

الحم الدخان حجم والأدر

إحدى شر قات مجموعة نماء Member of Nama Group

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ANNUAL REPORT 2020

TOWARDS A SUSTAINABLE FUTURE





Late His Majesty Sultan Qaboos Bin Said - May God rest his soul in peace - His Majesty Sultan Haitham Bin Tariq - May God protect him -

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Glossary of Terms:

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APSR	Authority of Public Services and Regulation
MZEC	Mazoon Electricity Company
NAMA	Nama Holding Group
HSE	Health Safety and Environment
ISO	International Organization for Standardization
BST	Bulk Supply Tariff
ТС	Transmission Connection Charges
TUOS	Transmission Use of System Charges
VAT	Value Added Tax
SAIFI	System Average Interruption Frequency Index
CAIDI	Customer Average Interruption Duration Index
SAIDI	System Average Interruption Duration Index
VOC	Voice of Customer
LTI	Loss Time Injury
LTIFR	Loss Time Injury Frequency Report
MD	Ministry Decision
RWC	Restricted Work Case
CRT	Cost Reflected Tariff
LMS	Learning Management system
WD	Working Day
VPN	Virtual Private Network
PV System	Solar Power System
SMEs	Small and Medium Size Enterprises
ICV	In-Country Value
GIS	Geographic Information System
MIS	Main Interconnected System
RAEC	Rural Areas Electricity Company (TANWEER)
DPS	Dhofar Power System

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About this **Report**



Mission

"Lighting and Enriching Life through Safe, Reliable and Sustainable Electricity"



Vision

"To be leaders in providing electricity in Oman by 2022"



Value

"Safety, teamwork, professionalism, integrity and respect"



CEO's Message

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Mazoon Electricity Company (MZEC) believes that it can achieve and sustain its vision by caring for the safety of its employees and customers and the public; and by demonstrating adherence to HSE standards in its operations.

MZEC will continue to improve the network reliability, security, and performance by investing further in its networks.

MZEC's key values include transforming the Company into a customer-oriented organization by providing connections faster, supplying quality power and minimising outages frequency and duration, proactively addressing customer's issues and above all educating and enlightening them.

MZEC strives to manage its working capital efficiently, enhance cost-effectiveness, and continue to be a socially responsible organisation utilising its resources judiciously and economically, taking part and contributing to the development of the nation.

Salim Said Al Kamyani

CEO, Mazoon Electricity Company



Previous Board of **Directors**



Eng. Omar Ahmed Salim Qatan Chirman



Mr. Abdul Aziz Mohammed Al Kharusi Director



Mr. Sunil A Raykar Director



Ms. Fatma Khalifa Al Maskiry Deputy Chairman



Dr. Mansoor Al Hinai Director



Mr. Ibrahim Said Al-Sulaimani Director

Board of **Directors**



Chairman: Mr. Ibrahim Said Masoud Al Suleimany

Mr. Ibrahim Said Masoud Al Suleimany joined Mazoon Electricity Company as Chairman on December 7, 2020. He also holds several directorships in other companies of Nama Group. His knowledge spans civil service, oil and gas, wastewater and electricity sectors with almost 30 years of experience working in the fields of human resources development, talent management and corporate communication. Mr. Ibrahim simultaneously handles the position of Executive Manager - Group HR at Nama Holding and is responsible for developing and implementing a wide range of human resource strategies for the entire Group. He guides and pilots the implementation of an effective human resources strategy for the companies of Nama Holding to ensure continuous updating of HR policy, processes, and practices. He acts as an internal consultant to other roles and directs the identification/resourcing of human capital needs.



Mr. Faisal Khamis Mohammed Al Daoudi

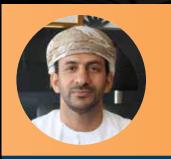
Mr. Faisal Khamis Mohammed Al Daoudi holds the position of Group Risk and Compliance Manager at Nama Holding. He is responsible for developing, maintaining, implementing, and monitoring Nama Group's Enterprise Risk Management (ERM) and Compliance Strategies. During his 19 years of experience, he served in prestigious organisations, performing diversified roles in auditing risk management and compliance sectors. Holding a BA degree in accounting from Staffordshire University, Faisal holds an International Certification in Risk Management from the Institute of Risk Management (The IRM -UK). He also holds an International Certificate in Business Continuity (CBCI) and an International Certificate in Compliance.



Ms. Munira Saloom Salim Al Harthi

Ms. Munira Saloom Salim Al Harthi currently works as Secretary of the Board and Group Document and Governance Management at Nama Holding Company. Her professional experience exceeding 15 years in different companies has contributed to her unique leadership style and knowledge base. Holding an Associate Degree in Finance and Accounting from City and Guilds London Institute, UK, she has held leading positions at companies like Majlis Industrial Services (Sohar Port Area), Oman Cables and Jotun Paints. She holds several certifications to her credit including CPD Certified in Business Process Analysis and Mapping; MSP Foundation and Practitioner - Managing Successful Program; PECB Certified ISO 900: 2015 Lead Implementer; IRCA Certified ISO 9001:2015 Lead Auditor; ISO 9001: 2008 Quality Management Systems and PECB Certified ISO 31000 Lead Risk Management.

Executives team



Salim Said Al Kamyani

Chief Executive Officer



Majid Nasser Al Busaidi Chief Operations Officer, Distribution



Abdul Rahman Saleh Al Harrasi

Chief Operations Officer, Supply (Acting)



Sultan Saleem Al Alawi

Senior Manager, Shared Services



Saleem Nasser Al Mahrouqi

Manager, Health & Safety, Environment



Mohammed Salim Al Ghenaimi

Senior Manager, Planning & Asset Management



Muntasar Abdullah Ambusaidi

Senior Manager, Human Resources



Khalfan Nasser Al Burtumani

Senior Manager, Regulatory & Corporate Affairs



Dilip George Vayaliparambil

Senior Manager, Finance (Acting)



Said Juma Al Busaidi

Manager, Communication and Sustainability



Biju Joseph Padanilam

Business Development Expert

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Sector Law and Regulations

The electricity sector in the Sultanate of Oman comprises of three separate and distinct market segments: The Main Interconnected System ("MIS") in the north of Oman; the Rural System of the Rural Areas Electricity Company (TANWEER); and the Dhofar Power System (DPS).

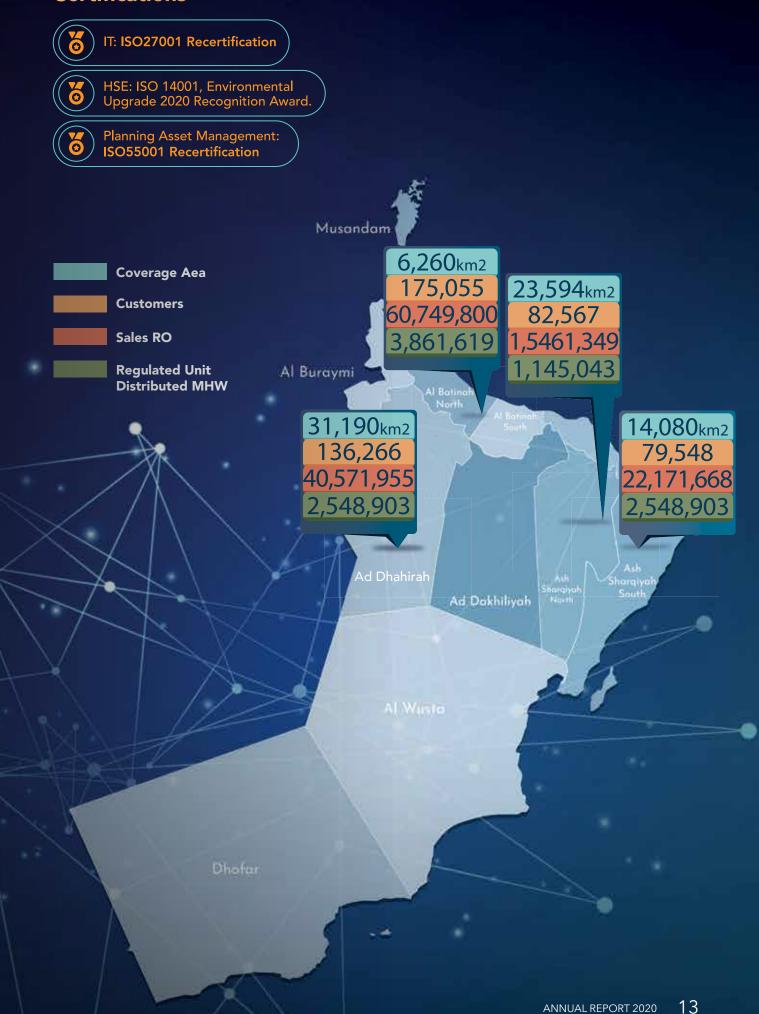
The Oman Electricity Transmission Company SAOC (OETC) is the monopoly provider of transmission services in the (MIS) Main interconnected System. OETC owns and operates the 220 kV, 132 kV and 400 kV interconnected transmission systems, and as system operator is responsible for the central dispatch of generating and desalination facilities.

After electricity is produced at the various power plants, it reaches the customers who use it. High voltage transmission lines carry electricity for long distances to a substation. The power lines go into substations near businesses, factories, and homes. Here, transformers change the very high voltage electricity back into lower voltage electricity. The distribution system is the last stage in the electricity production, as the distribution system reduces the voltage and then transfers electricity to customers. In addition to substations, the distribution system includes wiring, poles, measurement, billing, and related support systems.

Mazoon Electricity Company (MZEC) pays Oman Electricity Transmission Company to transmit electricity to be connected to MZEC's network(distribution) and use it(supply). MZEC pays Oman Power and Water Procurement Company (OPWP) for bulk electricity purchases through bulk supply tariffs, which include costs paid by the company for its electricity purchases.

