



State of Clean Cooking in Asia Pacific region and the value of integrated energy access planning

Empowering and Enabling market development on clean cooking in the Asia-Pacific

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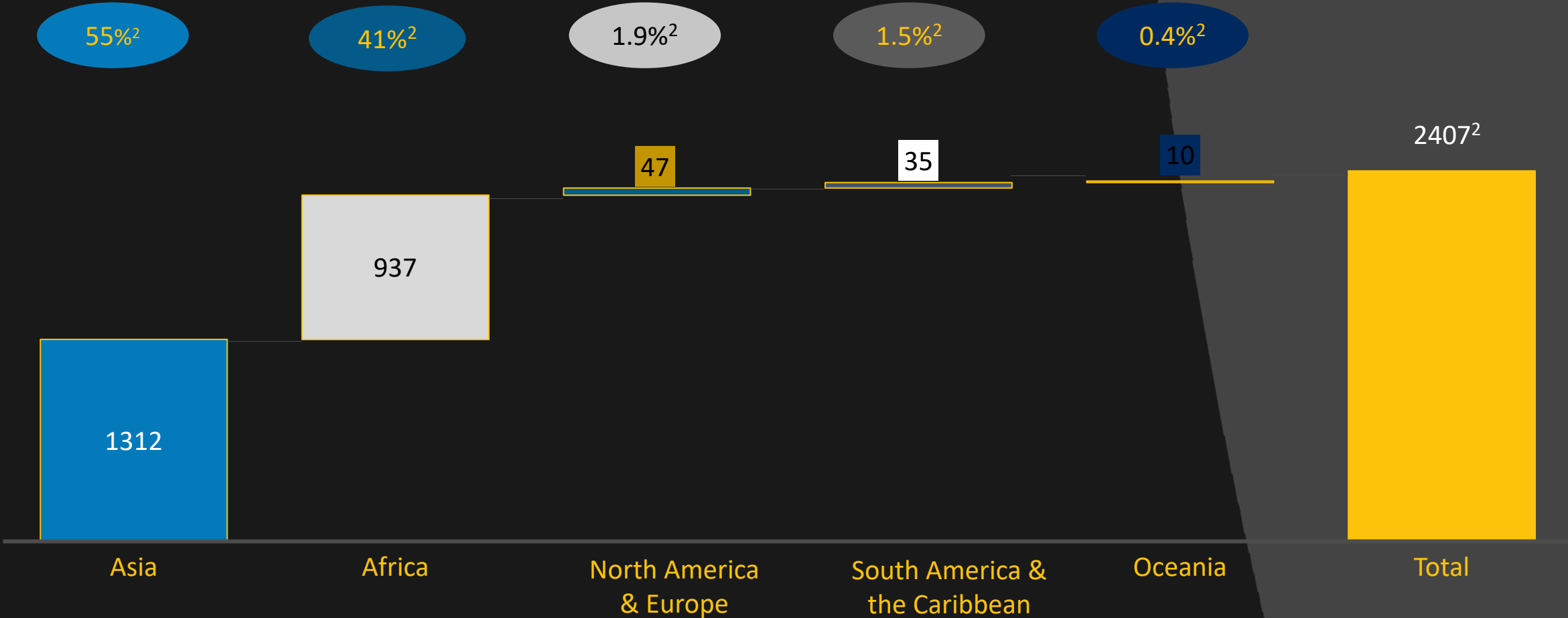
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There are ~2.3 billion people in the world without access to clean fuels and technologies for cooking

Population without access to clean fuels and technologies for cooking,¹ millions, 2021

(X) % of total



NOTES: 1 Clean cooking access is defined as a household using clean fuels or improved technologies for cooking as defined by the WHO.

2. Due to lack of access rate data for various countries in the 2020 dataset as well as the possible total population data disparity, there is a 66 million difference between the population reported by the 2022 Tracking SDG7 report on total world population without clean cooking access (2.4 billion people) in 2020 and the calculated population number by using the 2022 Tracking SDG7 dataset and the World Bank total population dataset updated on 22 May 2022. This analysis uses the total World Population without Clean Cooking Access from the 2022 Tracking SDG7 report, while the calculated population numbers are used for each country and each region. This creates the sum of the shares and does not add up to 100% (it is 97.3% in total).

