



# New Frontiers

## Investment Plan

2030



31.77	23.57	50.97
64.74	22.75	94.15
102.06	35.87	75.61
324.08	32.11	66.09
214.55	67.09	64.00
5.44	6.09	21.69
3.98	124.14	123.65
2.88	15.03	27.04
1.42	174.11	78.64
3.60	25.42	582.69
7.06	16.11	312.13
9.87	176.11	125.96
46.85	177.10	42.85
16.42	3.10	33.83
32.04	6.06	98.91
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# Disclaimer

The projections and forecasts contained in this presentation are only intended for NEPRA for the purposes of evaluating and determining KE's Investment Plan for Transmission & Distribution segment. The plan contained in this document is based on expectations, estimates and projections at the time of filing of the Investment Plan to NEPRA that could differ from actual results or events owing to business and operational risks and change in scope and circumstances.

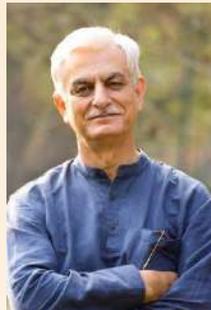
The information contained in this presentation is not intended as a solicitation or recommendation of investments. Under no circumstances should this information be relied on or treated as legal or other professional advice. Although KE has taken the greatest possible care in compiling this information, it assumes no responsibilities for any reliance for investment decisions placed thereon.

Serving  
**3.4 MN**  
Customers Today





Customers by 2030



**Privatised**

in

**2005**

and rebranded



Karachi Electric  
Supply Corporation

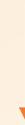


**K-ELECTRIC**

Privatised

in  
2005

and rebranded  
Better known as



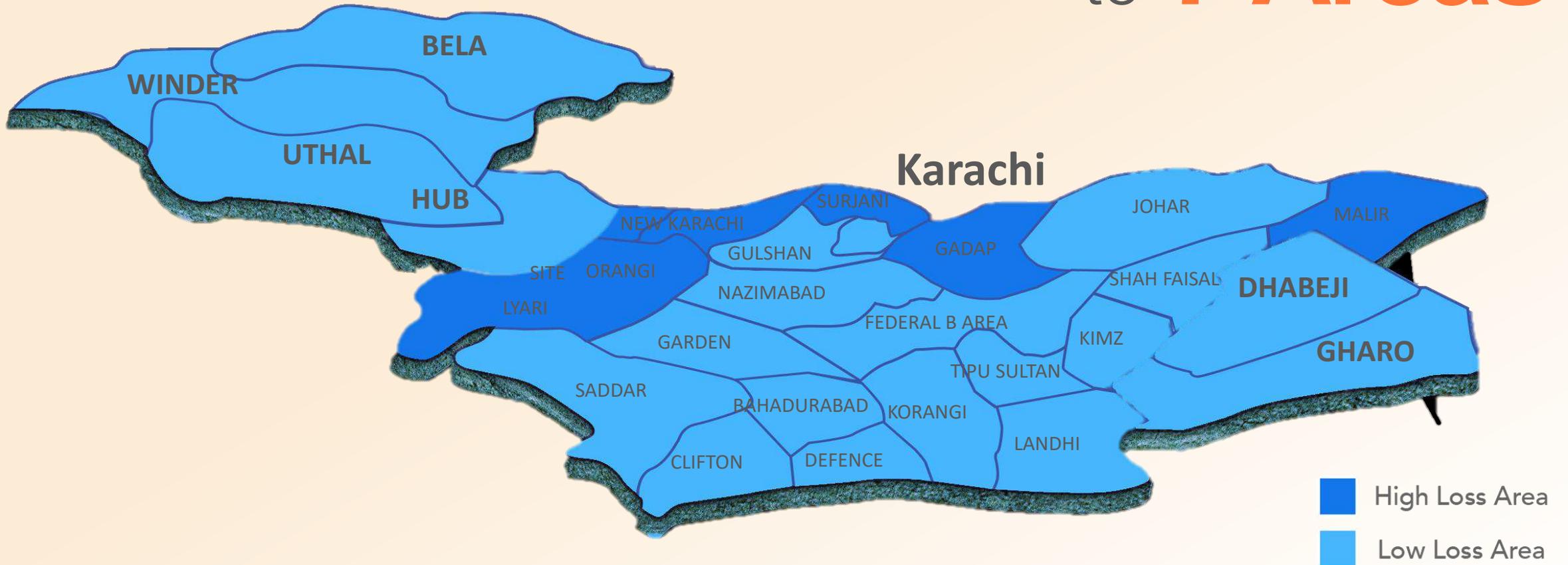
KINETIC

Def: the energy an object possesses  
due to its motion.

Powering

# 3,380 MW

# to 7 Areas



# Doubled

Customer Base

From 1.8M to **3.4M**

Power Consumed

From 8.5 BN kWh to **16.7 BN kWh**

Distribution Infrastructure

From 3,882 MVA to **8,685 MVA**

# Halved

T&D Losses

From 34.2% to **15.3%** Improving beyond NEPRA'S Benchmark of 15.95%

Since Privatization

# Boosting Industrial Growth

Through **2X** Power Supply  
3,000 GWh in 2005 vs 5,800 GWh in 2022



# KE recognised as the most improved Distribution Company



Improving beyond NEPRA'S Benchmark of 15.95%

	2022	2005
<b>KE</b>	<b>15.3%</b>	<b>34.2%</b>
LESCO	11.5%	13.2%
GEPCO	9.07%	10.6%
MEPCO	14.8%	20.3%
FESCO	9.10%	10.1%
IESCO	8.18%	9.90%
HESCO	32.8%	34.6%
PESCO	37.4%	32.1%
QESCO	28.10%	15.3%

“KE has significantly reduced its Transmission and Distribution (T&D) losses as compared to other DISCOs.”

