



# HUMANITARIAN ENERGY CONFERENCE

16 May 2022  
Kigali, Rwanda

#HumanitarianEnergy  
#HEC2022

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# Session 3 Track A: Inclusive Policies and Enabling Environment

15:30-16:45 CAT

Room A

# Moderator



Owen Grafham

Chatham House

# Speakers



**Samuel Emase**

Ministry of Tourism, Culture, Environment,  
Energy and Natural Resources, County  
Government of Turkana



**Michael Abimbisibwe**

Ministry of Energy and Mineral  
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(GRN)



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# Inclusive Policies and Regulatory Environment

## COUNTY GOVERNMENT OF TURKANA REPUBLIC OF KENYA



HUMANITARIAN ENERGY CONFERENCE 2022  
KIGALI, RWANDA

Eng. Emase Lopetet

# Turkana County



- Kenya is a safe haven for many displaced populations from around the East African region hosting **547,884\*** refugees and asylum seekers & Turkana County hosts **228,000\*** in Kakuma Refugee Camp & Kalobeyei Integrated Settlement. \*(UNHCR, March 2022)
- Two systems of governance; National Government & devolved County Governments e.g., Turkana County. Functions of devolved governance are enshrined in the Kenya Constitution, 2010.

## Turkana County

Headquarters	Lodwar Town
Population	926,976
Land area	77,000 km <sup>2</sup>
Electricity access	~8.6% census 2019
Sub-counties	6

# Turkana County Government

## Directorate of Energy

### Mandates

1. Harness, creation of awareness on the renewable forms of energy readily available in the county;
  2. Develop County energy plans, policies and regulations in alignment with existing National energy policies & regulations;
  3. Collection and maintenance of energy data in the County;
  4. Enhance better service delivery through installation & routine maintenance of institutional standalone solar PV systems for public institutions in off-grid areas in the county;
  5. Promote access to clean energy in the County through public private partnerships;
  6. Facilitation of energy demand by planning for industrial parks and other energy consuming activities in the county;
  7. Streets and markets lighting.
- Access to electricity is approximately 8.6% (2019 Census); the % has since increased by approximately 4 times: following adoption of several national energy policies e.g KNES 2018-2019, last mile project etc.
  - This is through grid connection, mini-grids (public and private);
  - In the displacement settings there are 4 mini-grids with an installed capacity of 109 kWp (solar PV) developed and operated by private sector;
  - Approximately 704 customers (host and refugee communities) have access to reliable electricity including households, businesses and social institutions
  - Expansion of mini-grids in the humanitarian setting targets an additional 2,500 additional connections.

# Policy frameworks

## National Government

- National Energy Policy of 2018
- Energy Act 2019
- Kenya Vision 2030 (MTP III).
- Kenya National Electrification Strategy (KNES) 2018-2022,
- Kenya Off-Grid Solar Access Project (KOSAP)
- Green Economy Strategy and Implementation Plan (GESIP)
- Sustainable development Goals (SDG7) & Sustainable Energy for All (SE4ALL)
- Last mile project

## Turkana County

- Turkana County Integrated Development Plan (CIDP);
- Turkana County Energy Sector Plan;
- Turkana County Energy Policy;
- Kakuma Kalobeyei Energy master plan;
- Kalobeyei Integrated Socio-Economic Development Plan (KISEDPA).
- Development of Kalobeyei spatial plan;



# Integrating Refugee Energy needs

1. Data collection and public participation processes in the development of the TCESP with refugee communities
  2. Kalobeyei Integrated Socio-Economic Development Plan (KISEDPP), integrating both refugee and host community needs, chaired by TCG working closely with UNHCR in coordinating interventions of other energy actors in the displacement setting to avoid duplication of roles, build synergies.
  3. Ongoing development of the Turkana County Energy policy, with technical energy committee of 15 members constituted from different sectors in the county to steer the process and create ownership.
  4. Waiver on energy related statutory charges to attract private developers to generate and supply electricity to the refugee camps and settlements.
  5. Land allocation to private developers to facilitate development of solar minigrids at the refugee settlements and displaced host community.
- Capacity building of County government technical officers, policy makers and facility managers on energy policy development and communication.
  - Promoting market-based energy access

# GAPS/AREAS OF PARTNERSHIPS

- Electrification of off-grid areas: Market centres, Institutions, Community facilities, Government offices.
- Harnessing of available renewable energy resources e.g. geothermal, solar, wind, biogas etc.
- Promoting Productive Use of Energy to improve livelihoods and reduce poverty
- Improve security and promotion of 24-hour economy in the settlements and the host community thro' sustainable street and market lighting.
- Development and review of existing policies.
- Promotion of efficient & clean cooking technologies to minimize woodland degradation.
- Capacity Building of County Government staff.
- Energy for agriculture, water, health, sports and education
- Desalination of water
- Expansion of existing power supply in order to accommodate more customers.
- Provision of grants to private power producers.

