

BRICS & UNIDO:

Technology and Innovation

for SMEs Development

Sergey Korotkov
Director, UNIDO CIIC Russia

New tendency in world economy UN INITIATIVES

New economic tendencies were reflected in UN Report (TDR 2013) "Adjusting to the changing dynamics of the world economy and discussed at UN Conference in Johannesburg, South Africa.

- Export-led development is no longer viable, economies will perform better with more balanced strategies
- •«Restructuring of financial system is needed to serve real economy, trade and development»
- •«Reverting to pre-crisis growth strategies is neither possible nor desirable and cannot be the only option»

SMEs fundamental Role in development sustainable Economy

Currently BRICS countries have vast population all showing the most in the world middle class growing based on SMEs. Importance of this aspect was underlined by BRICS leaders in Declaration of BRICS Summit 2013 held in Durban, South Africa:

"We recognize the fundamental role played by Small and Medium Enterprises in the economies of our countries and which are major creators of jobs and wealth.

In this regard, we recognize the need for promoting dialogue among the respective Ministries and Agencies, with a view of promoting their international exchange and cooperation for fostering innovation, research and development."

Industrial Partnerships essential for post-2015 development

The effective implementation of the MDG post - 2015 development agenda requires formulate the new Sustainable Development Goals (SDG) noting new tendency in world economy which are currently in the process of working out by UN Teams.

In December 2013, UNIDO Member States ratified the Lima Declaration, giving the Organization a mandate to promote inclusive and sustainable industrial development as its vision for sustainable development.

Currently Prepared draft of outcome UN document presumes to include posting -2015 strategy "inclusive and sustainable industrialization" as Goal 9 of MDG for consideration in September 2015 UN Heads of State Summit.

The Director General of the United Nations Industrial Development Organization (UNIDO) LI Yong emphasized the critical role of partnerships for the successful implementation of the Sustainable Development Goals at the Partnerships Summit in January 2015 in India.



UNIDO Project

The Project "Partnership in technology and innovation for development of SMEs" *started in 2012* in support of Declaration of BRICS Summit 2011.

It serves as well to implementation of all three priority fundamental task of sustainable development:

Technology and Innovation

SMF's

UNIDO Project

The general goal of the project is to *enhance business* partnerships between BRICS countries to exploit potential synergies between them in selected areas of innovation and new technologies

The objective of the first project phase is to develop a networking platform to enhance innovation alliances and sustainability of technology transfer between BRICS countries

The Project contributes to National Development Programs

BRAZIL. Program of Acceleration of SMEs development 2012-2017

RUSSIA. Science and technology development program 2013-2020

The state program "Economic development and innovation economy" (sub-programme "Promotion of innovation")

INDIA. The 12th Five Year Plan (2012-2017)

Vision: enabling India to emerge as global industrial research and innovation hub

CHINA. Sectoral state development programs of China The 12th Five Year Plan (2011-2015) of China

SOUTH AFRICA. National Development Plan 2030 Industrial Policy Action Plan (IPAP)



Problem

Need of information on market opportunities in highgrowth sectors and potentials for technological and innovation cooperation between BRICS Small and Medium Enterprises (SME)

Need of support in *technology transfer* and related *investment opportunities*, including locally available funding mechanisms, and information on business culture and legal provisions

BRICS Technology Platform

Development programs show current and long term objectives indicating *priority industrial sectors* of economy

Providing SMEs of BRICS countries with *access to current technologies* to participate in priority clusters of national development programs

Implementation of development programs requires *active international industrial cooperation* based on comprehensive technologies, modern equipment, high intellectual potential of Technology Holders, etc.

Mission of the Network

To support SME internationalisation within BRICS

<u>Internationalisation is an engine</u> for SME competitiveness and development

In order to enhance competitiveness and growth, cooperation platforms must <u>facilitate internationalisation</u>, not only exports

To help small companies, research organisations, industries, universities make the most of the <u>business opportunities</u> in BRICS

BRICS Technology Transfer Networking Platform (www.brics-ttn.org)









REQUESTS AND OFFERS





USEFUL

CONTACTS

NEWS

20.04.2015
BRICS FINANCE MINISTERS MEET HELD IN WASHINGTON



Ahead of the 7th BRICS Summit in Russia this summer, the Finance Ministers and Central Bank Governors Meeting of the BRICS was held in Washington on Thursday where the officials of the five countries took stock of the preparations for operationalizing the \$100 billion BRICS New Development Bank.

see more...

