### **K-Electric Limited**

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# The Harmony of Energy

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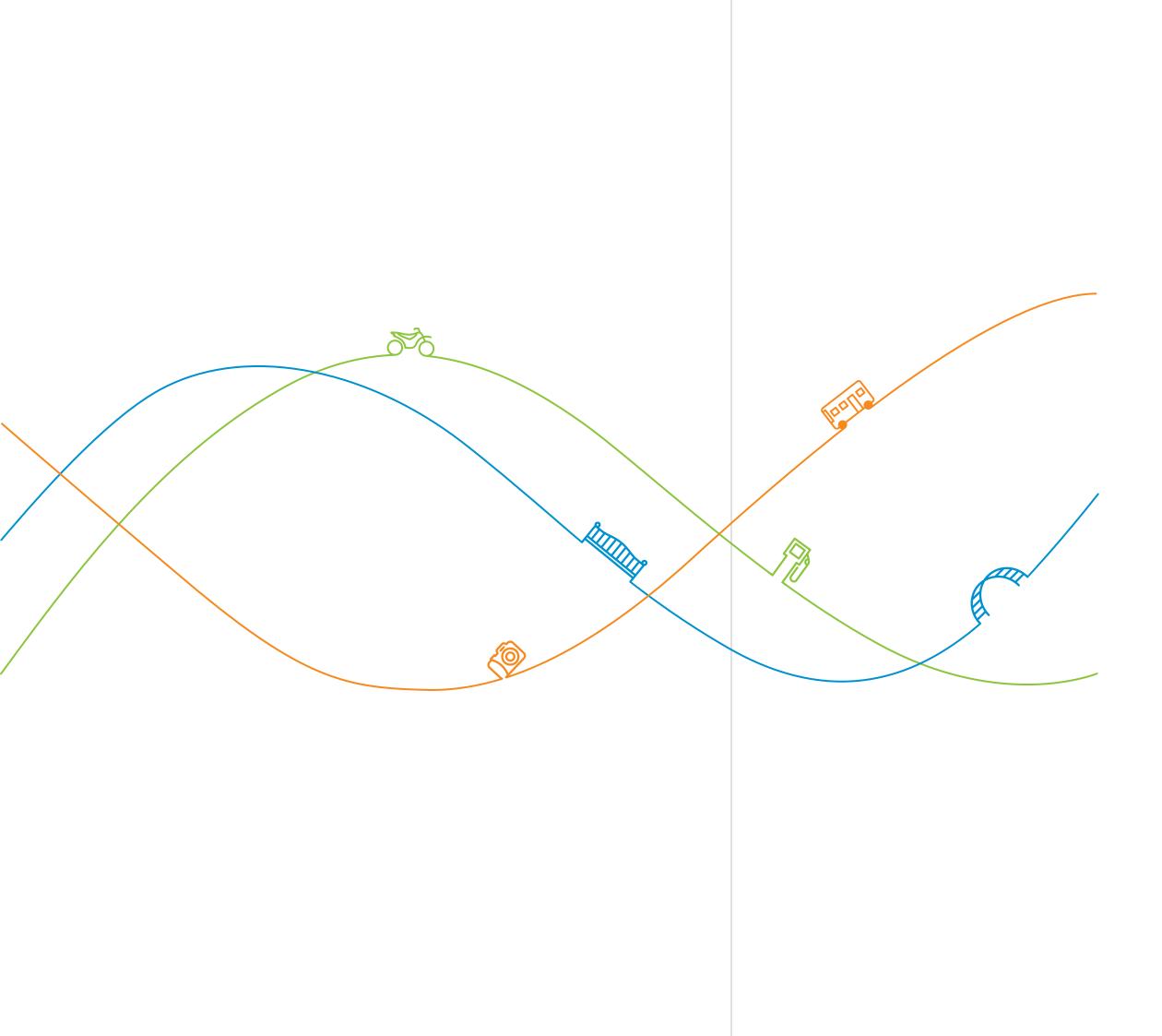
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Sustainability Report 2014









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# **About the Report**

This report celebrates our strong performance against our environmental and social commitments, as it is KE's first externally audited sustainability report. The purpose of this assessment is to provide a benchmark for comparing the combination of the organisation's social, economic, governance, and environmental performance against established standards and across time. In doing so, the report communicates externally verified information on the organisation's performance utilizing the Global Reporting Initiative (GRI), G3.1. KE plans to use the results and conclusions reached in this report to further improve its sustainability performance in the future.

This year, KE presents the second report that ensures further assurance to our stakeholders through obtaining a third party verification by KPMG. The verified report is grade checked by GRI at A+ level, which is the highest disclosure level checked by the global organisation. This report is a manifestation of KE's commitment to achieve the highest levels of disclosure and transparency with its stakeholders.

The report covers activities that are located within KE's direct space and the ones related to its community and respective stakeholders. The report focuses on the organisation's licensed network area. In this way we have limited the scope of this report to the activities of KE in the direct sense, not including analyses of outsourced operations and sustainability-related activities of the entities working on the commercial supply and demand sides of KE operations. We hope to expand our sustainability-related monitoring and disclosure capacities to account for our suppliers as well by the next reporting cycle.

KE follows basic and widely used international standards in its data measurement, compilation, and calculations. Moreover, the information needed to asses our performance in relation to GRI, G3.1 generally require straightforward measurements and analyses. Assumptions regarding measurements in this report are, therefore, unlikely to affect the information provided or pose problems for future performance comparison. KE is likewise committed to communicating and broadcasting any substantial changes in measurement assumptions and analyses in its future sustainability reports.

The report was compiled by the ESG and Sustainability department of KE. in collaboration with Distribution, Generation, Transmission, Human Resources, Finance, Corporate Affairs, HSEQ, Strategy and Marketing and Communications departments with some assistance from external consultants. In compiling this report, the team's goal was to satisfy the disclosure standards stipulated in GRI, G3.1, Level A+, as a tool for both external disclosure and internal assessment for future planning. Despite all the challenges that the organisation faced in its recent past, the reforms conducted in relation to its management systems were such that it is now able fully to report on most of the GRI, G3.1 disclosure indicators.

The full report is available online at our website www.ke.com.pk. We look forward to your feedback, suggestions and queries on our second sustainability reporting initiative, which can be directed to: **zehra.mehdi@ke.com.pk** 



# GRI has confirmed that the report was prepared according to the GRI G3.1 Guidelines, at Application Level A+

K-Electric Limited (KEL) 2013-14 Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) sustainability reporting Guidelines, version 3.1. GRI Report Services has determined that KE's 2013-14 Sustainability Report fulfills the requirement of GRI G3.1 application level A+.

The GRI Application Level Service confirms that the required set and number of disclosures for the application level have been addressed in the reporting and that the GRI content index demonstrates a valid representation of the required disclosures. The use of the GRI Application Level Service icon serves as the formal confirmation.



Application Level K-Electric Limited





# **Independent Assurance Report to the Board of Directors**

# Scope

We have been engaged to perform limited assurance engagement on the Sustainability Report ("the Report") of K-Electric Limited ("the Company") for the period 01 July 2012 to 31 December 2014 prepared by the management of the company.

# Management's Responsibility

The company's management is responsible for the preparation and presentation of the report in accordance with the requirements of the framework adopted by the company in line with the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI 3.1) and supported by the company's internally defined procedures, as described in the GRI Reference Table of the report and CSR Voluntary Guidelines 2013 (the Guidelines) issued by Securities and Exchange Commission of Pakistan.

# Auditors' Responsibility

Our responsibility is to express a conclusion on the report based on our work. We conducted our work in accordance with the International Standard on Assurance Engagement 3000 "Assurance Engagements other than Audits or Reviews of Historical Financial information".

The standard requires that we comply with ethical requirements and plan and perform the assurance engagement, under consideration of materiality, in order to provide our conclusion with limited assurance. In a limited assurance engagement, the evidence gathering procedures are more limited than for a reasonable assurance engagement, and therefore, less assurance is obtained than in a reasonable assurance. Accordingly, the procedures selected were based on our professional judgment. Within the scope of our work, we performed, amongst other, the following procedures:

• Interviewed selected key senior personnel of the company to understand the current processes in place for capturing sustainability performance data, the company's

sustainability goals and the progress made during the reporting period

- Reviewed the company's approach to stakeholder engagement and processes for determining material issues through interviews and review of associated documents
- Reviewed relevant documents and systems for gathering, analyzing and aggregating sustainability performance data in the reporting period
- Reviewed major anomaly within the report as well as between the report and source data/information
- Verified the transcription of data, internally verified by the company
- Reviewed the reliability of the information, assessing related controls and their operation effectiveness
- Reviewed the Company's plans, policies and practices, pertaining to their social. environmental and sustainable development

# Limitations

Our scope of work did not involve:

- Aspects of the report other than those mentioned above
- Data and information outside the defined reporting period (01 July 2012 to 31 December 2014)
- Technical information/data which required an expert for its verification
- The company's statements that describe expression of opinion, brief

aspiration, expectation, aim or future intention and national or global socio-economic and environmental aspects

• Data and information on economic and financial performance of the Company, which, we are informed, are from the company's financial records

# Conclusion

Based on our limited assurance engagement, nothing has come to our attention that causes us to believe that the report is not fairly presented, in all

### KPMG Taseer Hadi & Co.

Chartered Accountants Sheikh Sultan Trust Building No. 2, Beaumont Road, Karachi, 75530 Pakistan Telephone +92 (21) 3568 5847 Fax +92 (21) 3568 5095 Internet www.kpmg.com.pk

material respects, in accordance with the framework adopted by the company in line with sustainability report guidelines of the Global Reporting Initiative (GRI 3.1) and supported by the company's internally defined procedures, as described in th GRI Reference Table of the report and the guidelines issued by the Securities and Exchange Commission of Pakistan for the period 01 July 2012 to 31 December 2014.

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KPMG Taseer Hadi & Co. Chartered Accountants Moneeza Usman Butt Date: 20 August, 2015, Karachi

# CEO's Message

Sustainability is not just integral to our business. It is our business. It is our strategy. And it is our future. Which is why, I am especially pleased to introduce our 2014 Annual Sustainability Report. It is a reflection of our journey to deliver a more sustainable future, by actively engaging communities, and to inspire a new generation with the models of world class corporate citizenship.

We have been successful in maintaining a streak of consecutive profits over the last few years. Our cumulative losses are below 23.31% and we can proudly claim that almost 58% of our network today is exempt from load shedding. This is a result of a decrease in electricity theft and the successful implementation of innovative loss reduction initiatives. The fact that our ongoing efforts have been recognized at notable international forums — like the Financial Times and the International Finance Corporation — is proof of the impact we are positively creating across the business landscape.

Above all else, our successes are due to the hard work, passion and commitment of our employees. Our people have one thing in common: they are specialists in their fields. Their identification with our company, our customers and our goals of sustainable energy enables them to go beyond their jobs to make a vital difference. We actively promote this attitude and are proud of having so many innovators in our ranks. In turn, we are committed to the responsibility of our employees' safety, security and welfare as we tirelessly work towards a future with zero-accident rates.

Delivering affordable, sustainable energy to customers is a priority made evident through our commitment to drive progress through a successful and responsible long-term energy business, trusted by customers and powering a thriving society and a healthy environment. Every day, we make sure that the economy has the energy to keep running. This cannot be done without the reliability and innovations of people who are charged with this responsibility, and who, by making contributions large and small, enable us to play our role in shaping the energy world of tomorrow.

As one of Pakistan's leading utilities, conserving energy is at the centre of our business model. We continuously improve our electricity generation in order to lower fuel consumption and emissions. However, our horizon extends beyond our plant. We also want our customers to benefit from the opportunities offered by making more efficient use of energy. With innovative services, we help households and industry to reduce costs and protect the environment. Our unrelenting commitment to impact the social sector through our Social Investment Programme also remains a priority. This year, the number of partners has increased to 13, with organisations such as Lady Dufferin, Kidney Center, Karawan-e-Hayat and SOS Village joining the ever-growing roster. We also continue to support communities during calamities through relief in billing up to a period of six months, as we did after the Timber Market fire incident.

We have achieved much already, but we know that we need to do more. On customer trust. On public engagement. On openness and transparency. As well as taking action now, these themes will shape our commitments for the next decade and beyond. As we build on what we have achieved so far, we will take another bold step forward through the launch of a new set of sustainability commitments looking beyond 2015 that will be complemented by our residential and business customer commitments and our low-carbon operations promise.

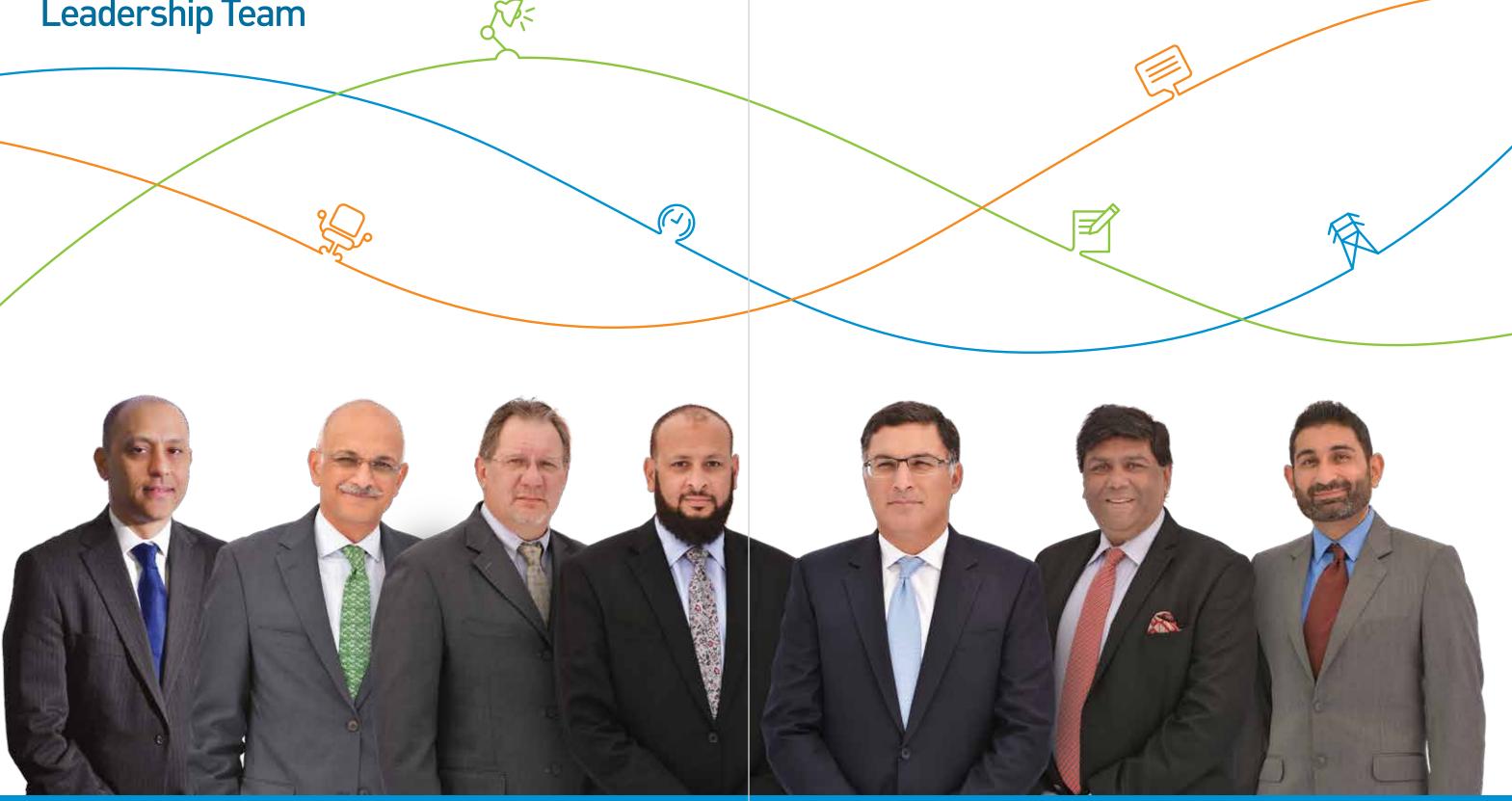
Proving, again, that sustainability lies at the heart of everything we do and everything we are.

Muhammad Tayyab Tareen CEO





# Leadership Team



Asif Saad Chief Operating Officer Distribution

Eram Hasan Chief Supply Chain Officer

**Dale Sinkler** Chief Generation and Transmission Officer Syed Moonis Abdullah Alvi Chief Financial Officer

Muhammad Tayyab Tareen Chief Executive Officer

Syed Fakhar Ahmed Chief Marketing and Communication Officer Muhammad Shoaib Baig Chief People Officer

# Harmonizing Growth

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Jinnah's Mausoleum

# **About K-Electric**

K-Electric (formerly KESC), incorporated in 1913, is a publicly listed fully integrated power utility involved in generation, transmission and distribution, energizing KARACHI, the 4th largest metropolitan of the world for more than a century. Twenty eight Integrated Business Centers (IBCs) are located across Karachi. The organisation employs over 10,000 workers in different capacities; in doing so it provides direct income to almost 10,000 households.

# Transmission

KE has 64 Grid Stations and 128 power transformers in service with 1248.8 KM of overhead and underground cables.

