas, the list of scientific energy research institutes, exploring the possibilities for further development of the BRICS ERCP,	List of experts Action plans of ERCP Work Streams BRICS ERCP Secretariat	2020-2021
2.2	Publication of the ERCP research reports	Reports	During the whole period
2.3	Selection of projects and the modalities of cooperation based on the ERCP research activities	List of projects	2021
2.4	Start of projects	Action plans of projects' realization	2021-2022
3	Exchange of best practices in the field of energy	Working Group meeting Join events (e.g. festival	During the whole period

	efficiency in the energy sector and popularization of energy saving	on energy efficiency #TogetherBrighter, etc.)	
4	Further involvement of youth into energy cooperation and research activities among the BRICS countries	Youth Energy Summit Youth Energy Outlook Joint events	During the whole period
5.	Selection of areas in regulations and standardization where coordination is appropriate	List of areas agreed	2020-2021
6.	Developing cooperation with other intra-BRICS mechanisms	Join events and projects	During the whole period
II. Deployment of new technologies and improving the conditions for investment in energy sector			
1	Preparation of an overview of new energy technologies within the framework of the BRICS ERCP on the basis of input from leading energy companies	Survey	July 2020
2.1	Identification of common interests in energy technologies and potential areas of cooperation	Workshop with ERCP members and other stakeholders	2021
2.2	Selection of technologies to be explored within the ERCP and modalities for cooperation	A list of technologies and projects agreed	2021
2.3	Start of joint projects	Action plans of projects' realization	2022
3	BRICS Energy Event	Exchange of views on common interests in developing BRICS Energy Cooperation	Annually
4	Consultations with the New Development Bank	Agreement on projects and forms of cooperation	During the whole period

III. Facilitating stability of energy markets and enhancing the role of BRICS countries in global energy issues			
1.1	Consultations among BRICS countries' representatives to international bodies and fora working on energy issues.	Informal consultations on the margins of G20 WG meetings	During the whole period according to the schedule of G20 working group on energy
		Informal meetings on the margins of WEC	During the whole period
		Forming the list of organization for consultations on BRICS positions	2021
1.2	Organizing join events on the margin of international fora related to energy issues	Events (workshop, round table, presentation, etc.)	During the whole period
2	Organizing discussion on market situation and promotion of energy related trade among the BRICS countries	Workshop	Annually