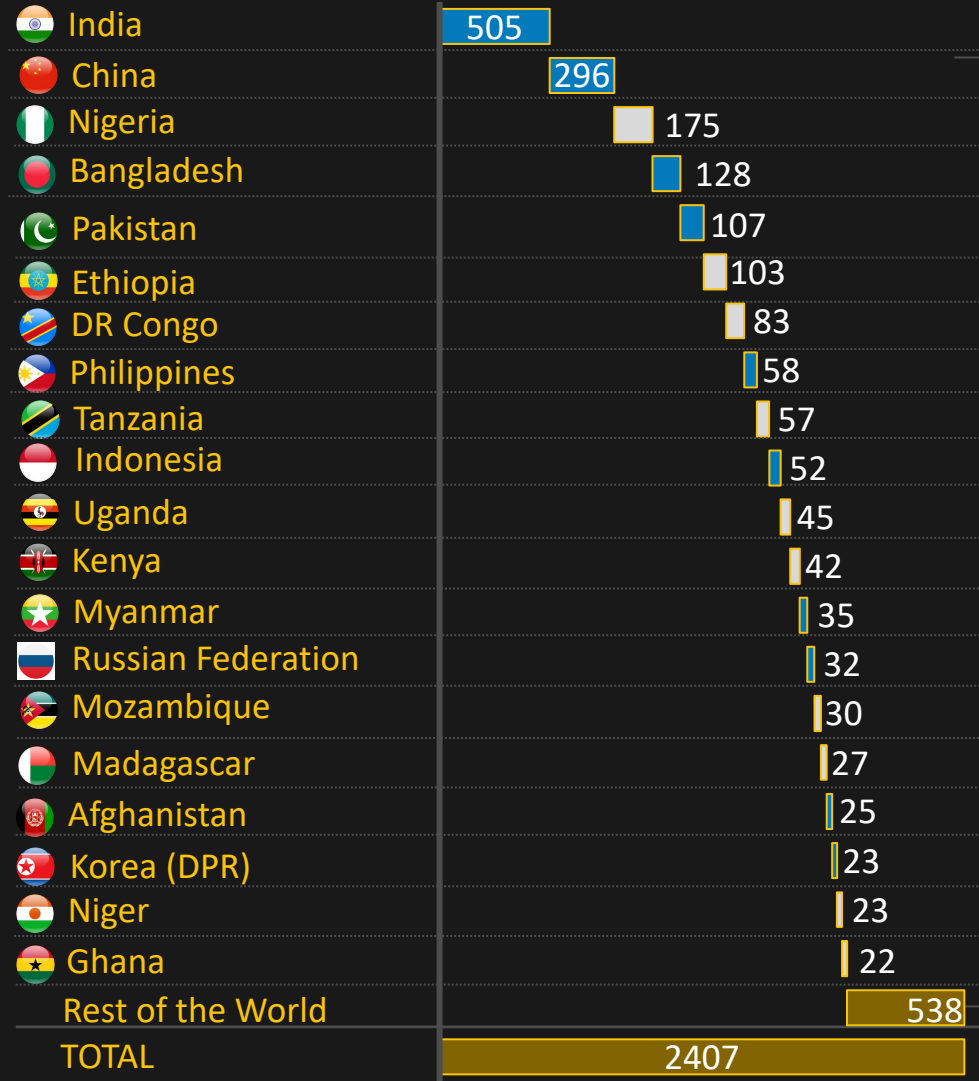
DATA SOURCE: World Bank/ESMAP Tracking SDG7 Database, 2022.



20 countries make up 78% of the access to clean cooking challenge and all of them are in Africa or Asia