*NEPRA state of Industry Report 2018*

“The evidence from KE suggests that with governance improvements and investment there is scope for significant reduction in DISCOs T&D losses”

*Committee for Power Sector Audit. Circular Debt Resolution & Future Roadmap (2020)*

# Innovation

Achieved through Industry First



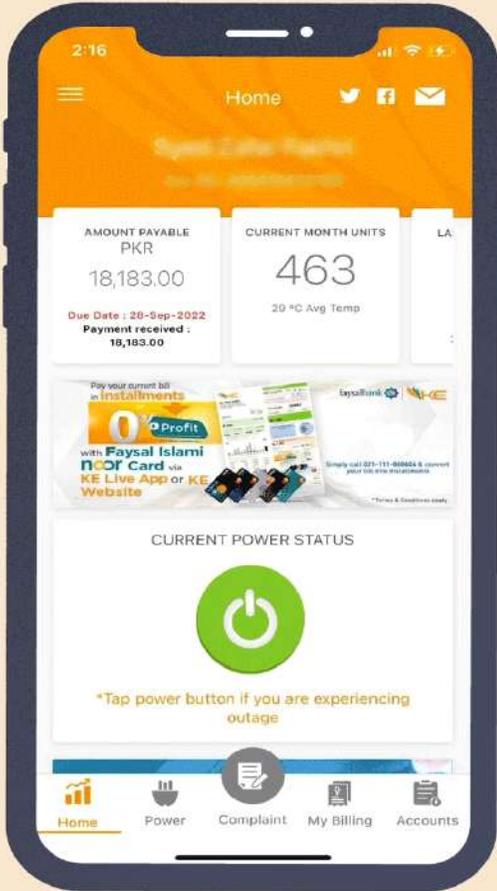
40% PMTs Converted to Aerial Bundled Cables

100% Industrial Customers Transitioned to Smart Meters

100% Meter Reading through Digital Handheld Units

Only power utility to offer bilingual WhatsApp service

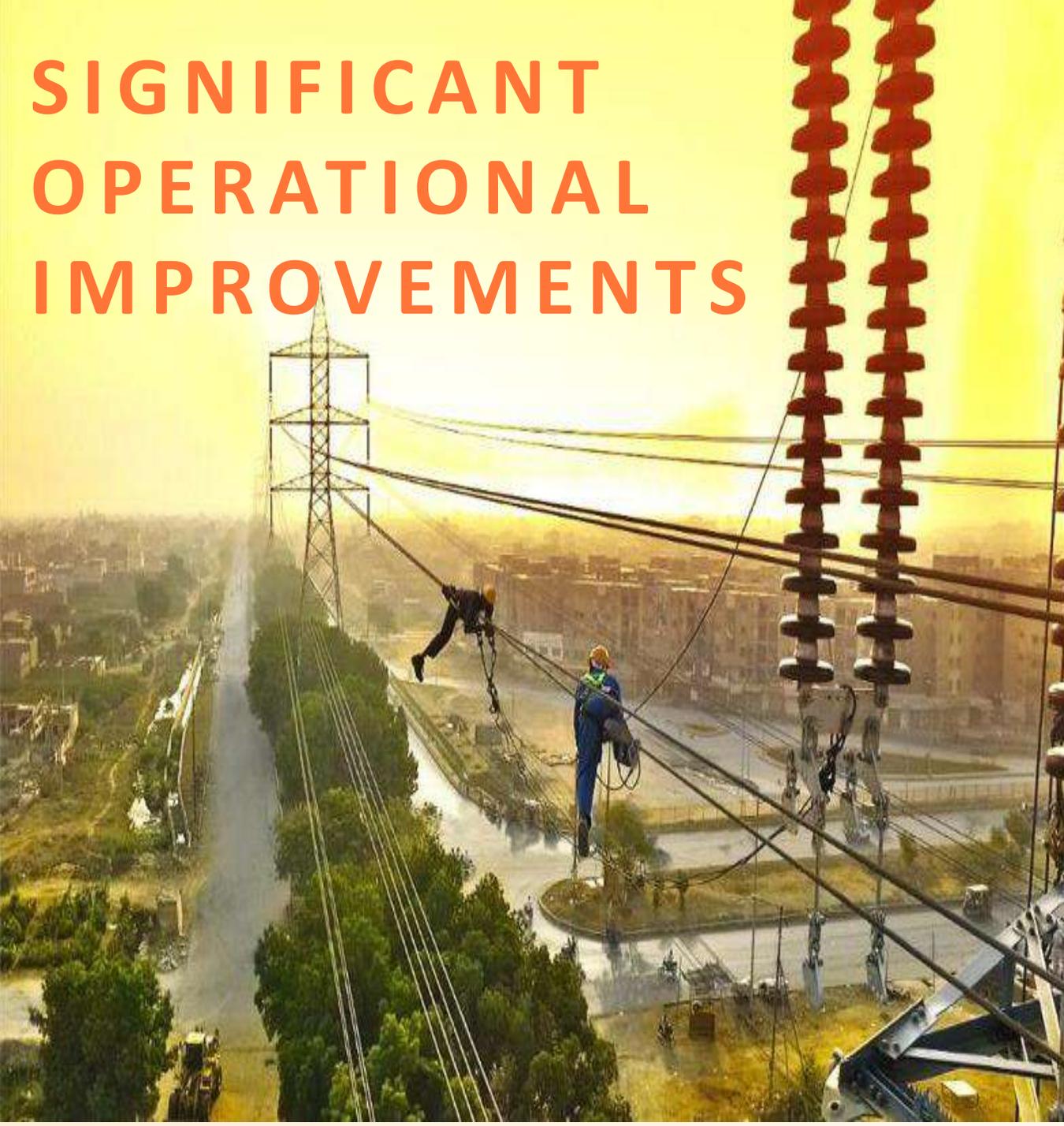
Dedicated digital KE Live app



Industry  
**1st**

- to deploy Smart Meters on all PMTs & Feeders
- to implement Mobile Device Management System
- to digitize the entire High-Tension network on GIS