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	South Al Batinah	South Al Sharqiyah	North Al Sharqiyah	Al Dakhilayah
Coverage Area (km²)	6,260	14,080	23,594	31,190
Number of Customers	175,055	79,548	82,567	136,266
Regulated Unit distributed (MWh)	3,861,619	1,437,354	1,145,043	2,548,903
Sales (OMR)	60,749,800	22,171,668	15,461,349	40,571,955

Certifications



Chairman's Report

Dear Shareholders,

It gives me great pleasure to present to you the Company's Annual Report for the year ended 31 December 2020. Unfortunately, due to COVID-19 pandemic, 2020 was an exceptional year of unprecedented lockdowns, restriction of physical movements and heightened levels of fear and panic among people. MZEC was forced to face severe challenges including supply chain interruptions, financial constraints, and the repercussions of the global economic crisis. As COVID-19 continued to present significant health and economic challenges to people and businesses across the world, the safety and well-being of our employees, customers and communities remained our top priority throughout the year.

With the first signs of the outbreak, MZEC Executive Management started to devise contingency plans to manage the situation by taking appropriate actions. A Business Continuity Plan was initiated by appointing dedicated taskforces responsible for managing critical business operations, rearrange office setups, take sanitization measures, obtain clearances for business trips, and more importantly give appropriate directions to employees. The entire management team assumed its responsibility and managed the challenging situation with utmost dedication and commitment. MZEC immediately adopted alternative means including switching to the digital mode to continue MZEC's 'enriching lives through safe, reliable and sustainable power' mission. With the necessary precautions taken and by following the guidance of the Supreme Committee, MZEC was able to carry out its operations without interruption while protecting its employees by limiting their exposure to the risks of the pandemic.

Moreover, following the decision of the Oman Investment Authority a new Board of Directors consisting of three members was appointed and assumed office on 2 December 2020. On this occasion, we would like to seize this opportunity to acknowledge the efforts and contributions of the previous Board of Directors for their enormous contribution to the progress of MZEC during their tenure.



Financial Performance

Though lower than expected, MZEC continued to demonstrate growth, in customer accounts, regulated units sold and sales revenue.

The number of customers totalled 473,436, registering an increase of 16,008 new customers during the year. Similarly, the regulated units sold during the year reached 8,992 GWh, showing a growth of 2.2% as compared to last year.

The total revenue comprising of the sales revenue, subsidy and other revenue for the year was OMR 351.636 million as against OMR 337.248 million in 2019, showing a growth of 4.3%. As the maximum revenue allowed is determined considering the pass-through costs, the increase in pass-through costs consisting of Power Purchase Costs (Bulk Supply Tariff-BST), Transmission Connection Charges (TC) and Transmission Use of System Charges (TUoS) is also reflected in the increase in total revenue.

Operating costs showed an increase of OMR 13.6 million compared to OMR 267.7 million of 2019 owing to the increase in (i) pass-through costs by OMR 9.4 million, (ii) depreciation by OMR 2.7 million, (iii) other direct costs by OMR 1.2 million; and (iv) spares and consumables by OMR 0.3 million.

The gross profit reported for the year increased to OMR 70.32 million from OMR 69.54 million reported in 2019.

The capital expenditures program was also affected by the restrictions on carrying out the project activities, following the outbreak of the pandemic. Furthermore, the company followed the directions of the Ministry of Finance to reduce the capital expenditures considering the financial constraints. Accordingly, the capital expenditures during the year amounted to OMR 69.593 million showing a decline compared to OMR 84.403 million in 2019.



Corporate Social Responsibility

Omanisation in Mazoon Electricity reached a remarkable level of 98.5% with 542 employees in 2020.

Rehabilitation of the distribution networks in the coastal areas of Jaalan Bani Bu Ali in South Al-Sharqiyah Governorate is a major project that demonstrated MZEC's commitment to the society. The project aims at improving the system reliability for better service and safety of the people in the area.

It gives us immense satisfaction that the projects which MZEC undertakes are in line with the aspirations of Oman Vision 2040 that lays down the foundations for "building national capabilities and achieving economic growth and social well-being." In fact, the policies that underpin Oman Vision 2040 address sustainable development and improved infrastructures that will help boost Oman's national economy and ensure a better distribution of resources to bring prosperity to all segments of the society. MZEC is proud to take part in the great visionary journey of Oman and aims to contribute to its march of progress.



Operational Performance

In respect of power distribution, no major outages were reported during 2020, which led to a significant improvement in the commonly used network performance indices, SAIDI and SAIFI. High priority was attached to customer communication, which positively reflected on customer satisfaction rate showing an improvement in the 'voice of customer' survey with a score of 93% in 2020 as compared to 91% in 2019.



Health, Safety and Environment

Health, Safety and Environment (HSE) are on top of MZEC's priorities list with both the Board and Management being committed to achieving the highest HSE standards. The Board allocates adequate time for discussion of HSE performance in every meeting. Several steps taken by the management to improve safety has helped to achieve the best results of 'No Fatality' and 'No LTI' during 2020.



Strategic Vision and Achievements

MZEC continued to adopt its strategies which based on six main pillars: customer services; QHSE; operation efficiency; IT and cyber security; human resources; and communication and marketing, with a view to achieving its vision to be a "leader in providing electricity in Oman".



Business Outlook

The Management aspires to achieve business growth in the coming years after the gradual recovery from the current distress and return to economic normalcy in the aftermath of the Covid-19 pandemic.

The Management does foresee some challenges in 2021. These will be associated with the implementation of the new CRT tariff on electricity as well as the Value Added Tax expected to start in mid of April 2021. Nevertheless, we are optimistic about achieving business growth although we expect it to continue at a slower rate than before.

MZEC will also follow the directions of Nama Holding relating to the privatisation announced for the sector.



Acknowledgment

On behalf of the Board, I would like to express my sincerest gratitude to His Majesty Sultan Haitham BinTariq for his wise and able leadership and to the Government of the Sultanate of Oman. I seize this opportunity to extend my thanks to the Authority for Public Services Regulation, Nama Holding Company, the sector subsidiary companies, our valued customers and all stakeholders for their continued support and co-operation.

I would also like to thank the previous Board members and my fellow board members for their valuable contributions to guiding and directing the Company's affairs. It is finally my pleasure to extend my sincere appreciation to the management team and all MZEC staff for their dedication, efforts, and invaluable contributions to successfully running the Company's business and achieving the desired results during 2020, the most challenging year ever

> Ibrahim Said Masoud Al Suleimani

Chairman - Board of Directors



CORPORATE GOVERNANCE

MZEC's corporate governance system is built on the philosophy of accountability, transparency, integrity, and sound ethical principles. This is ensured by our sound business decisions and firm commitment to values as we strive to meet stakeholders' expectations. The governance practices that MZEC adopts are aligned with the Code of Corporate Governance issued by the Capital Market Authority/Ministry of Commerce and Industry. Our board and its committees are formed in conformity to MZEC's governance philosophy that aims at enhancing long-term shareholder's value, ensuring adherence to the law and ethical standards. MZEC also formulates and implements strategies and policies with a view to optimising stakeholders' value.

MZEC endeavours to achieve sustainable growth, and focuses accordingly on all business aspects including human resources, products, services, technology, financial strength, customer satisfaction, etc. To realise this basic policy and to increase corporate value over the mid-long term, MZEC realizes that reinforcing good governance through setting up a management structure and a proper delegation of authorities, in a manner consistent with the corporate governance philosophy is of utmost importance.

Transparency, accountability, fairness, and intensive communication with stakeholders are integral to our functioning. We believe in system-driven performance and performance-oriented systems. We accord highest priority to these systems and protect the interests of all our shareholders.

MZEC made good progress at the level of corporate governance implementation through its internal regulations and procedures with a view to running the Company's affairs pursuant to the governance principles. MZEC has also appointed an internal auditor and legal advisor.

MZEC conducts significant intercompany transactions with the electricity sector companies under the same holding group, and the transactions with these major related parties are in the normal course of business and all such transactions are at arm's length.

MZEC's board consists of all independent and non-executive directors. The Board has constituted an Audit and Risk Committee and a Board Executive Committee.



Composition of the Board

MZEC's Board consists of five members nominated by the shareholders: Electricity Holding Company SAOC, Nama Shared Services LLC and Numo Institute for Competency Development LLC. The five-member Board was reappointed in the Annual General Meeting held on April 7, 2020. However, pursuant to the decision of the Oman Investment Authority, the number of board directors was reduced to three and the new Board was elected in the Ordinary General Meeting held on December 2, 2020.

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Details of MZEC's Board Directors carrying out their duties on 31 December 2020 and their directorships in other companies in Oman are as follows:

1. Mr. Ibrahim Said Masoud Al Sulaimani - Chairman

- Nominated by the Electricity Holding Company
- Chairman of other board Nil
- Member of other boards 3 (GPDC, Wadi Al Jizzi and OETC)
- Member of other board committees- 4 (committee member in MZEC, GPDC, Wadi Al Jizzi and OETC)

2. Ms. Munira Saloom Salim Al Harthi

- Nominated by the Electricity Holding Company
- Non-executive director-Nil
- Chairperson of other boards- Nil
- Member of other boards- Nil
- Member of other committees- Nil

3. Mr. Faisal Khamis Mohammed Al Daoudi

- Nominated by the Electricity Holding Company
- Non-executive director- Nil
- Chairperson of other boards- Nil
- Member of other boards- Nil
- Member of other committees- 1



The below meeting shows the meetings held by the previous Board up to 2 December 2020, and attendance of the various meetings in 2020:

Table 1

Member	Position	AGM	09-01-2020
Eng. Omar Ahmed Salim Qatan (Resigned effective from 02 December 2020)	Chairman	Ś	Ś
Ms. Fatma Khalifa Al Maskiry (Resigned effective from 02 December 2020)	Deputy Chairperson		\$?
Mr. Sunil A Raykar (Resigned effective from 02 December 2020)	Director		
Dr. Mansoor. Al Hinai (Resigned effective from 12 August 2020)	Director		Ś
Mr. Abdul Aziz Bin Mohammed Bin Said Al Kharusi (Resigned effective from 02 December 2020)	Director		Ş
Mr. Ibrahim Said Masoud Al Sulaimani (Joined after resignation of Dr. Mansoor Al Hinai)	Director		

Board Meetings					OGM
26-02-2020	19-04-2020	16-06-2020	14-09-2020	17-11-2020	02-12-2020
Ś	S:	N.	S:		\$?
Ś	Ś		S:	Ś	\$
		Ś	Ś	Ś	
Ś	Ś	S:			
S:		S:	S:	Ş:	
			S:	Ş.	