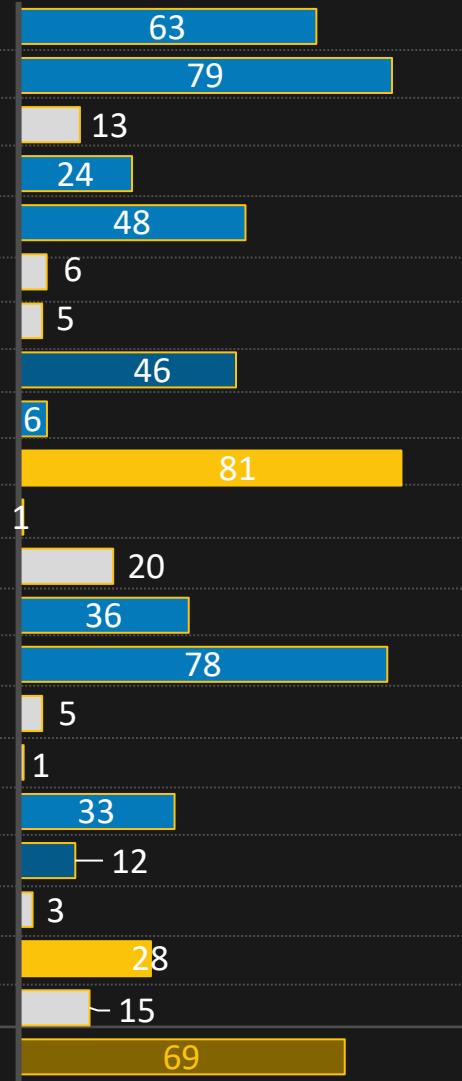
Africa Asia

Population without access to clean cooking, millions, 2021



78% of total population without access to clean cooking

Access rate, %, 2021



- 20 countries account for 78% of the clean cooking challenge, 10 in Asia and 10 in Sub-Saharan Africa.
- The situation is dire in the African countries. In 7 of the 10 countries, less than 10% of the population had access to clean cooking.
- Although the Asian countries in the top 20 mostly have higher access rates than their African counterparts, significant improvements are still required for universal access.

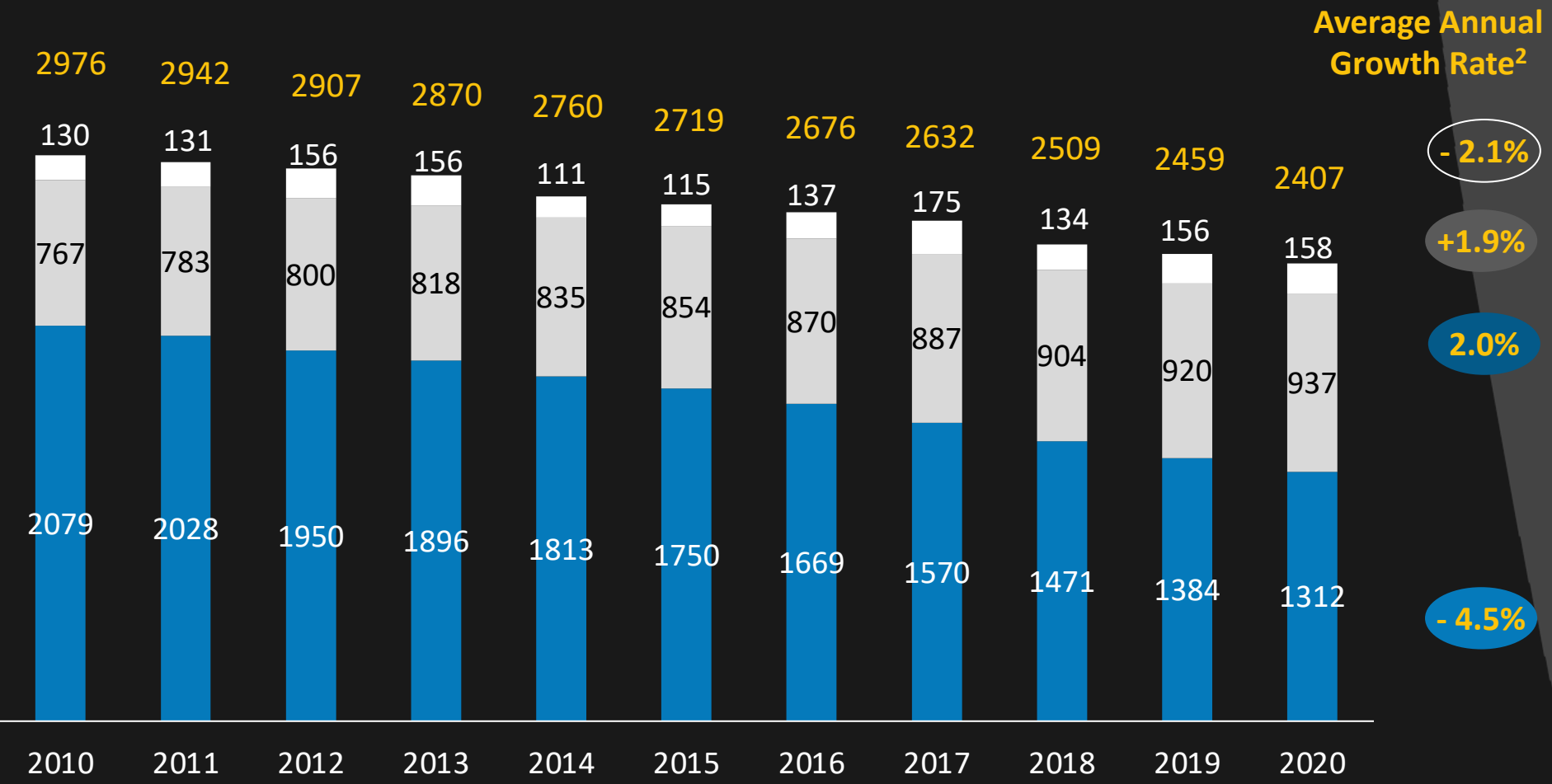
DATA SOURCE: World Bank/ESMAP Tracking SDG7 Database, 2022.



