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## Multi-Sector-Multi-Layer Growth Corridor Programme for Asia Africa Growth Corridor (AAGC): A Perspective



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### Introduction

Within the challenges of sustainable development lie the opportunities of continuous sustainable growth. This is, however, only possible for the economies that are future oriented and enterprises that take their time to study the situation and its potential possibilities. This can equally be true for developing countries and enterprises therein that are at the extreme spectrum of both sustainable development challenges and opportunities (Cohen, Demeritt, Robinson & Rothman, 1998). With the historical relations between Asia and Africa in terms of their shared history and the recent developments of the South-South and Triangular Cooperation - SSTC for development narratives (Chaturvedi, 2016), a new sense of hope for Africa's development is now in clear view. One of the outcomes of these developments is the promising but slowly evolving Asia Africa Growth Corridor (AAGC) (RIS, 2017).

The AAGC Vision Document has presented an extensive list, under its proposed elements as the four pillars of AAGC, of measures that if adopted, the result will be immensely appreciated by both parties. It is one thing to know *WHAT* to do, and yet another to know *HOW* to do it in a manner that practically appeals to the needs and interests of both parties. This is the aim of this piece; to propose amongst others, one of the ways through which the acceptability, adaptability and implementation of AAGC might be made smooth and

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with less hiccups, especially on the part of African countries. An illustration for new and renewable energy sector is provided before going over the policy implications and finally it provides the conclusion and the way forward.

### **The Proposal: Multi-Sector-Multi-Layered Growth Corridor Programme**

It is clear, following the developmental antecedents of the two continents, that both Asia and Africa have a lot to benefit from AAGC. There is no question that a strategic and systematic combination of Asia's evolving technical know-how and growing capital-base with Africa's resources and markets would produce a new level of shared-prosperity. This not only benefits the Global South but the world in general, in a way that has never been seen before and cannot be achieved with each of the two continents acting independent of one another.

However, one of the challenges standing on the way of these realisations is the simple fact that, Africa needs to be convinced of the encapsulation of SSTC in AAGC as a "Better-Deal" in practice. This can be done with a number of demonstrative moves over and above the simple business deals, bilateral and multilateral agreements of the previous decades. In this regard, therefore, this paper proposes a strategic and comprehensive programme for AAGC in the energy sector as one of these demonstrative moves. The programme has been conceived and being designed in a multi-sector (cutting across all economic sectors) and multi-layered manner (that cuts across all the proposed elements of AAGC within individual sectors). The aim is to set up some sort of a rare Growth and

Development *Super Market* that provides various opportunities to different players according to their needs, capacities and capabilities.

The Multi-Sector-Multi-Layered Growth Corridor Programme is being thought of to be organized around the existing Asia-Africa relations; that is, by way of consolidating them to further strengthen and expand them for maximum realisation of the proposed elements of AAGC through the following three (3) key layers/components:

- People/businesses/institutional linkages and exchange services
- Upgradation of established Asia and African businesses
- Collaborative research development, deployment & demonstration

### **Linking the Three Layers to AAGC**

These layers are embedded in the AAGC philosophy and principles in the sense that each of them has some strategic significance in facilitating the four pillars of AAGC:

- Businesses/institutional linkages and exchange services is the first stage of all cooperation and collaborations, as it is the first stage of people-to-people partnership through which connectivity for enhancing capabilities and skills will take place. It is also at this stage that the connected people and institutions begin the process of conceiving the ideas for quality infrastructure that will eventually be executed through development & cooperation projects.
- Upgradation of established Asian and African businesses/institutions is what

will follow the established connection above. This is because both the Asian and African businesses and institutions will be taken to a higher level than they were before this engagement, as most African businesses will experience transformation and linkages to the global value chain as their Asian more experienced counterparts will be elevated to the rank of global players operating in an intercontinental market. The visibility of all the four pillars of AAGC will be apparent within this process, as upgradation here means the result of establishing people-to-people partnerships, for the purpose of enhancing capabilities and skills to operate at the level that, with their enriched experience, they begin to develop ideas for quality infrastructures and institutions that will be executed as development and cooperative projects and programmes.