# SIGNIFICANT OPERATIONAL IMPROVEMENTS



Achieved	2005		2022
Supply	2,200 MW	↑	3,380 MW
Generation Efficiency	30%	↑	39%
Grids	52	↑	71
Distribution Transformers	9,200	↑	30,000
Feeders	1,000	↑	2,000

# Continuous Investment across the Value Chain

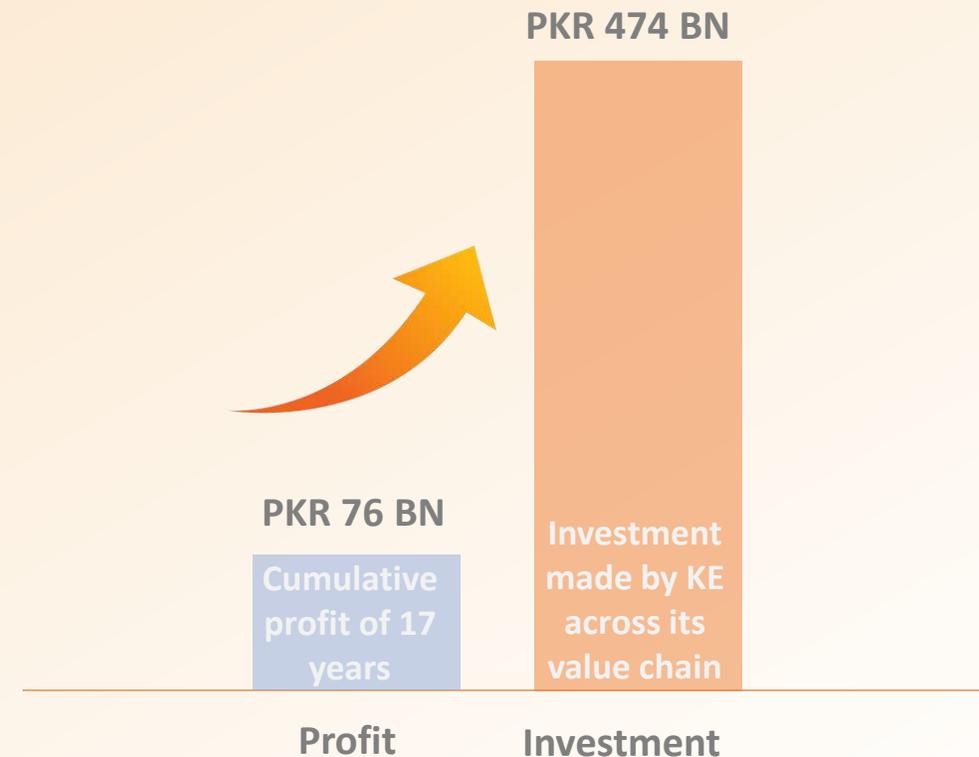
PKR 474 BN Investment  
vs. PKR 76 BN Profit

All profits reinvested in strengthening power supply  
NO DIVIDENDS PAID to investors in 17 years

Investments

**6X**

Higher than  
Profit



Through an

**INVESTMENT** of  
**474 BN PKR**

made across the value chain

**Korangi Gas Turbine Power Station 107 MW**



**Korangi Combine Cycle Power Station 248 MW**



**INVESTMENT IN KARACHI'S POWER SUPPLY**



**Bin Qasim I  
840 MW**



**Bin Qasim II  
573 MW**



**Site Gas Turbine Power  
Station 107 MW**

With the most-recent **900 MW** power plant  
**ENERGISED**



Amongst  
**Pakistan's**  
**TOP 5**  
Most Efficient  
Power Plants

# Spurred Investments

to enhance transmission capacity



**PKR 123 billion**  
invested

- **19 Grids** added to KE fleet taking total to 71 including 2 **Mobile Grids**
- **250+ kms** of EHT network added