The below table shows the meetings held by the present Board from 2 December 2020, and attendance of the various meetings in 2020:

Table 2					
Member	Position	Board N	leetings		
		02-12-2020	27-12-2020		
Mr. Ibrahim Said Masoud Al Sulaimani	Chairman	S.	S:		
Ms. Munira Saloom Salim Al Harthy	Deputy Chairperson	¢?	S:		
Mr. Faisal Khamis Mohammed Al Daoudy	Director				

Audit and Risk Committee

Terms of Reference	The Board constituted an Audit and Risk Committee pursuant to Article (54) of the Articles of Association and its terms of reference include all matters specified under that article.
Composition	The Audit Committee comprised of three independent and non-executive directors of the Company until it was replaced by a two-member committee following the election of the new Board effective from 2 December 2020. Following resignation of Dr Mansoor Al Hinai from the Board, Mr. Ibrahim Al Suleimani joined the Board and replaced Dr Mansoor Al Hinai in the Audit and Risk Committee.

The below table shows the meetings held by the Audit and Risk Committee:

Table 3: Audit and Risk Committee Meetings

Member	Position	ARC Meeting				
		11-02-2020	26-02-2020	17-05-2020	09-09-2020	12-11-2020
Mr. Sunil A Raykar	Chairman	Ś	¢?	Ś	Ś	Ş.
Mansoor. Al Hinai	Deputy Chairperson	\$	Ś	Ś	Ś	
Mr. Abdul Aziz Al Kharousi	Director	\$	\$	Ś	Ś	\$
Mr. Ibrahim Al Suleimani	Director					S:

Board Executive Committee (BEC)

The BEC was headed by the Chairman of the Board and composed of two Board Directors as members. The BEC was suspended after the election of new the board effective from 2 December 2020. The below table shows the Committee meetings held in 2020:

BEC Meeting Member Position Eng. Omar Ahmed Į. S. Chairman \mathcal{A} \mathcal{A} S: S. Salim Qatan Ms. Fatma Khalifa Deputy S. S. S S. S. S. Al Maskiry Chairperson Mansoor. Al Hinai S. S. \mathcal{A} S. S. Director

Table 4: Board Executive Committee

Remunerations

MZEC paid an amount of RO 1,019 thousand in remuneration to its senior management staff (including a bonus of RO 32 thousand to members of the Board of Directors) during the year.

"The remunerations paid to the senior management staff (5 members of the board of directors and 16 executives) during the year include all salaries and benefits".

Company's Compliance

No penalties or restrictions were imposed on the Company by the Muscat Securities Market, the Capital Market Authority or the Ministry of Commerce and Industry on any matter relating to the capital market during the year.

Communications with Shareholders and Investors

MZEC is in close contact with the Electricity Holding Company as the company's largest shareholder on various matters relating to the company's strategic and policy initiatives. MZEC's financial and operational performance is regularly reviewed through monthly reports submitted to the Electricity Holding Company. MZEC's Annual Report is also forwarded to the shareholders: EHC, Numo Institute for Competency Development LLC, and Nama Shared Services Company LLC



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Equity Distribution

As on 31 December 2020, the percentage of shareholding was as follows:

Shareholders	Shareholding		
	OMR Per		
Electricity Holding Company SAOC	149,985,000	99.99	
Numo Institute for Competency Development LLC	7,500	0.005	
Nama Shared Services LLC	7,500	0.005	
Total share capital	150,000,000	100	

Table 5: Equity Distribution

Statutory Auditors

M/s. KPMG were the statutory auditors of the Company for the year 2020.

CORPORATE STRATEGY

The strategic business plan aims to establish a clear vision and strategic direction for the company's business, and to assist the management in focusing its attention on key responsibilities towards shareholders, while complying with regulatory requirements. The plan identifies objectives, milestones, risks, issues, and challenges, in addition to the financial plans that will need to be addressed during the period of this plan. The business plan also addresses the associated risks and challenges while envisaging the desired state MZEC would like to achieve.

MZEC has grouped the strategic objectives under six strategic themes. It has also adopted MSP to manage the strategy implementation and assigned a senior officer in-charge of each strategic theme to manage the related projects. A strategic plan for each theme has been prepared in such a manner that ensures its alignment with the other plans and milestones that have been set for achieving the targets.

Strategic Themes:



Strategic Objectives:



Improve network security, reliability, and performance.



Enhance and implement fully effective self-healing system in QHSE.



Be a model of service excellence in meter reading, firstcall resolution and customer satisfaction.



Improve communication with key stakeholders by 30%.



Drive high performance in the work environment to achieve required level of professionalism.



Maximise return on investment and optimise quality of working capital management.



Enhance digitalization and cyber security compliance.

HEALTH, SAFETY AND ENVIRONMENT

UNI TAGE

MZEC continued to work on implementing a comprehensive HSE plan in all its activities. The main activities were spreading awareness and building a 'safe environment' by enhancing the culture of safety among the employees and the society. MZEC's HSE team launched campaigns relating to home safety, public safety, road safety and illegal electrical connection risks. 2020 was another year marked by significant HSE performance during which MZEC did not record any fatality or Lost Time Injury in any of its activities.

COVID-19 Impact and Precautionary Measures

The COVID-19 pandemic had a severe impact on all business aspects. MZEC formed a Crisis Management Committee to tackle health emergencies. Right in the early stage, the Business Continuity Team and HSE Team prepared a workplace risk mitigation plan and followed all guidelines set by the Supreme Committee entrusted with undertaking measures to tackle developments resulting from Coronavirus (COVID-19) pandemic. The Committee met frequently and managed the situation.

MZEC quickly responded to reduce the consequences of the pandemic through a wide range of measures:

- 1. Raised awareness about COVID-19 precautionary measures;
- 2. Activated Microsoft Team to hold online meetings;
- 3. Allowed use of employee's card as a temporary replacement for the finger scan;
- 4. Activated Nama self-service application;
- 5. Approved critical elements of the team's emergency plan such as the set up of a control centre, a call centre, and an operation centre.
- 6. Suspended all physical meetings, stopped all trainings, interviews, and exams.
- 7. Stopped receiving any customers and encouraged them to use online applications or the call centre.

MZEC has successfully endeavoured to avoid any disruptions caused by the COVID-19 pandemic, while acting in a responsible manner to do

everything in its power to prevent the spread of the virus. MZEC continued to closely monitor and assess the developments of the situation and was diligent about communicating on important issues. MZEC implemented the working from home option as instructed by the Supreme Committee and a few measures were taken to facilitate the Company's business, namely:

- 1. Digital signatures were implemented;
- 2. Internal invoices were sent via official mail;
- 3. Vital projects were prioritized, and other projects were postponed;
- 4. Meter reading inside customers' proprieties was stopped and customers were encouraged to use self-reading services;
- 5. All power outages were stopped; and
- 6. Hardcopy bills were stopped.

As per the Supreme Committee's decisions and recommendations, MZEC was committed to providing a safe environment for its employees, their families, and the communities where it operates. Initially, MZEC asked its employees to work at home to reduce infection transmission risks and to keep them safe.

MZEC took extensive precautions to protect its workforce, including increasing the frequency of cleaning and disinfection, placing signage, screening visitors, and restricting their access, as well as providing PPEs. MZEC also planned to put in place specific measures to limit the spread of the infection, including social distancing and extensive hygiene protocols.

HSE Reporting System

In 2020, MZEC continued to implement a proactive HSE approach, reporting risks through NIMS. MZEC believes that every accident can be prevented by educating

all concerned parties about the importance of reporting and dealing with HSE risks in a timely manner.

Safety Assets Rehabilitation Projects

Governorate	нт		LT		Total	
	Qty	Amount in OMR	Qty	Amount in OMR	Qty	Amount in OMR
BATINAH-SOUTH	1	30,459.66	2	30,840.45	3	61,300.11
Sharqiyah - Total	3	80,805.00	10	1,383,042.43	13	1,463,847.43
SHARQIYA- COASTAL AREA	-	-	9	1,382,321.38	9	1,382,321.38
SHARQIYA-NORTH	1	16,903.70	1	721.06	2	17,624.76
SHARQIYA-SOUTH	2	63,901.30	-	-	2	63,901.30
Dakhiliyah	0	-	0	-	0	-
Total	4	111,264.66	12	1,413,882.88	16	1,525,147.54

Hazardous Waste Management

MZEC is committed to meeting Ministerial Decision No. 18/1993 regarding the collection of all hazardous waste resulting from its operations. In 2020, MZEC continued to manage environmental aspects and ensure all its operations comply with Ministerial Decision No. 48/2017 Issuing Regulations on Obtaining Environmental Permits.

Operational HSE Audit

In 2020, MZEC continued its HSE compliance audit in operation and maintenance activities to assess operational safety performance, with an emphasis on the implementation of electrical safety rules during operations and when working at heights, as well as on safe lifting operations, environmental management during operations, and office safety. The audit findings were effective as they contributed to identifying areas for improvement.



CUSTOMER EXPERIENCE

Results of the Voice of Customers (VOC) Survey (2018-2020)







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Although it was a challenging year due to COVID-19 pandemic, a significant improvement in satisfaction rates was achieved in the VOC survey. This continuous improvement in the VOC which reached 93% in 2020 was due to many reasons and not limited to the below listed initiatives:

- Development and implementation of the customers' segmentation strategy: focusing on the requirements and needs of all categories of customers.
- Development of Customer Experience Policy: principles and criteria for measuring customers' experience.
- Development of Customer Experience Journey Map: plan for customer's path from providing the service to obtaining it.
- Improving customers' loyalty: enhancing the customer's loyalty to the company's services by offering a welcome kit consisting of: (a service manual, a welcome message and a gift).
- Revamping the current website: restructuring the website and the way information is presented to facilitate browsing by customers.
- Development of a Customer Guide: a new, easy-to-understand and content-focused version that allows customers to easily understand services-related requirements.

New Connections Statistics



As a part of the customer service strategic plan some measures were taken to enhance the new connection mechanism:

- Web pages were created for customers to apply for new connections and additional services online.
- A meeting was held with the operation team to task them with following up new connection applications
- \checkmark Team leaders were able to contact the wiring team directly..

