



Annual Report

2019



* **Jordanians have stood, as they have always done, as shields to protect our homeland and its achievements. Jordanians do not retreat in the face of difficulties, but rather persevere and stand still, for they have inherited determination and persistence to work and accomplish, stubbornly.**

* **I know that many today are wondering to where we are heading. I tell them that Jordan is moving forward with steady steps, as the most difficult reforms are behind us, and the promising future is ahead of us, and we are moving towards it confidently to achieve the aspirations of the people of this country.**

* **The government has put forward an economic scheme that will be phased out along four dimensions that aim at reconsidering wages and salaries, stimulating the economy and promoting investment, improving the quality of services provided to citizens, administrative reform and public finance.**

* **Let us rise to build a new reality that maximizes growth and creates thousands of**

opportunities for every aspiring Jordanian citizen, for those who work and persevere, for those who have hope, for those who do not set a ceiling for their ambitions, for those who achieve a lot of less and do not expect achievement without work. Our awakening has no place for those who succumb to pessimism and melancholy.

Members of the Board of Commissioners:



Chairman of the Board of
Commissioners
CEO
Eng. Farouq Al-Hiyari



Deputy Chairman of the Board
of Commissioners
Eng. Wejdan Al-Rabadhi



Commissioner
Dr. Majd Al-Hawwari
To 30/6/2019



Commissioner
Mr. Bashir Al-Srour



Commissioner
Dr. Ali Swareh

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I am pleased to present to you the annual report of the Energy and Minerals Regulatory Commission (EMRC) for the year 2019, which summarizes EMRC achievements and activities, including organization, monitoring and pricing for all sectors organized by EMRC, as well as providing information on the basic indicators of electricity, petroleum derivatives, natural sources, radiation and nuclear activity sectors, in terms of statistical indicators or performance indicators. EMRC is a positive example of an independent regulatory authority that has succeeded in creating an organizational and supervisory climate that takes into account the maintenance of the public facilities regulated by it, builds on its achievements in previous years and looks optimistically

towards the future .

EMRC has continued to keep pace with the development and growth of the energy and minerals sector in the Kingdom by developing appropriate regulatory tools to maintain an effective sector structure that takes into account the interest of operating companies and consumers alike, as well as monitoring the performance and commitment of the licensees in this vital sector to achieve EMRC's goal of organizing the sector on the basis of balance between the interests of consumers, licensees, investors and any other related parties, and ensuring that the licensees are provided with safe, stable and high-quality services.

Perhaps the most prominent achievement of EMRC in 2019 is the issuance of regulatory legislation for the petroleum derivatives sector. EMRC was entrusted with these regulatory and supervisory tasks after the issuance of the Energy and Minerals Regulatory Commission Law No. (8) of (2017). EMRC issued a regulation for licensing activities related to the petroleum derivatives sector, and issued instructions related to organizing the activities of various petroleum derivatives, in addition to preparing (14) standard licenses related to the practice of various activities in this sector.

As for the other sectors organized by EMRC, EMRC continued its keenness to apply and implement the laws, regulations and instructions of EMRC regulatory work in the sectors of electricity, renewable energy, petroleum derivatives, radiation protection, nuclear safety and security and natural resources, and to maintain and develop an effective structure for the sector to enhance its economic viability and improve its efficiency.

In conclusion, I would like to extend my sincere thanks and appreciation to all EMRC staff for their efforts and tireless endeavors towards upgrading the energy and minerals sector. As we approach (2020), I wish that the efforts of EMRC staff continue to accomplish the desired achievements and overcome the challenges facing us with determination, persistence, and outstanding spirit of the youth.

Chairman of the Board of Commissioners
CEO
Eng. Farouq Al-Hiyari

EMRC Vision

To become a pioneer in regulating and developing the sector of energy, minerals, and radiation and nuclear applications in a peaceful, secure and sustainable manner.

EMRC Mission

To ensure the provision of secure, sustainable, durable, high quality and affordable services, through advancing regulation, supervision, and competition in the energy and minerals sector, and the uses of nuclear energy and ionized radiation in peaceful areas to ensure the interests of consumers and investors.

Core Values

- **Transparency, integrity and justice.**
- **Maintaining competitiveness.**
- **Teamwork spirit.**
- **Continuous improvement of performance.**
- **Motivation.**
- **Quality control and assurance.**
- **Community responsibility.**
- **Initiative and creativity.**
- **Cooperation, coordination and integration with partners.**

ADMINISTRATIVE SYSTEM, ORGANIZATIONAL STRUCTURE AND STAFF DISTRIBUTION FOR 2019

The administrative framework of EMRC is regulated by the Administrative Organization Regulation No. (88) of 2018.

Under this Regulation, the organizational structure of the Commission consists of the Board of Commissioners, CEO, the departments, directorates and units shown in Figure (1) Organizational Structure.

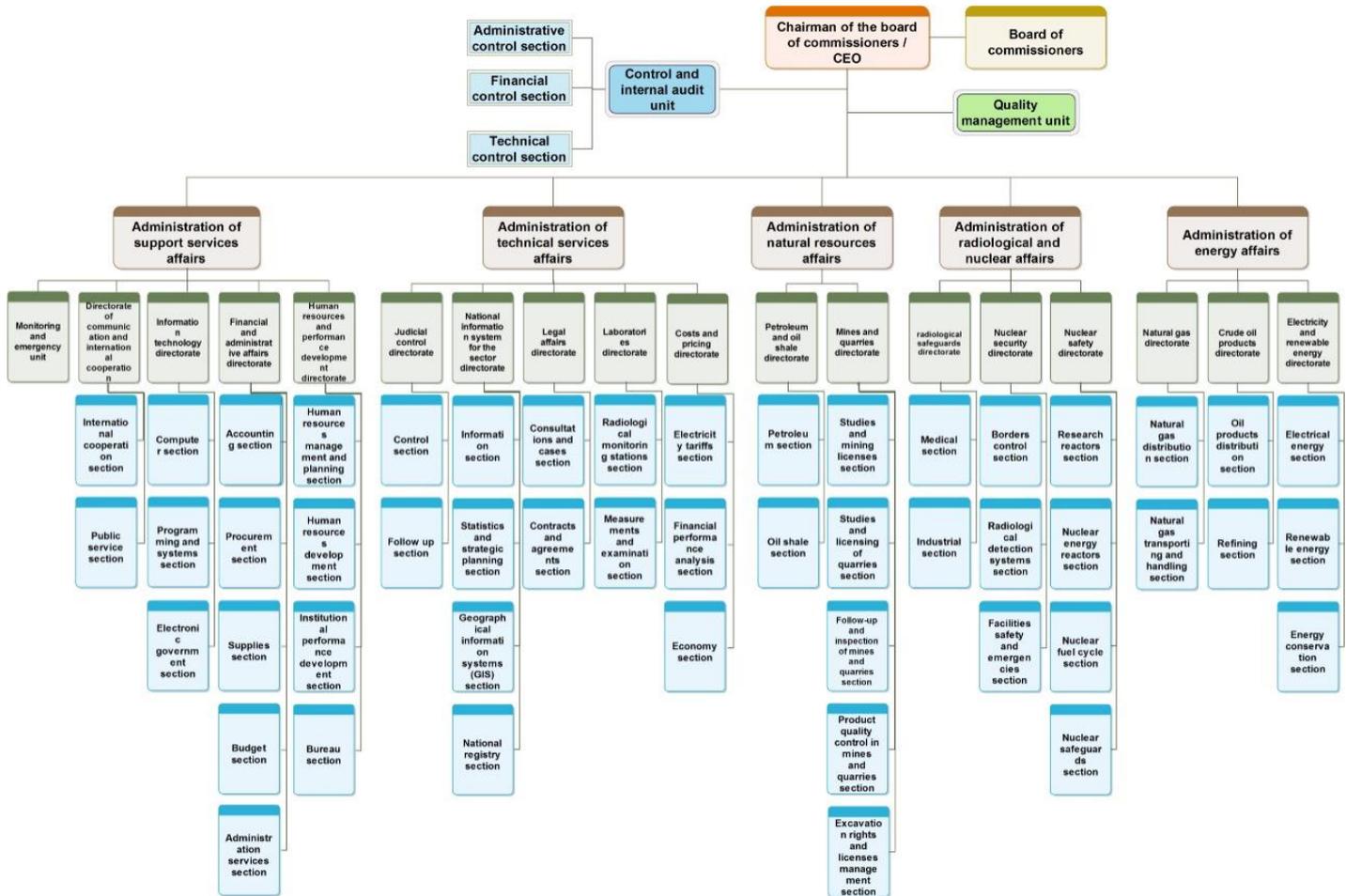


Figure (1)

Figure (2) shows the number of staff members of the Energy and Minerals Sector Regulatory Commission amounting to (353) employees in 2019, including 282 male employees and 71 female employees.

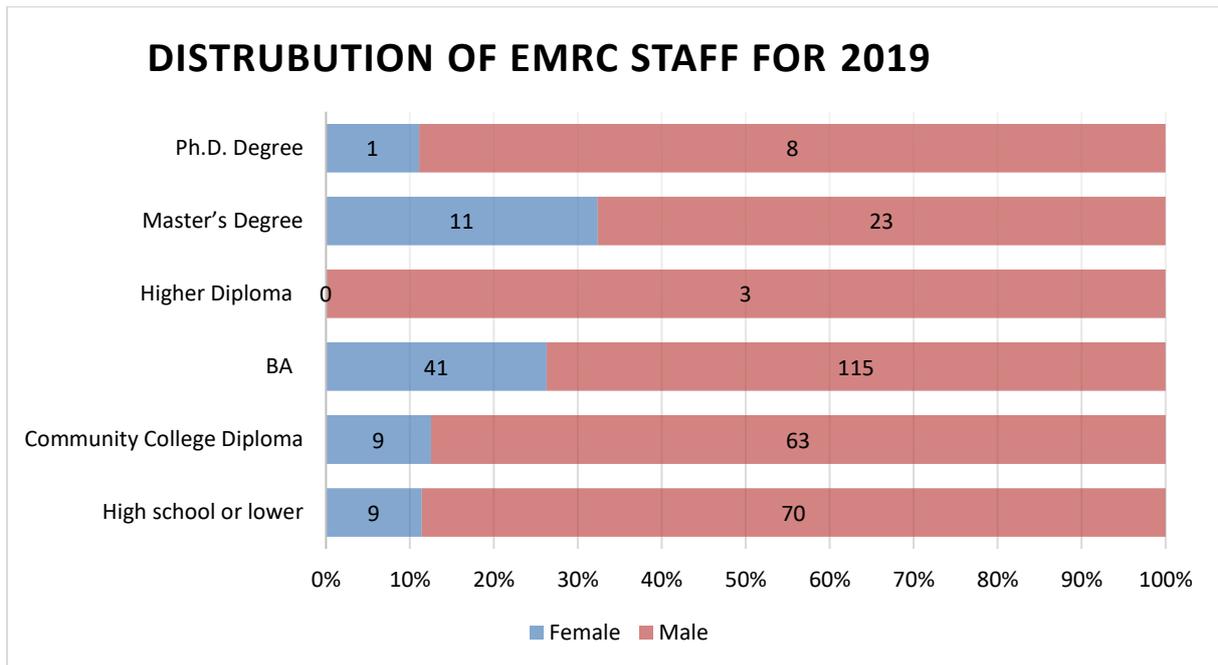


Figure (2)

Employees are distributed across the following locations and regions:

- ✓ **Head Offices in Amman /Eighth Circle.**
- ✓ **Control station in Aqaba.**
- ✓ **Radiological control gates at land, air and sea borders.**
- ✓ **Electricity Distribution Companies/Law Enforcement Agency**

ABBREVIATIONS:

Table (1)

Kilowatt	kw
MW	Megawatt
kWh	Kilowatt .hour
MWh	Megawatt.hour (1000 kilowatt hour)
GWh	Gigawatt hour (1.000.000 kilowatt hour)
KvA	Kilovolt-Ampere
MVA	Megavolt Ampere
kV	Kilovolt
KgOE	Kilogram of Oil Equivalent
toe	Ton Oil Equivalent
Km	Kilometer
km.circuit	Kilometer - Circuit
m /s	Meter / Second
μ Sv/h	Microsievert/hour

INTRODUCTION:

EMRC has been keen to ensure balance between the interests of consumers, licensees, investors and any other stakeholders, maintaining the interests of consumers, and maintaining and improving the efficiency of the structure of the sector, ensuring the provision of safe, stable, durable and high quality services, providing public safety conditions and requirements, protecting the environment and human health and property in accordance with the provisions of legislation related to the organization of the sector through the application and implementation of laws, regulations, and instructions for EMRC regulatory work to the energy sector, natural resources, minerals, radiation and nuclear work, and petroleum derivatives in the Kingdom, including:

- **radiation protection, and nuclear safety and security.**
- **generation, transmission, distribution and supply of electric power**
- **renewable energy**
- **petroleum, petroleum products, and natural gas**
- **oil shale and coal**
- **biofuel**

SECTORS REGULATED BY EMRC AND THE LEGISLATION GOVERNING ITS WORK, AS INDICATED IN FIGURE 3 BELOW.

