

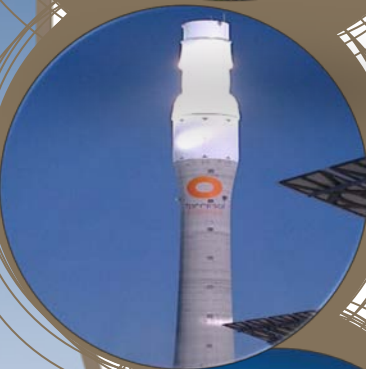
# Global DSO Platform

## “ Watching the Mediterranean coasts and southwards”

*The Rural Electrification challenge in  
sub-Saharan Africa*

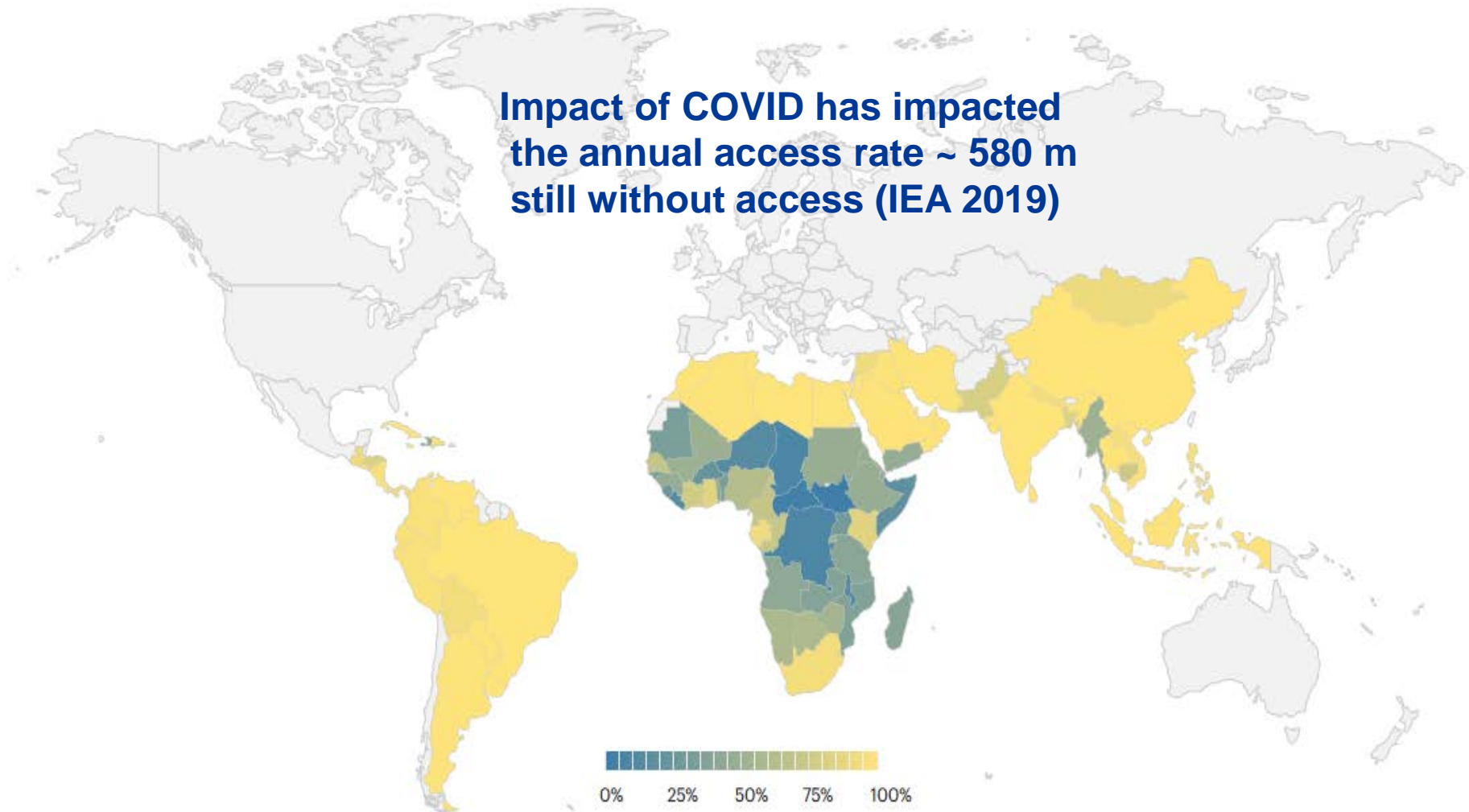
*Kurt Dedekind*

*28 January 2022*

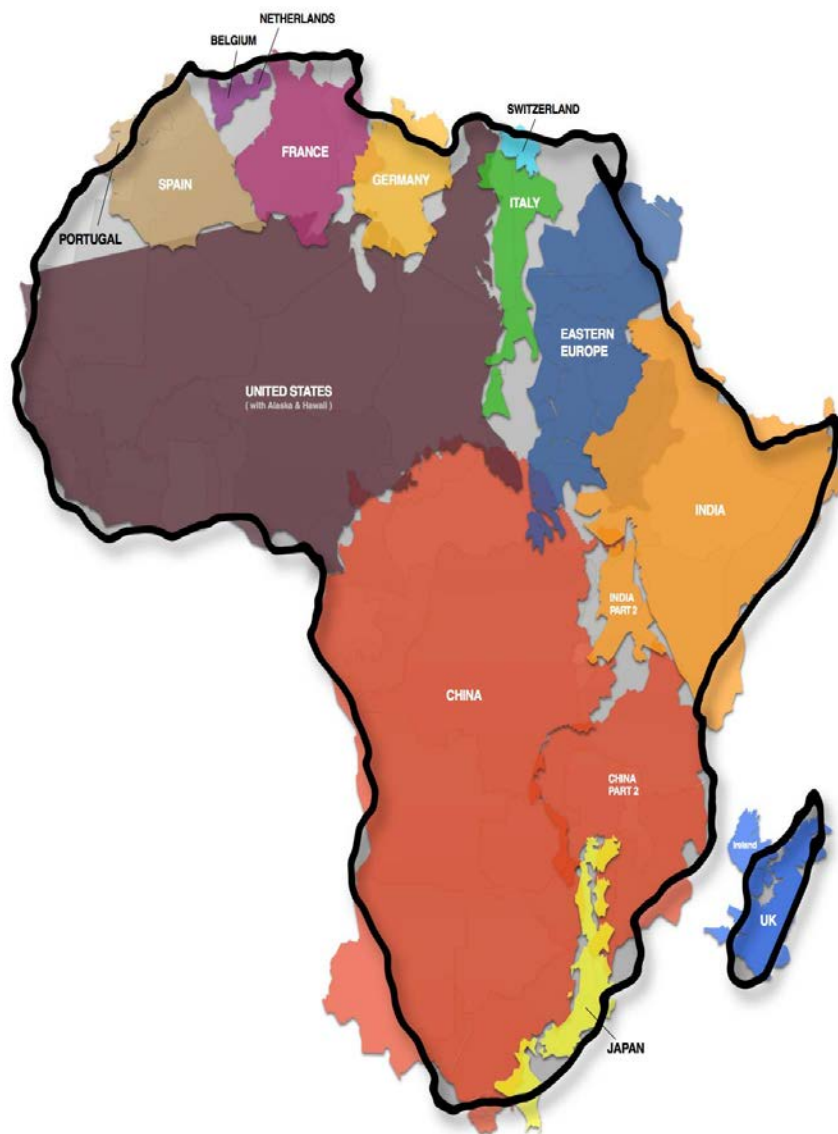


# The Rural Electrification challenge....

**Impact of COVID has impacted  
the annual access rate ~ 580 m  
still without access (IEA 2019)**



# Africa needs innovative approaches & revolutionary solutions **now!**



## Rapid population growth

- 2.5 billion people by 2050



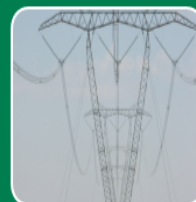
## Rapid urbanization

- 70 percent urbanization by 2050
