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Greening Africa's industrialization

African economies remain constrained by systemic weaknesses, which limit their economic growth potential, undermine social progress and jeopardize the environment. Building on its previous issues, the Economic Report on Africa (ERA) 2016 presents “green” industrialization as a crucial element of successful structural transformation. The report underscores the need for country-specific national green agendas, aligned with broad development goals. The State ought to play a pivotal role in articulating and promoting a vision beyond 2030. The involvement of a wide range of stakeholders, effective public institutions and consistent implementation are the prerequisites for mobilizing private sector resources. Investments in innovation and regional collaboration, and the establishment of best practice-sharing platforms will lead to industrial greening. Institutional and human capacities should be strengthened to effectively carry out, monitor and adjust the green growth agenda to reflect emerging realities.

Green industry as a driver of inclusive socioeconomic development

In spite of global headwinds, African economies have been expanding fast on the back of strong domestic demand and commodity exports. This growth has been accompanied by steady but slow productivity gains as economic structures tend to be dominated by agriculture, resource exploitation and services. Despite improvements in social development indicators, gainful employment opportunities in the formal sector are still very few. A deterioration in fiscal and current accounts in a number of African economies, triggered by a recent commodity price slump has betrayed the risk of

reliance on raw material exports. African countries also face environmental degradation, while their development is hamstrung by inadequate energy supply and rising water scarcity.

Recently, a series of landmark global and regional frameworks have reinforced the call to promote sustainable development. The 2030 Agenda for Sustainable Development, the twenty-first session of the Conference of the Parties to the United Nations Convention on Climate Change, Agenda 2063 of the African Union and the Addis Ababa Action Agenda on financing for development all advocate broad-based approaches to development. Together, these development frameworks coalesce into an auspicious backdrop for coordinated action on environmentally sustainable and socially inclusive economic development.

Macroeconomic vulnerability, slow social progress and environmental degradation constitute a compelling case for sustainable and industry-driven structural transformation¹. Strategic planning and a vision reflecting the linkages among various policy and economic domains, harnessing and improving productive capacity (ECA, 2012), natural resource management (ECA, 2013), commodity-based industrialization (ECA, 2014) and trade policies (ECA, 2015) have already been recognized as salient components of a successful transformation process.

The Economic Report on Africa 2016 (ECA, 2016) identifies industrial greening as being complementary to productive, inclusive and environmentally sustainable African economies. Grounded in contemporary academic literature, the report draws on a scenario analysis that weighs the cost of

¹ For the purposes of this paper, structural transformation is defined as the reallocation of resources from low- to high-productive sectors, usually as a result of investment (ERA, 2016).

business as usual against that of industrial greening (the green agenda), using a set of case studies from across the continent, showcasing best practices and informing policy recommendations to guide Africa's green industrialization.

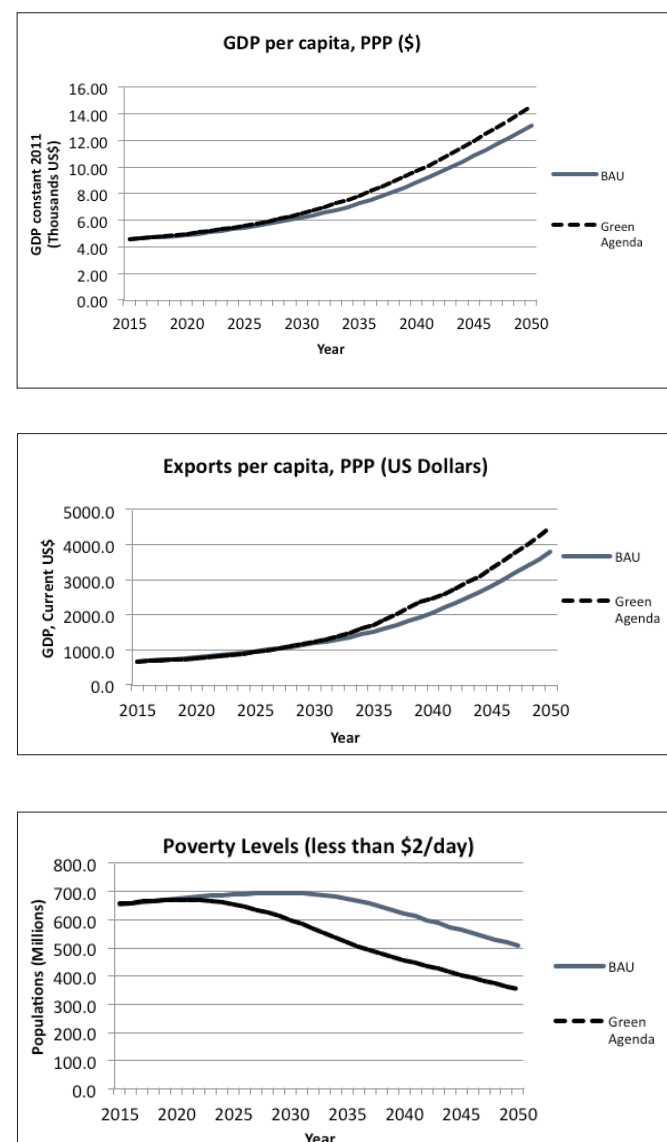
Industrial greening is a process underpinned by environmentally friendly methods of production and decreased resource intensity of production, i.e. "decoupling". A green, transformative industrial base could help diversify the economy, enhance international competitiveness, increase the value added of exports and provide extra job opportunities to help raise incomes and foster social inclusion (ILO, 2015; ECA, 2016). In addition to protecting health, green industries would safeguard natural assets, which are critical to human development, avoid stranded assets and render infrastructure more resilient to natural shocks. Capitalizing on rapid urbanization, the green sector can also jump-start transition towards a knowledge-based economy.

