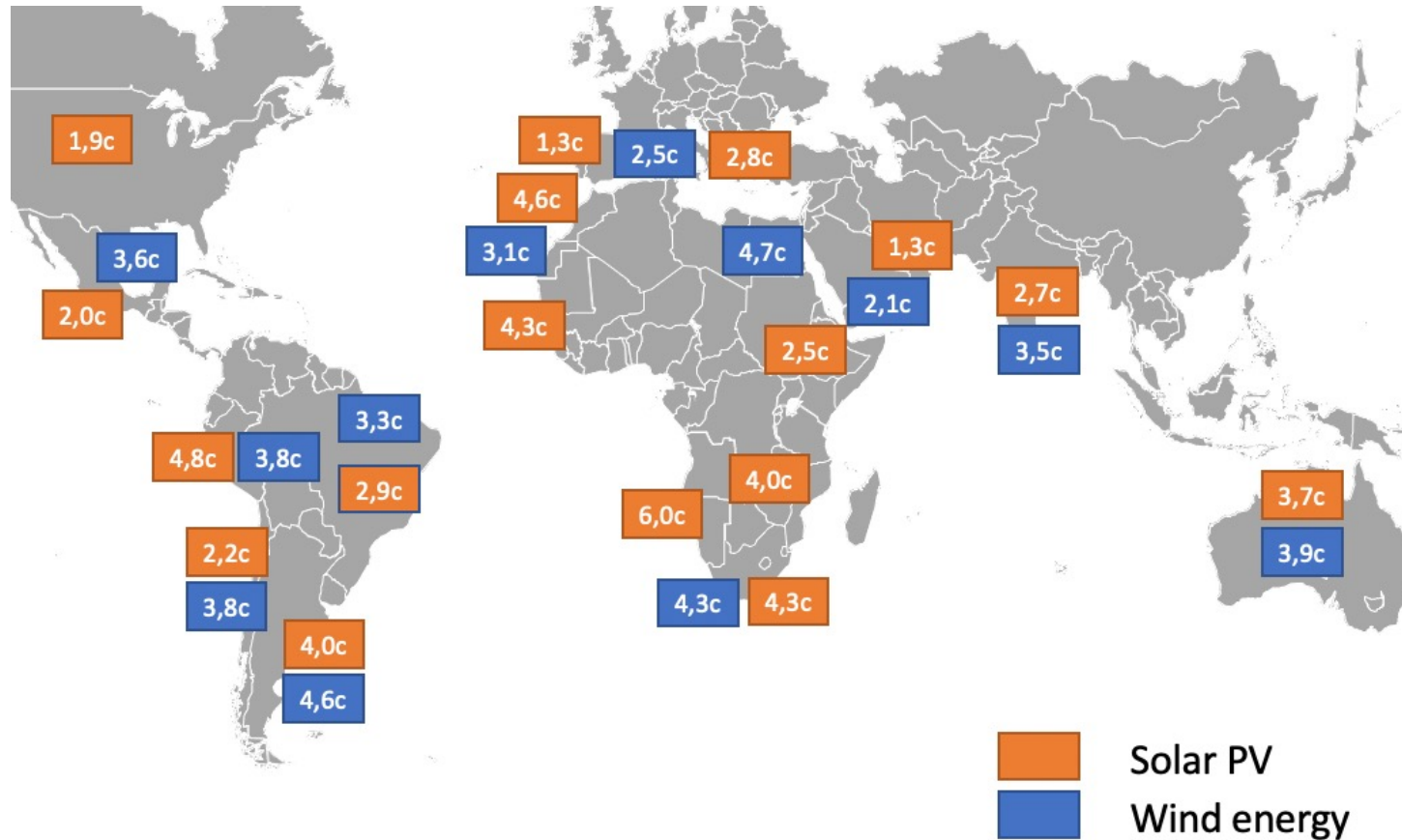


Climate Academy 2022: Digitalization and Energy transition

Christine Juta

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Trends in new generation capacity