Statistics of number of customers by Tariff Type 2019-2020

Tariff Category

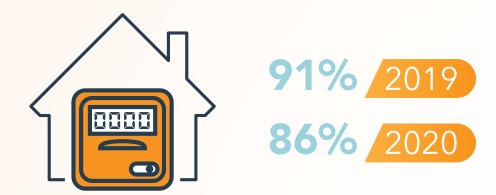






Meter Reading/Accuracy

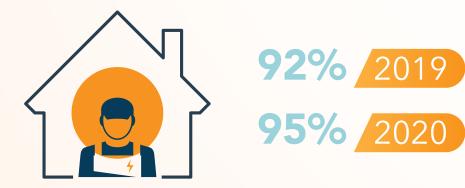
Statistics of actual meter readings 2018-2020:



Due to the COVID-19, MZEC was faced with many challenges during 2020. There was an increase in the number of the estimated meter readings. To resolve this challenge, an awareness campaign was initiated via SMS to encourage customers to use the self-meter reading tool that was made available on the Company's website.

Bill Distribution

Although 2020 was a difficult year in terms of achieving the annual goal of bill distribution, as this activity was suspended according to the instructions of the Supreme Committee entrusted with undertaking measures to tackle developments resulting from Coronavirus (COVID-19) pandemic, MZEC recorded a bill distribution rate of 95%, which marked an increase of 23% compared to 2019.



To achieve this rate, a few actions were taken, namely:

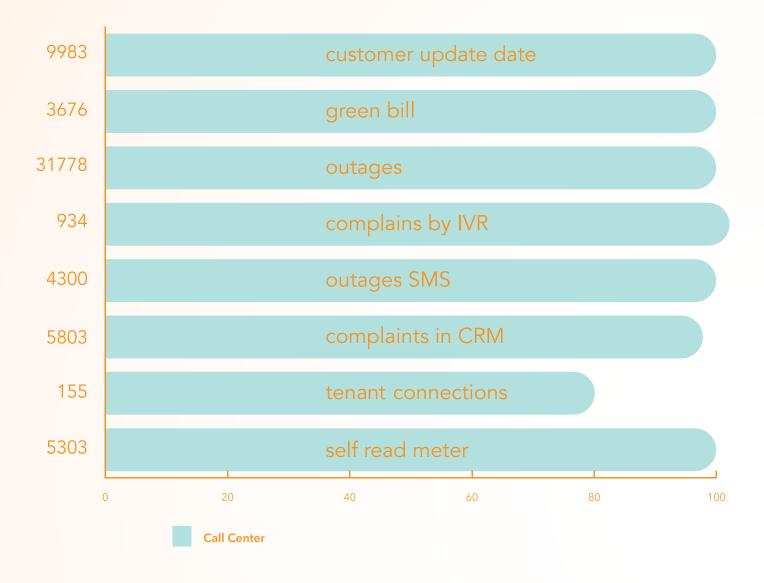
- The Green Bill Prize increased the total green bill customers to 242,292;
- ✓ A bill calculator was added to the website;
- ✓ The CRT Green Bill was re-designed;
- ✓ A social media "Green Bill" awareness campaign was launched;
- A Green Bill Ramadan Competition was held;
- The Green Bill was promoted during the World Environment Day.

Collection and Call Centre

2020 saw a surge in the percentage of electronic payments, which represented 65%, compared to 31% in 2019. This was mainly due to co-operation between the Collection Team and the Call Centre as well as some of the below initiatives:







Collection Improvement Procedures

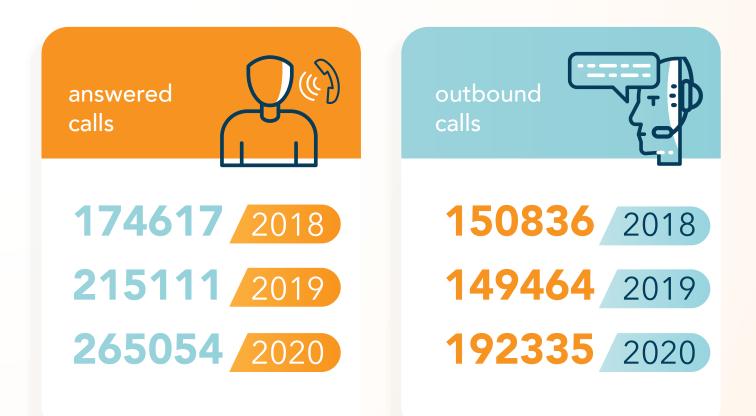
- Launching an e-payment awareness campaign on social media;
- Sending monthly reminders to customers to use e-payment channels;
- Implementing IVR bill payment;
- Giving away E-payment Prizes (electronic devices);
- Updating the payment gateway on MZEC website;
- Improving Call Centre operations (number of incoming calls, number of abandoned calls, etc.) and complaints resolution.

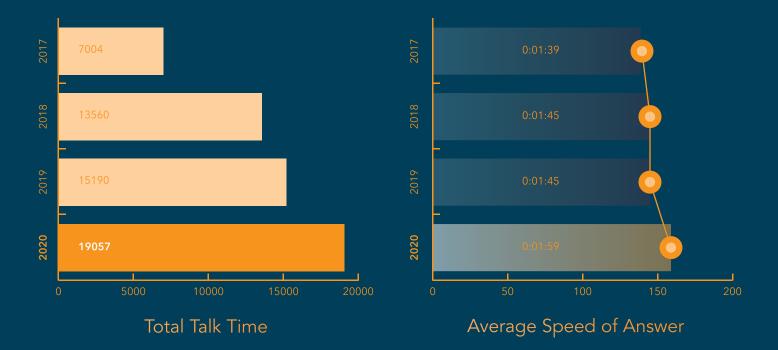
Actions taken to improve the Call Centre operations started from 2019 with the IVR tree review and update:

- Choice of talking to an agent was added;
- Number of agents was increased during 2020;
- \checkmark Two team leaders were appointed.
- Quality and knowledge assurance system was commissioned.

Statistics of Services Provided through the Call Center and MZEC's Offices 2020

A better centralisation





The reason for the increase in the Total Talk Time from 15,190 in 2019 to 19,057 in 2020 is due to several factors explained as follows:

- 1. Most of the inquiries were related to the increase in prepaid services as customers were asking about this service and showing interest in it.
- 2. The new tariff categories (residential, non-residential, commercial, cost-reflective tariff) announced by the government in the last quarter of 2020 to be implemented by 2021 made many customers call to request clarifications, which raised the Average Speed of Answer from 0:01:45 to 0:01:59 in 2020.
- 3. The centralized service related to the bill payment instalment plan offered to MZEC customers facing financial difficulties to avoid disconnection was shifted from the offices to the Call Centre to ensure service efficiency.

Improvement of Complaints Handling Performance

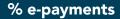
Handling of customer complaints indicates an improvement in performance whereas complaint resolution duration was shortened to one business day in 2020 compared to two business days in 2019.

Complaint Handling Performance (Average Days to Close Customer Complaints) 2019-2020

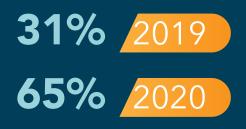


This improved performance was due to:

- Change of name/nature of services of all departments.
- Automatic classification of complaints in the system.
- \checkmark Calling and updating of the customer about his complaint after one business day.
- \checkmark It was made compulsory to close the complaint maximum by two working day.
- \checkmark It was made mandatory to send SMS to account and customer number.







Tariff Reform

Due to the changes and developments in the state of the general economic plan of the country, which is managed from "Twazin 'and National Support Center. There are set of initiatives under the Sultanate's Medium-Term Fiscal Plan (2020-2024). One of these major initiatives is the reform of electricity and water subsidies. This will take a gradual implementation approach starting in January 2021 until 2025. In line with the program for reforming electricity and water subsidies, new tariffs will be implemented for electricity and water services effective 1 January 2021, which includes the gradual removal of subsidies during the upcoming years with citizens (no more than two accounts) continuing to avail from government subsidies until 2025.

The subsidy reform initiative aims mainly to:

- \checkmark Enhance the efficiency and sustainability of the utility sector.
- Improve the efficiency of government spending and its financial sustainability.
- Enhance the social safety net ecosystem by rechannelling government subsidies to the segments of society most in need.

National Transformation Program for Smart & Prepaid Meters

This program, which envisages the rollout of 1.2 million smart meters across the country over the next five years is considered a leading national project in terms of digital transformation, with the smart meters set to replace mechanical meters.

MZEC is part of this initiative which is basically in line with the socio-economic objectives of Oman Vision 2040. These focus on keeping pace with global developments and employing technology in all fields including the effective and efficient delivery of electricity-related services in a manner that supports the development of smart, sustainable cities with advanced basic services. Benefits anticipated include regular and more accurate meter reading and billing, the elimination of discretionary meter reads and the development of new services for customers who will also be able to monitor and manage their consumption. The new smart meters will reduce network losses and shorten the duration of power outages.

MZEC will bear the costs of replacement and operation of the new smart meters and steps will be taken to ensure that meter readers are not impacted by the change.



HUMAN CAPITAL

MZEC's workforce is its most valuable asset. With the network expanding and the workload increasing, the number of employees in the company increased from 541 in 2019 to 549 in 2020. To align with government's Omanisation policy, one expatriate staff had to resign during the end of 2020.

In addition, during COVID-19 Learning Management System (LMS) online workshops were extended to 98% of the staff, and 4175 courses were completed.







By adopting digitization and with the aim of enhancing learning and developing the company's human capital, MZEC staff have designed online workshops on various topics covering many disciplines and topics, which are not only limited to the energy sector, but also touch on a number of other important topics.

