



Ministry of Energy

Presentation at the Zim-Zam Summit 2025

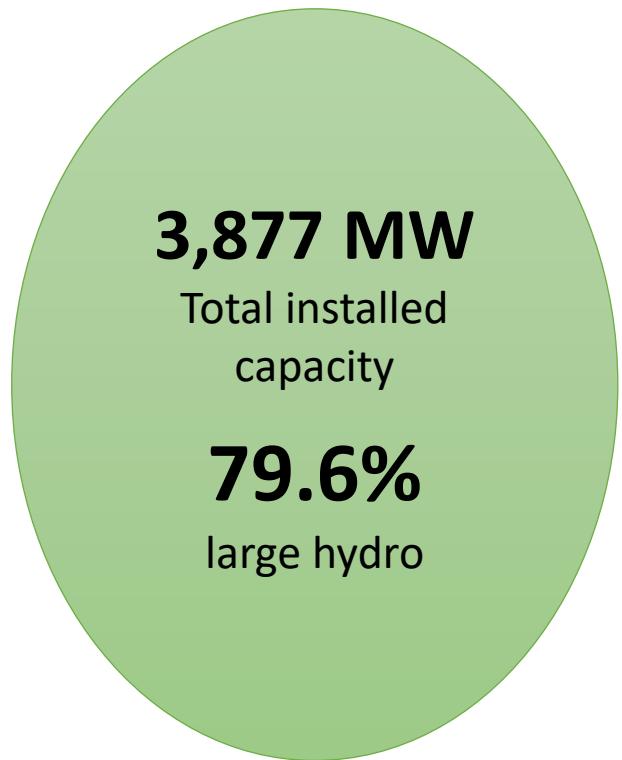
Radisson Blu
27 November 2025



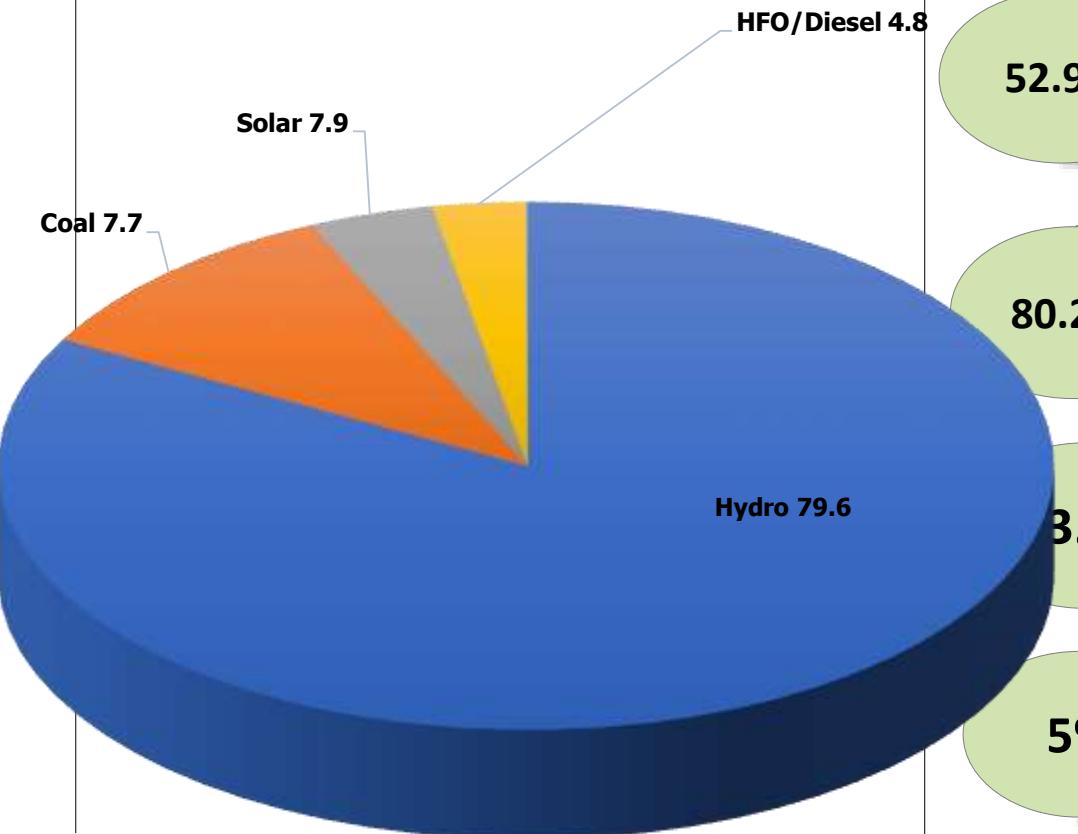