26.03.2015

SIGNING THE MEMORANDUM ON COOPERATION IN SCIENCE, TECHNOLOGY AND INNOVATION BETWEEN THE GOVERNMENTS OF RUSSIA, BRAZIL, INDIA, CHINA AND SOUTH AFRICA



Russia jointly with its BRICS partners has prepared a draft Memorandum on Cooperation in Science, Technology and Innovations Between the Governments of the Federal Republic of Brazil, the Russian Federation, the Republic of India, the People's Republic of China and the South African Republic.

see more...

SUCCESS STORIES

02.04.2015

BRAZILIAN-RUSSIAN TECHNOLOGY
PARTNERSHIP FOR PRODUCTION OF RIGID
POLYURETHANE SYSTEMS USING
ENVIRONMENTALLY FRIENDLY BLOWING
AGENT



Brazilian company "Purcom Quimica", an independent national System House specialized on polyurethane production, is investing in research and development of new technologies. The company established a special innovation center that carries out in-house R&D for polyurethane production and realizes open innovation projects with international partners.

see more..

Target participants

Small and Medium Enterprises (main group)
Universities and their alliances with industrial companies (like "competence centers")

R&D Labs

Industry

Technological brokers:

national technology transfer networks/centers business associations supporting technological business cooperation business incubators, technoparks, clusters, etc.

BRICS Technology Platform - Priorities

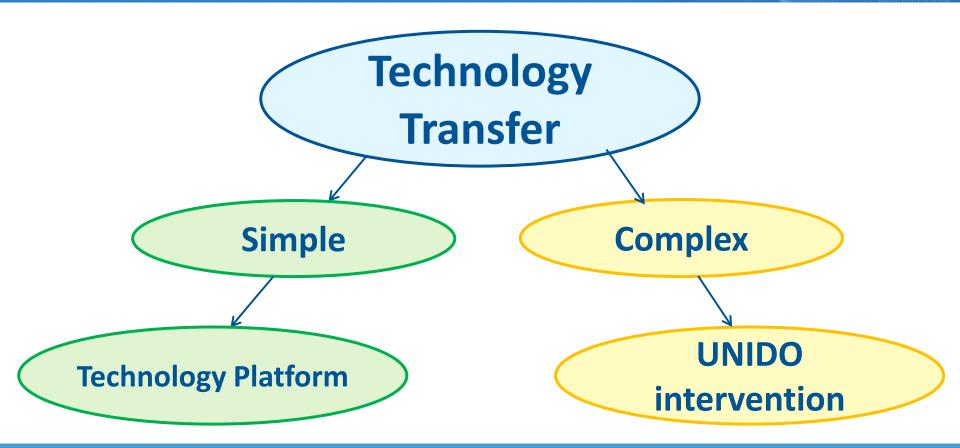
MINING & MINERALS PROCESSING
METALLURGY & FOUNDRY
METAL & METAL FABRICATION

GREEN TECHNOLOGY
WASTE MANAGEMENT
_____ IT & HIGHTECH

FUEL & ENERGY
ENERGY EFFICIENCY
RENEWABLE RESOURCES

INFRASTRUCTURE:
TRANSPORT, ENERGY, WATER
CONSTRUCTION:
INDUSTRIAL & HOUSUNG

AGRO PROCESSING BIOTECHNOLOGY; CHEMICAL INDUSTRY MANUFACTURING



UNIDO intervention

Negotiation of technology transfer (TT) through *joint* venturing and capital venturing, establishment of joint ventures cooperation projects between institutions and companies

Joint *demonstration and pilot projects* in priority sectors identified and support provided for their implementation for further provincial and regional spreading and multiplying of TT

Technology Transfer Methodology - Stages

- 1. Work with users
- 2. Identification of offers / requests
 - 3. Search for partners
 - 4. Initial contact / negotiations
 - 5. Technology transfer

A major competitive advantage of the project is the methodology adapted from the Russian Technology Transfer Network and European Union innovation networks, which ensures efficient technology transfer, not only nationally but also transnationally.

Networking Platform is a Unique Tool

The Platform assembles in one place

- Innovative companies, R&D centres, universities, competence centres, etc. representing ffered technologies at all stages of development, from upstream research to marketable products (and everything in between), as well as technology needs.
- **technology brokers** professional intermediary organisations (technology or innovation centre, regional chambers of commerce, etc.) work on behalf of their clients, representing their technological offers and needs and provides technology transfer services in their countries.