Mazoon Electricity was committed to providing a safe environment for its employees, contractors and customers. Throughout the COVID-19 pandemic it took practical

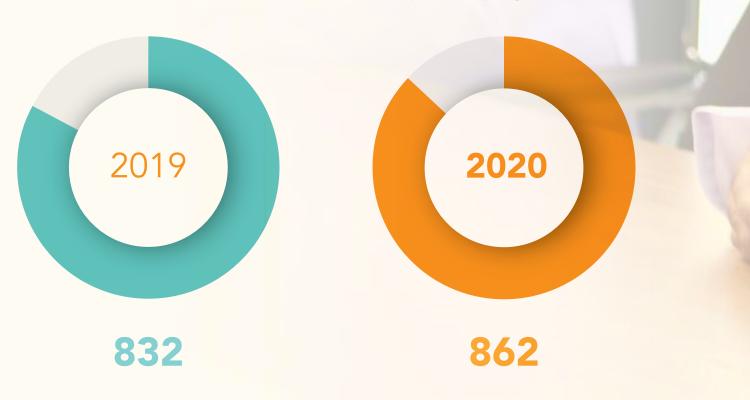
steps and implemented robust measures to ensure the welfare of all. The IT department designed unique tools to keep all the staff connected and provided timely and appropriate customer services. Laptops and access to the system via VPN was also provided. This step was helpful in activating contingency plan of working online and for accessing the system via VPN. This contributed to increasing productivity and loyalty of company's staff. In addition, the employee engagement department completed an outpatient clinic programme

for the staff to collect challenges faced by them in five areas. The feedback was used to find solutions that aligned with the company's vision and mission and business needs.

All the above initiatives have contributed to provide the best experience for our 473,436 customers.

Furthermore, the time period for hiring was downsized after adopting a new recruitment process. Previously new joiners would take almost three months to join from the time of advertising till the joining date.

Number of Customers Served per Employee





INFORMATION TECHNOLOGY & CYBER SECURITY

MZEC made progress with its digitalization plan. In 2020, more than 30 processes were digitized and moved to workflow process. In addition, MZEC developed its own end-to-end supply chain system that complies with Oman Tender Law and MZEC's Internal Procurement Manual.

In addition, a new unit rate system was developed to improve task allocation to MZEC's contractors.

Moreover, MZEC's IT Department passed the ISO27001 recertification audit with zero nonconformity to the standard. Several cyber security awareness sessions were conducted across MZEC's branches. DuringIn 2020, Mazoon Electricity conducted penetration testing to enhance toand evaluate it resilience to any cyber-attack. On the cyber security culture development front, Mazoon ElectricityMZEC conducted several phishing email simulations to evaluate its staff awareness level.

In connection to enduser support, information technology departmentthe IT Department successfully closed 97% of the support requests. Furthermore, Mazoon Electricity hasMZEC successfully shifted its operation to the new office at Adam with no customer service interruption.

During COVID-19, Mazoon ElectricityMZEC was able to support work from home and

provided VPN access to all, to ensure network security and confidentiality of the data. Additional laptops were distributed to support staff working from home. Several security posters were distributed, and awareness session were conducted to improve staff awareness about cyber security risks associated with working from home.

Digitalization Plan

During COVID-19 pandemic, MZEC business leaders recognised that automation and digitalisation business processes are important for the success of the organisation. They also understood that automation processes are no longer considered 'nice to have' but are imperative to the operation. This global pandemic crisis forced leaders to accelerate their digital transformation plans not only

to anticipate the challenges that they will face on the long run but also to deal with the immediate ones. As the world moves towards digitalisation, studies have shown that for organizations to adapt to the future modalities of doing business, they must automate around 90% of their business internal and external processes.

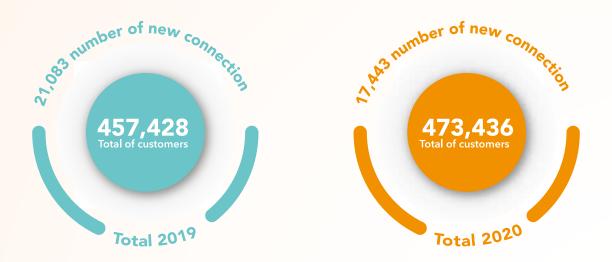
About 50-80% of MZEC's internal and external operations are processed

manually (in paper form), which is considered a very high percentage compared to the size of the business. To eliminate the risk of being left behind and to stay ahead, the company has planned to start transferring its business process from manual to automated. To achieve the required transformation, the organisation is planning to implement a five-year digitalization strategy starting from 2021 till 2025.

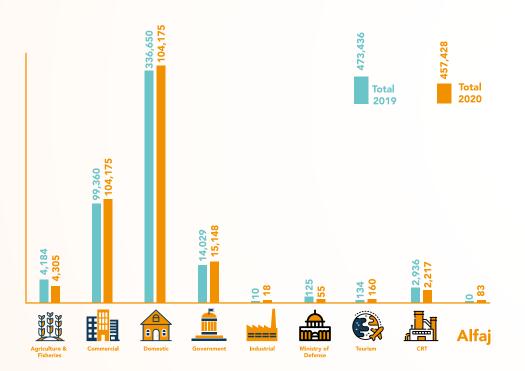


OPERATION PERFORMANCE

a. Customer Base



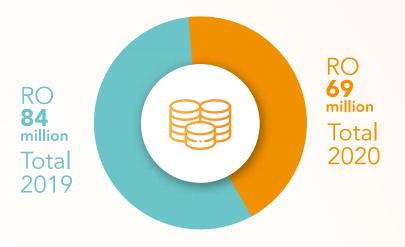
Customer Categories



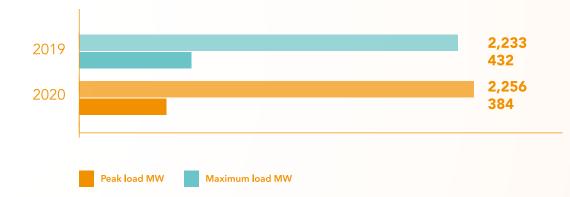
Customer Category CRT

Commercial	Government	Industrial
1,705/2019	1,155/2019	76 / 2019
1,414/2020	737/2020	66 / 2020

b. Capital Expenses



c. Supply Pattern



d. Sold Units (GWh)



Sold Units by Customer Category (GWh)

A A Agriculture & Domestic Commercial **Fisheries** 256 / 2019 811 / 2019 5,181 / 2019 5,624 / 2020 273 / 2020 737 / 2020 ____ **Ministry of** Government Industrial Defense 363 / 2019 0/2019 220/2019 273 / 2020 1 / 2020 181 / 2020 Aflaj Aflaj **Tourism** CRT 42 / 2019 1,918/2019 0/2019 33 / 2020 1,868/2020 2 / 2020

8,792 / Total 2019 8,993 / Total 2020

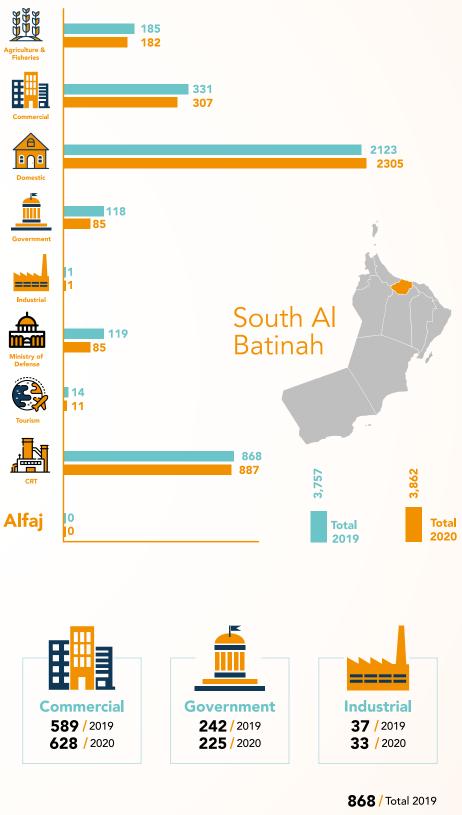
CRT Category GWh



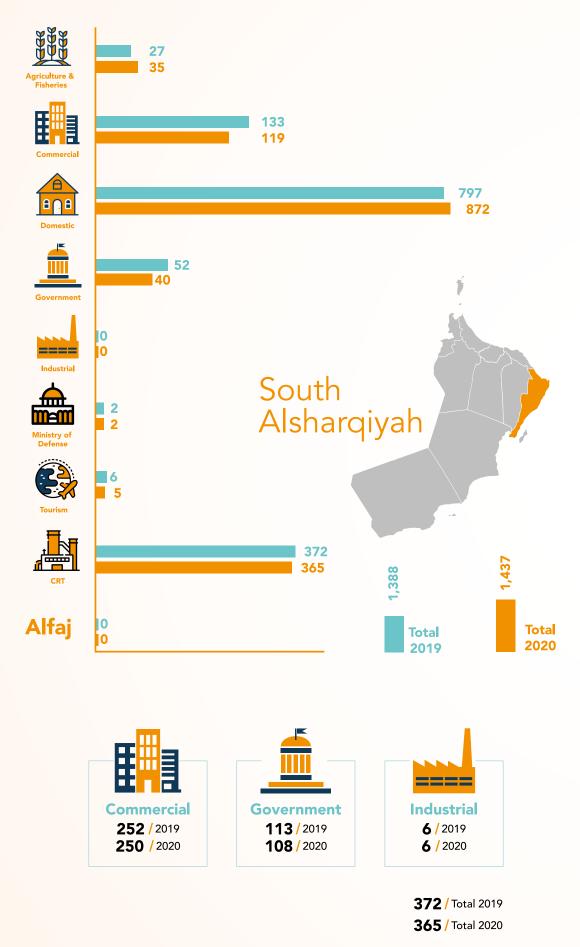
1,918 / Total 2019 **1,868** / Total 2020