# Generation

Available capacity 1635 MW (June 30, 2014 Fuel Types: Gas, HFO) Power Plants

**88 MW** Korangi Gas Turbine Power Station

88 MW

SITE Gas Turbine Power Station

220 MW Combined Cycle Power Plant

1260 MW

Bin Qasim Power Station – I

# 560 MW

Bin Qasim Power Station – II

₹J÷

Canal Constant

Well I



# Vision, Mission and Values

Our Vision -Hamari Manzil

Our Mission -Hamara Amal

Our Values – Hamari Aqdaar To restore and maintain pride in KE, Karachi and Pakistan

Brightening lives by building the capacity to deliver uninterrupted, safe and affordable power.

### We Believe

We are committed to sustainable value creation for all key stakeholders. We believe that together we can continue to strive to enhance the organisation's performance and create a greater economic and social impact on the community at large.

# We are Trustworthy

We remain accountable for all our actions. Self-accountability and the highest level of integrity are integrated in all our actions. All our initiatives are founded on compassion and honest intent. Our utmost win is to gain the trust and respect of all our key stakeholders.

### We are Open

We speak clearly and concisely and disseminate factual information relevant to our stakeholders. We are committed to creating open bridges of communication and to be accessible to all our key stakeholders.

# We are Dependable

We can be relied upon to do the right thing by everyone we come across and act in a responsible manner towards, places and the environment. We continuously strive to create sustainable impact through all our initiatives and investments.

### We Think about You

All our actions are with the intent to create shared value for our key stakeholders based on long lasting partnership. Mutual respect, fairness and creation of an inclusive organisational environment enhances our performance and empowers us to serve all our key stakeholders with increased commitment.



# **Performance Overview**

# Financial Performance

Marked improvement: FY 12-13 EBITDA of PKR 26.9 billion; FY13-14 EBITDA of approx. PKR 30.2 billion.	Net income in FY 2012 was positive for the first time in 17 years – last fourteen consecutive quarters have had a net profit.	Total CAPEX spend of over USD 1 billion over last 5 years.
Circular debt managed by a set-off mechanism with GOP payables – subsidy receivable is netted with NTDC payable or cash paid to KE.	IFC/ADB converted USD 50 million (USD 25 million each) of long-term loan into equity in December 2012– validating the investment case and success of the turnaround strategy.	
AZM TFC (Fu	ul launch of (Fully	ZM Sukuk subscribed in isiness hours)

# **Operational Performance**

enhanced by nearly 1,010 MW, through addition of four new

Average fleet efficiency increased from 30.4% to

distribution losses of 16%.

distributed.

SCADA, SAP IS-U and

cycle adding 47.5 MW of capacity as well as enhanced generation efficiency.

in progress.



# Human Resource

Realignment of workforce through restructuring across the board from 17,436 to 10,603 employees. KE undertook the largest cultural change management programme in the corporate history of the country. Some 11,500 employees went through the training programme. Succession planning, focus on training and skill enhancement and induction of fresh blood through one of the biggest management trainee programme.

Successful completion of the fifth round of the annual performance appraisal through Bell Curve evaluation system for management and staff.

An extensive career progression programme has been conducted; 1,046 employees have been trained and promoted.

# Stakeholder Management

Several sovereign issues around implementation agreement, tariff structure and fuel supply significantly addressed.

Open, proactive, accessible and transparent relationship with media.

# **Social Investments**

Social investments in the health, education and sports through grassroot sports development sector.

Our cumulative social contributions impact over 7.5 million individuals in the city.

Real time interactive social media presence through Twitter, Facebook and LinkedIn, which became a first in the utility sector in Pakistan.

Over 3,000 hours have been volunteered over the last two years, which brings the total so far, up to 153,000 hours.



# Generation – Re-energizing Energy

# Today our Total Gross Dependable Capacity is 1,620 MW with nearly 1,000 MW of plants less than five years old.

We are consistently innovating, enhancing capacity and efficiency at our generation plants. Over the last five years we have enhanced installed generation capacity by over 1,010 MW and fleet efficiency has increased from 30.9% in Sep. 2008 to the highest ever 40.3% in Feb. 2014.

Our fleet portfolio has been enhanced through rehabilitation of old plants and addition of new plants. Total Gross Dependable Capacity of 1,620 MW with nearly 1,000 MW of plants less than five years old (Gross Capacity lesser compared to FY 13 as it does not include units for coal conversion and obsolete units of KTPS, SGTPS and KGTPS).

Our 1260 MW Bin Qasim Power station 1 (BQPS1) has gone through major rehabilitation in the last five years resulting in the recovery of 40 MW and improvement in efficiency. Addition of 220 megawatts was made possible through successful implementation of the Korangi CCPP. Conversion project for two open cycle Gas Turbines into combined cycle, is in progress. Upon completion all gas turbines would run in combined cycle mode.

90MW GE Jenbacher Site and 90MW GE Jenbacher Korangi were termed the 'Best fast track project' and 'Best Plant in the Region' by Asian Power magazine. The addition of BQPS II, the largest and most efficient combined cycle plant in Pakistan, has taken KE one step closer to self-reliance in power generation and in meeting Karachi's long-term power needs. The accomplishment is a landmark achievement in the energy sector and with the addition of state-of-the-art 560MW Combined Cycle; KE can proudly claim that the Bin Qasim Power Complex stands as the country's largest, with an installed capacity of 1820 MW.

In the last fourteen months, reliability projects were implemented through an extension of contractual service agreement with GE worth USD 11.2 million for LM6000 GT's (CCPP). Rehabilitation of BQPS-I for capacity and efficiency recovery has been undertaken as a USD 46 million project which would result in 86MW increase in capacity and 2.2% efficiency improvement.

All KE generating stations are certified in the field of QHSE. They are certified with OHSAS 18001 for excellence in complying with international safety standards, ISO 14001:2004 for compliance with international standards of Environmental Management and ISO 9001:2008 for excellence in Quality Management Systems.



# **Generation Capacity and Efficiency Enhancement**

Generation capacity has been enhanced by 1010MW and overall efficiency has improved by 18.6% (Jan-Jun '14 vs Jan-Jun '8). New projects for adding 47MW capacity are under various stages of construction/commissioning.

# New Installed Capacity 1010MW

- New Capacity Already Added
- 220MW CCPP Korangi
- 180MW GEJB Korangi & SITE
- 50MW Aggreko (Rental/Rehab of Old Plant)
- 560MW BQPS 2

### **Capacity Addition in 14 Months**

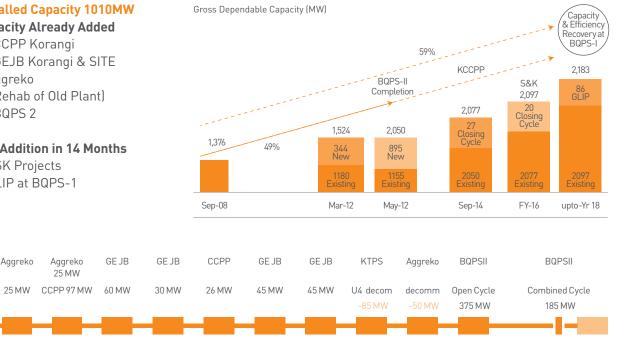
- 47MW CSK Projects
- 86MW GLIP at BQPS-1

Aggreko

Jan-09

CCPP

97 MW



Jul-10

Mar-11

Jan-12

April-May-12

Dec-09

Oct-09

### Improvement in Fleet Efficiency 18.6%

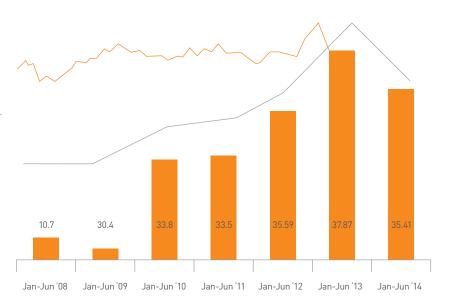
Mar-09

Jul-09

Aua-09

Sep-09

- 18.6% Efficiency Gain (Jan-Jun 08 to Jan-Jun 14)
- · Addition of new efficient plants.
- Annual maintenance of BQPS.
- Efficiency increased by 10.1% from Jan-Jun 08 with the addition of GEJB (S&K) and 220MW CCPP in Jan-Jun 2010.
- Efficiency increased by a further 12% due to continuous operation of BQPS-2 in Jan-Jun 13.
- Efficiency decrease in Jan-Jun 14 due to LPT rotor failure at BQPS-II (Under Warranty) will revert upon new rotor replacement.



# **Ongoing Efficiency Enhancement Projects**

Increase in efficiency and capacity will be achieved from converting two existing fully operational open cycle plants (220 MW and 180 MW GE JB) to combined cycle. Advanced ongoing construction activities for conversion to combined cycle are

underway. This will result in additional capacity of 47.5 MW (27.5 MW by Sep 2014 and 20 MW by Jul-Aug 2015) and an increase in fleet efficiency.

EPC activities at KCCPP 220 MW



plant for the addition of 27.5 MW are in the constructional/commissioning stage and are expected to complete

in September 2014. Design, procurement and construction in progress for the NTP to Korangi (10 MW) project issued in Dec 2013 and the NTP to Site (10 MW) project issued on 26th Feb 14. A five-year rehabilitation plan for BQPS-Units 1, 2, 5 & 6 has been approved by the management and is in place (Expected increase in capacity 86 MW; efficiency 2.2%).

# Sustainability Report 2014

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# **Key Generation Statistics**

	01	Installed Capacity: 2341MW (This includes 1250 has de-commissioned because the unit is obso very low operating efficiency (application for de
4	02	Fuel types at KE plants: Gas, HFO
	03	About 45% of the electricity is purchased from WAPDA & IPPs
	04	Nearly 55% of the electricity is generated through our own system
	05	The KE fleet has 2341 MW of installed capacity requirement. The main generation units consis
	06	Bin Qasim Power Station I (1260MW Steam Pow power station comprising of six steam turbine of can be fired on Gas or HFO.
	07	Korangi Power Complex (Comprising of 125MV Combined Cycle Power Plant). KE has applied t steam turbine due to its poor efficiency and obs
	08	GE-JB Gas Engine Power Stations at S.I.T.E. and these stations comprises of 32 High efficiency ( of 2.739MW each.
	09	The new state-of-the-art, Bin Qasim II 560 MW Combined Cycle Power Plant.
	10	KE also imports power from independent pow captive power plants and NTDC to offset the de

MW capacity of an old generating unit which KE blete, unreliable & unsafe to operate and has a e-comissioning pending with NEPRA)

to cater to the city's st of:

ower Station). It is a thermal units of 210MW each. Each of the units

W old Steam Power Plant and 220MW for the de-commissioning of the 125MW olescence.

nd Korangi (88MW each). Each of GE-Jenbacher gas fired engines

er producers, ficit in supply.

# **Transmission - Progress in Reliability**

KE's transmission system comprises a total of 1,249 kilometers of 220 KV, 132 KV and 66 KV transmission lines with 63 grid stations. With initiatives taken to improve system reliability, our net transmission losses are currently residing at less than 1.27%. Rehabilitation of our EHT network has resulted in 189 kilometers of EHT lines rehabilitated. With an addition of 62 km of EHT lines added, our power transformer reliability has increased with a reduction in transformer tripping by almost 55%. Our fault response time has improved, with 56% reduction in unserved energy since 2008.

Increased transmission lines reliability
41% reduction in lines tripping since 2008
Theft reduced by almost 100%
Improved fault response
43% reduction in unserved energy since 2008

Addition of a mobile grid at Gharo: 15/20 MVA in FY 13-14 has resulted in a net addition transmission capacity of 706 MVA. In total 11 new grid stations have been added since 2008.

The state-of-the-art SCADA has gone through ongoing improvement over the years. We have also introduced smart transducers at 220KV line and transformer bays for visualizing three phase voltage, current, active power and reactive power in load dispatch center. Optimized data storage capability has been introduced by reconfiguring SCADA system to store real-time values periodically.

Successful implementation of SAP PS Module in Transmission is in progress with more than 50% of grid assets uploaded to the SAP database and uploading of all 132 KV and 220 KV in process with KCR 220 KV already gone live. APM through SAP has been started and was executed successfully for grid transformers in FY2013-14. Fire alarm systems have been installed at 19 grid stations.

**63** Grid Stations

of Transmission System

1,249 KM

220, 132 & 66 KV

Transmission Lines



# **Power Transformers** Reliability

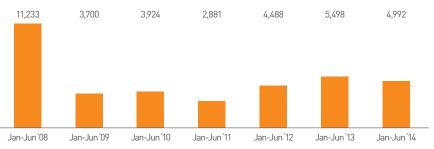
55% Reduction in transformer tripping vs. 2008.

70% Transformer trips occurred by 11KV (Distribution network) from Jan-Jun 08) to Jan-Jun 14

Fault response improvement, 56% reduction in unserved energy vs. 2008.



### Un-served energy by Trafos (MWH)

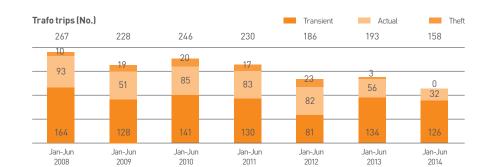


# Transmission Lines Reliability

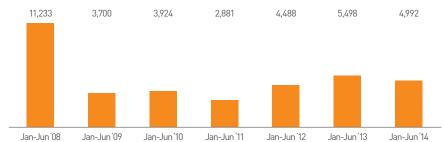
44% Reduction in lines tripping vs., 2008.

100% Reduction in Thefts vs., 2008 (100% vs., 2012).

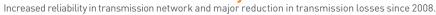
Fault response improvement; 43% reduction in unserved energy vs., 2008.

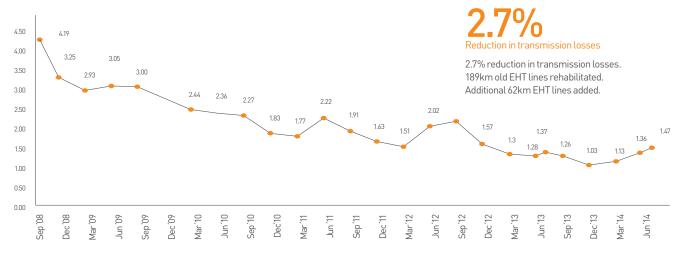


Un-served Energy by Trafos (MWH)



# **Transmission Network - Key Initiatives**





# **Ongoing Strategic Transmission Projects**

In the year 2013-14 KE enhanced transmission capability by 97 MVA by converting transformers from ONAN to ONAF through installation of fans with auto control system. KE also signed a joint venture with AKHMCF (Agha Khan Hospital and Medical College Foundation) on 1st Feb 2013 for 132 kV Agha khan Grid station along with allied 132 kV underground cable circuits. Grid energisation is expected by mid March'15.

In KGTPS-II Generation Expansion Project, new 132 kV GIS (14 bays) has been signed-off in October 2013. Commissioning is scheduled on 12-June 15. Moreover in SGTPS-II Generation Expansion Project, 04 additional 132 kV GIS bays have been included for safe evacuation of ST Load. NTP has been issued on 26th Feb 2014. Design completed, erection and installation work at SGTPS-II will start soon. Planed commissioning of SGTPS-II is in Aug-Sept 2015.

# Distribution – Leading Progress

While lighting up around 2.5 million households, industries and commercial ventures, continues to bring challenges for us, some very evident ones include the law and order situation, growing demand, prolonged summers and increase in electricity tariffs. Despite these hurdles we continue to make progress. Today we can proudly claim that 58% of Karachi is exempt from load shedding, in other words gets 24/7 electricity including all industrial zones and pockets of underprivileged areas. Our transmission and distribution losses reduced by 11.1% over the last five years, standing today at 23.8%. Over 70% of Karachi has distribution losses of 16%. Two thirds of KE's distribution network that is 17 out of 28 IBC contributes over 80% of revenue with a recovery ratio of 95% without PSC.

System improvement and upkeep of the distribution network is an

ongoing project. The company is consistently adding capacity to the distribution system along with preventive maintenance projects conducted on Low Tension and High Tension networks. A total of 229MWs were added to the distribution system through new connections in FY14. State-of-the-art billing and CRM system roll out (SAP IS-U) in all IBC's resulted in improved systems, better overall management and increase in productivity.

# Sustained Loss Reduction Initiatives

With increased capability to target smaller clusters for loss reduction and increased stakeholder support and accountability, we have been able to get sustained loss reduction and operational excellence through the following strategic initiatives focused on under privileged areas and the masses:



# Aerial Bundle Cabling (ABC)

To date ABC has benefited approximately 180,000 consumers and as a result proved to be one of the most effective solutions for theft reduction as putting a hook connection is more difficult and now much easier to detect.

It also proves to be safer for communities and the environment and as a result of reduction in losses the high loss areas would eventually get minimal or no load shedding. It also adds to the aesthetic of the specific area as it is less cluttered and gives a cleaner impact.

Aerial Bundled Cabling (ABC) continues as a means towards sustained loss reduction in areas infested with illegal consumption of electricity despite various external challenges and at times violent resistance from illegal electricity consumers. ABC has been successfully rolled out on 226 Pole Mounted Transformers (PMTs) namely in areas of Clifton (Kemari), Defence (Gizri), Gulshan, Garden, North Nazimabad, Bahadurabad (Lines Area), Johar and other areas of the city where losses have been significantly reduced on these PMTs.