# ASANTE



**Mr. Michael  
Abimbisibwe**

**Ministry of Energy and  
Mineral Development of  
Uganda**



# Enabling Energy Access for Humanitarian Settings

Inclusive Policies and Regulatory Environment

**Humanitarian Energy Conference**



**SELCO Foundation**

[www.selcofoundation.org](http://www.selcofoundation.org)



# Approaches to Program Design and Solution Design for DRE Based Solutions



## Supply Driven Top Down Approach

Renewable energy and technology decisions are prioritised

May not account for/be tuned to - livelihood needs, market linkages of businesses and ownership dynamics of users, hindering usage/uptake

Cookie-cutter approach to deployment with little consideration for long term viability



## Demand Driven Bottom Up Approach

Livelihood needs, needs for social service provision are prioritised with technology and renewable energy built for them

Ownership models and financial modelling are built in practices, providing for higher chances of success and asset utilisation

More complex to deploy requiring dedicated personnel with livelihood- energy nexus focus

# REFUGEE SETTLEMENTS

## Nyaragusu Refugee Settlement, Tanzania



### Context:

- Nyarugusu is the largest refugee camp in Tanzania hosts over **130,000 refugees** in 30,437 households.
- Electricity access is limited and expensive (off-grid diesel generators)
- **Health posts unable to operate beyond 4pm owing to lack of electricity;**
- High operational expenditure for Main hospital using diesel

### Local Ecosystem and Ownership:

- **Strong local health partner (Tanzanian Red Cross Society) and UNHCR TZ local team**
- Capacity built of key stakeholders on energy- health nexus
- Health facility technicians/ electricians to be trained
- Energy enterprise for solar system installation, maintenance to be identified

# INTERNAL DISPLACEMENT CAMP

## Cattle Camp in Maharashtra, India



### Context:

- Mann Deshi Foundation from January 1, 2019 started a cattle camp which became home to around **9000 animals and 1800 farmers**
- **Transitory in nature**, the camp location suddenly saw a sudden surge in power requirements
- High operations costs for the camp- **primarily dependent on dirty fuels**

### Local Ecosystem and Ownership:

- The energy requirements were divided into two- consumptive and other that has productive use applications- leading to financial models accordingly
- **Community Lights, Portable Lights for Farmers, Fodder Chopping Machines, Milking Machines, Mobile Charging Stations, Solar for official use, Anganwadi and health centre**



# INTERNAL DISPLACEMENT (Disaster affected)

Jamkhandi community, Karnataka, India



## Context:

- Agricultural labourers; Dairy is the main occupation
- Socially- vulnerable community historically
- Flooding every year for 30 days +Heat stress during summer
- Damage to houses and livestock
- Unreliable grid access

## Local Ecosystem:

- **Solutions: Home Energy Systems, Improved Homes for Heat Stress, Solar for Livelihood Solutions- Tailoring, Flour Milling (Entrepreneur run Model for Community Needs)**
- Part Financing through local MFI-NGO (SEEDS) for all solutions
- Energy enterprise for maintenance, servicing
- Market linkage: Local community
- Micro- entrepreneur run businesses

## KEY TAKEAWAYS

### **Integration of Decentralised Renewable Energy in all Program Designs:**

- Water Access
- Social Institution Planning: Health, Education
- Other Services

### **Understanding Enabling Environment as per Community Typology:**

- Emergency
- Post Emergency
- Protracted

This can influence **ownership models** and **financial models**

**Holistic Assessments:** Meeting demands of host communities, along with communities facing humanitarian crisis

### **Capacity Building:**

- Program Design
- Procurement Guidelines and System Design Guidelines
- Local Partnership / Stakeholder Mapping

