

## **GNF Conference, Energy and Water Solutions in Sub Saharan Africa**

*Modern Development Cooperation Between Europe and Africa*

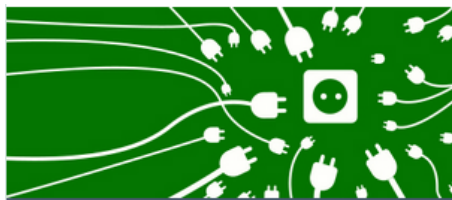
**Murefu Barasa, EED Advisory Limited**

**Radolfzell, Germany: October 16-17 2014**

# Introduction to EED Advisory



- EED is an advisory firm with services offerings in the **energy and environment** space delivered through four practice lines:
- We aspire to be a premier **solutions center**



## SUSTAINABLE ENERGY

An estimated one-half of the world's population still lacks clean cooking and heating options and almost one-quarter do not have access to grid based electricity. At EED, sustainable energy goes beyond renewable energy solutions

[Learn more >](#)



## CLIMATE CHANGE

The concentration of carbon dioxide in the atmosphere exceeded the 400 parts per million threshold in 2013. Without drastic and urgent action it seems likely that the earth will experience a temperature rise of up to 50C by 2100

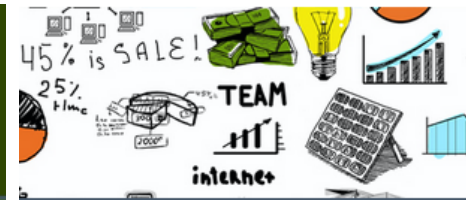
[Learn more >](#)



## NATURAL RESOURCE MANAGEMENT

Competition for natural resources is a common trigger for communal, sectoral, national and international conflicts. At EED, we take a systems approach in evaluating

[Learn more >](#)



## COMMERCIAL PROJECT DEVELOPMENT

At EED, we believe in the power of demonstration. We are constantly designing, testing and refining innovative business models that will deliver sustainable energy and other

[Learn more >](#)

1

2

3

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# Introduction to EED Advisory: Clients



