The New Deal on Energy for Africa
- The Way Forward –

Batchi Baldeh
Director Power Systems - Power, Energy, Climate Change and Green Growth Complex

7 June 2017
The business as usual scenario is untenable and the New Deal on Energy aspires to achieve universal access by 2025.

**Africa's access to electricity**, % of population

- **Business as usual**: 45% access by 2025
- **SDG7 goal**: Universal access by 2030
- **New Deal on Energy**: Universal access by 2025
- **Africa Power Vision**: 80% access by 2040

SOURCE: WEO 2014; Brighter Africa report; The New Deal refers to defines electricity access as actual connections.
Universal access by 2025 means connecting over 200 million households and nearly doubling grid generation capacity.

<table>
<thead>
<tr>
<th>From current energy situation in Africa</th>
<th>To universal access in 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, $M$</td>
<td>1,174</td>
</tr>
<tr>
<td>GDP, $bn</td>
<td>2,175</td>
</tr>
<tr>
<td>Electrification rate, %</td>
<td>43%</td>
</tr>
<tr>
<td>Households connected, $M$</td>
<td>87</td>
</tr>
<tr>
<td>Grid</td>
<td>83</td>
</tr>
<tr>
<td>Off-grid</td>
<td>4</td>
</tr>
<tr>
<td>Grid capacity, $GW$</td>
<td>170</td>
</tr>
<tr>
<td>Consumption kWh/capita</td>
<td>613</td>
</tr>
<tr>
<td>Households using clean cooking, $M$</td>
<td>70</td>
</tr>
</tbody>
</table>

1 Assuming 100% urban electrification and 95% rural electrification
2 Out of 234m households in 2015 and 300m households in 2025

SOURCE: WEO 2014; Brighter Africa report; World Bank
Several approaches required to achieve universal access

Policies & approaches

• Strong and sustained political commitment
• Integrated Sector planning
• Support to utility transformation initiatives
• Measures to attract private sector investment
• Creating an enabling environment to spur off-grid growth
• Promoting access to clean cooking solutions

Investments

• Need to boost the overall investments in from USD 35 billion in 2015 to between USD 65 - USD 90 billion annually up to 2025
• Bank will focus on leveraging and catalysing investment
• SMART Subsidies
• Local content maximization
First year achievements (1)

- Establishment of the **Vice Presidency** and recruitment of the management team.
- **High level stakeholder consultations** and dialogue for political support of Heads of State and Government.
- 29 Energy Sector operations approved amounting to **US$ 1.7 billion and leveraging 1.4 billion in additional financing** to deliver:
  - 546 MW of additional installed capacity
  - 21,264 km of distribution lines
  - 641 km of transmission lines
  - 688,950 new households / businesses receiving electricity access
  - 700,000 tonnes CO₂ avoided
- **Policy-based operations** for energy sector reforms started in 5 countries.
First year achievements (2)

• **Examples of projects** approved in 2016:

  ✓ USD 134 million for Phase II of the transformative **Kenya Last Mile Connectivity Project**, which will entail providing 300,000 new connections.

  ✓ USD 150 million for **Côte d’Ivoire Power Transmission and Distribution Networks Reinforcement Project**, which will construct over 3,000km of transmission and distribution lines and connect 20,000 households.

  ✓ **Segou Solar IPP in Mali**, which entails the design, construction and operation of a 33 MW solar PV power plant.

  ✓ Approval of a USD 500 million **Debt Facility for Energy Inclusion** with an initial Bank contribution of USD 100 million and two windows focused on (i) off-grid and (ii) on-grid (mini-grids, small scale independent power producers)

• Increased **project preparation support** through the Sustainable Energy Fund for Africa (SEFA) and launch of the Green Mini-Grid Market Development Program.

• **Receipt of several key mandates**, including to assist Mozambique, Tanzania and Zambia in their utility turnaround, and to act as **lead arranger** for key regional power projects, such as the 2400MW Batoka Gorge Hydropower project.
Focus areas of the New Deal going forward (1)

- Increased **private sector focus** for the Bank’s energy investments with a view to increase the leverage of available resources;

- Supporting **policy- and institutional-level reforms** in countries to improve the environment to increase private sector participation and strengthen utilities (e.g. IPP procurement programme; utility turnaround; PPPs);

- Development of **access-focused programs** that would address power, energy efficiency and clean cooking & lighting needs;

- Development of **regional projects** including Inga III and interconnections e.g. Nigeria-Niger-Burkina-Benin (“Northcore”), Guinea-Mali, and Cameroon-Chad;

- Financing of specific project opportunities, e.g. gas-to-power IPPs;

- **Strengthening existing partnerships** and establishment of new strategic partnerships capitalizing on Bank roles as host of the SEforALL Africa Hub and the AREI Independent Delivery Unit and including increased focus on **project preparation** through strengthened collaboration with project preparation facilities and project development companies such as Africa50
Focus areas of the New Deal going forward (2)

- Innovative financing instruments and approaches including:
  - Establishment of a **Co-Guarantee Platform for Renewable Energy Projects in Africa** to achieve economies of scale and efficiency by aggregating the guarantees from multiple institutions into a single facility.
  - Bringing in of capital from investors who are looking for stable returns from de-risked assets, i.e. energy projects that have been completed and are operating.