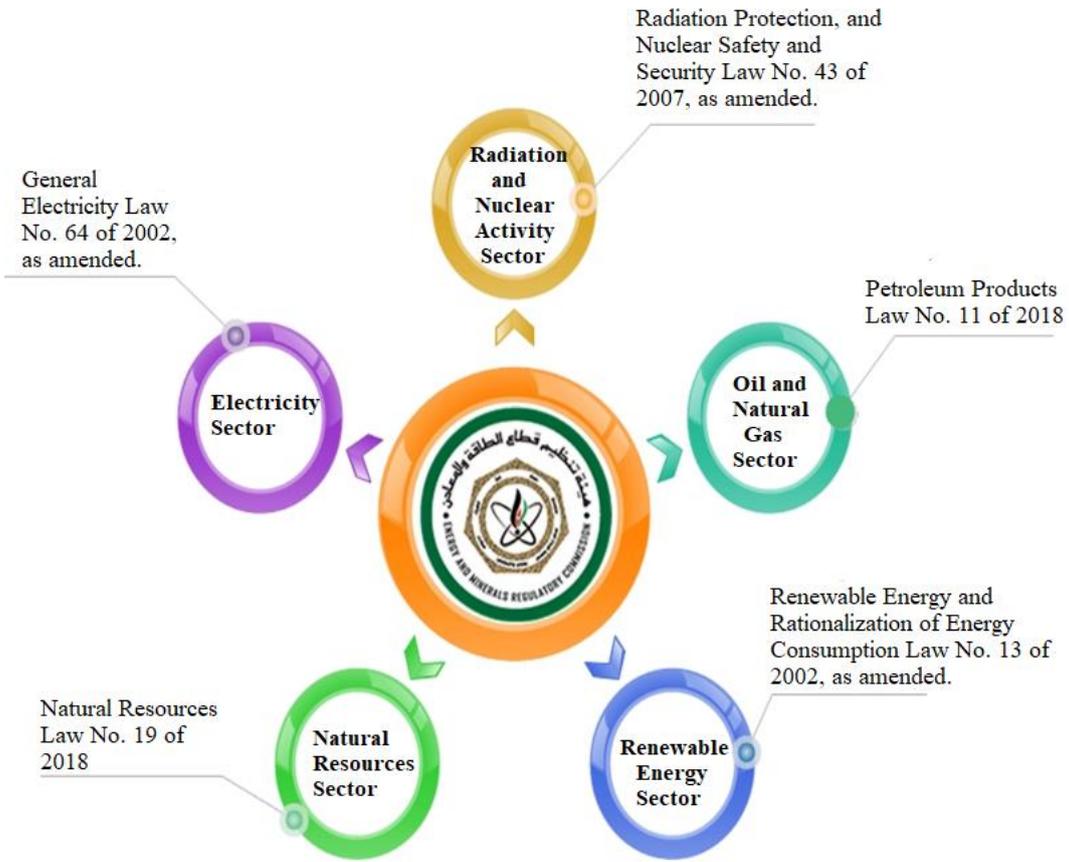


Figure (3)

POLICY AND PLANNING:

The Ministry of Energy and Mineral Resources adopts comprehensive planning for the sector in terms of organization and the development and follow-up of public policies to fulfill the tasks entrusted to it, namely, providing the necessary energy of various forms for the overall development purposes at the lowest cost possible and according to the best specifications, in addition to attracting the necessary capital to invest in the various fields of energy, such as electricity generation, production of petroleum products, exploitation of natural resources and local energy resources, especially renewable energy sources.

CONTROL AND REGULATION:

EMRS is in charge of regulation and control functions of energy, natural resources, minerals, radiation and nuclear sectors in the Kingdom, including petroleum, petroleum products, oil shale, coal, natural gas, liquefied natural gas, biofuels, and generation, transportation, distribution and supply of electrical power, renewable energy, radiation prevention, and nuclear safety and security.

INSTITUTIONS OPERATING IN THE RADIOACTIVE AND NUCLEAR SECTOR:

JORDAN ATOMIC ENERGY COMMISSION: Jordan Atomic Energy Authority was established in 2008 with the aim of transferring the peaceful uses of nuclear energy and radiation technologies to the Kingdom and developing its use for the generation of electricity, water desalination, and for agricultural, medical and industrial fields.

Jordan Nuclear Reactor For Research and Training (JRTR): JRTR is the cornerstone of research and training in nuclear science and technology in Jordan. It provides a strong platform for training and scientific research for nuclear engineering students, other nuclear scientists, engineers and technicians to operate, maintain and develop nuclear reactors. It will be used to produce medical and industrial isotopes to support nuclear applications in medicine, agriculture, water and industry at the level of Jordan and the region.

SYNCHROTRON (PHOTODIODE): The Synchrotron Center SESAME has been established as the world's first center of excellence in scientific research in the Middle East, similar to the European Organization for Nuclear Research (CERN) in Europe. It is a joint government organization of the region's Member States under the auspices of UNESCO and hosted by Jordan in the town of Alan, Balqa Governorate.

Subcritical system (JSA). The Jordanian subcritical nuclear system was built and operated in the campus of Jordan university of science and technology (just), as the first nuclear facility in Jordan for education, training and scientific research purposes in order to increase the experimental knowledge of just nuclear engineering students and to conduct practical experiments for the fundamentals of reactor engineering.

RADIOACTIVE WASTE MANAGEMENT FACILITY: A facility for handling, processing, adapting, temporary or permanent storage of radioactive wastes.

MEDICAL AND INDUSTRIAL INSTITUTIONS: Medical/industrial facilities authorized to practice radioactivity business using radioactive sources, totaling (709) facilities.

INSTITUTIONS OPERATING IN THE ELECTRICITY AND RENEWABLE ENERGY SECTOR:

NATIONAL ELECTRIC POWER COMPANY: A government-owned public shareholding company whose mission is to build, operate and maintain the transportation system within the Kingdom's borders, in addition to the transportation system that connects the electrical system with the electrical systems of other countries through expanding the construction of generation units through the private sector and/or the public sector.

CONVENTIONAL POWER GENERATION COMPANIES:

Seven companies that are responsible for generating electricity from conventional sources and selling them to the National Electric Power Company as follows:

CENTRAL ELECTRICITY GENERATION COMPANY: A public joint stock company that is engaged in the generation and wholesale sale of electric power to the National Electric Power Company. It was established in 1999. The Company's generating capacity is 1034 MW.

SAMRA ELECTRIC POWER GENERATION CO. (SEPGCO): A private shareholding company fully owned by Government, whose mission is to generate electricity and sell it to the National Electric Power Company. It was established in 2004. The Company's generating capacity is 1245 mw.

AED-Jordan PSC (Al-Manakher): A private company owned by the US AES company and the Japanese MITSUI Company, which is responsible for generating electricity and selling it to the national electric power company. It was established in 2009. It owns the first private sector project in Jordan under the patronage of his majesty, which is East Amman/Al-Manakhir plant that was officially inaugurated by King Abdullah 11 bin al-Hussein on 26/10/2009. The company's generating capacity is 370 mw.

AL QATRANA ELECTRIC POWER COMPANY: A private company owned by the Korean Company KEPCO and the Saudi Company XENEL. The Company was established in 2010 to generate electricity and sell it to the National Electric Power Company. The Company's generating capacity is 370 MW.

AMMAN ASIA ELECTRIC POWER COMPANY: A private company owned by the Korean Company KEPCO and the Japanese Company MITSUBISHI, whose mission is to generate electricity and sell it to the National Electric Power Company. It was established in 2014. The Company's generating capacity is 573 MW.

AES Levant: a private company owned by the US AES company and the Japanese MITSUI Company, whose mission is to generate electricity and sell it to the National Electric Power Company. It was established in 2014, and its generating capacity is 241 mw.

ZARQA ELECTRICITY GENERATION COMPANY: A private company owned by the Kingdom Company and the Red Sea Company, with a generating capacity of 485 MW.

ELECTRIC POWER DISTRIBUTION COMPANIES THAT SELL ELECTRICITY TO THE END CONSUMER AS follows:

JORDANIAN ELECTRIC POWER CO.: A public shareholding company that distributes electrical power in the capital, Zarqa, Madaba and Al-Balqa, with the exception of the Central Jordan Valley area. On 29/5/2014, the Company was granted a 20-year license.

IRBID ELECTRICITY COMPANY: A public shareholding company that distributes electricity in the governorates of Irbid, Mafraq, Jerash and Ajloun, with the exception of the Northern Jordan Valley and the eastern regions. In 2008, the Company was granted a 25-year license.

ELECTRICITY DISTRIBUTION COMPANY: A public shareholding company that distributes electrical power outside the concession areas of Jordan Electricity Company and Irbid Electricity Company, specifically in the Southern, Eastern and Jordan Valley area. In 2008, the Company was granted a 25-year license.

COMPANIES OPERATING IN THE RENEWABLE ENERGY SECTOR:

LICENSEES TO GENERATE ELECTRICAL ENERGY FROM RENEWABLE ENERGY SOURCES VIA DIRECT SUPPLY SYSTEM: Projects that are implemented and operated through tenders announced by the Ministry of Energy and Mineral Resources and a direct proposals committee that considered the documents of the 30 companies that submitted these tenders and were subsequently licensed by EMRC.

LICENSEES TO GENERATE ELECTRICAL ENERGY FROM RENEWABLE ENERGY SOURCES FOR PRIVATE CONSUMPTION PURPOSES: 48 projects (companies) intended to cover the consumption by a specific establishment and are licensed by EMRC, if their capacity is greater than 1 MW, whether in accordance with the system of net measurement or transit transport.

LICENSEES ENGAGED IN THE SUPPLY, INSTALLATION, OPERATION, MAINTENANCE AND INSPECTION OF RENEWABLE ENERGY SOURCES SYSTEMS: 354 renewable energy companies or individual institutions that are engaged in this field and have been licensed by EMRC based on the instructions of persons engaged in renewable energy.

INSTITUTIONS OPERATING IN THE NATURAL RESOURCES SECTOR:

INSTITUTIONS OPERATING IN THE MINING RIGHTS FIELD: 127 institutions that explore, extract and exploit minerals or their derivatives within a specified period of time.

INSTITUTIONS OPERATING IN QUARRIES: 171 institutions that are engaged in the extraction of stones and their derivatives.

INSTITUTIONS OPERATING IN THE PETROLEUM AND NATURAL GAS SECTOR: Institutions that carry out oil and gas exploration operations within the Kingdom as well as crude oil refining operations and sale of oil derivatives:

NATIONAL PETROLEUM COMPANY: A government-owned public shareholding company that carries out oil and gas exploration and production activities in the concession area located in the northeast of the Kingdom on the Iraqi borders, covering an area of 7000 sq. km, which includes Al-Risha Gas Filed, which is about 1500 sq. km long. The period of this concession is 50 years. It came into effect in 1996.

JORDAN PETROLEUM REFINERY COMPANY: A public joint stock company responsible for refining crude oil and producing and distributing oil derivatives within the Kingdom.

JORDAN OIL TERMINALS COMPANY: A private shareholding company incorporated in 2015. It is the first independent open access storage provider in Jordan providing world class warehousing, handling, transportation, bunkering and warehousing services to local clients. The Company provides integrated services for oil storage and logistics all over Jordan, in addition to designing, building, operating and maintaining private storage stations in order to achieve regulatory and international standards

THE EGYPTIAN JORDANIAN FAJR COMPANY FOR THE TRANSPORTATION AND SUPPLY OF NATURAL GAS: A limited liability company operating under the license agreement signed on January 25, 2004 between the Jordanian government, represented by the Ministry of Energy and Mineral Resources, and the Egyptian Jordanian Fajr Company, which is tasked to build, own and operate the natural gas pipeline from Aqaba to the north of the Kingdom, receive Egyptian natural gas in Aqaba and transport it through the pipeline and sell it to power plants and major industries.

OIL PRODUCTS MARKETING COMPANIES: 3 private sector companies entrusted with importing and securing the Kingdom's need for oil derivatives, in accordance with the licenses granted to these companies, and supplying gas stations and airports with (all kinds of gasoline, diesel, kerosene and aircraft fuel). Fuel stations: Fuel stations owned by legal or natural persons concerned with the sale of fuel to citizens. The number of operating fuel stations amounted to 652 until the end of 2019.

CENTRAL GAS DISTRIBUTION COMPANIES: Privately owned companies involved in the distribution of gas in tanks. The number of these companies amounted to 7 operating companies in 2019.

GAS WAREHOUSES: which are repositories owned by legal or natural persons concerned with transporting liquefied gas cylinders from filling stations to warehouses and then supplying distribution vehicles that belong to licensed distribution agencies. The total number of warehouses reached 129 by the end of 2019.

GAS AGENCIES: Gas agencies, which are owned by legal or natural persons concerned with the distribution of gas cylinders to citizens. The number of operating agencies reached 679 agencies until the end of 2019.