220 kV Grids = 10  
132 kV Grids = 58  
66 kV Grids = 3

With the latest being **500KV** KE KANUPP  
Interchange (KKI) Grid



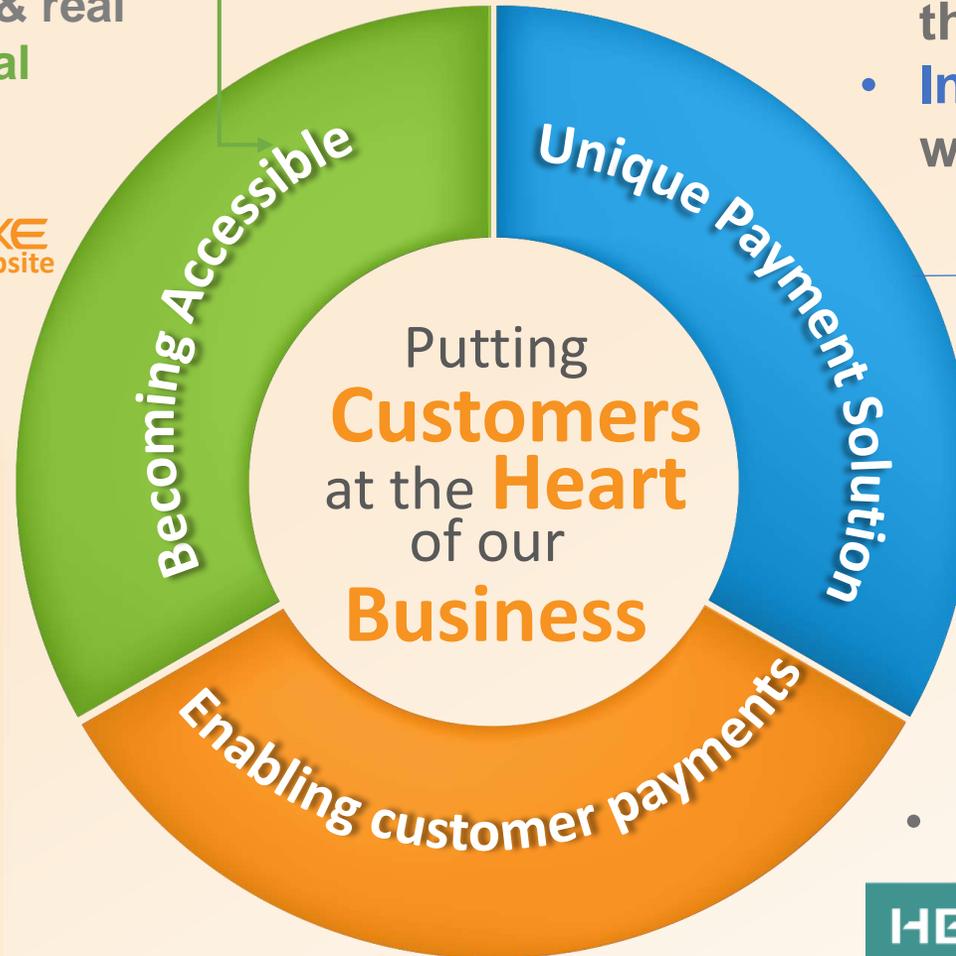
- Easy access to **65 physical touchpoints**
  - ✓ Upgraded 27 touchpoints & added 38
- Enabling **24/7 accessibility & real time update** through **7 digital touchpoints**



- Industry First to offer **Cashback**
- **400k+** Customers availed the offers till date
- **Industry first** partnership with banking channels

# 1M

Digitally Connected Customers



- Over **40 payment partners**



Before



After



After



State of the art Mega Customer Care Centre

Accessible Mobile Centres

New & Improved CCCs & CFCs

**27** Customer Care Centre

**25** Customer Facilitation Centre

**11** IBC on Wheels

# Driving Greater Good For Social Impact



# Breaking Gender Barriers

in the Power Sector



## Roshni Baji

NEIGHBOURHOOD WOMEN AMBASSADOR INITIATIVE

**150** Women Empowered



**S&P Global Platts**  
Global Energy Awards  
Award Winner

# Breaking Gender Barriers

**FIRST** in the Power Sector

**37** Meter Readers

**9** Grid Operators

**1st** Lineswomen  
Coming Soon!



In a first, Pakistani power company appoints five women grid operators

The future is  
**GREEN**

# CONTRIBUTING TO PAKISTAN'S 2030 TARGETS

Increase annual growth rate of real **GDP per capita to 5%**



Increase share of **renewable energy consumption to 25%**.

