



2020

Sustainability  
Report



Unwavering  
Commitment to  
**Excellence**

# Unwavered Commitment to Excellence

## ABOUT THIS PUBLICATION

This is the Sixth Sustainability Report for Egbin Power PLC.

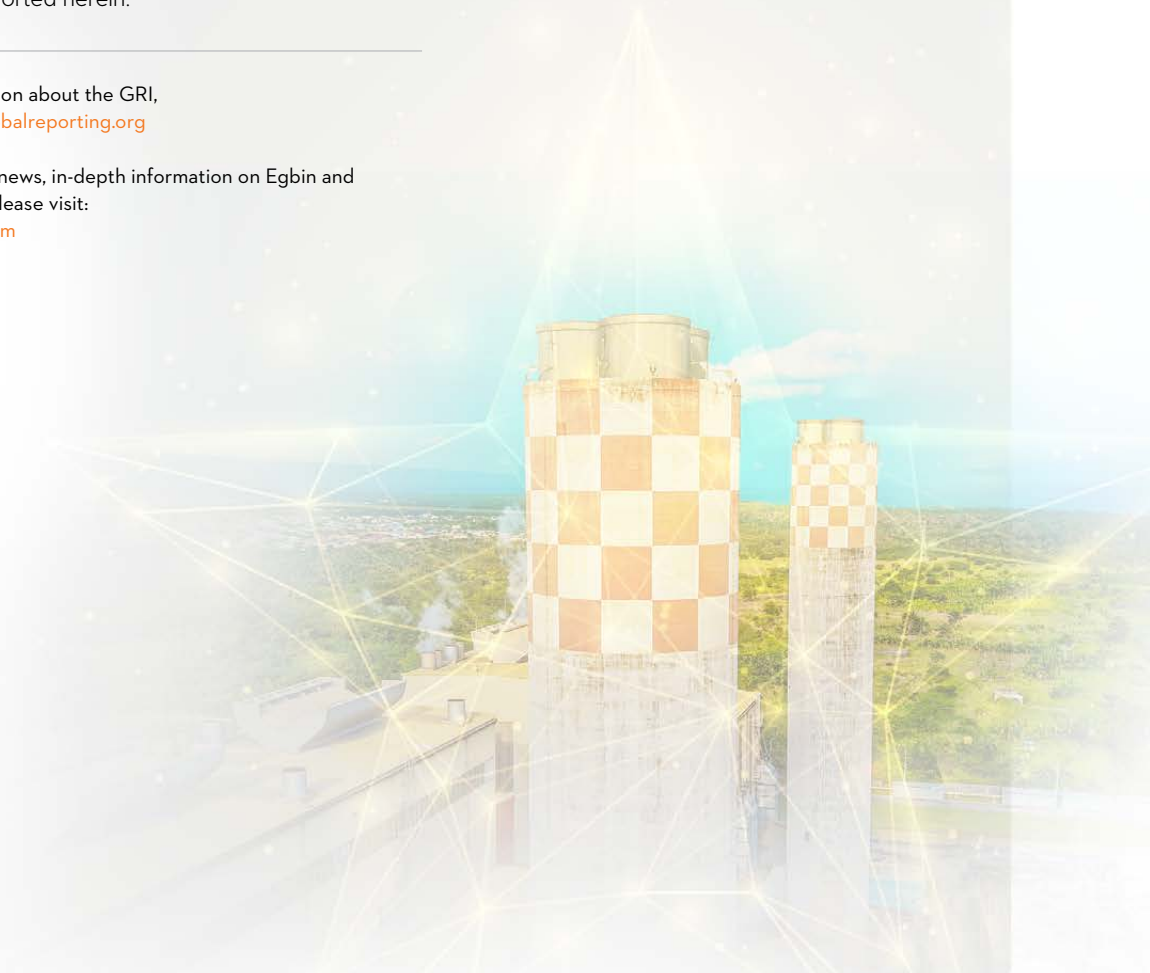
The Data in this report covers the period of January through December, 2020.

Financial Information is given in U.S. dollars and Nigerian Naira. This report was prepared using the Global Reporting Initiative (GRI) Standards. The mission of the GRI is to promote international harmonization in the reporting of relevant and credible corporate economic, environmental and social performance information to enhance responsible decision making. The GRI has not verified the contents of this report, nor does it take a position on the reliability of information reported herein.

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# Content

## Introduction

Board Chairmain's Message	06
Chief Executive's Message	12

## Profile

Introduction	18
Vision & Mission	20
Corporate Governance	21
Board of Directors	21
Business Framework	22
Executive Management	22
Business Approach	23

## Plant Operations & Maintenance

Celebrating Maintenance Successes: A Robust In-house Technical Capability	26
Building a Safer Plant: HSE as a Core Driver of O&M Activities in Egbin	30
Sustaining Operational Performance	32
Responding to O&M Related Emergencies: The Egbin Oil Spill Contingency Plan	34
Asset Management Philosophy	35
Beyond 2020: Future Initiatives Planned	37



## Economic Sustainability

Ownership Structure	40
Economic Performance	40
Organisational Supply Chain Stakeholder	42
Engagement	44
Plant Availability and Reliability	46
Financial Status	48
Supply Chain Management	49
Investment and Expenditure	50







## Environmental Management

Energy Consumption	54
Water Utilization	55
Emissions	56
Effluents Quality Control	58
Biodiversity	59
Environment Management	60
Waste Management	61
Environmental Impact on Transportation	62
Occupational Health and Safety	62
Disaster/Emergency Planning and Repsonse	63



## Social Responsibility

Stakeholders Engagement	66
Stakeholders Support	68
Community Relations	70
Covid-19 Intervention	71
Our People	72
Diversity, Equal Opportunity and Fairness	73
Occupational Health and Safety	74
Carbon Footprint Reduction	75
Training & Education	76



## Egbin Sustainability Report 2020

### Editor

Akin Matanmi

### Assistant Editor

Stephanie Amaechi

### Managing Editor

Bethel Obioma

### Editorial Direction

Sahara Group Corporate Communications

### Assistant Editors

Adeyemi Oyelami  
Michael Ashogbon  
Nnanna Obielo  
Bede Onyia  
Chukudi Edechuku  
Ganiyu Raji

### Art & Creative Direction

Victory James Ugwuodike

### Layout/Illustration

Witts & Stratts

### Photography

Major Works Studios  
Egbin Media Team





**TEMITOPE SHONUBI**

Chairman, Board of Directors, Egbin Power Plc

# Board Chairman's Message

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The year 2020 was defined by our resilience as a Company and our commitment to bring energy to life and light up Nigeria.

We took steps to introduce initiatives that ensure the environment remains sustainable to drive business continuity, productivity and overall well-being of our employees and host communities.



The year 2020 was a year like no other. The COVID-19 pandemic presented the largest economic shock that the world had experienced in decades. While economic activities across the world were brought to a near standstill, critical industries like ours had to find new ways to continue operating amid the pandemic to meet the power needs and ensure uninterrupted power supply in Nigeria.

The year 2020 was defined by our resilience as a Company and our commitment to bring energy to life and light up Nigeria. Despite the challenges of the year, we are pleased to be sharing our 2020 Sustainability Report with the theme **“Unwavered Commitment to Excellence”**, which reiterates the insights of the steps taken towards ensuring business sustainability throughout the reporting year.

## Investments Towards a Sustainable Future

Egbin remained committed to the continuous development of the Power sector in Nigeria through investment in the upgrade and maintenance of infrastructure. Though planned works were slowed down due to the national lockdown and travel restrictions resulting from the pandemic, we were able to forge ahead with plans for the overhaul of our assets which included generating units and ancillary equipment, to ensure that we met our power supply obligations to our offtakers. During the reporting year, we completed Type A inspections for Unit 4 and Unit 6 and carried out the overhaul of the Boiler Feed Pump (BFP) for both Unit 6 and Unit 4, as well as the overhaul of Unit 6 Turbine Control Valves.

We improved the daily energy generated by our plant from an average of 600MW per day to an average of 700MW per day by the end of fourth quarter of 2020. Therefore, we believe that with sustained availability of gas and guaranteed energy evacuation, we can deliver on plans to double the capacity of Egbin through the proposed Egbin Phase 2 with an estimated additional capacity of up to 1,800 MW.

As the largest privately-owned power generation plant in Sub-Saharan Africa, we embrace the all-important responsibility of playing a lead role in our industry, not only through the creation of economic value, but with the provision of solutions to societal and environmental issues. During the reporting year, we took steps to introduce initiatives that ensure the environment remains sustainable to drive business continuity,



productivity and overall well-being of our employees and host communities. As such, during the reporting year we deployed electric buggies and electric scooters for commuting within the plant to entrench a culture of clean energy and reduce our carbon emissions. We have plans to deploy a total of 500 bicycles and an additional 200 electric scooters to enhance our climate action campaign.

Simultaneously, we are taking steps to invest in an industrial park, which we believe would boost the economy of our neighbouring and host communities and the entire country as a whole. It is envisioned that this will create employment opportunities and much needed infrastructural development for the organisation, host communities and Nigeria's economy at large; as well as the West African region.

## COVID-19 Relief Support

The company provided support to the indigenes of its host communities; Egbin, Ijede and Ipakan to reduce the hardship caused by COVID-19. Part of the initiative launched was a month-long food drive geared towards feeding residents of the communities and providing them with basic food and household items. More than 20,000 cooked meals were distributed during the national lockdown and more than 3,000 families across all the three host communities received food and household items.

To support the effort of healthcare professionals in combating COVID-19, we successfully commissioned an oxygen generator to supply bottled oxygen to nearby healthcare facilities. We also prioritized the health and wellbeing of our employees by introducing safety protocols to mitigate the risk of exposure of our employees and their families to COVID-19 and providing our staff with relief items such as food items, monetary support, and adequate access to healthcare services.

## Economic Overview

The Nigerian economy went into a recession in 2020, as Nigeria's Gross Domestic Product (GDP) contracted by 3.6% in the third quarter of 2020. This was due to the decline in the perfor-



mance of the oil sector, with the drop in Brent Crude price to about a two-decade low of US\$18.4 bpd and the unparalleled shock to the non-oil sector due to the impact of the COVID-19 pandemic on the global economy.

The Nigerian power sector was not immune to the global impact of COVID-19. The COVID-19 lockdown led to the shutdown of all but essential commercial activities across the country and this significantly reduced the electricity demand from industrial and commercial customers and consequently led to a loss of revenue. Though demand from residential consumers was said to have increased, this was not significant enough to offset the loss from the reduction of demand from commercial and industrial consumers, as the tariff charged by the Distribution Companies (DISCOs) for residential customers is often below the average cost of supply



As the largest privately-owned power generation plant in Sub-Saharan Africa, we embrace the all-important responsibility of playing a lead role in our industry, not only through the creation of economic value, but with the provision of solutions to societal and environmental issues



17%

Increase in average daily energy generated by plant in fourth quarter of 2020



## Reducing the hardship of COVID-19 on our host community

We provided support to the Egbin, Ijeda and Ipakan communities. Providing more than **20,000 cooked meals** and **catering for more than 3,000 families** during the national lockdown



500 Bicycles  
200 Scooters

Planned deployment to enhance our climate change action





as compared to that of commercial and industrial consumers.

Worthy of note is the fact that, in 2020, the Nigerian Electricity Regulatory Commission (NERC) issued a Minimum Remittance Order, which set a minimum market remittance threshold payable by the DISCOs. While there have been some progressive regulatory interventions in the industry, the impact is yet to be felt as the industry continues to struggle with heavy debt and liquidity issues. Despite the challenges, Egbin Power Plc remains committed to providing value for all relevant stakeholders.

## Strategy and Innovation

The deployment of technology remains a key component of our strategy to achieve optimum efficiency in our operations at the plant. Our focus is to continue to invest in the most advanced project delivery tools which will be integrated into our business operations.

Since takeover in 2013, we have deployed several technologies to enhance efficiency ranging from the introduction of Computerised Maintenance Management System (CMMS) to the digitization of our technical library to facilitate easier electronic referencing of vital design, operational and maintenance information.

In the year 2020, we integrated into our operations, the PlantDX application which streamlines the data collection process and enable effective data capturing for the maintenance of the plant. We also carried out a full Implementation of the station Log-out Tag-out (LOTO) system to enhance the safety of our plant and personnel.

## Outlook for the Future

With the commitment of all stakeholders and participants in the supply chain, we foresee the development of the Nigerian power supply industry to a level where the industry is unconstrained in its ability to deliver and meet the power demands in Nigeria and even West Africa. We are willing and prepared to work with all sector stakeholders to help actualise this desired future.

On our part, we are driven by the challenges and opportunities within the sector and we are working to break the barriers that inhibit progress. We remain

committed to our plans to be more efficient in the future by reducing our cost of operations, improving availability and reliability, leveraging technology and continuous investment in learning and development. We have reinvented our work Culture to introduce values which we consider essential to achieving a high-performance culture. Our new culture is focused on inclusivity, being result-oriented, agility, stewardship, leadership, technology driven, innovative and data driven with ambidexterity as the bone of our existence.

As the largest thermal plant in Sub-Saharan Africa, we are mindful of our carbon footprint and continue to operate in compliance with global standards to ensure our environment is preserved for future generations. We continue to introduce initiatives that align with the United Nations Sustainable Development Goals (SDGs) particularly Goal 7 (Access to Affordable and Clean Energy) and 13 (Climate Action) which we have adopted, to ensure heightened environmental responsibility.

## Conclusion

We acknowledge the commitment of our employees and the effort of all stakeholders of the Nigerian Power Supply Industry including but not limited to NERC, NBET, the Market Operator, the Presidency, Ministry of Power, Ministry of Finance, the Nigerian National Petroleum Corporation, the World Bank, the Central Bank of Nigeria, and the Commercial Banks in developing and sustaining the power sector despite the challenges. We believe that multi-stakeholder collaboration is critical to delivering uninterrupted power supply in Nigeria.

At Egbin Power Plc, we remain strengthened in our resolve to build a robust and resilient power sector. We will continue to take all necessary steps to achieve business and operational sustainability. We will also continue to partner with the government and other relevant stakeholders in order to improve the state of the Nigerian power sector.

Thank you.

**Temitope Shonubi**

Chairman, Board of Directors  
Egbin Power Plc







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We are mindful of our carbon footprint and continue to operate in compliance with global standards to ensure our environment is preserved for future generations.







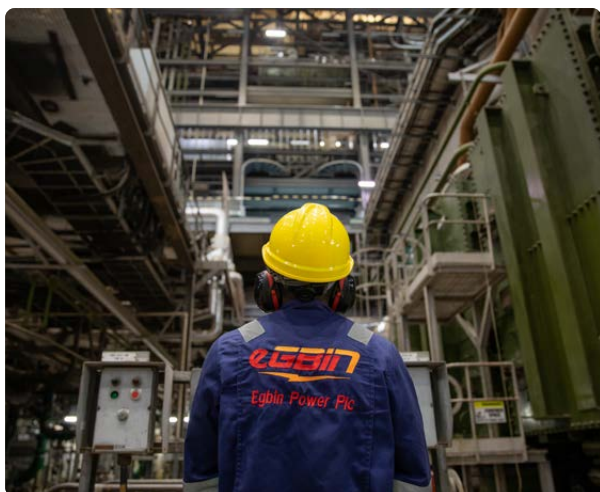
**PAUL HARRIMAN**

Acting Chief Executive Officer, Egbin Power Plc

# Chief Executive's Message



With the ambition to remain the leading power generation company in Sub-Saharan Africa, we continued to prioritize Health, Safety and Environmental (HSE) Compliance, Regulatory Compliance, Employee Welfare, and Sustainable Quality Power Generation



## OUR PRIORITIES



Health & Safety



Environmental Compliance



Regulatory Compliance



Employees Welfare



Sustainable Quality Power Generation

The year 2020 was certainly challenging in many ways. Notwithstanding the many challenges, we remained committed to meeting the power needs in Nigeria and continued to deliver power to our offtakers. We responded and adapted to the pressures of the COVID-19 pandemic to sustain our operations by prioritizing the safety of our employees and optimizing the way we work using technology. We take pride in our achievements amidst the pandemic and are pleased to unveil our Sustainability Report for the year 2020.

The 2020 Sustainability Report provides insights into our operations as a transparent organization. It captures our corporate social responsibility and stakeholder engagement activities, as well as areas of achievements and concerns regarding our business operations.

## Strategic Priorities

With the ambition to remain the leading power generation company in Sub-Saharan Africa, we continued to prioritize Health, Safety and Environmental (HSE) Compliance, Regulatory Compliance, Employee Welfare, and Sustainable Quality Power Generation. Over the year, we updated our HSE Policies and upgraded our facilities to address concerns regarding COVID-19, which yielded positive results as we recorded 4.2 million injury free man-hours and Zero Lost Time Injury in the reporting year. In terms of regulatory compliance, we achieved full compliance with regulatory requirements without sanctions from the regulatory authorities.

Utmost importance was given to securing the well-being, health and safety of our employees, whose dedication and contributions were crucial in sustaining our operations at the on-set of the Pandemic. Several initiatives were rolled out to cushion the effect of the pandemic and ensure a safe and stable work environment. Overall, our aim is to maintain high levels of availability, generation capacity and efficiency at the Plant.



# 50%

## Reduction in operations trip compared to 2019

As a result of the Asset Intervention Plan for Egbin Power Plant, introduced in 2019

The power sector is still burdened by heavy debt and liquidity issues which substantially affect our ability to meet working needs and operation demands. Although we have gained much traction as a Company with regards to gas availability, grid transmission limitations and disturbances continue to be a major challenge that causes us to operate at a reduced capacity which impacts our efficiency. Our strategic aim is to improve on these issues to achieve sustainability.

## Key Events, Achievements and Failures In 2020

We continued the implementation of the Asset Intervention Plan for Egbin Power Plant, which was introduced in 2019. This led to a 50% reduction in the number of operational trips in 2020 compared to 2019.

Also, we carried out Type A inspections on our ST-04 and ST-06 during the reporting year, to ensure their continuous operation and reliability of our units. As a result of our proactive efforts, the plant reliability increased in 2020, as the overall electrical energy generated during the year increased from 3,786,239MWh in 2019 to 4,794,874MWh.

We have strived to achieve optimal operations and maintained our investments in our human capital and infrastructure. In the year 2020, we developed, signed and commenced the implementation of Maintenance Philosophy and Strategy for 1.32GW Egbin Power Plant, which defines the philosophy and strategy for the maintenance of the power generation assets in Egbin Power PLC in alignment with global best practices. We also signed Standard Operating Procedures (SOP) for the power plant to establish best practices for the safe operation of the power plant.

## Our commitment towards building a sustainable organization

Our mission is to build a sustainable organization with the capability to transform the Nigerian Power Sector. To achieve this, we incorporate internationally prescribed standards in our operations and continue to invest in human capital enrichment, technological advancement, and Infrastructure.

As part of our drive to improve employee productivity, we reinvented our work Culture in 2020 to introduce values which we consider essential to achieving a high-performance culture. In addition, we developed Competence Frameworks for technical departments and completed a skills audit of staff in Operations and Maintenance departments in order to develop Learning Intervention Plans (LIPs) and close any skill gap amongst the technical staff.