- Implementing the “**Off-Grid Revolution**” in close collaboration with partners, to focus on: (i) removing barriers; (ii) financing; (iii) managing risks.

- Establishment of **dedicated funds and lines of credit** in support of energy efficiency and small-scale renewable energy projects (including local currency lines).

- **Capacity building** and **local content maximization** (e.g. banks; PIUs; training institutions; utilities; regulators; developers; manufacturers; service providers)
Focus on energy access: Facility for Energy Inclusion

The “Facility for Energy Inclusion” is an umbrella debt programme with two financing windows targeting distinct segments of the small-scale energy market.

**Facility for Energy Inclusion (FEI)**

- **Target**: raise USD 500m in debt for small-scale renewables and energy access projects
- **Bank contribution**: USD 100m (equity/debt) already approved by the Board

---

### Off-Grid Window (~20%)

- PAYGO and other energy access product distribution companies;
- MFIs partnering with distributors
- Other intermediaries structuring securitized receivables transactions as SPVs

**Target size** of USD 100m (USD 60m first close)

**Bank participation**: USD 10m equity and USD 20m debt

+ **Technical Assistance Facility (~$2m)**
  - Capacity-building with borrowers / local Banks
  - Independent advisory costs (legal / accounting)

**Fund Manager**: (recruited)

### On-Grid Window (~80%)

- Small-scale IPPs, mini-grids and captive power projects
- Total project size of less than $30m
- RE technologies, but primarily solar PV, small hydro, biomass/biogas and wind

**Target size** of USD 400m (USD 200m first close)

**Bank participation**: USD 40m equity and USD 30m debt

+ **Technical Assistance Facility (~$10m)**
  - Transaction structuring support pre-financial close
  - Focusing primarily on independent advisory costs

**Fund Manager**: TBD
(Six firms shortlisted and RFP to be launched)
New Focus Areas: Africa Green Financing Facility (AGFF)

Objective
- Promote small/mid-scale energy efficiency and renewable energy investments in selected pilot countries, including Nigeria, Cameroon, South Africa, Kenya and Egypt

Components
- Lines of credit to banks
- Technical Assistance to banks (capacity building & support in project appraisal), project developers and local service providers

AfDB Role
- Managing/monitoring AGFF activities, processing the transactions, managing technical assistance (project developers, local banks)

Next steps
- Resource mobilisation for the TA component (ongoing)
- Recruitment of a consulting firm to provide the TA (2017)
- Discussion/Negotiation with local FIs (2017)
- Launch of the facility (early 2018)
New Focus Areas: Scaling up clean cooking

Guiding approach

• Policy and regulatory reforms and harmonization

• Technical assistance and financial solutions for industrial players in the cook stoves and modern fuel value chains (LPG and biofuel)

• Awareness raising and marketing for end-user consumers, and support to innovative distribution mechanisms

Next steps

• Develop the Clean Cooking Action Plan (Q4 2017)

• LPG sector development and investment financing (Q4 2017)

• TA and debt/grants to clean cooking solutions enterprises (Q4 2017)

• Develop financial solutions for suppliers and consumers, coupled with mobile payment solutions and innovative distribution models (e.g. Indian model)
Partnerships are at the heart of the New Deal

**Ecosystem of Partners**

- Civil society
- Energy initiatives, project preparation facilities, trust funds
- Other MDBs/DFIs/int. orgs.
- Project developers & corporates
- Financial institutions
- Pension funds, SWF, insurance companies
- African institutions
- Association/Foundation/Research institutions
- Regulators & Utilities
- New Deal on Energy
- Govts

**The Bank will work with the ecosystem of partners**

_inter alia_

- Work with **Governments** to support integrated sector planning and to improve enabling environment for private sector investments;
- Work with other **DFIs** and donors to increase coordination and impact around shared priorities;
- Work with the **private sector** to increase investments in the energy sector including mobilization of institutional investors and pension funds;
- Work with **civil society** to reach the « bottom of the pyramid ».
Looking ahead

- AfDB has pledged to commit **US$ 12 billion** by 2020 of its own resources to leverage another **US$ 45 – 50 billion**;

- Over 50 energy sector projects (public and private) in current 2017 pipeline amounting to **US$ 5 billion** in potential Bank financing.

### Envisaged outputs in 2017

- **2 GW of power capacity**
- **2,500 km of transmission lines including regional interconnections**
- **1,250 km of distribution lines**
- **500,000 solar home systems**
Internal Organization Structure

VP Power, Energy, Climate & Green Growth

Amadou Hott

Henry Paul Batchi Baldeh
Power Systems Development
National & Regional Power Systems
Power Utilities

Ousseynou Nakoulima
Renewable Energy & Energy Efficiency
Renewable Energy
Energy Efficiency & Clean Cooking

Wale Shonibare
Energy Financial Solutions, Policy & Regulation
Energy Policy, Regulation & Statistics
Financial solutions

Astrid Manroth
Energy Partnerships
Public Energy Initiatives & Partnerships
Strategic Private Sector Relationships

Anthony Nyong
Climate Change & Green Growth
Climate & Environment Finance
Climate & Green Growth
Let us work together to light up and power Africa

Thank you!