

FROM
BRICS
WITH



SDG #7 URBAN GUIDEBOOK FOR BRICS AND BEYOND



**BRICS
YEA**
BRICS YOUTH ENERGY AGENCY



UN Major Group for
Children and Youth
the space for children and youth in the United Nations



**SDG7 YOUTH
CONSTITUENCY**
YOUTH IN SUSTAINABLE ENERGY

Honoring the 5th anniversary of adoption of the UNFCCC Paris Agreement and of the 2030 Agenda for sustainable development and celebrating the 75th anniversary since establishment of the United Nations, the SDG Platform by BRICS Youth Energy Agency (YEA) launches a campaign «From BRICS with SDG» partnered with the SDG7 Constituency of the United Nations Major Group for Children and Youth (UN MGCY). The campaign addresses young people who make a day-to-day change by contributing to achievement of the Sustainable Development Goals. This year the theme of the campaign is Smart and Sustainable cities. Cities need to become sustainable and energy efficient and it is the youth who should take lead as they are the ones who will be their future residents.

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WHY BRICS?

Today the concept of a smart city is no longer just a theory and is actively being implemented in the largest metropolitan areas of our planet. The BRICS countries, in this respect, represent a unique area where smart cities are already at the forefront of technological innovation, for example those in the transport area, real estate development, entrepreneurship activity and governance. The crucial fact is that one of the top priorities of each smart city is to improve energy efficiency. This is what makes these diverse communities closer, which is especially true for the BRICS countries' megacities, such as Sao Paulo, Moscow, Delhi, Shanghai, Capetown and others. And still, though they have similar problems, each community requires a tailored solution.

ORGANIZERS

- 2015** ● **INCEPTION**
 Launch of the BRICS Youth Energy Agency pursuant to the First BRICS Youth Summit Action Plan in Moscow/Kazan
- 2016** ● **ENHANCEMENT**
 Consultations with the entitled organisations on coordination of BRICS youth energy cooperation
- 2017** ● **RECONCEPTION**
 Development of research and energy projects created the basis for reorganisation into the BRICS Youth Energy Agency
- 2018** ● **BRICS YEA I SUMMIT**
 First BRICS YEA Summit was held in Moscow, Russia, and the BRICS Youth Energy Action Plan up to 2020 was approved
- 2019** ● **BRICS YEA II SUMMIT**
 At the II BRICS YEA Summit the first BRICS youth energy research was introduced: BRICS Youth Energy Outlook 2019
- 2020** ● **BRICS YEA III SUMMIT 5th Anniversary**
 In line with the BRICS Youth Summit, the III BRICS YEA Summit was included into official programme of the Russian Presidency in BRICS 2020

BRICS YEA

BRICS Youth Energy Agency was established to secure youth energy cooperation between BRICS states in the field of energy research and project development.

BRICS YEA develops numerous projects for the BRICS Energy Youth. All of them are aimed at involving talented and proactive young people in the projects that contribute to development of BRICS cooperation in the field of energy.

ENERGY OUTLOOK

Energy research conducted on annual basis which forms the vision of young scientists and professionals on future energy development of BRICS countries



SUMMIT

The main international energy event for BRICS Youth held annually at the "Russian Energy Week" International Forum Youth Day



NETWORK

Digital Platform for the global community of young scientists, professionals and students of the BRICS Youth Energy Agency



UN MGCY SDG #7 YOUTH CONSTITUENCY

The **United Nations Major Group for Children and Youth** is the formal engagement mechanism for young people at the UN. It is mandated by the United Nations General Assembly to be self-organised and engage in numerous policy processes related to sustainable development. Its primary purpose is engaging communities of young people in the Design, Implementation, Monitoring, and Follow Up & Review of sustainable development policies at all levels.

The **SDG7 Youth Constituency** is the formal engagement mechanism for young people in UN and UN-related processes focused on energy topics. Moreover, SDG7 YC acts toward youth engagement in other energy-focused processes in the multilateral system.