It provides relative immunity against short circuits caused by external forces (wind, fallen branches) hence minimizing the voltage fluctuations and breakage of wires while enhancing the useful life of PMTs. There has been substantial decrease in faults reported due to higher resistance to moisture and surge currents. It allows prevention of fatal accidents and minimizes tripping which is a norm for high-loss areas. Going forward, the company plans to convert PMTs in high-loss areas to ABC to yield benefits for both the utility and the end consumer.

# Low Cost Meter Project

Low-cost meters have been provided to consumers residing in underprivileged communities on easy installments. These communities were infested with illegal connections or 'Kundas' and therefore this gives the company an opportunity to give legal connections to many slums with very high losses.

The drive involves community engagement and support and

thus an opportunity for each community to get better service from KE and to use electricity through a legal metered connection. Going forward we plan to install some 100,000 meters under this project in the year FY1 15-16.

# Flexible Payment Facility

Consumer's propensity to pay has considerably decreased over the years following tariff increases and as a result many good consumers reach the verge of non-payment. There are many customers who are willing to pay but their income levels do not allow them to clear the dues on time. Hence with this realisation, the company has offered flexible payment options. Discounts and rebate are offered on full settlement and easy installments are also offered to provide the customer with an option for partial payment. Rebate of upto 50% are offered to underprivileged consumers who are willing to pay.

# Mobile Metering Project

The objective of the project is to eliminate manual meter reading



with the intent of reducing errors due to human intervention. An android application has been developed that enables meter readers to go on the field and note down meter readings from the meters on their route. The readings are then transferred to billing servers via GPRS and then processed for billing. Currently 18 out of the 28 business centers of KE have adopted this technology with more to follow in the current year. A total of 366 meter readers are taking readings on android phones.

Mobile Meter reading reduces time to process billing as the readings are now punched directly on the

software and transmitted via GPRS. The chances of human error have decreased, resulting in lower complaints and better consumer satisfaction. It also improves the accountability of meter readers as pictures are required for each meter along with GPS tracking of the individual. The mobile application also has a feature where Meter Readers can take pictures of discrepancies they note on their route, which enables the company to deal with electricity theft with timely proof. It is our first step to move towards a paperless, green environment.



# Efficiency Enhancement Projects Network Optimisation Project

The total losses in transmission and distribution systems consist of technical losses and non-technical

losses. The non-technical losses also called commercial losses. caused by actions external to the power system, are due to power theft, non-payment of customers and energy accounting system. Technical losses occur naturally and are due to power dissipation in transmission and distribution power lines, transformers and measurement devices. While curtailment of non-technical losses is catered to in all utilities. little heed is paid to the curtailment of technical losses due to difficulties in exact loss determination and performance management.

With this project we tend to focus mainly on the development of efficient mechanisms for significant reduction in technical losses at the feeder level through standardized network optimisation. As a result of which, not only the technical loss of the company shall reduce but improved service levels and reduction in network faults will also be witnessed.

Another aspect of reducing technical loss is the identification

of power factors of each and every consumer. Therefore, we have circulated forms among ordinary consumers as part of their self-load regularisation scheme, whereby consumers are notified to rectify their power factors themselves, thus enabling KE to improve its distribution and plan its network in an efficient manner.

15 feeders executed (FY14) with technical loss reduction from 14% to 7%. Around 100 feeders targeted within 2015.

The major impact of the project is reduction in feeder technical loss by 50% of the current loss level, reduction in faults and tripping, hence improvement in power quality and power factor (PF 0.9). The implementation of the project also improves voltage within the limit of +/- 5% and optimizes HT: LT ratio (initially to 1:2 against a standard of 1:1.2). in a layman's term it is availability of more power for distribution hence a decrease in load shed.

# Preventive and Corrective Maintenance

With an aim for continuous improvement in our network and to ensure sustainable energy supply for our consumers, we initiated a formal programme of Preventive Maintenance on both High Tension (HT) and Low Tension (LT) networks. This programme was initiated with an aim to improve system reliability by minimizing outages due to faults and system downtime and increased energy supply through reduction in feeder tripping. This in turn also decreases our cost of corrective maintenance /replacement of damages and reduced accidents through controlling equipment failure.

# Customer Services – Towards a Customer Centric Organisation

Customers now do not have to wait for the bill to be delivered to their doorsteps in order to make the monthly payment and can easily avail this facility through a single step registration process.



Our objective is to make access for the customer to K-Electric easier and simpler. To achieve this we are making processes simpler, empowering the customer services team and creating more efficient platforms and alternate channels for the customers to engage with us.

In order to meet the growing needs of the customer and to reduce the turnaround time, we have expanded our state-of-the-art call center and streamlined call handling capabilities through increased number of PRI lines, construction of an ISO compliant server room, and increase in the number of customer service representatives. Customers now do not have to wait for the bill to be delivered to their doorsteps in order to make the monthly payment and can easily avail this facility through a single step registration process. But that is not where it ends. Standing in long queues outside bank branches under the scorching sun to make the bill payments is definitely not an

easy task. Now KE customers can make payments through online or mobile payment options.

In order to provide more real time feedback to the customer, SAP has been integrated with the system to allow for better data management and improved communication with other related business units. Customer service is now also empowered to handle complaints from alternate channels such as email, social media, website and SMS. All customer platforms are also empowered with CRM services. Auto complaint rectification confirmation via IVR to all customers is being implemented.

A very powerful platform of SMS complaint registration was launched this year in order to make complaint registration and feedback more effective. This service is also used to inform customers proactively of the major developments with regards to shutdowns, faults and load shedding schedule, etc. Customers also have access to monthly billing details.

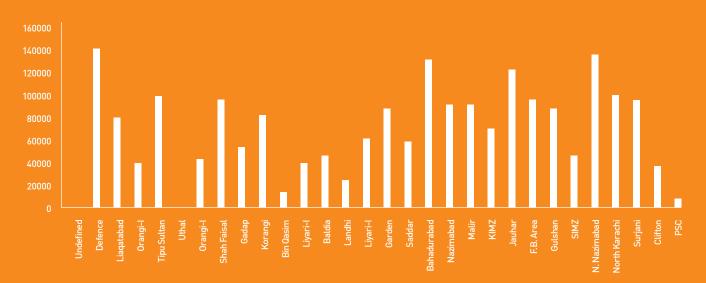
In order to make the customer experience more customized and virtual, a self care portal is in the development stages which aims to empower the customer through proactive information, quick access and online payment platforms.

# Building Customer Relationships at IBCs

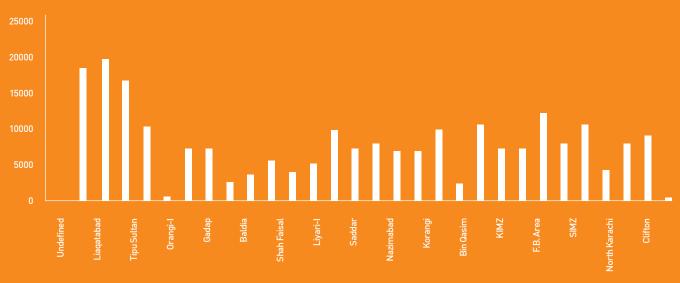
For more complex billing related issues or more personalized services, the customers visit us at our IBCs or Integrated Business Centers where they can discuss their issues face-to-face with our trained CCRs over the counters.

Even at IBC level we are not ignorant of how customer focused we need to be and have rolled out new concepts to make our customer's visit to the IBC friendlier. Induction of Customer Relationship Officers at IBCs is another manifesto strengthening our customer eccentricity and commitment. KE believes in upholding our tradition of serving senior citizens and special visitors with a priority service as an acknowledgement of their status in our society. The SAP CRM & ISU used by KE to help our CCRs better serve our extremely large base of customers is now more effective than ever. The four-day CRM mandatory training conducted last year for all Customer Services staff was to ensure that the SAP is continued to be brought in best use and that our CS staff

Total Customer Interaction via 118 Call Centre 2014



Total Customer Interaction via Customer Visits to IBC 2014



gets a refresher of the amazing SAP that they use to interact with our 233,410 customers in 2014.

Our CS staff feels pumped up after the rigorous trainings and feels that KE is looking well after their growth and development as they have invested 2,016 man-hours in their learning.

# Investments for the Future – Imagining the Unimaginable

KE's turnaround and our innovative approach have created higher benchmarks for the sector to follow. The thought leadership created by KE is our contribution to the overall development of the energy sector in Pakistan, especially the innovative investments made to strengthen and build efficiencies in generation, transmission and distribution.

KE is investing in strategic projects for the future to create value for our shareholders and community, with focus on energy infrastructure and smart grid solutions.

# **Our Strategic Goal and Renewable Energy Investments**

KE has taken a lead role in redefining the future fuel strategy of the energy sector of Pakistan. From solar, biogas to coal we are exploring and investing in fuel options that are reliable, affordable and have low carbon impact. Our primary emphasis is on coal as the fuel of the future for Pakistan. Thar has one of the largest reservoirs of lignite coal available in the world. Current estimates suggest close to 175 billion tons of recoverable reserves. Other than that we will convert 15% of our generation portfolio through renewable energy sources by 2020.

The following gives a snapshot of our strategic investments for coal and renewable energy:



# **Coal Based Projects**

### 420 MW Coal Conversion Project

KE is looking to pioneer the development of coal power in the country and, as a first step, it is working on the conversion of two furnace oil based units out of six units (210 MW X 2) of its 1200 MW Bin Qasim Power Station 1 (BQPS-1) to coal in Phase 1. This project is being developed under an Independent Power Producer (IPP) structure. KE will lease out the two units to the IPP which have already been formed by the project investors by the name of K-Energy.

K-Energy has entered into an EPC contract with a reputable Chinese contractor, Harbin Electric International (HEI) for the engineering, procurement, and construction of new machinery, which will also include overhauling and rehabilitation of existing equipment. The boiler being designed is based on coal specifications suitable to local coal to accommodate Thar coal as and when available in sufficient and commercial quantities. Coal for the operations of the plant initially will be procured from a dedicated mine in Indonesia. K-Energy, vides HEI, shall be responsible for construction of the boiler, auxiliaries and coal handling infrastructure.

KE will lease out its existing equipment consisting of steam turbine and the Balance of Plant (BOP) to K-Energy for the life of the project. KE has gotten approval from NEPRA to have its license modified in April 2014.

The total cost of the project is \$ 400 million. With a 32-month construction time, the project is expected to come online by first quarter 2018.

### Country-wide Impact of Cost Savings and GHG Emissions Calculation of country-wide impact for existing operations and for the

Calculation of country-wide impact for existing operations and for the project shows that the estimated cost would be around US\$ 231 million to convert two units with a total capacity of 420 MW and will result in improvement of the efficiency of the power generation units. Assuming the delivered fuel price of US\$745/ton and imported coal price of US\$125/ton, the country will realize annual savings of about US\$505 million, resulting in a payback period of only five months.

Conversion of two units to coal firing at Bin Qasim Power Station will increase the CO<sub>2</sub> emissions by about 184,686t CO2e annually, nearly 6% increase from the baseline. The table below presents the calculation of annual fuel consumptions and GHG emission reductions from the project.

With improvement in the thermal efficiency of the plant by 3% and the benefit of lower coal price when compared with fuel oil, the conversion project generates significant savings over the life of the plant and investment is estimated to be paid

Dependable Cap
Availability (%)
Efficiency (%)
Electricity Gener
Energy Consum
CO2 Emission Fa
CO2 Emission (t(

back within five months of the project completion. An additional advantage of using coal would be the availability of substantial quantities of ash that would be recycled.

### Transportation of Coal

Coal will be transported by sea. It is considered to be transferred to 8000t barge in Qasim Port area from large capacity coal ship and then transferred to the special port of the plant. The waterway between Arabian Sea and Qasim Port area is Phitti Creek, about 35km long. The plant will be provided with supporting facilities, such as special coal unloading terminal for 8000t barge and corresponding unloading machineries.

A new coal unloading terminal for 8000t berth is proposed to be built for this project, having length of 200m and width of 25m, with the turning basin and anchorage area size considered as per the designed type of ship; 2 sets of unloading machineries shall be installed at the unloading berth, each set has an unloading capacity of 1250t/h, whose annual unloading capacity can meet demand of coal consumption of the power plant.

	Existing Units	Project
bacity (MW)	320	420
	85	90
	29.0	32.0
rated (GWh/yr)	2,383	3,311
ed (GWh/yr)	8,216	10,348
actor (tCO2/TJ)	77.4	101.0
CO2/TJ)	2,289,383	3,762,442

### 660MW Coal Fired at Port Qasim

KE has initiated development of a greenfield 660 MW coal fired power plant in the strategic location of Port Qasim. China Machinery Engineering Corporation (CMEC), China Dating Overseas Investment CTDO and KE have signed a joint development agreement, which defines the framework within which the three companies will work together for setting up the project.

The land MoU has been signed with Textile City. HBL has been engaged by KE as lead advisor for the project. The project (both Units of 330 MW each) is expected to come online by early 2019. The total project cost is \$900 Million.

### Nooriabad 100 (2x50MW) MW Gas-Fired

The Sindh Nooriabad Power Company (Pvt) Limited (SNPC), a company sponsored by the Government of Sindh (GoS) and Technomen Kinetics (Pvt) limited in consortium with China Electric of China. is in the process of developing a 100 MW (2 X 50 MW) gas fired power project at Nooriabad, Sindh.

The project is to be set up in 2 locations (50 MW each). KE has signed a term sheet with SNPC and SNPC phase II regarding the power

purchase by KE from the facility. The power sale proposal has been provided to KE by SNPC. SNPC has initiated communication with STDC (Sindh Transmission and Distribution Company) regarding the wheeling mechanism to bring in the power to KE network. Generation license is currently under processing at NEPRA level. Project is expected to come online by first guarter 2016. The term of the contract is for 25 years.

### FFBL 52 MW Coal Based Project

K-Electric Limited signed the term sheet of its power purchase agreement with Fauji Fertilizer Bin Qasim Limited (FFBL) for power off-take of up to 52 MW from FFBL'S project. FPCL has submitted generation license application to NEPRA, which has been admitted.

FPCL has finalized its power sale proposal and submitted with KE with a term period of 30 years. FPCL is in the process of finalizing their EPC framework. KE intends to file for the tariff with NEPRA through a Purchase Acquisition Request (PAR). Project is expected to come online by early 2017.

# Bio Gas – Worth from Waste

In line with its climate change policy,

K-Electric has identified an opportunity to develop a waste-to-energy power project within the vicinity of Karachi by utilizing the municipal waste deposited in landfill sites. The waste to energy project has a huge social impact as it will impact the cleanliness and hygiene of the 7th largest and 2nd most populous city of the world, thus reducing a huge environmental hazard and diseases spread by open dumps of solid waste. The waste is eventually either burned or left to degenerate on its own, thus generating hazardous carbon emissions of the worse kind and directly impacting the health vitals of the population at large.

This will be the first project of its kind in Pakistan that will provide a preventive approach to generate sustained environmental and public health benefits, helping the society at large apart from being a long-term solid waste management solution. The potential stakeholders of the project have been taken for this initiative, which includes KWS, Karachi Metropolitan Corporation, Cantonment Boards, WWF, local communities and government of Sindh etc. KE, through various discussions and meetings, has gathered its basic understanding and has been offered support and assistance from these institutions.

KE has issued an LOI to Kinetics for the development of 65 x 2 MW solar based IPP within KE's licensed area. Term sheet highlighting heads of agreement of EPA for first 65 MWDC signed by Kinetics Renewable Energy is under process. 335 acres of land has been finalized and the process for purchase of land is currently underway.

### Meeco Group

Meeco group has been issued an LOI of 10 X 3 MW for the development of solar project in KE's licensed

area. Land options are being shortlisted at the moment.

First Solar, USA First Solar and KE have signed a MoU whereby First Solar has committed to developing a 50 MW IPP within KE's licensed area. First Solar is engaging local reputable developers/investors and international financial institutions, such as SkyPower, OPIC, for the development of the project. Currently, KE and the developers are finalizing land options and the interconnection scheme.

KE has signed two MoUs with power from 640 MW Azad Pattan project and 250 MW Ashkot hydropower project. The projects are under the Power Policy of 2002. Azad Pattan has received its feasibility stage tariff by NEPRA. The feasibility

Laraib Group (LG) to procure affordable currently in development phase as IPPs study for Ashkot is in approval stage

with the panel of experts. EPC is currently being finalized for both the projects. KE has shown its interest to participate in equity subject to policy decision on wheeling the power to KE. Policy support required for these projects is to have IA from GoP to cover political risks, and KE to provide payment risk guarantee. KE has written to NEPRA and MOWP regarding the policy framework. Project is expected to come online in 2021.

In an effort to add nearly 50-100 MW of wind power into its system, KE is currently engaged with wind project developers to discuss options for power off take.

### **Burj Power**

Al Wardah Wind Power and KE have signed an MOU for exploring options of power off take. Al Wardah owns approximately 1200 acres of land with bankable data of six years. A draft REP for the feasibility has been prepared and shared with Al Wardah for feedback and review. Topographic survey has also been done.

# Redefining the Future of Transmission

# Karachi Transmission Project

A comprehensive and integrated scope of Transmission Project (TP1000) is conceived to meet the growing load demand of the metropolitan city by up gradation of existing transmission network and addition of new grid station and extra high transmission lines.

