

# The New Deal on Energy for Africa

A transformative partnership to light up and power Africa by 2025



## **The African Development Bank**

As the premier development finance institution on the continent, the AfDB's mission is to help reduce poverty, improve the living conditions of Africans, and mobilize resources for the continent's economic and social development. The Bank Group has 80 member countries, comprising 54 regional member countries and 26 non-regional member countries.

The Bank has an active energy portfolio of over USD 11 billion, with lending to energy sector projects (public and private) exceeding an annual USD 1 billion in recent years. Over three-quarters of the energy portfolio supports public sector projects. The portfolio is composed largely of generation projects, as well as distribution projects, and support for regional energy interconnections.

The Bank hosts the Sustainable Energy for All (SE4All) Africa Hub in partnership with the African Union Commission, the NEPAD Agency, and UNDP. It also hosts the Secretariat to the African Energy Leaders Group (AELG). The Bank is one of the architects of the Programme for Infrastructure Development in Africa (PIDA), and a key financier for the PIDA Priority Action Plan. The Bank is actively engaged in the new Africa Renewable Energy Initiative, and is expected to play a key implementation role. The Bank cooperates with key stakeholders in the Energy sector, such as the World Bank Group, European Commission, bilateral donors including the US (especially through the Power Africa Initiative), the UK, France, Germany, IRENA, and others. The Bank is also working with USAID and SIDA on the provision of co-guarantees.

## What is the New Deal on Energy for Africa?

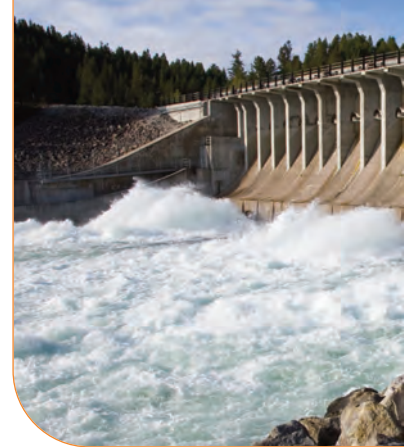
The New Deal on Energy for Africa is a partnership-driven effort with the aspirational goal of achieving universal access to energy in Africa by 2025. To drive and achieve this goal, the African Development Bank is working with governments, the private sector, and bilateral and multilateral energy sector initiatives to develop a Transformative Partnership on Energy for Africa – a platform for public-private partnerships for innovative financing in Africa's energy sector.

The New Deal on Energy for Africa helps to unify all of the other efforts that are currently driving towards achieving the goals of universal access in Africa. It focuses on five key principles: raising aspirations to solve Africa's energy challenges; establishing a Transformative Partnership on Energy for Africa; mobilizing domestic and international capital for innovative financing in Africa's energy sector; supporting African governments in strengthening energy policy, regulation and sector governance; and increasing the African Development Bank's investments in energy and climate financing.

## What does the New Deal aim to achieve ?

To reach the goal, Africa must achieve four targets:

- increase on-grid generation to add 160 GW of new capacity by 2025
- increase on-grid transmission and grid connections that will create 130 million new connections by 2025, 160 per cent more than today
- increase off-grid generation to add 75 million connections by 2025, 20 times what we have today
- increase access to clean cooking energy for around 130 million households.



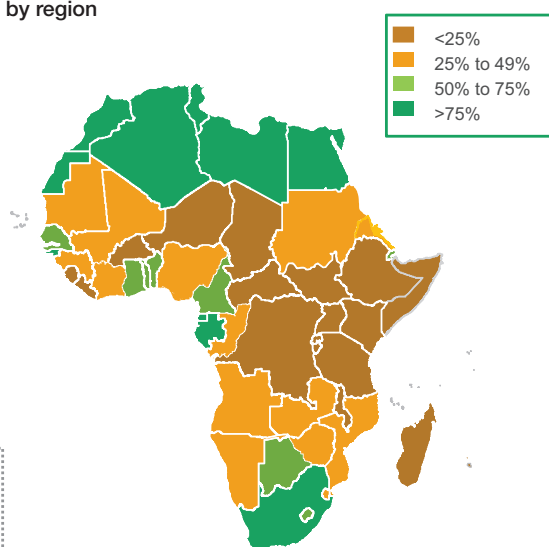
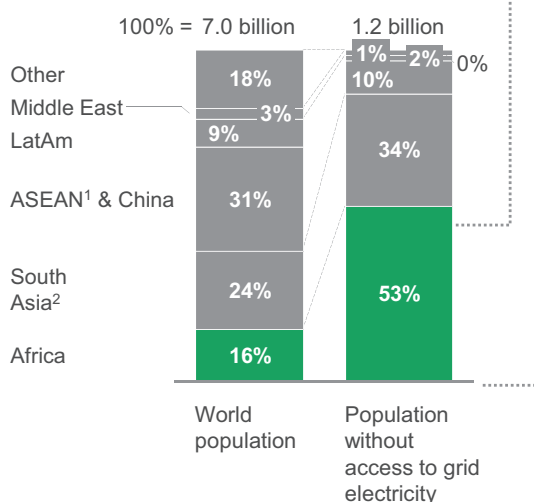
## Why the New Deal?