1. Sector Overview

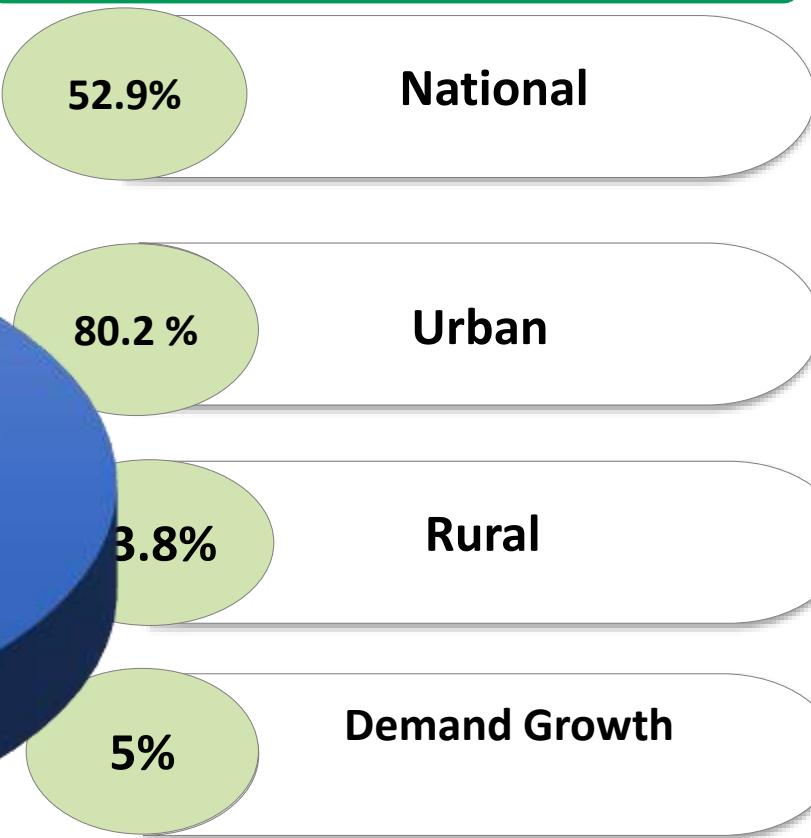
Generation



Electricity Generation Mix

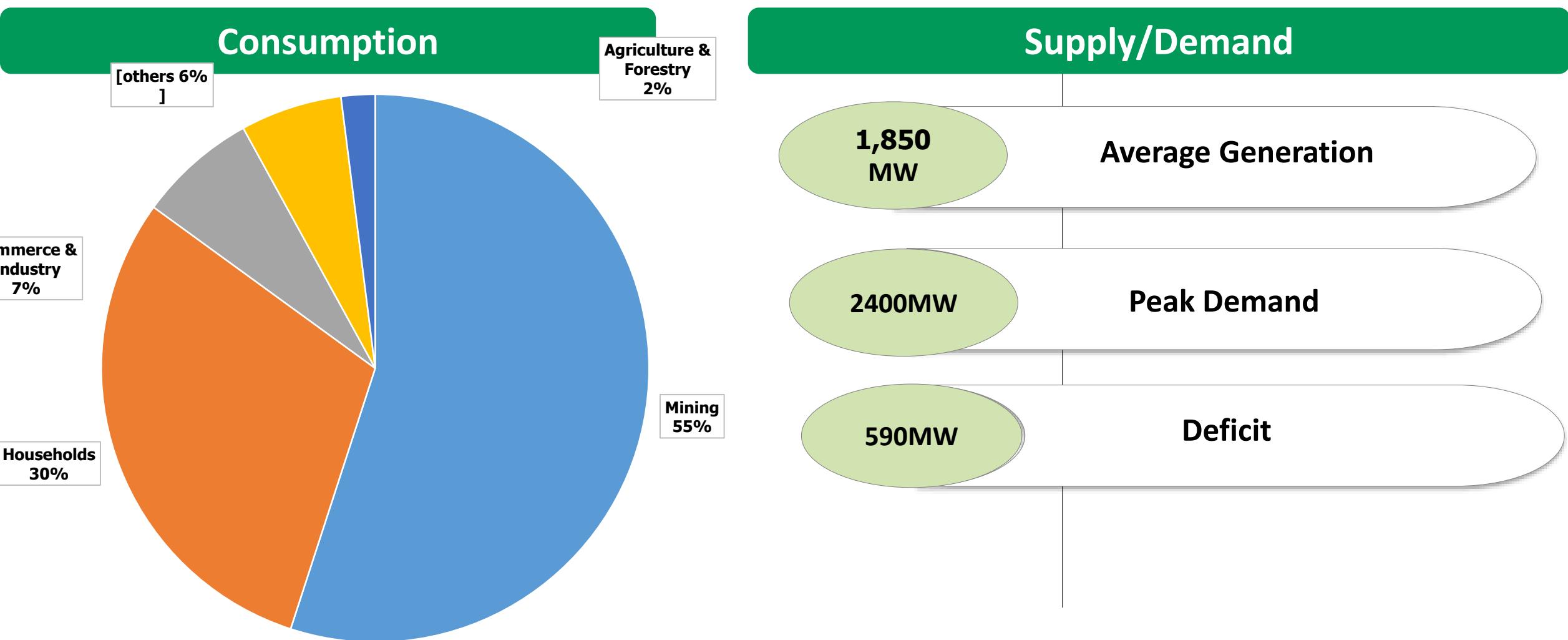


Electricity Access





1.2 Sector Overview