**THE  
WORLD  
BANK**

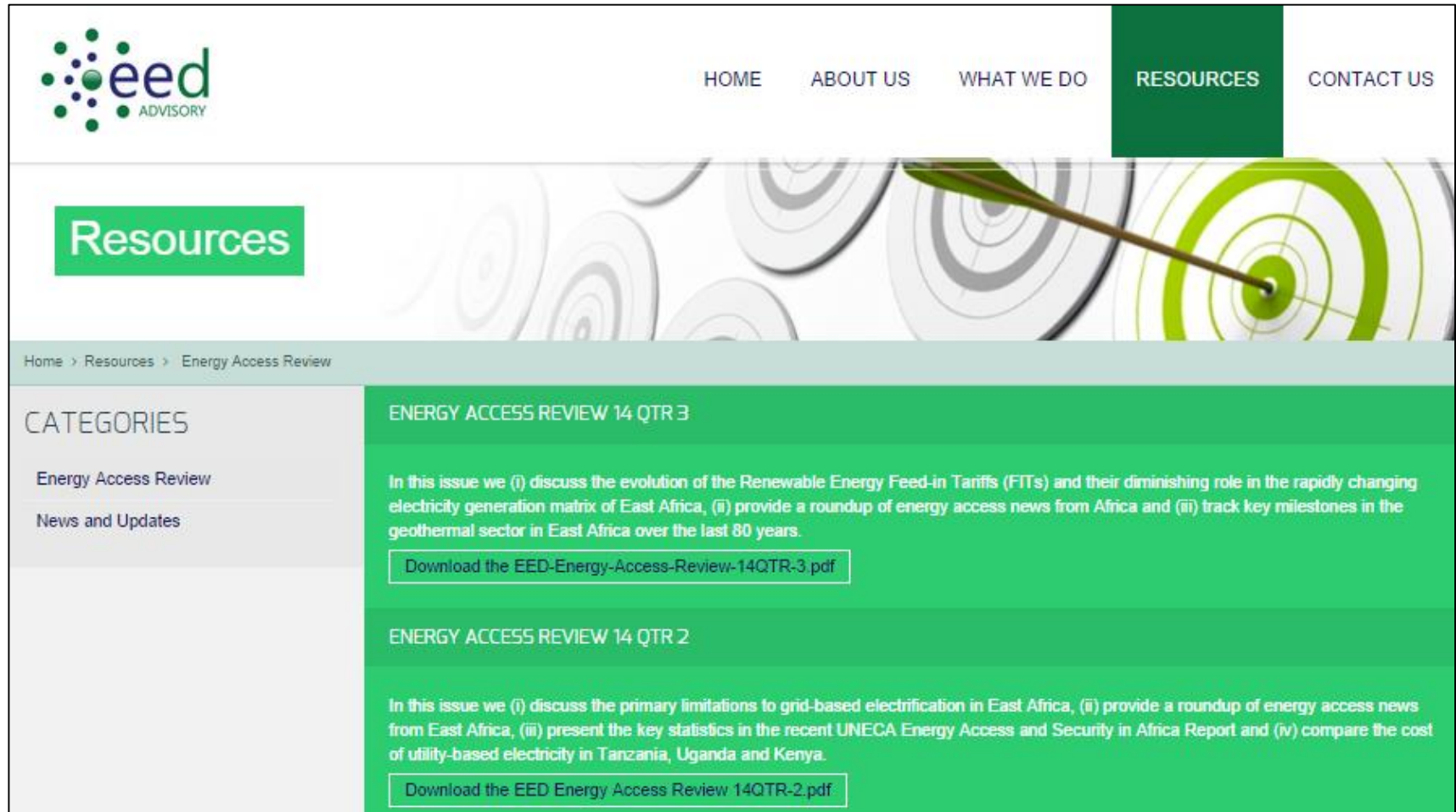
**SNV**



**IFC**  
**International  
Finance  
Corporation**  
World Bank Group



# Introduction to EED Advisory: EAR



The screenshot shows the EED Advisory website's "Resources" page. The header includes the EED Advisory logo and navigation links: HOME, ABOUT US, WHAT WE DO, RESOURCES (highlighted in a green box), and CONTACT US. Below the header is a large banner with a green "Resources" button and a background image of concentric circles and an arrow. The main content area has a breadcrumb trail: Home > Resources > Energy Access Review. On the left, a "CATEGORIES" sidebar lists "Energy Access Review" and "News and Updates". The main content area displays two sections for "ENERGY ACCESS REVIEW 14 QTR 3" and "ENERGY ACCESS REVIEW 14 QTR 2". Each section contains a brief description of the report's content and a "Download" button with the PDF filename.

Home > Resources > Energy Access Review

**CATEGORIES**

- Energy Access Review
- News and Updates

**ENERGY ACCESS REVIEW 14 QTR 3**

In this issue we (i) discuss the evolution of the Renewable Energy Feed-in Tariffs (FITs) and their diminishing role in the rapidly changing electricity generation matrix of East Africa, (ii) provide a roundup of energy access news from Africa and (iii) track key milestones in the geothermal sector in East Africa over the last 80 years.

[Download the EED-Energy-Access-Review-14QTR-3.pdf](#)

**ENERGY ACCESS REVIEW 14 QTR 2**

In this issue we (i) discuss the primary limitations to grid-based electrification in East Africa, (ii) provide a roundup of energy access news from East Africa, (iii) present the key statistics in the recent UNECA Energy Access and Security in Africa Report and (iv) compare the cost of utility-based electricity in Tanzania, Uganda and Kenya.

[Download the EED Energy Access Review 14QTR-2.pdf](#)