NATIONAL OBJECTIVES

- Improve the level of services provided to citizens and distribute them fairly.
 - Create an attractive investment environment capable of attracting foreign capital and encourage local investment.
 - Maintain financial and monetary stability, control budget deficit, and develop an efficient and low-risk financial system.
-

CORPORATE OBJECTIVES

- Regulate the energy and minerals sector on the basis of balance between the interests of consumers, investors, licensees and any other stakeholders.
 - Maintain the interests of consumers provided that they comply with the conditions of providing the services approved by EMRC, which are provided by the licensees.
 - Maintain an efficient environment for the sector, which will enhance the economic feasibility of the sector and improve its efficiency.
 - Ensure the provision of secure, stable, durable and high- quality services in the sector.
 - Ensure the provision of public safety conditions and requirements and protect the environment and human health and property.
 - Ensure that the services required from licensees are provided to consumers sufficiently and with high quality.
-

STRATEGIC OBJECTIVES

- Regulate the energy and minerals sector on the basis of balance between the interests of consumers, investors and licensees and any other stakeholders.
 - Develop an effective control and inspection system for the sector to improve and enhance the confidence of consumers and investors and achieve competitiveness and protect people and environment.
 - Develop cost-based pricing systems and methodologies to ensure improved performance and lowest costs.
 - Enhance EMRC efficiency and effectiveness.
-

EMRC DUTIES AND POWERS:

- Granting permits and licenses to persons operating in the energy and minerals sector.
- Verifying the compliance of the licensees with the provisions of the laws related to the regulation of the sector.
- Monitoring the licensees to ensure their compliance with the provisions of the laws related to the sector regulation and the permits and licenses granted thereto. For this purpose, EMRC may conduct inspection of any entity or any other body.
- Participating in developing the technical standard specifications or rules related to the equipment, facilities and materials pertaining to the sector, in consultation with other stakeholders.

- **Participating with the competent authorities in the development of the necessary requirements for the implementation of environmental conditions to be met by the sector's facilities and establishments, in accordance with the legislation in force.**
- **Building an integrated information system for the sector.**
- **Any other functions or powers related to EMRC activities, in accordance with the provisions of the legislation related to the regulation of the sector.**

MAJOR SERVICES:

- **Receiving and handling complaints 24 hours a day, and information requests.**
- **Granting licenses to nuclear establishments and facilities, radiation institutions and licensing radiation workers.**
- **Granting import, re-export or transit of radioactive materials or equipment permits, and corporate license for the transport of radioactive materials.**
- **Examining all incoming, outgoing and transit vehicles across the Jordanian territory to ensure that they are free of any radioactive contaminants.**
- **Conducting lab examination of samples and issuing radiation-free certificates.**
- **Determining the electrical tariff (wholesale tariff) between the National Electric Power Company and the three electricity distribution companies.**
- **Determining electricity tariffs for subscribers in all sectors (household, commercial, industrial, agricultural, banks, hotels, telecommunications, ...) and approving electricity meters.**
- **Licensing electricity companies and electricity generating companies using renewable energy sources systems.**
- **Licensing persons engaged in the supply, installation, operation, maintenance and inspection of renewable energy sources systems.**
- **Granting permits and licenses to public and private electric charging stations for electric vehicles.**
- **Granting or renewing exploration licenses and mining rights for exploitation of natural resources (e.g. phosphate, potash, limestone, silica, pozzolana, dolomite, calcium carbonate, copper .etc.), and granting licenses for quarries/crushers.**
- **Granting licenses to export mineral raw materials, stone products and Dead Sea salts.**
- **Licensing consultancy services for mining rights studies**
- **Granting licenses to oil refineries, crude oil pipelines, pipelines for transporting oil derivatives, and gas cylinders filling stations.**
- **Granting licenses for fuel stations, gas distribution warehouses and agencies, and distribution of central gas.**
- **Granting a license to the storage facilities of crude oil and its derivatives, and licensing the distribution and marketing of oil derivatives.**
- **Granting licenses for the import and sale of natural gas, transfer of natural gas by pipelines and supply of natural gas to generate electricity and industries.**
- **Granting a license to operate an industrial and bio-fuel production plant.**
- **Granting petroleum coal, coal and high viscosity fuel import licenses.**

DECISION MAKING:

BOARD OF COMMISSIONERS:

THE BOARD OF COMMISSIONERS HELD 267 MEETINGS IN 2019 IN WHICH 1806 RESOLUTIONS WERE PASSED. THE BOARD ENSURES THE ADOPTION OF ITS ADMINISTRATIVE DECISIONS AND THE ARRANGEMENT OF THE LEGAL POSITIONS WITHOUT DELAY IN ORDER TO ACHIEVE THE PUBLIC FACILITY PRINCIPLE, WHICH ENSURES PROGRESSIVE SUSTAINABILITY OF PUBLIC FACILITIES.

FIGURE (4) COMPARES THE NUMBER OF THE MEETINGS OF THE BOARD OF COMMISSIONERS AND THE NUMBER OF DECISIONS FROM (2015) UNTIL (2019). IN 2019, THERE WAS A SIGNIFICANT INCREASE IN THE NUMBER OF BOARD MEETINGS BY (% 9), COMPARED TO (2018) AND A SIGNIFICANT INCREASE IN THE NUMBER OF DECISIONS TAKEN BY THE BOARD THROUGH ITS MEETINGS BY (39 %), COMPARED TO (2018) IN ORDER TO COVER THE SIGNIFICANT GROWTH WITNESSED BY THE ENERGY AND MINERAL SECTORS IN THE HASHEMITE KINGDOM OF JORDAN AND THE CONSEQUENT LEGISLATION AND INSTRUCTIONS THAT STIMULATE THIS. GROWTH AND ENSURE ITS CONTINUITY AND SUSTAINABILITY IN LINE WITH THE STRATEGIC PLANS AND THE ECONOMIC STIMULATION PLAN.

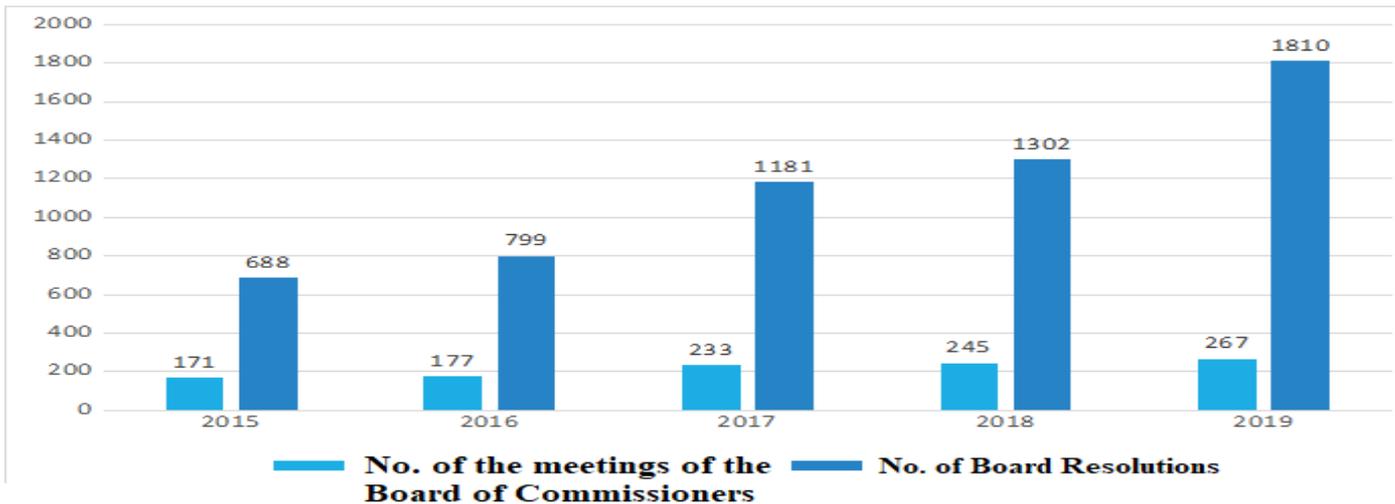


Figure (4)

PLANNING AND COORDINATION COMMITTEE:

THE EFFECTIVE PARTICIPATION OF THE PLANNING AND COORDINATION COMMITTEE IN CARRYING OUT THE TASKS ENTRUSTED TO IT UNDER THE ADMINISTRATIVE MANAGEMENT SYSTEM AND OTHER TASKS ENTRUSTED TO IT AS PLANNED OR DESIGNATED HAS CONTRIBUTED SIGNIFICANTLY TO THE ACHIEVEMENT OF THE OBJECTIVES OF EMRC AND TO THE FACILITATED PROVISION OF SERVICES TO CUSTOMERS.

In 2019, the Planning and Coordination Committee held 69 meetings in which it discussed all the subjects entrusted to it under EMRC Administrative Organization Regulation No. 88 of 2018, as shown in Figure 5.

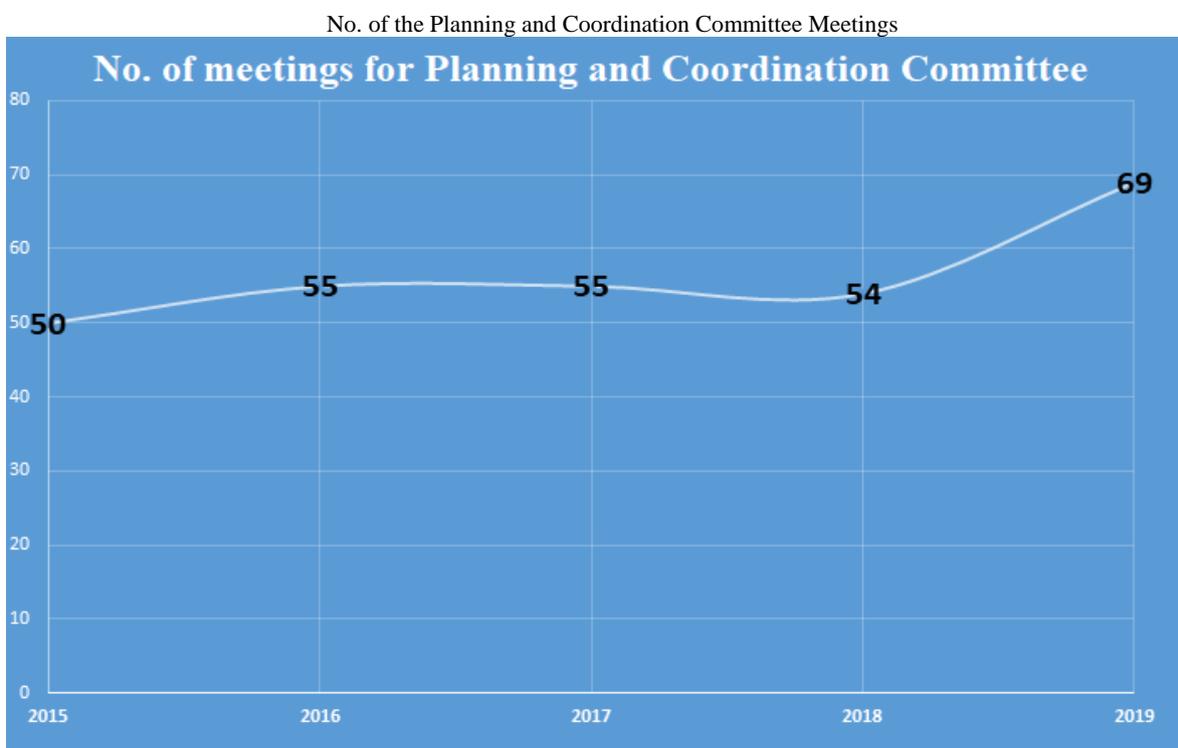


Figure (5)

It should be noted that numerous activities were carried out by EMRC Planning and Coordination Committee, through field campaigns, meetings with the strategic partners of the Commission, working on shifts at EMRC Monitoring and Emergency Center during emergency weather conditions and unannounced false emergencies to verify the readiness of the licensees, participating in the Public Service Office and attending the majority of the meetings of the competent Board of Commissioners.

RADIATION AND NUCLEAR WORK SECTOR LAW PROVISIONS

In the field of organizing radiological and nuclear work, EMRC aims to:

- Regulate and monitor the uses of nuclear energy and ionizing radiation.
- Protect the environment, human health and property from the hazards of contamination and exposure to ionizing radiation in accordance with the provisions of this law.
- Ensure the fulfillment of requirements of general safety, radiation protection, safety and nuclear security are satisfied.



* In order to achieve its objectives in this field, EMRC undertakes the following tasks :

- Granting permits and licenses to workers in the field, verifying their compliance with licenses, permits and applicable legislation, and conducting inspections on any establishment or any entity in this regard .



Communicating with institutions and bodies concerned with the regulation and control of nuclear energy, radiation protection, and safety and security in Arab and foreign countries

to benefit from expertise, scientific research and aid in their fields .

Organizing the relationship between the Jordanian authorities and institutions concerned with radiation protection, nuclear safety and security on one hand and the relevant international, regional and Arab bodies on the other .

- Implementing comprehensive safeguards and establishing a system for identifying and controlling all nuclear materials subject to such safeguards.