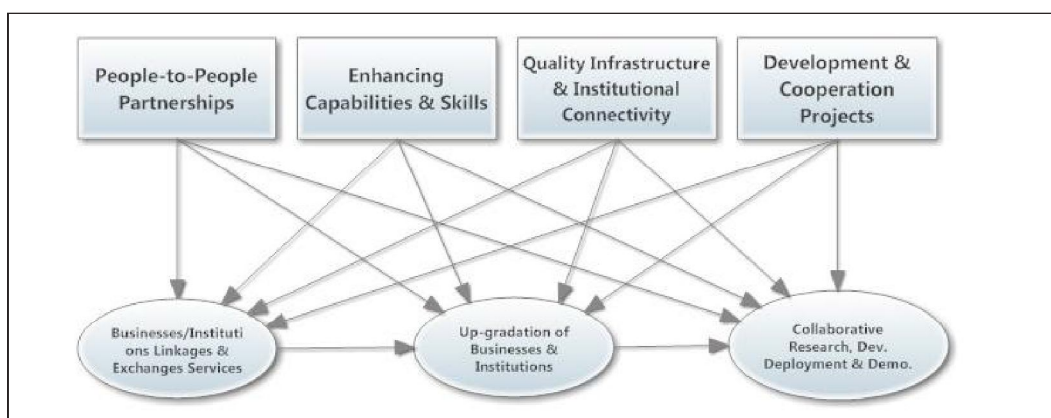
- Collaborative research development, deployment and demonstration is a flexible part of this process. As it is operative at all the stages, it ensures that the process keeps getting more

informed and better. This can be achieved by identifying the key issues to be addressed based on factual data and new/recent research findings. It is needed at the cyclical starts, mid-ways and the ends so as to find ways to improve the next step, round or cycle of activities. Through research studies and surveys, the interested people and institutions to be connected through this programme will be identified as having the set down characteristics; as also the sets of capabilities and skills to be enhanced, the institutional and infrastructural deficiencies to be addressed, and set of development and cooperative projects as well as the best ways of executing them.

The three layers of the Multi-Sector-Multi-Layered Growth Corridor Programme as they relate to the four pillars or elements of AAGC can be viewed as depicted in the Figure 1.

The remainder of this paper provides a brief description of the programme for the new & renewable energy sector, other sectors' versions may be similar to this with difference in the sectoral specifics.

**Figure 1: Four Pillars of AAGC and Three Layers of the Multi-Sector-Multi-Layered Growth Corridor Programme**



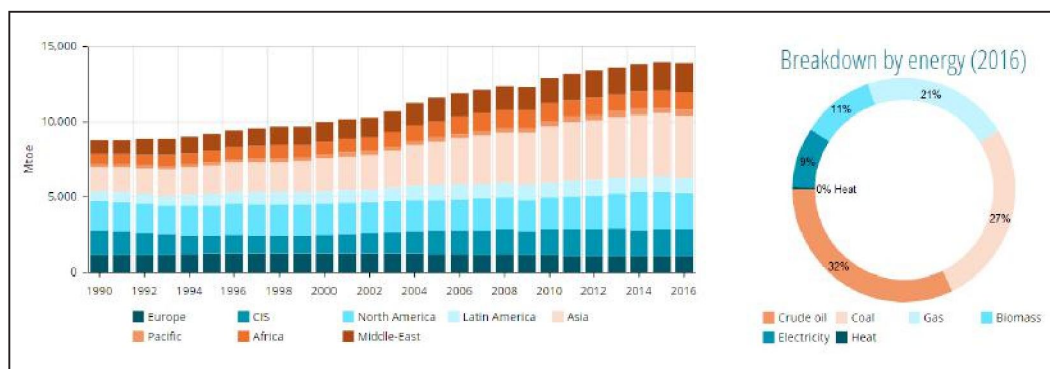
### Illustration of the Programme for New & Renewable Energy Sector

According to United Nations General Assembly (2015), energy is the dominant contributor to climate change, accounting for around 60 per cent of total global greenhouse gas emissions. The demand for more energy has been and will continue to increase particularly with the ever increasing aspirations of developing economies to experience their respective ages of mass production and consumption. Currently the most widely used form of energy are fossil fuels consisting of coal, oil and natural gas in combination with nuclear from the last few decades and few renewables (of which only bio-fuels and hydroelectricity are significant) here and there. To have clear picture of the world energy supply situation in the last nearly two decades, the Enerdata (2017) depiction in Figure 2 may come handy. It can be seen that, from 1990 to 2016, global energy supply rose from a little below 9,000 Mtoe to almost 14,000 metric tonnes of oil equivalent (Mtoe), that is more than 50 per cent increase. Disaggregating these reveals the growing domination of fossil fuels

with 32 per cent crude oil, 27 per cent coal and 21 per cent gas, leaving the renewables of both biomass (11 per cent) and hydro (9 per cent) with only 20 per cent. This calls for the action towards sustainability even from the developing and least developed countries, particularly if one considers the potential emissions these countries are capable of in the near future. Thus, instead of continuing the trends of fossil fuel and later shift to renewables, an immediate shift to renewables and contribution to global climate action can be started now. This means joining the world with as little as they can put into the process of achieving carbon neutrality by the mid of 21<sup>st</sup> century so as not to be part of the future environmental challenges.