Over 645 million Africans have no access to electricity. Power consumption per capita in Sub-Saharan Africa is the lowest of all continents, currently estimated at 181 kWh per annum, compared to 6,500 kWh in Europe and 13,000 kWh in the United States.

### Most of the people with no access to electricity live in Africa

#### Distribution of population without access to electricity by region

% of total population, 2013



1 Association of Southeast Asian Nations.

2 Bangladesh, DPR Korea, India, Mongolia, Nepal, Pakistan, Sri Lanka, Other Asia.

SOURCE: World Energy Outlook, 2015; Electricity Access Database, © OECD/IEA 2015

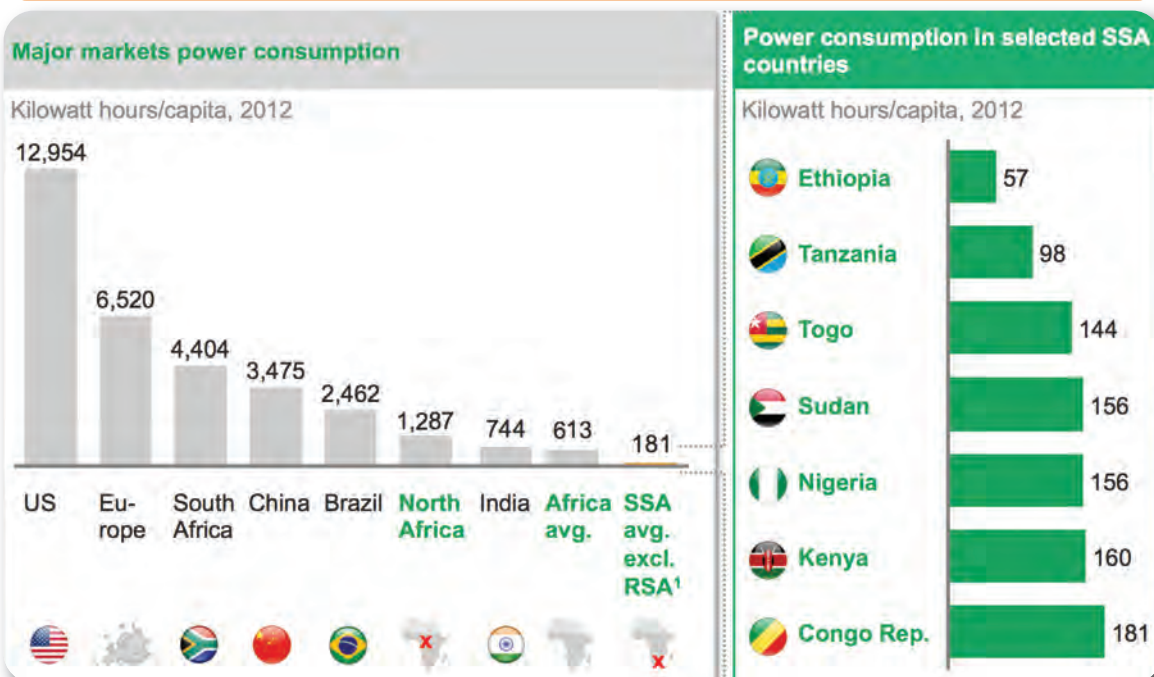




Energy-sector bottlenecks and power shortages are estimated to cost Africa some 2 - 4 per cent of GDP annually, undermining economic growth, employment creation and

investment. Companies in Tanzania and Ghana are losing 15 per cent of the value of sales as a result of power outages. South Africa's economic growth has been hobbled in recent years by severe electricity generation capacity constraints and frequent 'load-shedding'.