Increase **access to electricity to 96%**



Reduce projected **emissions by 50%**

Increase **manufacturing value added to 16% of GDP**



Introduce **30% Electric Vehicles**





Ensure access to affordable, reliable, sustainable and modern energy for all

Requires a Robust Investment Plan

Expected demand by 2030 is

**5,000MW**

BY



WE AIM TO ACHIEVE

30%



Growth in  
Our Customers



Share of  
Renewables



Reduction in  
Power Outage

We embark towards New Frontiers with an

# INVESTMENT

Plan of

PKR

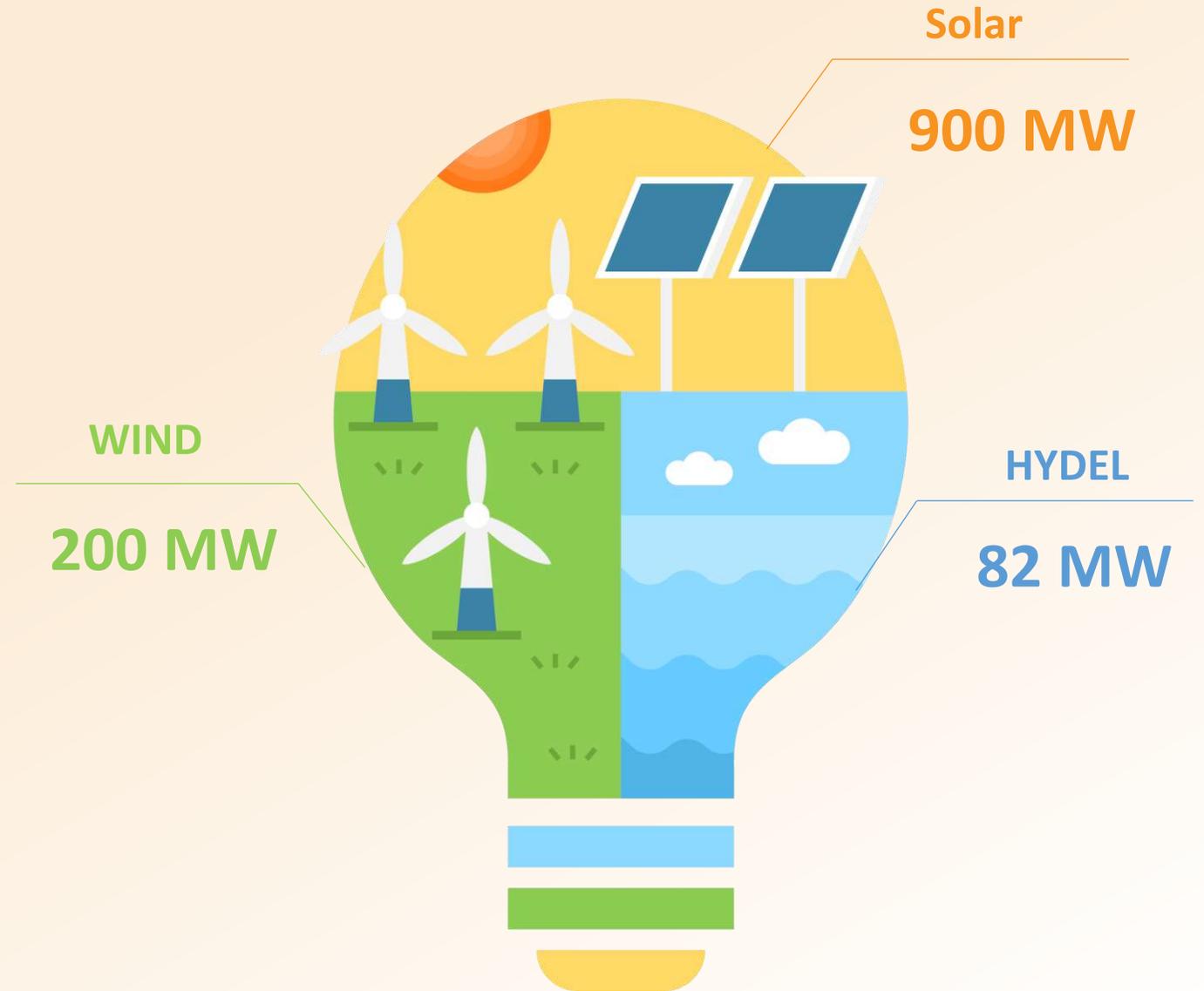
# 484BN

Adding

**1,182**

**MW**

**Renewables**



# With Innovative Solutions



## Pakistan's first 500 MW Floating Solar

- Expected commissioning by 2025
- Financed by World Bank

MARKETS

Pakistan's first 500MW floating solar power plant to be installed at Keenjhar

- Will start generating electricity in a span of two years

BR Web Desk Published July 8, 2022



## 82 MW power from Micro-Hydel project in KPK



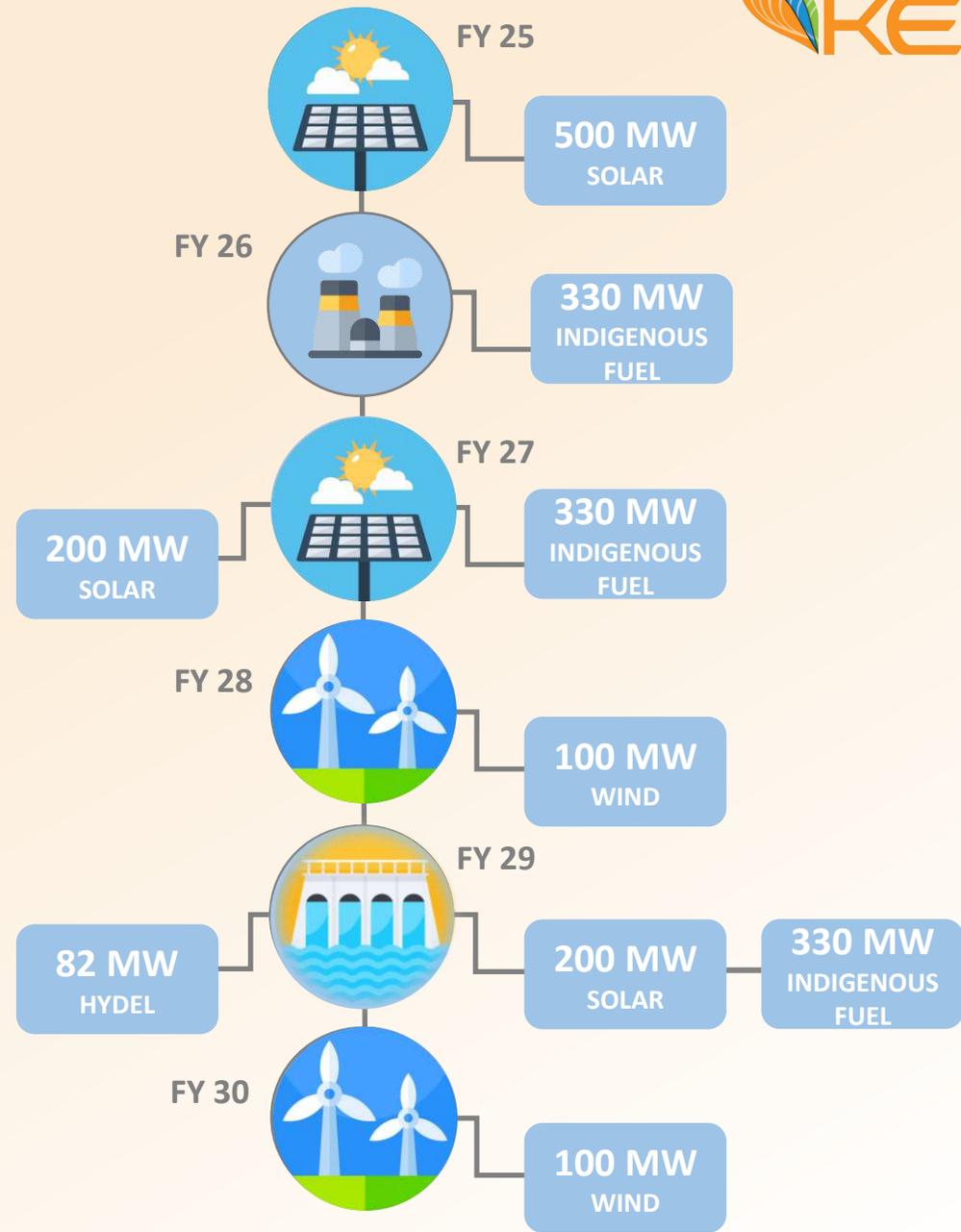
Subject to finalization of wheeling regulation