The world's attention in terms of energy has now shifted away from fossil energy and slightly from nuclear energy to renewables even though, the world will be stuck with these non-renewable energy sources for some time before the transition is complete. This is because, as already illustrated, fossil energy is currently providing more than 80 per cent of global energy requirement (IEA, 2015,

**Figure 2: Global Total Energy by Regions and Fuel Sources**



Source: Enerdata (2017)

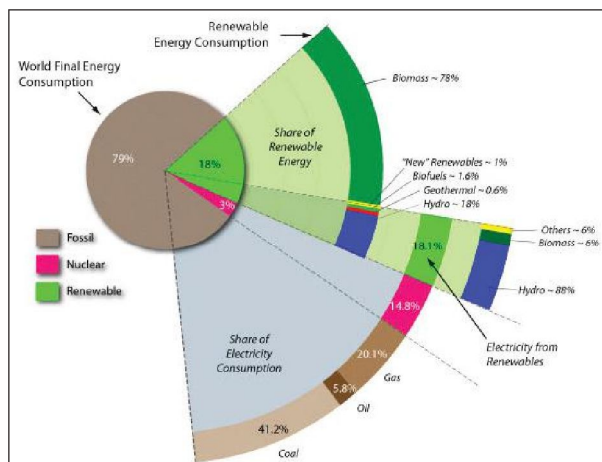
Enerdata, 2017). Impressively, Africa is also contributing in this shift to renewables as is evident with sweeping energy policy changes across the continent and the bold move from African Development Bank in putting all its energy investment into renewables throughout the 2017 financial year (AfDB, 2017). This paradigm shift in global energy scenario will have effect on energy generation, storage, distribution and trade. It will directly and indirectly, as the case may be, affect national and international institutions at varying degrees that can only be determined through careful studies.

The United Nations, prior to the Paris Declaration, had this in mind when drafting the Sustainable Development Goals (SDGs) adopted September, 2015 as the 21<sup>st</sup> century Global Development Agenda for the next 15 years. Sustainability, Clean Energy and Climate are explicitly stated as three Goals 7, 11 & 13 - of the seventeen goals that constitute the new direction of global sustainability the world advances towards in the 21<sup>st</sup> century (United Nations Gen. Assembly, 2015). Above all,

partnerships for the goals is the last but not the least means to achieve the SDGs, hence the relevance of AAGC and programmes of this scale.

Renewable energy (RE) is not a new form of energy, it has been here since the beginning of life on planet earth, rather, its utilisation remained small to the subsistence level. The share of renewables in the world can be better appreciated in the World Final Energy Consumption illustration (Figure 3) by Green Rhino Energy (2013). While the Global Climate Action is the best known action plan to ensure sustainable future of the planet, it came with huge challenges particularly with world's huge investment in fossil fuel. As such, it is in the interest of developing countries to pursue an ambitious climate action strategy that will ensure that they have adequately contributed to the global climate action as well as to safeguarding their economies and territories from not only the adverse effects of climate change but also from the opportunity-rush taking place globally at various business and geopolitical fronts.

**Figure 3: Global Final Energy Consumption**



Source: Green Rhino Energy, 2013.

On the eve of, and immediately after, the 22<sup>nd</sup> Conference of the Parties to the Kyoto Protocol, different reports with various initiatives began to surface on how best to go about the climate action. Some notables include the Oxfam report which argued underestimation of the cost of coping with climate change for developing countries by tens of billions of USD. The International Renewable Energy Agency (IRENA), as a UN Sustainable Energy for All (SE4ALL)'s hub for RE, proposed Remap 2030 that calls for doubling the share of renewable sources in the global energy mix by the year 2030. We Mean Business in collaboration with Carbon Disclosure Project-CDP released Business Side of Climate Change, with five global business initiatives to accelerate the climate action that can reduce the global emission by 7-9 per cent (3.2-4.2 billion/year) of the 2010 levels by 2030. One common point about most of the initiatives is that, they are too general in their approaches and disregard the differences in capacities and capabilities of countries and companies in fulfilling the Intended Nationally Determined Contributions-INDC and Business Determined Contributions-BDCs. Against this background, the Multi-Sector-Multi-Layer programme gives a clear new and renewable energy sector development cooperation framework to accelerate climate action beyond INDCs & BDCs. This can be done in a way that is very important for developing countries as well as the energy firms and other relevant institutions therein within the umbrella of SSTC through AAGC.