Transmission project is a major step towards meeting the growing demand of our rapidly expanding city. It will be vital towards enhancing the operational flexibility of the KE transmission network. This venture will serve to relieve a majority of the overloaded EHT circuits, hence this venture will result in better load management across the city. This project mainly features the following critical areas which will be addressed along with rehabilitation and revamping of existing grids and transmission lines:

- Three new 220 KV grid stations at Gulshan, Surjani and Port Qasim areas along with new 220 KV transmission lines of more than 80 KM.
- Five new 132 KV grid stations at Old Golimar, Labour Square, Bath Island, Shadman & Gadap.
- Addition of 15 power transformers at existing grid stations.
- Addition of six new 220 KV and six new 132 KV transmission lines.
- Addition of three 250 MVA auto transformers with bays at Baldia, KCR and Mauripur (750 MVA).

Based on the transmission network study a detailed tender was floated to international renowned companies including Siemens, ABB and ALSTOM T&D divisions with Chinese consortium members including Shanghai Electric Group, CMEC, XIAN Xd and TBEA. Received the bid in November 2014, which is being under techno-commercial review of K-Electric. Contract negotiation with the potential bidder will start soon after the screening process; Environmental Impact Assessment (EIA) and NOCs (No Objection Certificate) have already been obtained for the construction of proposed sites of 132 KV grid stations. The project will be kick-started in mid 2015.



# Impact on the City

Potential increase in KE capability to serve additional consumers up to 1000 MVA.

Lesser breakdowns in the city; no more tripping due to circuit overloading.

03

Lower load shedding, improving consumer life.

04

Reliable industrial power supply will provide a boost to economic growth of the city.

05

Stable voltage levels with much lower occurrence of fluctuations.

# Redefining the Future of Distribution

The initial investment is approximately USD 6.0 million. Based on reducing distribution losses by 50% and increasing the recovery ratio to 95%, the project provides a payback of less than 2.5 years.

# **Smart Grid**

KE distribution's smart grid initiative is a key strategic initiative to establish KE as commercially feasible, best in class utility, serving as a role model for utilities in the country and the region. The project aims to reduce Aggregate Technical and Commercial (AT&C) losses through improved energy monitoring (impact on the economic viability of the company) and through a Distribution Network Management System to improve operations and reduce network outage response time (operational efficiency and improved customer service).

With the increased visibility over its distribution network and detailed measurements on its distribution nodes, KE will further enhance its planning and load management capabilities. The scope of the project covers the installation of smart meters and introducing an IT platform that allows for remote data management and analytics. Replacing existing standard meters on all energy nodes within the identified cluster will improve network visibility, enabling KE to manage the current and future energy demand systematically. The IT platform will be the basis of KE's

drive to benchmark itself to international industry standards, enabling remote management, analytics and future enhancements such as time of use tariffs and pre-paid billing.

Similarly, monitoring devices will be installed to facilitate faster response over outages on the Medium Voltage (MV) network. Input from these devices will be fed into the network management system to enhance control room processes.

The first phase includes the implementation of IT platform, with 10,000 metering points expected to be completed in 2015. KE plans to quickly ramp it up to around 100,000 consumers in the near future and to a potential of 500,000 consumers in the next 5 years.

The rollout is primarily targeted toward small and medium size industries where energy loss in terms or revenue is high and can be minimized in a short span by the use of technology. However, KE plans the implementation in terms of geographic cluster that contain high revenue commercial and industrial consumers.



# **Awards and Recognition**

Financial Times/ IFC Global Transformational Business Award for Exceptional Achievement in Project Finance – Energy - June 2014 (Only company in the energy sector to win this international award).

9th Employers Federation of Pakistan in Collaboration with ILO (International Labor Organization) - April 2014.

UN Environmental Program (UNEP) / NFEH Environment Excellence Award - July 2013.

Fire & Safety Award – 2013 – Recognized by National Forum for Environment and Health (NFEH), supported by United Nations Environmental Program (UNEP) and Fire Protection Association of Pakistan (FPAP), a member of Confederation of Fire Protection Associations International (CFPA-I) & CFPA-Asia.

2nd FPCCI Achievement Award for the Year 2013 - presented for unprecedented investment of USD 1 billion in power generation along with introducing efficient and effective policies to overcome the power crisis in the city.

Corporate Social Responsibility Awards 2013, 2014 & 2015 – By the National Forum for Environment and Health in collaboration with Aman Tech, The Citizens Foundation, WWF, Make a Wish Foundation, Indus Hospital and Marie Adelaide Leprosy Centre

6th NFEH Environment Excellence Award – 2014 - presented by National Forum for Environment and Health (NFEH) in collaboration with the UN Environmental Program (UNEP) and the Environment Protection Department, Government of Sindh.

in the pilot phase of INJAZ Pakistan.

Karachi Chamber of Commerce and Industry.

4th International Corporate Social Responsibility Award – February 2015 – recognized for Corporate-Community partnership by the Professionals Network in collaboration with



BQPS 1 BQPS 2 SGTPS KGTPS



First Distribution facility in Pakistan to get ISO 9001-2008 Certification for improved performance and operations for the following IBC's: SITE, Clifton, KIMZ, Gulshan, Defence,



JCR-VIS upgrades ratings of K-Electric Ltd; Continuous improvement in KE's operational metrics – JCR-VIS KESC assigned A+/A2 ratings by JCR-VIS Asia; proposed finance certificates obtain A+ --- November 2013

Outstanding Corporate Volunteerism Award -2014 - Recognized by INJAZ for involvement

NFEH Energy Leader Award - 2014 – Recognized for best practices in Energy Conservation, Energy Efficiency and Implementation of Efficient Practices by the National Forum for Environment & Health supported by Government of Sindh, the FPCCI and the

ISO 9001, OSHAS 18001, EMS 14001 (ISO 14001) ISO 9001, OSHAS 18001, EMS 14001 (ISO 14001) **CCPP Korangi** ISO 9001, OHSAS 18001, EMS 14001 (ISO 14001) ISO 9001, OHSAS 18001, EMS 14001 (ISO 14001) ISO 9001, OHSAS 18001, EMS 14001 (ISO 14001)

# Financial Value Creation

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Jinnah International Airport, Karachi

# **Financial Sustainability**

Since the past three consecutive financial years, KE has showcased sustained positive financial performance as our reform actions in the form of on ground projects reap expected fruit, and even better results.

In November 2012, JCR-VIS Asia assigned entity ratings of "A+/A2," whereas its proposed finance certificates obtained preliminary ratings of "A+" by JCR-VIS Credit Rating Company Asia, in recognition of the power utility's high performance within a short span of time. Outlook on the assigned ratings was 'Positive'. These ratings appreciate the strategic importance and the strong business profile of KE. This was supported by the enhancement of KE's power generation capacity, reduction in transmission and distribution losses, a stable and professional management team, and, improvement of its financial risk profile over the past 5 years.

Over the years, many international financial institutions have expressed confidence in the organisation's financial prospects. In the last three years the IFC and ADB have invested major shares, USD 1 billion debt and equity into KE. Performance Standards on Social and Environmental Sustainability, and the relevant ADB EHS guidelines

As part of its financing requirements, ADB also requires implementation of the ESMS (Environmental and Social Management Schedule) in accordance with its safeguard policies (Environment, Involuntary Resettlement, Human Rights), and the technical standards required in the IFC documents. IFC, ADB and OeKB-(Austrian ECA) were our major investment partners. The reduction in T&D losses, together with improved fleet efficiency impacted an improvement in EBITDA by 12% over the last two financial cycles:

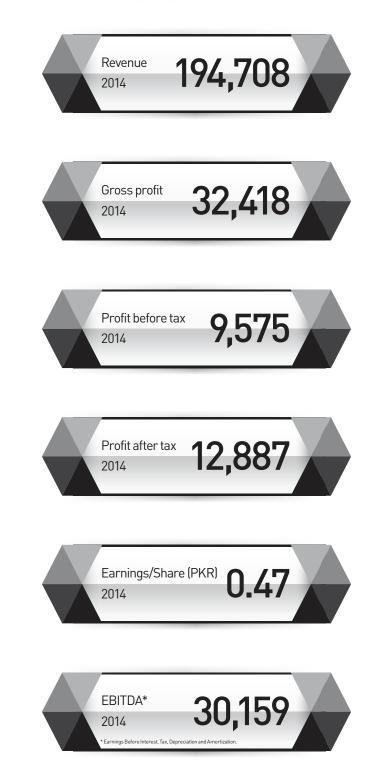
## Financial Initiatives AZM Sukuk of PKR 6,000 million (March 2014)

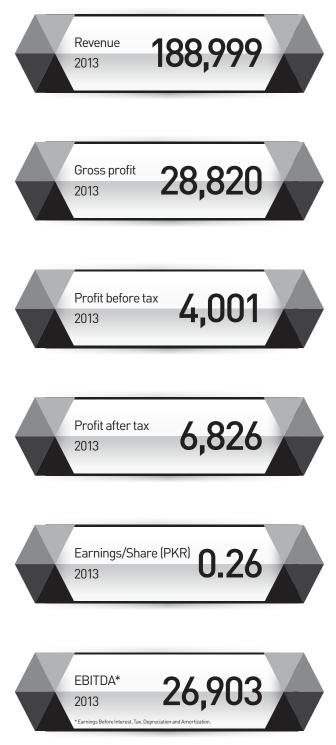
The Issuance of AZM Sukuk of PKR 6,000 million in March 2014 was Pakistan's first ever rated, listed and secured retail Sukuk issuance. The Sukuk proceeds were utilized to fund the permanent working capital requirements of the company. The instrument was rated "A+" (A plus) by JCR-VIS Credit Rating Agency and International Islamic Rating Agency, Bahrain. It is also listed on Pakistan Stock Exchange and received great response from the local financial market and the whole issue was subscribed to within the first 12 hours of subscription. The issuance of KE AZM Sukuk laid a foundation stone for Pakistan's non-existent Capital Market for retail listed Sukuk instrument.

The issuance of Sukuk of PKR 6,000 million has received awards and acknowledgements on various forums i.e. 2nd prize in ICAP Professional Excellence Award and award from South Asian Federation of Exchanges (SAFE).

	FY-09	FY-10	FY-11	FY-12	FY-13	FY-14	HY FY-15
Net Profit (PKR billions)	(15.5)	(14.6)	(9.4)	1.8	6.8	12.9	13.3
Net Profit (USD millions)	(197)	(175)	(110)	29	70	125	131

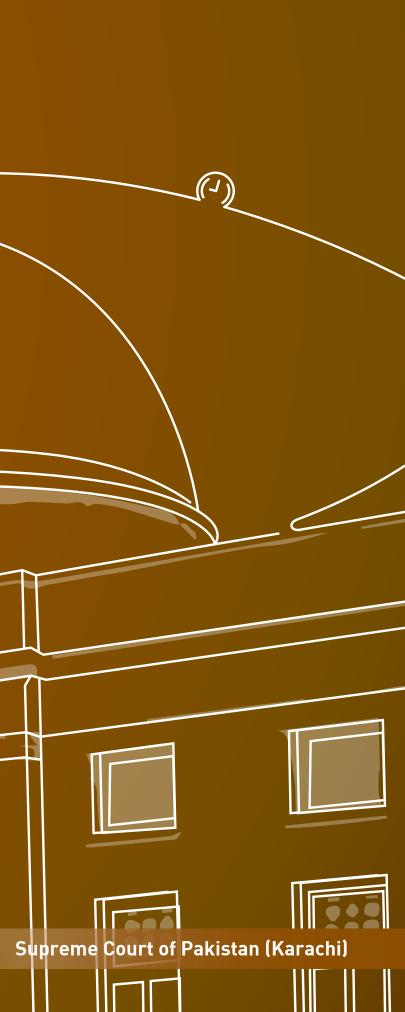
# Financial Highlights (PKR in Millions)





# Harmonizing Shared Value

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# Shared Growth – Human Resource

The work environment and culture at KE enables the individual growth and development of our workforce through strategic human resource management.

Our aim is to provide an atmosphere that brings out the best in all our employees while instilling in them a sense of ownership and loyalty towards the organisation. Enhanced workforce effectiveness through creation of performance driven workforce optimisation (reduction of headcount by approximately 7000 from 17,436 to 10,530)

Effective management of Human Resources is a major milestone achieved for the successful turnaround of the company. Right sizing the organisation through Conversion of 3,500 non-management to management cadre followed by regularisation of 5,700 contractual staff to successful implementation of Voluntary Separation Scheme (VSS) has been key for the creation of a dynamic and performance oriented organisation. On 31st December 2010, KE launched its Voluntary Separation Scheme (VSS), offering approximately 4,500 non-core, non-management employees the chance to leave the organisation through a financially viable offer that would facilitate them to attain a better lifestyle and better growth opportunities. The total estimated payout was between PKR 5.5 to 6 billion and the payback was 4.5 years. Despite the

Union's disruptions and

non-ethical, often criminal, acts to make this scheme unsuccessful, the majority of the 4,500 targeted employees chose to accept and benefit from this offer, making the VSS a success. As of December 2014, management headcount stands at 5,708 and non-management at 4,822.

We seek to be the best employer and we uphold equal opportunity in the workplace to attract and retain



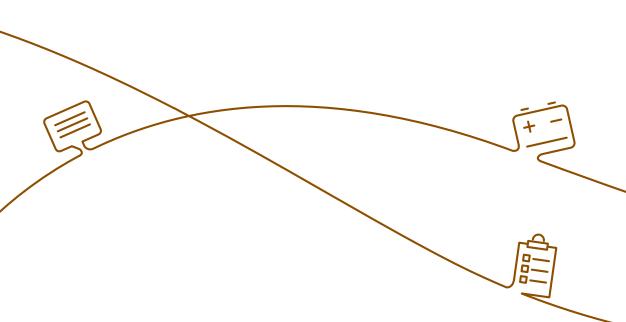
the most skilled personnel in the industry. Given the level of expertise required of our employees, we ensure rewards and remuneration are in compliance with existing legal and statutory wage requirements nationwide, internally equitable, and market competitive. A leadership development programme supports succession planning and management, and we make it a point to monitor the career development of each employee.



	Jun-12	Jun-13	Jun-14	Dec-15
Total number of employees	11,377	10603	10242	10530
Percentage of regular employees	98%	97.8%	96.7%	95.8%
Percentage of contractual employees	0.5%	0.3%	0.2%	0.2%
Percentage of trainees	1.5%	1.9%	3.1%	4.1%

Employment Type	Jun-12	Jun-13	Jun-14	Dec-14
Management staff	5,593	5280	5277	5708
Non-management staff	5,784	5323	4965	4822
Number of trainees inducted	174	216	210	90

Employment by Age Group	Jun-12	Jun-13	Jun-14	Dec-14
Female				
21-30	87	103	109	139
31-40	54	53	53	53
41-50	29	26	21	24
51-59	32	19	14	14
60 & Above	0	0	-	-
Male				
21-30	1780	1802	1771	1991
31-40	3504	3412	3436	3545
41-50	3110	2811	2570	2510
51-59	2748	2375	2268	2254
60 & Above	33	2	-	-





# Standard Guiding Human Resource Policies

We respect the universal declaration of human rights and the International Labor Organisation's fundamental conventions on core standards. Our code of conduct and ethics is designed to protect our employees by creating a comfortable work culture. We also maintain strict anti-corruption policies and procedures with a thorough investigation process. The existing open-door policy at KE allows for any employee to contact senior management freely regarding any issues related to the working conditions and environment.

### Accountability and Transparency

A stringent self accountability survey of all the employees of K-Electric was conducted in order to implement the values of self-accountability and transparency in word and spirit. A HR legal cell was formed in January 2010 in order to take disciplinary action where required – resulting in systems and anti-corruption policies created to deal with misconduct and integrity issues. Implementation of disciplinary committee for the first time resulted in dismissal of 1,175 employees of all cadres due to corruption, theft and misconduct.

### Performance and Reward

We completed our fifth round of Annual Performance Appraisal through a Bell Curve evaluation system for management and staff and initiated a 360 degree performance review. "Variable Yearly Performance Reward Matrix" has been implemented for all employees this year as well. The appraisal system is based on bi-annual review – preliminary and Final (June/December) and a "Bell Curve" approach. We have ensured that the system is based on an organisation-wide transparency policy. Each appraisal is validated by the HR Committee for each group via the group head's presentation.

The organisation links its compensation with performance and its salary scales are transparently broadcasted. Within the last five years, we have been able to complete the reform of our human resources system by linking compensation with ESS performance. Weightage of around 5% in the overall performance appraisal is given to safety policy implementation and adherence. In the coming years volunteerism and climate change policy implementation will also be given due importance.

### KE's Salary Scale

	Min. per Annum (PKR)			
Top Level	2,913,036	11,329,296		
Senior Management	1,355,964	6,943,692		
Middle Management & Below	162,600	3,366,444		

The following table presents KE's annual increment matrix and how it links performance to compensation at the moment.