Sold Units by Governorate

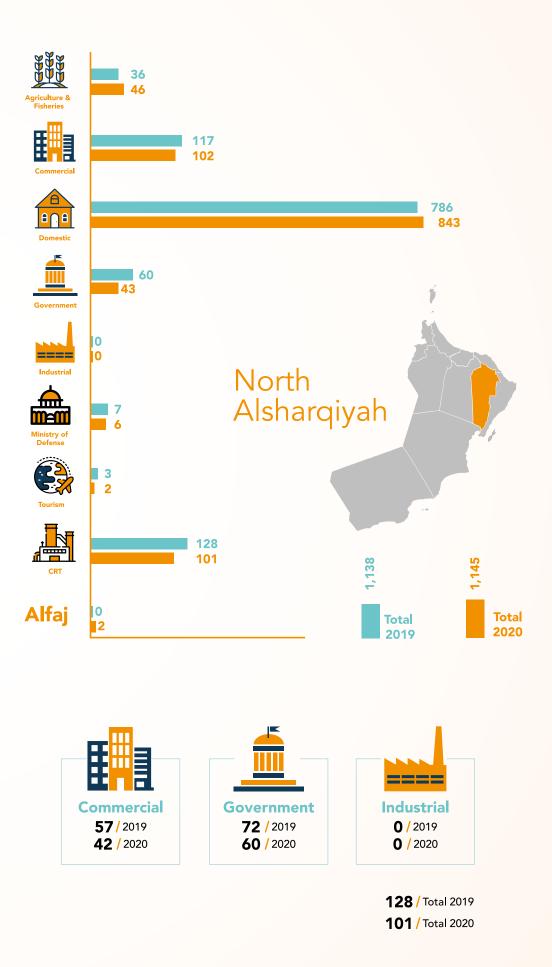
South Al Batinah



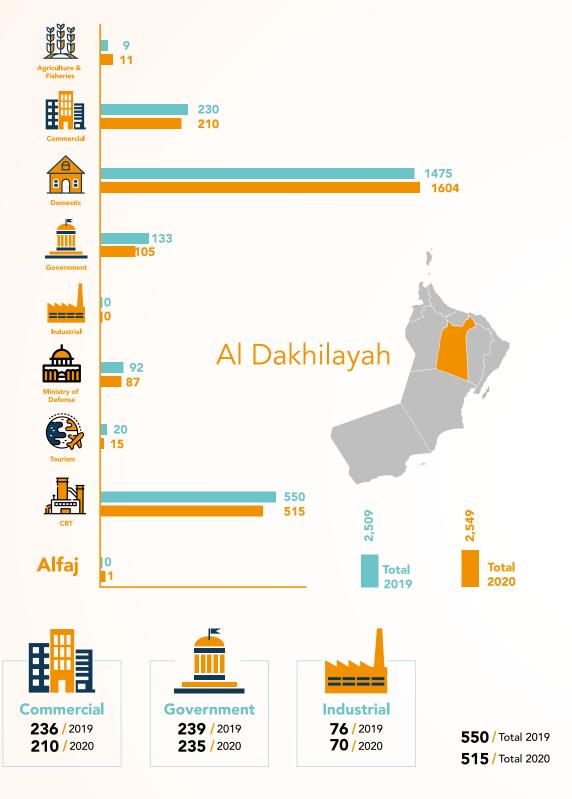
South Alsharqiyah



North Alsharqiyah

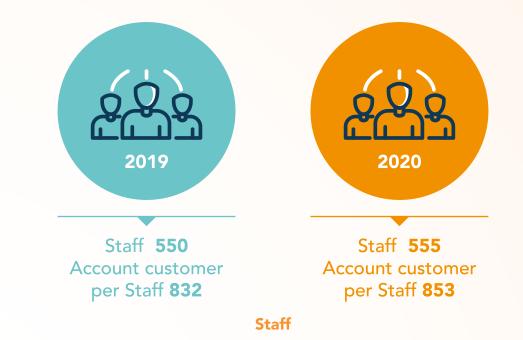


Al Dakhilayah



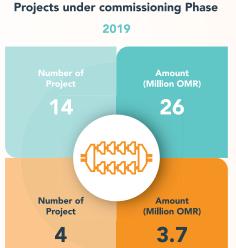
e. Electricity Losses



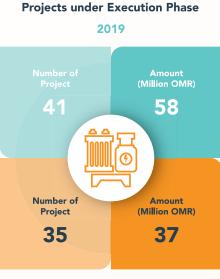


f. Electricity Reliability







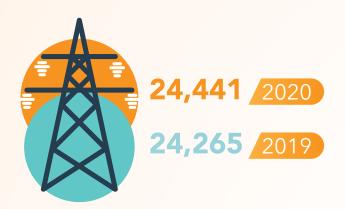


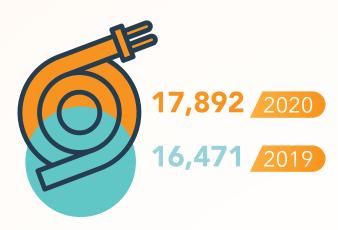












Total length overhead network (Km)

Total length underground network (Km)



Grid 29 (2019) 32 (2020)



Primary 292 (2019) 301 (2020)



Distribution 20,064 (2019) 20,792 (2020)

Number of stations



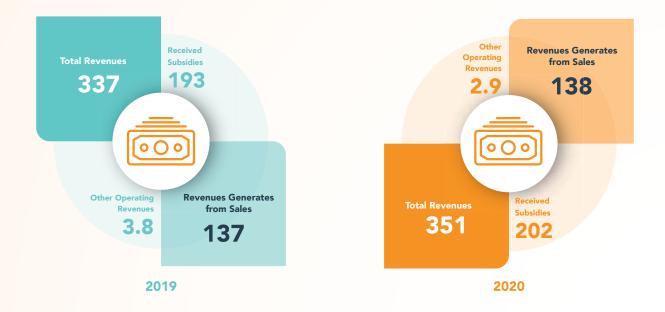
Reliability index*

*Non Audited figures

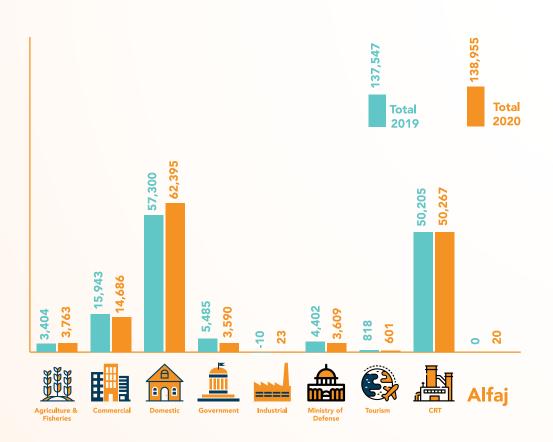
FINANCIAL PERFORMANCE

a. Income

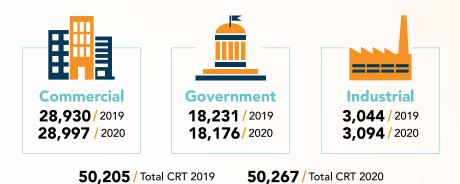
Revenues in Million OMR



Revenues Category

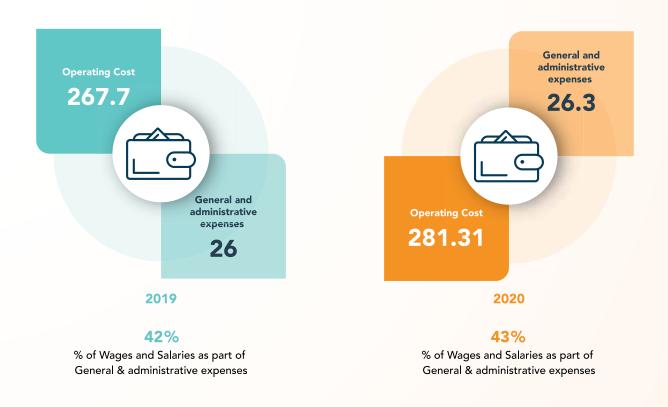


Revenues Category - CRT



b. Expenses

Expenses by Category in Million OMR



c. Cost by Category Cost in OMR



operating cost Per GWH 30.45 (2019) 31.28 (2020)



Capex per Overhead Network

3.46 (2019)

2.82 (2020)



Capex per underground Network 5.10 (2019) 3.86 (2020)



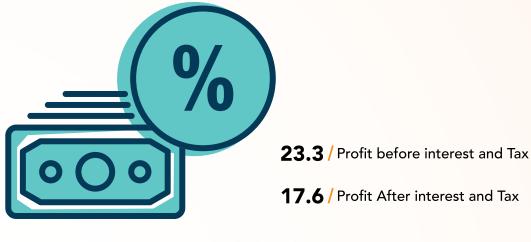
Capex per Customer 184 (2019) 146 (2020)

d. Sale Proceeds Collection Days

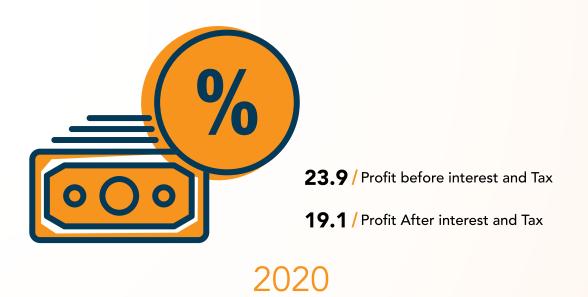


e. Profits

in Million OMR



2019



COMMUNICATION AND SUSTAINABILITY

Social Media Channels



Oman Vision 2040 and Government Collaboration

We are inspired by Oman Vision 2040 and are encouraged by its commitment to strengthening the role of all sectors, including the electricity, in serving as a true partner in national development. Taking inspiration from the Oman Vision 2040, MZEC is proud to collaborate and embrace many of its national priorities, including building national capabilities, Omanisation, and SME development, among others.

All the projects undertaken by MZEC are in line with the aspirations of Oman Vision 2040 that lays down the foundations "for building national capabilities and achieving economic growth and social well-being."

At the core of Oman Vision 2040 are policies that call for sound development and outstanding infrastructures that provide stronger economic growth together with better sharing of the benefits of increased prosperity among communities. MZEC, assuming its role as an Omani company, promises to contribute

to this progress journey.



Communication Initiatives and Achievements:

There is no doubt that the COVID-19 pandemic has caused a crisis of a magnitude with no parallel in modern times, casting a shadow over almost all sectors around the world. In such critical times, it was essential for the Communication Team to prioritize internal and external communication activities. To this end, the Team ensured that the appropriate tools are in place to keep both the employees and customers updated about all relevant information. This has given us the opportunity to stay on the right track and keep everyone safe.

To effectively communicate, the Communication Department had a strong communications plan in place. The team made sure its response to the evolving situation was managed well. It used various communication channels and made sure all the staff were aware about them. The Department made sure that the staff received key information from the company before they heard it from somewhere else.



As per the guidelines of the Supreme Committee, MZEC allowed employees to work from home so its business could continue while keeping customers safe and observing social distancing protocols.

During this time, the Communication Team constantly kept in touch and kept providing staff with information on workfrom-home protocols, safety guidelines, how to communicate with their managers and information flow. Information about meetings and briefings were conveyed too.