The number of people without access to clean fuels and technologies for cooking decreased slightly from 3 billion in 2010 to 2.3 billion in 2021

Population without access to clean fuels and technologies for cooking,¹ millions, 2020

Rest of the World Africa Asia



- Access to clean fuels & technologies for cooking has improved slowly over the past decade
- While Asia has made some gains, the size of its population still makes it the largest population without clean cooking access.
- The number of people without access in Africa has increased and stronger focus is required to reverse this trend.

NOTE: The World Bank/ESMAP historical data up to 2019 and the total population historical data were both updated with the 2022 dataset. This creates several inconsistencies with the analysis from the previous year.

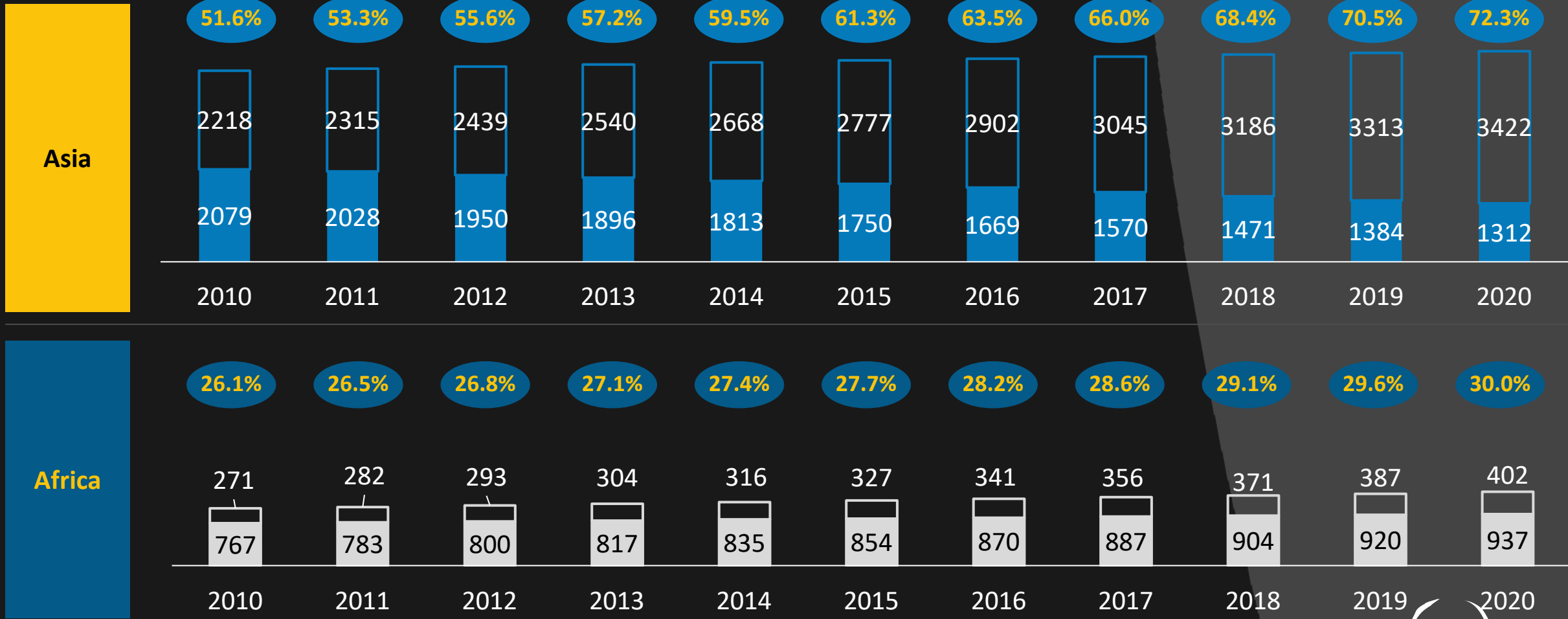
1. Some country data unavailable between 2011 and 2019 were interpolated. 2. Compound Annual Growth Rate (CAGR) = the average annual growth rate.