### **Our Annual Increment Matrix**

	BE	ME	EE	<b>0</b> 5
Top Level	0.00%	6.50%	8.00%	11.50%
Senior Management	0.00%	7.50%	9.50%	12.50%
Middle Management & Below	0.00%	9.00%	10.50%	14.00%

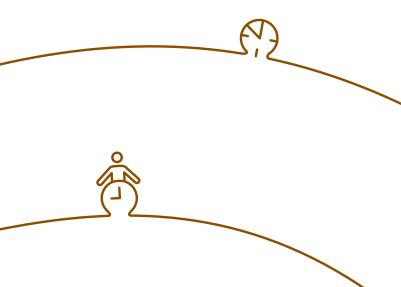
# Employer of Choice

Today we can proudly claim to be among the top preferred employer list for fresh graduates. Our Graduate Trainee Recruitment Drive has been our focus in order to create the future workforce for KE. The programme has become very popular among graduates of all reputable business school like IBA and LUMS and Engineering schools like NED, NUST etc. To date, since 2008 we have inducted 927 young professionals under our Management Trainee/Trainee Engineers programme from various top-ranked institutes.

Internal Job Postings have been successful in motivating current employees by giving them the opportunity to build their careers within KE at positions that match their skill sets and career aspirations. For various positions, KE sought out individuals with relevant experience in blue chip corporate entities, including the Power Sector, Engineering and FMCG Sector, Financial Sector and other organisations. The next tables present KE's employee turnover rates, broken down by gender and age. As the tables show, the rates are also in line with our move to inject new blood into KE.

**Rate of Employee Turnover** 

Year	Total Headcount	Total Resignation & Retirement Cases		Female		P	ſale
		HC	%age	HC	%age	HC	%age
2012	11,377	417	3.67%	11	3%	406	97%
2013	10,603	873	8.23%	52	6%	821	94%
2014	10,530	324	3.08%	18	6%	306	94%



# Maternity Leave and Turnover

There is no concept of leaves for fathers in Pakistan. Our retention rate is 100% for all the female employees who have availed maternity leaves.

# Inclusiveness & Diversity

Equal opportunity and the protection of human rights are foundations of our corporate culture and people development. We recognize the diversity of talent in our workplace and the unique perspectives they bring to the business. Thus, we work hard to foster an environment of inclusiveness, where each individual can flourish to the best of his/her ability.

We currently employ 13 employees with special needs in the organisation and are in discussions for retrofitting our offices for accessibility, helping with policy implementation and sourcing talent. There is a strong presence of females in our workforce, especially in the management cadre. Although the numbers are still very small, making up almost 2% of the employee-base, we hope to achieve a healthier ratio to balance out our human resources in the coming years. With a base of 10,000 employees, plethora of ethnicities, today's KE is a truly cosmopolitan workforce.

Accordingly job grades and salary ranges are the same across all job levels, regardless of the gender or ethnicity of the employee. Nevertheless, KE did inherit a situation whereby the length of service, experience, performance ranking, and other factors that determine compensation vary across gender. This currently translates in a pay differential, but does not in any way influence the pay ceiling of our female workers.

The differential is expected to equalize over time as our new female hires accumulate experience, service time and performance related capacities. Since the difference is negligible and we do not want to create any policy level gender biases among employees, so over time as the female population grows in the organisation, we are consciously closing this gap and there is no gender wise differential practiced in the current hiring.



# **Celebrating Diversity**

K-Electric is an organisation committed to sharing values of diversity and inclusion in order to achieve and sustain excellence.

We firmly believe that we can best promote excellence by recruiting and retaining a diverse group of employees by creating a climate of respect that is supportive of their success. The increasing population of females at K-Electric was felt with greater impact when a room full of KE's female employees buzzed with energy and enthusiasm to interact with their CEO.

It was for the first time that an interactive session was arranged for females to discuss various aspects of organisational sensitisation for a more facilitating work environment.

Various relevant issues with regards to retrofitting, transportation, childcare and training, etc. were raised along with some very useful suggestions by the participants. Mr. Nayyer Hussain responded to the various queries and suggestions very objectively.

Following the session various decisions have been taken to facilitate females for a fulfilling career at K-Electric.

# **Training Our** Next Line of Leaders

In a highly technical, specialized business such as ours, there is only one standard to aim for: excellence. We believe that competitive advantage lies in continuously enhancing the capability of our employees and strengthening expertise in their respective disciplines. Given the skill and level of expertise required of our employees to maintain our leadership position, training is the focus on which we build excellence.

Standardized and structural learning interventions through "AZM" Learning Institute have introduced the largest management trainee programme in the country.

Training, certification & promotion of 855 karkuns in the Semi-Skilled Lineman Training Programme.

Total 12,973 employees trained since January 2013 till July 2014.

Total training budget for FY2014-2015: PKR 99.75 million.

Total training man-hours of 240,048 since January 2013 till July 2014.

Induction and training of 927 management trainees, trainee engineers, trainee accountants since 2008.

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### Induction and training of 927 management trainees, trainee engineers, trainee accountants since 2008.

Individual Career Development warrants special focus in order for an organisation to develop as a whole. Our interventions ensure progression and development through the following mechanisms:

### **Career Progression**

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Extensive career progression based trainings conducted to promote Karkuns to Semi-Skilled Linemen. 20 batches have completed training and 823 employees have been promoted through this programme. Other training and development

initiatives include the First Time Supervisory Programme for employees who are new to supervisory roles, the emerging managers programme for high-potential management employees, technical training programme for our field staff, the business catalyst programme to inculcate forward thinking and the motivation to achieve business goals and workshops to tackle commonly faced difficult situations during customer facilitation.

# Benefits provided to full-time employees that are not provided to temporary or part-time employees

Car & fuel allowances as per entitlement (manager to GH level)

Mobile phone & Blackberry handsets with allowances

Leave fare assistance (one gross per annum)

Financial assistance in case of natural or accidental death

Medical services

Hajj leave (once in whole service), iddat leave, maternity leave & regular 30 days leave per annum

House accommodation up to manager level

Employee retirement benefits	2013	Jan-June '14	Jul-Dec '14	2014
Gratuity	3,879,895	3,973,534	4,128,210	8,101,744
Post retirement medical benefits	1,058,868	635,102	659,093	1,294,195
Post retirement electricity benefits	307,025	337,585	344,249	681,834
Total	5,245,788	4,946,221	5,131,552	10,077,773



# **Shared Protection – Health & Safety**

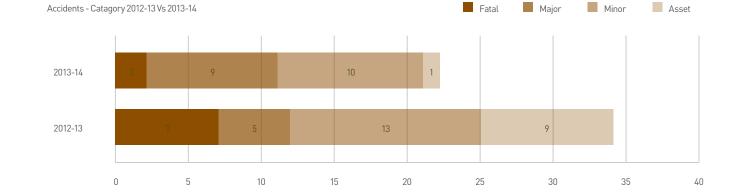
# KE is committed to protecting the safety and health of its more than 10,000 workforce employees and their families. We are also committed to spreading awareness with regards to public safety.

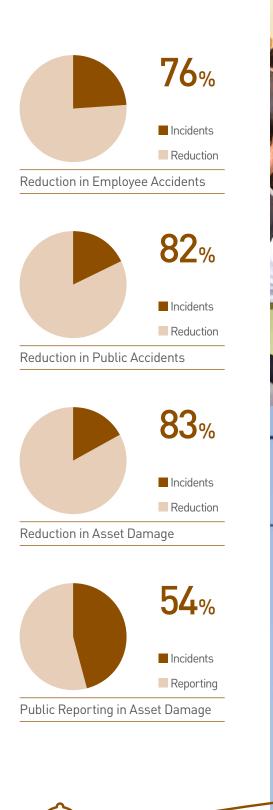
Commitment to achieve our health and safety goals is an embedded value at KE. The new management took on a very aggressive approach to Health and Safety and over the last five years we have created a Health and Safety management system that drives compliance with the policy, continuously improves our performance and measures our actions against our words.

Our employees' health and safety are of utmost importance as we tackle some of the toughest safety challenges. We aim to have zero fatalities and no incidents that harm people. We put extra focus on managing the most critical safety risks. We work to mitigate these risks by enforcing compliance with vital controls, and effectively checking that controls are in place at all times. Safety Management has been made an important personal objective for every employee of KE as a mandatory commitment in their annual performance appraisal.

In the utility sector, KE has attained a thought leadership position and has created safety compliance benchmarks for the overall sector to follow. Over the last five years we have shared our leanings with other utility providers and have also earned recognition in the form of awards. Our success rests on a culture aimed at inculcating safety oriented values, for self, peers and assets of the organisation. Safety audits are being conducted regularly and the sustained system compliance is encouraged through cash awards and organisation wide recognition.

The sustained efforts have left a positive mark, a fact confirmed through the radical reduction in employees' accidents by 76% and public accidents by 82%. Our basic theme of safety of employees, contractors and assets was rewarded in 2013-14 with overall accidents reduced by 32% (34 to 23), year-on-year. Employee accidents were reduced by 12% (25 to 22) accidents], with fatal and minor accidents reduced by 57% (9 to 3) and 23% (12 to 10), respectively as compared to 2012-2013.







# Safety Management System

A comprehensive Safety Management System (SMS) was designed on the principles of ISO 9000, ISO 14000 and OHSAS 18000, with a strong focus on:

- Evolving a safety culture through development of policies and procedures
- Garnering employees' involvement by sustained safety and task-oriented trainings
- Defining safety responsibilities and accountabilities
- Linking individual safety performance with annual appraisals
- Awarding safety rewards and reprimands
- Disseminating lessons learnt from accident investigations

- Regular safety oversight audits
- Hazard identification
- Risk management
- Developing emergency response plans, etc.
- All five KE generating stations achieved OHSAS 18001:2007 certification.

Business units were also encouraged to take safety initiatives, such as near-miss reporting, tool-box talks, evacuation drills, job specific trainings, internal audits, and safety walks to name a few, which resulted in a significant reduction of occupational incidents throughout the organisation. An increase of 38% in safety initiatives (Training from 853 to 1,777, Near-Miss reports from 213 to 518, Safety Walks 8312 to 13425 and Tool-Box Talks 21,355 to 31,490)

resulted in bringing down the accident rate of 2.3 accidents per hundred thousand interruptions to 1.39 accidents per hundred thousand interruptions.

# Safety Training

A total of 16,708 employees have been provided safety training, with 11,415 staff members trained last year alone. Employees were trained for 27,554 man-hours on subjects ranging from basic safety, tool-box talk, environmental awareness, first aid, fire fighting and summer preparedness to effective communication, etc. To monitor and measure effectiveness of the safety management system in KE's licensed area of 6,500 square kilometres, a spot check and survey system was established to perform random safety audits of field activities performed at grid stations, power plants, transmission corridors. HT and LT distribution network, new connections, etc. This

year, more than 1,228 such audits conducted by corporate HSEQ teams were closed and recommended corrective measures were implemented by the concerned departments.

Emergency Response Plans have been prepared for all locations of strategic importance, such as power plants, head offices, grids, IBCs, etc. and periodic evacuation drills are being conducted to ensure awareness amongst all staff members on actions required to be taken in emergency situations. More than 300 emergency drills conducted this year with safety wardens in place within all major areas.

Investigation of all occupational accidents of fatal, major, minor and asset nature have been conducted by HSEQ investigation teams, along with concerned departmental representatives. They identified root causes and other contributing factors of accidents, so that these could be mitigated through

implementation of recommended actions and recurrence of such incidents could be prevented.

# **Percentage of Employees in HSEQ** department are 0.4% apart from around 400 safety wardens across the organisation.

This reduction in accidents has not only shown continual improvement in our safety management system and raised employee satisfaction, but has also reduced financial cost of accidents by up to PKR 20 million during the year.

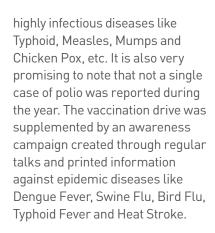
# **Employee Wellness**

Employee health and wellbeing remained a top priority. A new dimension was added to our Health and Safety vision when its scope was enhanced to include the

families of employees, under the "We Care" programme. The programme was aimed at providing preventive vaccination and medication against leading causes of diseases in Pakistan. Improved health resulted in lower absenteeism and more efficient employees.

Regular vaccination campaigns were run throughout the year to provide employees and their families with immunisation at their doorstep against Hepatitis-B and other highly infectious diseases. The immunisations were also made available daily at our centres. The vaccination drive was in line with the W.H.O health programmes, conforming to the National Health Programme and Expanded Programme for Immunisation (EPI).

The vaccination campaign achieved very encouraging results by reducing Hepatitis-B cases by 73% (100 to 27 employees) and reporting of sick children to the medical O.P.D for



Senior workers (above 55 years) were given thorough annual medical check-ups. Employees who had fitness problems were either treated and made fit before taking any high-risk jobs, or were retrained to relatively simpler or less risky work. In this way, an important segment of a highly trained workforce was utilised with more efficiency and effectiveness. Six-monthly health and hygiene check-ups of workers remained in focus for improving general wellbeing. In this respect 4,532 workers were checked and 25 contagious diseases were identified and reported. 349 hygiene workplace inspections conducted to ensure better work place hygienic conditions. These were integrated with awareness sessions on "First Aid" and "Ways to Improve Personal Hygiene" These efforts were major contributors in reducing work-hour loss through the "We Care" programme.

# Public Health and Safety

For the first time in Pakistan, a power utility invested marketing dollars to ensure that everyone is safe. On an annual basis, we launch marketing awareness campaigns on general public safety, especially during the monsoon season, through extensive coverage in electronic, print and outdoor media. Public outreach activities like stall activation in malls, school programmes and other public awareness talks are also organised on an annual basis.

A 'Safety Hazards' reporting button is placed on KE's website to facilitate the public in reporting



electrical hazards in their vicinity. Quick response to resolve the reported issues is being ensured by an efficient team that is available round the clock. In 2013-14, 563 hazards were reported on KE Safe Card like tilted poles, wire loose, broken conductors, tree branches touching conductors etc. All of them were reported on top priority basis resulting in reduction of public accidents by 82%.

# Shared Progress – Supply Chain

KE offers strategic support to partner suppliers, understanding that the growth of its suppliers directly translates to improvements in its own competitiveness and quality.

Increasingly, shared growth between big and small businesses is becoming a matter of global significance. KE's supply chain involves not just the methodical sourcing of material and services from suppliers and vendors, it essentially means the very system that allows the rest of the organisation to perform its day-to-day operations without interruptions. At KE, supply chain has the added responsibility to ensure that we move our business to entities that adhere to the strictest of ethical standards and norms including all governing labor laws and code of conduct and ethics. KE works to implement principles of shared growth with its suppliers in order to create a mutually beneficial business ecosystem with them. Over 75% products and services procured locally with a base of 2,777 suppliers.

Over the course of the fiscal year, several improvements have been made to existing systems, as the department continues to upgrade itself. To reduce lead times of purchase and reduce dependence on suppliers that monopolise the market, new contracts have been introduced and new suppliers have been taken on board for the procurement of goods and services.

Effective management of real estate and works has seen several construction and renovation projects delivered, while the number of rented premises has also been reduced as part of KE's rent-free vision. We have implemented an online centralized Real Estate Database Management System with a GIS overlay, covering aspects of property data and space utilisation.

Systems at Inventory Management have been improved through the implementation of SAP and the creation of inventory and scrap disposal management portals, all associated processes have also been standardized by developing SOPs. We have also incorporated a PR release strategy and a Warehouse Management System for improved stock visibility and traceability. Advance material planning for TSW has been initiated which has led to a reduction in material stock outs.

The fleet management department has implemented a cohesive fleet management solution and successfully reduced the fleet age. 181 new fuel efficient MTLs have been inducted. The capacity of KE's transformer workshop has been enhanced and it now also repairs switch gears and isolators mechanisms. 2,564 transformers have been refurbished in the last



one year. The initiatives and steps taken with respect to KE's supply chain are primarily aimed at the streamlining and automation of relevant processes to increase efficiency and control, while lowering the costs associated in these areas.

All this needs to be done in a socially responsible way by conducting business with ethical suppliers; the idea being to support the rest of the organisation and augment its smooth operation allowing us to further thrive as the region's flagship energy provider.