About  
**SELCO Foundation**

**Since 2010**

- Inclusive innovation to meet end-user needs
- Incubation of local energy enterprises
- Institutionalization- working with partners across health, livelihoods etc.
- District level, State level Programs (India)
- National level advocacy (India)
- Global Replication and Knowledge Sharing

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**Reach out to us for further information, resources  
and support for DRE implementations**

**Rachita Misra**

Associate Director, Knowledge and Advocacy

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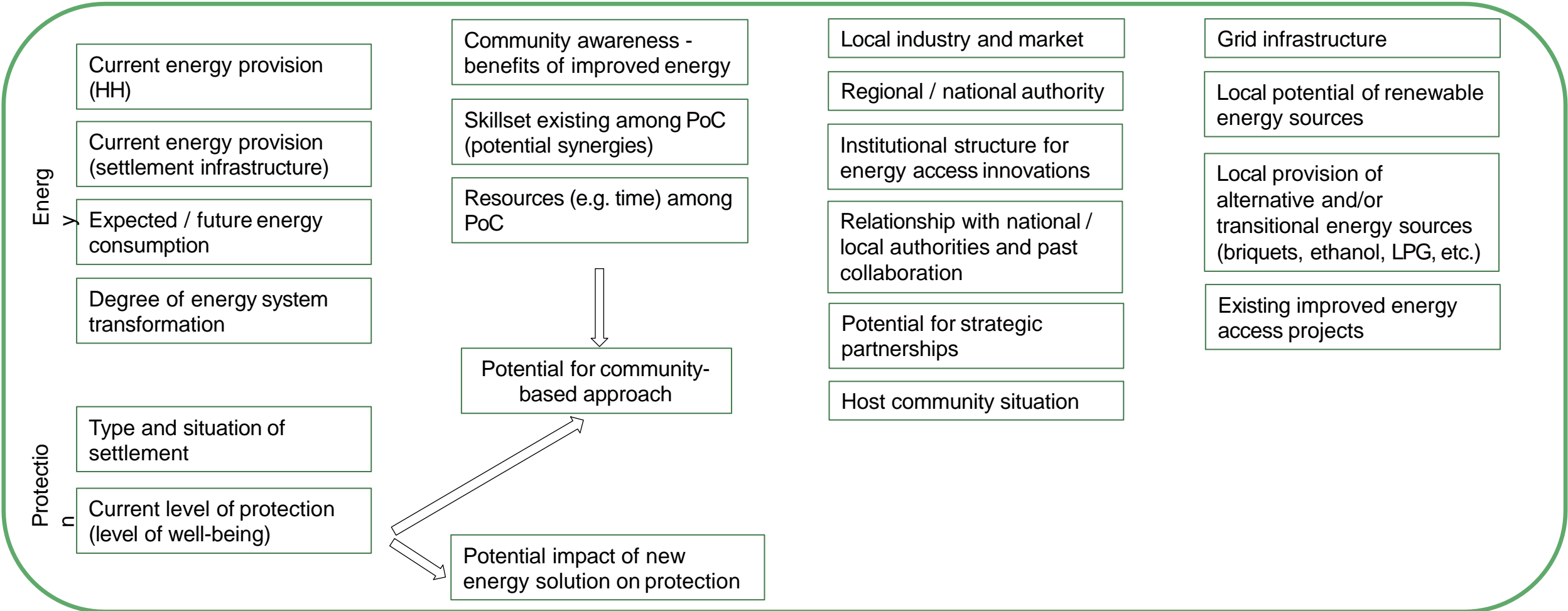
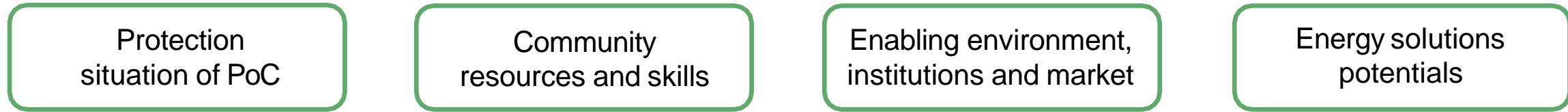
**Shaza Alrihawi**