DATA SOURCE: World Bank/ESMAP Tracking SDG7 Database, 2022 and World Bank total population data 2022.



In Africa, population growth has outmatched gains in the population with access to clean cooking while Asia has made progress despite population growth

Population, millions



NOTE: The World Bank/ESMAP historical data up to 2019 were also updated with the 2022 dataset. This creates several inconsistencies with the analysis from the previous year.

DATA SOURCE: World Bank/ESMAP Tracking SDG7 Database, 2022.



Advancements in the sector

Average RISE Scores between the two regions:

- Clean Cooking Planning: 56 - *CC Planning is lagging behind EL*
- Electrification Planning : 77.5



CC Planning: 54
EL Planning: 74



CC Planning: 58
EL Planning: 81

*Regulatory Indicators for Sustainable Energy (RISE) [ESMAP] is a set of indicators intended for use in comparing the policy and regulatory frameworks that countries have put in place to support the achievement of SDG7. The Scores ranges from 0-100. Latest individual country data available for 2019.

The SEforAll Integrated Energy Planning (IEP)

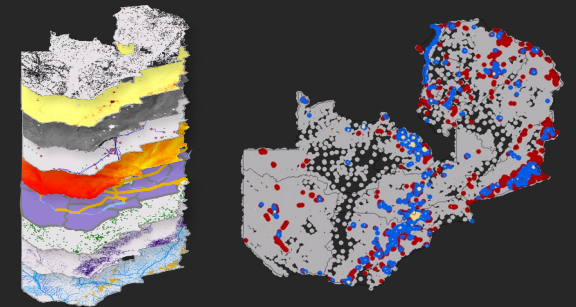
Challenge

- With less than 8 years left to achieve SDG 7, governments need to know where to focus, funders need to know which solutions to support, and solution providers need to understand which communities to target.
- Decision makers often lack the data and tools necessary to answer these questions in an accurate, coordinated and timely manner.



Opportunity

- Integrated energy planning makes use of information technology, digital tools (e.g., GIS), satellite imagery and machine learning to give policymakers an easier, relatively low-cost, and visually powerful way of identifying the optimal mix of technologies to achieve universal energy access.
- It also facilitates problem solving and makes it possible to explore linkages, evaluate trade-offs and compare the consequences of different energy decisions.
- When done correctly, integrated energy planning can:
 - Inform national policy and investment decisions with more precision
 - Inform the preparation of specific energy access operations
 - Foster transparency and rationality in Government planning, reducing risk of private investment
 - Lead to increased availability of market data supporting private sector off-grid operations
 - Help planners assess areas to be targeted for pre-electrification if grid cannot be expanded in desired time horizon



SEforALL's Approach

- SEforALL's Universal Integrated Energy Planning program seeks to accelerate the adoption of 'best-in-class' integrated energy plans (IEP) among high energy access-deficit countries.
- We do this by setting the standard for what a best-in-class IEP should be and by advocating for the widespread adoption of IEPs to guide universal energy access efforts. We also turn our words into action by working with governments to showcase, learn from, and commission, best-in-class IEPs.

Integrated Energy Access Planning (IEP)



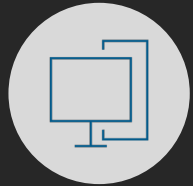
Electricity Access



National Electrification Plan (NEP) already in place?
Add Cold-chain and CC component

Integrated Energy Access Planning

Capabilities



Least-cost technology mix to electrify households and social infrastructure (by 2030)



Integrating electrification, medical and agricultural cold-chains and access to clean cooking analysis with geospatial components



Associated costs, budget implications and prioritization of sites for each technology type