KEY ACTIVITIES:

- **POLICY ADVOCACY**

Youth engagement in inter-governmental and multi-stakeholder processes of UN and allied institutions, including engagement with member states

- **CAPACITY-BUILDING**

Exchanging opportunities and know-how relevant to youth in the sector and organising webinars and other educational engagements

- **YOUTH ACTION**

Showcasing, mobilising, and supporting existing and new youth actions on sustainable energy and building or supporting region-specific networks of youth involved in renewable energy sector

- **KNOWLEDGE**

Drafting youth publications in partnership with relevant stakeholders and consolidating best available scientific data to support work of youth movements

CAMPAIGN

TARGETED SDGS

The Campaign 2020 has increased awareness of young people from BRICS countries about 5 United Nations' Sustainable Development Goals.

7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



13 CLIMATE ACTION



17 PARTNERSHIPS FOR THE GOALS



OUTCOMES



The 2020 campaign shall provide young people from BRICS and beyond with insights from urban development experts and other young practitioners, help share their vision and shape best practices into policy recommendations to be introduced at the 3rd BRICS Youth Energy Agency Summit as part of the “Russian Energy Week” International Forum #TogetherBrighter Youth Day. The policy recommendations prepared by BRICS Youth will be addressed to the BRICS Urban Forum 2020.

ABOUT #FROMBRICSWITHSDG

The campaign addresses young people from BRICS countries and beyond who make a day-to-day change by contributing to achievement of the Sustainable Development Goals.

Honoring the 5th anniversary of adoption of the UNFCCC Paris Agreement and of the 2030 Agenda for sustainable development and celebrating the 75th anniversary since establishment of the United Nations, the SDG Platform by BRICS Youth Energy Agency launches a campaign «From BRICS with SDG ♡» partnered with the SDG7 Constituency of the United Nations Major Group for Children and Youth. The campaign addresses young people who make a day-to-day change by contributing to achievement of the Sustainable Development Goals. This year the theme of the campaign is Smart and Sustainable cities. Cities need to become sustainable and energy efficient and it is the youth who should take ahead as they are the ones who will be their future residents.

SURVEY 15 August - 9 September

Start the campaign by participating in the survey where you might want to share your ideas about applicable policy guidelines to make our cities smarter and more sustainable.

The #FromBRICSwithSDG Campaign "Smart and Sustainable Cities" has four main steps: guidelines and practices collection via survey, two days of webinars and workshops and the final event.

WEBINAR & WORKSHOP 10 September

«Environmentally-Friendly & Efficient Transport and Buildings»

Keynote speaker: Prof. Johannes Urpelainen - Director and Prince Sultan bin Abdulaziz Professor of Energy, Founding Director of the Initiative for Sustainable Energy Policy (ISEP)

Youth Practitioners: Sum Yue Chung (V'air Hong Kong co-founder, China), Pranav Sinha (Energy economist, India)

Moderators: Aditi Mishra, Arsenii Kirgizov-Barskii

Video:
youtu.be/ytmylWLope8



WEBINAR & WORKSHOP 17 September

«Sustainable and Inclusive Municipal Governments and Business»

Keynote speaker: Hon. Ilsur Metshin - Mayor of the City of Kazan, Chairperson of the United Nations Advisory Committee of Local Authorities (UNACLA)

Youth Practitioners: Bruce Roberto Scheidl Campos (Secretariat of International Relations of São Paulo City Hall, Brazil), Evgenia Parinova (Moscow Agency of Innovations, Russia)