1. NUCLEAR SAFETY:

REGULATION, CONTROL AND INSPECTION

•7 instructions were issued.

- . Instructions of nuclear power plants safety.
-
- Instructions of procedures for granting licenses and permits to Synchrotron facilities.
-
- Instructions for accrediting specialized training, qualification and personal licenses in nuclear power plants. Instructions for the principles of qualification of nuclear inspectors.
- Instructions of procedures for granting nuclear power plants commissioning permit .
- Instructions of procedures for granting nuclear power plants operation licenses.
- Instructions of procedures for granting nuclear power plants decommissioning permit

- **Issuance and renewal of (8) licenses for employees of the Jordan Research and Training Reactor (nuclear fuel handlers, main operators and operators).**
- Issuing an operator license for the subcritical assembly.
- **Issuing amendment principles related to procedures for amending, renewing, suspending or canceling licenses and permits for nuclear facilities and activities.**
- **Issuing a license to manage and operate the radioactive waste management facility located on the campus of the Jordan Research and Training Reactor.**
- Issuing a construction permit for the synchrotron facility.
- **license renewal for the central storage facility of radioactive waste.**

Jordan Research and Training Reactor (JRTR) and the Radioactive Waste Treatment facility (RTF) of JRTR.

- Preparing the annual inspection plan and programs for the reactor, including the inspection plan for the management, quality and operation systems of the reactor.

- Instructing the reactor management to provide radiation protection officers during the reactor's operation period.
- Instructe the reactor management to provide radiation protection officers during the reactor's operation period.
- Accompanying IAEA safeguards inspectors to the reactor, in accordance with the provisions of the Nuclear Safeguards Agreement and the Additional Protocol.

- Performing 4 inspection missions per week per round to follow up the implementation of the maintenance and sustainability program for equipment and systems, inspecting the air containment system inside the research reactor, and ensuring that the work mechanisms approved by them are applied according to the terms of the operating license.

- Prepare and establish annual inspection program on the Radioactive waste treatment facility(RTF) .

•Jordan Sub-critical Assembly at the University of Jordan for the Science and Technology(JSA) .

- Developing a plan and annual inspection programs for the subcritical ecosystem.
- Carrying out two inspection tasks on the subcritical system to ensure its compliance with the terms of the license and regulatory requirements.
- Accompanying IAEA safeguards inspectors to the subcritical system, in accordance with the provisions of the Nuclear Safeguards Agreement and the Additional Protocol.
- Reviewing and amending the design information for the subcritical system and sending it to the International Atomic Energy Agency.

•Synchrotron (Light Accelerator)

- Following up the progress in the facility and the installation of radiation beams in order to ensure that the requirements set out in the instructions for granting licenses and permits for the Synchrotron facility are satisfied.

- Following up the correction of the legal status of issuing a construction permit (Construction Permit) for the synchrotron.
- Other activities
 - Preparing terms of reference for the task of IAEA experts on reviewing draft regulations and instructions for the extraction and mining of nuclear materials.
 - Preparing reports for the International Atomic Energy Agency on activities relevant to the implementation of the provisions of the Additional Protocol to the Nuclear Safeguards Agreement related to the Treaty on the Non-Proliferation of Nuclear Weapons.
 - The Completion of the training program related to the students trainees from the Nuclear Engineering Department of Jordan University of Science and Technology.

2. RADIATION PROTECTION:

CONTROL AND INSPECTION

- Instructions for licensing/permit requirements of temporary radioactive sources storages
- Instructions for radiation protection requirements related to occupational exposure.
- Instructions for licensing requirements for the practice of transporting nuclear and radioactive materials.
- Granting 495 permits for import, transportation, transit, and re-export of radioactive equipment and radioactive materials.
- Issuing (471) facility licenses.
- Issuing (1303) personal licenses.
- Carrying out (716) inspection visits on medical and industrial establishments that possess radiation sources and devices.
- Carrying out (8) monitoring campaigns on medical and industrial facilities targeting (353) institutions.
 - Studying (320) reports on the results of personal radiation surveillance of (2382) radiation workers.
 - Organizing a workshop on radioactive waste acceptance criteria .

Radiation and Nuclear Work Sector

- Conducting a workshop on the national level on controlling and monitoring activities related to nuclear natural radioactive materials.
- Conducting a workshop on the national level on “Methods of Searching for and Securing Orphan Radioactive Sources”, in cooperation with the US Department of Energy/Radiation Security Bureau.
- Conducting a workshop on the national level on “Security of transporting radioactive materials requirements”.
- Preparing and implementing licensing software as an interface to the database of the regulatory authority information system (RAIS).
- A training program was developed to qualify radiation protection officers working in radiation facilities.
- The establishment stage of the diagnostic radiology reference level project has been completed
- More than 20 local and external trainees have been trained through the Jordanian International Atomic Energy Agency.
- (3) radiation protection courses were held. More than (100) workers were trained in the field of radiation protection - level (1).
- Participating in EMRC team to assess aspects of radiation protection for the synchrotron facility.

3. NUCLEAR SECURITY

CONTROL AND INSPECTION

- Management and operation of (66) radiation detection gates covering the land, sea and air border ports in the Kingdom, including (2) gates for training purposes at the Middle East Scientific Center for Security.
- Seizing two contaminated trucks in excess of the permissible limit and returning them to the country of origin on 29/8/2019 and 24/9/2019.
- Preparing standard work procedures for radiation detection at Queen Alia International Airport and Amman Civil Airport.
- Conducting physical protection checks for Jordan Research and Training Reactor.

Radiation and Nuclear Work Sector

- Conducting radiological emergency drill to approve the contingency plan for Jordan Research and Training Reactor
- Inspecting cybersecurity program
- Inspecting the reactor personnel reliability program
- Participating in the national window project and implementing it at Aqaba Borders Center
- Implementing the simultaneous inspection project at Amman Customs Center
- Operating the free zone at Queen Alia International Airport
 - Participating in the national drill to combat weapons of mass destruction
 - Completing the joint research project with the International Atomic Energy Agency regarding enhancing radiation alarm assessment procedures
 - Signing memoranda of understanding with Queen Alia International Airport and Amman Civil Airport.
 - Hosting the Omani delegation to inform them of the Jordanian expertise in the fields of nuclear security
 - Maintaining the work of border radiation monitoring stations
 - Updating the system of radiation monitoring equipment at Jaber Borders Center
 - Maintaining the work of border radiation monitoring stations.
 - Updating the system of radiation control equipment at Jaber Borders Center.
 - Holding (4) regional training workshops on radiation detection and maintenance of radiation equipment.

Radiation and Nuclear Work Sector

Table (2)

Statistic	Jan.	Feb.	March	April	May	June	July	August	Sep.	Oct.	Nov.	Dec	Total
Number of scrap checks	350	380	400	380	360	316	300	300	350	340	400	450	4326
Number of vessel checks	7	8	8	9	5	7	7	8	3	5	5	7	79
Shipments returned to the country of origin	0	0	0	0	0	0	0	1	1	0	0	0	2
Global ASYCUDA system	2074	2239	2452	2708	2269	2133	2775	2212	2738	2715	2441	2717	29473
Number of secondary checks	261	364	444	467	376	335	343	350	336	351	298	284	4209
Number of radiological checks	207534	191787	266291	267300	264880	268528	320570	306082	299073	260888	264706	261226	3178865
Number of alarms	3779	3565	6084	7139	6754	7974	8800	6229	12495	9757	4765	4619	82140

4. ENVIRONMENT RADIATION MONITORING AND LABORATORY TESTS:

CONTROL AND INSPECTION

- EMRC monitors the Jordanian radiological environment through periodic environmental radiological survey of the various environmental elements and through the 19 advanced radiological monitoring stations across the governorates of the Kingdom.
- 1873 samples received by EMRC from the border centers and public and private facilities were examined. 63 commercial samples, 1765 radioactive soil survey samples, 11 water samples, 18 quality control samples and 15 vegetable and fruit samples were examined.
- The average ambient radiation dose in the air was measured for (17236) radiological survey points measured using (mobile laboratories), and (5560) average readings were recorded from the radiation monitoring stations operating on a daily basis and around the clock.
- Radiation monitoring stations did not record any rates in excess of the natural radiation background rates in the Kingdom

THE SECTOR IN NUMBERS:

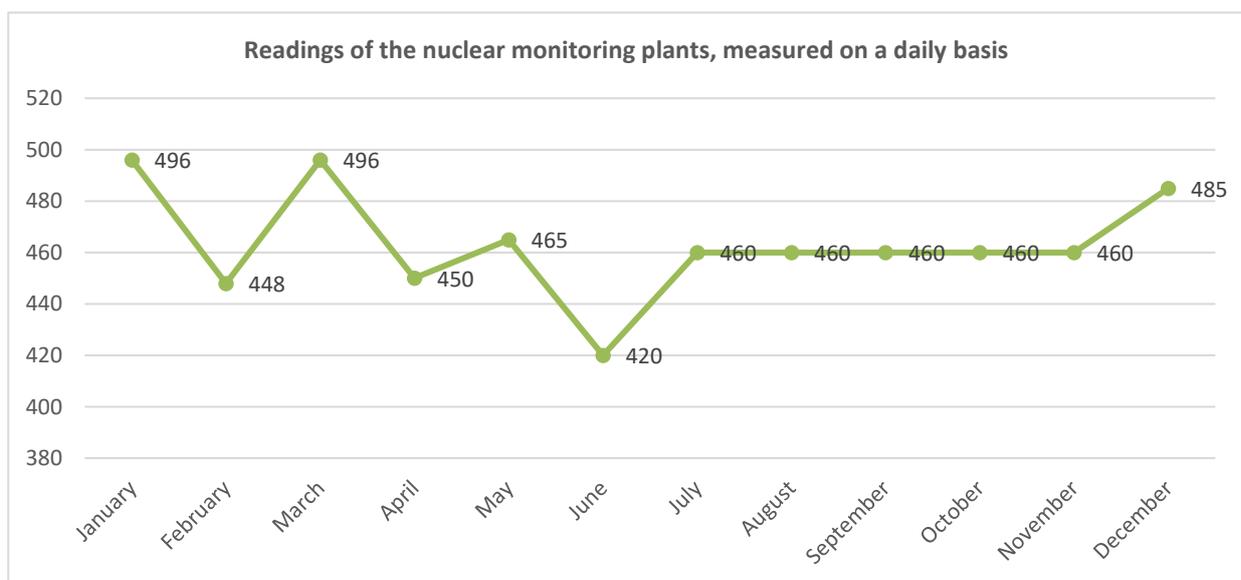


Figure (6)

Radiation and Nuclear Work Sector

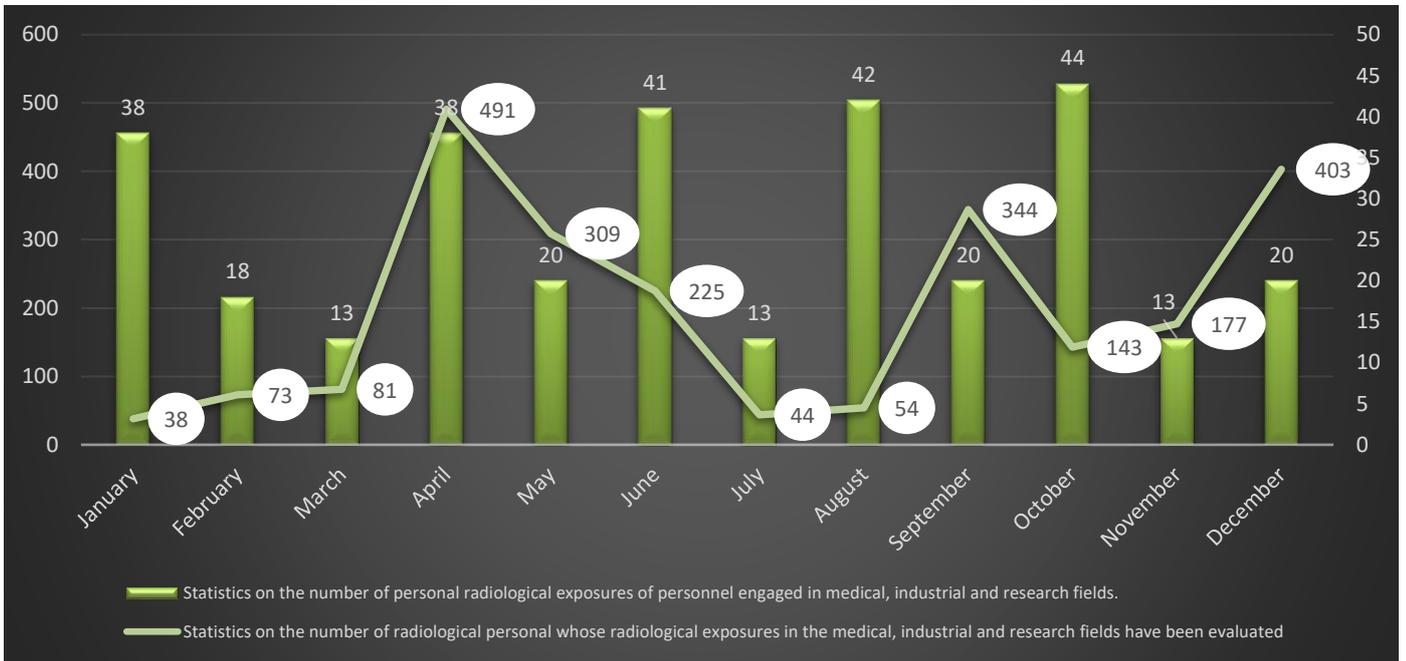


Figure (7)