### Paul Harriman

Acting Chief Executive Officer  
Egbin Power Plc





## Updated HSE Policies & Facility Upgrades

To address concerns regarding COVID-19



# 27%

Increase in electricity generated from 2019

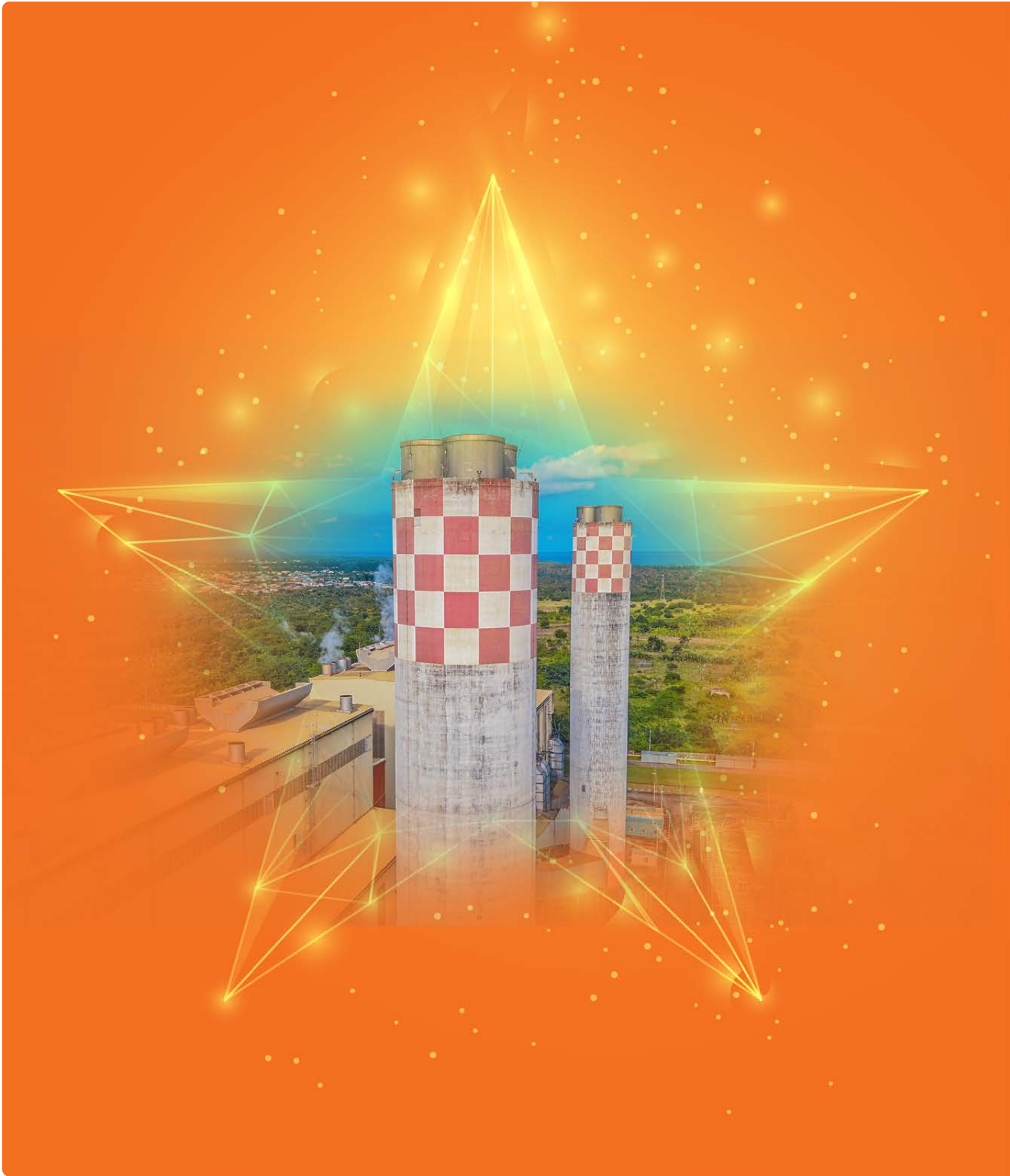
Due to our proactive efforts and inspections on our ST-04 and ST-06 turbines



## Re-invention of our work culture & Competence Framework

To achieve high-performance + Learning Intervention Plans (LIPs) to close the skill gap amongst technical staff







# Profile

## IN THIS SECTION

Introduction	18
Vision & Mission	20
Corporate Governance	21
Board of Directors	21
Business Framework	22
Executive Management	22
Business Approach	23

**W**est Africa's largest power generation station, Egbin Thermal Power Plant, was built by the Federal Government of Nigeria. The plant was commissioned in 1985, and it is located at the heart of a small town in Ikoro-du Local Government Area of Lagos State, Nigeria.

Egbin currently supplies about 20% of the electricity going to the National Grid, which is consumed by residential, commercial and industrial electricity consumers in Nigeria, thereby making Egbin the largest provider of electricity generated for consumption across Nigeria.

Following the Sahara Group's acquisition of 70% shares in Egbin Power Plc in 2013 through a special purpose vehicle - KEPCO Energy Resource Limited (KERL), Egbin Power Plc was handed over to KERL by the Federal Government of Nigeria through the Bureau of Public Enterprises. The asset has been professionally and optimally managed through the adoption of international best practice from November 2013 till date.

Over the years, Egbin has continued to maintain its operation of 6 units of 220 MW Hitachi Gas Fired Steam Turbines, a GE gas turbine and an emergency diesel generator with installed capacities of 1320MW, 24MW and 1.5MW respectively. In line with our resolve to promote the United Nations Sustainable Development Goals, we remain committed to minimizing any negative impact of our business activities on our surrounding environment and host communities, as well as promoting inclusive growth and development in Nigeria.

We operate a closed cycle thermal system where we source water from deep wells that are located about three kilometers from the facility. Considering the fact that water is critical to the sustainability of our business operations, water conservation is prioritized by drawing minimal quantities of water from the aquifers.

Pumps are used to pressurize the water to transport it to the water treatment plant where the groundwater is treated to become potable and fresh water. The fresh water is further treated in the demineralization plant where it

goes through a series of resin vessels including anion, cation, and mixed bed. The treated water which becomes demineralized water is pumped into the 705tons/hour steam generator, also known as a boiler.

The steam generator heats the demineralized water in a series of convoluted tubes to steam at the required temperature and pressure of 541oC and 12,500KPa respectively.

The steam in this condition is superheated and is conveyed to the steam turbine through lagged pipes. Accordingly, the steam turbine is divided into three – high pressure, intermediate pressure, and low-pressure turbines, with all the turbines including the electrical generator on the same shaft coupled together at different points.

The expansion of the turbine allows the steam to flow into the condenser where it is cooled by lagoon water to become condensate. This process starts the power generation cycle where the condensate is pumped through a series of low and high-pressure heaters to increase the temperature of the feed water before it enters the boiler.

Using a state-of-the-art hydrogen plant, Egbin produces hydrogen from an electrolysis process. The hydrogen produced has high thermal conductivity required to absorb the heat generated when the electromotive force is induced in the electrical generator. Consequently, the high heat transfer from the generator windings ensures an efficient generator level of about 98%. This high efficiency at the generator enables Egbin to wheel out more power at the most cost-effective rate for a steam power plant.







# 1,320 MW

Total Installed capacity



## 6

Gas Fired Steam  
Turbines



## 20%

Electricity contribution  
to the national grid





## Our Vision

To be the provider of choice  
where energy is consumed



## Our Mission

We transform through sustainable  
and reliable innovation in energy  
generation, connecting lives and  
positively impacting livelihoods.

## Our Core Value System

Egbin Power Plc is guided by values and principles which are not only required to engage better with the economy, society, and environment but are also needed to improve the dynamics of the power industry in Nigeria, where operations are in line with international best practices. Our values and principles are designed to ensure that the company achieves sustainable long-term success. We harness our core values from the acronym S.P.I.C.E.S, which distinguishes us and guides our activities. They are as follows:

# S P I C E S



Safety



Professionalism



Integrity and  
Discipline



Commitment to  
Stakeholders



Environmental  
Consciousness



Sustainability



# Corporate Governance



Introduction

Profile

Plant Operations & Maintenance

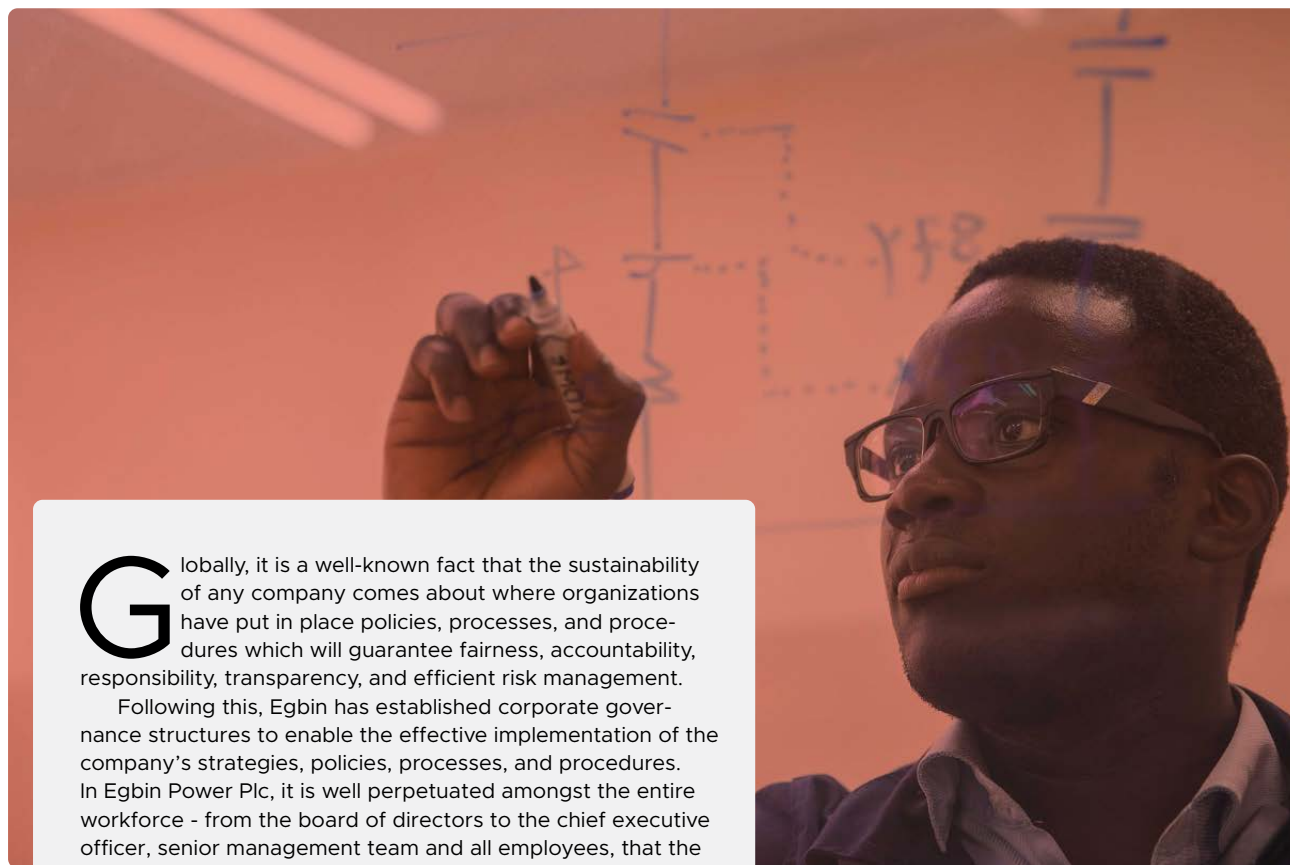
Economic Sustainability

Environmental Sustainability

Social Responsibility

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21



**G**lobally, it is a well-known fact that the sustainability of any company comes about where organizations have put in place policies, processes, and procedures which will guarantee fairness, accountability, responsibility, transparency, and efficient risk management.

Following this, Egbin has established corporate governance structures to enable the effective implementation of the company's strategies, policies, processes, and procedures. In Egbin Power Plc, it is well perpetuated amongst the entire workforce - from the board of directors to the chief executive officer, senior management team and all employees, that the success of our company depends mainly on well-articulated corporate governance frameworks, policies, processes and procedures that engender transparency in all aspects of our electricity generation business.

Furthermore, in ensuring sustainable operational excellence in a regulated power industry, the need to be transparent in our business operations to better engage our external stakeholders cannot be over-emphasized. The need for increased transparency necessitated the creation of internal control mechanisms to reduce business risks to the barest minimum, with the resolve to eliminate them in the near future.

## Board of Directors

Underscoring the importance of corporate governance to Egbin Power Plc as a business is the fact that the company's board of directors does not only formulate and approve the broad corporate governance framework (covering risk management, performance accountability and policy adherence), it is also deeply involved in the implementation of the instituted framework. The Board drives the implementation of the framework through its audit, risk, and governance committee; finance, investment and general-purpose committee; and technical and operations committees.



The success of our company depends mainly on well-articulated corporate governance frameworks, policies, processes and procedures that engender transparency in all aspects of our electricity generation business

# Business Framework



Policies



Process



Systems

Despite the myriad of challenges in the electricity market, ranging from gas constraints to limited power transmission capacity of the national grid; illiquidity challenges; we continuously and progressively review the measures in place, targeted at surmounting the challenges and making the Nigerian power sector a strong, vibrant market.

In ensuring the sustainability of our power generation business, we have mapped out our organizational goals and strategies and set out implementation plans through policies, processes, and systems to enable the company to succeed in the current challenging business environment. Our approach to addressing the issues has two dimensions – independently and collectively. On our part, we have identified other sources of fuel supply whose fuel may be fired in our boilers to produce power. Liquefied natural gas is one of the fuels we are considering piping to our facility so that we minimize our dependence on the single gas line of the Nigerian Gas Company – our current gas supplier. Cooperation with the players in the industry is another approach we are taking to help proffer solutions in the electricity market to the several challenges that hamper growth in the sector. We have charted ways by which we could render assistance to the Transmission Company of Nigeria to improve their ability to evacuate the power being generated. This assistance may be in the form of funding for maintenance projects or equipment upgrades.

The power industry in Nigeria is a strictly regulated sector that involves several players who work together to deliver electricity to the consumers at a cost-reflective tariff. Therefore, Egbin continues to play its part as a power generation company (GENCO) ensuring industry improvements, while complying with the Electric Power Sector Reform Act of 2005, regulatory guidelines, code of corporate governance and policy statements of the Federal Ministry of Power.

Our determination to carry out power generation using our core values (SPICES), which include sustainability, has enabled Egbin to adopt international best practice in all its areas of operations. Accordingly, we operate in compliance with the highest operation, maintenance and safety standards that are currently applied in any modern power station in the world. Although we recognize that we need to continuously perform expensive overhauls and innovation to stay competitive in the business of electricity production and delivery, we have commenced the journey towards instituting systems, policies, processes, and procedures that will manage the human capital and intellectual capacity required to secure the sustainability of Egbin power station.

The sustainability of a power station cannot be achieved without the cooperation of the players in the industry and the stakeholders that will ensure its smooth operation. We recognize the level of collaboration needed amongst industry players in all parts of the value chain, to promote the growth and development of the electricity sector. This has made our company take the necessary steps to collaboratively working with the Transmission Company of Nigeria for efficient power evacuation and with the Nigerian Bulk Electricity Trading Company, as well as our vendors and suppliers to create a sustainable supply chain management system.

# Executive Management

The corporate goals and objectives which are components of the broad organizational strategy laid out by the board of directors are championed by a dynamic team of professionals who are committed to implementing the corporate strategy as well as manage the technical and business support staff to effectively and efficiently utilize financial, material and human resources. This team includes:

Chief Executive Officer

Chief Operating Officer

Chief Financial Officer

Human Resource Manager

Operations Manager

Maintenance Manager

Procurement Manager

Support Services Manager

Legal Adviser

Chief Security Officer

# Business Approach

## International Operating Standards



At Egbin Power Plc, we are committed to ensuring that nothing short of international standards are applied in all areas of our operations to guarantee the sustainability of our business. To achieve this, our Quality Health Safety Security Environment (QHSSSE), Plant Operations, Equipment Maintenance, and Asset Management systems, have been designed to be consistent with international operating procedures and practices. Our quest to operate a sustainable business has propelled us to adopt and implement international operating standards which have now become our corporate culture and way of life. In promoting international standards in power generation, and building upon our enviable performance in 2018, we achieved again in the 2019 reporting year, the remarkable safety performance of zero fatality rate, extremely low emissions which were well within internationally acceptable limits; increased safety awareness and training, increased investment in employee healthcare, etc.

To reduce the energy wasted at different points and terminals of the Egbin Power Station, as well as ensuring our business sustainability, Egbin Power Plc utilized globally accepted operating procedures and practices to achieve efficiency in energy performance. We continued in our efforts to improve our energy performance because we leveraged international best practice to identify energy-saving opportunities that could be introduced to maintain and improve our energy management system, thus increasing our energy efficiency throughout the reporting year of 2019.

## Sustainable Development Goals

As previously reported, we have adopted the 17 Sustainable Development Goals (SDG's) of the United Nations as essential tools for attaining sustainability. The United Nations Sustainable Development Goals Fund (SDG-F) in New York inaugurated the Private Sector Advisory Group (PSAG) made up of 13 private sector organizations from across the world in April 2015 to support the SDG-F in developing sustainable solutions to identified global problems. As mentioned in the past, the Sahara Group is a member of the SDGF's advisory board and also one of the arrowheads of the PSAG in Nigeria. As a subsidiary of Sahara Group and being a sustainability-driven organization, the project is critical to Egbin Power Plc. During the reporting year, we continued to promote the objectives of the PSAG through our various Personal and Corporate Social Responsibility initiatives. In particular, our strategic focus was on quality education, healthy living, and sustainable use of the terrestrial ecosystem.

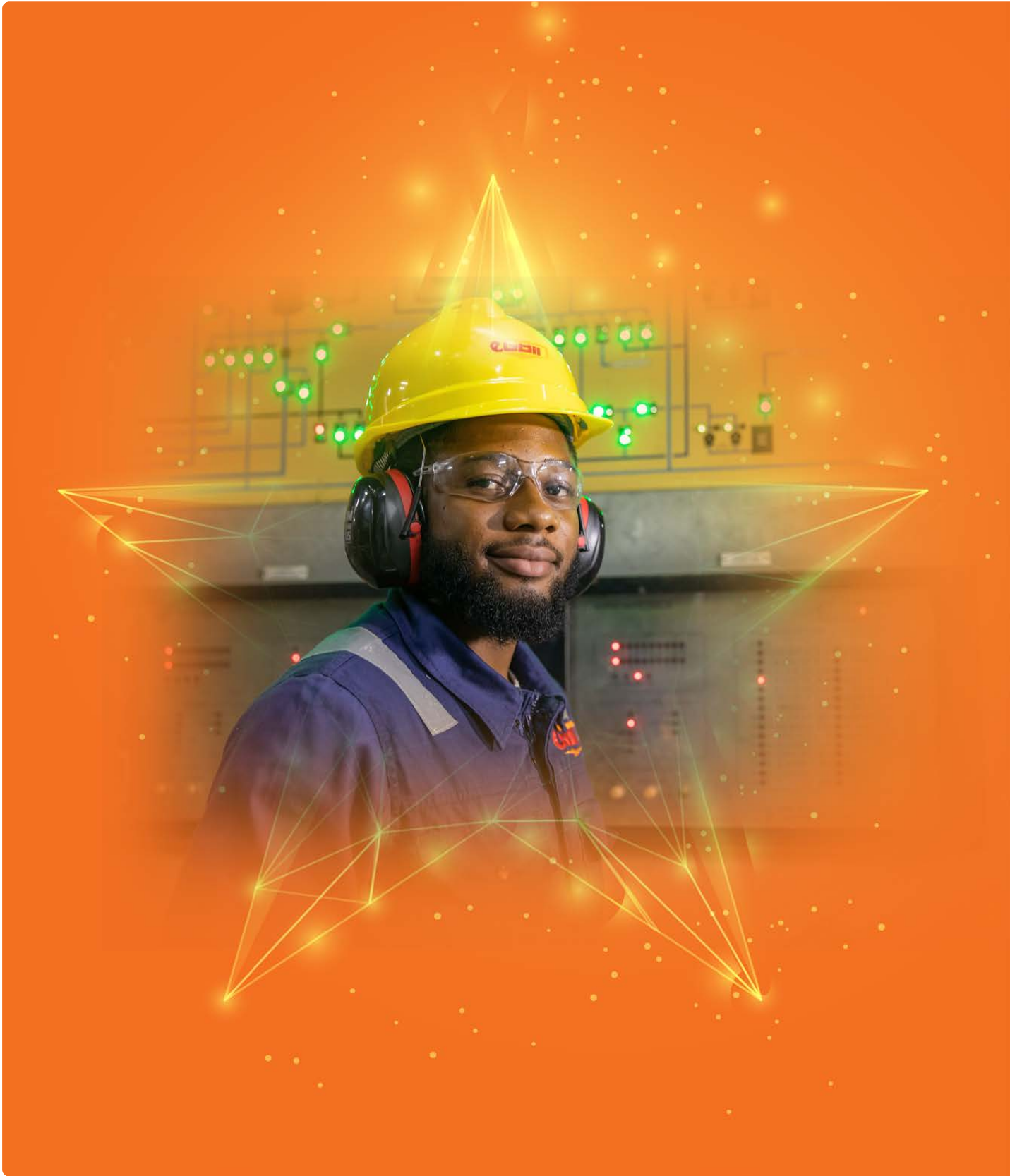


## Commitment to Compliance Obligations



Egbin Power Plc has continued to lead by example in the Nigerian Electricity Supply Industry. We pride ourselves in knowing that we do not fall short on obligations owed to external bodies/ organizations that govern our business activities. This enduring commitment is consistently demonstrated through the regular and early filing of our financial statements with the Nigeria Electricity Regulatory Commission (NERC), as well as the prompt filing of both employee and employer contributions. Our track record has been proven over time with no recent record of penalties or fines paid due to non-compliance with laid down procedures. To ensure business sustainability, the directors, management and employees of Egbin Power Plc., continue to be committed to the laws, internal corporate rules and regulations that govern our business operations. To further show our commitment to our compliance obligations, we have developed a Corporate Compliance Manual, which serves the purpose of driving the efficient implementation of our business operations based on laid down compliance procedures.





# Plant Operations and Maintenance

## IN THIS SECTION

Celebrating Maintenance Successes:	26
A Robust In-house Technical Capability	
Building a Safer Plant: HSE as a Core	30
Driver of O&M Activities in Egbin	
Sustaining Operational Performance	32
Responding to O&M Related Emergen-	34
cies: The Egbin Oil Spill Contingency Plan	
Asset Management Philosophy	35
Beyond 2020: Future Initiatives Planned	37

# Celebrating Maintenance Successes: A Robust In-house Technical Capability

**D**uring the reporting year, our Operations & Maintenance (O&M) workgroup accomplished a number of technical feats. This highly skilled technical team operated at the frontlines to ensure that the Company remains the supplier of choice wherever energy is consumed. In 2020, despite the lockdown and disruptions occasioned by the COVID-19 pandemic, the Company continued to leverage on the massive in-house technical capabilities of the O&M workgroups to keep the generating assets running.