**Global Refugee-led  
Network (GRN)**

# Elements to consider for inclusive policies and recent work results

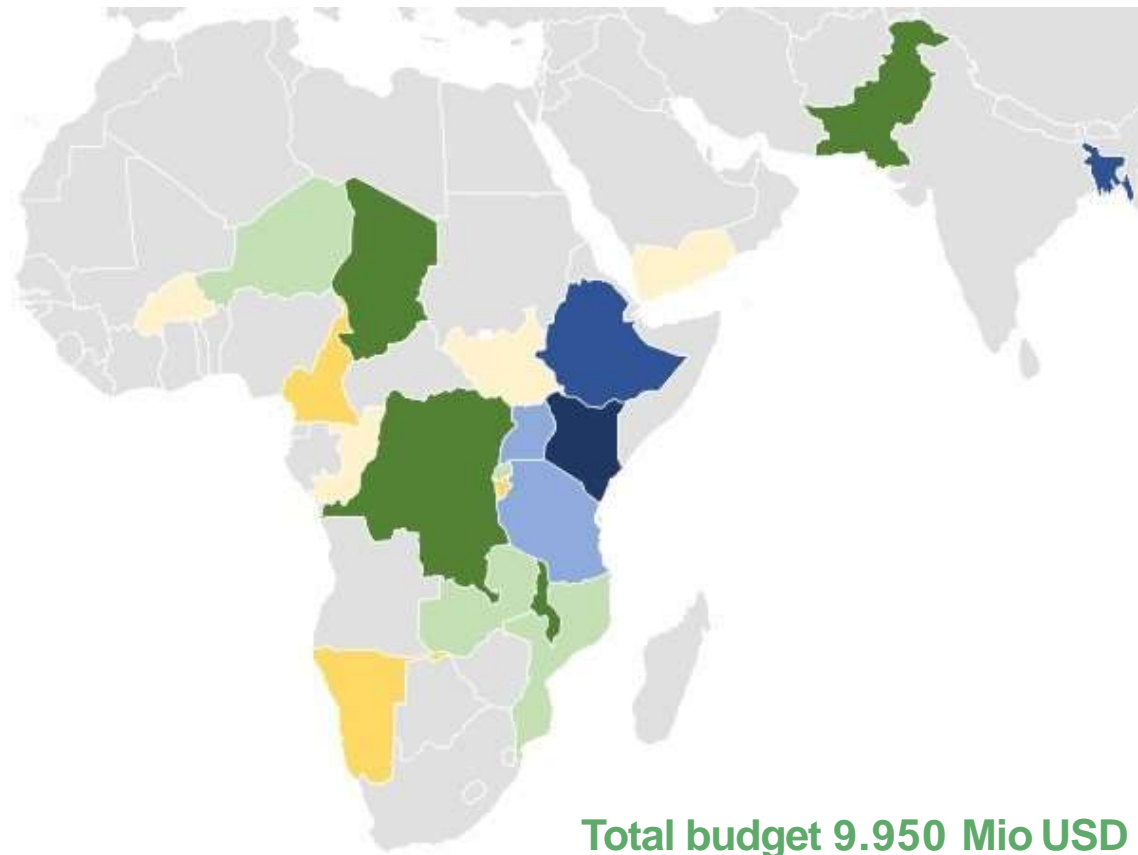
Session on Inclusive Policies and Enabling Environments for Energy Access  
Boris Heinz // [Hudara](#) // [Technische Universität Berlin](#)

# Considerations for inclusive policies



# Energy program activities with relevance to displaced

**Active and planned energy programs with thematic relevance for displacement context in 25 countries and by the actors ADB // AFD // AfDB // GIZ // IFC // KfW // USAID // WB**