The main concern of the team was to make sure employees are safe and healthy. It constantly shared information about good hygiene habits such as hand washing protocols, using hand sanitizer, avoiding touching the face and observing social distancing to help mitigate the spread of COVID-19. The team made posters, sent out special messages and delivering essential health and safety information sent out by our health authorities.



Keeping Employees Updated

With the situation constantly evolving, the Communication Department was keen to keep the employees informed of the latest developments such as decisions about switching to remote work, returning to the office, or if an employee at the workplace tested positive for COVID-19. The team sent out alert messages as needed, keeping employees informed of any updates on the company's policies related to dealing with the COVID-19 pandemic.



Rehabilitation and Communication

With the aim of enhancing efficiency, improving

reliability and expanding its servicing capacity in 2020, MZEC undertook a major project of rehabilitation of the distribution networks in the coastal areas of Jalan Bani Bu Ali, South Sharqiyah Governorate. The Communication Team kept communication channels open with customers all the time.



Internal Communication Committee

To encourage our staff to improve their competences and performance level, MZEC formed an internal communication committee as part of its Employee Development Initiative. The function of this Committee is to enhance employees' engagement and improve their personal and professional skills in a manner that reflects on MZEC's overall development and achievement of its goals. As for the members of the Committee, their role is to encourage employees to participate in internal and external events linked to their skills.



Toastmaster Sessions

Furthermore, MZEC introduced weekly Toastmaster sessions with the intention to make employees improve their public speaking skills, build leadership abilities, maximize personal growth, build selfconfidence and self-awareness.

Recognising that new skills and ways of learning will help employees grow, MZEC uses a variety of methods, initiatives and programmes and makes training and development integral elements of its strategy. It adopts continuous learning as means of boosting employees' growth and gaining a highly skilled workforce.



Online Courses

To raise employees' competency levels across the Company, MZEC held online courses not only to enhance employees' performance but also to improve the overall quality of services provided by the Company.



Renewables

Renewable energy utilization in Oman is a topic of growing interest for the Omani government and the private sector. MZEC's focus on this initiative presents a step in the right direction towards achieving the goal of Oman 2040 Vision: Renewable Energy Program, which aims to reduce dependency on non-renewables. This in turn will minimise the demand on MZEC stations, which will result in lower electricity bills.

Moreover, MZEC strived to raise public awareness about renewable energy, and to contribute to the development of the society by providing support to companies engaged in the business of PV systems. MZEC seeks to find sustainable solutions to protect and preserve the local environment for future generations.

The topic of renewable energy has become one of the most discussed topics among environmental scientists today since the concepts of solar powered systems can serve long-term investments in a convenient and sustainable way and help in finding ways to reduce climate change. The following is a summary of the main challenges and key issues related to non-compliance:

- Non-environmentally friendly: Use of utility grid supply can play a major role in increasing the carbon footprints which are created from non-renewable sources. When the use of solar and other renewable energy increases only then can the depletion of our planet natural resources will be reduced.
- Cost ineffective: Since these loads are dependent on the grid supply, MZEC will require payment of bills based on the amount of energy consumed to the electricity provider each month. Thus, operating costs will increase.
- Perishable source: Since oil and gas resources are limited, there is always a possibility that they will become unavailable or unusable.
- Power consumption: The stations and offices consume an average of 238,710.32 Kw/annually.



Social Initiatives

'For Lasting Prosperity'

To support Oman Government's initiatives to mitigate the social and economic impacts of COVID-19, MZEC has been part of Nama Group's visionary campaign 'For Lasting Prosperity'. The campaign, one of Nama Group's social sustainability initiatives, aims to help those who are directly affected by the pandemic, namely social security families and SMEs. Being one of Nama Group's distribution and supply companies, the families and SMEs affiliated to MZEC will naturally benefit from this initiative.

Nama Group launched this campaign by establishing a fund with an initial contribution of OMR 300,000 to cover electricity bills equally for social security families and SMEs. The targeted groups, including individuals and SMEs, can benefit from all donations from the Nama Group and other donors to pay their electricity bills during the pandemic. The campaign was launched in partnership with the government sector (Ministry of Social Development, Public Authority for Small and Medium Enterprises Development "Riyada", Al Raffd Fund) and Dar Al Atta'a. To carry out the campaign, Nama Group established a fund with an initial contribution of OMR 300,000 to equally cover electricity bill payments for families of social security and SMEs. All donations from Nama Group and other donors will benefit the targeted categories of individuals and SMEs by covering their electricity bill payments. The campaign has been launched in partnership with the Government Sector (Ministry of Social Development, Riyada and Al Rafd Fund) and Dar Al Atta'a



Environment initiatives

Safe Collection and Disposal of Lead Acid Batteries (LAB)

In line with its environmental sustainability practices, MZEC signed an agreement with Oman Environmental Services Holding Company (Be'ah) for safe collection and disposal of lead acid batteries (LAB).

The agreement helps MZEC safely dispose of chemicals used in the battery units in the main electrical stations. Be'ah will be responsible for collecting and transporting LAB from MZEC to certified processing and recycling facility. Beah's action will help MZEC ensure that its work processes are in accordance with the stipulated environmental laws of the Sultanate. Be'ah will also provide MZEC with approved LAB waste collection pallets that help prevent acids leakage.



Environmentally Friendly Electrical Transformers

MZEC won the 'Environmental Upgrade of the Year' recognition at the 2020 Asia Power Awards' in recognition for its successful environmentally friendly electrical transformers.

Understanding that current and future energy challenges require a market efficient, reliable, and environment-friendly technology, MZEC uses modern approaches to implement suitable environmental upgrades. As part of this strategy, the company began using environment friendly transformers which use green oil as an insulating medium rather than traditional mineral oil. MZEC was honoured with the Asian Power Awards for its state-ofthe-art execution capabilities of this important project.

The green oil transformers project sets a global benchmark and is differentiated by the environmental and socially responsible approach. MZEC believes that shift to green oil in transformers is one of the key steps towards greener and more sustainable future transmission and distribution networks. The chance to use a product which uses biodegradable oil was appealing to MZEC which is continually looking at more environmentally sustainable options



ICV

Being committed to the implementation of iBeing committed to the implementation of its optimised In-Country Value (ICV) strategy, MZEC is earnestly dedicated to increasing Omanisation rates and developing the skills of the national workforce.

As part of its intensive efforts to develop the national workforce in Oman, MZEC

has achieved a major milestone of 98.5% Omanisation during the year 2020.

The Company constantly encourages its contractors to hire Omani talents who are serving almost half million customers across governorates in Oman.



SME Support

As part of its commitment to high quality and professional operating standards in distribution operations, MZEC continue to issue internal electrical wiring license to electricians, thereby giving an opportunity to SMEs.

To obtain a license, Omani electricians must meet certain requirements and demonstrate their knowledge, skills, and ability to conduct electrical wiring installations. The Omani candidates who want to obtain a license must hold a higher secondary certificate or a sixmonth's training certificate in electricity from an authorised institute.

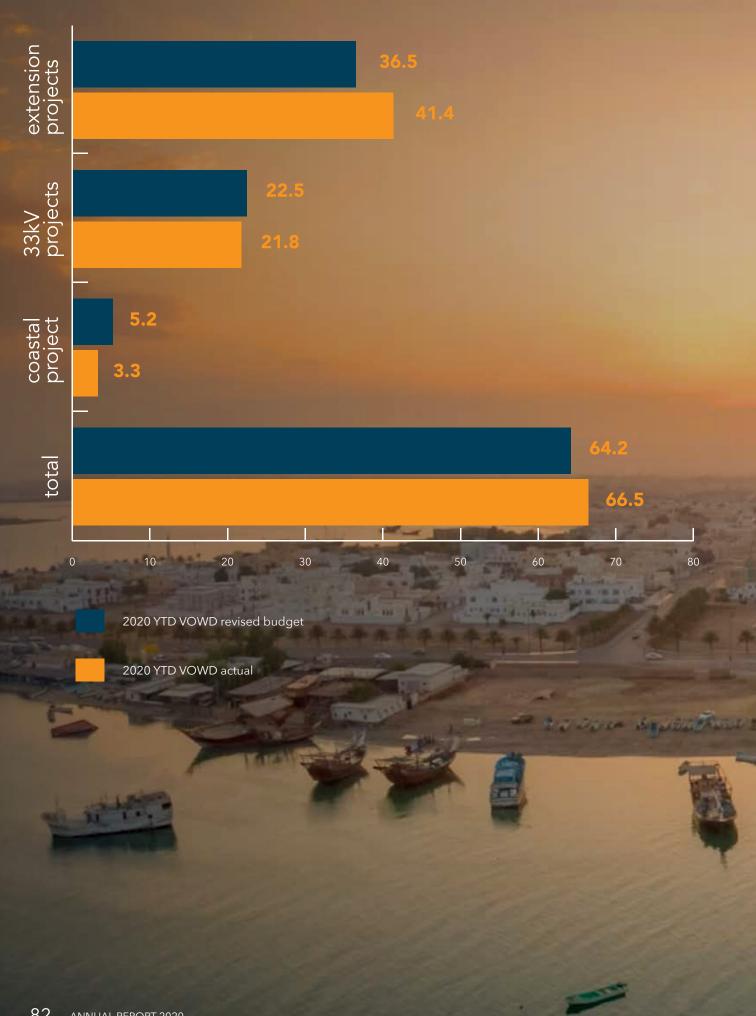
MZEC conducts written exams and practical test for candidates interested in securing a license. Once the electrician receives his license, he will be allowed to install electrical wiring for buildings as per set standards.



SUMMARY OF MAJOR PROJECTS ACHIEVEMENTS

Network System Development

MZEC continued to execute the projects planned for 2020 without compromising on safety and quality despite the COVID-19 pandemic situation. It managed to complete most projects as per the proposed plan. Several major projects were completed and added to the network. The value of the projects work done during 2020 is approximately OMR 66.5 million.