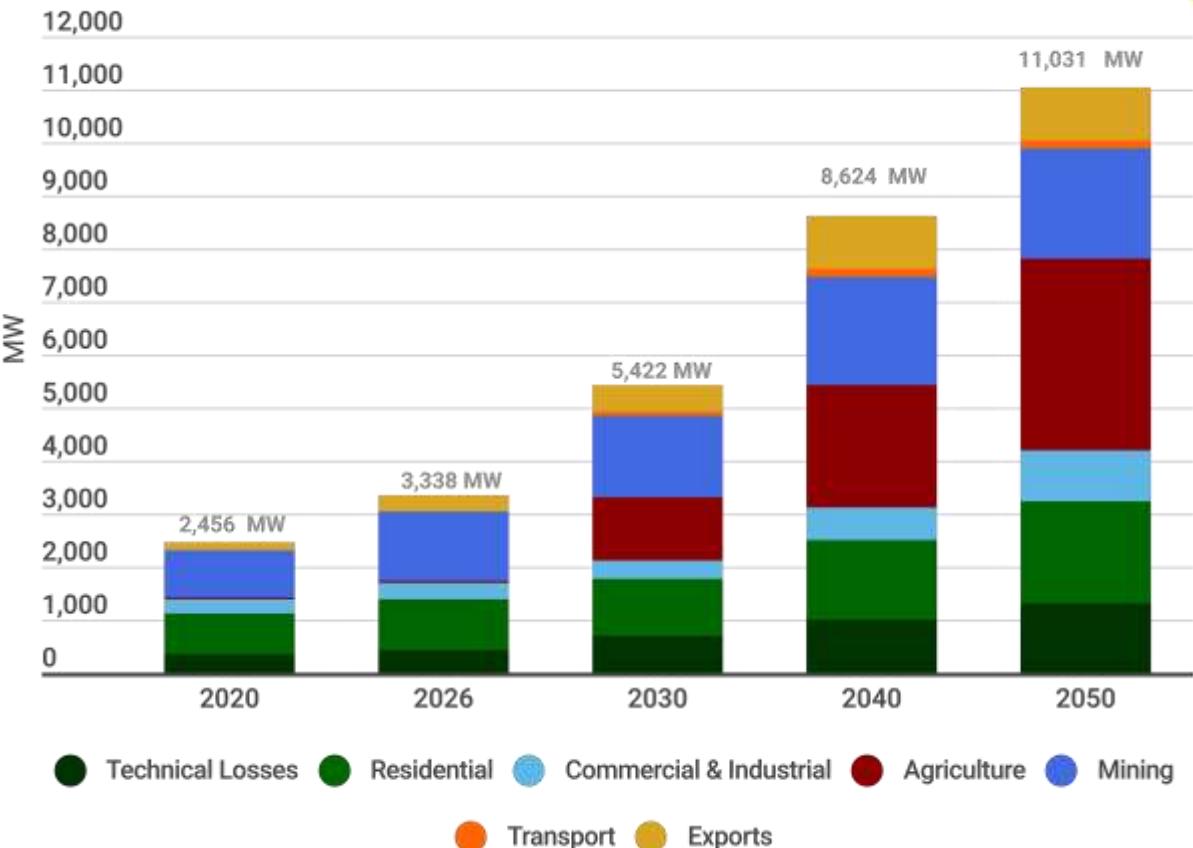




2. Demand Trajectory



- Peak electricity demand is expected to rise by 121% to 5,422 MW by 2030 and by a substantial 349% to 11,031 MW by 2050.
- Significant growth is projected in agriculture, power exports, mining, and residential sectors.
- The transport sector is identified as a noteworthy source of electricity growth.