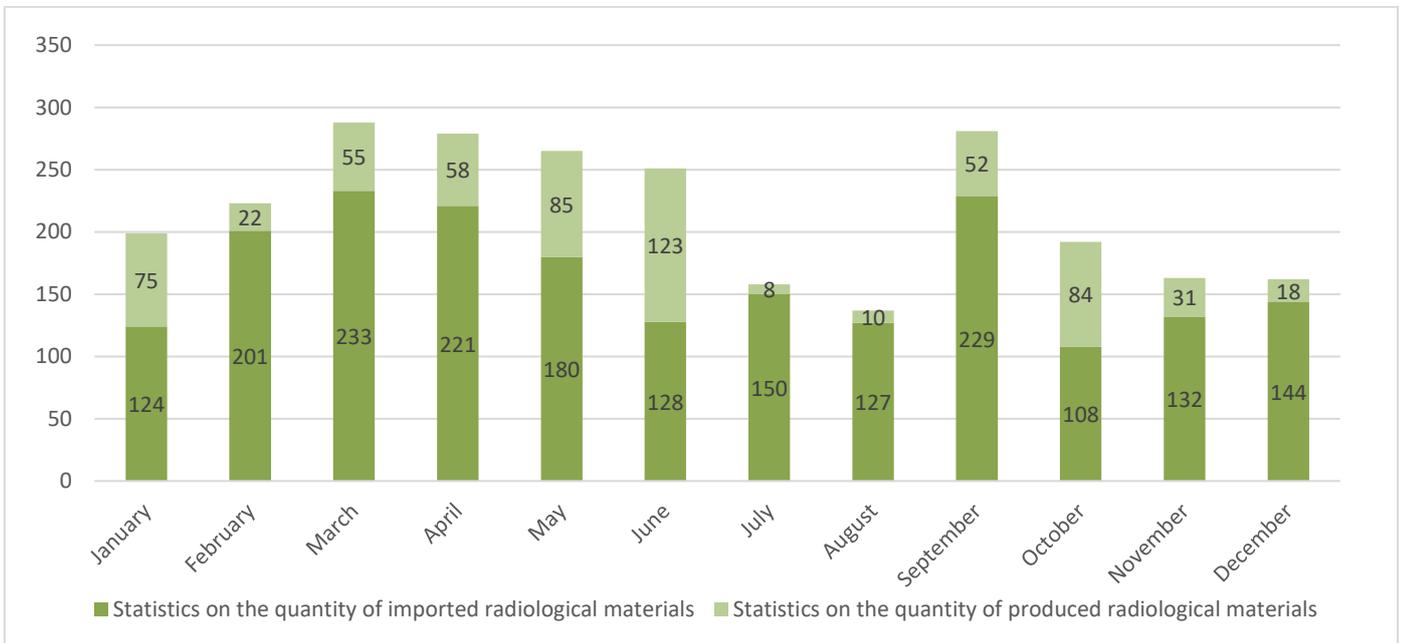


Figure (8)

ELECTRICITY SECTOR LAW PROVISIONS

- **In the field of regulating the electrical energy sector, EMRC aims at:**
 - Regulating the sector on the basis of balance between the interests of consumers, investors, licensees and any other stakeholders.
 - Maintaining an effective structure for the sector and developing it to ensure and enhance its economic viability.
 - Encouraging investment and competition in the sector, improving its efficiency, and selling electricity at reasonable prices.
 - Ensuring the provision of safe, stable, durable and high-quality services in the sector and ensuring adequate provision of electricity services to consumers.
 - Ensuring that projects operating in the sector comply with environment conservation standards and public safety conditions and requirements.
 - Ensuring that the electricity prices charged by the licensees enable them to finance their activities and guarantee them a reasonable rate of return on their investments.
 - Fostering the interests of consumers, subject to their compliance with the conditions for providing electrical service.

- In order to achieve its objectives in this field, EMRC undertakes the following tasks:
 - Licensing persons and entities operating in the sector .
 - Regulating generation, transmission, supply, and distribution, and operating the transmission system in the Kingdom .
 - Determining the electric tariff, subscription fees, services allowance, security deposits, and the cost of connection to the transmission and distribution system .
 - Taking part in setting standards for electrical equipments and facilities.

- Taking part in the development of the necessary requirements for the implementation of environmental conditions to be met by the sector's facilities and establishments.



CONVENTIONAL ELECTRIC POWER GENERATION - REGULATION:

- Issuing standard licenses to:
 1. Standard license to practice electric power generation activity (hydropower).
 2. Standard license to practice the activity of generating electric power through hydrogen fuel.

Conventional electric power generation – Control and Inspection: Table (3)

7 electricity power generation companies licensed by the EMRC generate electric power for the electrical system with a total capacity of (4332) MW, and they undertakes:

Generating Capacity (MW)	Company
1043	Central Electricity Generating Company (51% private sector, 49% government)
1250	Samra Electric Power Generation Co.(government-owned)
370	East Amman Electricity Generating Company (Private Sector)
370	Al-Qatranah Electricity Generating Company (Private Sector)
573	Third private generation company (private sector)
241	Fourth private generation company (private sector)
485	Fifth private generation company (private sector)
4332	Total

- Reviewing (84) performance reports for all companies. No company was reported to violate the performance standards and licensing requirements.
- Conducting an inspection tour to Samra power plant to ensure its compliance with the provisions of licenses.
- Reviewing the emergency plans of its electric power plants
- Following up the implementation of the licensed plant for oil shale power generation with a capacity of about 470 megawatts, which has been granted the license by EMRC.

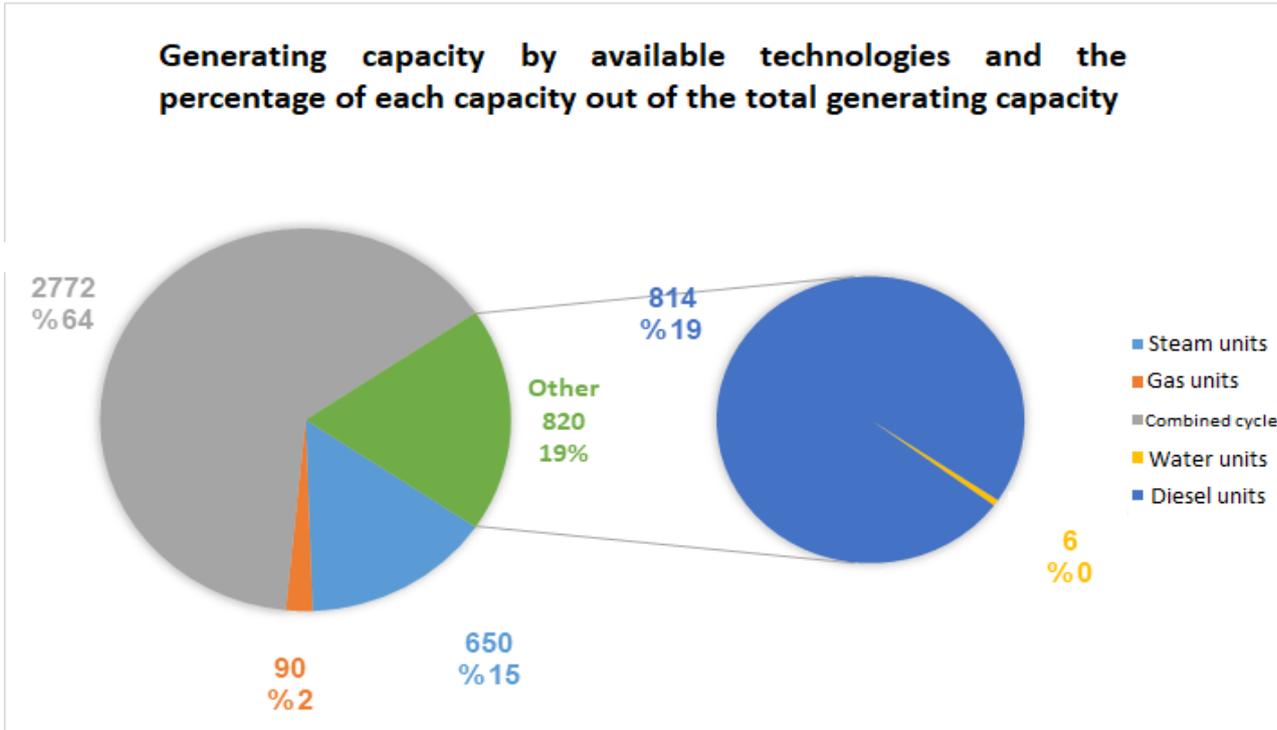


FIGURE 9

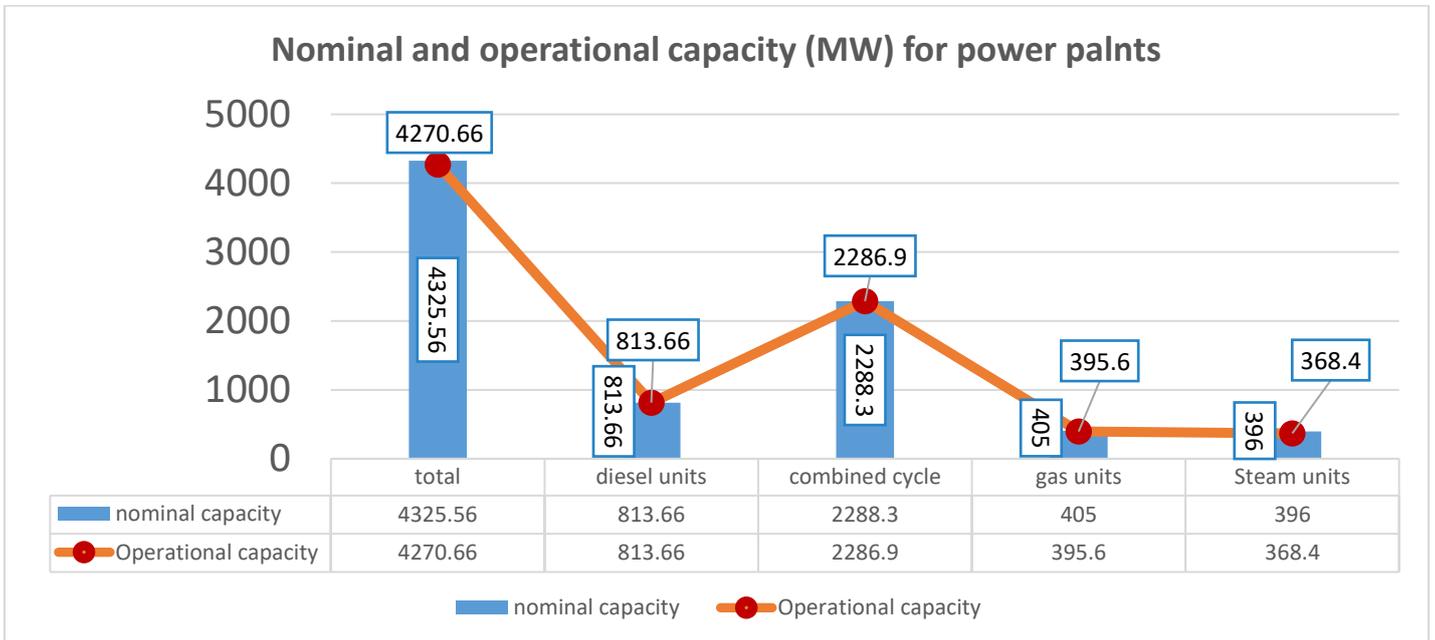


FIGURE 10

Electric power transmission - Control and Inspection



- Reviewing (12) performance reports for all companies. No company was recorded to violate the performance standards and licensing requirements.
- Conducting (9) inspection rounds on electric power transmission plants to ensure their compliance with the provisions of licenses.