Opportunities

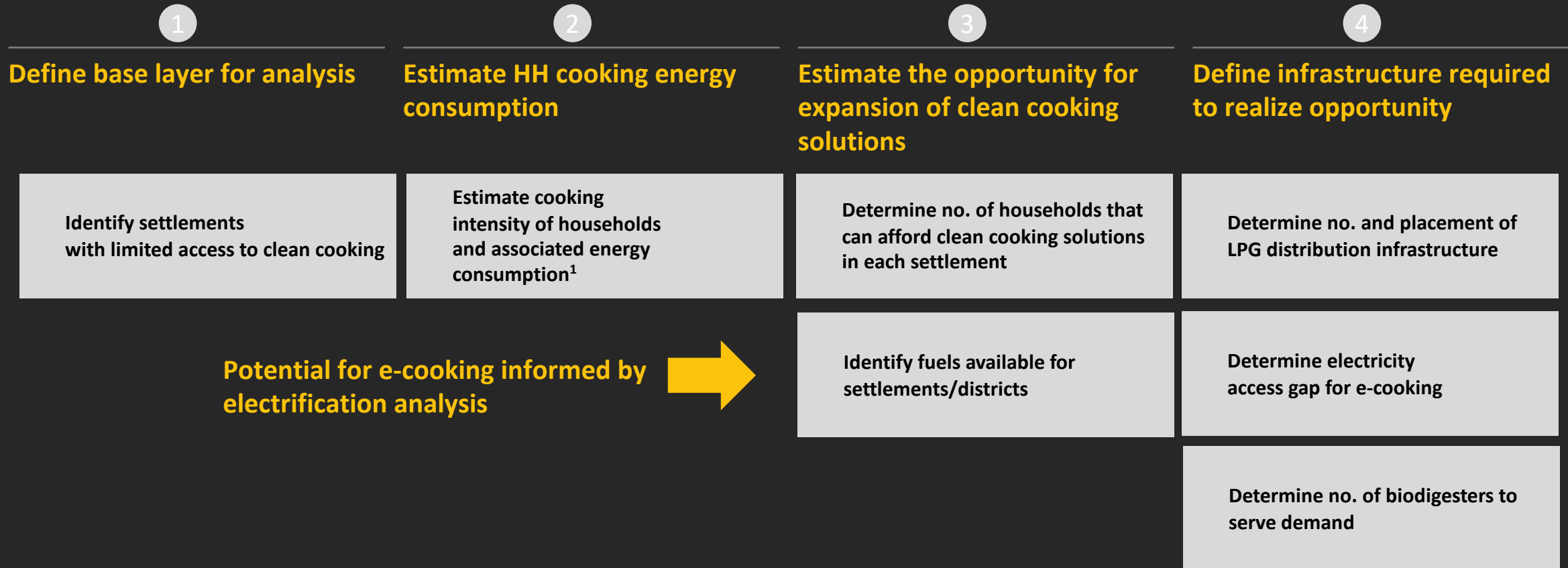


A holistic and integrated national plan helps de-risk investments for the sector with the certainty of data-driven geospatial planning



Enables the efficient and effective implementation of energy interventions by unlocking access to finance

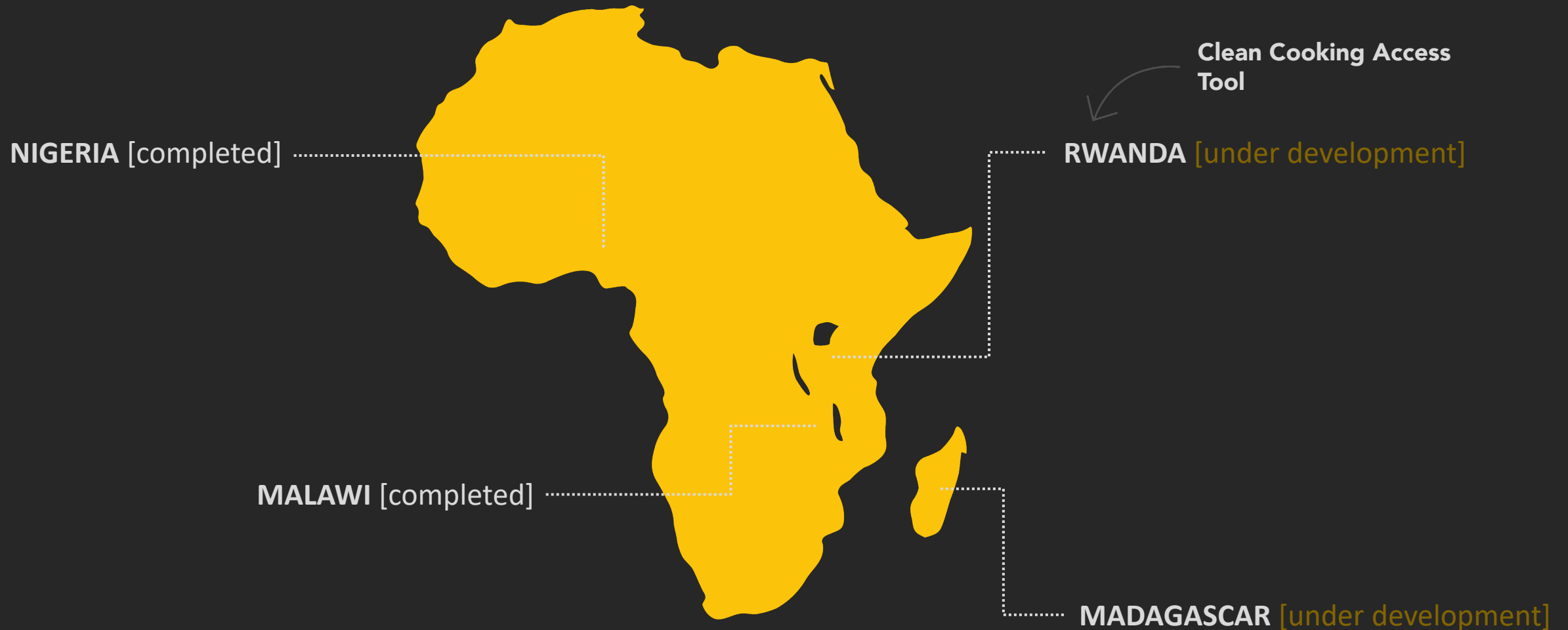
IEP: Clean Cooking - *a multi-step process*