The Maintenance Department at Egbin consists of the Mechanical Section, Instrumentation & Control Section, Electrical Section, Mechanical Workshop; as well as the Maintenance Planning team that coordinates job planning and helps to track efficient execution of maintenance activities via the Computerized Maintenance Management System (CMMS). As reported in 2019, to further strengthen business performance and aid service delivery, the Maintenance Department was restructured. This strategic re-alignment saw the Mechanical Sections (Turbine and Boiler) merged into a sole function under common leadership and oversight. This restructuring also saw the creation of a component repair group within the Mechanical Workshop. The Maintenance Sections continued to leverage upon this rejigged structure in 2020.

The Mechanical Section is essentially charged with the task of ensuring the availability of the steam generators, turbines and auxiliary support equipment across all the six generating units cocooned in the company's 4 Business Generating Centres. The efficient execution of the Section's functions ensures that core business indices like plant reliability and availability are guaranteed.

For the Instrumentation & Control team, there was a lot of procurement of new materials and work tools such as various calibrators, meters and other spares in preparation for the proposed

overhauls. The Instrumentation & Control team also actively participated in the restoration works on our Steam Turbine-02 which had been unavailable for an extended period of time due to vibration issues. Completion and return to grid duty are expected to take place in January 2021. In addition, the Instrumentation & Control team, leveraging on the online support of the Original Equipment Manufacturer (OEM), also carried out the restoration of the ST-04 control system Engineering Work Station (EWS) and Historian which had been in a failed state for a significant time period. Furthermore, the Section continued with training exercises to build the capacity of team members with particular emphasis on the Emerson Ovation DCS.





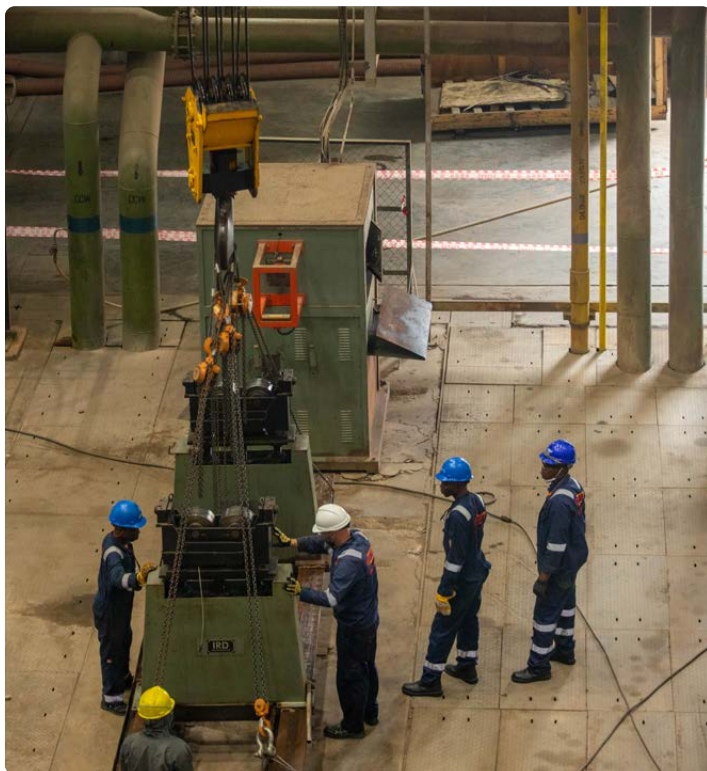


Despite the lockdown and disruptions occasioned by the COVID-19 pandemic, the Company continued to leverage on the massive in-house technical capabilities of the O&M workgroups to keep the generating assets running.

## Maintenance Short term Planning at Egbin

Despite the unique challenges the COVID-19 pandemic posed to the company, the maintenance planning team continued to provide sterling support for the O&M process, ensuring that maintenance jobs were adequately scheduled and midwived to a successful conclusion, with the eventual outcome of the projects conforming with the allotted timelines and pre-defined deliverables. During the reporting year, the maintenance planning team created a training video module to instruct the O&M team on how to maximally utilize the Computerized Maintenance Management System (CMMS) platform. To enhance documentation management and control, the team reviewed and revised the reporting template for maintenance projects. In order to harvest data necessary to proactively predict equipment performance and reduce mean time to failure, the maintenance planning team in conjunction with the mechanical section commenced in 2020, the condition monitoring of rotating equipment using a vibro analyser.

As a testament to the hard work and synergy between all stakeholders across the O&M workgroups, the team was able to achieve a 93% completion rate for maintenance jobs and a 95% timeline compliance rate for priority 1& 2 maintenance jobs.



## The Journey towards Condition Based Maintenance: Digitising Data Logging at Shift Operations

In line with global industry best practice and in sync with the maintenance team's commencement of condition monitoring of certain equipment, the Shift Operations team commenced the process of transitioning to digitized data logging for the plant. In order to achieve this quest, the company acquired hand-held devices equipped with Plant DX software to be utilized for taking readings both for remote and field instruments. This will further enhance the quality of data acquisition and interpretation and help to improve data-driven decision-making as relating to plant equipment. Full-scale roll-out is expected to commence in the first quarter of 2021.

**During the reporting year, the O&M workgroups were able to accomplish the following critical successes:**

### Reactivation of Moribund Fire Alarm System: 1

The Instrumentation & Control workgroup reactivated the moribund fire alarm system for the station. The first stage of reactivation has been completed and focused on areas housing critical plant infrastructure for the optimum and safe running of the plant. The relay rooms, central control room, battery rooms and other critical locations saw their fire alarm system reactivated.



### Development of Condition Monitoring Template: 2

Developed and implemented a condition monitoring template to aid maintenance decisions through the provision of a continuous stream of operational data for all Instrumentation & Control equipment. During the year under review, using harvested data, the Instrumentation & Control workgroup was able to carry out targeted checks on all pneumatic equipment across the generating units, with a view to addressing the challenge of air leakages on pneumatic equipment. This proactive data-driven approach has helped to significantly improve equipment reliability.







The transition to digitized data logging by the Shift Operations team to be utilized for taking readings both for remote and field instruments will further enhance the quality of data acquisition and interpretation, improving our data-driven decision-making related to the plant



Building upon the HR strategy of succession planning designed to maintain sustainability and aid knowledge transfer within the O&M teams, 2020 saw the deployment of maintenance technicians into the various O&M workgroups to further strengthen the workforce. In addition to this, young engineers recruited under the **Graduate Engineering Program (GEP)** completed their rotations and were also deployed into the various O&M workgroups to further bolster the capabilities of the various departments within the O&M section. Some staff were also assigned to job shadow senior members of the Operations team in order to deepen their capacity to take on more leadership roles in the future.

## Other note-worthy milestones achieved by the O&M workgroups during the 2020 reporting year

ST-02 turbine disassembly in preparation to fix high bearing vibration.

ST-04 Boiler Feed Pump A overhaul to fix the auxiliary oil pump and the main oil pump issues

Swapping of Circulating Water Pumps 2A and 6B.

Circulating Water Pumps 2A and 6A repair projects to fix shaft, bearing and casing issues.

Comprehensive Boiler Statutory Inspections for Units 4, 5 and 6

ST-03 lubrication oil system flushing and oil replacement.

Demineralization trains A and B resin replacement for the anion and cation vessels.

Complete overhaul of Unit 6 Turbine Control Valves

Completion of type A inspection projects for Units 4, and 6.

Non-Destructive Tests carried out on Unit 2 boiler parts.

Boiler tube repair projects on ST-02, ST-04, ST-05, and ST-06

Participation in Egbin's oxygen production plant project

Installation of newly acquired Emergency Diesel Generator (EDG) to improve the emergency power needs of the station

Repurposing the unused hydrogen storage vessels in readiness for station service air storage

Replacement of wells A and D submersible pumps

Cleaning of Unit 6 Surge tank, De-aerator, and Hot well to correct high chloride level in feed water caused by resin ingress.



# Building a Safer Plant: HSE as a Core Driver of O&M Activities in Egbin

**A**s with other years, the Company continued with its drive to ensure that all Operations and Maintenance activities carried out within the facility were conducted in a manner that was safe for personnel, assets, and the environment.

In 2020 alone, about 17.5% of employees at Egbin were involved in safety committee groups activities. A significant component of these were team members drawn from the O&M workgroups. Safety committees are groups recommended by health and safety laws to enable the Company's management attend to safety issues in a holistic manner, in order to reduce incidents in the plant. The management safety committee (a 30-man committee) comprises the various departmental heads, section heads and some other employees, with the Chief Executive Officer as Chairman and head of the Health Safety and Environment (HSE) department as the secretary. The committee's key function is to help drive safety commitments and policies in the company.

Also, there is a 40-man team of safety representatives selected from each of the Company's departments. The safety representatives have two sub-committees, the house keeping committee and the toolbox meeting committee. The housekeeping committee coordinates the housekeeping issues within the plant

complex while the toolbox committee monitors the effectiveness of toolbox meetings being carried out by different departments and sections of the power plant. Issues beyond the scope of the safety representative are escalated upwards and handled by the safety management committee.

In 2020, over 1120 toolbox discussions were conducted by teams company-wide, the bulk of them by the O&M workgroup on different health, safety and environment topics as related to the task at hand. This interactive approach enhanced the safety awareness of each staff and deepened the corporate culture of safety across the O&M workgroup. Egbin HSE personnel also conducted work-specific on-site safety education to contractors and their employees to minimize the likelihood of accident inducing behavior occurring.

## 17.5%

Employees involved in safety committee groups activities



## 40

40-Man strong team of safety representatives selected from each of the company's departments



## 1120

Toolbox discussions Conducted by teams company wide



# 4.2 Million

## Injury-free man hours

Conducted by teams company wide

Within the O&M workgroups, the following initiatives were either strengthened or introduced into the procedural outlay for the O&M workgroups



Regular Safety 'pep talks' during morning job review meetings



High consistency in conducting toolbox meetings prior to jobs.



Strict adherence to the approved Permit to Work System



Adequate utilization of Personal Protective Equipment in job delivery



Periodic certification of personnel, equipment, and accessories where applicable to ensure their conformity to safety standards

In 2020, as a result of these proactive HSE strategies adopted by the Company, the Company recorded zero cases of injuries to the public involving company assets (including legal judgments, settlements and pending legal cases and diseases). The Company also recorded zero cases of injury and fatality involving company assets. As of 31st December 2020, the Company had recorded Zero (0) Lost Time Injury and had racked up an impressive 4.2 million injury-free man-hours because of this. The company also achieved Zero (0) occupational-related fatality in the year under review.

# Zero

## Injuries, Fatalities, Occupational-related Fatality & Lost time injuries

Due to the proactive HSE strategies we adopted





# Sustaining Operational Performance

## Upholding International Operating Standards within the Generating Process

Our corporate goal as a company is to be the preferred supplier of choice wherever energy is consumed. As a business, therefore, we have continued to innovate and evolve to enable us to maintain a business that is both profitable and sustainable. Despite the COVID-19 pandemic, the year 2020 was no different for us, as we built on the successes of previous years by continuing to operate with zero fatalities, reduced emissions and set in motion an aggressive plant improvement and performance framework that helped us to identify and minimize any losses due to energy wastage within the generation process.

Water quality requirements for the steam electricity generation process is very critical. This is particularly important to preserve and extend the life of the steam generator and turbines. Poor water quality will lower the efficiency of the heating process, and inadvertently lead to equipment breakdown, increasing production loss time, and related costs for required repairs. Several chemicals are used in treating and conditioning the process water. These chemicals create a condition that inhibits corrosion and prevents the formation of scales within process equipment. Each generating unit is equipped with an on-line sampling system to monitor water quality at various points in the cycle. In addition, process water samples are taken regularly from the sampling racks and subjected to bench analyses in the station's laboratory.

The input fluid used to drive the turbine is treated water that has been heated to superheated steam with energy. It goes through a closed cycle, changing phase from steam to condensate to feed water. The steam is cooled with water pumped from the lagoon through shell & tube heat exchangers to absorb the latent heat of vaporization of turbine exhausted steam and condense the steam. Therefore, 100% of the working fluid is recycled back into the system for continuous power generation; although, due to inefficiencies in the system and other losses, there is a negligible deviation from 100% that cannot be accounted for.

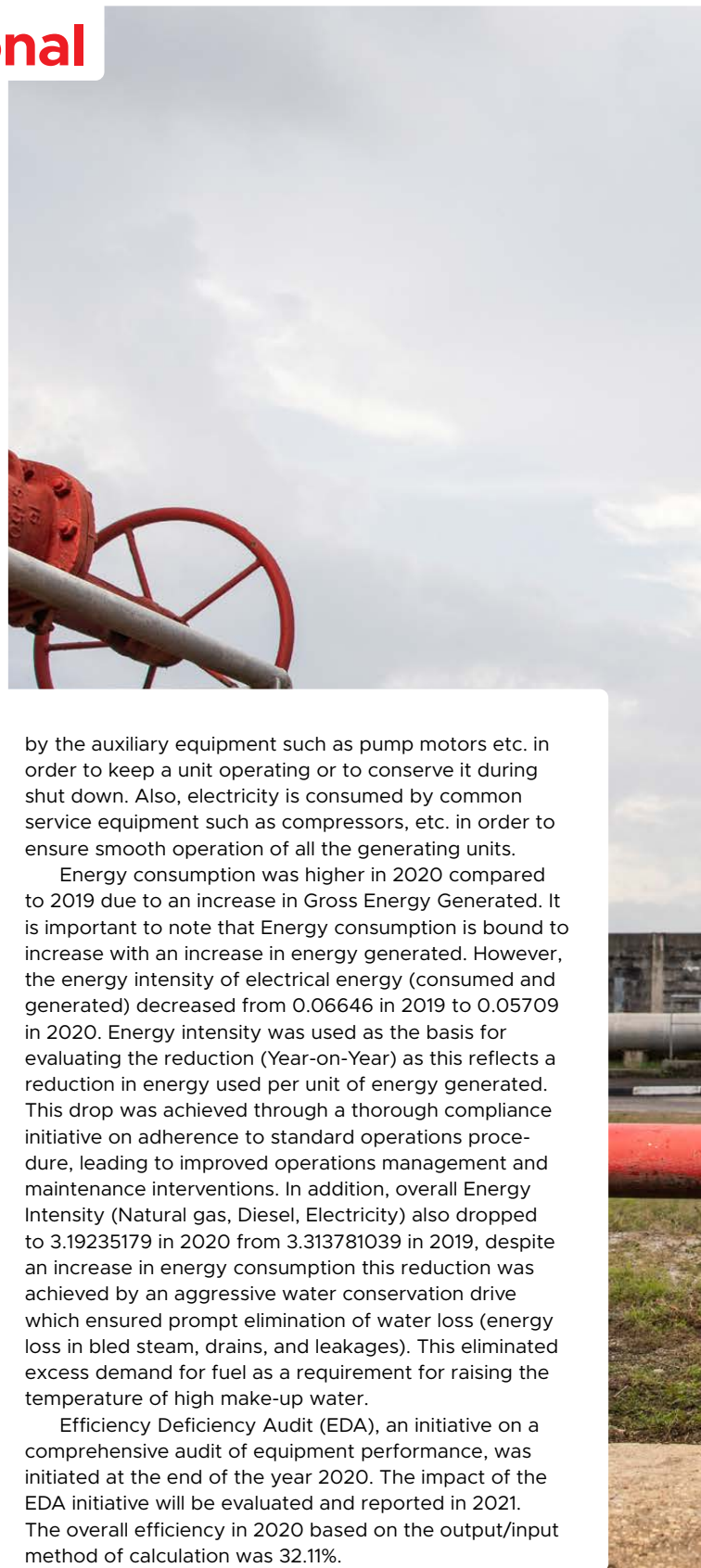
At Egbin, for steam power generation, the boiler can use two sources of fuel for combustion: Natural Gas and High Pour Fuel Oil. For Black Starts, the Emergency Diesel Generator uses diesel; and the Gas Turbine Generator uses diesel for start-up and Natural Gas during normal operation. However, given the cost advantage of running the units with natural gas, no High Pour Fuel Oil was used to run the six generating units in 2020.

A percentage of energy output is usually consumed

by the auxiliary equipment such as pump motors etc. in order to keep a unit operating or to conserve it during shut down. Also, electricity is consumed by common service equipment such as compressors, etc. in order to ensure smooth operation of all the generating units.

Energy consumption was higher in 2020 compared to 2019 due to an increase in Gross Energy Generated. It is important to note that Energy consumption is bound to increase with an increase in energy generated. However, the energy intensity of electrical energy (consumed and generated) decreased from 0.06646 in 2019 to 0.05709 in 2020. Energy intensity was used as the basis for evaluating the reduction (Year-on-Year) as this reflects a reduction in energy used per unit of energy generated. This drop was achieved through a thorough compliance initiative on adherence to standard operations procedure, leading to improved operations management and maintenance interventions. In addition, overall Energy Intensity (Natural gas, Diesel, Electricity) also dropped to 3.19235179 in 2020 from 3.313781039 in 2019, despite an increase in energy consumption this reduction was achieved by an aggressive water conservation drive which ensured prompt elimination of water loss (energy loss in bled steam, drains, and leakages). This eliminated excess demand for fuel as a requirement for raising the temperature of high make-up water.

Efficiency Deficiency Audit (EDA), an initiative on a comprehensive audit of equipment performance, was initiated at the end of the year 2020. The impact of the EDA initiative will be evaluated and reported in 2021. The overall efficiency in 2020 based on the output/input method of calculation was 32.11%.







## Improving business profitability of Operations and Maintenance at Egbin: An Asset Management Approach

Driven by a continuous need to improve business profitability and hence deliver increasing value to key stakeholders, the Asset Management function was established for Egbin Power Plc in April 2019 to coordinate the management, operation and maintenance of all the power plant assets. As a result of this, four (4) Business Generating Centres (BGCs) were created to serve as operating hubs for the Asset Management function. The anticipated outcome of this is that the facility would continue to export power in a safe, profitable and sustainable manner whilst complying with extant legal and regulatory obligations.

# 3.66%

Drop in overall energy intensity (Natural gas, Diesel and Electricity)

**Despite an increase in energy consumption**, due to our aggressive water conservation drive, which promptly eliminated water loss (energy loss in bled steam, drains, and leakages).energy loss in bled steam, drains, and leakages).

An engineer checking one of the water flow valve system

# Responding to O&M Related Emergencies: The Egbin Oil Spill Contingency Plan

Emergencies occur when early signs are ignored. Various risks can emanate and cause fires, oil spills, chemical spills, and other emergencies that may arise. All emergencies must be responded to immediately to save both lives and assets of the company while also keeping the environment safe from adverse impact. There are different types of emergencies that can occur within the company's operations. The types of emergencies shall determine the type of response.

**The Egbin Power Plc Oil Spill Contingency plan follows the content and organization of IPIE-OGP "Good Practice Guide Series" (International Association of Oil and Gas Producers) and describes the distribution of responsibilities and basic procedures for responding to an oil discharge and performing clean-up operations.**

As a response Strategy, Egbin personnel and contractors are equipped and trained to respond to certain "minor discharges" confined within the facility. Minor discharges can generally be described as those where the quantity of product discharged is small, the discharged material can be easily stopped and controlled, the discharge is localized, and the product is not likely to seep into ground water or reach surface water or adjoining shorelines.

For the oil spill response plan, there are lines of responsibilities in the management of the spill. Egbin has the primary responsibility for providing initial response to oil discharge incidents originating from its facility. The CEO assumes responsibility for overall safety and environmental protection matters in the facility. The Safety Manager is the incident commander who leads and coordinates the response action of the field responders making sure that the emergency is controlled.



## LINES OF RESPONSIBILITY IN SPILL MANAGEMENT

### CEO

Assumes responsibility for overall safety & environmental protection matters

### SAFETY MANAGER

Is the incident commander, leads and coordinates the response action of the field responders. Ensuring effective control of any emergency



As a response Strategy, Egbin personnel and contractors are equipped and trained to respond to certain "minor discharges" confined within the facility.



# Asset Management Philosophy

As reported in our 2019 Sustainability Report, the Asset Team developed and signed an Asset Management Philosophy and Strategy Document, which defined the overall Asset Management objectives for the plant and the BGCs, as well as the strategies for their realization. Three key instruments were identified as necessary to support these objectives namely: People, Equipment (Assets) and Processes. As a driver for achieving all these objectives, in 2020, the Asset Management Team developed the Asset Management Imperatives for effective asset management behavior and asset performance.



## OUR ASSET MANAGEMENT IMPERATIVES



**Competitive Workforce**



**Enterprise-First Behaviour**



**Regulatory Compliance**



**Zero Operational Trip**



**Zero Equipment Breakdown**



**Competitive Unit Cost of Power Generation**



**G**uided strategically by these imperatives, the asset management team conducted a series of strategic interventions designed to enhance the value derivation experience from the company's generating assets. The Asset Team carried out the following:

Assisted in the design of an Unsafe Act Unsafe Condition (UAUC) e-form for reporting, tracking & close out of UAUCs. This made UAUC reporting more user-friendly and thus **increased the number of reported UAUCs in 2020.**

Developed the methodology for an **Energy Audit of Non-Power Generation Assets in Egbin Power PLC** – meant to reduce energy waste and our carbon footprint. It is expected that the energy audit will be implemented in 2021.

Signed the **Standard Operating Procedures (SOP)** for the power plant. This established best practices for the safe operation of the power plant.

Consistently ensured that the environmental aspects of the power generation business (e.g. effluent discharge and flue gas discharge etc) were within regulatory limits.