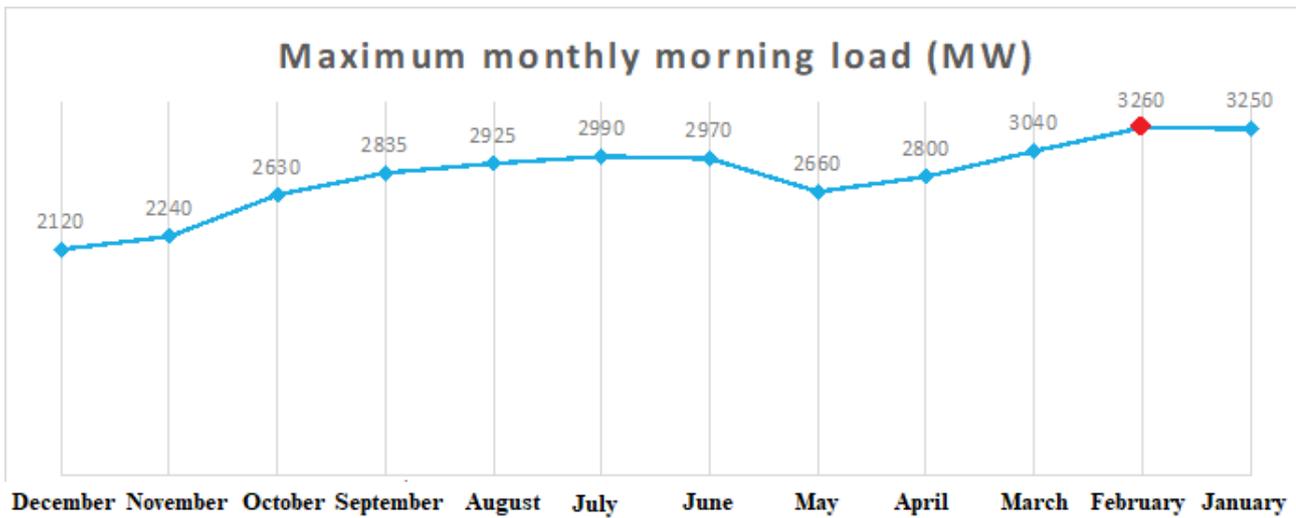


Figure (11)



Maximum monthly evening load (MW)

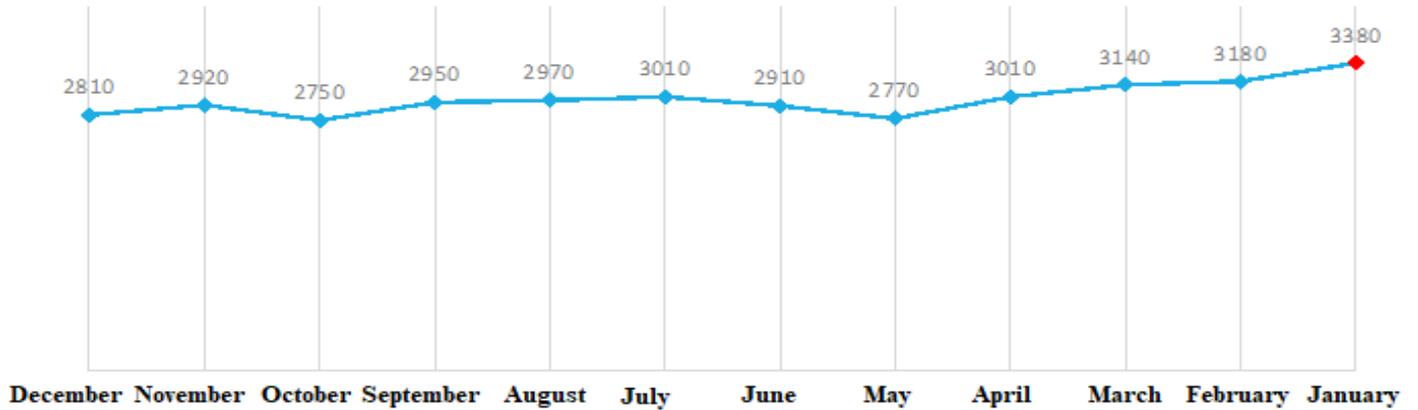


FIGURE (12)

In the field of electrical power distribution - regulation, control and inspection

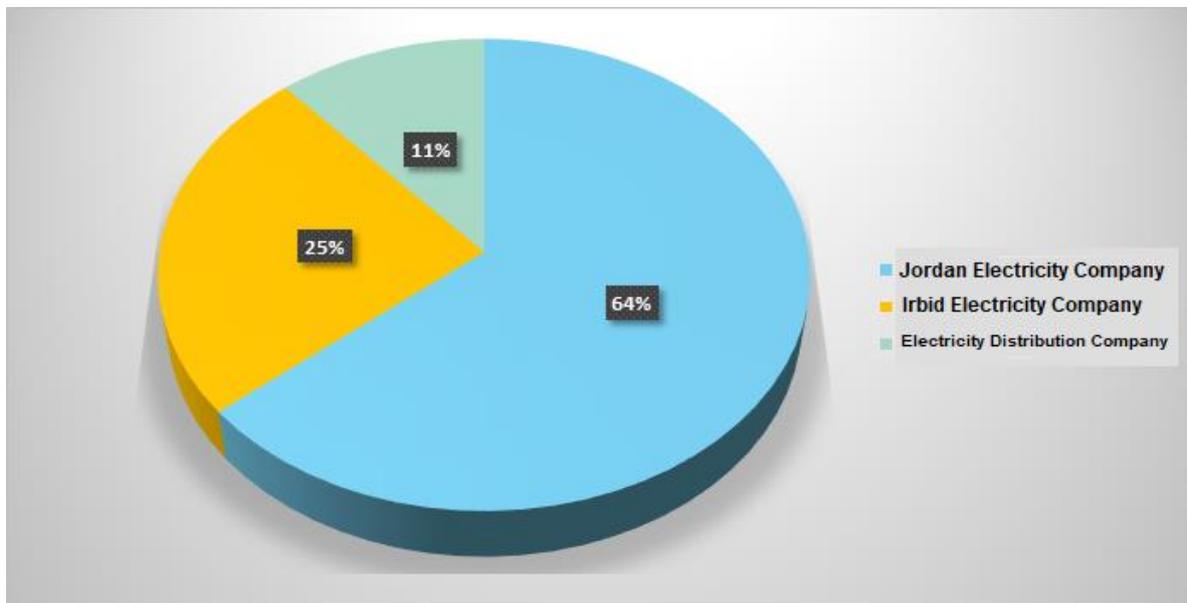


Figure (13)



- Electricity Distribution Company: (Southern governorates: Aqaba, Ma'an, Karak, and Tafila, in addition to Jordan Valley).
- Irbid Governorate Electricity Company: (Northern governorates: Irbid, Ajloun, Jerash, and Mafraq).
- Jordan Electricity Company: (central governorates: the capital, Amman, Al-Balqa, Zarqa, and Madaba).
- Reviewing (36) performance reports for all companies. No company was reported to violate the performance standards and licensing requirements.
- Issuing (24) licenses and permits for the purposes of operating public and private charging stations for electric vehicles.
- Granting 146 permits for the establishment of public relay stations and collecting relevant contributions.
- 135 specialized inspection tours were conducted to the sites of electricity companies (the electrical system) to verify the commitment of the licensees to the licenses granted to them and the legislation in force and the readiness of the main operation centers, emergency rooms, public service, warehouses, secondary and main relay stations, and low and medium pressure networks of distribution licensees for emergency response.
- Approving (118829) electricity meters for electricity distribution companies.

- **Monitoring the Electric Power Company readiness to address high loads in summer 2019 in main plants. The procedures included the Department plan for the remainder of 2019 to verify the readiness of electricity companies to handle the electrical loads, and verify the principle of (N¹) for 2019 and indicating that inspection campaigns were conducted on the main relay plants of the National Electric Power Company in the Kingdom governorates and the main relay plants of the electricity distribution companies and inspecting the high and medium voltage lines and continuity by communicating the results and recommendations of the campaigns to the companies**

Table (4): Inspecting (44) relay plants to ensure that these plants meet standard (N-1)

No. of relay plants	Company	No.
24	National Electric Power Company	1
8	Electricity Distribution Company	2
4	Irbid Governorate Electricity Company	3
8	Jordanian Electric Power Co.	4

POWER LOSS, UP TO 10% FOR THE DISTRIBUTION NETWORK BY THE END OF 2020:

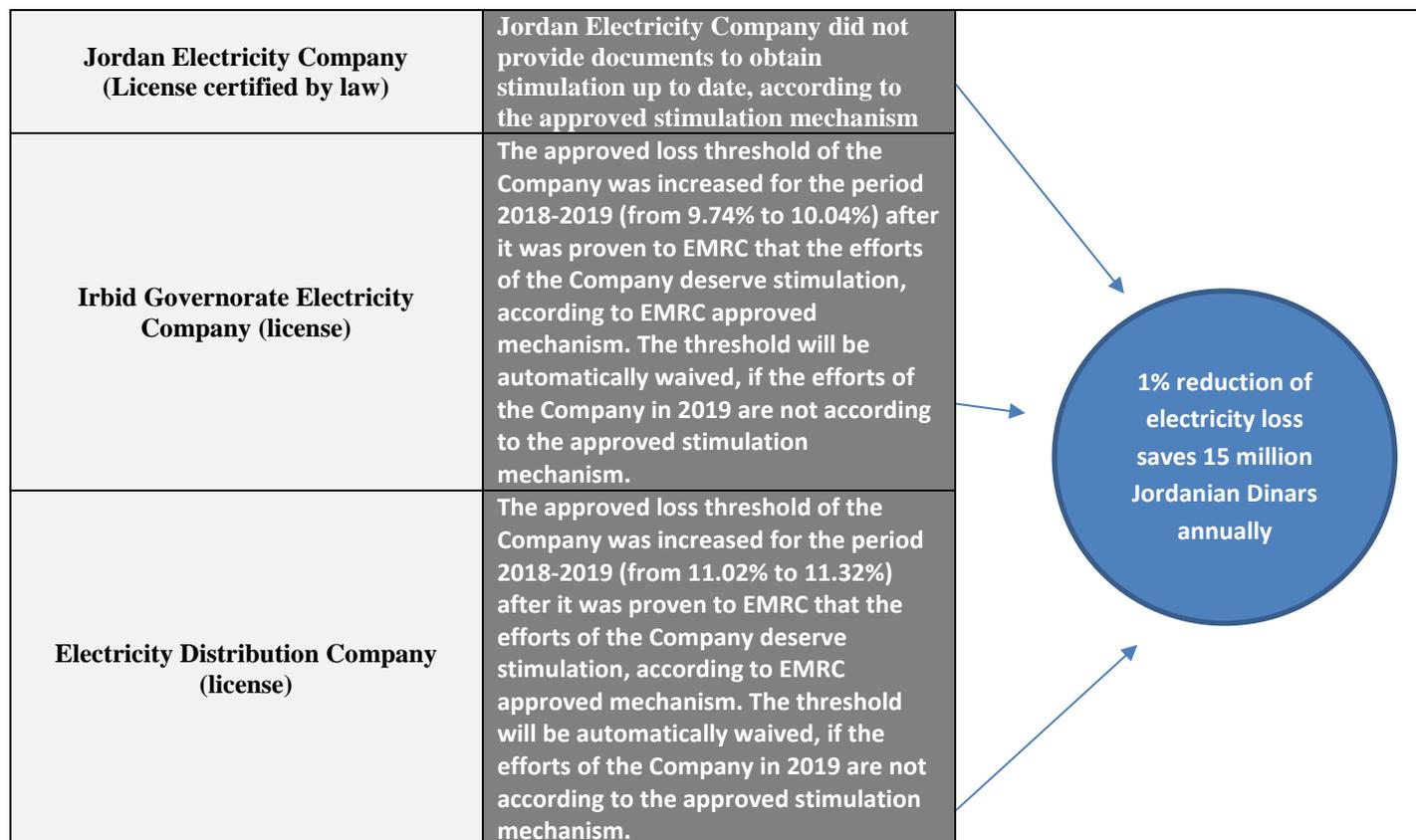


Figure (14)

Table (5)

Million JOD	Company
27	Jordanian Electric Power Co.
1.8	Irbid Governorate Electricity Company
2.2	Electricity Distribution Company
31	Total

EMRC has completed a study on calculating the amount of savings from electrical losses for the period 2015-2018. The study showed that the savings reached (31) million dinars annually, according to Table No. (5).