A similar multi-step process is performed for all components of the IEP

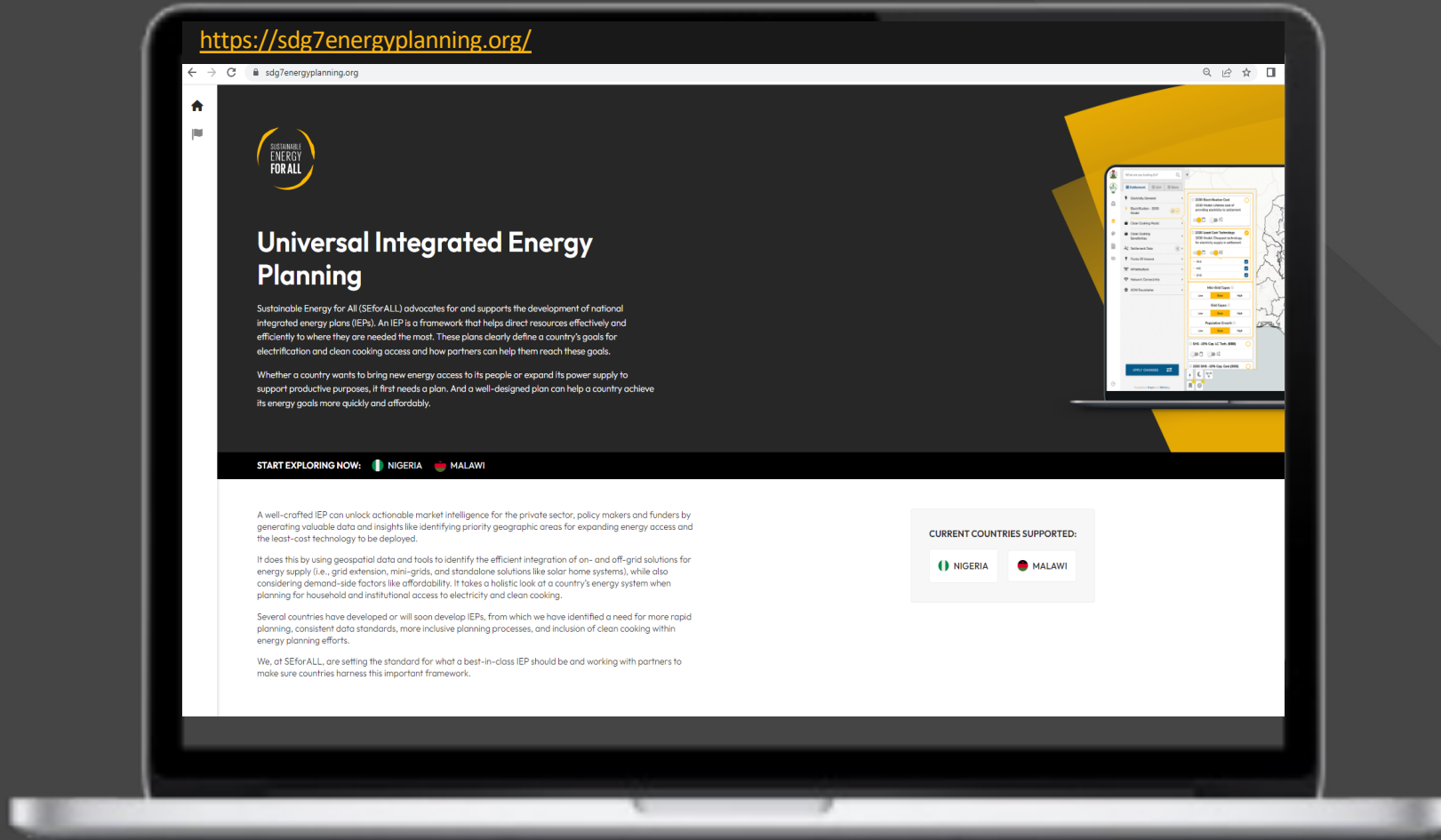
1. Number and size of meals cooked daily in each household/health center