In the 2020 reporting year, the Asset Management team also scored a number of major achievements, as a result of the revamped asset management perspective developed in 2019. A few of these achievements are as follows:

Improved **Maturity Scale** of Asset Management in Egbin Power PLC from **Level 1 (Aware) in 2019 to Level 2 (Developing)**; which means that the Asset Management function has enabled the company to identify a means of systematically and consistently achieving competency in the management of its power generation assets.

Developed, signed and commenced the implementation of **Maintenance Philosophy and Strategy for 1.32GW Egbin Power Plant**. This defined the philosophy and strategy for the maintenance of the power generation assets in Egbin Power PLC in alignment with global best practices

Developed, signed and implemented Opportunity Framing Report for Procurement Metrics and Benchmarks. This framed opportunity used to identify and unlock procurement inertia and minimize the organization's overall purchase requisition processing time. It also serves as a Service Level Agreement (SLA) between the Asset Management and Procurement Department.

Developed Category Groups for the Procurement Department – meant to promote professionalism through the creation of focused categories for the competence development of buyers in the Procurement Department.

Continued the implementation of the **Asset Intervention Plan for Egbin Power Plant (2019 to 2023)**. This led to a **50% reduction in the number of operational trips in 2020 compared to 2019.**

Developed Competency Frameworks for technical departments: Asset Management, Operations and Maintenance skill pools; used for skill audits for staff.

In liaison with Human Resources Department, completed skill audit of staff in Operations and Maintenance departments. This was used to upskill the technical staff for improved employee productivity.

In liaison with the Human Resources Department, utilized the skill audit to develop Learning Intervention Plans (LIPs) for staff in Operations and Maintenance departments. This was used to close the skill gaps amongst the technical staff.

Conducted Scope Management Training for about 60 staff, drawn from over 10 departments in the company. This improved the quality of scoping of Purchase Requisitions (PRs) and enabled the seamless purchase of goods and services.

Successfully executed 2Nos. Type A Inspections: ST-04 and ST-06

Achieved zero Lost Time Injury (LTI) throughout the year.

# Beyond 2020: Future Initiatives Planned



Develop Roadmap for  
ISO14001 Certification



Reduce energy waste and  
carbon footprint



Upgrade of turbine oil drives, and  
increase Unit available capacity



There are efforts by the Asset Team in conjunction with the HSE team to comprehensively develop a roadmap for the ISO14001 Certification of Egbin Power Plc in the nearest future. We also hope to sign the Project Charter and carry out an Energy Audit of Non-Power Generation Assets in Egbin Power Plc and thus implement recommendations aimed at reducing energy waste and the carbon footprint of the organization. The year under review was not without its own set of challenges for the asset management team. Back-log of overdue maintenance activities particularly the plant overhauls (deferred to 2021 in part due to the pandemic), ST-02 was largely unavailable throughout the year 2020 due to a catastrophic failure associated with excessive vibration (Repair work is, however, ongoing by a combined team of in-house engineers and supported by a team of external contractors and the unit is expected to be available for grid duty by January 2021). In the year under review, Type A inspections were carried out on ST-04 and ST-06 as part of targeted plant interventions aimed at improving plant performance.

As part of a phased asset care plan developed back in 2019, the replacement of turbine lubricating oils commenced in September 2019 with ST-03; while lubricating oil for ST-04 was replaced in 2020. Replacement of lubricating oils for other units is billed to follow as soon as possible. The turbine oil drives for the generating assets will be upgraded in 2021. This is expected to enhance the smooth operation of the steam turbines; in addition to preventing oil contamination and damage to turbine control valves – one of the frequent causes of operational trips and reduction of unit available capacity.





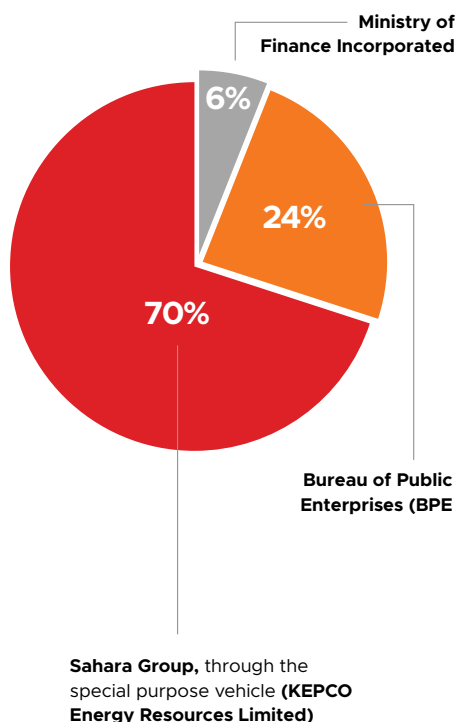
# Economic Sustainability

IN THIS SECTION

Ownership Structure	40
Economic Performance	40
Organisational Supply Chain	42
Stakeholder Engagement	44
Plant Availability and Reliability	46
Financial Status	48
Supply Chain Management	49
Investment and Expenditure	50

# Ownership Structure

**E**gbin Power Plc's capital structure remained the same in 2020 as 2019, with Sahara Group owning, through a Special Purpose Vehicle (KEPCO Energy Resources Limited), 70% of the shareholding, Bureau of Public Enterprises (BPE) with 24%, and Ministry of Finance Incorporated owning the remaining 6%.



# Economic Performance (Financial Information)

**2**020 was loaded with economic shutdown as countries fought to curtail the spread of COVID-19. In addition to this, the ENDSARS protest disturbed business activities across the country, which created structural/logistics loggerheads in the country. These events dip dived the economy into a recession, as global crude oil prices plummeted to \$18 per barrel against the 2020 budgeted benchmark of \$57/ per barrel (Nigeria being an import-dependent economy and its major income is from crude oil sales). The continuous reduction in oil prices and oil production had a negative impact on the national budget, which also contributed to the instability of Naira. The economy experienced the Naira devalued twice against Dollar in 2020. (N305/\$1 to 326/\$1 in March & N326/\$1 to 379.5/\$1 in July). The availability of COVID-19 Vaccines in the last quarter of 2020 signaled rays of hope globally as countries began to relax the economic shutdown which led to the 0.11% marginal GDP rate as against the projected 2.93%.

Egbin generated an average of 547MW representing 27% above the 433MW generated 2019. The year 2020 recorded an increase in revenue of about 52% to settle around N119.6 billion (\$311.7 million) in 2020, an increase from the revenue figures of N79.8 billion (\$218 million) recorded in 2019. The increase in earnings is attributable to the 27% increase in generation from an average 433MW to 547MW as the number of grid collapses reduced from ten (10) in 2019 to four (4) in 2020 and gas supply improved in the reporting year. The translation of Egbin's financials to reporting currency USD (\$) was based on NAFEX rate (Nigeria Autonomous Foreign Exchange rate at an average of N384/\$) in 2020 and 2019 an average of N361.58/\$.

Cost of sales also increased by 45% to close at about N112.4bn. The increase in cost of sales was mainly due to an increase in generation. There was retardation in performance, as a loss before tax of N1.077 billion in 2019 shifted to a loss before tax of N2.9 billion in 2020. By the end of 2020 total assets had increased to N419 billion, 12% increase from the figure recorded in 2019 majorly due to continuous application of IFRS 9 adjustment on receivables, due to huge receivables from Market Operator, Nigeria Bulk Electricity Trader & Others. We are working closely with our partners to ensure this does not jeopardise our sustainability in the short term.



**547MW** ↑ 27%

Average electricity generated,  
representing 27% increase from the  
433MW generated in 2019

**N119.6 Billion** ↑ 52%

Revenue in 2020  
representing a 52% increase from  
N79.8 billion in 2019

**N112.4Billion** ↑ 45%

Cost of Sales  
A 45% increase, mainly due to increased  
power generation.

**N419Billion** ↑ 12%

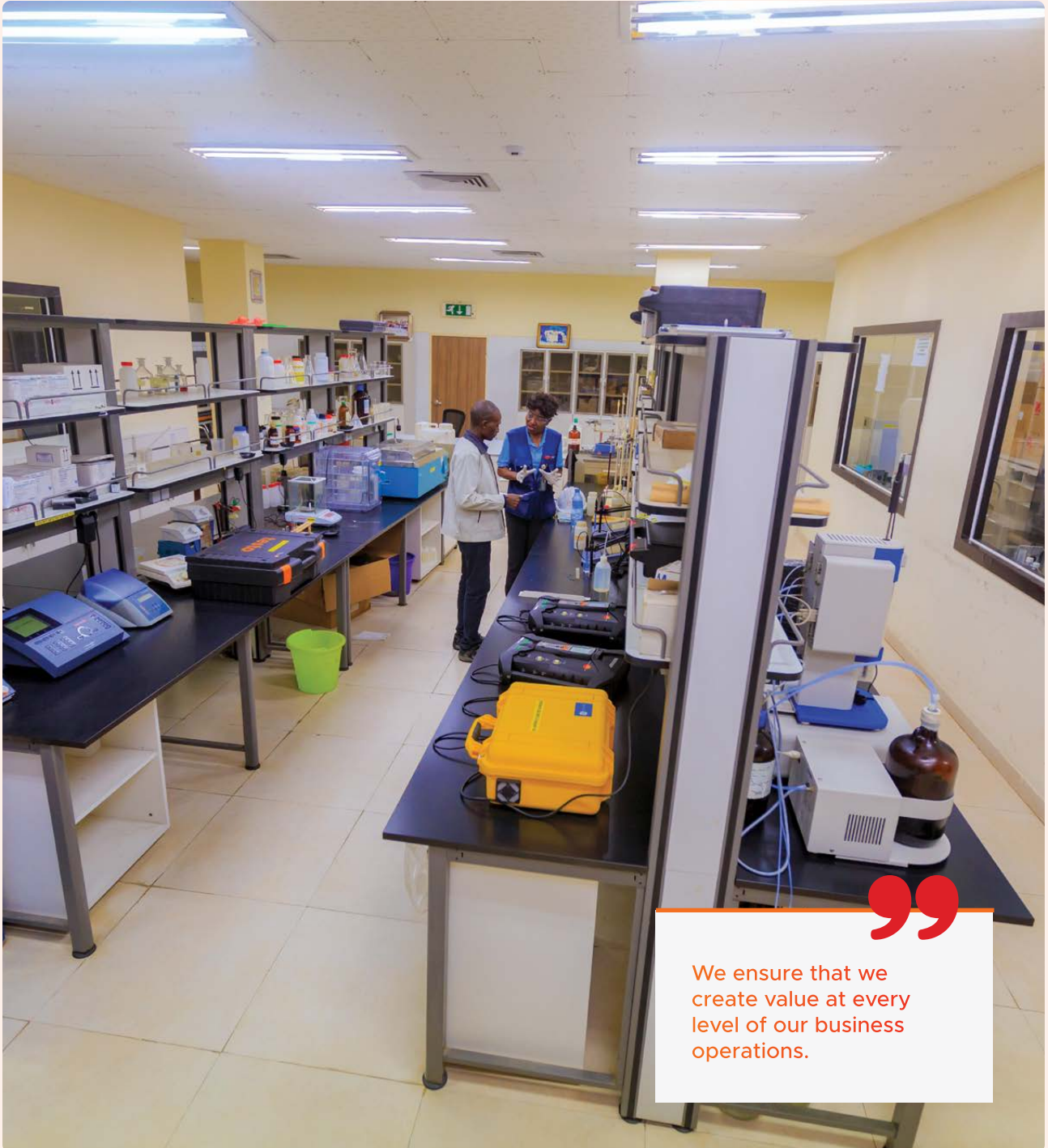
Total Assets  
A 12% increase from 2019 due to continuous  
IFRS 9 adjustment on receivables





# Organisational Supply Chain

**A**s a well-structured organization, Egbin Power Plc has maintained an extensive supply chain management system ranging from producers/manufacturers, transporters suppliers to consumers. As an organization, we ensure that we create value at every level of our business operations.



”

We ensure that we create value at every level of our business operations.

For ease of understanding, we have categorized some members of our supply chain into the following groups:

### Brokers

In a bid to ensure this value created is also sustained, we ensure that all our generating assets are covered under comprehensive insurance policies through our broker/agent management system, thereby ensuring that not only are our plants insured against risk, but also our people and all other forms of combined risks that could arise from our operations and to our people are duly assessed and covered.

### Consultants

In ensuring business sustainability, Egbin Power Plc hires and retains the services of some of the most reputable consultants locally and internationally.

Towards ensuring that the integrity of our financial statement is maintained, PricewaterhouseCoopers, one of the big four auditing firms was appointed as the Company Auditor for year 2020 after Deloitte & Touché completed its term in line with NERC regulations and the Companies and Allied Matters Act. In addition, a leading Tax consultant Pedabo Associates was retained during the reporting year to manage the company's regulatory risk and ensure compliance with all tax filings has been completed.



### Wholesalers

Chevron Nigeria Limited (Chevron), Nigeria Petroleum Development Company (NPDC)/ ND Western Limited and the Nigerian Gas Company (NGC) are our major wholesalers as they supply & transport the gas that is used as feedstock (fuel to boil water that produces steam) to power the turbines of our plant. In 2020, the existing agreements with Chevron and NPDC/ND Western improved gas supply vis a vis improved plant reliability and minimal grid instability. With the signing of the FG/Siemens improvement deal in 2020, we anticipate an improved grid stability.



### Manufacturers

The Power sector is a capital-intensive sector with ground-breaking technology being introduced daily to meet the ever-growing demands of the environment in which we operate. In a bid to remain "Provider of choice wherever energy is consumed" we have partnered and are continually looking at partnership that we deliver on our vision. As such we have partnered with vendors such as KEPCO, ORBIS and KPS to help manufacture various capital-intensive items over the period.



### Offtakers

#### i. Nigerian Bulk Electricity Trading Plc

Nigerian Bulk Electricity Trading Plc. (NBET) is the primary off-taker of the energy produced by Egbin Power Plc. Through the Power Purchase Agreement (PPA) entered into between NBET and Egbin Power Plc, NBET purchase bulk power from Egbin Power Plc. and resells the power to the distribution companies (DISCOs) according to demand, based on the vesting contract it enters into with the Discos. In 2020 NBET, we received about N45b payment assurance with the support of the FGN guaranteed payment assurance guarantee scheme to improve the liquidity in the power industry.



#### ii. Eko Electricity Distribution Company (EKEDC) And Ikeja Electric (IE)

NERC approved the trade of excess power by Egbin in a bilateral contract with Ikeja Electric (IE) and Eko Electricity Distribution Company (EKEDC). The excess energy generated by Unit 6 (with a capacity of 220 MW) is supplied to the feeders designated by the DISCO parties. However, supply to EKEDC was suspended in 2016 due to overdue and unpaid arrears.



# Stakeholder Engagement

The management of Egbin Power Plc understands the need for stakeholder engagement and accountability for all activities carried out by the company, hence why there were three board meetings and an Annual General Meeting held during the reporting year. In our daily operations as an organisation, we interact with various groups of individuals and organisations. We have grouped our stakeholders into various categories based on the type of relationship with the organisation. Some stakeholders based on categories are listed below:

## Shareholders



**KEPCO Energy Resources**



**Bureau of Public Enterprises (BPE)**



**Ministry of Finance Incorporated**

## Regulators



**Nigerian Electricity Regulatory Commission (NERC)**



**Bureau of Public Enterprises (BPE)**



**Financial Reporting Council (FRC)**



**Federal Inland Revenue Services (FIRS)**



**Lagos State Inland Revenue Services (LIRS)**

## Partners



**Korea Electric Power Corporation (KEPCO)**

**ORBIS**



**KPS**



**MHPS**

















**Emerson**



**Dietsmann**



## Suppliers

 <p><b>Nigeria Gas Company</b></p>	 <p><b>Chevron Nigeria Limited</b></p>	 <p><b>Nigeria Petroleum Development Company (NPDC)</b></p>	 <p><b>Pan Ocean Oil Corporation Nigeria</b></p>	 <p><b>Drury Nigeria Limited</b></p>
 <p><b>Brightest Hope Company Limited</b></p>	 <p><b>Rohluck Nigeria Limited</b></p>	 <p><b>Hygeia HMO Limited</b></p>	 <p><b>Express Cleaners</b></p>	<p><b>Prayer Reign Global Services Limited</b></p>
<p><b>Richard Obada &amp; sons</b></p>	 <p><b>KEPCO Korea</b></p>	 <p><b>Prime &amp; Hills Energy</b></p>	<p><b>Polyfirm Nigeria Limited</b></p>	<p><b>Denee Global Nigeria Ltd</b></p>
<p><b>Bara Energy Limited</b></p>	<p><b>African Hydro Agric Chemicals Limited</b></p>	<p><b>Denotat Engineering Service Ltd</b></p>	 <p><b>Halogen Security Company Ltd</b></p>	 <p><b>KPS</b></p>
<p><b>ORBIS</b></p>	 <p><b>Dietsmann</b></p>			

## Offtakers

 <p><b>Nigeria Bulk Electricity Trading Company Limited (NBET)</b></p>	 <p><b>Ikeja Electric</b></p>
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Our esteemed staff and local communities are a great part of our stakeholders that have also helped to boost our operating activities through their support and dedication.



Introduction

Profile

Plant Operations & Maintenance

Economic Sustainability

Environmental Sustainability

Social Responsibility

www.egin-power.com

# Plant Availability and Reliability

**E**gbin operates six steam turbine-generator (ST) units. During the 2020 reporting year, ST2 was brought back to the grid after the replacement of some of its turbine stages and diaphragm; thus, increasing the availability of the plant.

Furthermore, ST4 and ST6 went on Type A inspections during the year, to ensure their continuous operation and reliability without breakdown.

Plant availability is basically uptime over a year if running all year long. The availability of a power plant varies greatly, depending on the type of fuel, the design of the plant and how the plant is operated. The plant's availability reduced in 2020 to 54% from the 76% obtained in 2019. The plant reliability also slightly reduced to 83% in 2020 from 84% in 2019. In the reporting year, Egbin generated a total of 4,794,874MWH, about 27% increment over last year's generation, with an overall efficiency of 32%.

The power generated by Egbin is traded in the energy market which is tightly controlled and regulated by the Nigerian Electricity Regulatory Commission. The process starts upstream with generating companies like Egbin, who then trade power with Nigerian Bulk Electricity Trading Plc (NBET), which is wheeled by the Transmission Company of Nigeria (TCN) for further distribution to the power distribution companies, who in turn sell the power to end users/consumers.





# 4,794,874MWH

Total power generated  
about 27% increment over last year's generation

## 54%

Plant Availability  
down from the 76%  
obtained in 2019



## 83%

Plant Reliability



During the 2020 reporting year, ST2 was brought back to the grid after the replacement of some of its turbine stages and diaphragm; thus, increasing the availability of the plant.



# Financial Status

## Direct Economic Value Generated and Distributed

As the largest contributor of electricity to the grid, Egbin Power Plc understands the need to demonstrate value creation to all stakeholders. A breakdown of movement in value added is provided below

### 15%

Decrease in Asset Maintenance and Future expansion

From 2019



### N13.57 Billion

Value Added

A decrease from N14.7billion in 2019 due to an increase in cost of sales and depreciation increase



### 114%

Increase in Payment to Government

From 2019



### N112 Billion

Operating Expenses

A marginal increase from the N77billion recorded in 2019



### 428%

Increase Community Investments

Mainly due to the COVID-19 pandemic



### 15%

Decrease in Payment to Employees

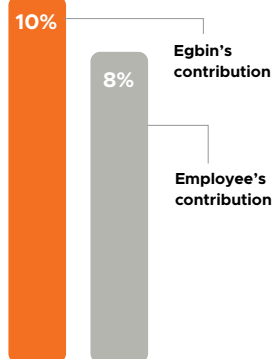
Mainly due to retirement



## Coverage of the Organization's Defined Benefit Plan Obligations

The law regulating Pensions in Nigeria is the Pensions Reform Act of 2014. Egbin Power Plc is aware of its obligations under this Act and ensures that proper remittances and deductions are done as stipulated. A pension plan is mandated for every employee of Egbin with a minimum contribution of 8% deducted from the employee's emolument, while Egbin Power Plc. the employer contributes a further 10%.

Employees interested in the additional voluntary contribution are allowed through the payroll systems and prompt remittance to their pension fund administrators. Pension deductions are done through the payroll system while the payroll team provided information on obligations expected and prompt remittances.



Contributions to employee's pension plan

## Financial Assistance Received from Government

Egbin Power Plc. being a major player in the power generation business with heavy investment in gas to power infrastructure, in acquisition and upgrade of plant facilities, the government through investment promotion council has demonstrated its support for the industry by approving the application for pioneer status which has availed us five-year tax savings from 2014-2018, which lead to savings that will be reinvested into the business to ensure sustainability, profitability and expansion of the generating Asset.

Also, the waiver of interest & penalty on outstanding tax liability was a tax-saving relief in the year 2020 and we look forward to an increased enabling environment from the government to support the power business.

Although Egbin has successfully transitioned from a government-owned company to a private company, the facility is widely considered a national asset mostly attributable to the retained government shareholding. The government's interest can be seen in the capital structure of the company with the government owning 30% of shareholding through the Bureau of Public Enterprises (24%) and Ministry of Finance Incorporated (6%).



# Supply Chain Management

## Procurement Practices

Egbin's Supply Chain Management is aligned with international standards of procurement which involves understanding the business needs at every point in time and managing supplier performance in order to boost the business performance of the organization. As a way to encourage technology advancement in the country, Egbin prioritises local sourcing of services, spares and replacement parts. The company sources services and spares internationally only when they are not readily available locally.