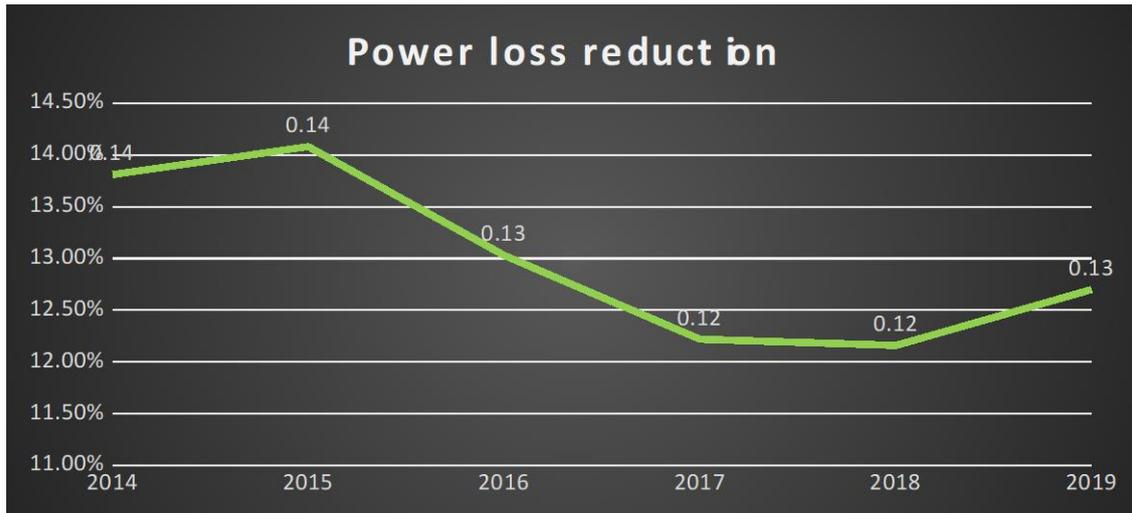


Figure (15)

ILLEGAL USE OF ELECTRIC POWER:

200 employees have been trained and qualified to act as law enforcement officers

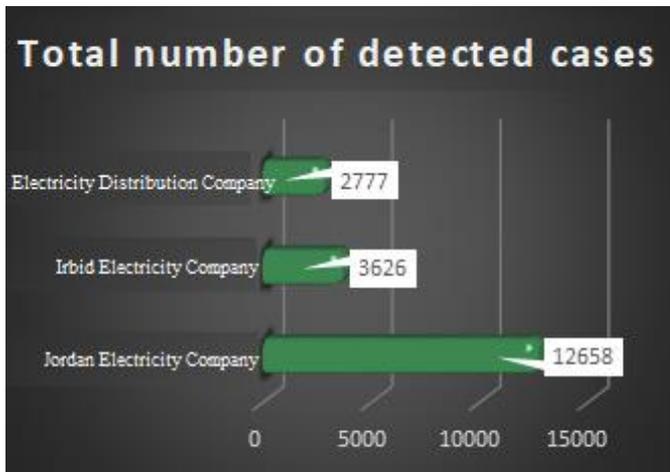


Figure (16)

EMRC carried out (293001) periodic and scheduled inspection visits, through which it detected (19061) cases of illegal use of electrical energy, which was distributed as follows:

- Electricity distribution companies detected **6101** misuse cases in the electrical system
- General Security and Gendarmerie personnel, in cooperation with electricity distribution companies, seized 2,413 cases.
- EMRC managed to identify 10547 misuse cases.

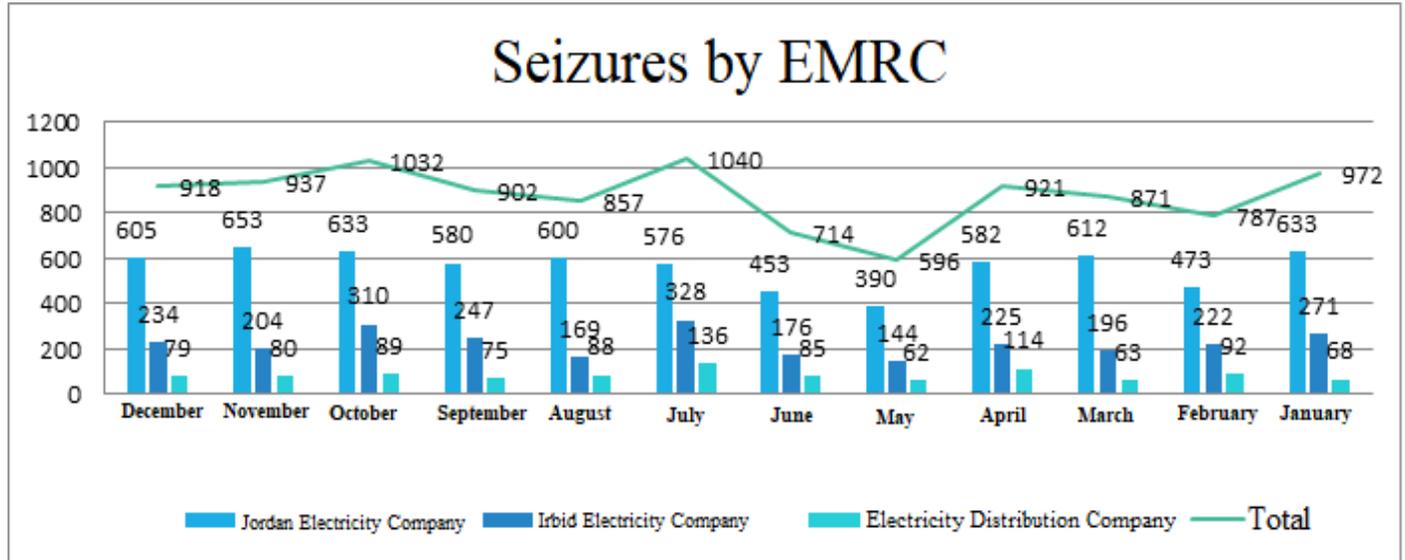


Figure (17)



Figure (18)

ELECTRICAL TARIFF/ DISTRIBUTED OVER 18 SECTORS BASED ON THE PRINCIPLE OF INTER-SUPPORT BETWEEN SECTORS AND SEGMENTS

The revenue generated from the electrical tariff effective for the year 2019 was about (1791) billion dinars, compared to the cost of the electrical system of (1791) billion dinars

- The cost of the electrical system for the year 2019 was about 98 fils/kWh, as indicated in Table (6)

- Table (6)

Rate of Electricity Connection to the End Consumer 2019				
1		Million JOD	Fils/kWh	Weighted Averages
2	Capacity expenses paid to the generating companies	374.1	23	20.9%
3	Maintenance and operation costs (related to the generating plants)	13.1	1	0.7%
4	Fuel cost	756.4	46	42.2%
5	Floating vessel costs	57.0	3	3.2%
	Operational costs (National Electricity Company)			
	a. General and administrative expenses	65.6	4	3.7%
	b. Debt service (interest) costs	114.3	7	6.4%
6	Electrical connection costs	12.6	1	0.7%
7	Purchase of renewable energy costs (wind and solar)	167.5	10	9.4%
8	Costs of distribution revenue by the granted licenses	42.0	3	2.3%
9	Administrative and operational expenses of distribution	188.0	11	10.5%
Total cost		1,790.6		100.0%
Quantity of energy sold to end user (GWh) in 2019				16,591
Cost of connecting electricity to the end user before the difference in fuel prices and other revenue items				108
Revenue of fuel price difference tariff item and other revenue				162
Cost of connecting electricity to the end user after the difference in fuel prices and other revenue items				98

- Adjustment of the wholesale electricity purchase tariff between the National Electricity Company and the three electricity distribution companies, as of early 2019.

The value of revenues collected from misuse cases for the period 2016 until the end of June 2019 (million dinars)					
	2016	2017	2018	2019	Total
Jordanian Electric Power Co.	6.4	6.9	7.98	6.5	27.78
Irbid Electricity Company	1.31	1.35	1.34	1.15	5.15
Electricity Distribution Company	1.49	1.39	1.13	1.3	5.31
Total	9.19	9.64	10.44	8.9	38.17

Preparing a draft study for restructuring the electrical tariff (retail tariff), which concluded the following :

- Canceling the fuel price difference item and including its revenue in the electrical tariff to reverse the electrical system costs.
- Considering the introduction of the concept of fixed tariff to the monthly electricity bill for all sectors and segments to cover part of the cost of the electrical system related to the cost of customer services and part of capacity cost and stimulate the productive and service sectors.

- Preparing a study to motivate industrial subscribers to reduce their operating costs to increase the competitiveness of their products by reducing the cost of their consumed electrical energy through the exploitation of the generating capacities available in the electrical system and the consumed quantities, which exceed the

level of consumption in 2018 and sell them these quantities at an incentive cost if the growth rate for the average industrial subscriber is greater than 6%, and more than 2% for the large industrial subscriber.

- In implementation of government procedures and directions aimed at reducing production costs, stimulating the economy, prompting investment, improving the quality of services and increasing their competitiveness, EMRC has carried out the following actions:

- Granting an incentive tariff for all tariff sectors. A tariff of (75 fils/kWh) was approved for electrical energy consumed by each sector of the electric tariff that exceeds its previous year consumption of electrical energy, with the exception of sectors with lower tariffs or rates than the incentive tariff (75 fils/kWh), such as household sector and the agricultural sector, and applying this decision by the end of 2020 on quantities that exceed the level of consumption in 2019 for each sector.
- Amending the maximum load tariff for the agricultural sector (subscribers to whom the triple tariff applies) to become 2.00 dinars/kWh/month instead of 3.79 dinars/month as of 1/1/2020.
- Amending the electrical tariff for both the medium industrial sector and small industrial sector by 10 fils/kWh for each sector as of 01/01/2020. The expected financial impact of this measure is to support these subscribers by 28 million dinars/year.
- Amending the electrical tariff for temporary subscriptions, which is applied to subscriptions that are under construction as of 1/ 1 /2020, so that the tariff is applied according to the type of target activity and that is not less than the cost of the electrical system.
- Amending the electrical tariff for water pumping sector by 10 fils/kWh and considering the decrease in the cost of water purchases from electricity as a substitute for the expected revenue from renewable energy projects (solar energy project/Dhleil, with a capacity of 50 MW, in addition to other solar projects with a capacity of 26.5 MW that is proposed to support the budget). It was found that the financial impact of this amendment is a reduction in energy costs for the water pumping sector by about 18 million dinars.
- Preparing a detailed study on the growth rates in the demand for electric power for the period 2015-2018, which concluded that the rate of growth in the demand for electric energy for the years 2015, 2016 and 2017 was 4.4%, 2.4% and 3.6%, respectively, while this percentage decreased in 2018 to become (2%), as this decrease is due to the subscribers' switch to using renewable energy in addition to the increase in the rate of growth in electrical energy revenues for the year 2015 compared to 2014, by 8.4%. This percentage decreased in 2016 due to the suspension of activating the plan to raise the electric tariff for the period (2013 - 2017), while revenue declined again in 2018, which is attributed to the same reasons

Electricity and renewable energy sector

for the decrease in demand for electric power. The growth rates in revenues for the period were: 8.4%, (-1%), 0.15% and (-3.6%) respectively.



- Developing a study on the financial impact of the proposal to amend subscription tariff of the 3 phases in the household and regular sectors and merging the tariff of the first three tranches of the regular and household sectors at cost tariff while retaining the current tariff for the remaining four segments. The study concluded that the additional revenues expected from the amendment of the tariff of the first three tranches are as follows:

- For the household sector, about (5.5) million dinars.
- For the regular sector, about

(1.1) million dinars

- For the regular and household sectors, about (6.72) million dinars annually.

- Developing an integrated financial model to amend the electrical tariff (retail and wholesale) to ensure coverage of the electrical system costs for the year 2019. This model has been approved by the World Bank.
- Reviewing the filling commission for LPG cylinders in the event that the LPG cylinders filling activity is separated in the three filling centers (Zarqa/Refinery site in Amman and Irbid/Salah El Din Center).
- Preparing a detailed study on the growth rates of demand for electric power in 2019 compared to 2018, which concluded that the rate of growth in demand for electric power increased by 1.2%.

RENEWABLE ENERGY SECTOR

LAW PROVISIONS

- **In the field of renewable energy and consumption rationalization, EMRC aims at:**
 - **Developing renewable energy sources and contributing to the exploitation and development of renewable energy sources to increase the percentage of their contribution to the total energy.**
 - **Rationalizing energy consumption and improving the efficiency of its use in various sectors**
- **In order to achieve its objectives in this field, EMRC undertakes the following tasks:**
 - **Licensing persons and entities operating in the sector.**
 - **Developing a benchmark for determining a mechanism for calculating the prices for purchase of renewable energy sources.**
 - **Determining the size and nature of small renewable energy facilities and renewable energy systems and the sale price of the generated electrical energy.**
 - **Issuing instructions, manuals and licenses.**



Figure (19)

LICENSED COMPANIES IN THE SECTOR AND THEIR GENERATING CAPACITY/DIRECT OFFERS

Wind power generation

Table (7)

Generating Capacity (MW)	Company Name
116.85	Jordan Wind Project Company
86.10	Green Energy Company
89.10	Al Fujaij Wind Energy Company
51.75	About Energy Company
45.00	Al Shobak Wind Energy Company
51.75	Daihan Wind Power Company
100.00	Jordan Diamond Renewable Energy Company
540.55	Total



Figure (20)

Solar Cell Power Generation

Table (8)

Generating Capacity (MW)	Company
10.979	Zahrat Al Salam Power Generation Company
9.8	Shamsona Energy Company
20.53	Ma'an First Lights Company (currently)
22.01	Anwar Al-Ard Solar Company
11.40	Ard Al Amal Solar Company
10.98	Zanbaq Power Generation Company
10.08	First Arab Company for Clean Energy Investments
52.50	Shams Maan Power Generation
10.98	Al Ward Al Jouri Power Generation Company
20.00	Jordan Solar One Cayman Company/Jordan
10.47	SCATIC Solar ASA / Jordan
10.00	Al Badia Power Generation Private Joint Stock Company
21.00	Saqr Maan Company
50.00	FRV Holdings BV/Jordan
50.00	The Local Company for Water and Energy
50.00	Empire Company
50.00	Al-Safawi Green Energy Company
10.00	Jordanian Armed Forces
200.00	Baynunah Solar Energy Company
50.00	Al-Reeshal for Solar Energy Projects
40.00	IM Solar BV Jordan
50.00	Hussainiya Power Generation
103.00	Al-Quwairah
873.72	Total



RENEWABLE ENERGY - REGULATION, SUPERVISION AND INSPECTION

- Approving the minimum permissible capacity for installing a renewable energy system, according to the transit system, to be (30) KW instead of (50) KW, in accordance with the instructions in this regard.
- Approving the exemption of low-income households and beneficiaries of the National Aid Fund from renewable energy sources connection fees required by electricity distribution companies from beneficiary subscribers, in accordance with the guidelines related to renewable energy systems connection, according to the net metering system, as these fees are recovered.
- Adopting G98 and G99 conformity standards for inverters for renewable energy projects.
- Adopting the policy of not granting renewal approvals for renewable energy projects that exceed 1 MW and giving an opportunity to new subscribers.
- Issuing the standard license to practice the activity of generating and storing electric energy from renewable energy systems for private consumption.
- The number of inspection tours on the licensees amounted to (118) tours to ensure that the licensees adhere to the conditions of the license granted to them.