<http://www.eedadvisory.com/resources/energy-access-review/>



# The Tale of Two Professors...

**"...the West's efforts to aid the rest have done so much ill and so little good."**

**"... the rich need to invest enough so that these countries can get their foot on the economic ladder."**



Prof. William Easterly,  
New York University,  
**"Whiteman's burden"**

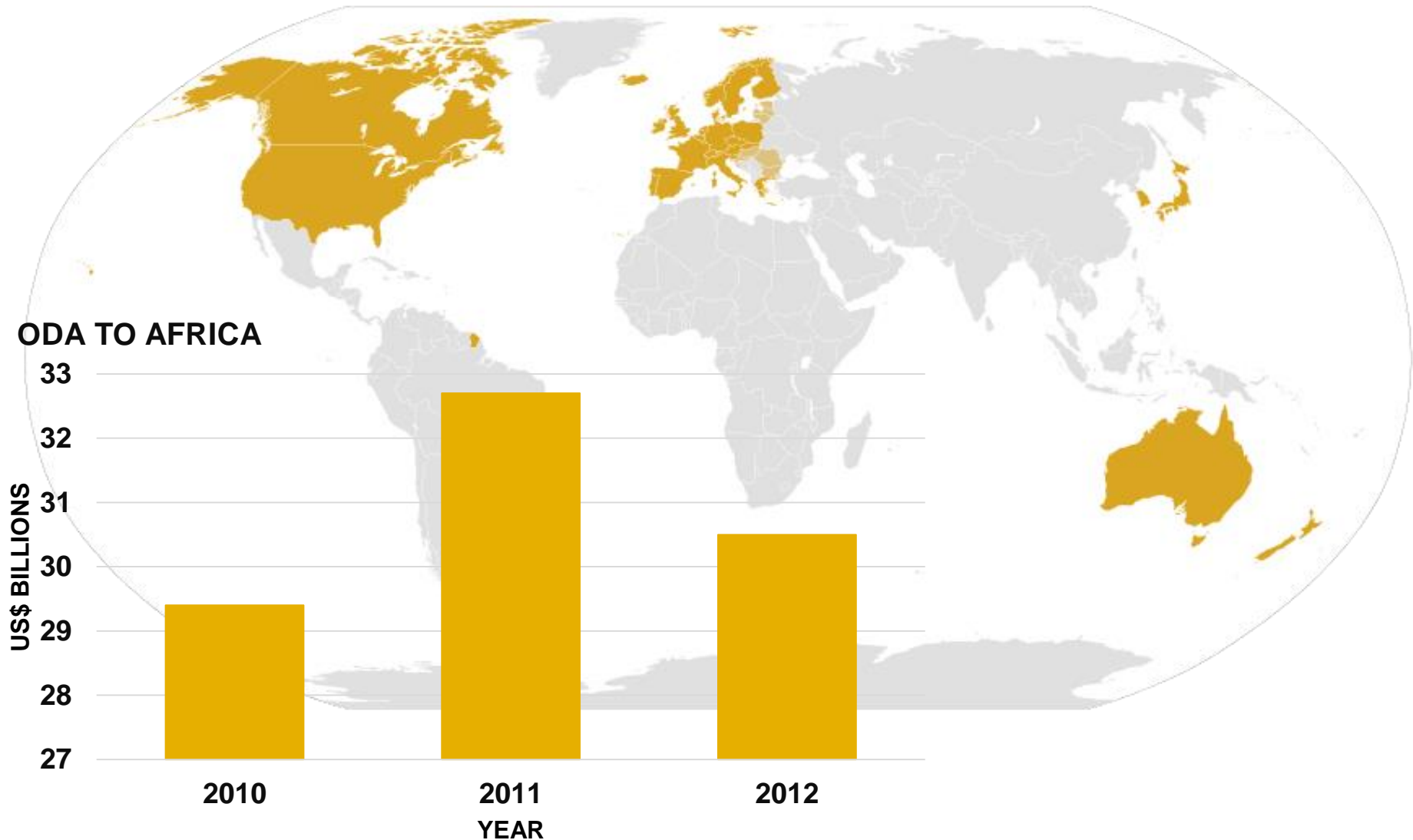
Prof. Jeffrey Sachs,  
Columbia University,  
**"End of Poverty"**