Egbin power Plc operates a transparent supply chain that creates a sustained value from the point of origin (i.e. suppliers) to the user department. The process involves planning, execution, control, and monitoring of supply-chain activities with the core objective of creating value, which is done by synchronizing supply with demand and measuring performance based on global standards.

Egbin Power Plc depends on its key suppliers and third-party providers, locally and internationally, for the supply and maintenance of equipment and services that is needed by the company towards meeting its objectives.

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We operate a transparent supply chain that creates a sustained value from the point of origin (i.e. suppliers) to the user department. The process involves planning, execution, control, and monitoring of supply-chain activities with the core objective of creating value



# Investment and Expenditure

## Investment in Community Projects

**A**t Egbin, we believe that just as we have benefited from the host communities, we should equally give back through our extensive personal and Corporate Social Responsibility (CSR) initiatives.

During the 2020 reporting year, we provided COVID-19 relief support to the host communities through a month-long food drive geared towards feeding residents of the communities while also providing them with cooked meals, raw food items, as well as basic toiletries for their personal use.

In the reporting year, we maintained donations to schools, hospitals and scholarships to indigenes of host communities as well as regular supply of anti-malaria medications to the health centre in order to help combat cases of malaria within the community. In addition to the Covid-19 relief support, we invested in the welfare of the community through our community medical outreach which focused on eye screening, distribution of free eyeglasses, free eye surgeries, provision of sickle cell drugs, and general consultation.

We also invested in infrastructural upgrades within the communities with the upgrade of the Ipekan Community Hall, the renovation of a classroom block and the construction of toilets at the Anglican Primary School in Ijede.

### Our community investments



Donations to schools



Donations to hospitals



Scholarships for indigenes



Regular supply of anti-malaria drugs



Covid-19 relief support



Medical outreach focused on eye screening



Infrastructure upgrades







## Investment in Human Capital, Safety and Environment

It is important to highlight that the world has gradually moved from just reporting the bottom-line of a business from the profit angle but has now adopted the “triple P” initiative which represents the People, Planet and Profit. These conceptions ensure the sustainability of the business and avoid environmental degradation.

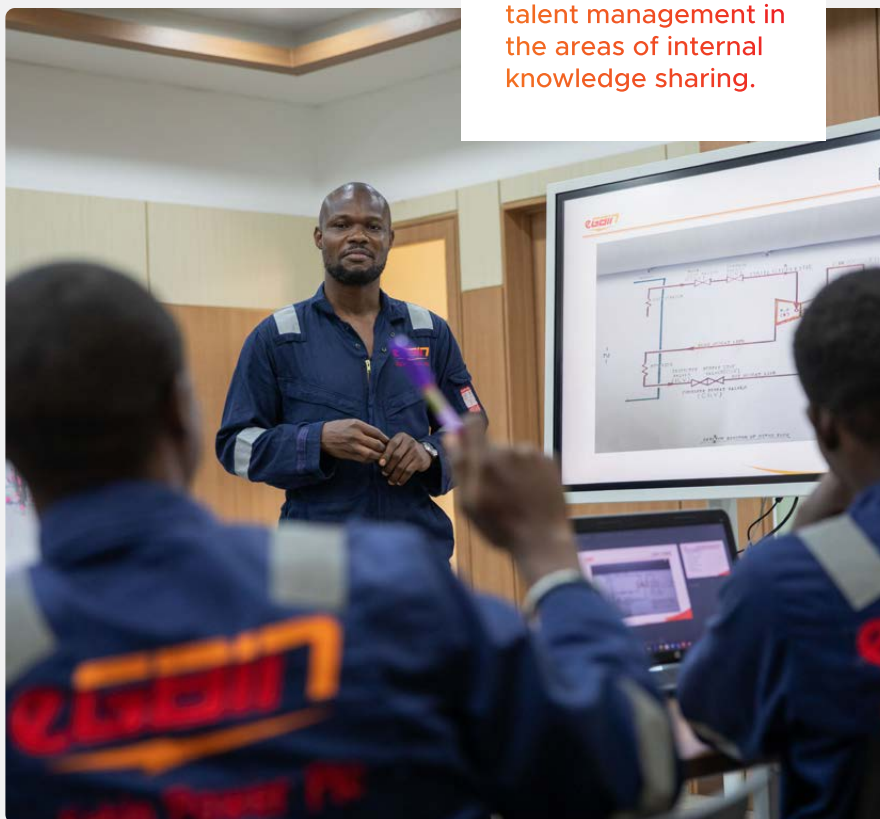
The training support and development of employees are core priorities for ensuring an efficient workforce, as such, we have integrated a formal learning process into the workday activities as well as on systematic talent management in the areas of internal knowledge sharing.

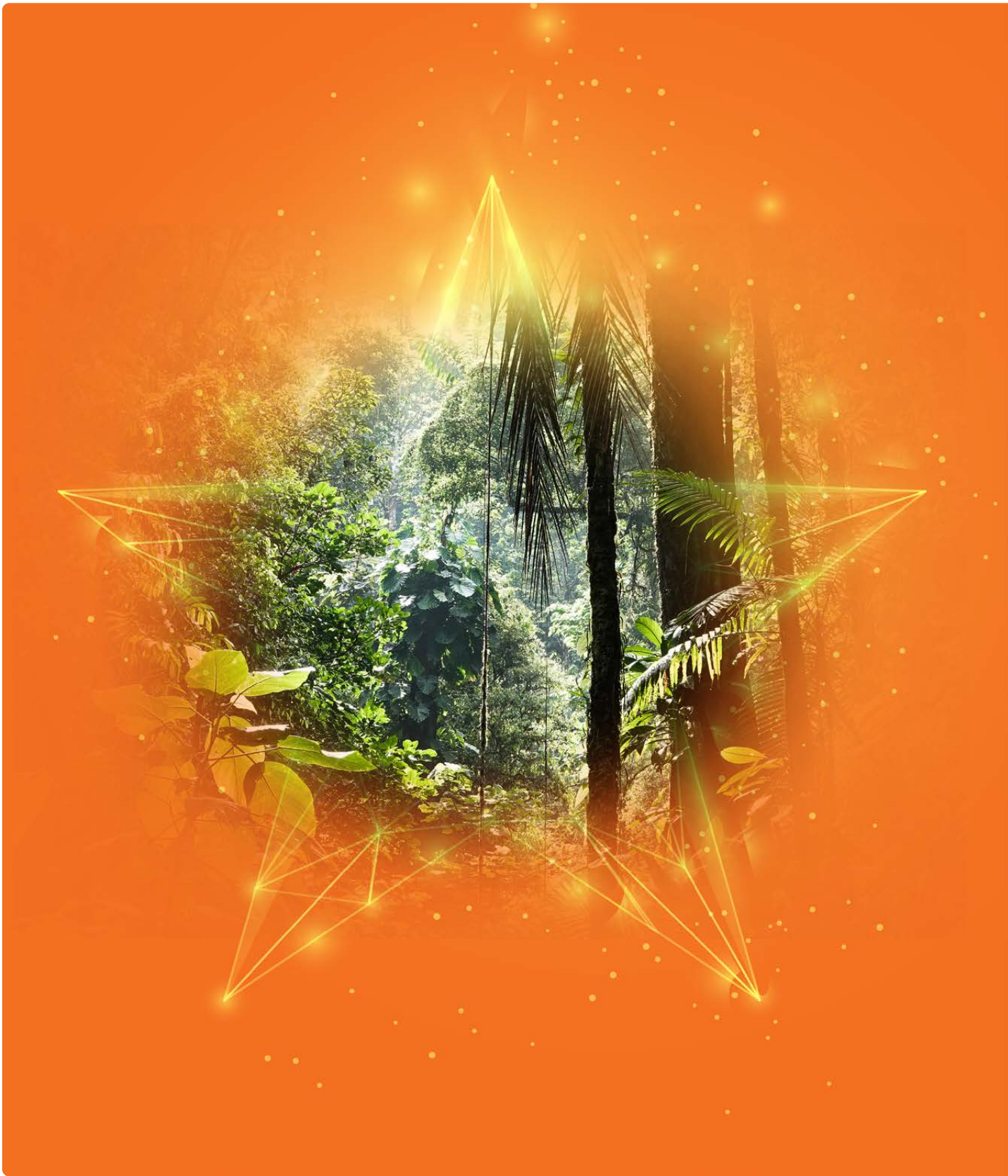
Egbin also complies with policies laid down by Lagos State Environmental Protection Agency (LASEPA) and National Oil Spill Detection and Response Agency (NOSDRA). This track record is further proven by a record of zero fines or sanctions from the regulatory agencies in charge of environmental protection.



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We have integrated a formal learning process into the workday activities as well as on systematic talent management in the areas of internal knowledge sharing.





# Environmental Management

IN THIS SECTION

Energy Consumption	54
Water Utilization	55
Emissions	56
Effluents Quality Control	58
Biodiversity	59
Environment Management	60
Waste Management	61
Environmental Impact on Transportation	62
Occupational Health and Safety	62
Disaster/Emergency Planning and Repsonse	63



# Energy Consumption

## Non-renewable materials used

**E**gbin steam turbines are driven by superheat steam generated by high temperature and high-pressure boilers. The quality of water needed for the steam generation process is of equal importance as compared to the volume consumed. While an enormous amount of water is needed for power generation; the water quality must also be of acceptable purity to prevent failures of boilers, turbines, pipings and other associated auxiliary equipment, thereby prolonging the life of plant equipment. Feed water for the steam generators is specially treated in a demineralized water plant where mineral elements are removed from the water. Un-demineralized or improper demineralized water results in scales formation caused by high silica content in the feed water.

It is important that hardness, total dissolved solid (TDS), total suspended solids (TSS) levels, specific conductivity etc are kept under permissible limits. The amount of chloride, sulphate, calcium and other undesirable elements should be kept under permissible limits so as to prevent scaling of boiler tubes. This scale formation affects the rate of heat transfer in the boiler and condenser. The scales caused by dissolved impurities result in corrosion of both the boiler tubes and turbine blades.

Several chemicals are employed in the treatment of process water. These chemicals act either to remove substances referred to as "impurities" from water, or to improve the state of water constituents. The resultant treated water (then) becomes free of corrosion and scale substances, becoming suitable for use in the plant. Each unit has a centralized sampling station where process water samples are taken from different points in the cycle to monitor water quality. Effective sampling is a key element in controlling water and steam chemistry. This includes obtaining representative samples, preventing contamination of the samples, and preventing loss of the species to be measured. Samples are taken from a continuously flowing sam-

ple stream. The time between sampling and analysis is shortened as possible. A reliable system is guaranteed with the addition of routine bench analyses of water samples in the station's laboratory.

In 2020, 5,330Litres of 25% stock Ammonia ( $\text{NH}_3$ ) and 1,384Litres of 80% stock Hydrazine ( $\text{N}_2\text{H}_4$ ) were used in the conditioning boiler water. This yields an 18.6% drop in Ammonia consumption and a 15.3% rise in Hydrazine consumption from the previous year.

### Conditioning Boiling Water Usage

**5,330Litres**  
25% Stock Ammonia ( $\text{NH}_3$ )

**1,384Litres**  
80% Stock Hydrazine ( $\text{N}_2\text{H}_4$ )

Yielded

**18.6%**  
Drop in Ammonia consumption & 15.3% in Hydrazine consumption from the previous year



# Water Utilization

Egbin Power Plant is the largest privately-owned producer of electricity in Nigeria, by converting heat into power in the form of electricity. Water is heated to transform into steam which spins the turbines that produce electricity. After passing through the turbine, the steam is cooled down and condensed to start the cycle again. Water is required in very large quantities for condensation of steam in the steam thermal electricity generation process, which requires ours to be built near a water source (Lagos lagoon).

Apart from the production of steam used for power generation, water also serves other important functions within the electricity generation process. In addition, water is needed for the cooling of auxiliary equipment (closed and open circuit cooling), in-house use (such as industrial cleaning), and firefighting in the case of fire emergencies. Water also serves the purpose of potability (i.e. for drinking, cooking and other domestic use) for staff both in the colony and station.

Egbin Power Plant extracts its water from two major sources: ground water from six underground wells and surface water from the Lagos Lagoon. The main source for steam generation, firefighting and potable water is provided by six ground water wells while Lagoon water is withdrawn mainly for the condensation of steam in-unit condensers, open circuit cooling, and constitutes part of the firefighting system.

Underground water undergoes a pre-treatment process to produce feed water which is further treated for potable water and demineralized water production.

The availability of raw water is essential to Egbin's operations; likewise, the effects of extracting raw water on the environment are also important. Water economy is, therefore, a priority to limit effects on these natural sources and guarantee continued availability. To achieve this goal, flow totalizers are installed to meter total groundwater flow, potable water flow and flow of water for firefighting. Flow values are compiled daily and the information is used to streamline water consumption.

There is no instrument to meter the amount of surface water extracted from the Lagoon. However, 927,071tons of groundwater was extracted in 2020. This represents a 2.1% drop in volume from the previous year.

There are no processes or facilities in place to recycle wastewater from both sources for reuse. However, effective measures are in place to ensure safe and environmental-friendly disposal of wastewater.



**97,071 Tons**  
Ground Water extracted



# Emissions

## Direct Greenhouse Gas (GHG) Emissions

Yearly, increasing attention is given to climate change (or global warming) and its effects. Countries all over the world have become aware of this situation, and have begun to take actions to ameliorate the situation or even reverse its effects.

In simple terms, climate change refers to the rising temperatures of the earth's atmosphere. Adverse weather conditions such as rising sea levels (marked by an increase in cases of flooding), drought (causing increasing desert encroachment and desertification), as more water is evaporated into the atmosphere it becomes fuel for more powerful storms to develop. More heat in the atmosphere and warmer ocean surface temperatures can lead to increased wind speeds in tropical storms and severe weather events have all been ascribed to the effects of climate change.

Research has proven that global warming is mainly caused by an increase in quantities of greenhouse gases (primarily carbon dioxide), carbon dioxide produced during consumption of solid, liquid, and gas fuels as well as gas flaring in the earth's atmosphere; with human activities being at the center of production of these gases.

Primarily, the burning of fossil fuels which leads to the release of gaseous products of such combustion to the atmosphere, and other human activities such as deforestation have been found responsible for this deleterious climate trend.

Egbin, as an entity, is fully aware of this unfavourable reality and is an advocate for environmental preservation. Among our core values as a business is an environmental consciousness. This forms the basis of our business policies and is ingrained in our operational philosophy.

The process of electricity generation in a steam thermal plant like ours involves the combustion of fossil fuels in a boiler to generate heat. In Egbin power plant, natural gas is the fossil fuel used. Natural gas is relatively "better" for the



environment compared to other fossil fuels such as coal and fuel oil because it is the cleanest fossil fuel energy source available, it leaves no particulate matter after combustion and producing nearly a third less carbon dioxide than coal and almost half less than fuel oil when burned. Our natural gas source is also free from oxides of sulphur, making it more eco-friendly. These favourable properties of natural gas, together with routine qualitative and quantitative analysis of boiler stack emissions to streamline and optimize boiler operations are the measures that Egbin follows to reduce the effects of fossil fuel combustion on the environment.

In line with sustainable efforts to protect the environment, Egbin has, in recent years, embarked on various Going Green initiatives. One of such initiatives is the Tree Planting Drive sustained from the year before. This initiative from Egbin is corroborated by the fact that "afforestation" is a proven counter measure to the effects of greenhouse gas emissions.



Egbin has, in recent years, embarked on various Going Green initiatives. One of such initiatives is the Tree Planting Drive sustained from the year before. This initiative from Egbin is corroborated by the fact that "afforestation" is a proven counter measure to the effects of greenhouse gas emissions.



*In 2020, CO2 emissions from the combustion of natural gas for power generation was not reported because the flue gas analyzer used for measuring and calculating complete combustion was not in operation for the year.*



## Energy Indirect Greenhouse Gas (GHG) Emissions

These are Greenhouse Gas (GHG) emissions released into the atmosphere associated with consumption of purchased electricity, heating, steaming, cooling, and other utility needs of the premises.

Based on the fact that all of our heat and electricity is self-generated, these indirect emissions can be tied directly to the already reported scope 1 emissions. This is consequent on the fact that Egbin Power Plc, including its housing colony and other attached appurtenances, at the design stage was built to be a self-contained facility. This means that virtually all utilities, primarily electricity, consumed within the facility emanate from what is generated.

The only aspect of scope 2 emissions left to be considered is that by the Nigerian Gas Company in processing the natural gas we purchase for our electricity generation. The nature of scope 2 emissions as being indirect and excluded from the company's sphere of control inherently makes reporting these emissions an activity that is beyond our purview. But we are confident that the Nigerian Gas Company, a subsidiary of the nation's petroleum corporation is strongly committed to preserving the environment and is all for adhering strictly to environmental regulations.

However, Egbin is committed to managing its own facilities and operations in a way that minimizes greenhouse gas (GHG) emissions and energy use, some of the measures to mitigate these emissions are already in place such as the encouragement of the use of non-combustive means of transport like bicycles for staff member's daily commute, as well as electric cars as mass transit of staff members to and from work, and also encouraging staff members particularly those within the housing colony to take walks to work sometimes. A typical passenger vehicle emits about 4.6 metric tons of carbon dioxide per year and this is equivalent to an average of 0.0126 metric tons of carbon dioxide per day. Every walk-to-work and bike-to-work activity as well as riding on the electric buses within the facility prevents the emission of 3.78 metric tons per day of carbon dioxide from about 150 cars within Egbin and 1379.7 metric tons every year.

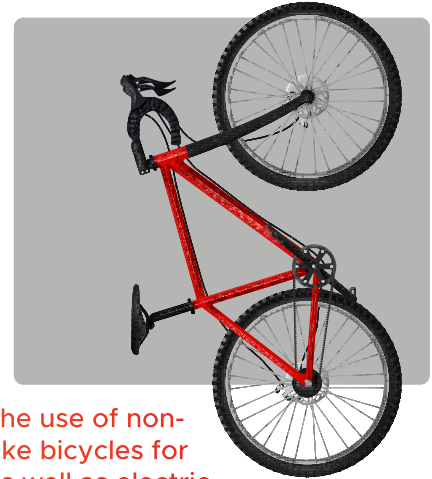
In 2020, the greenhouse gas emission intensity to be reported as absolute CO<sub>2</sub> emissions from natural gas combustion relative to the intensity of power generated (MWh) was not reported. This

is because the flue gas analyzer used for measuring and calculating complete combustion was not in operation for the year.

**3.78**  
**Metric Tons**

CO<sub>2</sub> Emission prevented  
per day

By walking, use of bicycles  
and electric buses



To mitigate GHG, we encourage the use of non-combustive means of transport like bicycles for staff member's daily commute, as well as electric cars as mass transit

## Reduction of Greenhouse Gas (GHG) Emissions

All over the world, the threat that burning of fossil fuels poses to the environment continues to be an issue. To stop this, we need to stop the amount of greenhouse gases, like carbon dioxide, from increasing. Burning fossil fuels and cutting down forests, which naturally pull carbon dioxide out of the air, has caused greenhouse gas levels to increase.

Aside from greenhouse gases, other substances such as oxides of nitrogen (NOx) and sulphur (SOx), particulate matter, smoke and other hazardous substances are also released into the atmosphere. The atmospheric pollutants from energy transformation and energy consumption, but also from industrial processes, are the main contributors to regional and local air pollution.

In the atmosphere, emissions of sulphur oxides (SOx) and nitrogen oxides (NOx) compounds are transformed into acidifying substances such as sulphuric and nitric acid. When these substances reach the ground, acidification of soil, water and buildings arises. Soil acidification is one important factor causing forest damage; acidification of the aquatic environment may severely impair

the life of plant and animal species. High amounts of smoke and particulate matter cause air quality to drop and this poses an immense health risk to humans and animals as well as cause the formation of smog that reduces visibility and impedes human activities.

Natural gas remains the cleanest fossil fuel. Natural gas releases the lowest quantities of NOx and SOx per weight when compared to coal and fuel oil. Properly combusted natural gas releases zero smoke and particulate.

At Egbin, data from routine qualitative and quantitative analyses of stack emissions from unit boilers is processed and used to improve boiler operation to ensure proper combustion. The absence of sulphur in the natural gas burned in our boilers eliminates the release of sulphur oxides. All this ensures that significant emissions remain well below obligatory environmental limits.

In 2020, the average composition of NOx in stack emissions was not reported because the flue gas analyzer used for the measurement was not in operation for the year.

# Effluents Quality Control

Effluent is an outflowing of water to a natural body of water from a structure such as a sewage treatment plant, demineralization neutralization sump and wastewater used during condensation of saturated steam. The wastewater resulting from washings goes into a neutralization sump, a primary containment for wastewater treatment before discharge into the lagoon. Egbin maintains its standard of minimizing its operational footprint on the environment and ensures that all wastewater discharged poses no danger to aquatic life or threaten the lagoon's ecosystem in any way.