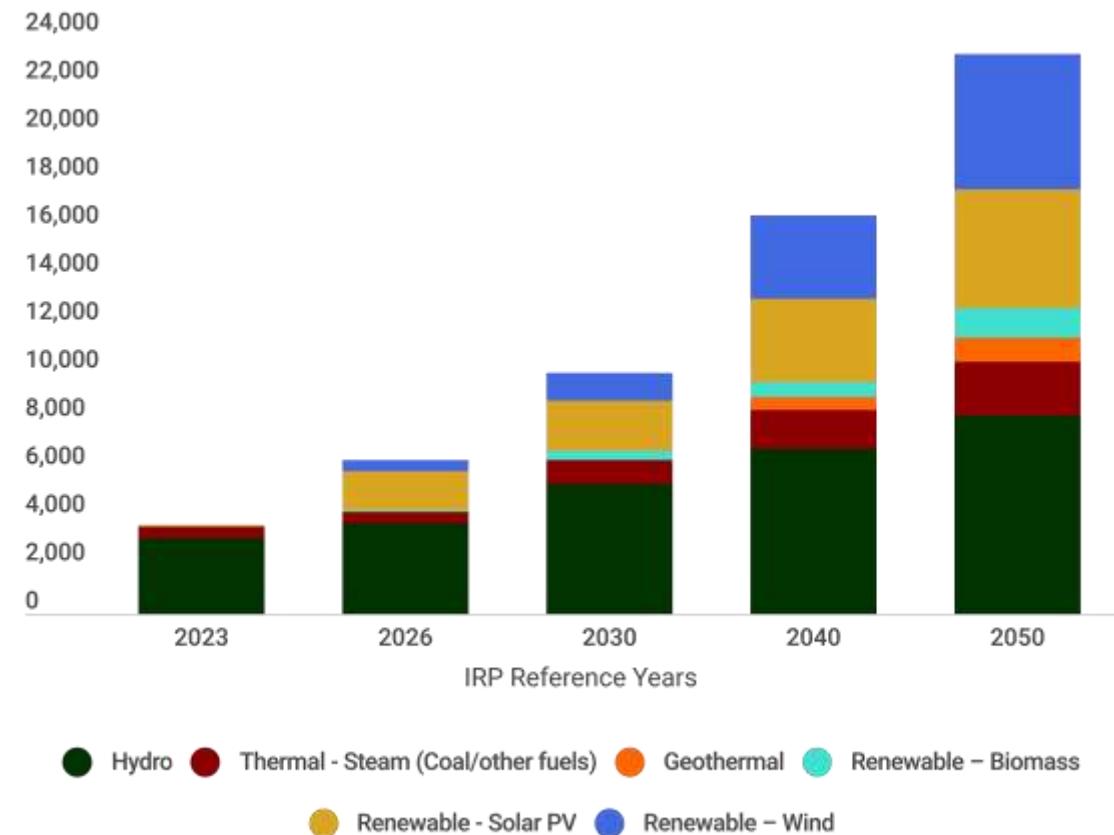




2. 2 Future Generation Diversification



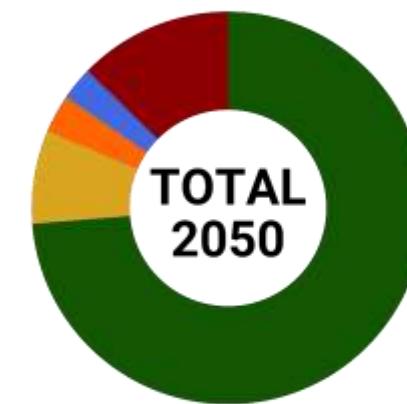
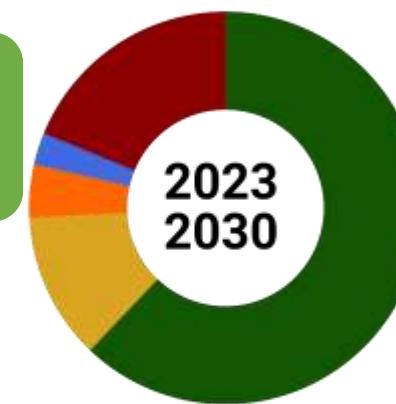
- Generation capacity projection to grow from 3,877 MW to 10,013 MW by 2030 and to 23,193 MW by 2050
- The increased capacity is primarily from investments in variable renewable energy sources (VRES)
- Current VRES contribution to overall generation capacity is 7.9%, while the anticipated VRES contribution in 2030 is 33%, increasing to 56% by 2050, thus demonstrating a clean energy growth trajectory for Zambia