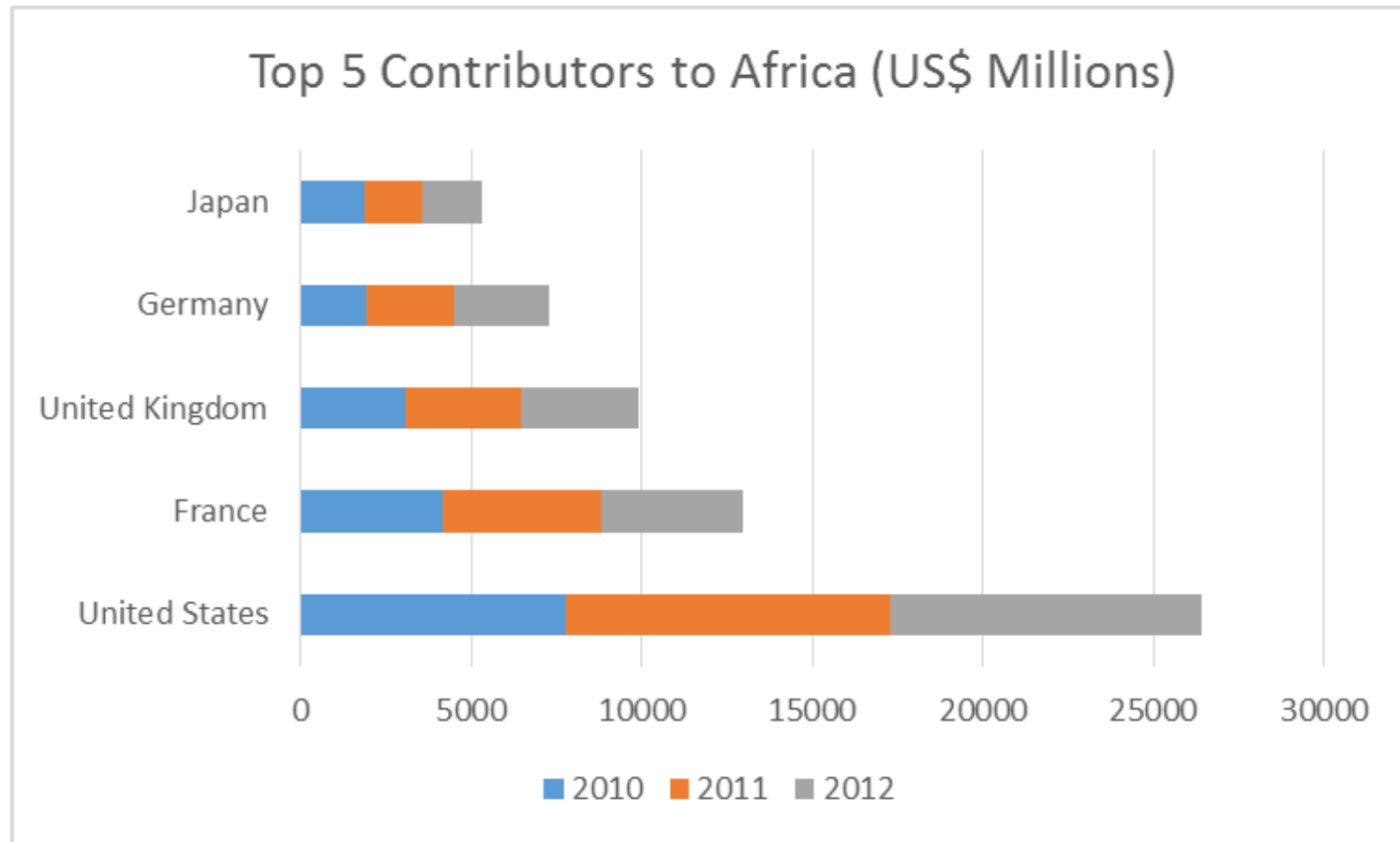
Picture credits: <http://www.aspenideas.org> and <http://www.guardian.com/>