Moderators: Alexander Kormishin, Vadim Kuznetsov

 Video:
youtu.be/wtsEiYTQNks

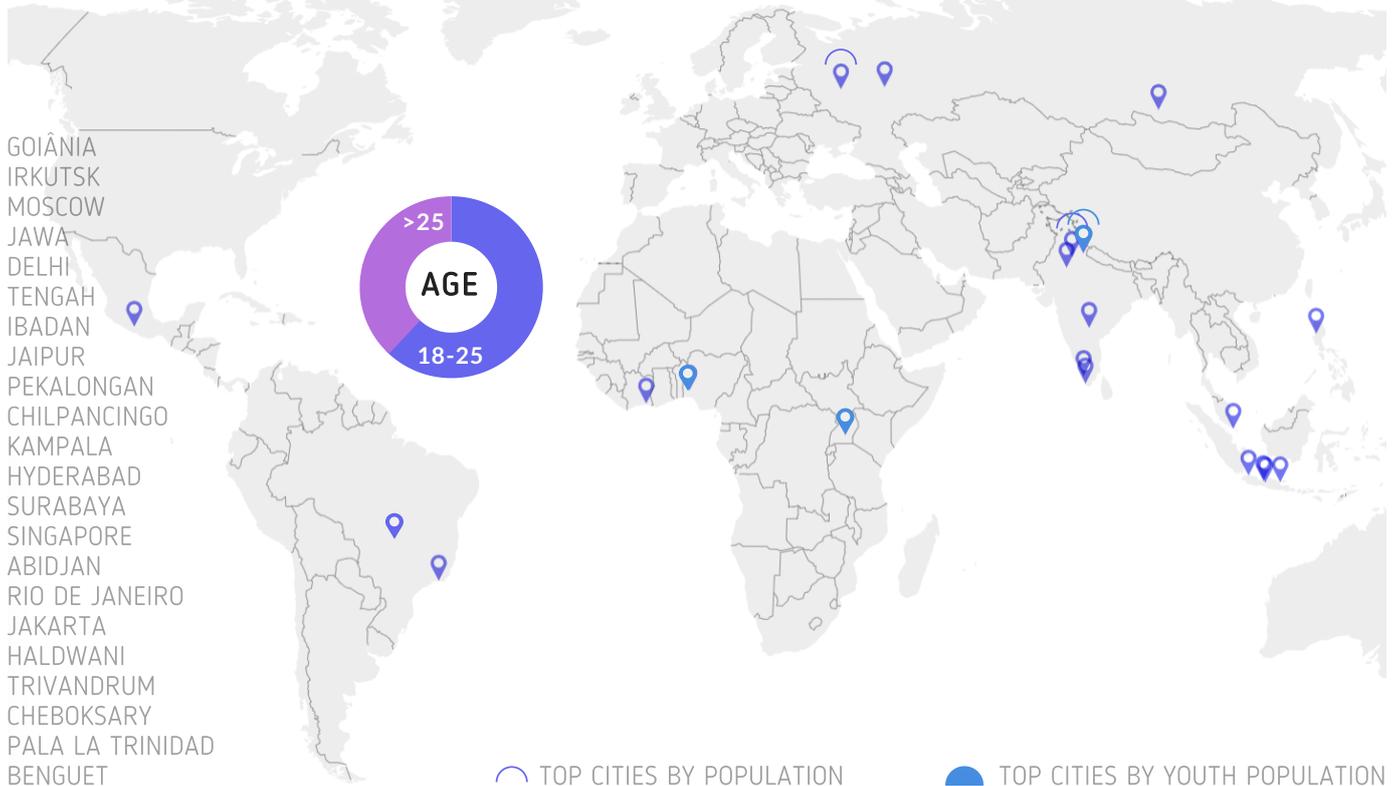
In the follow-up to the webinars and workshops, we asked participants to share their ideas on how the proposed policy guidelines might look like. Their inputs were used for drafting the final document. As part of the survey, the respondents shared their experience of sustainable and smart cities of their countries and hometowns.

FINAL EVENT 16 October

Final event of the campaign 2020 will take place online at the 3rd BRICS Youth Energy Agency Summit. The document will be handed over to mayors of BRICS countries as part of the BRICS Urban Forum 2020.