Wastewater from several operations in Egbin poses no danger to the environment, and typically does not require treatment of any kind. About 700million, m3 of the lagoon is used as both planned and unplanned water discharges that come from intake for the cooling of condensers and coolers. The variance is only in the temperature of the lagoon water after the cooling process which is higher compared to intake but by the design of the Egbin power plant, the discharge water through the canal regains back the temperature before getting in contact with the body of water. However, effluents from the demineralization plant and unit condensate polishing plant processes require treatment. These plants are equipped with the capability to neutralize wastewater before discharge. The Neutralization process has to do with maintaining wastewater pH at neutral levels, similar to that of the lagoon. Water quality has a lot of advantages on the process and environment especially the body of water (lagoon), preservation of aquatic life, pollution-free water that could affect communities living around the power plant.

The wastewater that is used and discharged is not reused by any other organization, as it is discharged straight into the lagoon.

As an environmentally conscious organization, Egbin engaged a reputable consultant to conduct monthly air quality and effluent monitoring, giving a third-party opinion aside from the analysis report by the Chemistry Department of Egbin.

In determining the quality of water,



## 76,066Tons

Estimated Waste Water from the demineralization plant

An increase of 4.5% due to increased power generation



Physico-chemical analysis and microbial analysis, various methods were used in compliance with Lagos State Environmental Protection Agency's (LASEPA) and NESREA's guidelines.

In 2020, wastewater from the demineralization plant was estimated at 76,066tons. This represents a 4.5% increase in wastewater generation from the previous year, as a result of increased power generation. The average pH value of wastewater generated in the year 2020 is also reported as 7.5. These values were derived based on process design and the number of regenerations carried out. Wastewater generated from the unit CPPs cannot be reported because the unit CPPs were not in operation throughout the reporting period.

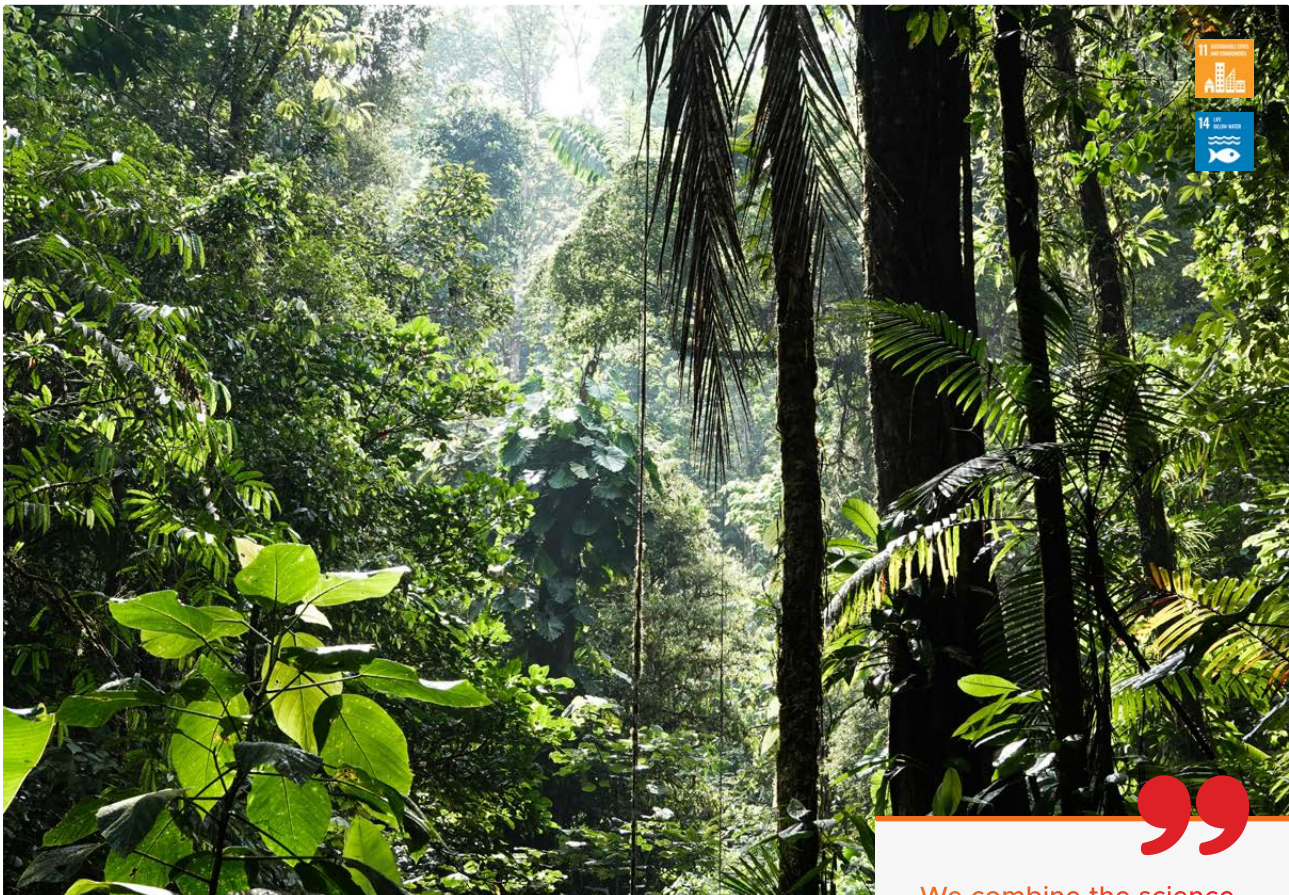
## 7.5%

pH value of Waste Water generated





# Biodiversity



Biodiversity is the variety of plant and animal life (i.e flora and fauna) in an ecosystem. The sustainability of any ecosystem largely depends on a high level of diversity. Egbin is bordered to the south by the Lagos lagoon which is home to a diverse species of aquatic life. To the north and the east, Egbin is surrounded by a forest that offers a diverse set of habitats for plants and animals -and the west, by the host community, Ijede.

In Egbin, biodiversity has always been held in high regard. We combine the science and knowledge of our local communities to enhance our understanding of the biodiversity of the lagoon and the air around us. This is so that our operations have next to no impact on marine and avian lives in the environment that surrounds us.

The aquatic ecosystem around Egbin is a habitat to a variety of biota.

Studies have been carried out in and around Egbin Power Plc., and the results show different species of wildlife. **The dimension of the Lagos lagoon which is estimated to be 6354.708sq km in area and 285km in perimeter provides for surrounding communities, a viable fishing and aquaculture industry as well as sand mining and dredging, recreation, inland waterways transportation logging and shipping and tourism.**

Numerous scholars and researchers postulated that the lagoon is periodically inhabited by fish species of fresh water and marine origins, recording a total number of eighteen fish species in their study. Others went further to survey and discover a range of mangrove species, mollusks, oysters, crustaceans and a variety of fish fauna.

We understand the adverse impacts climate change has on biodiversity result-

We combine the science and knowledge of our local communities to enhance our understanding of the biodiversity of the lagoon and the air around us. This is so that our operations have next to no impact on marine and avian lives in the environment that surrounds us.

ing in a loss of species or migration and so we strive to tackle emissions that are a major contributor to climate change.

Preserving the habitat of these species is of great importance to us and our relationship with the host community and the nation at large.



# Environment Management

Egbin Power Plc has invested significantly in technologies to improve its conservation of natural resources and its products (Water, Natural gas and Paper use). It is a power generating company that uses a proactive approach in managing environmental and safety issues in the plant, this approach over the years has earned the plant as a leader not only in power generation but also in safety and environmental management.

Our positive approach to safety and environment has its foundation in our robust health and safety management system, which enables formulation and implementation of sound policies in health, safety and environment. This gives us an edge among other power-generating companies in the country.

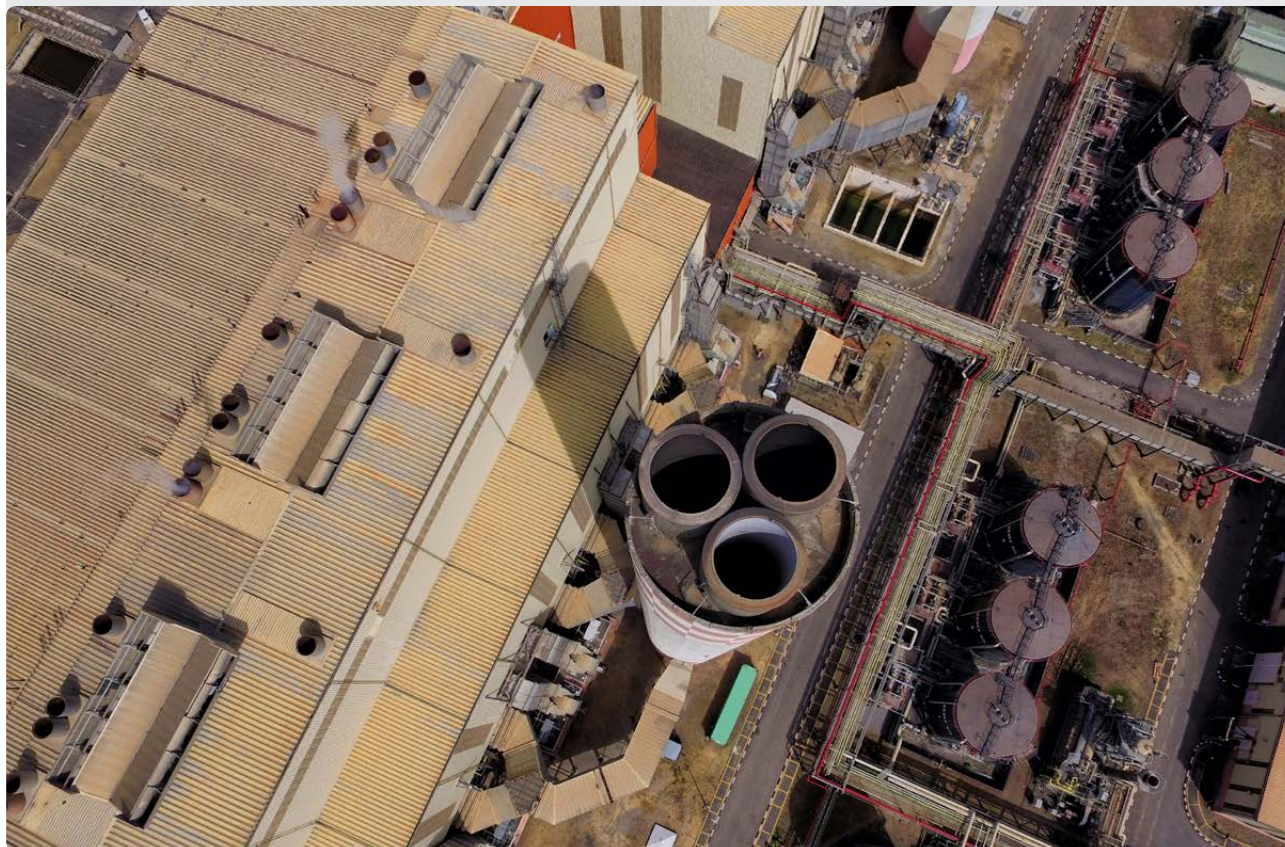
Being a power sector player, the company fully subscribes to Nigerian Electricity Regulatory Commission Health and Safety Code, and it has been a guiding principle in the company's management of health and safety with other local and international laws and regulations.

In the environment, regulators, such as, Lagos State Environmental Protection Agency (LASEPA), National Oil Spill Detection and Response Agency (NOSDRA), National Environmental Standards and Regulation Enforce-

ment Agency (NESREA) and Federal Ministry of Environment, are closely monitoring environmental aspects. For air, land and water discharges to ascertain the company activities are in line with laws of the land in pollution management and control of wastes as it affects the power plant.

Egbin Power Plc is a member of the UK health and safety body, British Safety Council, this enables the company to be strategically positioned our safety management system and actively monitors our active and reactive performance indicators and has improved our safety standards. Egbin is also a corporate member of the Institute of Environmental Management & Assessment based in UK (IEMA), an environment and sustainability advocate professional organization.

Egbin Power Plc did not, for now, has any emission trading scheme but there has plans to invest more in energy efficiency technology that is more friendly with the environment; the use of combined power cycles that utilizes heat waste for another cycle of power generation.



# Waste Management

Waste is a by-product that results from any process, which does not have an economic value to the originator and must be managed from cradle to grave. Poor management of waste can lead to an epidemic and negative health impact on the community and those within the location. Due to the peculiarity of the operations of Egbin Power Plc, waste management takes priority. The categories of waste generated are mainly garden wastes, metal scraps, burnt electrical bulbs, food wastes, wastewater and gaseous waste (CO, CO<sub>2</sub>). Egbin power plant generated and evacuated 936 tons of non-hazardous wastes from the plant in the year 2020.

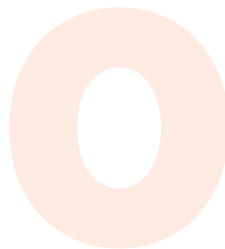
## Hazardous Waste Management

If hazardous wastes are not properly collected, treatment and disposal, it can cause substantial harm to human health and safety or to the environment. Hazardous waste can take the form of solids, liquids, sludge's or contained gases and some of the hazardous wastes generated include used lubricants, waste oil for cooling purposes, resins and printer cartridges, etc. In 2020, Egbin evacuated 53,400 litres of waste oil to recycle through LASEPA (Lagos State Environmental Protection Agency) accredited vendors.

In the year under review, Egbin did not ship any hazardous wastes internationally as such we have Zero% of hazardous waste shipped internationally.

## Solid Waste Management

Solid waste management is the collecting, treating and disposing of solid material that is discarded because it has served its purpose or is no longer useful. Improper disposal of municipal solid waste can create unsanitary conditions and these conditions, in turn, can lead to pollution of the environment and to outbreaks of vector-borne disease that is, diseases spread by rodents and insects. Proper waste collection is important for the protection of public health, safety and environmental quality. About 9 tons of waste is evacuated on weekly basis throughout the year 2020 by Lagos State Waste Management Authority (LAWMA) accredited vendor for onward transportation to a government-approved dumpsite.



### Hazardous waste shipped internationally

#### Oil Spillage Management

In the year 2020, zero spills were recorded within the power plant, therefore 0% spill activities occurred for oil spill (soil and water surfaces) fuel spills (soil or water surfaces) spill of wastes (spill or water surfaces) spills of chemicals (mostly soil or water surfaces). In case of oil spillage, the company has instituted an oil spill contingency plan that has been approved by the Federal Ministry of Environment, the National Oil Spill Detection and Response Agency, and the Lagos State Environmental Protection Agency. The company's operations complied with regulatory requirement and best practices on environmental management. As a result, the host communities are still going about with their normal fishing business. Additionally, the company did not record any sanction for non-compliance with the environmental laws and regulations in year 2020.

**936Tons**

Non-hazardous waste generated and evacuated



**53,400 Litres**

Waste oil evacuated for recycling through LASEPA



**9Tons**

Solid waste evacuated by LAWMA weekly



**Oil spill recorded in 2020**



# Environmental Impact on Transportation

Transportation is the act or process by which people or goods are moving from one place to another; these may have environmental impacts ranging from noise, the emission of pollutants to climate change. In Egbin Power Plc our products, goods and materials have no environmental impacts of transporting for the organization's operation apart from the fact that the road network that links the power plant is in a poor condition.

The majority of the workforce are residing in the estate while the few that reside outside the colony come with their personal vehicles or public transport. However, due to the poor road network, delays are usually experienced when materials have to be transported from source to the power plant.



## 17.5%

Staff involved in safety committee group activities

## Occupational Health and Safety

Egbin occupational health and safety (OHS) management system encompasses more than just health and safety program but also includes health and safety policies, systems, standards, and records, and involves incorporating your health and safety activities and programs in the organisation. We have put in place an effective management system to improve our ability to continuously identify hazards and control risks in the workplace.

Egbin also provides a conducive working environment and developed a working culture that supports health and safety at work. In doing so, we promote a positive social climate and smooth operations that enhance the productivity of the business.

About 17.5% of Egbin power plc employees were involved in safety committee group activities. The management safety committee (A 30-man committee) comprises of the various departmental heads, section heads and some other employees with the Managing Director as Chairman and head of HSE as the secretary. Their key function is to help drive safety commitments and policies in the company. They achieve this by providing training to management, supervisors and employees by means of awareness and direct training geared toward the prevention of workplace accidents. The committee also provides a forum for employees and management to work together to solve health and safety problems.

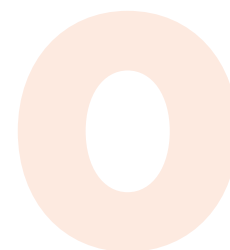
Also, there is a 40- man safety representatives selected from each of the departments. The safety reps have two sub-committees: the house keeping committee and the toolbox meeting committee. The housekeeping committee takes care of the housekeeping issues within the plant and the toolbox committee monitors the effectiveness of toolbox meetings being carried out by different departments and sections of the power plant. Any issue beyond the safety reps is handled by the safety management committee.

These committees have helped increase awareness of health and safety issues among workers, supervisors, and managers; and have developed strategies to make the work environment safe and healthy.



## Workplace Injury statistics

Egbin Staff			Independent Contractors		
Data Type	Male	Female	Data Type	Male	Female
Types of Injury	Nil	Nil	Types of Injury	Nil	Nil
Injury Rate (IR)	0	0	Injury Rate (IR)	0	0
Occupational Diseases Rate (ODR)	0	0	Occupational Diseases Rate (ODR)	0	0
Lost Day Rate (LDR)	0	0	Lost Day Rate (LDR)	0	0
Work-Related Fatalities	0	0	Work-Related Fatalities	0	0



**No cases of workplace injury, disease or death of any Egbin Staff or Contractor.**

## Disaster/Emergency Planning and Response

There are different types of emergencies that can occur within the company's operations. The type of emergency determines the type of response. Emergencies occur when early signs are ignored. Various risks can emanate and cause an emergency; fire, oil spill, chemical spill, and other emergencies that may arise in the course of our operation. All emergencies must be responded to immediately to save the lives and assets of the company.

**Egbin Power Plc Oil Spill Contingency plan follows the content and organization of IPIE-OGP "Good Practice Guide Series (International Association of Oil and Gas Producers)" and describes the distribution of responsibilities and basic procedures for responding to an oil discharge and performing clean-up operations.**

Response Strategy: Egbin personnel and contractors are equipped and trained to respond to certain "minor discharges" confined within the facility.

Minor discharges can generally be described as those where the quantity of product discharged is small, the discharged material can be easily stopped and controlled, the discharge is localized, and the product is not likely to seep into groundwater or reach surface water or adjoining shorelines.

In case of any disasters, proper safety and security arrangements are already in place to prevent any of these events; but if they occur, arrangements for emergency response are in place to avert any disaster to personnel and the power plant. A 40-member committee known as the Emergency Support Staff was constituted to support fire marshals in case of any emergency situation. They work along with firefighters during evacuation drills to achieve successful drill exercises. Emergency Support Staff are trained for emergency handling and are readily available all the times in duty hours at adequate numbers to assist the firemen team.

**40-Man**  
Constituted committee  
Known as the Emergency Support Staff, trained to support fire marshals in cases of emergency





# Social Responsibility

IN THIS SECTION	Stakeholders Engagement	66
	Stakeholders Support	68
	Community Relations	70
	Covid-19 Intervention	71
	Our People	72
	Diversity, Equal Opportunity and Fairness	73
	Occupational Health and Safety	74
	Carbon Footprint Reduction	75
	Training & Education	76



# Stakeholder Engagement

An organization cannot possibly thrive without deliberate and effective engagement with its stakeholders. Egbin, as an organization with an evident focus on sustainable business operations, rode on the continual success of its commitment to the needs and expectations of stakeholders which had been carefully knitted with its business needs. The ambiance of the coexistence between Egbin and its stakeholders at all levels and in all categories was maintained through regular engagement with the stakeholders for proactive management of dynamic needs and expectations.

During the reporting year, Egbin actively engaged all stakeholders who are directly and indirectly affected by its operational decisions; and no social or environmental concerns ensued. These stakeholders, which are Regulators, Customers, Product Suppliers, Employees, Host communities, and Shareholders, collectively enjoyed a harmonious relationship at all levels. As such, all engagements and relations ensured successful operations in the business environment by meeting expectations within the company's corporate policy while taking all feedback received from stakeholders seriously and maintaining an open dialogue to ensure that the needs/requirements outlined were treated.

As a performance-driven organization with impactful core values, the relationship and engagements with stakeholders throughout the year under review were focused on performance, harmony, partnership, support, and accountability. Egbin recognizes continuous engagement as a strategy that will not only change how it may have been wrongly perceived but also provide ample opportunity for stakeholders to

better understand and be a part of the decision-making processes, which will, in turn, provide Egbin the needed support and cooperation.

Egbin Power Plc continued to proactively cater to the social needs of one of her prominent stakeholder categories, the host communities, through its Corporate Social Responsibility initiatives. In the reporting year, the organization maintained its support with the supply of drugs, mosquito nets and power supply to the health facilities within the communities; provided quality education through the Powerfields Group of Schools, and also maintained Scholarship opportunities that enabled deserving students from host communities to attend Powerfields Group of Schools tuition-free.







We continue to proactively cater to the social needs of one of our prominent stakeholder categories, the host communities, through our Corporate Social Responsibility initiatives



## Tuition Free

We maintained scholarship opportunities for students in **Powerfields Group of schools**, enabling them to attend school tuition-free.



# Stakeholder Support

Egbin, as a reputable brand, recognizes that being committed to its social, economic, and environmental responsibilities towards stakeholders is integral to the success of its business. Therefore, it demonstrates these responsibilities through actions and corporate policies.