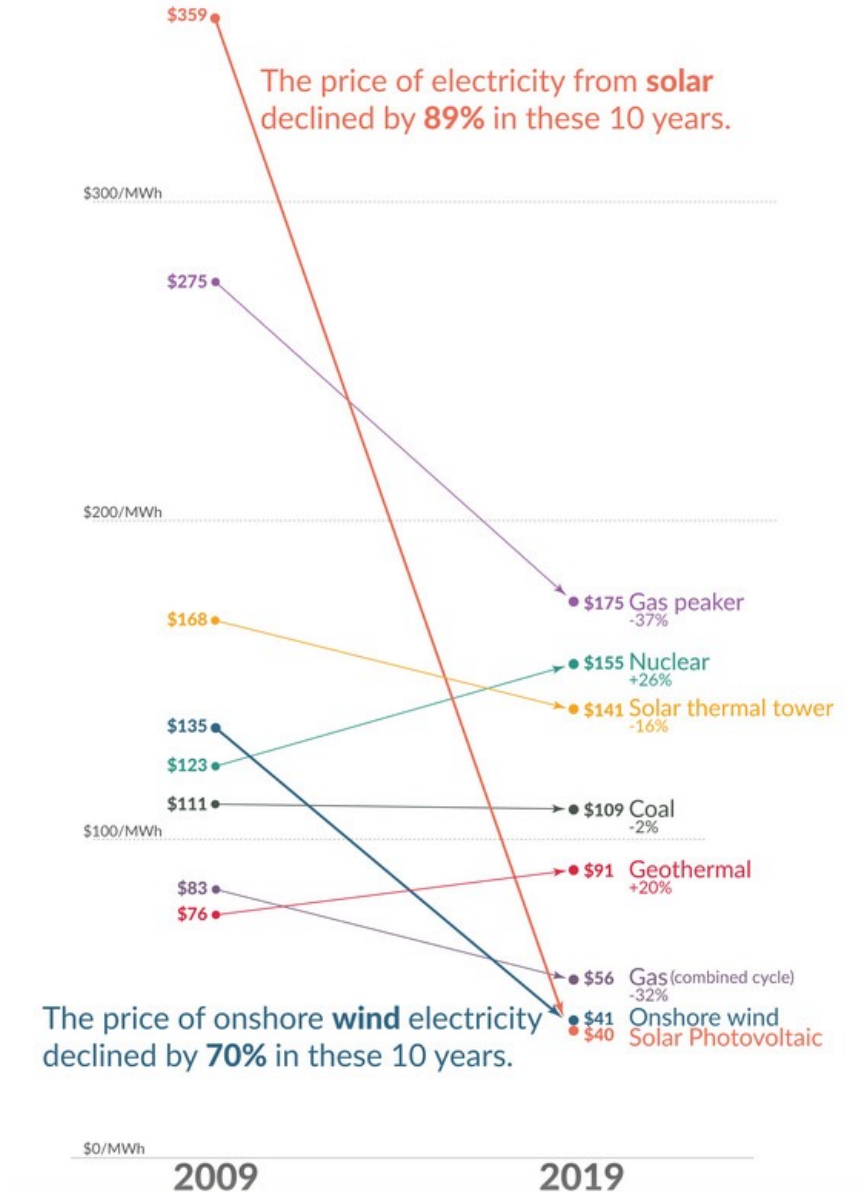


Source: Power Futures Lab

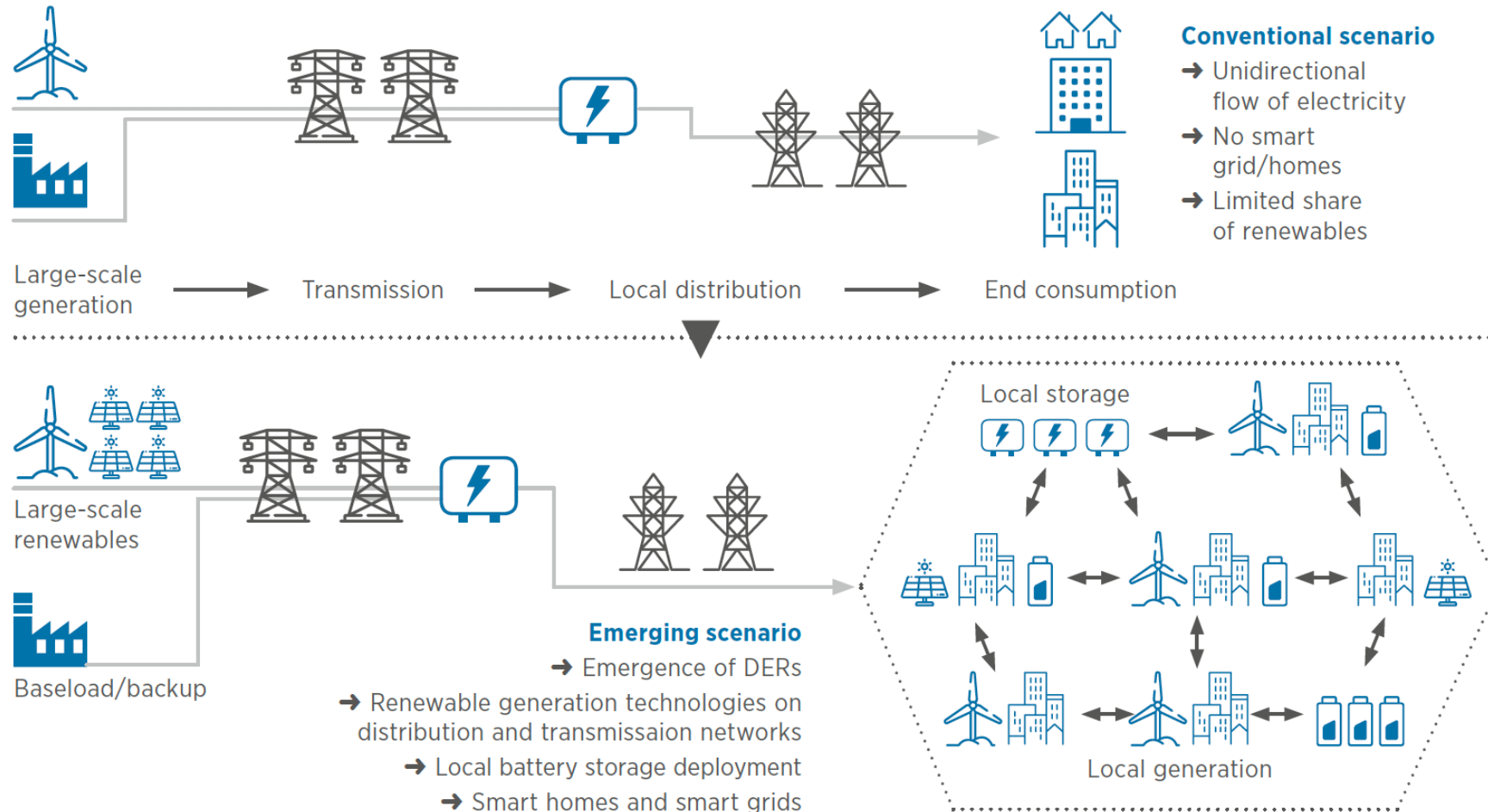
The price of electricity from new power plants

Electricity prices are expressed in 'levelized costs of energy' (LCOE). LCOE captures the cost of building the power plant itself as well as the ongoing costs for fuel and operating the power plant over its lifetime.