# Harmonizing Shared Impact

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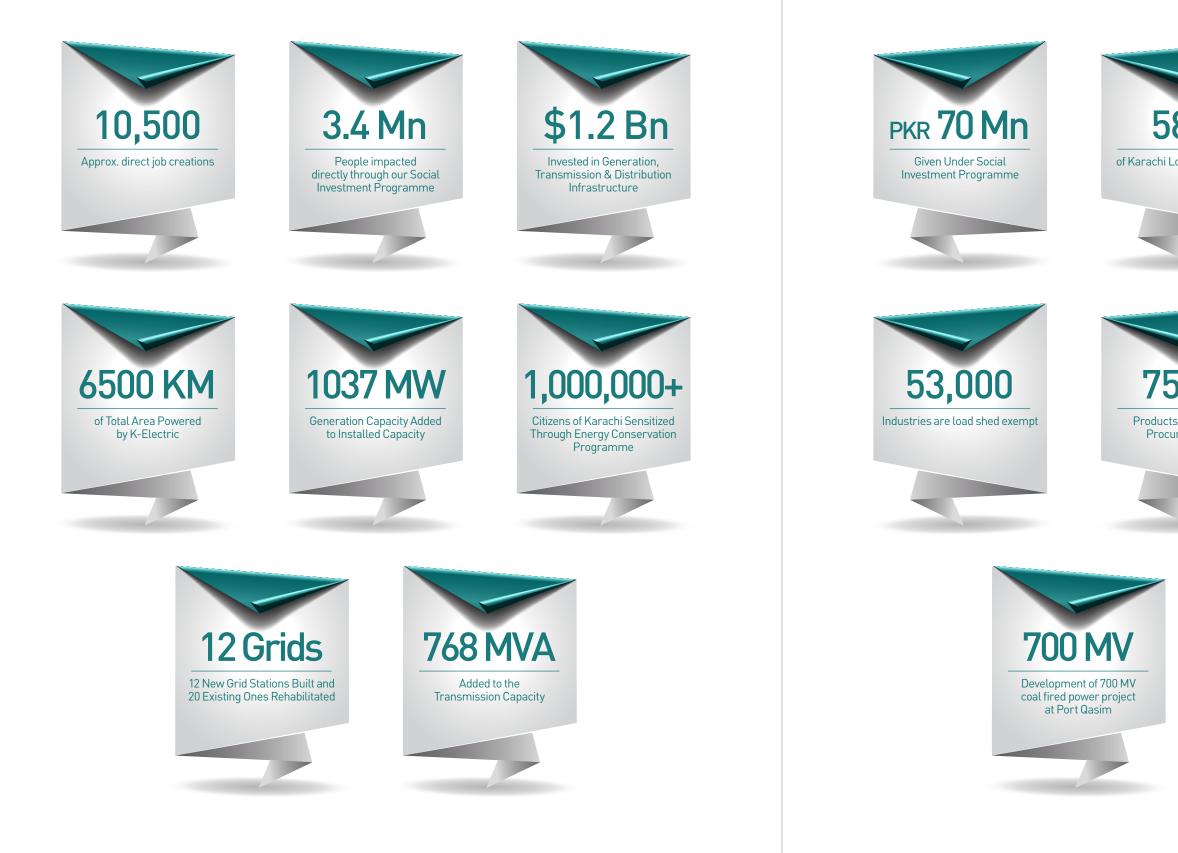
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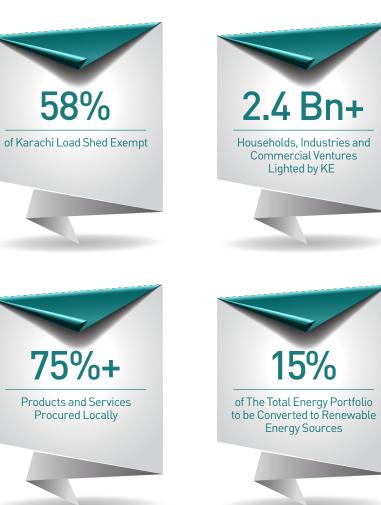


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# **Our Sustained Impact**









We firmly believe that KE's own sustainability is fundamentally linked to the economic, social and environmental values that we create for a diverse set of stakeholders whom we serve and engage on a daily basis.

In accordance with its belief that business can prosper only when the society within which it operates remains healthy, KE maintains a wide range of CSR activities in order to help build a better society for all. KE works to contribute to the improvement of communities in areas such as poverty reduction, health, education, skill development, environmental protection, and energy conservation. KE regularly conducts studies on potential environmental and societal impacts whenever it plans to develop a new project. KE takes care to ensure that its new projects not only facilitate lives through provision of uninterrupted quality power but also contribute to making the community healthier.

# Social Investment Programme

The impact created by our Social empower through power. The umbrella programme undertakes all initiatives that facilitate life line welfare organisations and entities

# **Social Investments**

Investment Programme is huge. We

that directly impact the quality of life of the masses facilitating them with provision of their basic needs. The approach we take allows us to benefit from our operational capabilities and the experience of our workforce.

Under this programme we also cover unforeseen calamities and emergencies and facilitate the victims through relief up to six months on their electricity bills.

### Empowering Through Power

The Empowerment Programme provides relief to social welfare organisations in the healthcare and education sectors. So far, under this initiative, agreements for provision of subsidized or 100 percent free electricity have been signed with 13 major lifeline health and education institutions of the city. These organisations act as life support for the underprivileged and masses and have huge impact on millions of lives in the city.

### Impact (Persons) Indus Hospital 560,000

Providing state-of-the-art, free-of-cost, tertiary level healthcare with a focus on research. Indus Hospital is implementing a master plan which will make this hospital the biggest tertiary care welfare hospital.



Impact (Persons) 33,000

MALC (Marie Adelaide Leprosy Centre) Working for Leprosy elimination, TB and Blindness Control and Community Development for the last 56 years with a well-knitted network.



Impact (Persons) 1,873,314 **SIUT** (Sindh Institute of Urology & Transplantation) One of the largest urology care and renal transplant institution in Asia provides specialized medical care to patients suffering from kidney, liver, related cancers and ethical transplant procedures "Free of Cost".



Impact (Persons) 58,000

**TCF** (The Citizens Foundation) Pakistan's leading organisations in the field of formal education providing 100% free education to the underprivileged of Pakistan.



Impact (Persons) 520,348

**LRBT** (Layton Rahmatulla Benevolent Trust) Provides comprehensive eye-care, ranging from simple refraction to the most advanced retinal surgery and corneal transplants.



Impact (Persons)

5,400

**Bait-ul-Sukoon Cancer Hospital** 

With 50 beds for inpatients and diagnostic facilities of mammography, ultrasound radiography, pathological laboratory and in-house pharmacy, Baitul-ul-Sukoon offers a complete range of cancer treatment.



Impact (Persons) 90,000

### Lady Dufferin Hospital

The largest maternity hospital of Pakistan providing state-of-the-art mother and child health care being managed on a nonprofit basis.



Impact (Persons) <b>32,000</b>	Karwan-e-Hayat Leading provider of psychiatric of the mentally ill.
Impact (Persons) <b>7,300</b>	<b>SOS Children's Villa</b> A home like orphanage which pro education and job-training, allowing develop a sense of confidence in t
Impact (Persons) 125,000	<b>Behbud Association</b> 50 years of empowering women providing healthcare, education
Impact (Persons) 62,000	<b>The Kidney Centre</b> The Kidney Centre is a proverbia treatment and the premier phila renal-related diseases.
Impact (Persons) 42,730	<b>APWA RLCC</b> Working for the empowerment of improved health, education and
Impact (Persons) <b>57,647</b>	<b>FESF</b> Dedicated to enhancing the qual members of the community by i development, and empowering
Total Impact	3.4 million

care, offering a full range of services for

### age Pakistan

ovides loving care, security, higher ing the children to live normal lives and to them to develop their full potential.

, children and their communities by h & income generation opportunities.

ial oasis of complete medical relief and anthropic institution for renal and

of youth and women of the area through economic independence.

lity of life for the disadvantaged investing in their educational them to reach their full potential.









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Impact

### System Enhancement Programme

Under this initiative KE provides uninterrupted supply of electricity to 23 major hospitals and educational institutions in the city that provide services to nearly 80% of Karachi. Dedicated feeders and PMTs are provided free of cost along with the system enhancements required to allow smooth running of operations.

# **3.4 Million** Individuals Annually PKR 70 Million Spent in 2 Years



KE provides capacity enhancement through investment in the overall electrical system in order to either enhance the quality of power or to increase the system capacity to increase reach and coverage area. Mostly investments in the systems are made to ensure fault free power supply to all strategic hospitals of the city or in order to support the expansion of a specific strategic facility. System enhancements have been implemented for three major hospitals, all of which are our existing empowerment partners.

Indus Hospital - started off with a then current usage capacity of 400KW. With KE's empowerment and enhancement programme, Indus Hospital was given an additional 2.5MW enhancement and system upgrade which increased the total usage capacity to 2.9 MW which will

suffice to the expansion project to a 1,500-bed hospital. The investment amount for Indus Hospital's system enhancement was PKR 7.3 million.

**SIUT** (Sindh Institute of Urology and Transplant) - catering to an annual influx of over 1 million patients annually, SIUT requires a heavy load to operate their dialysis units and kidney transplantation facilities. The Primary Healthcare Unit and

the Deewan Faroog Complex of SIUT were donated a massive 2.9 MW connection under KE's empowerment and system enhancement plan. This would help SIUT channelize their efforts to improve healthcare provision to the patients. The total investment amount of the system enhancement is 7.1 million PKR.

LRBT (Layton Rehmatullah Benevolent Trust) – catering to 0.5 million patients annually LRBT is a partner under KE's Social Investment Programme. A 3-phase connection allowing usage up to 20 Kilowatts was donated to LRBT's North Karachi facility. The social investment amount for system upgrade is 266,000 PKR.

### **Employee Volunteering**

Our employees regularly participate in the INJAZ Pakistan, TCF Rahbar and TCF Career Counseling programmes. They also conduct Management Workshops to aid the capacity building of our Social Investment Partners. Technical training and plant tours are conducted by our technical experts imparting knowledge and strengthening our knowledge sharing platform.

Over 3,000 hours have been volunteered over the last two years. which brings the total so far, up to 153,000 hours. Our aim is to scale up this programme by bringing on board a panel of NGOs working for the betterment of the city and providing these options to our employees in the form of a volunteering menu.

#### Emergency **Response Initiative** Calamity

In times of calamities like fire incidents and bomb blasts, KE has always stepped forward as the only corporate entity to provide support to victims of these tragic events and has created an example for others to follow. We supported the victims of the Kharadar fire incident, Abbas Town, Baldia industrial fire incident and most recently supported the victims of Timber market fire incident Monthly electricity bills for then current and next six months were waived for the affectees of the tragedies.

KE's initiative has been reciprocated by other entities especially utilities like SSGC as well.

#### **KE – TCF School** The newly-constructed TCF

school built on 5,000 yards land



donated by KE within the KE's employees residential colony has become one of the flagship campuses of TCF in Karachi. With a capacity to incorporate 1,000 students, with huge sport grounds and airy classes, the campus fills a gap to service the whole of Bin Qasim area.

The current initial strength of the campus is 200 students with around 100 students belonging to KE residential colony.

Usable furniture and other items were donated to the Dar-ul-Banaat Fellowship School for Girls.

Also, K-Electric Limited under its Social Investment Programme distributed solar-charged study lamps among high performing students of The Citizens Foundation School.

# Impact

# 6 million Individuals Annually

# Solar Study Lamps Distribution

90 top performing students at the TCF, Qayyumabad school were awarded Solar Study Lamps with dual charging by solar power and electricity by the chairman of KE.

This marked the first step of the project initiated by KE, under which KE would be providing solar lamps to all secondary high academic achievers in eight campuses of the TCF.

With the solar-charged lamps, which have a battery life of 6 hours, students would have an alternate source of emission free light for studying. KE's objective through this project is to provide extended study hours to students giving them an opportunity to enhance their academic performance.

### Thought Leadership Platforms

KE's aim with this programme is to bring progressive minds together and promote enlightened thoughts aimed at sustainable development. To this end we have created platforms that facilitate the spreading of intellectual opinions.

#### Thought Leadership Forum

Using this platform we bring together all concerned stakeholders to discuss issues that are affecting our society and the economy, to collectively work towards solutions that will benefit Karachi and Pakistan. The overriding theme of each forum has been to initiate sustainable and harmonized development. So far two events have been held under this umbrella. First one addressing

the 'Impact of Privatisation on Sustainable Development was having invited Dr. Ishrat Hussain – Dean and Director (IBA) as the keynote speaker. Champions from government and private institutions were invited to attend the session. The second session was based on the theme of 'Social Entrepreneurship and its Impact on Sustainable Development'. Notable entrepreneurs from across the board were invited to address the audience about the initiatives that brought a new meaning to the word sustainability. Speakers for the session were Dr. Abdul Bari Khan-CEO (Indus Hospital), Mushtaq K. Chhapra- Founder and Director (The Citizens' Foundation) and Dr. Adib Rizvi – Key Note Address- Founder and Director (SIUT Pakistan). We will continue to create thought leadership forums on topics which









are relevant to the overall growth and prosperity of the city.

#### Youth Engagement Platform

Since the inception of the Youth Engagement Platform, 34 sessions have been conducted in terms of technical visits and lectures, aimed to impart real life, technical knowledge of the course matter being studied at the technical universities. The students gain insights of practical implementation of the knowledge being taught at their institutions. Major institutions who have partnered with us on this platform are NED, IBA, FAST, KSBL, SSUET, Mehran University Nawabshah, Mehran University Jamshoro, Bahria University, and IoBM to name a few. So far with this initiative and our various youth engagement platforms we have targeted over 8000 students.

#### PSSE Sponsorship and PhD Facilitation

KE recently invested in NED University's PHD programme as a facilitation partner. KE has entered into a MoU for mutual knowledge sharing with NED. 1.8 million PKR have been invested under this initiative to benefit both the undergraduate and postgraduate students of NED University in their understanding of the real power system by making models, running load-flows and simulating fault for their research studies.

#### **NED Lab Creation**

KE has pledged to develop a technical, testing lab at NED University for research and study purposes. The KE exclusive lab will have state-of-the-art equipment that is required to understand the basics of electrical engineering equipment and their workings.

#### PAKATHON – Data Design and Connect – Competition

KE participated in a unique challenge, under the advisement of the MIT Enterprise Forum of Pakistan. This forum aims to bring together industry and academia with talent from Pakistan and abroad.

PAKATHON was initially launched in 3 cities namely, Boston, Lahore and Islamabad where there were 250+ attendees for 30 different projects. KE was the only organisation that volunteered to allow use of actual data for solutions, provided challenges to these students so that solutions for load-shed and theft could be sought. Team with the best solution was awarded the prize, which was PKR 200,000 by K-Electric.



# Shared Impact – Sports



KE Sports department not only manages our professional football and cricket teams, but also focuses on grass-roots development of sports in the troubled areas of Karachi. The aim is to divert disenfranchised youth towards more positive outlets and increase the national profile of sports.

KE believes that the best way to serve the society through sports is to inspire the youth, especially the underprivileged youth, to adopt a healthy lifestyle focused on sports. Creation of powerful platforms is critical as it does two things: allows young and upcoming players to display and harness their talents, and provides us a communication platform to engage the community especially crime inflicted, electricity theft prone underprivileged communities and build a strong positive association with them. Under this strategy the following initiatives were implemented to strengthen ties through sports:

### **KE and UNICEF**

KE and UNICEF entered into an agreement, with the pledge to support our grass-root sports development initiatives and to mutually increase awareness regarding polio and preventive diseases through tactical communications — because 'Karachi Deserves To Smile'.

### KE Youth Football Programme

In line with this, KE sponsored the KE Lyari Football League in

collaboration with UNICEF and the Anti Narcotics Force in May 2014. KE worked with UNICEF and the Anti-Narcotics Force to provide awareness to underprivileged children regarding the dangers of drug use and the importance of immunisation for kids and other health related messages.

This tournament was organized for the underprivileged youth of Lyari. Twelve teams of under-16 footballers participated in this tournament. The tournament was held at the People's Stadium Layri. 32 matches were played.

KE–Lyari 2010 League recognized 11 underprivileged children who were selected for the Pakistan U14 team, out of which 9 went on to represent the Pakistan team. Night Street-Football Match in collaboration with Azm-e-Alishan in support of the victims of the Lyari bomb blast was also organized.

### KE Football Future Objectives

One of KE objectives is to be able to produce players who can go on and take the Pakistan Football Team to qualify for the AFC qualifiers in five years and also substantially push Pakistan up in the FIFA rankings. To achieve our vision, some initiatives were taken to develop a football team on grass-roots and some are in the pipeline.

## KE Lyari Football League

Lyari is the hub of football and keeping this in view KE is always eager to develop football for underprivileged children in Lyari. With this spirit KE will be organizing a platform for the youth of Lyari to



show their potential, which will be live telecasted by the biggest national sports channel, Geo Super, in April 2015.

### **KE Cricket League 2015**

KE Cricket league under-19 cricket teams from all 7 zones of Karachi will participate in this league with live telecast of final match on leading sports channel of Pakistan.

# Harmonizing Environment



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# **Green Management Framework**

In 2013, KE launched its 5 year cumulative climate change framework to address critical challenges faced by one of the largest cities of the world, including the need for cleaner and more-efficient sources of energy, reduced emissions and emphasis on efficient energy usage advocacy. Since then, we've been focusing on fulfilling our commitments and KE has made significant progress in the commitments.

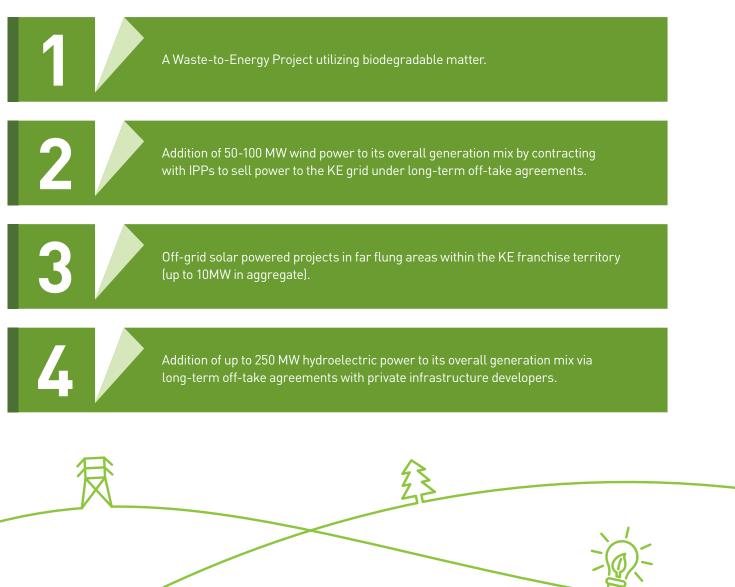


# **Climate Change Policy Framework**

KE has adopted a balanced and responsible approach, while carrying out its core business operations that reduces carbon emissions and ensures social and environmental gains. We aim to expand our current generation portfolio by 15 percent through renewable energy and various energy efficiency initiatives over the next five years to mitigate climate change and reduce our carbon footprint.