### Power consumption per capita in Africa remains very low, especially in sub-Saharan Africa



<sup>1</sup> Sub-Saharan Africa average, excluding South Africa

SOURCE: World Development Indicators 2015; World Bank Group; Non-OECD Energy Statistics; © OECD/IEA 2015

An estimated 600,000 Africans (mostly women and children) die annually due to indoor air pollution associated with the use of fuel wood for cooking. Children under-perform for lack of electricity, since over 90% of Africa's primary schools lack electricity. Lives are at risk in African hospitals, as life-saving equipment and services lie unused because of lack of electricity.

Africa's poorest people are paying among the world's highest prices for energy. A woman living in a village in northern Nigeria spends around 60 to 80 times per unit more for her energy than a resident of New York City or London (Africa Progress Panel).

While a number of programmes and projects exist (and more are emerging), the lack of sufficient innovative

and appropriate financing, of bankable projects, of appropriate policy and regulatory environments, of pricing incentives and of coordination severely limits the scale and speed at which energy is provided to the continent.

At the same time, Africa is rich in energy resources. The continent has well over 10 TW of solar potential, 350 GW of hydroelectric potential, 110 GW of wind potential and an additional 15 GW of geothermal potential. This does not even include coal and gas, which can still provide some of its cheapest electricity. Africa cannot power its homes and businesses unless it unlocks this huge renewable energy potential, and combines it with conventional energy to light up and power the continent. Energy is the engine that powers economies.



## What will underpin the New Deal?

The New Deal is built on five inter-related and mutually reinforcing principles.

### 1 Raising aspirations to solve Africa's energy challenges

The New Deal calls on partners to raise aspirations and mobilize political will and financial support to solve Africa's energy challenges. This is a pre-requisite for achieving the UN's Sustainable Development Goals (SDGs) agreed in New York in September 2015, and for implementing the global climate change deal reached at the UN summit ('COP 21') in Paris in December 2015.

### 2 Establishing a Transformative Partnership on Energy for Africa

The New Deal will be implemented through a partnership designed to provide a platform for coordinated action amongst partners (private and public) and for innovative financing. The Partnership will unlock Africa's energy potential, and eventually foster a transition to low carbon energy futures. It will help reduce duplication and pool resources to achieve economies of scale in Africa's energy investments.

**Universal access to energy by 2025 means connecting ~200 Mn households, and nearly doubling grid generation capacity and tripling the use of clean cooking solutions**

		From current energy situation in Africa		To Universal Access <sup>1</sup> in 2025	
Power	Population, M	1 174	x1.3	1 499	
	GDP, \$ bn	2 175	x1.7	3 742	
	Electrification rate, %	43%	x2.3	97%	
	Households <sup>2</sup> connected, M	87	x3.6	292	
	Grid	83	x2.6	213	+130 M new on-grid connections
	Off-grid	4	x20	79	+75 M new off-grid connections
	Grid capacity, GW	170	x1.9	332	+160 GW of new capacity
	Consumption kWh/capita	613	x1.5	941	
Clean cooking	Penetration rate, %	31%	x3.3	100%	
	Households using clean cooking, M	70	x3.1	220	+150 M of clean cooking solutions

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

### 3 Mobilizing domestic and international capital for innovative financing in Africa's Energy sector

To achieve universal access by 2025, innovative mechanisms are required to mobilize an additional USD 40-70 billion annually in domestic and international capital. This is a significant increase on the USD 22.5 billion invested in the sector in 2014. Achieving this scale of energy financing requires that collective action be taken by all stakeholders – public and private – to create enabling conditions for financial flows, to develop bankable projects, to reform utilities, and to enhance African countries' absorptive capacities.

### 4 Supporting African countries in strengthening energy policy, regulation and sector governance

The New Deal will build on and further scale up the Bank's investments in the "soft" infrastructure of national governments and institutions, to enhance energy policies, regulations, incentive systems, sector reforms, corporate governance, and transparency and accountability in the energy sector.