Our World
in Data



Sector transformation and the changing role of the consumer



Source: IRENA

Energy access for inclusive, sustainable, and resilient economic growth

Business model
innovation to support
last-mile service and
ensure affordability

Stimulating demand
growth and
productive use of
energy

Rural electrification

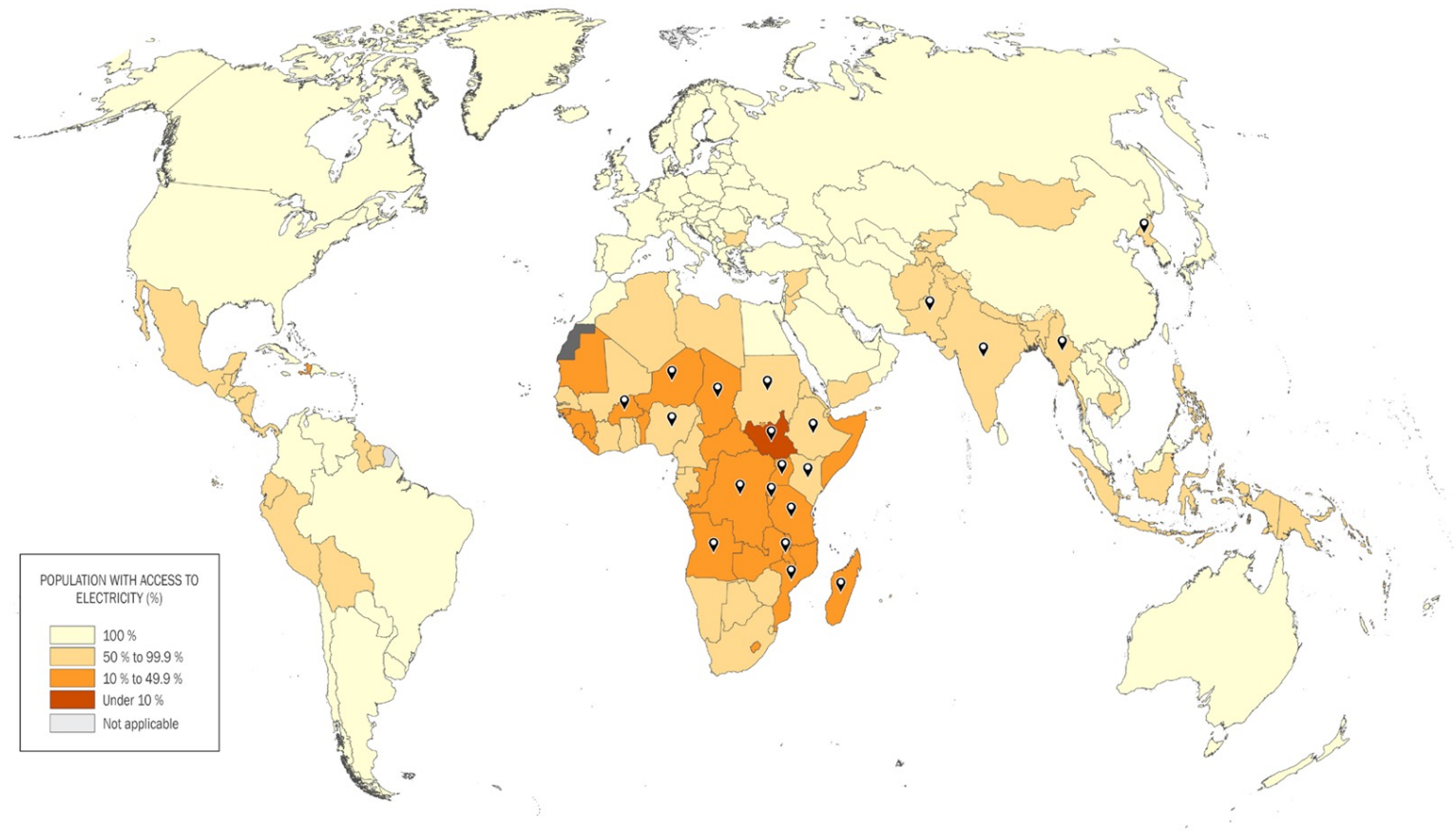
Gender equality in
energy access
interventions

Support for fragile
and conflict regions

Global progress toward the SDG7 targets

INDICATOR	2010	LATEST YEAR
 <p>7.1.1 proportion of population with access to electricity</p>	<p>1.2 billion people without access to electricity</p>	<p>733 million people without access to electricity (2020)</p>
 <p>7.1.2 Proportion of population with primary reliance on clean fuels and technology for cooking</p>	<p>3 billion people without access to clean cooking</p>	<p>2.4 billion people without access to clean cooking (2020)</p>
 <p>7.2.1 Renewable energy share in total final energy consumption</p>	<p>16.1% share of total final energy consumption from renewables</p>	<p>17.7% share of total final energy consumption from renewables (2019)</p>
 <p>7.3.1 Energy intensity measured as a ratio of primary</p>	<p>5.6 MJ/USD primary energy intensity</p>	<p>4.7 MJ/USD primary energy intensity (2019)</p>
 <p>7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy</p>	<p>11.2 USD billion international financial flows to developing countries in support of clean energy</p>	<p>10.9 USD billion international financial flows to developing countries in support of clean energy (2019)</p>