Improvements in technological know-how and infrastructure would put agri-led industrialization, water management and resource extraction on a more sustainable footing and align Africa's supply chains with the expectations of increasingly environmentally conscious global consumers. Harnessing the potential of renewable energy would boost energy security and improve the trade balance by cutting energy imports.

Status quo would fail to deliver on sustainable and inclusive growth

A scenario analysis developed for ERA 2016 points out the consequences of failing to challenge the prevailing model of economic growth by gauging the prospective effects of greening from 2015 through 2050. The business as usual scenario portrays the likely outcomes, should the current patterns of development and resource usage continue unabated in relation to their impact on GDP per capita, exports and poverty levels. The alternative green agenda scenario maps the expected impacts of a successful implementation of green policies across a range of sectors, such as water, storage, transport, energy and agriculture (figure 1).

Figure 1: Business as usual and green agenda – GDP per capita, exports per capita and poverty levels, Africa, 2015-2050



Source: ECA (2016).

In both scenarios, deeper industrialization gives rise to structural transformation and higher productivity, which in turn reinforce regional trade linkages and spur exports and economic growth. However, the green agenda scenario, which exploits the best available technologies and approaches, yields socioeconomic outcomes superior to that of the business as usual baseline. Although the business as usual pathway exhibits somewhat better macroeconomic results in the short-term the fortunes quickly reverse. Indeed, by 2050, the GDP per capita and exports per capita are estimated to be 11 per cent and 18.9 per cent higher respectively for the green agenda scenario compared to that of business as usual. Poverty rates under the green agenda would then be 30 per cent lower, owing to faster expansion of formal employment

opportunities, demographic transition, upskilling and protection of natural capital. Gains in democracy, economic freedom and gender empowerment also appear stronger under the green agenda scenario (ECA, 2016).

Progress made highlights the need for guidance and collaboration

Fourteen case studies presented in the ERA 2016 illustrate progress already made in Africa and give pointers on enabling the greening process. Plant-level changes, which promote greater resource efficiency, as well as system-wide reforms, call for dedicated leadership, appropriate policies and cooperation with different actors. The complexity of systemic greening and the diversity of sectors, countries and value chain elements it encompasses have widened the range and increased the number of stakeholders to be engaged. Evidence suggests that publicly funded programmes can further facilitate this process.

The report notes that strong incentives, investment and clear government vision and involvement are crucial for the greening process of the provision of public goods, notably water and energy infrastructure. Changes in the productive sector, albeit ultimately carried out firms, are often driven by the final markets, such as shifts in consumer demand, environmental activism and regulation.

Conclusion: Levers for Africa's structural transformation and green industrialization

Structural transformation, based on green industrialization, calls for specific and coherent policies entrenched in a coherent development strategy. Committed leadership ought to guide transformative action involving concerted efforts among ministries and government departments, economic sectors and actors, and along value chains. Every national vision should take into consideration the specific circumstances of countries, their delivery capacities and global positioning. The fundamental principles of inclusive development, such as empowerment of the poor, recognition of the limits of purely economic methodologies and market instruments, and promotion of formal job opportunities should also be observed.

The report offers various policy options to steer and stimulate the transformation process. Countries should start by reviewing their development plans and strategies to identify opportunities and entry points for green industrialization and develop an economy-wide green

growth vision. This national ambition should embody clear, consistent and coherent policies and interventions. Inclusion of a whole range of economic and societal actors, including women and marginalized groups, is critical to democratizing the ownership of the green agenda and providing space for the articulation of appropriate context-specific approaches. By forging partnerships and purposefully leveraging limited public resources, countries can mobilize investments from various sources, including the private sector. Investment in innovation, infrastructure, collaborative research, regional integration and trade can further catalyze the green industrialization process. Learning by doing, sharing best practices and drawing from international experience can help countries avail themselves of the most advanced, appropriate and cost-effective technologies and approaches. At the same time, governments should seek to harness the innovative potential of the informal sector and make use of small-scale initiatives. Also, institutional and human capacities also ought to be built and strengthened to carry out the green growth vision effectively. The national vision and its related policy instruments should be periodically monitored and appraised for ensure continuous improvement.

There are four main entry points for Africa's green industrialization: changing price incentives; regulating environmental standards; greening public infrastructure; and reducing resource intensity. The appropriate policy mix would depend on the specific situation, taking into account the relative advantages and disadvantages inherent in individual policy options. While price incentives can shape private investment decisions, their effectiveness hinges on an accurate pricing of costs, including capital and recurrent costs, as well as positive or negative externalities, which are often difficult to appraise. Government regulation can raise environmental standards but may struggle to effect change within the informal sector. Its impact would also be limited in the absence of reliable monitoring and enforcement systems. Deployment of enabling, future-proof and climate-resilient infrastructure would also help Africa take advantage of its low-carbon position and leapfrog into sustainable models of production.