### 5 Increasing the African Development Bank's investments in energy and climate financing

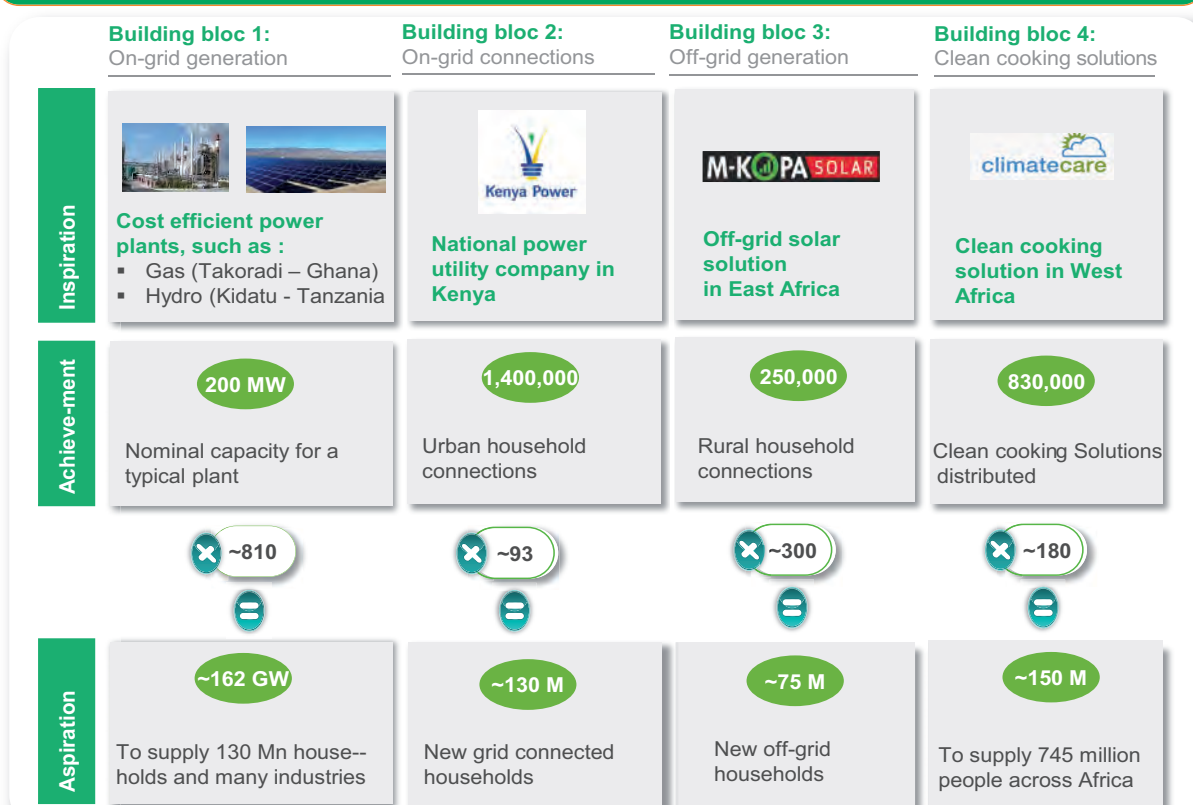
Over the past five years, the African Development Bank has invested some USD 6 billion in the energy sector. Under the New Deal, the Bank will ramp up its investments to provide finance and guarantees, co-financing and syndication.

Between 2016 and 2020, the Bank will invest about USD 12 billion and leverage about USD 50 billion in public and private financing for investments in the energy sector. In addition, it will triple its climate finance to about USD 5 billion per annum, and leverage about USD 20 billion in private and public sector investments in climate mitigation and adaptation by 2020.

## How will the New Deal work?

Building on the five principles, the development of the New Deal has focused on identifying and overcoming the obstacles to universal access.

**4 Key Aspirations: Universal Access by 2025 implies the equivalent of ~800 power plants, ~90 "Kenya Power", ~300x Africa's biggest PayGo company and ~180 "ClimateCare" projects**



SOURCE: M-KOPA Solar, Press





To make major strides towards delivering these programmes, the New Deal addresses seven strategic themes, each of which is supported by a series of flagship programmes that the Bank will launch.

**1 Setting up the right enabling policy environment**

Advising and supporting governments on setting up efficient sector regulation and governance, focusing on cost reflective tariffs, building credible counterparties, and ensuring appropriate risk allocation.

**2 Enabling utility companies for success**

Offering technical assistance to utilities for restructuring (privatisation and concessions) and operations improvement (loss reduction and revenue recovery).

**3 Dramatically increasing the number of bankable energy projects**

Aggregating project development capital, and channelling it through highly capable private sector organisations which are involved in world-class project development, including private sector financing and legal institutions.

**4 Increasing the funding pool to deliver new projects**

Scaling up the pool of finance that will be used to create greater leverage on the financial markets, by buying down certain categories of risk for the private sector.