SURVEY

RESPONDENTS GEOGRAPHIC RANGE



Following recommendations and opportunities were provided

ENVIRONMENTALLY-FRIENDLY & EFFICIENT TRANSPORT AND BUILDINGS

Goiânia 

My proposal is the government incentive through subsidies and discounts on equipment with more efficient energy consumption

Another one is the distribution of advertising campaigns through the government to explain how beneficial energy efficiency is, both monetarily and, mainly, for the environment

Rio de Janeiro 

Space management systems could be introduced to assess occupancy level in buildings and transportation, in order to help with energy management and social distancing guidelines

Chilpancingo 

Foster a gradual transition to change to clean and innovative technologies in buildings and already established transport services, through courses and training, tax incentives or agreements with suppliers that offer affordable prices and various payment methods

Establish mandatory rules for the entry of new transport units and construction permits. Offering the same benefits mentioned above, financial support and contact with certified providers that offer good quality services at a good price

Sign agreements with universities for the development of technologies that benefit energy efficiency

Establish a system of monitoring and periodic evaluation of buildings and transport units to promote the maintenance of energy efficiency measures and constant care of facilities

Evaluate routes for public transportation in order to find strategies for using fewer units in the same places

Jaipur 

Use of public transport must be increased because only 400 low floor busses available for transportation of more than half million people daily

Delhi 

The city has such high temperatures for at least 8 months! Its a waste of a resource so abundantly available. All buildings like schools and offices should have solar tech of their own.

The city has many open water drains which produce huge amounts of gases energy prospects of which have been discussed in almost every national science seminar CBSE conducts each year with schools.

Haldwani 

Energy efficient buildings and transportation system for a city like mine is necessary. It is growing with a whopping 25% decadal growth rate which is now demanding a much more energy to live.

I have policy recommendations: Taxing all those citizens who are consuming higher per capita energy at home. So that all of them could be pushed to use energy efficient building techniques and integrated power systems.

For transportation, electric buses could be very efficient for my city. I would suggest to subsidize electric mass vehicles production and operation

Pala 

Large areas especially rooftops are underutilized, which could be used for solar energy, gardening or micro wind turbines. With this, we reduce the consumption of polluting fuels and deforestation. The surplus energy can be contributed to the grid and households could save routine energy costs and could earn as well. Construction of buildings should give preference for natural lights, in cities most of the buildings due to how its constructed has lots of dark spots for which there need 24 hours of artificial light. Public transports should power from renewables and should have separate lanes for movements and efficient charges. With this, one could travel cheap and fast in public transport.

Combining it with incentives especially for daily travellers, the number of trips can be increased

Kampala 

Build new public transport lines. I recommend to construct a railway in Kampala to cut on emissions from the many old taxis. Buildings should install solar lanterns to cut on electric bills and gas emissions from power generators.

Ibadan 

Information and communication is very essential, hence, citizens must be educated and made aware of issues around energy saving, energy efficiency and waste minimization in buildings.

La Trinidad Benguet 

Clean energy and affordable energy is important in buildings and transportation. This will ensure the preservation of our environment and maintain the clean and fresh air in my city

Feri 

Many cities as Jakarta City have a bad air pollution. It happened because of the many vehicles that uses fossil fuel. We have to move and use renewable energy. We know in transportation industries are already make some electric cars to decrease bad emissions.

Surabaya 

Commercialization of solar panel usage in building what have a high consumption of electrical energy. Usage of alternate fuel from trash who converted to ethanol or biogas. Vehicle transformation from fossil fuel based to alternate energy based. Suitable for ethanol and methanol. Operating of Trash Based Power Plant to commercially used. Energy audit for commercial and non commercial building to build an energy efficiency consumption.

Jakarta 

In Indonesia sun is exposed for 12 hours. This can be used to provide electricity to buildings. For transportation, fossil fuels are used more and even given subsidies from the government. This is what makes Indonesia produce large emissions from processing fossil energy and the use of fossil itself.

Singapore 

Apartment buildings are a contributor to a State's carbon footprint. Retrofitting older apartment buildings with modern and more energy efficient heating/cooling elements would be a good change. These older apartment buildings are usually ones that are not created with sustainable living and energy efficiency in mind. Moreover, the propensity of the household to obtain or use older heating/cooling elements are higher since it is much cheaper to buy.