The Platform is specially designed to flexible support different types (structure) of the Technology Transfer Network taking into account specificity of national SME and technology transfer support instruments and organisations:

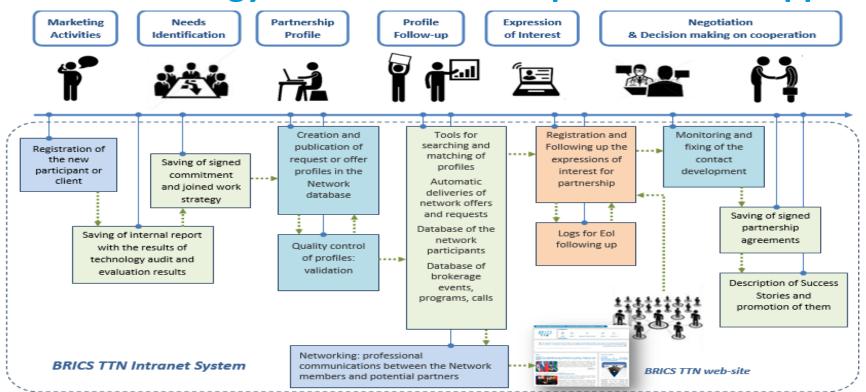
- Support networks are managed by the government (Commercial offices abroad) or big business associations
- •Co-operation networks are focused on promoting direct co-operation between companies (e.g. marketplaces).







BRICS Technology Transfer business process & IT support



Counterpart Inputs

The Project created the linking system of cooperation in all BRICS countries for efficient assisting to inclusive and sustainable industrial development:

BRASIL

Fundação Centros de Referência em Tecnologias Inovadoras (CERTI) – focal <u>point</u>

Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT) – <u>general</u> <u>partner</u>

RUSSIA

Russian Agency for Support of Small and Medium Business (SIORA) – <u>focal point</u>

Russian Technology Transfer Network (RTTN) – <u>general</u> partner

Vnesheconombank (VEB) – <u>financial</u> support for projects

CHINA

International
Technology Transfer
Network Center
(ITTN) – <u>focal point</u>

Beijing Municipal
Commission of
Science and
Technology (BMSTC)
– state support

INDIA

Council of Scientific and Industrial Research (CSIR)-focal point

Associated Chambers of Commerce and Industry of India (ASSOCHAM) general partner

Federation of Indian Micro & Small and Medium Enterprises (FISME)- state support

Bank of India - <u>financial</u> partner

SOUTH AFRICA

Technology
Innovation Agency
(TIA) – <u>focal point</u>

Industrial
Development
Corporation (IDC) –
financial partner

Small Enterprises
Development
Agency (SEDA) –
state support

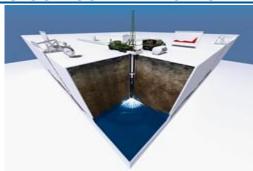
ONGOING PROGECTS

BRAZILIAN-RUSSIAN TECHNOLOGY PARTNERSHIP FOR PRODUCTION OF RIGID POLYURETHANE SYSTEMS USING ENVIRONMENTALLY FRIENDLY BLOWING AGENT



Brazilian company "Purcom Quimica", an independent national System House specialized on polyurethane production, is investing in research and development of new technologies. The company established a special innovation center that carries out in-house R&D for polyurethane production and realizes open innovation projects with international partners.

RUSSIAN OIL RECOVERY ENHANCEMENT TECHNOLOGY FOUND APPLICATION IN BRAZIL



The Russian company "Novas-Energy" has developed a unique Plasma-Pulse Technology (PPT) for enhancing the productivity of oil fields. The low cost of the technology application allows rehabilitation of unpromising wells, which are too expensive to be treated with conventional methods of productivity enhancement.



Expected benefits

Speedup of economic growth

Cost effectiveness

Innovation and technology development

Job creation

Faster introduction of energy efficiency and green technologies

THANK YOU!

Sergey Korotkov

Director

S.Korotkov@unido.org

UNIDO Centre for International Industrial Cooperation in the Russian Federation

125252, Moscow, 21B Kuusinen str.

+7 (499) 943.00.21

WWW.UNIDO.RU