The programme for new and RE sector begins with some basic understandings and beliefs that:

- Over 80 per cent of our energy is coming from non-renewable sources.
- Over 15 per cent of the world is currently without access to modern energy (electricity).
- Over 80 per cent of the people without access to electricity live in low income, Sub-Sahara African and South Asian developing countries.
- Most developing countries do not currently have the needed energy infrastructure and hence represent the future increase in energy demand.
- Climate action is a collective responsibility even though most developing countries are not currently required under Kyoto Protocol to lower their emission.
- Instead of continuing the trend of fossil energy and start the transition later when their emissions become alarming, developing countries have the option of leap-frogging to RE from now.

Therefore, the idea is about creating the enabling environment for developing countries to leap-frog into RE use and accelerating the climate action beyond the INDCs and BDCs. This will be achieved by aligning the programme's procedures and activities with the UN, regional and country specific policies, programmes and initiatives, like the Barefoot College's Solar Mamas and International Solar Alliance (ISA), across Asia, Africa and beyond. To raise the standards and level of excellence of the programme and its ensuing projects, they will be registered as Programme of Activities (PoA) and Projects under the Clean Development Mechanism of United Nations Framework Convention on Climate Change (UNFCCC). This is to enable emission-reduction processes

in developing countries to earn saleable, certified emission reduction (CERs) credits even though their price has been on the downward trend. These CERs can be used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol (UNFCCC, 2016). Every business link/contract and projects will be initiated with the intention of leading to an emission reduction energy project or process that earns CERs that will further enhance the profitability of the projects and joint ventures that will result from the programme.

Among the key targets of the programme shall be efforts to upgrade energy companies to make them ready to provide energy products and services in line with the requirements of Kyoto Protocol, Paris Agreement, Global Climate Action, UNCTAD, SDGs as well as their regional and national policies, programmes and initiatives. It is set to start/reform, connect & grow green entrepreneurs by linking energy companies with established RE technology and those with market penetration with the aim of setting into motion the process of greening the energy sectors in these nations. One special example of this can be the outcome of algae fueled vehicle test of the New Millennium India Technology Leadership Project (AK Singh et al., 2018, NPI, undated). It can be organized through:

- Joint research & patent documentation
- Technology/market sharing
- Inter-country energy policy harmonisation

This will be done by familiarising these firms (particularly those from Africa), through the course of the programme, with all the components and requirements of the above UN & other

regional sustainable energy policies & programmes, and also equipping them with the needed competencies and skill sets to enable them operate within their markets with an improved understanding of the changing global energy scenes. This will invariably allow them contribute to achieving various global energy and environmental objectives through achieving their business goals. This process will transform some of the existing fossil energy firms into, depending on their operational level & capacity (or where necessary create), modern day green energy firms. This will be done by making them up to date with the most current/appropriate technologies, policies & investment options as well as sources with linkages to those sources for faster energy products & services development & delivery.

The specific objectives of the programme in this sector may include among other things:

- To speed up the process of Mitigation & Adaptation beyond INDCs.
- To promote energy tech firms with proven technology to global value chain.
- To create linkages between energy firms within developing countries.
- To increase access to clean energy especially in remote areas.
- To promote the culture of joint research between developing countries.

Apart from the environmental, health and social benefits, the following economic and business gains stand out:

- Gradual conversion of the existing investment in fossils into renewables and generating new investment where necessary.

- Skills acquisition & employment generation.
- Expansion in the existing and creation of new ventures where necessary.
- Promotion of energy firms with technology patents into global players.
- Linking energy firms in low-income countries to better renewable technologies.
- Enhancing quality of life of the poor with modern energy access to the population currently not reached.

### Policy Implications

Though a significant milestone has been recorded in Africa in this regard, with harmonisation of the renewable energy and energy efficiency policies at regional levels, such may not necessarily be the case across Africa and between Asia and Africa. However, with these continents participating in international renewable energy initiatives like the UN's Sustainable Energy for All (SE4All) and others (ISA), such harmonisation will not be difficult to achieve. Finance may, however, be another challenge in this regard; this also can be overcome by the collaboration in accessing global financing through joint project preparation, development as well as implementation. Energy technology challenges will also be overcome by indirectly reducing its cost of transfer through mass deployment across the under-served and excluded sections of continents. In a nutshell, a process of neutralising all major differences in new and renewable energy policies should be started at the inception of the programme. This is aimed at providing the much needed enabling play ground for private sector both in and outside the two regions to participate in the programme.