### **Renewable Energy Infrastructure**

KE's goal to enter and grow in the renewable energy space is driven by its goal to reduce dependence on fossil fuels, improve security of fuel supply, and reduce greenhouse gas emissions creating environmental benefits. The following projects will be added to our portfolio by 2018.



## **Energy Efficiency and GHG Reduction**



Open-to-combined cycle power projects at the existing plants in SITE and Korangi within the next 18-24 months which will increase the overall heat rate efficiency by 5%

Incentivizing Karachi-based industries using captive power (average efficiency 20%) to switch back to KE (average efficiency 45%) as the primary source of

environmentally-friendlier imported Liquefied Natural Gas (LNG) into the fuel mix as a

Facilitating the revival of the 80 MW DHA cogeneration (power & water) plant in Karachi.

Transmission & Distribution (T&D) technical loss reduction package via Pakistan's first Smart Grid project. The Smart Grid has a broad range of technologies that will spur the nation's transition to a smarter, stronger, more efficient and reliable electric system.

Replacement of all our internal equipment containing CFC compound (air conditioners,

# **Energy Conservation**

KE remains proactive in advocating and fostering responsible energy usage among our customers and employees. We propagate and facilitate energy efficient lifestyles among our customers. We also facilitate our industrial and commercial customers through consultation and advisory services to adopt energy efficient operations. We are actively pursuing the following:

Power factor improvement projects and free energy audit service for industrial and commercial customers.

Encouraging the usage of energy efficient appliances and adaptation of efficient energy systems and building codes in collaboration with reputable manufacturers, architects and construction experts.

Awareness creation for adaptation of energy efficient lifestyle specially targeted towards the youth.

Active participation in the ADB-funded energy-saver national distribution programme. Cost sharing in the conversion of main municipal thoroughfare street lights and landmark monuments to LED and solar lights. Collaboration with USAID on the KWSB pumping station efficiency project.

Incentive programme for commercial markets to adopt Daylight Saving Programme by way of guaranteed uninterrupted power supply during their operating hours.

## **Environmental Compliance and Green Zone Development**

We continue to mitigate our GHG emissions through creation of green zones. For day-to-day operational monitoring, the following systems are being implemented:





# **Climate Change Policy - Progress**

Since the launch of Climate Change framework in 2013, KE has made significant progress on our commitments.





Signed two separate MoUs with Engro with the objective of using LNG as fuel for new generation.

# 80

51 Energy Audits conducted leading to 5.6 MW of Optimized Load, 25.3m KWH of units saved, a saving of PKR 402.23m and a reduction in carbon emissions by 5,119.2 M tons.

96

# Lowering Emissions

There were no spills or accidental releases of any pollutants during the period 2013-14 and no complaints or violation notices were received from any regulatory body of the land. No penalties or fines were incurred during the period.

### **Fuel Switching**

KE's new generation plants and expansion projects are primarily based on a low-carbon solution – natural gas. More investments in sustainable projects based on renewable energy sources, bio fuels and liquid natural gas are being done. KE is working with local and international strategic partners to introduce environmentally friendlier imported Liquefied Natural Gas (LNG) into the fuel mix as a replacement for imported high-sulfur furnace oil.

### SF6 Gas Monitoring

A comprehensive procedure for Sulphur hexafluoride gas (SF6) gas monitoring and management has been released for implementation across KE. This was essential for the effective management of SF6, a Fully Fluorinated Compound (FFC) which is recognized as the most potent greenhouse gas. KE accounts for all SF6 gas in its system, and also the amount of gas that has been lost to the atmosphere. Status of the monthly consumption and availability of the gas is maintained. Regular feedback is taken from the grid management to promote efficient use of the gas and control releases to the atmosphere. Replacement of old SF6 gas insulated breakers in KE's network is also planned.

### Compliance Update

KE is in complete compliance with the National Environmental Quality Standards (NEQS) of Pakistan particularly with respect to its operations at generation plants. KE has now registered itself in the Self Monitoring and Reporting Tool (SMART) with the Environmental Protection Agency (EPA). There were no spills or accidental releases of any pollutants during the period 2013-14 and no complaints or violation notices were received from any regulatory body of the land. No penalties or fines were incurred during the period.

Third party monthly monitoring has been carried out consistently and comprehensive monitoring reports are generated which are sent to the Sindh Environmental Protection Agency (SEPA) for regulatory compliance.

# Environmental Systems measure: 2013-2014 Result

Our environmental system measures records our emissions, effluents, and solid waste. KE's monitoring results are in total compliance with National Environmental Quality Standards. Our improved performance has been widely recognized as the best in Pakistan, to the extent that some local distribution companies approach us for help with training their staff and improving their environmental systems.



#### Name of Unit/Site: Bin Qasim Thermal Power Plant 1

Liq	Liquid Effluent Monitoring										
	Parameters	Unit		NEQS	Sea Water	Wastewater					
			1	2	3						
01	Temperature	°C	40=<3	40=<4	40=<5	28.75	30.25				
02	pH value		6-9	6-9	6-9	7.18	7.39				
03	BOD5	mg/l	80	250	80	69	37.33				
04	COD	mg/l	150	400	400	173.33	170				
05	Oil & Grease	mg/l	10	10	10	0.025	0.025				
06	Total Suspended Solids	mg/l	200	400	200	7.58175	9.125				

#### **Gaseous Emission Monitoring**

#### Fuel Used: F. Oil /N. Gas

 $\widehat{\boldsymbol{\Omega}}$ 

I G									
	Parameters	NEQS	Turbine						
		(mg/Nm3)	1	2	3	4	5	6	
01	СО	800	125.15	35.58	Nil	Nil	317.50	77.2	
02	NOx	400	314.07	222.25	Nil	Nil	221.73	236.99	
03	S02	1700	1524.6	1191.21	Nil	Nil	674.74	945.63	
04	Particulate Matter (PM)	300	60.9	83.16	Nil	Nil	94.83	143.25	

# Name of Unit/Site: Bin Qasim Thermal Power Plant 2

Liq	uid Effluent Monitoring							
	Parameters	Unit		NEQS			Wastewater	TWW
			1	2	3			
01	Temperature	°C	40=<3	40=<4	40=<5	29.75	31.00	29.42
02	pH value		6-9	6-9	6-9	7.17	7.13	6.69
03	BOD5	mg/l	80	250	80	63.33	60.00	6.00
04	COD	mg/l	150	400	400	160.00	150.00	13.00
05	Oil & Grease	mg/l	10	10	10	0.03	0.03	0.03
06	Total Suspended Solids	mg/l	200	400	200	15.17	13.22	14.00

#### Gaseous Emission Monitoring Fuel Used: N. Gas

Tu	Parameters	NEQS	Turbine						
		(mg/Nm3)	1	2	3	HRSG # 1	HRSG # 2	HRSG#3	
01	CO	800	3.0	4.89	3.22	3.5	6.67	5.84	
02	NOx	400	5.92	34.66	6.11	6.5	6	7.335	
03	S02	1700	BDL	1	1.00	Nil	Nil	Nil	
04	Particulate Matter (PM)	300	32.33	30	37.33	Nil	Nil	Nil	

#### Name of Unit/Site: Combined Cycle Power Plant

Liq	Liquid Effluent Monitoring										
	Parameters	Unit		NEQS	Sea Water	Wastewater					
			1	2	3						
01	Temperature	°C	40=<3	40=<4	40=<5	27.3275	28.335				
02	pH value		6-9	6-9	6-9	6.4075	6.57675				
03	Oil & Grease	mg/l	10	10	10	BDL	BDL				
04	Total Suspended Solids	mg/l	200	400	200	11.7475	16.085				

#### **Gaseous Emission Monitoring**

Fuel Used: Natural Gas

<u>\_</u>

Parameters	NEQS		Turbine							
	(mg/Nm3)	1	2	3	4					
СО	800	61.165	16.75	40.67	19.92					
NOx	400	43.665	41	59.96	14.25					
S02	1700	Nil	Nil	BDL	Nil					
Particulate Matter (PM)	300	Nil	Nil	13.33	Nil					
		ParametersNEQS (mg/Nm3)CO800NOx400SO21700	NEQS (mg/Nm3)         1           CO         800         61.165           NOx         400         43.665           SO2         1700         Nil	NEQS (mg/Nm3)         Turk           1         2           CO         800         61.165         16.75           NOx         400         43.665         41           SO2         1700         Nil         Nil	NEQS (mg/Nm3)         Turbine           1         2         3           CO         800         61.165         16.75         40.67           NOx         400         43.665         41         59.96           SO2         1700         Nil         Nil         BDL					

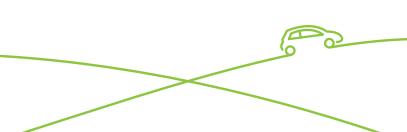
Na	me of Unit/Site: KTGTPS			GEJanbacher Gas Engine 90 MW					
Liq	uid Effluent Monitoring		Gaseous Emission Monitoring						
				NEQS		Waste		NEQS	Average Values
	Parameters	Unit	1	2	3	Water	Parameters	(mg/Nm³)	(mg/Nm³)
01	Temperature	°C	40=<3	40=<4	40=<5	30.58	CO	800	216.89
02	pH value		6-9	6-9	6-9	7.68	NOx	400	61.30
03	Oil & Grease	mg/l	10	10	10	37.00	S02	1700	23.56
04	Total Suspended Solids	mg/l	200	400	200	116.24	Particulate	300	67.18
							Matter (PM)		

Na	me of Unit/Site: STGTPS						GEJanbacher Gas Engine 90 MW			
Liq	uid Effluent Monitoring	Gaseous Em	nission Monitoring							
		NEQS Waste			•	NEQS	Average Values			
		Unit	1	2	3	water	Parameters	(mg/Nm <sup>3</sup> )	(mg/Nm³)	
01	Temperature	°C	40=<3	40=<4	40=<5	30.58	CO	800	137.13	
02	pH value		6-9	6-9	6-9	7.68	NOx	400	31.65	
03	Oil & Grease	mg/l	10	10	10	37.00	S02	1700	BDL	
04	Total Suspended Solids	mg/l	200	400	200	116.24	Particulate	300	43.30	
							Matter (PM)			

# Noise Monitoring

Noise monitoring around the plant boundaries is a regular feature of our activities as well and data is being maintained and analyzed quarterly. We are in complete compliance with the national and international guidelines in this respect.

Locations	NEQS	Average (dB)
BQPS-I	75	58
BQPS-II	75	65
KCCPP	75	64
KTGTPS	75	71
SGTPS	75	63



# **Environmental Protection Expenditures**

Projects	Cost (PKR)	Cost (USD)
Environmental Studies of Eleven (11) Projects	6,225,000	62,250
Environmental Monitoring of Power Plants	2,635,000	26,350
PCB Monitoring of Grid Stations	1,025,000	10,250
Asbestos Monitoring at Power Plants	285,000	2,850
Total	10,170,000	101,700

### Material Usage

Gas and furnace oil are the main raw materials used for electricity generation. The following table gives the total fuel usage with costs, including the cost of electricity bought from Independent Power Producers (IPP) for the last 2 years. On average 85 % of the material used comprises of fuel.

Year		Gas			Furnace oil					
	Quantity (MMCFD)	Energy (MMJ)	Cost (Rs)	Quantity (MTONS)	Energy [Tera Joules (1*10^12 joules)]	Cost (Rs)	Total Fuel Cost (Rs)			
FY-12-13	164	172,956,860	29,336,016,891	587,276	30,168,050,580	38,471,826,599	67,807,843,490			
FY-13-14	168	177,175,320	31,552,581,191	497,424	25,552,401,923	32,783,357,000	64,335,938,191			

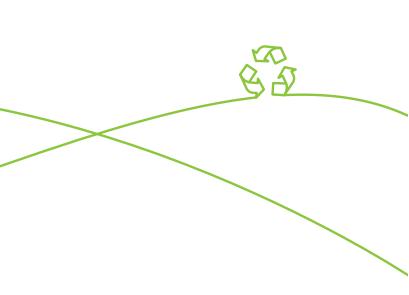
Year	Total Expenses (incl. IPPs & General Overheads)	KE Fuel Cost as % of Total Expenses	Total cost of Fuel (incl. IPPs) as % of Total Expenses
FY-12-13	171,036,964,457	39.65%	85.47%
FY-13-14	173,858,015,529	37.00%	84.73%

Apart from fuel, water is also used as a major raw material for generation. The following table gives details of water consumption and the source:

Station	Water Type	Source	Impact on source	Rate In: um/h		Draina	je	Recycled
					Sewerage	Sea	Atmosphere	
BQPS-I	Raw Water	KWSB/PASMIC	Low	221	221	76	48	0
	Sea	-	Low	139248	139248	139248	_	_
BQPS-II	Raw Water	_		-	_	_	_	_
	Sea	Port Qasim	Low	47,225.94	47,225.94	47,218	0	0
KCCPP	Raw Water	KWSB/PASMIC	Low	3.6	3.6	0	0	0
	Sea	_	Low	9800	9800	9800	0	0
KGTPS	Raw Water	Tanker	Low	0.82	0.82	0.00	0.20	0.00
	Sea	_		-	_	-	_	-
SGTPS	Raw Water	Tanker	Low	0.546	0.546	-	0.082	0.00
	Sea	_		-	_	_	-	-

### Material Transportation

Our final product electricity is transported through HT and LT cables from the plant to the grid and then through transformers & PMTs to millions of residential and commercial units. The final product is not exposed environmentally and thus has no impact during transmission and distribution. Our main fuels, furnace oil and gas, are transported by their respective suppliers though pipelines from the source to our plants, having negligible environmental exposure.



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#### Waste Management Solid Waste Management

A corporate procedure was established and implemented through an extensive training programme. This significant effort has resulted in no accidents, spills or reports of contamination arising from any of our activities.

Continuous emphasis is being given on waste management improvement with special emphasis on reduction of various types of waste being generated by the organisation in its different business units and divisions. These include non-hazardous waste made up of wood, paper, scrap iron, copper conductor, aluminium conductor, tyres and tubes, scrap cables, energy meters, and hazardous waste, including used oils and batteries. Waste transition yards are established in each business unit to ensure effective waste management. All business units are

managing their respective facility waste through segregation at source with an emphasis on reuse and recycling. The remaining is sent to inventory management for ultimate disposal. EPA certified contractors have been appointed in order to handle, transport and dispose hazardous waste. This is in compliance with Hazardous Substance Rules 2003 and in line with the corporate procedure for waste management.

#### Wastewater Management

Neutralisation treatment is carried out to process the effluence before final discharge to the sea. It is ensured that the water leaving the wastewater treatment plant is free of pollutants and complies with NEQS restrictions to protect marine habitat and maintain the natural ecosystem.

Regular testing of neutralisation basins is carried out in order to

assess its performance. The environment monitoring department also gives recommendations and does cross-checking at different intervals on the control of oil and chemical spillages, monitoring of domestic effluents, placement of drain covers and water conservation measures in order to remain within NEQS limits and protect the environment. State-of-the-art water recycling plants have been installed in BQPS1 and CCPP Korangi Plant. Reports on effluent discharge are sent to Pakistan and Sindh Environmental Protection Agency on quarterly basis under SMART for all generation plants.

EPA certified contractors have been appointed in order to handle, transport and dispose hazardous waste. This is in compliance with Hazardous Substance Rules 2003 and in line with corporate procedure for waste management.

### Details of Disposed Solid Waste 2013/2014

Locations	NEQS		
Scrap power transformers	420 Nos		
Old vehicles	110 Nos		
Scrap meters	520 M/Tons		
Scrap copper conductor/wire	732 Tons		
Scrap aluminum cable	280 Tons		
Scrap aluminum conductor	158 Tons		
Used tyres	350 Nos		
Used tubes	650 Nos		
Scrap iron	1410 Tons		
Scrap batteries/cells	1961 Nos		
Used oil	121,000 Ltr		
Scrap plastic drums	210 Nos		
Scrap wood	340 Tons		
Scrap empty steel drums	780 Nos		
Scrap copper cable	70 Tons		
Scrap waste paper	55 Tons		
Scrap 132 KVA air circuit breaker	-		





# **Energy Efficiency Initiatives**

In the last few years emphasis has been on interactive sensitisation of the masses through various events and activities. We have engaged students, corporate entities and the masses through participation in key strategic events, student interactive sessions and mall interceptions. Last year we also executed a 360 degree media campaign "Switch Off Karo" that was supplemented by a digital media campaign named ipower Karachi.

In a country where the energy shortfall has been increasing alarmingly, KE and Karachi have become the standard for the rest of the region to follow with more than half of the city having access to uninterrupted supply. This is possible, in part, due to the various successful initiatives taken to promote and inculcate energy efficiency.

Our motto has been: 'A MW saved is a MW generated', a message or value that has been inculcated in the public through careful interventions to ensure sustainability in the energy sector, and contribute towards the protection of scarce natural resources.