2.3 Investment Needs

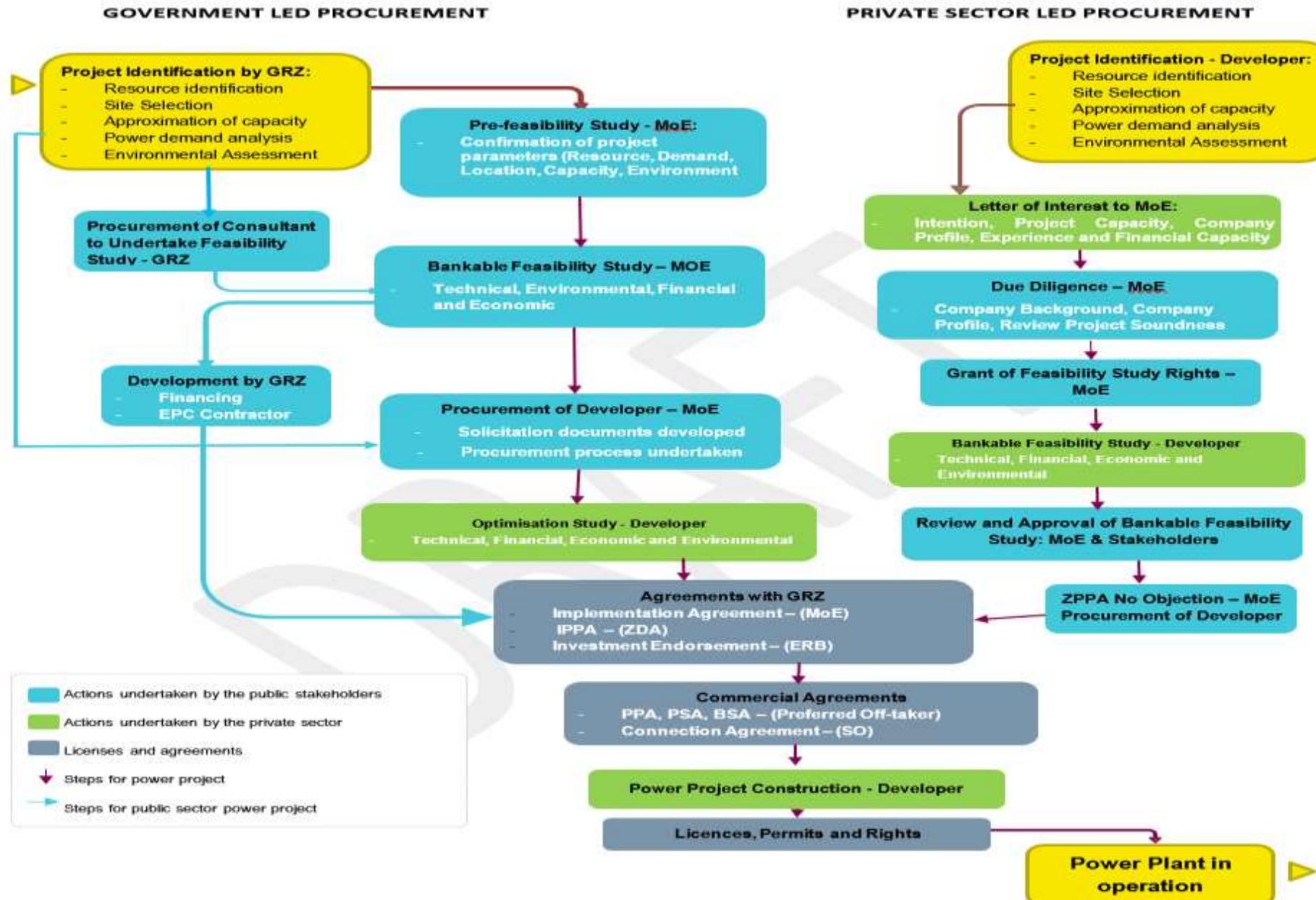
- The total IRP investment envisaged is **\$11.6Bn** by 2030 and **\$31.0Bn** by 2050
- On-grid generation represents the largest share of the IRP's capital investment requiring **\$7.2Bn** by 2030 and **\$22.8Bn** by 2050
- Off-grid energy access is the second-largest cost component, requiring investment of **\$2.2Bn** by 2030 and **\$3.9Bn** by 2050



IRP Investment (2023-2030)	\$million	Percentage
Generation	7,224	62%
Transmission (including 66kV)	1,410	12%
Distribution (33kv Network)	506	4%
On-Grid Access	308	3%
Off-Grid Access	2,185	19%
Total IRP Investment	11, 634b	100%