# Adding a total of

# 2,172

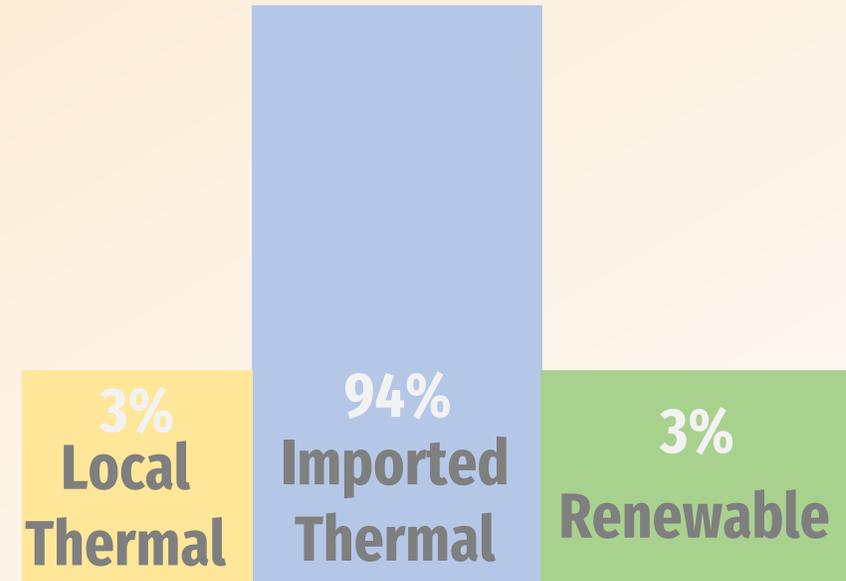
# MW

## to Generation Capacity



C. **30%**  
Share of  
**Renewables**  
to Generation Capacity

## Current Generation Capacity

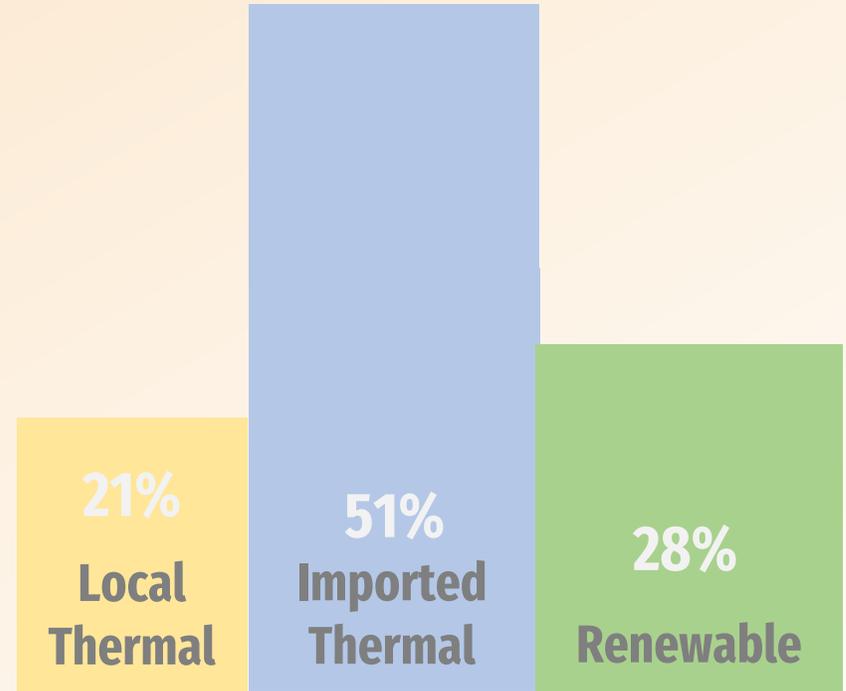
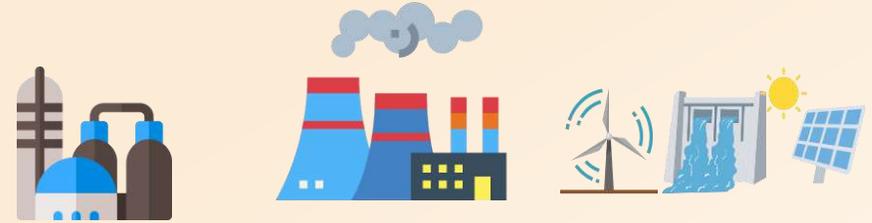


# C. 30%

Share of  
**Renewables**  
to Generation Capacity

Reduced reliance on  
imported fuel

## Proposed Generation Capacity



Power supply capacity enhanced to

**6,715 MW** (including National Grid)

# Innovations in distribution

- Advanced Distribution Management System
- Mobile workforce Management
- GIS (Geographical Information Systems)
- Advance Analytics & Artificial Intelligence