As such, these would rack up carbon footprints. These retrofitting work to be done would see a significant reduction on carbon footprint in a single building alone. It would also be a cost benefit for each household as their utility bill will be reduced with just a change to a more energy efficient element.

The company sourced to provide with the energy efficient cooling/heating element would be able to garner business and a sustainable flow of income for them with the amount of consumers that they would hold.

Erwanda 

For sea and river transport in shore cities, we recommend to use more wind and seawave energy base, not just to reduce oil usage but in near future. We hope this facility could further encourage wind and seawave energy. The challenge for this kind of energy is to find the way to transfer and distribute.

But if this happen globally we think this trend could adapt way like fiber optic which distribute worldwide

SUSTAINABLE & INCLUSIVE MUNICIPAL GOVERNMENTS AND BUSINESS

Haldwani 

Strengthening self help group for small initiatives like Cloth bag production and eco friendly disposable plates. Advertising and marketing these products to be vocal for local

Capacity building Workshops on sustainability with local businesses and designing behavioural change programs with citizens

Pala 

Municipal governments should ensure cities grow in a sustainable manner, not as concrete jungles. Natural patterns and ecosystems should be the foundation of cities. We should not be razing through wetlands, lakes or forests in cities for unwarranted contraction activities. Having more natural spaces around the city, it will infuse residents to spend time with nature and will reduce the time they spend at home using many electronic items. Spending time outside will also help in nurturing local businesses around. If cities are well organised the unusual rounds around the city a be avoided. If perfect places for everything from shopping items to recreational centres if everything is well mapped, it will help people directly to come to the business.

Cities should also have one waste management plan where segregated wastes are sorted out converted again to rain materials, manure and biogas which could power up the city and also provide economic gains. It also helps in not to pollute the water and soil. Regional demands should be met regionally, we should look into producing the basic things needs for us within our region to avoid long trips coming in just to deliver them.

If we produce locally from local resources traditional local businesses could thrive and help to preserve the sustainability of the region.

Ibadan 

Local governments should be used as agents in the environmental management system in terms of ensuring businesses and comply with sustainable directives. The government should promote innovative business models to enhance consumer demand for sustainability.

Surabaya 

Energy efficiency and renewable energy transformation to efficiency the fossil energy usage. So, the business and government can reduce cost for energy usage. Then, there are many renewable energy company who invested in government and take a business profit.

Government focusing on the acceleration of environmentally friendly industries, and supporting changes in businesses that are environmentally friendly

Singapore 

In light of the pandemic we are currently facing, it comes with the best opportunity to revamp the structure of having a more sustainable municipal government and businesses. The post Covid-19 recovery plan would be a great way to boost the sustainable businesses and generate more green jobs in the market. Moreover, the municipal government could also show its support by providing easier access for sustainable businesses into the market. This would provide for a healthy competition that would influence for a more innovative push towards sustainability.

According to our respondents, sustainable buildings should: have renewable energy installations (rooftop solar panels); be incentivised by Feed-in Tariff; improve the aesthetic appearing



Moderators

According to our respondents, sustainable business and governments take: new approach to urban planning in order to create green zones, facilitates access to local markets for sustainable start-ups, raising awareness and sustainable education, opt for zero-waste events, broader waste management including recycling and biogas extraction, support local activism, reasses the existing energy and subsidy policy, stricter policies against fossil fuels based compnsnies



Moderators

BEST PRACTICES

Mathew Ayodele, Ibadan: Nigeria will be used as a case study. The issue of lighting in residential buildings in Nigeria is significant to security and environment visibility. While there is a new development in technology, general electric in particular. Light-Emitting Diode (LED, also known as solid-state) technology is getting a lot of attention because it is extremely energy efficient and it allows better light distribution than standard CFL or fluorescent technologies. Standard lamps radiate light in all directions. This necessitates a fixture design to control light distribution, which reduces the effective lumens. A well-designed LED system can control light exactly where it needs to go, which maximizes fixture efficacy. Hence, if Nigeria could embrace this development and implement it, there would be energy efficiency in residential buildings.