The reduction in demand as a result of KE's energy conservation and efficiency programmes are slowly, but surely, adding to the company's profitability, ensuring smoother technical operations due to the subsequent unburdening of our electricity network, while contributing positively to the country's energy shortfall and the environment.

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strategic events, student interactive sessions and mall interceptions.

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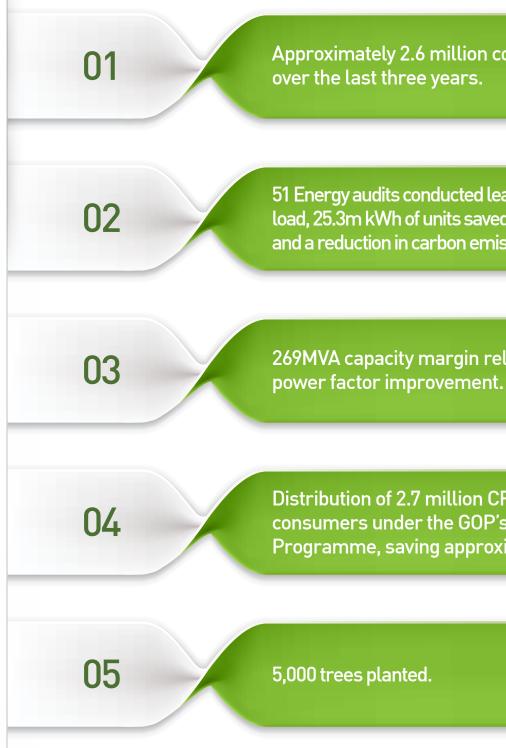
> KE offers energy audits to various organisations, manufacturing concerns and businesses to suggest improvements which contribute to power factor improvement and energy efficiency. We are actively

targeting different stakeholder sets with sensitisation campaigns that focus equally on guiding them in making the necessary investments in energy efficient technology and alterations in their lifestyles.

The idea is to scale up the impact of these initiatives in the future by approaching more high-consumption entities where the biggest difference can be made, while increasing focus on inculcating the responsible values of energy conservation into the youth as a long-term approach.



### Impact in Numbers and Figures



Approximately 2.6 million consumers sensitized

51 Energy audits conducted leading to 5.6MW of optimized load, 25.3m kWh of units saved, a saving of PKR 402.23m and a reduction in carbon emissions by 5,119.2m tons.

269MVA capacity margin released through

Distribution of 2.7 million CFLs amongst domestic consumers under the GOP's National CFL Programme, saving approximately 107 MW.

# Harmonizing Stakeholder Management



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# **An Engaged Business**

Our stakeholders are our partners in progress. Constant engagement with them helps us improve the way we do business as we become more aware of our impact on their lives, their communities, and the environment.

ensuring full compliance with all laws

relationship-driven communication with stakeholders in order to promote shared growth. K-Electric's diversity of stakeholders includes shareholders, NGOs, local communities, suppliers, mass media, regulatory bodies and

the government. Taking care to match the appropriate communication channel with each group, K-Electric carefully considers each piece of feedback from stakeholders, and makes every effort to reflect lessons from the feedback in the company's future corporate policies and actions. In order to facilitate effective communication with stakeholders, K-Electric has designated specific departments for various stakeholder groups.



# Stakeholder Universe

K-Electric uses an array of communication channels to inform and engage stakeholders through productive and relationship-driven communication. The company hosts public stakeholder forums and maintains a strong presence on the social media through interactive platforms. This is an effort to encourage stakeholders to express their honest point of view on any matter related to the organisation.

- Residential, Industrial and Commercial Customer
- Suppliers
- Financial Institutions and Stock Exchanges
- Regulatory Bodies
- NGO's and Local Communities
- Employees
- Shareholders and Board of Directors
- Media
- Government and Ministries
- Political Parties

## Media is one of the most critical stakeholders and we believe that it has played a key role in raising relevant issues and lobbying for the desired solutions related to the energy sector.

### Industries and Trade Associations

Our regional heads and CEO secretariat are in direct dialogue with all key trade associations and industries in order to keep them informed about the real time challenges and problems faced by KE. They are engaged through various trade association platforms on various power sector issues like fuel shortages, energy efficiency and tariff hikes, etc. Their advice is solicited in advance for any issue that will have an effect on their performance.

### Government and Regulatory Bodies

KE management and leadership are engaged in an on-going dialogue with all key stakeholders, be it ministries, regulatory bodies, power sector players or key suppliers. This on-going interaction has emerged as a mutual partnership to focus on critical policy issues of the overall power sector.

### Media

We maintain an open, proactive, accessible and transparent relationship with media. KE has played a critical role to educate media on different micro and macro aspects of the power crisis and the issues revolving around it. Media is one of the most critical stakeholders and we believe that it has played a key role in raising relevant issues and lobbying for the desired solutions related to the energy sector.

The Media & PR team has continued to hold interactive dialogues with media and over the last two years has managed to place KE's voice 2,655 times in the form of News Tickers, News Headlines, News Reports, Talk Shows, Beepers and Interviews. This voice has been raised time and time again on 14 prominent news channels working in the country along with the international media as well. Around 220 press releases and around 180 rebuttals to media on various issues has been released over this period.

# Shareholders

Annual and quarterly financial reports are printed regularly for the shareholders and overall stakeholder universe. Sustainability Report is another initiative to report in detail the economic, social and environmental impact of the organisation. AGM is held annually. Investor Relations (IR) meetings are also a regular feature. The website also provides updated information to shareholders and investors.

### **Employee Engagement**

Regular, open and interactive communication with the employees is given due importance with the organization and many platforms have been created for employee facilitation and interaction with the management. Regular recreational events are also organized for informal interaction and team bonding.

#### AZM, our monthly internal Urdu

**newsletter,** helps unite our community of over 10,000 employees by keeping them abreast of recent activities and developments taking place within the organisation. AZM also focuses on showcasing the achievements of our personnel, acting as an effective motivational and employee engagement catalyst.

#### KE intranet has been created to

**keep** employees updated with the most recent activities taking place within the organisation, along with facilitation to access all major document templates and apply for IT, HR-oriented and Administrative requests online.

### Inter-departmental Cricket

**tournaments** are organized biannually. Employees from all levels including CEO and top brass of KE participate in these tournaments. It becomes a big celebration amid friendly competition and casual fun.

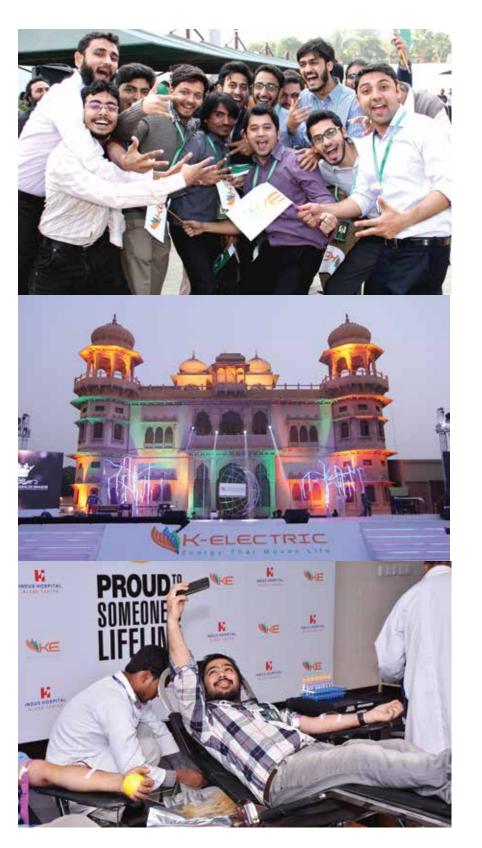
Volunteer initiatives such as Blood **Donation Camps** are organized regularly at various KE locations. K-Electric has been recognized as a major blood donor, in a ceremony held to celebrate World Blood Donor Day, celebrated under the auspices of World Health Organisation.

Family Gala – The Biggest Corporate Family Get Together in Pakistan. As part of the KE's Centennial Celebrations an all inclusive, free for all and one of its kind KE-Family Fun Gala was organized. The programme was aimed at the entire KE universe, employees and their families.

Meticulous planning and execution included custom invitations for every employee along with their family members. The two-day event attracted approximately 36,000 people comprising of only employees and their families. Entertainment shows, fun games and free food for all including mega lucky draws were highlights of the gala. This was the very first time that the entire leadership was present at any casual occasion with all the employees. The event was closed, both the days, with a display of fireworks to remember for a lifetime.

### Customers

Using a multi-pronged approach, we seek to engage our consumers through various media platforms since the past few years the emphasis has been on the creation of interactive platforms through a strong presence on social media and



116,000	through 360 degr major consumer
FB Followers (Launched in Jan 2014) <b>16,800</b> Twitter Followers	Social Med We started our o through Twitter v in the utility secto Provision of real consumers was a KE consumer ne
<b>42,000 У</b> Tweets	After a successfu decided to establ Facebook given t active social mec Pakistan. Then o
12,800 in LinkedIn Connections	only using the pre complaints, effort perform outbound alongside facilita complaints, News out to those follow
OVER THE LAST THREE YEARS We have added 1.010 NW OF FRESH GENERATION IN ORDER TO FACILITATE KARACHI'S GROWTH.	and Facebook, ar used for sending of Facebook: 116,00 (launched in Jan Twitter: Tweets 4 Twitter Followers LinkedIn: 12,800
	Brand Mar The Rebrand In the fiscal year the company's ce celebrations, the
	implementation of rebrand with a ch from the Karachi Company to K-El the successful tr company and pro management's d The list of mileste last five years is fortunately the 'p

360 degree campaigns on nsumer centric issues.

#### Media

ed our online presence Twitter which became a first lity sector in Pakistan. n of real time information to ers was a novelty, which the umer never experienced. successful run on Twitter, KE to establish a presence over k given that it was the most ocial media platform in . Then onwards, instead of ng the presence for customer ts, efforts were made to outbound release of information le facilitating customer nts, News was primarily sent ose following us on, Twitter ebook, and LinkedIn was sending out corporate news.

ok: 116.000 followers ed in Jan 2014) Tweets 42,000 Followers: 16,800

# d Marketing

cal year FY13-14, following bany's centennial ions, there was a successful entation of a corporate with a change of identity Karachi Electric Supply y to K-Electric to highlight essful transformation of the and proclaim the ment's desire to start afresh. of milestones achieved in the years is very extensive and ely the 'point of arrival' being accomplished on our centennial was remarkable.

#### Other Major Campaigns

Advertisement campaigns of varying natures were launched across all electronic and print mediums to increase consumer awareness regarding key issues and initiatives such as energy conservation and AZM Sukuk campaigns.

By offering the highest rates of return and flexible tenor options through a very thorough media mix comprising an engaging radio spot, print ads, building wraps, on social media and its own website, all three tenor options of the AZM TFC were subscribed within the first five weeks of the launch — a record breaking time frame in Pakistan.

# **IPOWERKHI**

Unfortunately, as a nation, energy conservation is probably not even amongst the top five on the list of our priorities. Therefore, rolling out basic energy conservation tips could not cut through the noise and our consumers wouldn't be able to relate to it the way they would to an audience-specific campaign. Hence, keeping the psychographics in view, the audience was split into eight segments which include Kids (seven years and above), Housewives (savings for shopping), CEO (even if you can afford it doesn't mean you waste it), industry for laborers or small school or health clinic for the underprivileged (switch off to switch on), Shopkeepers (save power and increase your profit).



You can conserve energy without compromising on your comfort & also save thousands every month

# **SWITCH OFF KARO BACHAT ON KARO**



UMEED, K-Electric's external electronic newsletter reaches around 900,000 stakeholders via email on a quarterly basis, and serves as the face of the organisation to all external stakeholders.

Each thematic was hammered through the following media mix: TV, Radio, Outdoor, Wraps (KE Sites), Bill Ads.

### Website

As part of digital communication, a complete revamp of the official website – kesc.com.pk to ke.com.pk - was successfully launched as part of the rebrand initiative.

In future, KE's website will also be further enhanced in alignment with the company's vision of continuing to become a consumer-centric company.

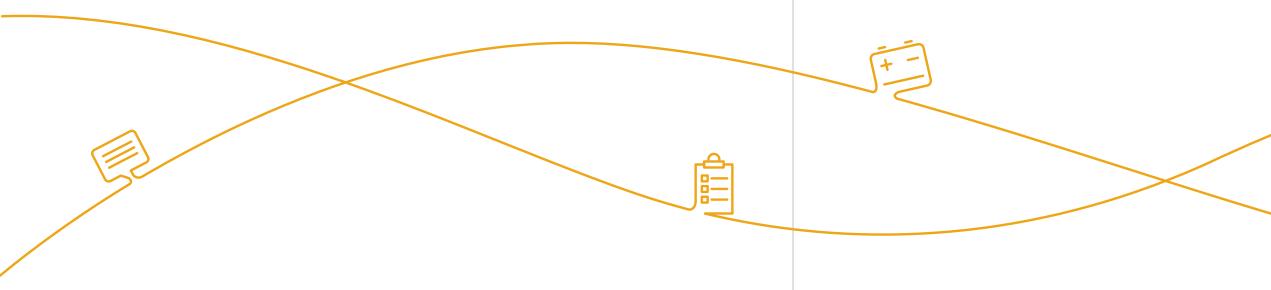
The project involves an integration of KE's back-end systems into the website's skeleton, along with the development of exclusive portals for customer and corporate care. By allowing consumers to lodge

technical and billing complaints, view their billing history, and track new connection status, the website's facelift will bring it closer to the best industry practices in digital communication. This will substantially improve the customer experience and create true value by providing an added transparent, uniform service for consumers.



JUST BECAUSE I CAN AFFORD TO, IT DOESN'T MEAN I HAVE TO WASTE ENERGY







### Customer Feedback

KE undertakes brand health tracking studies on an annual basis through which we calculate brand equity index and satisfaction index, which is the output to total brand experience. A total of 74 selected perception attributes are present in these brand trackers. The total sample is equally divided among SEC A, B, C, D and E. As per Wave 7, we have shown an increase in all Company image-selected attributes, also with anti theft, customer service and billing. The eighth wave of the consumer tracker was conducted in Jan 15.

# Disclosure on Stakeholders Engagement by Type and Frequency

Stakeholder Group	Type of Engagement	Frequency of Engagement 2013-14	
Federal & Provincial Ministries	Policy meetings and written communications on various issues	Ongoing on day-to-day basis/regular participation in all conferences and meetings held.	
Regulatory Bodies (NEPRA - SECP)	NEPRA-Meetings for tariff/meeting for customer compliant resolution/Annual Report. SECP–Compliance related reports, Quarterly reports, Annual reports and Sustainability Report	Bimonthly/Monthly meetings/Annual performance report/SECP updates and Quarterly meetings on organisational performance and compliance.	
Federal & Provincial Governments	Meetings and written communications on various issues/SMART Programme report	Ongoing on day-to-day basis/monthly environmental SMART report.	
Stock Exchange	Financial reports	Annual/Half yearly and Quarterly financial reports.	
Environmental Enforcement Bodies	SMART Report	Monthly	
Media	Press Releases Press Conferences		
NGOs	Meetings on various issues/Written Communications/ Umeed/Emails/SMS	Ongoing	
Consumer Groups	Meetings on various issues/Written Communications/ Umeed/Emails/SMS	Ongoing	
Social Action Groups	Meetings on various issues/Written Communications/ Umeed/Emails/SMS	Ongoing	
Opinion Leaders	Umeed (Newsletters) Emails/SMS /Thought Leadership Forum	Monthly newsletter/bimonthly thought leadership forum/emails - SMS as per need	
Educational Institutions	Youth Engagement Interactive forum	350	
	Educational visits to Plants	39	
	Sponsorship of various educational events	16	
Strategic Business Partners	Meetings on various issues/ Written Communications	Ongoing on day-to-day basis	

Professional Bodies	Meetings on various issues/ Written Communications		
Foreign Missions	Meetings with strategic leadership level	As per scheduled visits.	
BOD/Investors	BOD meetings/KES Power meetings	Quarterly/Annual	
Industry/Commerce/Trade Associations	Corporate Advisory Panels/ Written Communications/Meetings	Ongoing written/verbal communica /12 Structured Advisory Panels o strategic leadership level.	
Industrial & Commercial Customers	Corporate Advisors/Written Communications/Meetings	Ongoing written-verbal communication/Meetings with strategic leadership level as per ne	
Key Suppliers & Service Providers	Meetings on various issues/Written Communications	Ongoing on day-to-day basis	
Financial Institutions/Partners	Annual Performance Reporting to IFC/ADB and other financial partners	Annual Reports/Ongoing written communication/Meetings	
Technology Partners	Meetings on various issues/Written Communications.	Ongoing on day-to-day basis.	
Customers	Khuli Katcheri (Open forums with the customers to resolve customer complains and queries)	18 forums - 4,500 customers direct served by the leadership team.	
	SMS	28 million	
	Emails	7 million	
	Electronic Programmes (News ticker updates)	Tickers	
	Electronic appearance in various programmes/News beepers	Appearances/0 beepers	
	Website	Tweets/Followers	
	Print Ads in the newspapers/ Radio and TV spots	9,897 Spots	
Community	Community Meetings	23 Panel Meetings	