Regional aspects of transitioning to clean energy growth model and building green industrial capacities

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Africa’s considerable progress and potential is obscured by a veil of prejudice, stereotype and generalization.
Africa is uniquely endowed with natural resources, a youth dividend, labour force explosion, market size and a digital culture.
AFRICA’S NATURAL RESOURCES:

2019: Africa produced nearly 1 billion tonnes of minerals worth $406bn.

Africa has 30 percent of the world’s mineral reserves, 12 percent of the world’s oil and 8 percent of the world’s natural gas reserves.

Plus all the minerals needed for the energy revolution.
TODAY AFRICA HAS JUST OVER 17% OF THE GLOBAL POPULATION; BY 2100 THIS IS PROJECTED TO RISE TO 40%. ASIA WILL SEE A SIGNIFICANT FALL FROM ALMOST 60% TODAY TO JUST OVER 40% IN 2100.
AFRICA WILL HAVE THE LARGEST LABOUR FORCE BY 2060
AFRICA WILL HAVE THE LARGEST SHARE OF YOUNG PEOPLE IN THE SECOND HALF OF THE 21ST CENTURY

70% under 30
SSA HAS THE LARGEST SHARE OF MOBILE MONEY TRANSACTIONS

Source: GSMA Report: The state of mobile money 2020
Fastest growing economies by the start of 2020

8.2% South Sudan
8.1% Rwanda
7.3% Côte d’Ivoire
7.2% Ethiopia
6.8% Senegal
6.7% Benin
6.2% Uganda
6.0% Kenya
6.0% Mozambique
6.0% Niger
6.0% Burkina Faso

— Source: Quartz Africa
FIGURE 1.1 Real GDP growth, 2019–23

Source: African Development Bank statistics and World Economic Outlook, April 2022.
Source: Infrastructure Consortium for Africa, 2018
Africa’s FDI relative to GDP compares favourably with other regions

FDI as a share of GDP in 2020* (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>FDI as a share of GDP</th>
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<tbody>
<tr>
<td>North America</td>
<td>0.3</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>0.5</td>
</tr>
<tr>
<td>Western Europe</td>
<td>0.7</td>
</tr>
<tr>
<td>Middle East</td>
<td>1.1</td>
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<tr>
<td>Latin America &amp; Caribbean</td>
<td>1.3</td>
</tr>
<tr>
<td>Africa</td>
<td>1.7</td>
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<tr>
<td>Emerging Europe</td>
<td>2.6</td>
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Source: FDI Markets (Financial Times), Oxford Economics, EY analysis.
GDP is in measured in nominal terms, FDI is the total capital invested in 'US$b'.
EY Africa Attractiveness Report. November 2021
THE NUMBER OF PRIVATE EQUITY INVESTORS IN AFRICA – 70% ARE AFRICA-BASED
Where Africa's Startup Activity Is Concentrated

Top countries for VC investment in Africa in 2020 (in million U.S. dollars)

- Morocco: $11.2m
- Egypt: $269.0m
- Rwanda: $11.6m
- Uganda: $11.3m
- Ghana: $111.0m
- Nigeria: $307.0m
- Kenya: $305.0m
- South Africa: $259.0m

Source: Partech Analysis via AfricArena
Lagos Is Africa's Startup Capital

Leading cities for startups in Africa in 2021 (by total score)*

- Lagos: 4.69
- Nairobi: 4.28
- Cape Town: 4.05
- Johannesburg: 3.86
- Cairo: 2.73
- Kigali: 1.21
- Accra: 1.11
- Tunis: 0.72

* Based on quantity (e.g. number of startups/accelerators), quality (e.g. number of unicorns, exits, pantheons) and business (national economic indicators) scores

Source: StartupBlink
Africa’s installed generation capacity is equal to France – if Africa energises using fossil fuels, none of the Paris targets will be achieved and runaway global warming will result. The world has an interest in support the energy transition in Africa. Its happening.
Climate shocks
Africa faces an outsized impact.
(index)

Sources: Notre Dame Global Adaptation Initiative, IMF, World Economic Outlook, and IMF staff calculations.
Notes: Index captures country-level exposure and sensitivity to climate shocks.
Africa’s renewable energy resources

- Africa has the best solar resources in the world
TARGET:
300 GW BY
2050
Drivers of democratization – from the AU’s African Peer Review Mechanism to Uprisings in 40 countries (hardly reported)

Third wave of uprisings: 1950s, 1990s and today – forces for democracy
1. Just low carbon – accelerate to RE asap to revive GDP growth, resulting in ‘trickle down’ wealth that will benefit the poor

2. Low carbon energisation plus social mitigation: accelerate RE, but with welfare interventions to mitigate negative impacts on coal & oil workers and their communities

3. Lower carbon plus social mitigation plus upstream industrialization: accelerated RE implementation should be used to instigate upstream industrialization wrt RE components, green hydrogen, electric vehicles, etc.

4. Just transition is only possible as part of a post-capitalist transition where the focus is public and social ownership of the means of energy production – ‘energy democracy’ movement
Greening industrialization means rethinking what industrial policy means......
- first generation IP: market failure, picking winners, state-driven, often resulting in rent seeking
- second generation: co-creation of value, setting the direction, facilitating joint strategies, political settlement making – not about picking winners or level playing fields to enable the market, but about tilting the playing field for directionality (i.e. green industrial transformation)
A TRIP TO 2030
Fostering Leadership and Transformative Change
for Economic Diversification in Central Africa

Commissioned by UNECA
But what about financing the transition?
Africa’s many financial challenges....

• 2% of $2.8 trillion of climate finance invested in RE for 2000-2020 went into Africa

• Cost of capital: 5-15%, compared to developed countries – 1-2%. 63% of all climate finance is debt, only 16% is concessional

• 37 of the 69 poorest countries are in debt distress – most in Africa

• 3-5% of African GDP is already spent on climate responses

• Capital flight: $2 trillion into tax havens, 1970-2014 – with interest = $2.4 trillion. 3 x African debt in 2018. Total ODA 1990-2015: $2.6 trn
Maybe it's time for a rethink….

- CPI: $277 bn pa to achieve NDCs. Current level: $30 bn per annum, with most of this generated within Africa. Gap: $247 bn pa.

- Columbia Center on Sustainable Development: to achieve Net Zero by 2050 - $136 billion pa. Investment in all sources in 2018 was “less than US$4 billion”. Funding gap: $132 bn.


- Funding gap: $99 bn pa to $247 bn pa

- Maybe it is time for a new financial paradigm: not Keynesian (whether fiscal or monetary focus), and not market-centric. Alternative: monetary architecture approach – the financial eco-system is a web of interlocking balance sheets (Steffen Murau) – I lead the National Planning Commission’s work on this
Can we dare to break free from old solutions to new problems?