Egbin's commitment to the United Nations Sustainable Development Goals was deepened with a strategic focus on quality education, healthy living, and sustainable use of the terrestrial ecosystem. This commitment was shown through Egbin's conduct with and support for various categories of its stakeholders. The relationship of an organization with its stakeholders is critical in ensuring a high level of business performance while upholding the values of honesty, partnership, and fairness in the relationships with these stakeholders



Egbin's commitment to the United Nations Sustainable Development Goals was deepened with a strategic focus on quality education, healthy living, and sustainable use of the terrestrial ecosystem

## Egbin provided support to its host community and relevant stakeholders through

Scholarship award to indigent students



Scholarship award to exceptionally brilliant students



Quarterly supply of anti-malaria medicines to General Hospital, Ijede



Distribution of 600 mosquito nets to indigenes of the 3 host communities to reiterate our commitment to the anti-malaria campaign



Free and uninterrupted electricity supply to General Hospital, Ijede.



Infrastructural upgrades within the communities:

- » Renovation of a classroom block and construction of toilets at Anglican Primary School, Ijede.
- » Ipakan Community Hall upgrade.



**Egbin Village Market:** A personal and Corporate Social Responsibility (PSCR) initiative of Egbin Power Plc., aimed at improving the social-economic well-being of the host communities. The market which is located within the Estate premises of the plant provides the residents of the host communities opportunity to sell their fresh farm produce at ease



Community medical outreach focusing on eye screening, distribution of free eyeglasses, free eye surgeries, provision of sickle cell drugs and general consultation:

- » 611 Persons benefited from general consultation with provision of prescribed drugs.
- » 216 beneficiaries of free Eye screening
- » 102 beneficiaries of free eye drugs
- » 114 beneficiaries of free eyeglasses
- » 20 shortlisted patients for free surgical services with 6 months follow-up
- » 30 beneficiaries of routine blood test, drugs and X20 Water pacts for sickle cell patients





**Egbin also maintained its support to its technical partners/ stakeholders with the continued**

Provision of training courses and availability of its facilities for use to hold seminars and industry meetings



Maintenance of a clean, healthy and safe working environment in line with its health and safety policy;



Provision of accommodation to critical operatives as approved by the Board of Directors of Egbin Power Plc;



Establishment and communication of standard maintenance procedures on the allocated apartments to forestall the use of unauthorized persons in carrying out maintenance on the apartment;



Participation in media engagements and activities to highlight our contributions to national development as well as challenges that may reduce the organization's business performance



Constitution of an all-inclusive committee that meets regularly to discuss NGC and TCN operations and facility-related issues with a view to resolving them promptly and amicably



Accessibility of facility to other stakeholders for courtesy visits and familiarization tours at least twice in a year, to be abreast of their operations, activities and challenge



Accessibility to quality education in Powerfields Group of Schools, upon fulfillment of entry requirements



# Community Relations

As an organization that is responsibly aware of its local environment, Egbin directly engages with the community through its quarterly community forum towards understanding the concerns of their members. These meetings remain structured to ensure that all parties share their concerns and opinions on how the organization can further exist through a mutually beneficial relationship. The organization maintains its commitment to the responsibility of visiting the community leaders, with aim of resolving any issue that may threaten the coexistence of parties or negatively impact the local economy.



**In its continued partnership with the communities, Egbin seeks to:**

Improve the standard and quality of education in the environment by providing scholarship scheme for brilliant and indigent students from host communities without gender bias



Develop environmental policies and objectives as part of the business planning



Support capacity development through intensive trainings for skill acquisition



Support growth and wellbeing through charity within the communities



Provide sustainable support for infrastructural upgrades within the communities



Provide employment opportunities (skilled and unskilled)



Encourage dialogue with local communities for the mutual benefit of peaceful co-existence through quarterly community forums with the representatives of each community and courtesy visits to the community leaders.



Support and encourage a thriving local economy through synergy with Ikeja Electric in promptly resolving electricity supply and distribution issues within the communities



Support and encourage our employees and partners to help local community organizations and activities in our environment, particularly local charities.



Work with public schools (primary and secondary) in our host community, to develop the standard and quality of education, to assist young people in choosing their future careers and to be an advocate for our industry



Support the provision and availability of quality healthcare within the host communities through the supply of medicine to the state-owned general hospital in Ijeda





# Covid-19 Intervention

As a concerned organization that understands the importance of social sustainability of its host communities, **Egbin launched an initiative that provided support amidst the harsh economic crisis posed by the COVID-19 pandemic to the indigenes of its host communities; Egbin, Ijede and Ipakan.** Part of the initiative was a month-long food drive geared towards feeding residents of the communities while also providing them with raw food items (bags of rice and cooking oil) as well as basic toiletries for personal use. Over 20,000 cooked meals were distributed since the start of the lockdown and food items and toiletries for more than 3,000 families were also distributed across all the three host communities.





# Our People



Egbin remains aware that a motivated, competent, resourceful, innovative, dedicated, and physically fit workforce with a culture of excellence, is a veritable tool for the success and leadership of an organization in its business environment. The shared values, skill set, and style of Egbin's workforce positions it to achieve its goals. To support continuous service delivery to other stakeholders, Egbin provides its employees with appropriate tools and opportunities for functional growth and career development. As such, the staff members are well-rounded in the technical and financial implications of its business processes irrespective of the functional group to which each individual belongs. This was achieved with Egbin's continuous learning and improvement culture through knowledge sharing for a and intermittent familiarization of staff members with other stakeholders, thereby gaining insights into individual contributions to the sustainability of the power sector. This awareness is easily imbibed by new hires through the onboarding program.

In the 2020 reporting year, the staff strength of the company as of December was 380 as against 403 that was reported in 2019. The staff strength comprises 340 males and 40 females with an employee turnover of 23 at a rate of 0.76. The organization deepened its interest in the development of future

leaders by engaging the services of 10 (ten) graduate interns and 20 (twenty) undergraduate interns who were trained during the period of engagement.

In the 2020 reporting year, Egbin maintained its commitment to the operating principles that reward excellence and conduct, recognizing business people, society, and the environment. This ensured fairness and non-discrimination within the organization and in its relationship with its stakeholders.



Egbin maintained its commitment to the operating principles that reward excellence and conduct, recognizing business people, society, and the environment.

## 380

Staff Strength



340  
Males



40  
Females



## 30

Graduate and Undergraduate interns trained



## Diversity, Equal Opportunity and Fairness



An organization can only harness the full potential of its workforce when it entrenches a culture of diversity, fairness and equal opportunity. Egbin upholds its commitment to development, performance improvement and nationhood through diversity and equal opportunity in recruitment and appointments. This ensured the recruitment and retention of qualified, competent, efficient and excellent employees for innovative business solutions that drive global presence. It is also evident in the diversity of reference groups, race, and gender of the staff members and management.

Egbin ensures strict adherence to equal treatment of all employees as adopted in its corporate governance policy. This is aimed at ensuring equal opportunity, treatment and welfare base for all employees as well as maintaining high energy, rewarding and favorable business environment.

Fair opportunity and treatment for Egbin's employees are irrespective of gender, culture and religion. The equal opportunity principles are in line with the company's goal to motivate its employees to outstanding performance. Promoting gender equality at the highest

levels of business guaranteeing equal treatment for all employees irrespective of gender, respecting and supporting human rights and non-discrimination; ensuring the health, safety, and wellbeing of all employees, promoting education, learning and development, has been among Egbin's guiding principles as an organization. As a result, Egbin offers remuneration packages that are competitive and standard for both male and female employees.

In maintaining its commitment to ensuring transparency, fairness and non-discrimination within the microeconomic environment, Egbin continued its support for the high-level anonymous whistleblowing mechanism which is independently managed by Deloitte. This was aimed at reposing confidence in individuals willing to submit reports and eliminate any form of perceived non-anonymity.

Pursuant to its resolve to foster equality in the workplace, Egbin provides childcare support systems, ensuring a work-life balance for both genders in the workplace. Some of the packages of the organization's childcare support system



**Egbin ensures strict adherence to equal treatment of all employees as adopted in its corporate governance policy.** This is aimed at ensuring equal opportunity, treatment and welfare base for all employees as well as maintaining high energy, rewarding and favorable business environment.

### Child Support System

Egbin provides childcare support systems, ensuring a work-life balance for both genders in the workplace. Some of the packages of the organization's childcare support system include parental leave, daycare and educational services within the premises of the organization

**6%**  
Employees with parental leave utilization



include parental leave, daycare and educational services within the premises of the organization.

In the 2020 reporting year, 6% of the employees utilized the parental leave of absence – this was the same as the previous year where Egbin had about 6% usage of the parental leave. The parental leave of absence, which serves as a paid leave of absence from work for parents (Male and Female) with new babies, includes a flexible working time for the female employees, to ensure a smooth transitioning after their maternity leave period.

# Occupational Health and Safety

The commitment of an organization to its own sustainability is reflected in its disposition to the health and wellbeing of its employees. Egbin values the occupational health and safety of its workforce as a priority for its sustainability. This has helped the organization in providing initiatives that enable all employees to maintain their overall health and wellbeing as well as prevent incidents that may arise from environmental impact.

In order to safeguard the health and safety of its employees, the organization's expenditure on hazard prevention and environmental management for year 2020 was about 850% higher than the expenses in the year 2019. This also proved Egbin's commitment to environmental protection.

**In addition to the provision of immediate access to primary healthcare within the facility, other initiatives promoted by the organization's health policy include**

- » Periodic checks for vitals
- » Health walk and aerobics sessions
- » Pre-employment medical tests for new intakes
- » Confidential and comprehensive review of employee health status
- » Health maintenance cover for employee and specified number of dependants



**In response to the unprecedented work realities that resulted from the COVID-19 pandemic, the health and safety drive in the year under review focused on creating awareness about the pandemic, maintenance of personal (mental and physical) health, and a safe workplace.** This was achieved by reinforced awareness and modification to work structures towards reducing the risk of exposure and supporting high spirits.



# Carbon Footprint Reduction



Prior to the change in work mode occasioned by COVID-19 spread, Egbin maintained its enterprise-wide initiative called “Walk to Work” (W2W) towards reducing emission per capita. With the W2W initiative, 380 members of staff committed to avoiding the use of fossil-fueled vehicles once every quarter. This commitment helps reduce individual carbon footprint and maintain wellbeing. During the reporting year, we also launched electric buggies and bicycles that were strategically deployed for use by members of staff within our facility, in a bid to reduce carbon emissions and protect the environment.



## 380

Staff committed to avoiding the use of fossil-fueled vehicles





# Training and Education



## Grooming Future Leaders

Egbin remains committed to the identification of talents, recognition of excellence and overall development of its employees from bottom to top as a strategy towards youth empowerment and national development. In the year under review, the Egbin onboarded 18 (eighteen) graduate engineers who were part of the 40 (forty) graduate engineers jointly recruited by the parent organization and trained by the industry training institute for the intricacies of the business. Egbin also provided all-inclusive development opportunities strategically for young employees towards building their business and technical management competencies through secondment, leadership roles and engagements with other players and stakeholders in the power sector. The organization also provided students and graduate internship programs for students and graduates of relevant education.

### 18

Graduate engineers onboarded

### 40

Graduate engineers recruited

jointly recruited by the parent organisation and trained by the industry training institute

## Partnerships for People Development

Training support and development of employees are core priorities for ensuring an efficient workforce. Egbin integrated a formal learning process into the workday activities as well as on systematic talent management in the areas of internal knowledge sharing. **Despite the impact of the COVID19 on conventional learning and development activities, Egbin partnered with international and local training organizations to deliver industry and curated training to her workforce. These training partnerships in the year 2020 involved:**

Energy Training Centre for specialized training for technicians and engineers



Lagos state Fire Service, training 20 shift operators on handling emergency fire



LinkedIn and HC Bonum, delivering soft skills and leadership trainings for the workforce



Egbin is also partnering with other learning providers and Original Equipment Manufacturers (OEMs) to design essential training programmes on techniques and procedures, Use of specialized tools and other specialized trainings

### Some of the achievements with the partnerships for learning and development

**774**

Complete Online Courses

**886**

Completed Hours

**189**

Employee sign-ups for online learning

During the lockdown



**2,803**

Man Hours of Trainings conducted with in-house faculty



Completion of the Technical Lab for practical trainings for the Operations and Maintenance Group



Following the successful launch of Egbin's competency framework, a comprehensive competency audit commenced for the entire technical workforce. This led to the identification of future interventions required to plug the critical gaps. The competency framework will help guide Line-Managers to plan and develop their team to the required level. It also gives Egbin the possibility of assessing potential recruits, by utilizing competency-based assessments and interviews.





## Scholarship Program

Egbin believes that investment in access to quality education, leadership and development of the next generation is a tool for raising future leaders and industry players for business and global sustainability. Egbin remains committed to the global achievement of SDG-4 which seeks to achieve equal access to quality education. In the 2020 reporting year, **Egbin maintained its scholarship which was introduced in 2016 for primary and secondary school students who are indigenes of the host communities.**



## Investment in Future Leaders

Egbin adopts some social development programs as a strategy for the development of future industry leaders. In the year under review, Egbin engaged the services of 10 (ten) National Youth Service Corps members and 20 (twenty) interns whose disciplines were closely related to our organizational functions and other relevant business areas. **The company values the training, education, and exposure of young minds as a strategy to groom future leaders who will be capable of business and technical management in the industry.**

**10** National Youth Service Corps (NYSC) Members Engaged

**20** Interns engaged



A man with a beard, wearing a white hard hat and safety glasses, is working on a large, complex industrial machine. He is wearing a blue work shirt with reflective stripes. The background is a solid orange color with a glowing, geometric wireframe overlay that resembles a stylized star or a complex network of lines. The word "Appendix" is written in white at the bottom of the image.

# Appendix

# GRI INDEX

## GRI 101: FOUNDATION

**T**his report has been generated in accordance with the Global Reporting Initiative Standards. The emphasis on the application of the reporting principles that should define the quality and content of a sustainability report was made by the GRI standards and implemented in this sustainability report.

In defining the report content, internal and external stakeholders were involved in the identification of where impacts occur and the potential threats to sustainable power generation. Also, the report has attempted to present Egbin's activities in the wider context of sustainability whilst completely covering material topics that specifically describe Egbin's impact on the economy, environment and society. This is to enable our stakeholders assess our performance in 2020.

In the spirit of sustainability, Egbin has ensured that the 2020 sustainability report adheres strictly to the principles stipulated by the Global Reporting Initiative that guarantee high quality reporting. These principles are very much reflected in the report, as we have ensured that the 2020 Sustainability Report is balanced enough to manifest both positive and negative performance in the reporting year, that will be sufficient for our stakeholders to form an opinion of our overall performance in 2020.

Additionally, the report may be compared to the previous edition, and this should enable stakeholders assess change in performance. Although this report has not been externally assured, the accuracy of this report is not in doubt as all the facts and figures disclosed are subject to audit by our stakeholders.

Furthermore, Egbin has decided to report its economic, environmental and social impacts on a regular basis, in order for stakeholders to receive timely information to make decisions. In the course of the reporting process, the clarity and reliability of the disclosures were emphasized. This was to ensure that stakeholders are abreast with the data that have been compiled, analyzed and subjected to quality and materiality checks. Also, this data has been presented in a manner that will be understandable and accessible to stakeholders.





GRI 102: GENERAL DISCLOSURES				
GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
ORGANIZATIONAL PROFILE				
<b>Disclosure 102 - 1</b>	Name of the organization	Profile	Disclosed	-
<b>Disclosure 102 - 2</b>	Activities, brands, products and services	Profile	Disclosed	-
<b>Disclosure 102 - 3</b>	Location of headquarters.	-	Disclosed	7A Oluwa Road, Ikoyi, Lagos, Nigeria.
<b>Disclosure 102 - 4</b>	Location of operations.	-	Disclosed	One Country(Nigeria)
<b>Disclosure 102 - 5</b>	Ownership and legal form.	Egbin Ownership Structure	Disclosed	-
<b>Disclosure 102 - 6</b>	Markets served.	Business Framework	Disclosed	-
<b>Disclosure 102 - 7</b>	Scale of the organization.	Profile	Disclosed	-
<b>Disclosure 102 - 8</b>	Information on employees and other workers.	-	Disclosed	These are regular employees who are directly employed to work for the organization and are paid directly by the company. They are entitled to wages, subsidized health care, holidays, sick time and contributions to a retirement plan. The staff strength of the company as of December, 2020 was 380 as against 403 that was reported in 2019. The staff strength comprises of 340 males and 40 females with employee turnover of 23 at a rate of 0.76. The organization deepened its interest in the development of future leaders by engaging the services of 10 (ten) graduate interns and 20 (twenty) undergraduate interns who were trained during the period of engagement.
<b>Disclosure 102 - 9</b>	Supply Chain.	Organizational Supply Chain	Disclosed	--
<b>Disclosure 102 - 10</b>	Significant changes to the organization and its supply chain.	Supply Chain Management	Disclosed	-
<b>Disclosure 102 - 11</b>	Precautionary Principle or approach.	Environment	Disclosed	-
<b>Disclosure 102 - 12</b>	External initiatives.	-	Disclosed	International Financial Reporting Standards Global Reporting Initiative
<b>Disclosure 102 - 13</b>	Membership of associations.	-	Disclosed	Association of Power Generation Companies. Operators of Electricity Industry. Council for the Regulation of Engineering in Nigeria.
<b>Electric Utilities Disclosure 1</b>	Installed Capacity, broken down by primary energy source and by regulatory regime.	Profile	Disclosed	-

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Electric Utilities Disclosure 2</b>	Net Energy Output broken down by primary energy source and by regulatory regime.	Power Generation	Disclosed	-
<b>Electric Utilities Disclosure 3</b>	Number of residential, industrial, institutional and commercial customer accounts.	-	Not Disclosed	Egbin is a power generation company and due to the structure of the Nigerian power industry, does not interface with residential, industrial, institutional and commercial customers; thus, Egbin does not have these customer accounts. The electricity distribution companies will have such information.
<b>Electric Utilities Disclosure 4</b>	Length of above and underground transmission and distribution lines by regulatory regime.	-	Not Disclosed	Egbin is a power generation company and does not directly manage above and underground transmission and distribution lines to residential, industrial, institutional and commercial customers. The Transmission Company of Nigeria and the electricity distribution companies will have such information.
<b>Electric Utilities Disclosure 5</b>	Allocation of CO2 emissions allowances or equivalent, broken down by carbon trading framework.	-	Not Disclosed	There is currently no carbon trading framework in Nigeria for now; therefore, Egbin does not trade CO2.
<b>STRATEGY</b>				
<b>Disclosure 102 - 14</b>	Statement from the senior decision-maker.	Board Chairman's Message	Disclosed	-
<b>Disclosure 102 - 15</b>	Key impacts, risks and opportunities.	Business Priority	Disclosed	-
<b>ETHICS AND INTEGRITY</b>				
<b>Disclosure 102 - 16</b>	Values, principles, standards, norms of behaviour.	Egbin Corporate Governance	Disclosed	-
<b>Disclosure 102 - 17</b>	Mechanisms for advice and concerns about ethics.	Diversity and Equal Opportunity	Disclosed	-
<b>GOVERNANCE</b>				
<b>Disclosure 102 - 18</b>	Governance Structure.	Board of Directors	Disclosed	-
<b>Disclosure 102 - 19</b>	Delegating authority.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 20</b>	Executive-level responsibility for economic, environmental and social topics.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 21</b>	Consulting stakeholders on economic, environmental and social topics.			Not Applicable to Core "In Accordance" Option



GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 102 - 22</b>	Composition of the highest governance body and its committees.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 23</b>	Chair of the highest governance body.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 24</b>	Nominating and selecting the highest governance body.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 25</b>	Conflicts of interest.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 26</b>	Role of highest governance body in setting purpose, values and strategy.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 27</b>	Collective knowledge of highest governance body.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 28</b>	Evaluating the highest governance body's performance.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 29</b>	Identifying and managing economic, environmental and social impacts.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 30</b>	Effectiveness of risk management processes.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 31</b>	Review of economic, environmental and social topics.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 32</b>	Highest governance body's role in sustainability reporting.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 33</b>	Communicating critical concerns.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 34</b>	Nature and total number of critical concerns.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 35</b>	Remuneration policies.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 36</b>	Process for determining remuneration.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 37</b>	Stakeholder's involvement in remuneration.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 38</b>	Annual total compensation ratio.			Not Applicable to Core "In Accordance" Option
<b>Disclosure 102 - 39</b>	Percentage increase in annual total compensation ratio.			Not Applicable to Core "In Accordance" Option
<b>STAKEHOLDER ENGAGEMENT</b>				
<b>Disclosure 102 - 40</b>	List of stakeholder groups.	Our Stakeholders	Disclosed	-

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 102 - 41</b>	Collective bargaining agreements.	Procurement Practices	Disclosed	-
<b>Disclosure 102 - 42</b>	Identifying and selecting stakeholders.	-	Disclosed	Regulatory requirements and compliance. The Nigerian Electric Power Sector Reform Act 2005. Corporate Social Responsibility The Egbin Code of Ethics and Corporate Governance Principles.
<b>Disclosure 102 - 43</b>	Approach to stakeholder engagement.	Our Stakeholders	Disclosed	-
<b>Disclosure 102 - 44</b>	Key topics and concerns raised.	CEO's Message	Disclosed	-
<b>REPORTING PRACTICE</b>				
<b>Disclosure 102 - 45</b>	Entities included in the consolidated financial statements.	-	Disclosed	Only Egbin Power Plc
<b>Disclosure 102 - 46</b>	Defining report content and topic Boundaries.	Board Chairman's Message	Disclosed	-
<b>Disclosure 102 - 47</b>	List of material topics.	Economic Section Environment Section Social Section of the Sustainability Report	Disclosed	-
<b>Disclosure 102 - 48</b>	Restatements of information.	-	Disclosed	Some restatements were made because the issues had either not changed or simply continued into the reporting year.
<b>Disclosure 102 - 49</b>	Changes in reporting.	-	Disclosed	There were no significant changes made to the 2020 sustainability report as the reporting period in the list of material topics and topic boundaries were fairly the same.
<b>Disclosure 102 - 50</b>	Reporting period.	-	Disclosed	January 2020 to December 2020
<b>Disclosure 102 - 51</b>	Date of most recent report.	-	Disclosed	December, 2019
<b>Disclosure 102 - 52</b>	Reporting cycle.	-	Disclosed	Annual
<b>Disclosure 102 - 53</b>	Contact point for questions regarding the report.	-	Disclosed	Egbin Corporate Governance <a href="mailto:gov@egbin-power.com">corp.gov@egbin-power.com</a>
<b>Disclosure 102 - 54</b>	Claims of reporting in accordance with the GRI standards.	-	Disclosed	This report has been prepared in accordance with the GRI Standards: Core Option.
<b>Disclosure 102 - 55</b>	GRI content index.	-	Disclosed	Most of the disclosures needed to be disclosed by an Electric Utility company like Egbin Power Plc, were disclosed in the content index.
<b>Disclosure 102 - 56</b>	External assurance.	-	Disclosed	No external assurance was provided for the 2020 sustainability report.