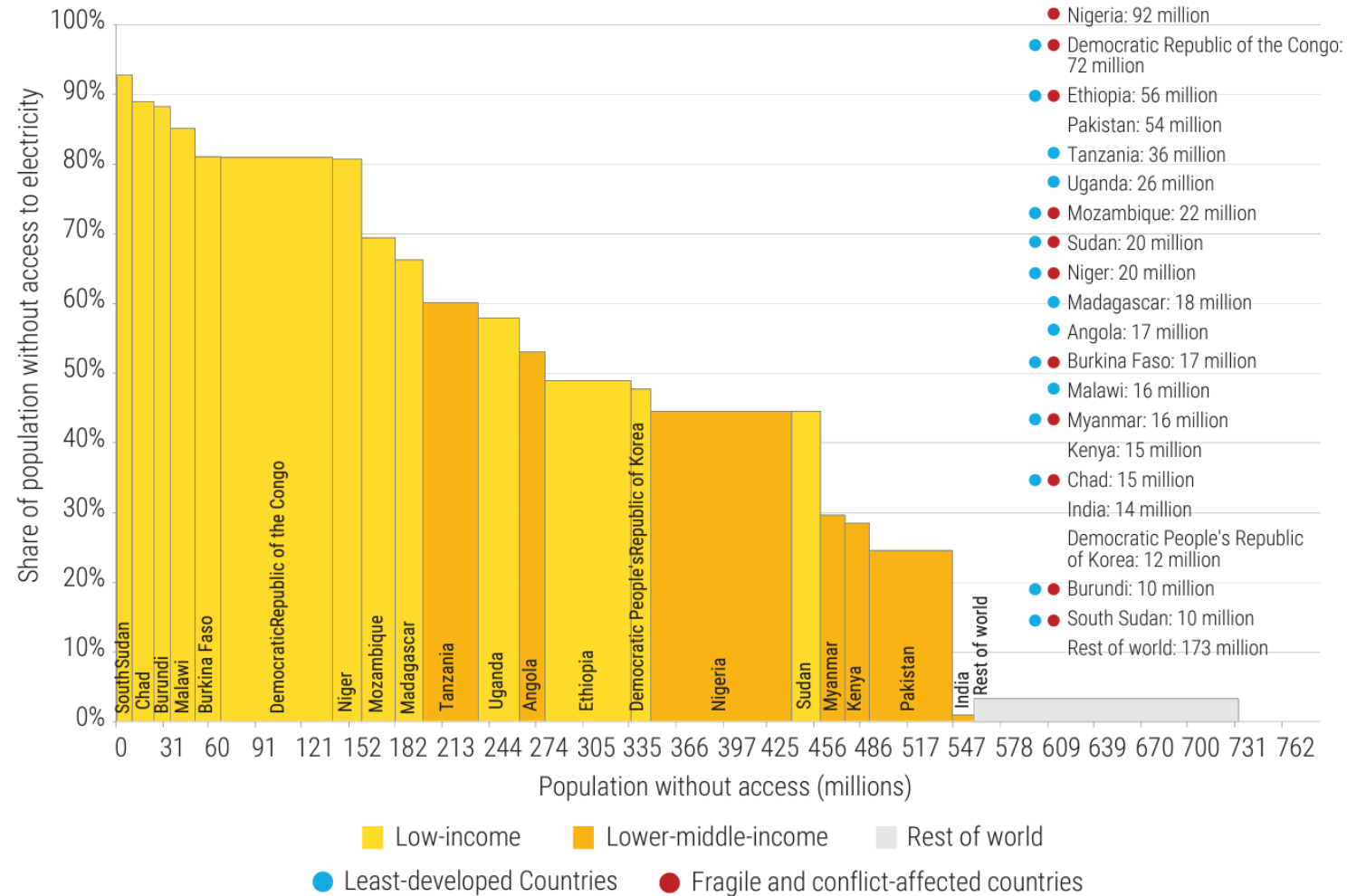
Share of population with access to electricity in 2020



Source: World Bank 2022.

Where are those without access?