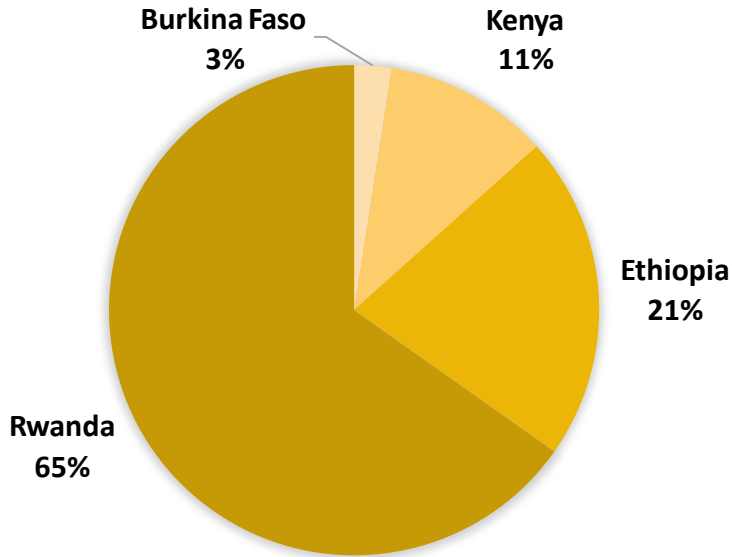


- 1 - 50 Mio. USD
- 51 - 100 Mio. USD
- 101 - 250 Mio. USD
- 251 - 500 Mio. USD
- 501 - 1000 Mio. USD
- 1001 - 2000 Mio. USD
- 2001 - 3000 Mio. USD

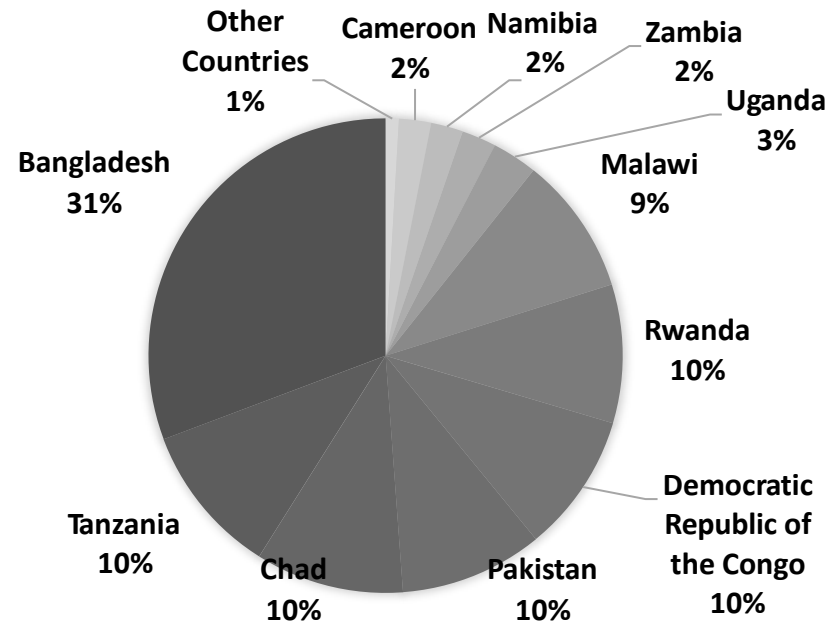
Disclaimer: Data completeness to be validated and continuously updated

# Energy program activities by topic

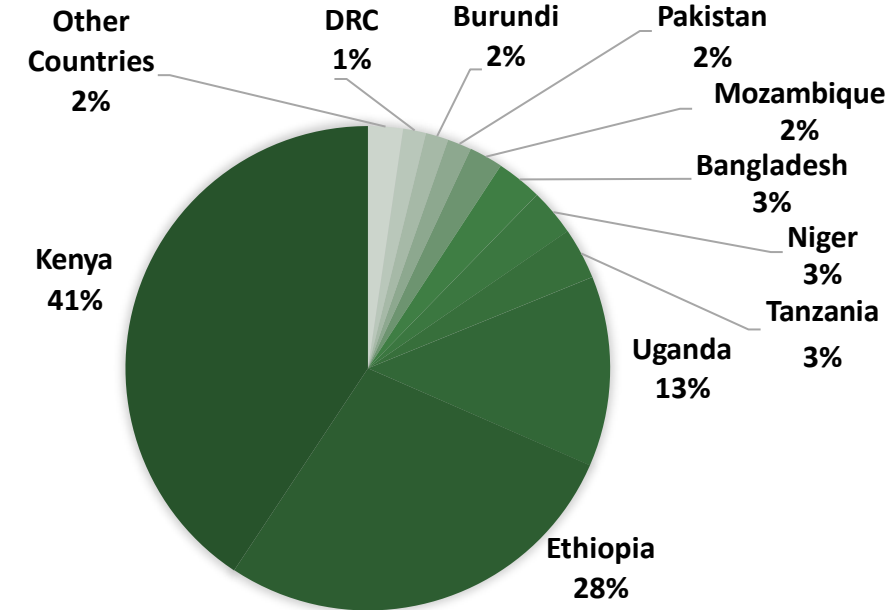
**Cooking programs**  
total of Mio. USD 42