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>ECONOMIC IMPACTS</b>				
<b>GRI 201: Economic Performance</b>				
<b>Disclosure 201 - 1</b>	Direct economic value generated and distributed.	Economic Performance Direct Economic Value Generated and Distributed	Disclosed	-
<b>Disclosure 201 - 2</b>	Financial implications and other risks and opportunities due to climate change.	Climate Change and Sustainable Electricity Generation	Disclosed	-
<b>Disclosure 201 - 3</b>	Defined benefit plan obligations and other retirement plans.	-	Disclosed	Egbin maintains a defined contribution Pension Scheme in accordance with the Pension Reform Act, 2004. Based on the reviewed Pension Reform Act 2014, the contribution by the employer and the employee was reviewed to 10% and 8% respectively of the employee's monthly emolument. The scheme covers 100% of the pension benefit and liabilities. The participation in retirement plans is mandatory, as it is guided by the Pension Reform Act 2014.
<b>Disclosure 201 - 4</b>	Financial assistance received from government.	Financial Assistance Received from Government	Disclosed	The company secured an approval for pioneer status which has availed us five-year tax savings from 2014-2018, that is being reinvested into the business.
<b>GRI 202: Market Presence</b>				
<b>Disclosure 202 - 1</b>	Ratios of standard entry level wage by gender compared to local minimum wage.	Our People	Disclosed	-
<b>Disclosure 202 - 2</b>	Proportion of senior management hired from the local community.	-	Disclosed	None in employment
<b>GRI 203: Indirect Economic Impacts</b>				
<b>Disclosure 203 - 1</b>	Infrastructure investments and services supported.	Plant Operations and Maintenance	Disclosed	-
<b>Disclosure 203 - 2</b>	Significant indirect economic impacts.	Investment in Human Capital, Safety and Environment Economic Contributions to the Local Communities	Disclosed	-
<b>GRI 204: Procurement Practices</b>				
<b>Disclosure 204 - 1</b>	Proportion of spending on local suppliers.	Economic Contributions to the Local Communities	Disclosed	-
<b>GRI 205: Anti - Corruption</b>				



GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 202 - 1</b>	Ratios of standard entry level wage by gender compared to local minimum wage.	Our People	Disclosed	-
<b>Disclosure 202 - 2</b>	Proportion of senior management hired from the local community.	-	Not Disclosed	None in employment
<b>Disclosure 205 - 3</b>	Confirmed incidents of corruption and actions taken.	-	Not Disclosed	No confirmed incidents of corruption.
<b>GRI 206: Anti – Competitive Behaviour</b>				
<b>Disclosure 206 - 1</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices.	-	Not Disclosed	There were no legal actions of this nature.
<b>Electric Utilities Disclosure: Availability and Reliability</b>				
<b>Disclosure 206 - 1</b>	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices.	-	Not Disclosed	There were no legal actions of this nature.
<b>Electric Utilities Disclosure 10</b>	Planned Capacity Against Projected Electricity Demand Over the Long Term, broken down by energy source and regulatory regime.	Investments Towards a Sustainable Future	Disclosed	-
<b>Electric Utilities Disclosure: Demand – Side Management</b>				
<b>Former Electric Utilities Disclosure 7</b>	Demand-side management programs including residential, commercial, institutional and industrial programs.	-	-	Not applicable
<b>Electric Utilities Disclosure: Research and Development</b>				
<b>Former Electric Utilities Disclosure 8</b>	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development.	-	-	Not applicable for now
<b>Electric Utilities Disclosure: Plant Decommissioning</b>				
<b>Former Electric Utilities Disclosure 9</b>	Provisions for decommissioning of nuclear power sites.	-	Disclosed	Egbin power station is a natural gas fired power plant, therefore no provision has been made for nuclear decommissioning.
<b>Electric Utilities Disclosure: System Efficiency</b>				
<b>Former Electric Utilities Disclosure 11</b>	Average Generation Efficiency of Thermal Plants by Energy Source and by Regulatory Regime.	-	Disclosed	The average generation efficiency of the Egbin power station in the reporting year was 32%.

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Former Electric Utilities Disclosure 12</b>	Transmission and distribution losses as a percentage of total energy.	-	Disclosed	The transmission losses target of the Multi Year Tariff Order of the Nigeria Bulk Electricity Trading Company is 8.05%. This is used to compute the net power generated and wheeled into the grid by the Egbin power station.
<b>ENVIRONMENTAL IMPACTS</b>				
<b>GRI 301: Materials</b>				
<b>Disclosure 301 - 1</b>	Materials used by weight or volume.	-	Not Disclosed	The information is not currently being recorded. Systems will be put in place to collate this data in the nearest future.
<b>Disclosure 301 - 2</b>	Recycled input materials used.	-	Not Disclosed	The information is not currently being recorded. Systems will be put in place to collate this data in the nearest future.
<b>Disclosure 301 - 3</b>	Reclaimed products and their packaging materials.	-	Not Disclosed	This disclosure is not applicable to Egbin Power Plc as a power generating company.
<b>GRI 302: Energy</b>				
<b>Disclosure 302 - 1</b>	Energy consumption within the organization.	-	Disclosed	Energy Consumption
<b>Disclosure 302 - 2</b>	Energy consumption outside of the organization.	-	Disclosed	Energy Consumption
<b>Disclosure 302 - 3</b>	Energy intensity.	-	Disclosed	Energy Consumption
<b>Disclosure 302 - 4</b>	Reduction of energy consumption.	-	Disclosed	Energy Consumption
<b>Disclosure 302 - 5</b>	Reductions in energy requirements of products and services.	-	Disclosed	Energy Consumption
<b>GRI 303: Water</b>				
<b>Disclosure 303 - 1</b>	Water withdrawal by source.	-	Disclosed	Water Utilization
<b>Disclosure 303 - 2</b>	Water sources significantly affected by withdrawal of water.	-	Disclosed	Water Utilization
<b>Disclosure 303 - 3</b>	Water recycled and reused.	-	Disclosed	Water Utilization
<b>GRI 304: Biodiversity</b>				
<b>Disclosure 304 - 1</b>	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	-	Disclosed	Biodiversity

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 304 - 2</b>	Significant impacts of activities, products, and services on biodiversity.	-	Disclosed	Biodiversity
<b>Disclosure 304 - 3</b>	Habitats protected or restored.	-	Disclosed	Biodiversity
<b>Disclosure 304 - 4</b>	IUCN Red List species and national conservation list species with habitats in areas affected by operations.	-	Not Disclosed	Egbin Power Plc does not have the total number of IUCN red list species and national conservation list species affected by our operations for now.
<b>Electric Utilities Disclosures 13</b>	Biodiversity of offset habitats compared to the biodiversity of the affected areas.	-	Not Disclosed	The information is not currently available.
<b>GRI 305: Emissions</b>				
<b>Disclosure 305 - 1</b>	Direct (Scope 1) GHG emissions.	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 2</b>	Energy indirect (Scope 2) GHG emissions.	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 3</b>	Other indirect (Scope 3) GHG emissions.	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 4</b>	GHG emissions intensity.	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 5</b>	Reduction of GHG emissions.	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 6</b>	Emissions of ozone-depleting substances (ODS).	-	Disclosed	Green House Gas Management
<b>Disclosure 305 - 7</b>	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions.	-	Disclosed	Green House Gas Management
<b>GRI 306: Effluents and Waste</b>				
<b>Disclosure 306 - 1</b>	Water discharge by quality and destination.	-	Disclosed	Effluent Quality Control
<b>Disclosure 306 - 2</b>	Waste by type and disposal method.	-	Disclosed	Effluent Quality Control
<b>Disclosure 306 - 3</b>	Significant spills.	-	Disclosed	Spill Management
<b>Disclosure 306 - 4</b>	Transport of hazardous waste.	-	Disclosed	Waste Management
<b>Disclosure 306 - 5</b>	Water bodies affected by water discharges and/or runoff.	-	Disclosed	Effluent Quality Control
<b>GRI 307: Environmental Compliance</b>				
<b>Disclosure 307 - 1</b>	Non-compliance with environmental laws and regulations.	-	Disclosed	Environmental Compliance
<b>GRI 308: Supplier Environmental Assessment</b>				



GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 308 - 1</b>	New suppliers that were screened using environmental criteria.	Suppliers were not screened in the reporting year 2016 with environmental criteria.	Disclosed	-
<b>Disclosure 308 - 2</b>	Negative environmental impacts in the supply chain and actions taken.	-	Not Disclosed	The information was not taken in the reporting year 2020. Systems may be put in place to collate the information in the nearest future.
<b>SOCIAL</b>				
<b>GRI 401: Employment</b>				
<b>Disclosure 401 - 1</b>	New employee hires and employee turnover.	-	Disclosed	In 2020, Egbin Power Plc hired 10 (ten) graduate interns and 20 (twenty) undergraduate interns who were trained during the period of engagement; with an employee turnover of 23 at a rate of 0.76.
<b>Disclosure 401 - 2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees.	-	Disclosed	Paid time off from work Health Care Life Insurance Disability and invalidity coverage Housing Allocation Welfare packages
<b>Disclosure 401 - 3</b>	Parental leave.	-	Disclosed	As part of an employee benefits package, Egbin provides a variety of options for paid time off. A <a href="#">paid time off (PTO)</a> policy includes paid annual leave, paid sick leave, paid compassionate leave, paid funeral or bereavement leave and paid parental leave. A PTO policy creates a pool of days that an employee may use at his or her discretion.
<b>Former Electric Utilities Disclosure 14</b>	Programs and processes to ensure the availability of a skilled workforce.	-	Disclosed	The Egbin Power Plc recruits qualified young graduates by internal and external recruitment processes and trains them for the intricacies of the job. It also has training programme for existing staff to develop themselves. It allows a staff member to further their educational qualification through the part time program for further individual educational development. The company also engages the services of youth corps members whose discipline is closely related to the organizational functions. There is also room for internship programmes for students and graduates of engineering, chemistry, and other business-related areas.

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Electric Utilities Disclosure 15</b>	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region.	-	Disclosed	In the next five years: Power Plant Operators = 4%Engineers = 6%Support Services = 1.3%Maintenance Staff = 9.1%In the next ten years: Power Plant Operators = 9.3%Engineers = 9.92%Support Services = 3.37%Maintenance Staff = 24.6%
<b>Former Electric Utilities Disclosure 16</b>	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors.	Occupational Health and Safety	Disclosed	-
<b>Electric Utilities Disclosure 17</b>	Days worked by contractor and subcontractor employees involved in construction, operation & Maintenance activities.	-	Disclosed	None
<b>Electric Utilities Disclosure 18</b>	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training.	-	Disclosed	70% of Egbin Power Plc contractors and their employees received both formal and informal HSE training for task within or outside the power plant.
<b>GRI 402: Labour Management Relations</b>				
<b>Disclosure 402 - 1</b>	Minimum notice periods regarding operational changes.	-	Disclosed	One Month
<b>GRI 403: Occupational Health and Safety</b>				
<b>Disclosure 403 - 1</b>	Workers representation in formal joint management-worker health and safety committees.	Plant Operation and Maintenance	Partially Disclosed	-
<b>Disclosure 403 - 2</b>	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities.	-	Not Disclosed	The type of injury recorded in the reporting year were minor injury of first aid cases (FAC). Details of the injury rate, occupational disease rate, lost days' rates etc. are not available for now due to the unavailability of the monthly health record statistics of employees from the HMO.
<b>Disclosure 403 - 3</b>	Workers with high incidence or high risk of diseases related to their occupation.	-	Not Disclosed	Details are not available for now.
<b>Disclosure 403 - 4</b>	Health and safety topics covered in formal agreements with trade unions.	-	Not Disclosed	The health and safety topics covered during the monthly health talk by the HMO are determined by a democratic process of voting by all members of staff.

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>GRI 404: Training and Education</b>				
<b>Disclosure 404 - 1</b>	Average hours of training per year per employee.	-	Disclosed	All staff members are scheduled to proceed on training annually irrespective of gender level or cadre.
<b>Disclosure 404 - 2</b>	Programs for upgrading employee skills and transition assistance programs.	-	Disclosed	On the Job Training In-house Plant Training Scheduled Trainings
<b>Disclosure 404 - 3</b>	Percentage of employees receiving regular performance and career development reviews.	-	Disclosed	Male: 100%Female: 100%
<b>GRI 405: Diversity and Equal Opportunity</b>				
<b>Disclosure 405 - 1</b>	Diversity of governance bodies and employees.	Our People Gender Diversity	Disclosed	-
<b>Disclosure 405 - 2</b>	Ratio of basic salary and remuneration of women to men.	-	Disclosed	Ratio 1:1
<b>GRI 406: Non - Discrimination</b>				
<b>Disclosure 406 - 1</b>	Incidents of discrimination and corrective actions taken.	-	Disclosed	None
<b>GRI 407: Freedom of Association and Collective Bargaining</b>				
<b>Disclosure 407 - 1</b>	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.	-	Disclosed	None
<b>GRI 408: Child Labour</b>				
<b>Disclosure 408 - 1</b>	Operations and suppliers at significant risk for incidents of child labour.	-	Disclosed	None
<b>GRI 409: Forced or Compulsory Labour</b>				
<b>Disclosure 409 - 1</b>	Operations and suppliers at significant risk for incidents of forced or compulsory labour.	-	Disclosed	None
<b>GRI 410: Security Practices</b>				
<b>Disclosure 410 - 1</b>	Security personnel trained in human rights policies or procedures.	-	Disclosed	Egbin employed the services of a third-party company to ensure the safety and security of the facility and the environs. The third-party company reports that 100% of its security personnel have undergone human rights trainings.
<b>GRI 411: Rights of Indigenous Peoples</b>				



GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Disclosure 411 - 1</b>	Incidents of violations involving rights of indigenous peoples.	-	Disclosed	None
<b>GRI 412: Human Rights Assessment</b>				
<b>Disclosure 412 - 1</b>	Operations that have been subject to human rights reviews or impact assessments.	-	Disclosed	None
<b>Disclosure 412 - 2</b>	Employee training on human rights policies or procedures.	-	Disclosed	None at the moment.
<b>Disclosure 412 - 3</b>	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.	-	Disclosed	None at the moment.
<b>GRI 413: Local Communities</b>				
<b>Disclosure 413 - 1</b>	Operations with local community engagement, impact assessments, and development programs.	Improved Health Care Safety of Marine Life Investment in the Sustainable Future	Disclosed	-
<b>Disclosure 413 - 2</b>	Operations with significant actual and potential negative impacts on local communities.	Major Environmental Issues	Disclosed	-
<b>Former Electric Utilities Disclosure 19</b>	Stakeholder participation in decision making processes related to energy planning and infrastructure development.	-	Not Disclosed	Egbin is currently working on the strategic document which will capture the processes and procedures for stakeholder participation.
<b>Former Electric Utilities Disclosure 20</b>	Approach to managing the impacts of displacement.	-	Not Disclosed	The construction of Egbin power plant commenced in 1983 and was completed in 1989. Back then, the plant was owned by the Federal Government of Nigeria, therefore all forms of re-settlements and compensation to the local indigenes for the impacts of the construction of the power plant, was systematically carried out.
<b>Former Electric Utilities Disclosure 21</b>	Contingency planning measures, disaster/ emergency management plan and training programs, and recovery/restoration plans.	Spill Management	Disclosed	-

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Electric Utilities Disclosure 22</b>	Number of people physically or economically displaced and compensation, broken down by type of project.	-	Not Disclosed	The records of the displaced people from their lands when Egbin power plant was constructed in 1983 is not with Egbin Power Plc at this point in time, as these records may be in the possession of the relevant government agency when the power plant was still owned by the Federal Government of Nigeria.
<b>GRI 414: Supplier Social Assessment</b>				
<b>Disclosure 414 - 1</b>	New suppliers that were screened using social criteria.	-	Disclosed	None, as this system was not in place in the reporting year 2020.
<b>Disclosure 414 - 2</b>	Negative social impacts in the supply chain and actions taken.	-	Disclosed	In the reporting year 2020, no supplier was penned down to have significant actual and potential negative impact on the society with respect to our supply chain management system.
<b>GRI 415: Public Policy</b>				
<b>Disclosure 415 - 1</b>	Political contributions.	-	Disclosed	None
<b>GRI 416: Customer Health and Safety</b>				
<b>Disclosure 416 - 1</b>	Assessment of the health and safety impacts of product and service categories.	-	Not Disclosed	None, as Egbin Power plc is a power generation company, therefore does not manufacture a product whose cycle life may pose risk to the general public.
<b>Disclosure 416 - 2</b>	Incidents of non-compliance concerning the health and safety impacts of products and services.	-	Disclosed	None
<b>Electric Utilities Disclosure 25</b>	Number of injuries and fatalities to the public involving company assets including legal judgements, settlements and pending legal cases of diseases.	-	Disclosed	None
<b>Electric Utilities Disclosure: Access</b>				
<b>Former Electric Utilities 23</b>	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support service.	-	Disclosed	Considering the fact that Egbin power plant is situated in Lagos-the economic nerve center of Nigeria, there are plans with the Federal Ministry of Power, to dedicate unit 6 to serve the Lagos metropolis, therefore boosting economic activities in the state.

GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Electric Utilities Disclosure 26</b>	Percentage of population unserved in licensed distribution or service areas	-	Not Disclosed	Due to structure of the Nigerian power industry, Egbin is only licensed to generate electricity. Thus, Egbin are not in custody of the data with respect to transmission and distribution infrastructure; and may not be able to estimate overall and unserved population.
<b>Electric Utilities Disclosure 27</b>	Number of residential disconnections for non-payment, broken down by duration of disconnectionAnd by regulatory regime	-	Not Disclosed	Egbin Power Plc is a power generation company, and therefore does not interface directly with residential, commercial, or industrial electricity consumers.
<b>Electric Utilities Disclosure 28</b>	Power outage frequency		Not Disclosed	Due to the structure of the Nigerian power industry, Egbin who is a power generation company, does not have in its possession the accurate number of customers served. This information is domiciled at the electricity distribution companies and the transmission company. Therefore, we cannot at the moment, accurately calculate the System Average Interruption Frequency Index (SAIFI).
<b>Electric Utilities Disclosure 29</b>	Average power outage duration.	-	Not Disclosed	These are performance indices for power transmission and distribution companies; and are not applicable to GENCOs.
<b>Electric Utilities Disclosure 30</b>	Average plant availability factor by energy source and by regulatory regime.	Availability Factor	Disclosed	-
<b>Electric Utilities Disclosure: Provision of Information</b>				



GRI Standard Disclosure Number	Disclosure Definition	Disclosure Location	Disclosure Status	Direct Response and Clarification
<b>Former Electric Utilities Disclosure 24</b>	Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services.	-	Not Disclosed	Egbin Power Plc generates and wheels out power into the national grid in a contained facility that is accessible to only authorized personnel and screened visitors. Therefore, Egbin does not relate directly or indirectly with electricity consumers. However, our signage labeling and safety warnings are written in English.
<b>GRI 417: Marketing and Labeling</b>				
<b>Disclosure 417 - 1</b>	Requirements for product and service information and labeling.	-	Disclosed	None
<b>Disclosure 417 - 2</b>	Incidents of non-compliance concerning product and service information and labeling.	-	Disclosed	None
<b>Disclosure 417 - 3</b>	Incidents of non-compliance concerning marketing communications.	-	Disclosed	None
<b>GRI 418: Customer Privacy</b>				
<b>Disclosure 418 - 1</b>	Substantiated complaints concerning breaches of customer privacy and losses of customer data.	-	Disclosed	None
<b>GRI 419: Socio-Economic Compliance</b>				
<b>Disclosure 419 - 1</b>	Non-compliance with laws and regulations in the social and economic area.	-	Disclosed	None