### Conclusion and the Way Forward

In the foregoing discussions, it has been established that, though the sustainable development, climate change and action stand to be seen as huge challenges, buried within them are equivalent or even bigger opportunities for developing countries to leap-frog in many areas including new and renewable energy. It is equally highlighted that SSTC for development is an important instrument for utilising these opportunities and AAGC stand a good chance of proving to a 'Better Deal' for African countries. This is particularly important if organized in the multi-sector-multi-layered programme that provides a kind of rare Growth and Development Super Market for the different countries in Africa. The gains are huge, but require careful preparation and policy harmonisation at the intercontinental level to smoothen the flow of triangular cooperation in all sectors.

The first step in the way forward can be to review areas of priority for both continents and identify areas where there are overlaps. Then one should immediately begin the process of policy harmonisation and reciprocal easing of apparently stiff but adjustable standards. This may be followed by setting a test-running period and the number of projects to be executed within the period. Another important recommendation often neglected has to do with extending capacity development assistance in the area of meeting requirements and standards that cannot be lowered or compromised and are key to successful completion of the cooperation processes. These will, to a large extent, be instrumental in pushing the AAGC agenda in the African end by not only sharing with African countries what they currently lack, but by showing them what they do presently have.



## Reference

- AfDB. (2017). African Development Bank achieves 100% investment in green energy Projects in 2017. December 28. <https://www.afdb.org/en/news-and-events/african-development-bank-achieves-100-investment-in-green-energy-projects-in-2017-17721/>.
- Singh, A.K., Singh, AK, Singh, S, Choudhary, P, & Singh, N.K. (2018). An Overview on: Next Generation Cost Effective Biofuel Production from Algae. *International Journal of Current Microbiology and Applied Sciences*, Special Issue-7, pp. 4139-4149, <https://www.ijcmas.com/special/7/Alok%20Kumar%20Singh,%20et%20al.pdf>
- Chaturvedi, S. (2016). *The Logic of Sharing: Indian Approach to South-South Cooperation*. Cambridge: Cambridge University Press.
- Cohen, S., Demeritt, D., Robinson, J., & Rothman, D. (1998). Climate change and sustainable development: towards dialogue. *Global Environmental Change*, Vol. 8, Issue. 4, pp. 341-371
- Enerdata. (2017). Global Energy Statistical Yearbook 2017. <https://yearbook.enerdata.net/total-energy/world-energy-production.html>
- Green Rhino Energy. (2013). The Big Picture: Uses and Sources of Renewable Energy. [http://www.greenrhinoenergy.com/renewable/context/uses\\_and\\_sources.php](http://www.greenrhinoenergy.com/renewable/context/uses_and_sources.php) Accessed on 17-12.2015.
- IEA. (2015). Energy and Climate Change. *World Energy Outlook Special Report 2015*, Paris.
- National Portal of India (NPI). <https://india.gov.in/new-millennium-indiantechology-leadership-initiative-csir>
- Research and Information System for Developing Countries (RIS), Economic Research Institute for ASEAN and East Asia (ERIA), & Institute for Development Economics - Japan External Trade Organisation (IDE-JETRO). (2017). *Asia Africa Growth Corridor Partnership for Sustainable and Innovative Development; A Vision Document*. RIS et. al. <http://www.eria.org/Asia-Africa-Growth-Corridor-Document.pdf>
- United Nations (UN) General Assembly. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*, 21 October 2015, A/RES/70/1, <http://www.refworld.org/docid/57b6e3e44.html>.
- UNFCCC. (2016). Clean Development Mechanism – CDM Projects Registry. *United Nations Framework on Climate Change*. <https://cdm.unfccc.int/Projects/projsearch.html>

## SOUTH AFRICA-SAUDI ARABIA: ENERGY SECTOR COOPERATION

Following the conclusion of the eighth South Africa-Saudi Arabia Joint Economic Commission (JEC), Saudi Arabia will be sending a technical team to assess the energy sector of South Africa to conduct a feasibility study. Saudi Arabia pledged to invest \$10 billion in South Africa's energy, defence and agricultural sectors during bilateral visits.

Saudi Arabia and South Africa are considering collaboration in development of the mining sector. An investment cooperation agreement was signed between Invest South Africa and Saudi Arabia General Investment Authority (SAGIA) and finalised a Memorandum of Understanding on renewables between the two countries. ACWA Power from Saudi Arabia already has invested in a solar plant in Bokpoort, Northern Cape, South Africa. Saudi Arabia is among South Africa's top five import partners, largely due to the amount of the oil imports.

Source: <https://www.devdiscourse.com/Article/other/206185-saudi-technical-team-to-assesssouth-africas-energy-sector>