# Current Cooperation in Numbers

Source: OECD (2014) Development Statistics at a Glance: Africa

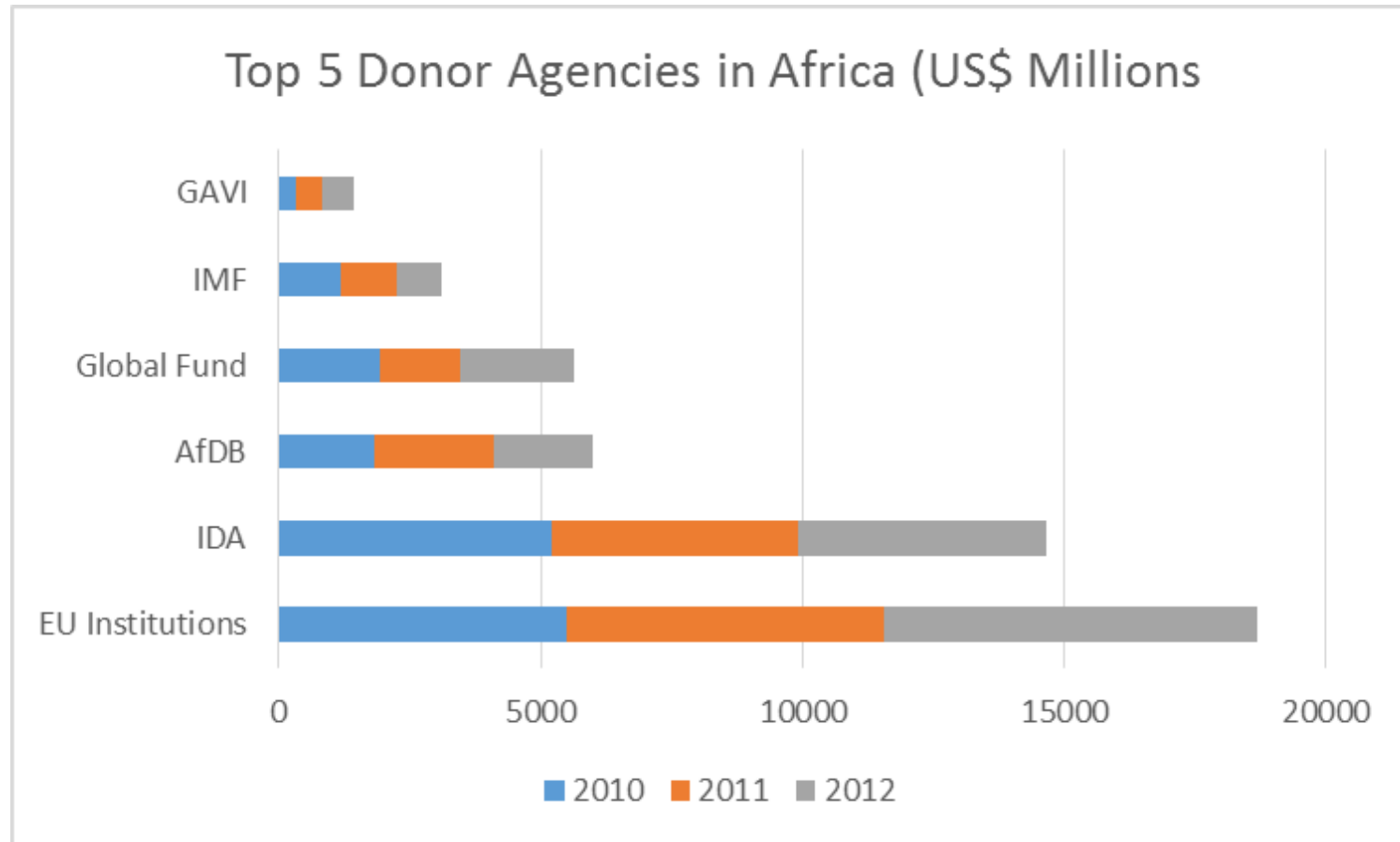


# Current Cooperation in Numbers



Source: OECD (2014) Development Statistics at a Glance: Africa

# Current Cooperation in Numbers

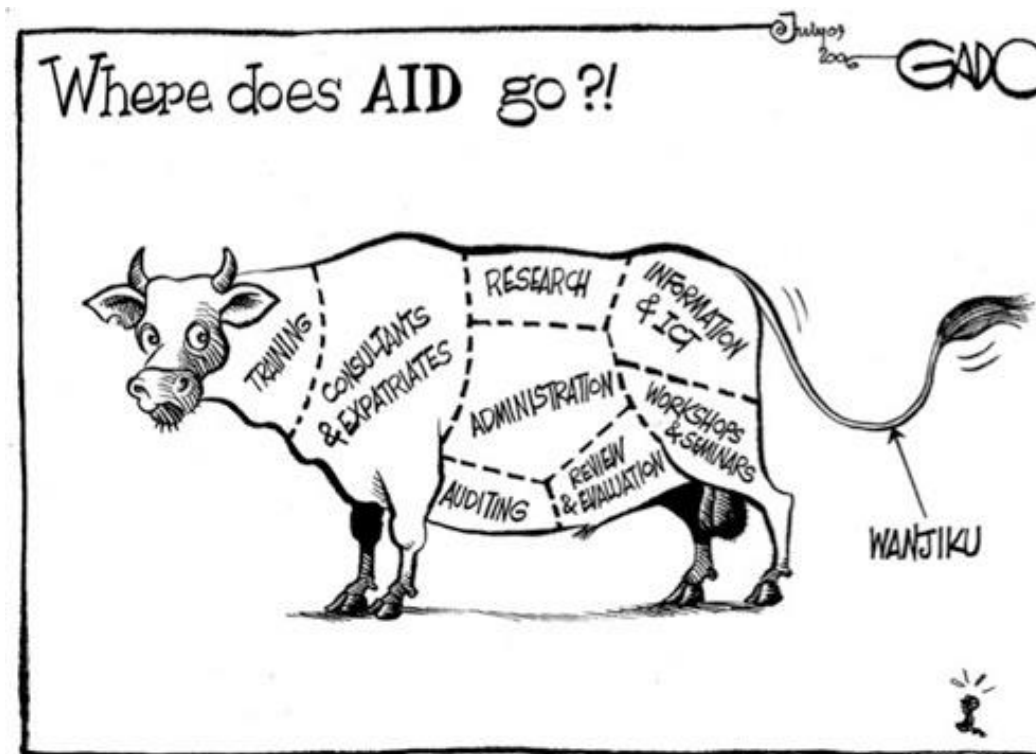


Source: OECD (2014) Development Statistics at a Glance: Africa



# Current Nature of Cooperation

1. Top down initiatives e.g. green growth strategies, mini-grids, national climate change legislation.