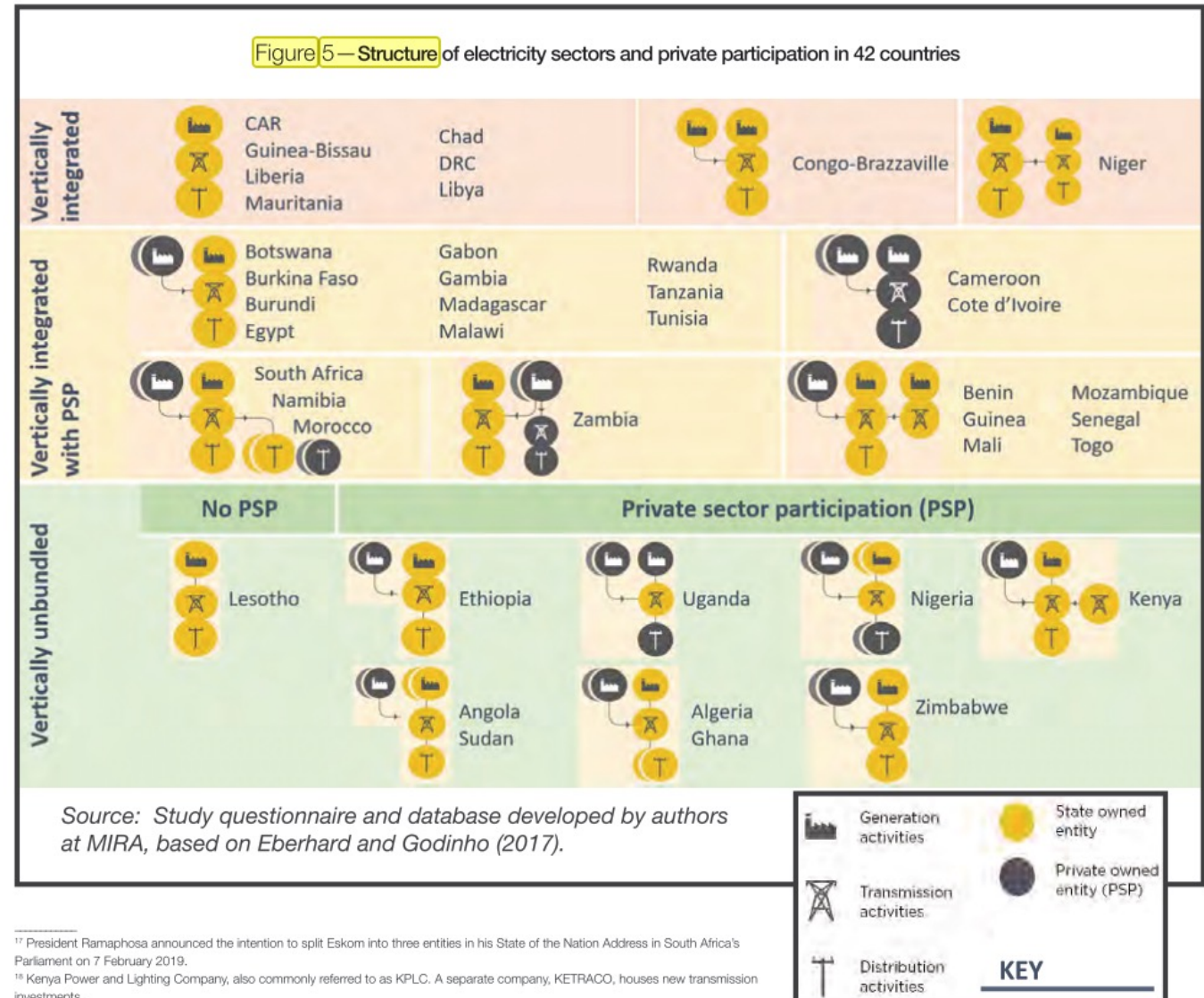
Share of population without access to electricity in top 20 access-deficit countries and rest of world, 2020



Source: World Bank 2022.


Structure of power sectors in Africa

Utilities face financial deficit and exhibit poor technical performance, with the consequence of insufficient investment in electricity supply infrastructure, poor system reliability and low access rates



¹⁷ President Ramaphosa announced the intention to split Eskom into three entities in his State of the Nation Address in South Africa's Parliament on 7 February 2019.

¹⁸ Kenya Power and Lighting Company, also commonly referred to as KPLC. A separate company, KETRACO, houses new transmission investments.



Thank you
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