- Faster Resolution
- Fewer Interruptions
- Enhanced Capacity

**Improved Customer Experience**

# Enhancing Access

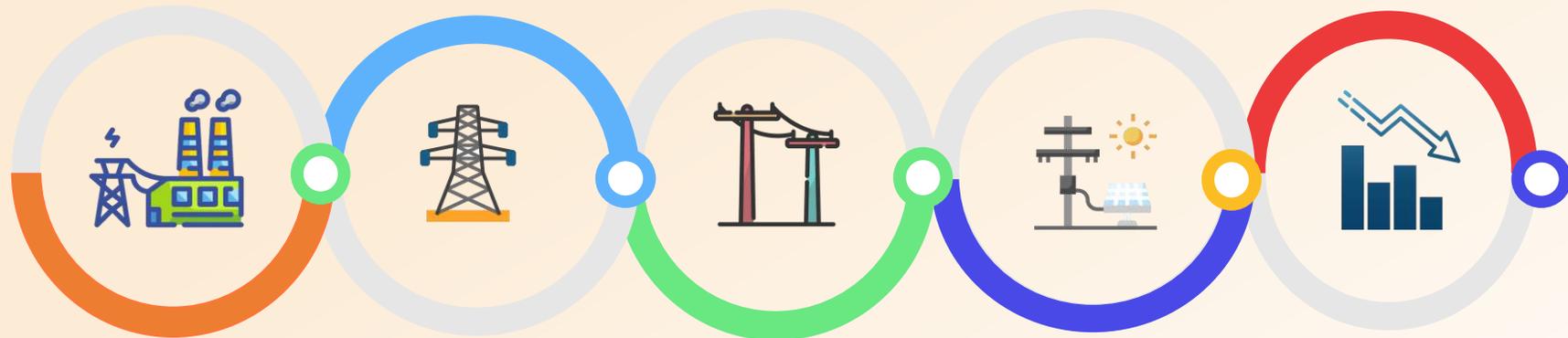
Addition  
by FY30'

Addition of  
**2,172 MW**  
Generation  
Capacity

**13 Grids &  
450km**  
Transmission  
Lines

**444**  
Feeders

**7,606**  
Distribution  
Trafos



Total by  
FY30'

**6,715 MW**  
Generation  
Capacity

**85 Grids &  
1,904km**  
Transmission  
Line

**2,528**  
Feeders

**38,412**  
Distribution  
Trafos

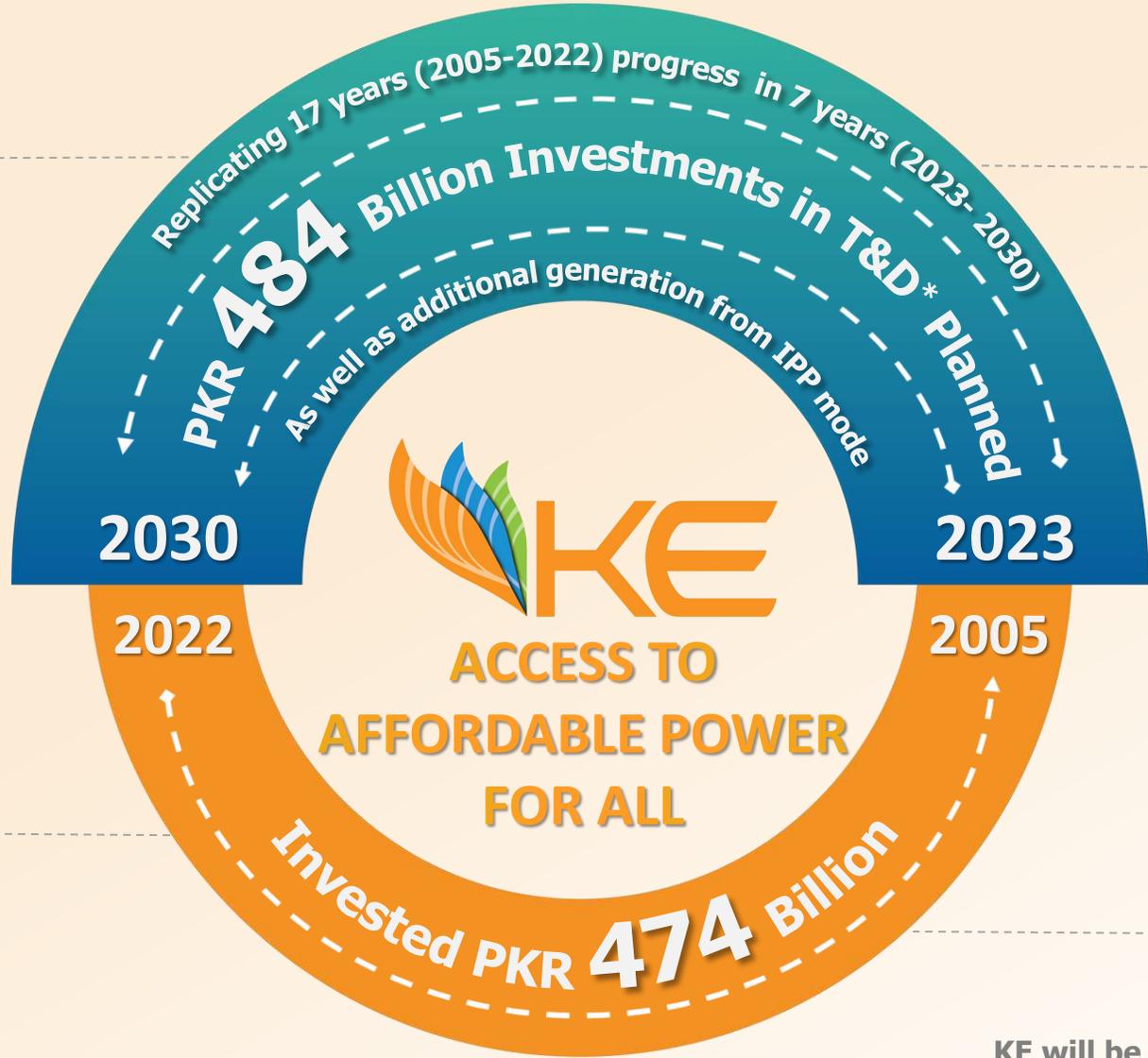
Interruption frequency &  
duration reduced by  
**33% and 29%**