2. Tethered assistance e.g. technical assistance, equipment supply, service provision, leading to general skepticism



# Current Nature of Cooperation

3. Opportunities for experimental blue-sky initiatives that results in great successes e.g. investment in the geothermal exploration in Kenya in the 1950s and 1960s



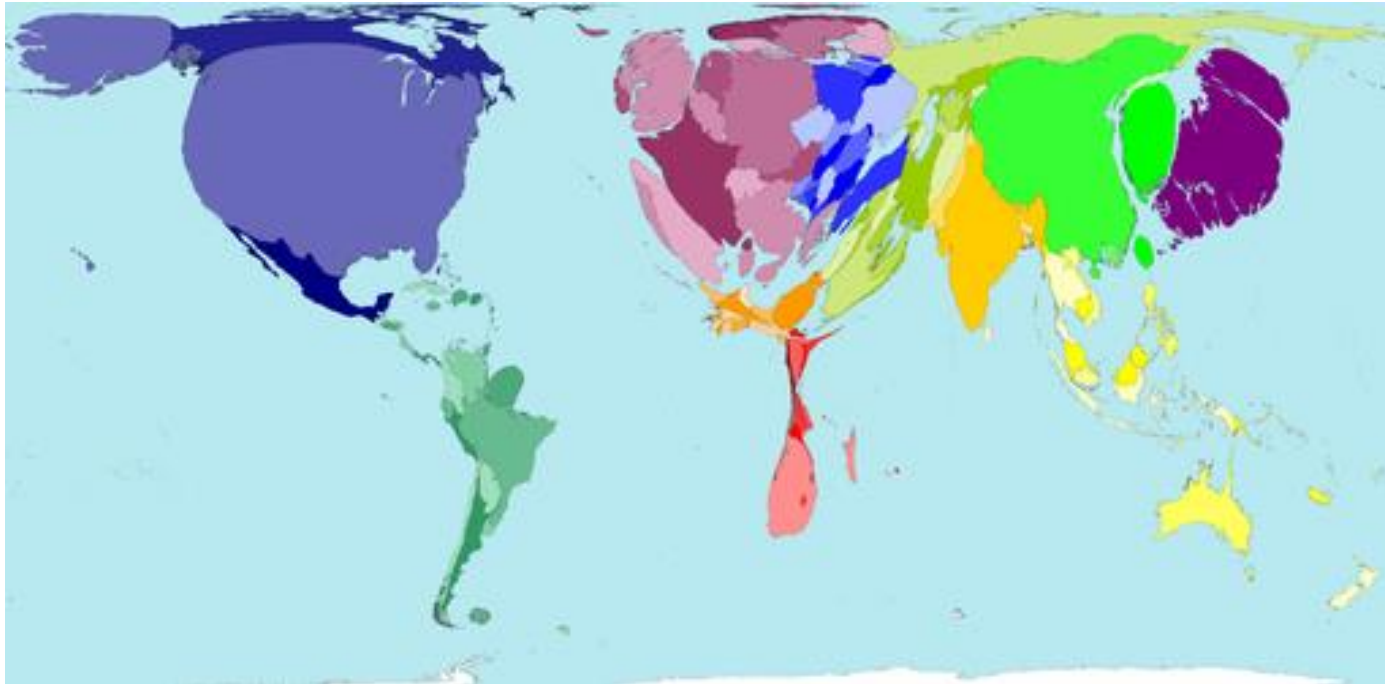
# Current Nature of Cooperation

4. Driven by “crisis narratives” and trends e.g. woodfuel crisis of the late 1970s, briquette for charcoal, current discourse on mini-grids