**5 Funding 'bottom of the pyramid' energy access programmes**

Increasing the availability of financing to promote the development of both on- and off-grid project organisations.

**6 Accelerating major regional projects and driving integration**

Identifying major regional projects, particularly those with regional interconnections included in their mandate, and systematically driving them to completion.

**7 Rolling out waves of country-wide energy 'turnarounds'**

A central theme tying all elements together is the systematic implementation of full-country turnaround

programmes. The Bank will coordinate major development institutions to launch end-to-end energy system turnarounds, in close collaboration with the Head of State, Minister of Energy and Minister of Finance in each country. These

programmes will include energy system planning, restructuring of the national regulatory environments, matching donors to targeted interventions, and bringing in the private sector to drive development of capacity and connections.

### **Some of the existing energy partnerships**

#### ***Africa Renewable Energy Initiative (AREI)***

Launched at COP21 in 2015 with a commitment of at least USD 10 billion for Renewable Energy investments in Africa by the G7 countries between 2015 and 2020. It will deliver at least 10 GW of new and additional renewable energy generation capacity by 2020, and aims to mobilise the African potential to generate at least 300 GW by 2030.

#### ***Power Africa***

A transaction and partnership-driven model launched by US President Barack Obama in 2013, Power Africa's goals are to add 60 million new electricity connections and generate 30 GW of new generating capacity by 2030.

#### ***Sustainable Energy for All (SE4All)***

Launched by UN Secretary-General Ban Ki-moon in 2011, the SE4All programme aims to achieve three main goals by 2030: ensuring universal access to modern energy services; doubling the global rate of improvement in energy efficiency; and doubling the share of renewable energy in the global energy mix.

#### ***Electrification Financing Initiative (ElectriFI)***

The Electrification Financing Initiative (ElectriFI) is an EU initiative, launched during COP21, to support electrification investments that will lead to new and improved connections, with strong features for scalability. ElectriFI aims to support different business models, utilities and mini-grids.

#### ***African Energy Leader's Group (AELG)***

Launched in January 2015, it brings together political and economic leaders at the highest level to drive the reforms and investment needed to end energy poverty and sustainably fuel the continent's economic future.





## **What makes the New Deal different?**

### **The New Deal will coordinate action across all existing programmes focused on the African energy sector**

There are a number of different African energy programmes currently underway. The New Deal is a Coordinated Action Programme (CAP).

It is designed to work with and build on the existing and emerging initiatives, to achieve impact at scale and at speed.

The New Deal will act as a central coordination point for all of the initiatives that are currently underway, but which are not always fully aligned with each other.

### **The New Deal is resource-neutral and technology-neutral**

The New Deal is energy resource neutral and technology neutral. It will work with countries to develop their comparative energy resource advantages without bias, in renewables and non-renewables alike. The transformation of existing energy systems is critical, but it requires pragmatic choices that harness the comparative resource advantages of countries to meet economic development needs, while at the same time reducing the rate of growth in greenhouse gas emissions. The New Deal aims to achieve a relative decoupling of energy access from carbon dioxide emissions through massive investments in renewable energy, cleaner technologies in the non-renewables sectors, and energy efficiency measures.

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May 2016

# The High 5 for transforming Africa Le Top 5 pour transformer l'Afrique



**The High 5 agenda** – five priority actions for the African Development Bank and for Africa – is the AfDB's channel for focusing and scaling up its 2013-2022 Ten Year Strategy, to bring about the social and economic transformation of Africa.

The High 5s are designed to deliver the twin objectives of the Ten Year Strategy: inclusive growth that is shared by all; and the gradual transition to green growth.

The High 5s are: Light up and power Africa; Feed Africa; Industrialise Africa; Integrate Africa; Improve the quality of life for the people of Africa.

**Le Top 5**, c'est-à-dire les cinq actions prioritaires pour la Banque africaine de développement et pour l'Afrique, constituent le moyen utilisé par la BAD pour concentrer et étendre la mise en œuvre de sa Stratégie décennale pour la période 2013-2022 visant à transformer l'Afrique sur le plan social et économique.

Le Top 5 a pour but de réaliser le double objectif de la stratégie décennale : une croissance inclusive partagée par tous ; et la transition progressive vers une croissance verte.

Le Top 5 est constitué des priorités suivantes : Éclairer l'Afrique et l'alimenter en énergie ; Nourrir l'Afrique ; Industrialiser l'Afrique ; Intégrer l'Afrique ; Améliorer la qualité de vie des Africains.