# KE INVESTMENT PLAN 2030

Since Privatization  
(2005-2022)

**DOUBLED**  
Customer Base, Power Consumed  
& Infrastructure

**HALVED**  
T&D Losses



## Vision 30 by '30



- ↑ Share of Renewables
- ↑ Customer Base
- ↓ Power Outage

KE will be serving a power demand of ~5000MW to approx. 5.0 million customers

\*Transmission & Distribution

Investment plan 2030 covering July 2023 – June 2030 period, subject to approval by NEPRA

Join us in our Journey to Conquer



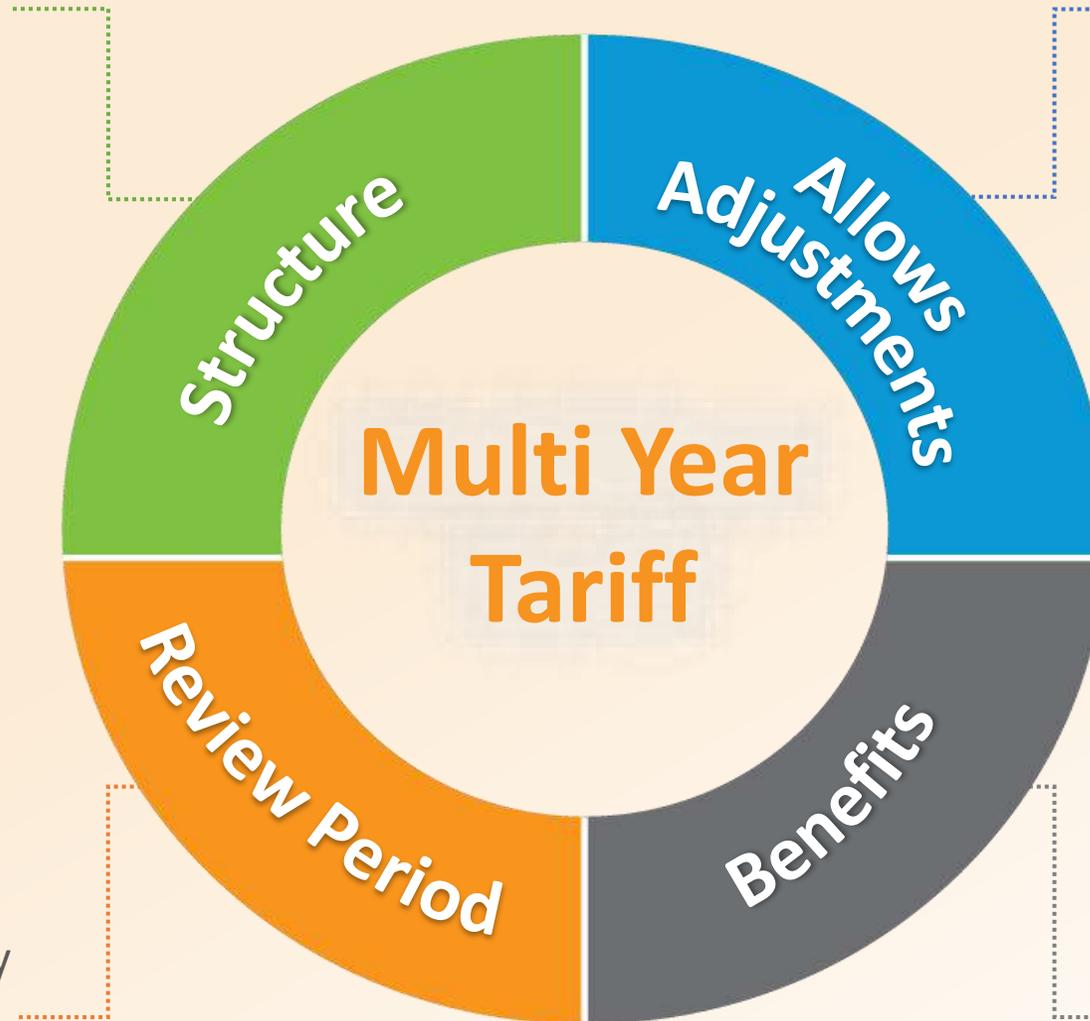
NEW FRONTIERS

# Investment plan 2030 subject to MYT approval by NEPRA



- Tenure: **7 Year**
- Requested for **Unbundled** Tariff for all Generation Plants, Distribution, Transmission & Supply

- **Scope review has been proposed after every 2 years** to account for the changes required due to demand growth, technology and other factors



- Allows variations for **macroeconomic & external factors** i.e. KIBOR/LIBOR, Exchange rates, CPI, etc.

- **Timely execution** of planned investments
- **Ability to ramp up infrastructure investments** based on customer-needs
- Greater **transparency** for all stakeholders
- **Consistent** with other utility tariffs