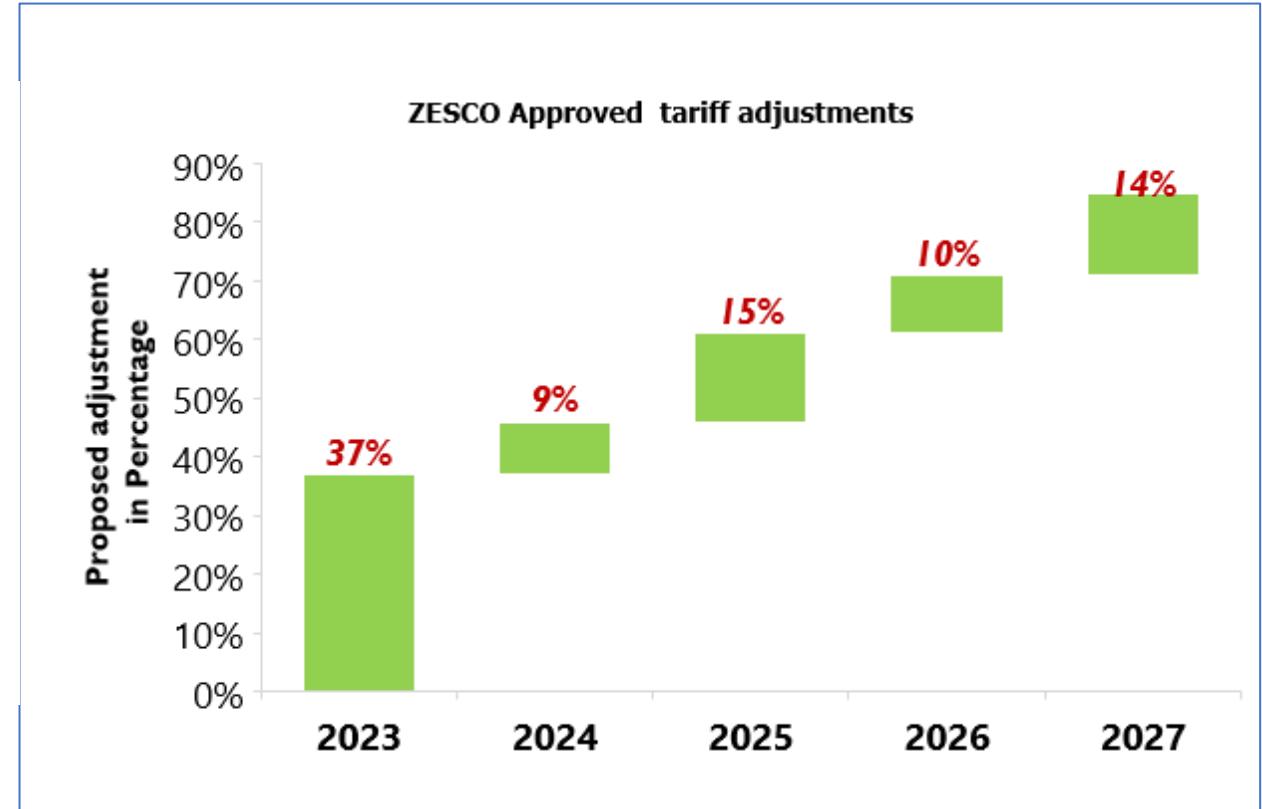
Total Investment	\$million	Percentage
Generation	22, 830	74%
Transmission (including 66kV)	2,386	8%
Distribution (33kv Network)	976	3%
On-Grid Access	853	3%
Off-Grid Access	3,926	13%
Total IRP Investment	30, 971b	100%

3. Government and Private led Development processes





3.1 Multi-year tariff Framework





3.4.1 Short Term Generation Snapshot

SN	Description	2025 (MW)	2026 (MW)
1	Utility Scale Projects - Public Sector	157.5	622.5
2	Utility Scale Projects - Private Sector	162	1,322
3	Green Cities - ZESCO Projects	30	40
4	Green Cities – Kiyona Energy	80.1	104
5	(a) Rooftops on Hospitals, Public Buildings and Other - Kiyona Energy Projects	77.5	83
6	(b) Rooftops Solar Projects Public/Private Sector Completed and Commissioned	1.1	-
7	Microgen Projects and Telecommunication Towers- Kiyona Energy Projects	40	230
8	Rural Electrification Projects – Off Grid and Private Sector	1.811	-
	Total Capacity (MW)	550.01	2,451.5
	Estimated Project Cost	USD 419.83M	USD 1,985.63M
	Estimated Total Project Cost (2025-2026)	USD 2,405.46M	



Thank You for Your Attention!!!

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