- 500 million in smaller cities



## Low access

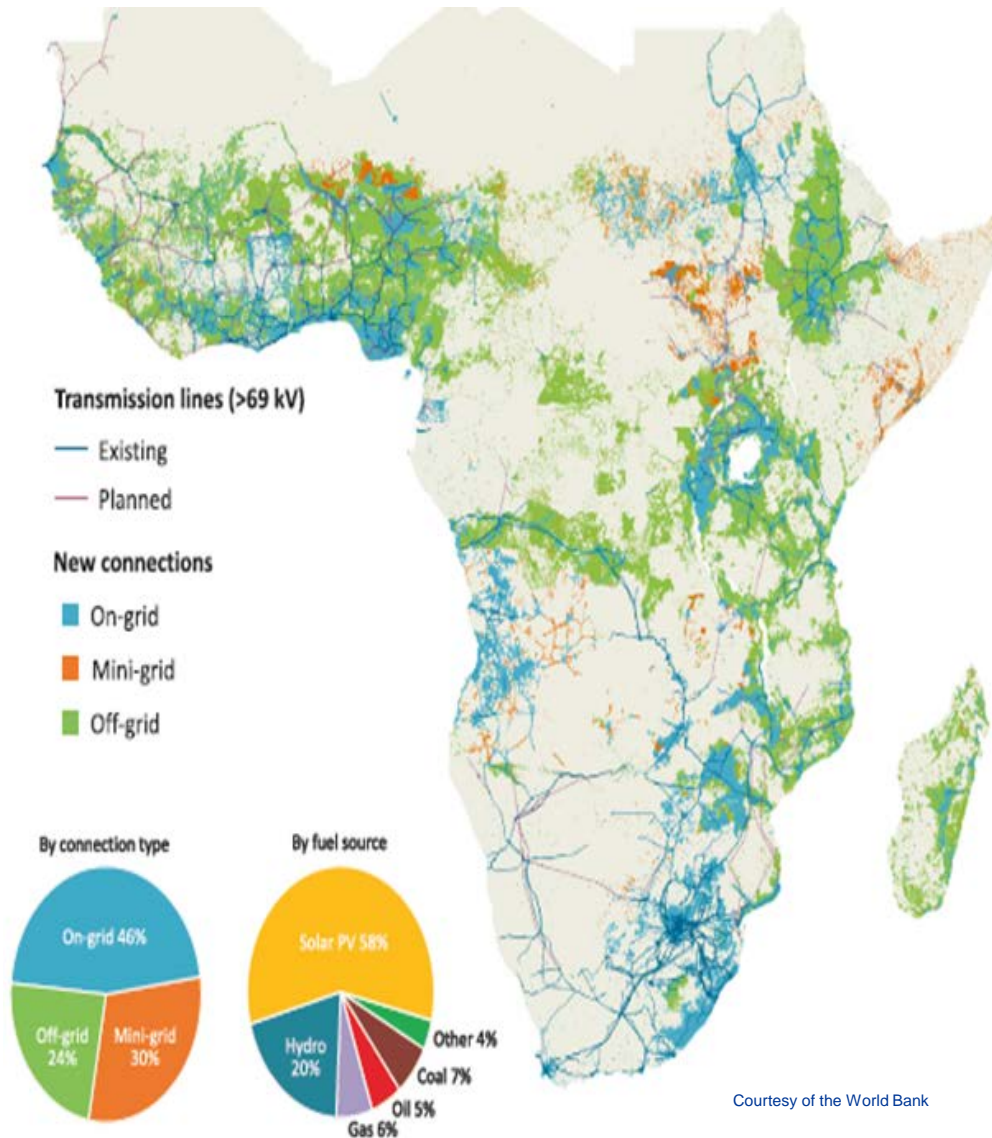
- 45 percent electrified



## Grids need modernization

- Hardware / software
- Supporting fellow utility engineers

# Technology adoption in sub-Saharan Africa



Courtesy of the World Bank

**Initial Access**

**Affordability**

**Reliability**

**Sustainability**



# How ready are utilities and engineers to convert the **energy transition** ambition into reality?



What are the right (best) practices to adopt in Planning, Design, Construction, Operations and Maintenance?



What structural adjustments will reduce the cost of supply and improve service reliability?



What investments do clients need to benefit from evolving technologies in the power system? Can they benefit from new and disruptive technologies such as Big Data, AI, Satellites, Smart Grids?



Do our clients have the capacity to deploy and operate modern grids? With creation of new TSOs and DSOs – how ready are they technically and financially to participate in market operations?

**Political will**

**Supportive Regulatory framework**

**Business structure flexibility**

**Reflective Tariffs and Pricing options**

**Adequate maintenance and operations capability**

**Competence and skills base to support JET**

**Market structures**

**Thank you!!**