Ramadhani Ichlasul Amal, Surabaya: Energy usage transformation from fossil based fuel to renewable energy/electrical based fuel. Transformation vehicle from fossil fuel based to electrical/RE. based fuel. Recruitment for student to work in renewable energy company. Innovation to improve efficiency and advantages in renewable energy usage. And operation of trash based power plant or PLTSA(Pembangkit Listrik Tenaga Surya) in Surabaya to set commercially used. Because now is just for power plant usage.

Diogo Quental, Rio de Janeiro: The Federal University of Rio de Janeiro (UFRJ) has been developing hydrogen-based transportation system.

Rifdi Abqary Farhan, Singapore: Singapore's schemes to improve energy efficiency through BCA's Green Building Masterplans that aims to make 80% of the buildings in Singapore to be "green". Singapore has recognised that 50% of the energy consumed in a commercial building is by the tenants.

Anohar John, Trivandrum: One of the best innovative solution in Energy Efficiency in buildings in country is the Green Building Concept done by Energy Management Center Kerala.

SUSTAINABLE IDEAS BANK

This year the SDG Platform by BRICS YEA is launching a new ambitious initiative - **BRICS Sustainable Ideas Bank** which is to become the first-of-its-kind comprehensive SDGs depository shaped and driven by the BRICS citizens.

Over the past few years, BRICS YEA has gained ground in incorporating the UN Sustainable Development agenda in its yearly activities. The commitment to fostering the realization of the 2030 Goals has led to the establishment of the SDG Platform by BRICS YEA. The initial focus on the SDG 7 (Affordable and clean energy) has then been broadened due to the interconnectedness of challenges that the BRICS countries face in the energy sector. While annually there are multiple SDG-related events constantly arousing great interest and enjoying high participation rates, no systemic input collection nor monitoring has ever taken place. To fill up this gap, the SDG Platform by BRICS YEA has therefore decided to launch the ground-breaking BRICS Sustainable Ideas Bank (BRICS SIB).

Our main goal is to provide a comprehensive common virtual space for a continuous collection of existing and new sustainable practices and ideas driven by BRICS citizens' active participation.

What's inside BRICS Sustainable Ideas Bank?

- Systematization of the collection of public input data regarding SDG-related ideas relevant for the BRICS countries
- Monitoring of the dynamics of SDG-driven proposals
- Amplification of SDG-friendly suggestions and active participation throughout the BRICS states.

4 QUALITY EDUCATION



Vocational training in sustainability
Local sustainability week in municipalities and cities

7 AFFORDABLE AND CLEAN ENERGY



Amplify the Feed-in Tariff practice
Hydrogen-based storage and transportation network

Encourage LED-driven lighting transition
Trash-based power plants with zero emissions

8 DECENT WORK AND ECONOMIC GROWTH



Mid-term student internships in renewable energy enterprises
Increase wages for waste management community work

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Financial incentives for start-ups in sustainability
Discount car purchase with solar tech on a car's roof

R&D of gas motor fuel use
Examine electric vehicles' Energetic Return On Investment

11 SUSTAINABLE CITIES AND COMMUNITIES



Lower public transport price for everyday commuters
Requirements for natural light proportion in new buildings

Electric sea and river transport in coastline cities
Urban car sharing with electric vehicles

13 CLIMATE ACTION



Decompose trash to extract biogas in vulnerable areas
Promoting public gardening

15 LIFE ON LAND



Reduce taxation on local foods

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Separate municipal budget clause for supporting eco-campaigns
Green dividend from just taxation

17 PARTNERSHIPS FOR THE GOALS



Activists and authorities co-projecting for the Goals
Local authorities delegate tasks to activist groups

Contribute to BRICS Sustainable Ideas Bank via website form at yeabrics.org

**FROM
BRICS
WITH** 

Moscow 2020