**Energy access programs**  
total of Mio. USD 3,364

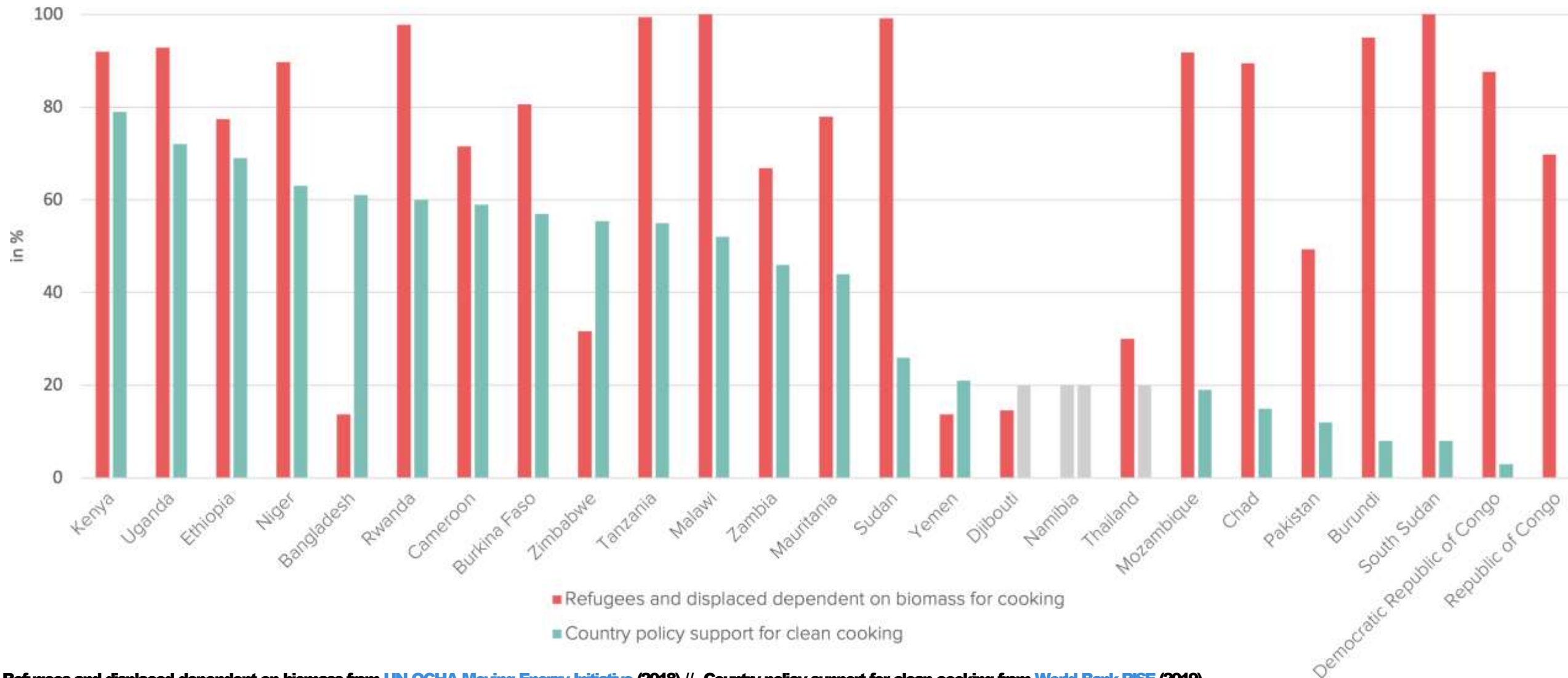


**Electricity access programs**  
total of Mio. USD 6,545





# Biomass dependency for cooking and enabling country policies for clean cooking



Refugees and displaced dependent on biomass from [UN OCHA Moving Energy Initiative \(2018\)](#) // Country policy support for clean cooking from [World Bank RISE \(2019\)](#)

# Thank you for your attention

**Prof. Dr. Boris Heinz**

**Head of**

**Programme**

**at Hudara // [www.hudara.org](http://www.hudara.org)**

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# Panel Discussion



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Thank you for attending the Inclusive Policy session at #HEC2022!