Source: <http://www.postconflict.unep.ch>

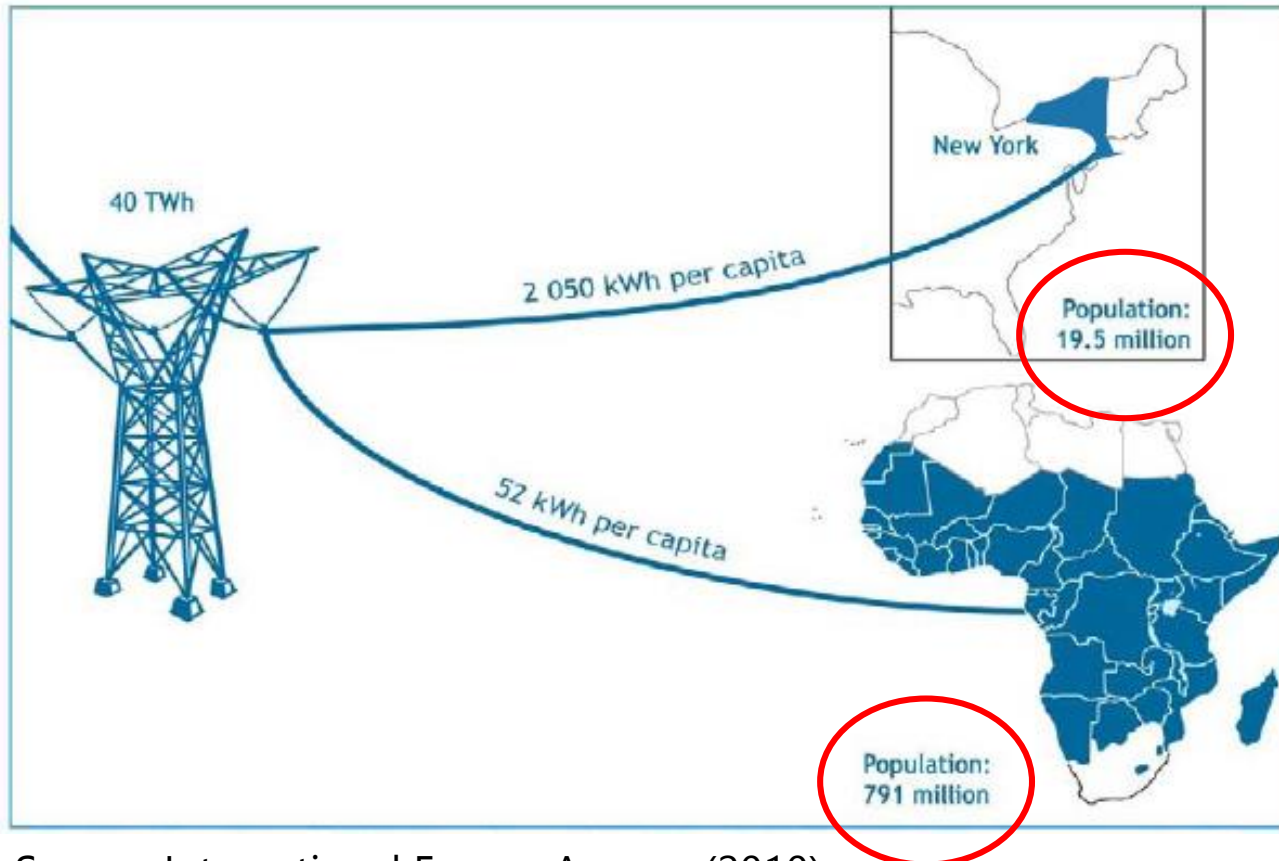
## **An energy starved continent...**



Source: <http://www.worldmapper.org/display.php?selected=117>



## Total Electricity Use Per Year



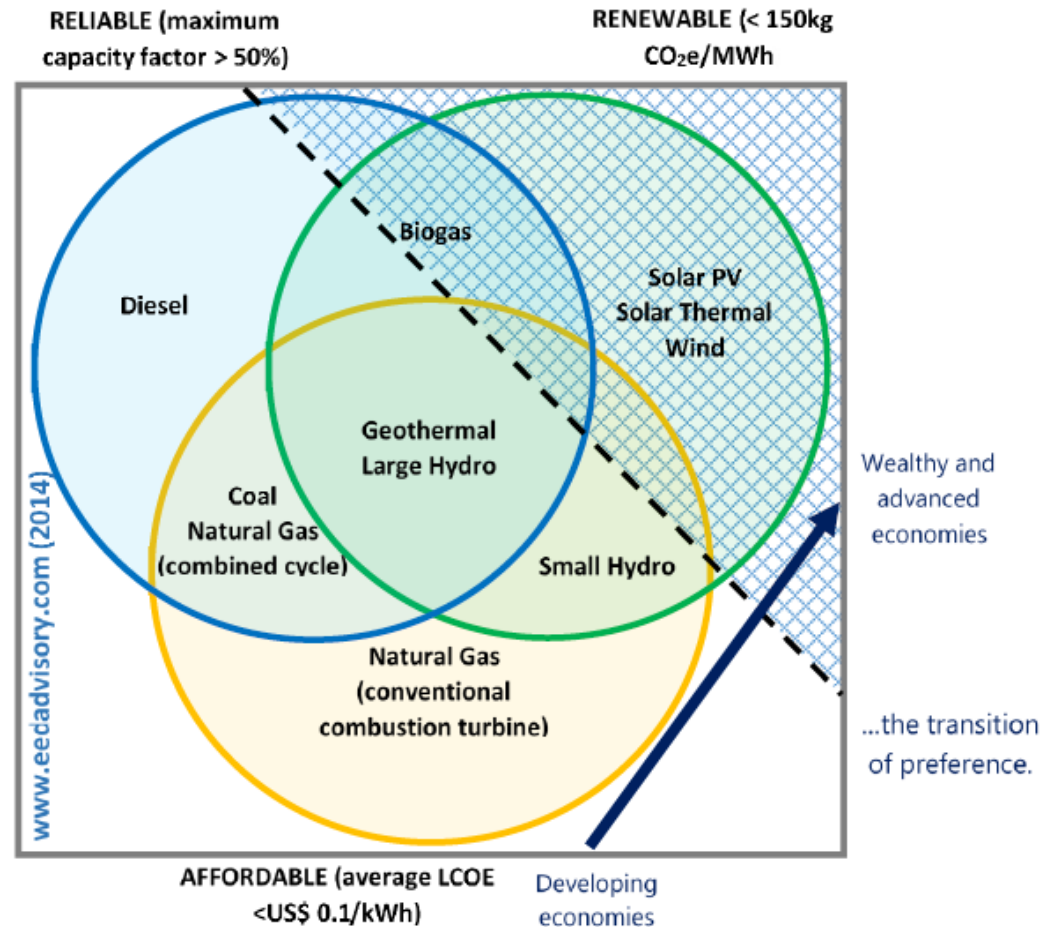
Source: International Energy Agency (2010)

# Cooperation in the Energy Sector

## Stylized Preference of Electricity Generation Options

### Data Sources:

IRENA (2014), Renewable Power Generation Costs, International Renewable Energy Agency, Abu Dhabi, UAE  
EIA (2012) Estimated LCOE, Energy Information Administration, US Government, Washington DC  
NREL (2010), Cost and performance for modelling electricity generation technologies, National Renewable Energy Laboratory, Colorado, US  
MoE (2012), Feed-in Tariff Policy on Wind, Biomass, Small-hydro, Geothermal, Biogas and Solar Resources Generated Electricity, Government of Kenya, Nairobi  
EWURA (2009), Guidelines for development of small power projects in Tanzania, Republic of Tanzania, Dar es Salaam



Source: EED Advisory (2014) Energy Access Review QTR 3



# Three Suggestions

1. Not substituting aid with trade, but targeting aid that spurs trade and entrepreneurship



**Is it  
commercially  
sustainable?**

# Three Suggestions

2. Cultivate peer to peer relations: Most people are moving away from the “West is to blame” notion



# Three Suggestions

## 3. Reorient the feedback loop: Decision making power to the recipients countries

### Current Model:

Donors allocates support then select Agencies



### Proposed Model:

Donors allocates support then Recipients select Agencies



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Picture credits: <http://www.aspenideas.org> and <http://www.guardian.com/>

# Thank You!