SEforALL - Integrated Energy Access Planning



Access to tools and data – key for *Access planning*

Online access
for ALL



Example Insights from IEPs



M

From Planning to Implementation



While IEPs can significantly improve the enabling environment, the next step is to raise the finance and bring in partners to implement the plans


Key Ingredients to success

- ✓ Data-driven insights (IEP)
- ✓ Sectoral buy-in
- ✓ Strong regulatory environment
- ✓ Private sector participation
- ✓ Sustained capacity development
- ✓ Key partners coming together to collaborate



**IEPs help articulating
gaps**

INTEGRATED ENERGY PLANNING TOOLS Available for:

 NIGERIA  MALAWI

Under development:

 RWANDA  MADAGASCAR

EXPLORE IT FOR YOURSELF

<https://sdg7energyplanning.org/>

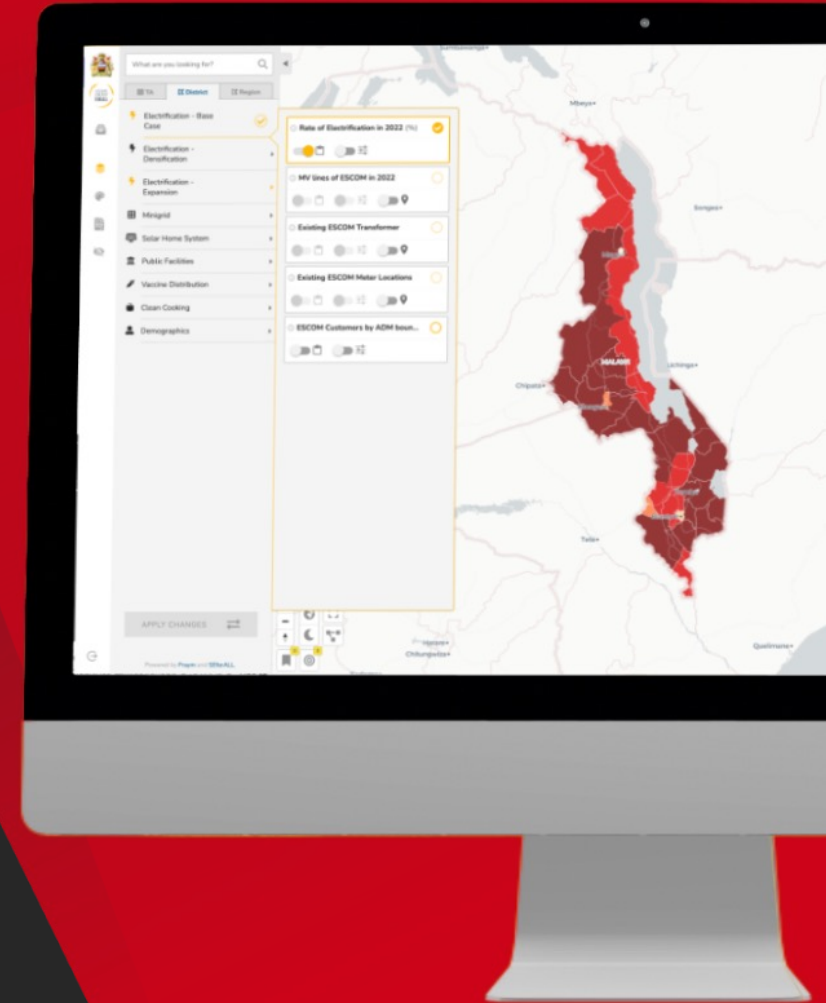
POWERED BY:



IN PARTNERSHIP WITH:



Global Energy Alliance
for People and Planet



Thank You!



For any questions and inquiries please email: iep@seforall.org



Aim your mobile
camera here



**Please check out the
Malawi IEP!**