Coastal Areas Networks Project

One of the key important projects is related to renewing the distribution networks in the coastal areas of South Al-Sharqiyah Governorate that our company has undertaken. The electrical networks have been affected in the coastal areas due to external factors such as high humidity, high salinity and wind loaded with sand grains. These factors have caused the disruption of the conductors, corrosion of external steel and damage of LV cabinets, transformer conservators, radiators, support steel work and stays leading to frequent power outages in these areas. By taking up these coastal projects, MZEC has ensured the commitment in enhancing the reliability and quality of electricity for the customers in its distribution area. MZEC is adhering to all safety procedures while carrying out extensive measures in the area to regenerate the network. The project will be executed through different phases at a budget of over OMR 15 million. These projects are in line with the aspirations of Oman Vision 2040 that lays down the foundations to build national capabilities and achieve economic growth and social well-being. At every step possible, MZEC intends to contribute to this progress journey of Vision 2040.

By renewing the electrical network in the coastal areas, MZEC is continuing to invest in enhancing customer experience and improving efficiencies. As per the vision of the company, MZEC will continue to enrich the life of our customers by providing reliable and sustainable electricity.

DEMAND FORECAST

The peak load of MZEC increased gradually but the growth is changing from year to year depending on the situation during each year. The following figure shows the percentage of growth from 2008 until 2020. It is obvious that the percentage of growth increased rapidly in 2011 and 2012 and there was a sharp drop in load growth in 2010 due to the adverse weather conditions. In 2019 the load dropped sharply to 1.2% from 6.8% in 2017 because of the ongoing economic crisis.

In addition, with the government applying Cost Reflect Tariff (CRT) since January 2017 it is directly affecting the load behaviour of large customers. CRT, a major component of the revenue is a government subsidy, and the company continues to depend heavily on the government for their support. The Cost Reflective Tariff (CRT) is contributing 34% of the total revenue that includes industrial, commercial, government and large customers whose annual consumption exceeds 150 thousand KWh (In 2021, CRT customers whose annual consumption exceeds 100 thousand KWh). Furthermore, this year, the load growth and load consumption behaviour were affected due to the COVID-19 pandemic and oil price drop. Due to this, Oman government took various measures to limit the spread of the pandemic such as to close government offices and working from home, stopping some commercial activities and factories, stopping studies, and closing mosques. Thus, the load growth increased just 1% as compared to the 3.9% last year.



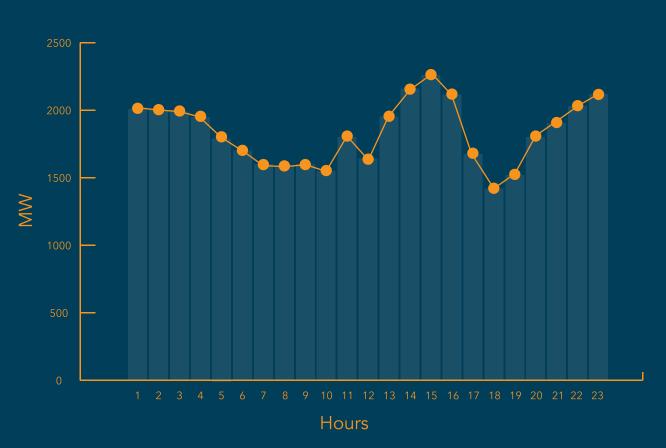
MZEC Peak Load in MW and Growth Rate

Figure 1: Mazoon Electricity peak load

The average growth as seen in the above figure is approximately 6% for all MZEC areas. It is expected to increase the load in the upcoming years since MZEC recognised non ordinary growth that will be driven by considerable number of governmental investments in form of tourism projects, infrastructure projects, and industrial projects as well as private sector investments accompanying them.

Load Curves

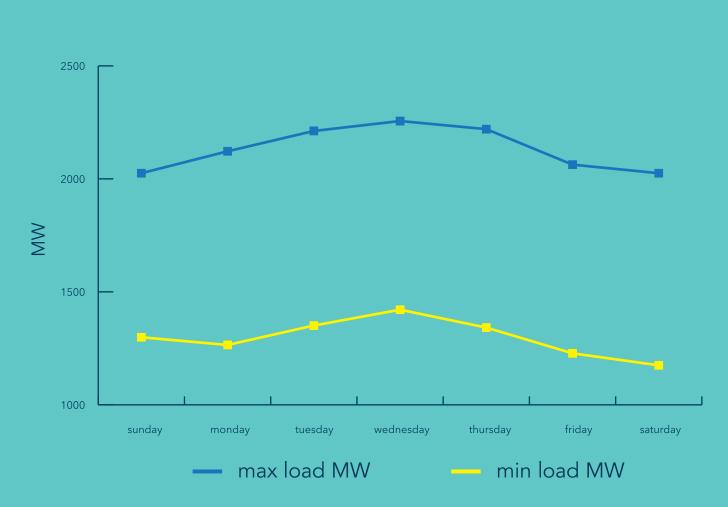
To give a general view of the load behaviour, the load profiles for MZEC taken on Wednesday August 5, 2020 which is the day when MZEC peak were recorded and presented in Figure 2 below. The highest load was recorded at 15:00 hours due to the number of people who return home to rest after their working hours. The load recorded was 2256 MW.



Daily Load Carve (5 August 2020)

Figure 2: Daily Load Profile of MZEC

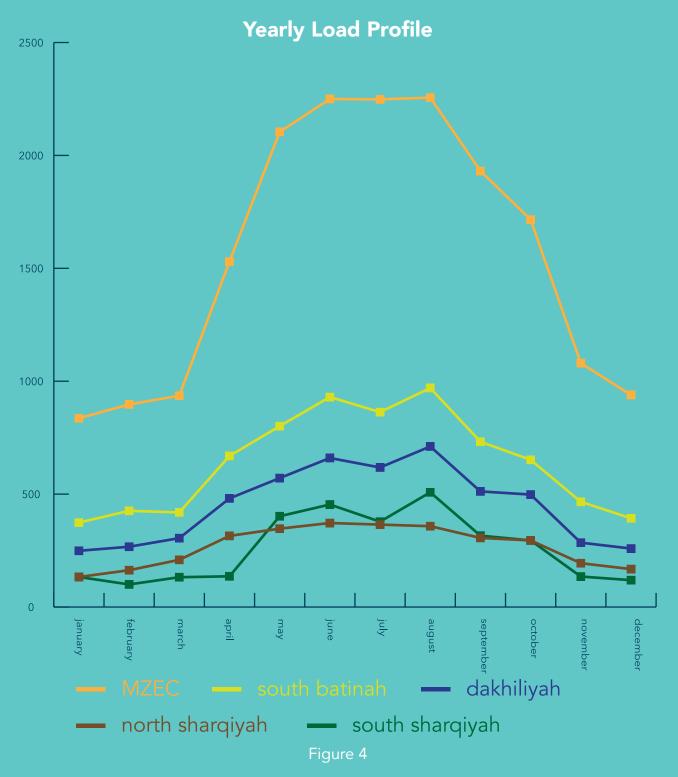
Similarly, a weekly load profile covering the period from 2nd August to 8th August 2020 was designed in Figure 3 to show the load behaviour of customers in a typical week of the year. The selected week included MZEC peak day. It is obvious that the load during weekends is slightly less than that during normal days.



Weekly Load Profile (2 August - 8 August2020)

Figure 3: Weekly Load Profile

To complete the picture, the yearly load profile for year 2020 until October was also plotted in Figure 4. The yearly load profile was obtained from spotting the highest reading in each month to the maximum load profile for the entire MZEC System as well as for each governorate.



Mazoon load curve follows typical load behaviour in hot countries as the peak period is in summer season that starts approximately in April and ends in September. It can be also of importance to note that MZEC peak is almost three times its minimum load recorded in off peak period during January and February. The demand side management needs to consider this issue to minimize the gap between peak period and off-peak period which no doubt will result on savings at generation, transmission, and distribution systems.

As can be seen from the graph of Figure 4, South Al Batinah Load represents the highest load among all the governorates followed by Al Dakhilyiah and Al Sharqiyah (South + North) governorates.

MZEC in GIS department has realised many achievements in the year 2020.

Geographical Information System (GIS) is currently the primary data repository for MZEC assets. The asset data in the system includes location information, asset attributes, and technical data. The reliance on GIS in the life cycle activities of various assets increases with the increase of customer service activities. Therefore, in order for MZEC to comprehensively and accurately capture the data of physical assets and make the most of the GIS, the following improvements were made during the year 2020:

GIS Gaps Project

• Started surveying of GIS GAPs locations in South Al Batinah and Al Dakliyah Governorates.

• So far, statistics of assets surveyed and added to GIS DB are:

o 24.5 KM of 11 KV lines

o 22.2 KM of LV lines

o 57 DSS - GMT

o 36 DSS - PMT

GIS

Geographic

Information

System

ABS Naming Convention

• Comparison of ABSs between SLD and GIS networks and update missing ABSs in GIS.

• Implementation of new ABS Naming Convention standards in GIS as available and updated in SLDs.

Implementation of GIS Data Improvement plan

• Completed the missing customer ACs as much as possible in coordination with other related departments (GIS-CRM Reconciliation = 98%)

• Completed critical missing attributes as much as possible (85%)

• Fixed most GIS QAQC errors

GIS DB Tuning (Phase One)

• Implementing GDB Tuning (Phase One) in level of GIS domains, new/remove fields, and data duplication.

New GIS Mobile Viewer (based on Portal for ArcGIS)

- Update GIS Data on Mobile
- Add MoH Plots
- Classified the mobile user and map content based on districts and/or team job operations
- Synchronised mobile feedbacks with GIS DB

Implementing New GIS Web viewer based on ArcFM Web (HTML5)

• Officially, published new GIS Web viewer (ArcFM Web -HTML5). Also, developed new enhancements on New GIS Web viewer for switch locator, feedback, develop home page, trace a feeder, and other tools

GIS Mobile App for Wiring Inspectors

• Developed and implemented new GIS Mobile app for wiring Inspectors to enable them to define new connection accounts and to draw a connection sketch for metre location, service cable, and service source. The sketch is linked with GSTS new connection workflow that will increase the level of completed NC jobs and the GIS data accuracy

GIS Web viewer specific for Assets Performance Team

• Development of a GIS Web viewer specific for assets performance department. Requirements that include web editing of specific GIS attributes and map contents.

Renew GIS Applications Maintenance Contract

• Extend GIS Applications Maintenance Contract to end of first quarter of 2022



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