RENEWABLE ENERGY SYSTEMS CONNECTED TO THE GRID OF ELECTRICITY DISTRIBUTION COMPANIES, ACCORDING TO THE NET METERING SYSTEM:

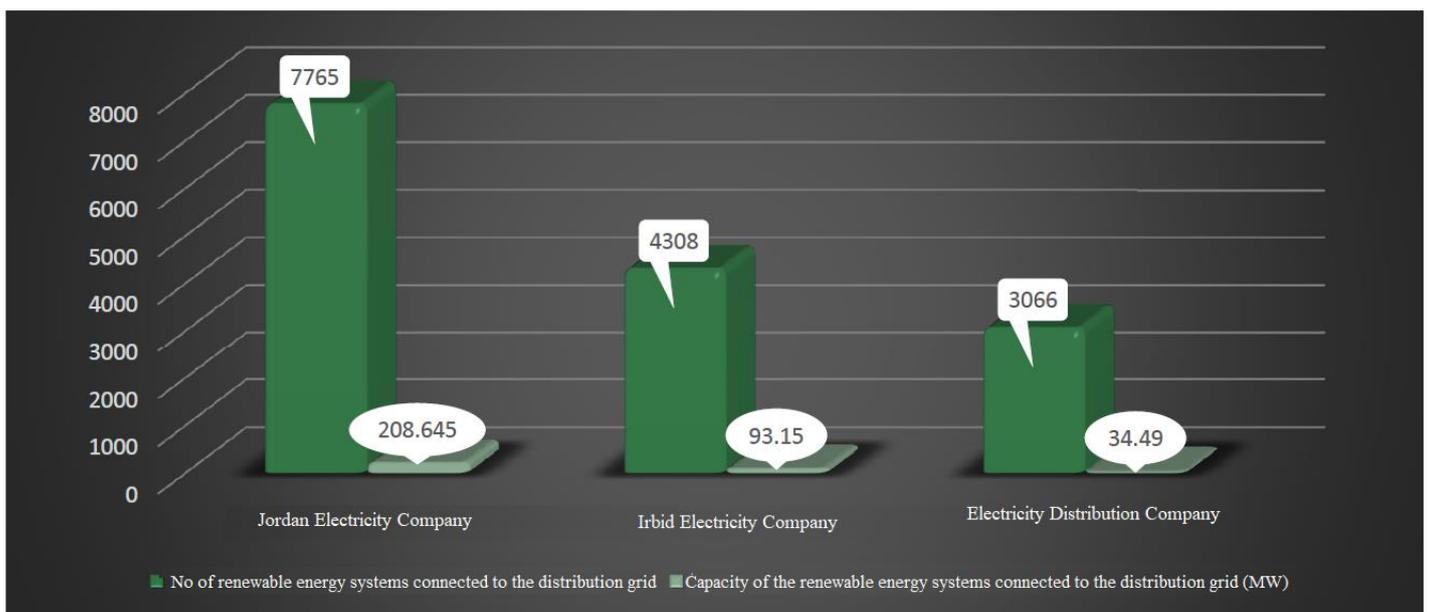


Figure (21)

RENEWABLE ENERGY SYSTEMS CONNECTED TO THE GRID OF ELECTRICITY DISTRIBUTION COMPANIES, ACCORDING TO THE TRANSIT SYSTEM:

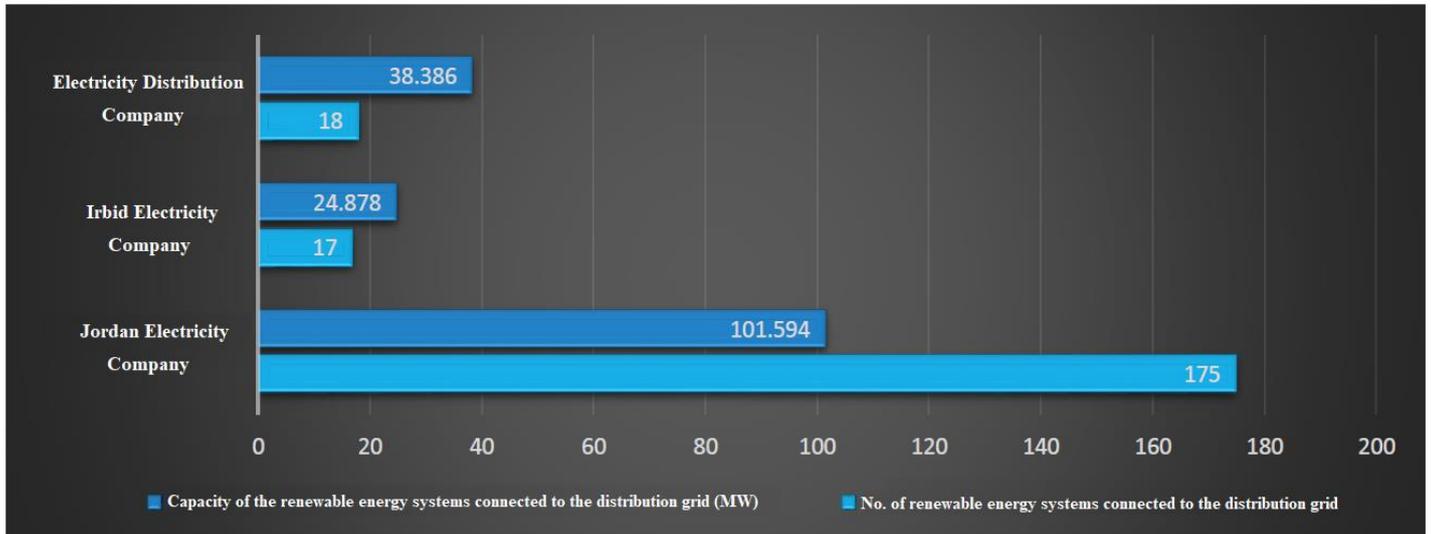


Figure (22)

Energy systems connected to the grid:

Net metering system

Table (9)

Total capacity of connected systems (MW)	Total number of connected systems	Company Name	No.
208.645	7765	Jordanian Electric Power Co.	1
93.15	4308	Irbid Electricity Company	2
34.49	3066	Electricity Distribution Company	3
336.285	15139	Total	

Transit system

Table (10)

Total capacity of connected systems (MW)	Total number of connected systems	Company Name	No.
101.594	175	Jordanian Electric Power Co.	1
24.878	17	Irbid Electricity Company	2
38.386	18	Electricity Distribution Company	3
164.858	210	Total	

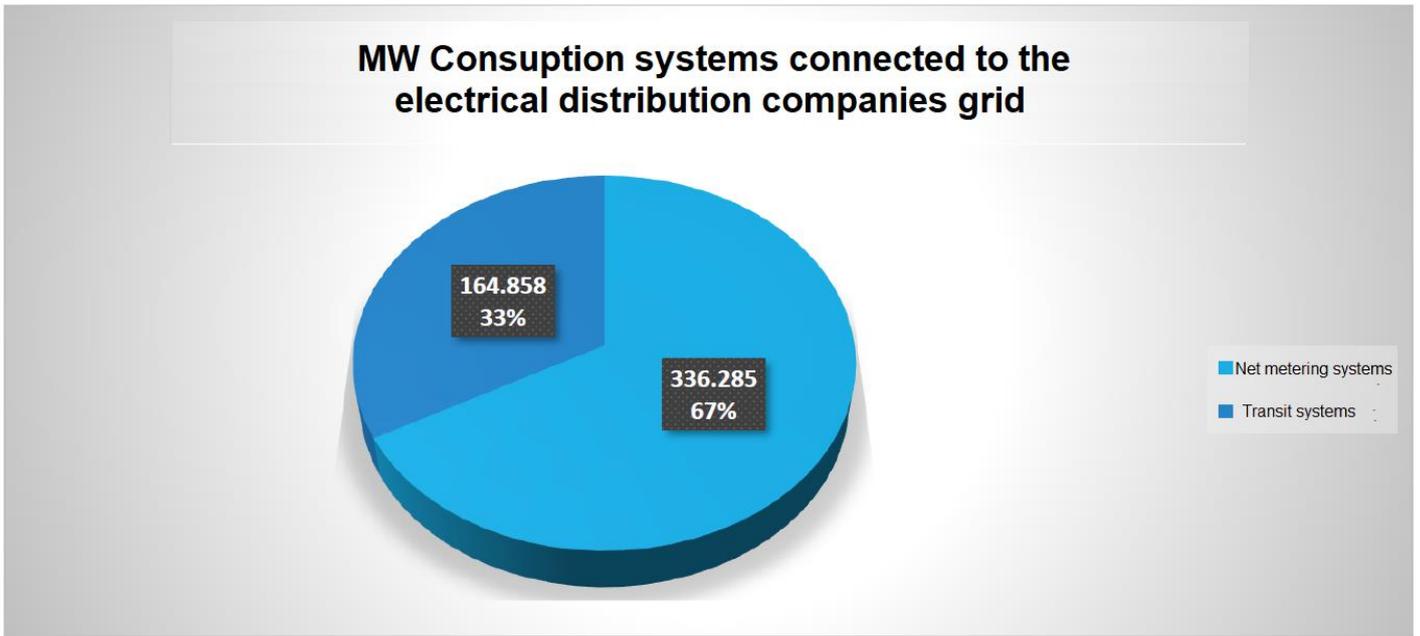


Figure (23)

EMRC issued (127) licenses for workers to practice the activities of supplying, installing, operating, maintaining and inspecting the systems of renewable energy sources according to the classification approved by EMRC, as shown in Figure (24). EMRC has also renewed (83) licenses for workers

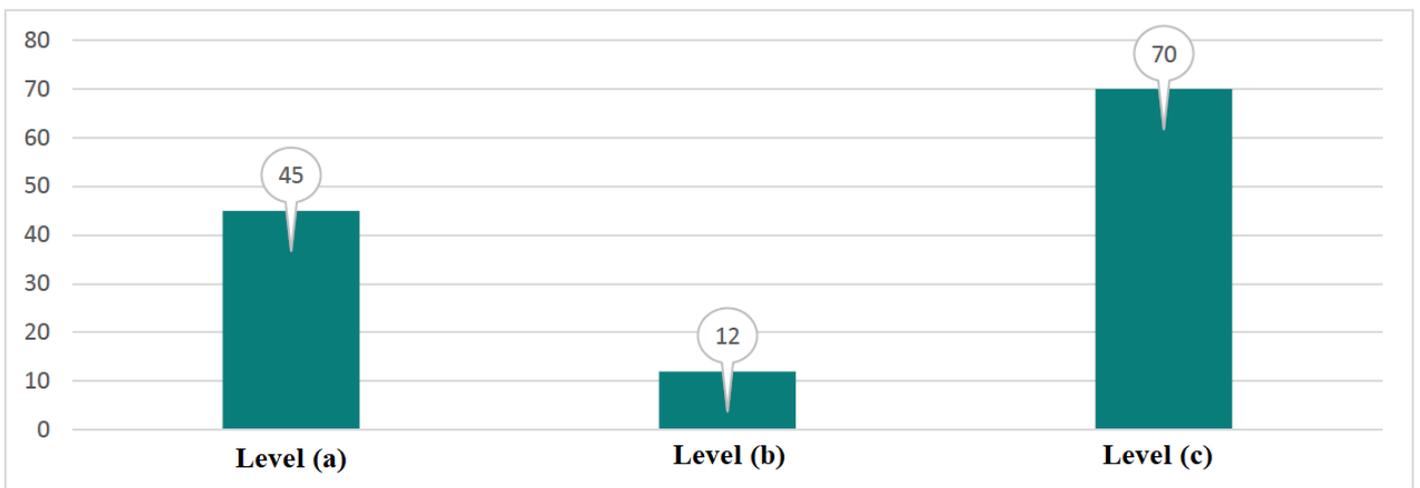


Figure (24)

NATURAL RESOURCES SECTOR

LAW PROVISIONS

EMRC undertakes the following tasks:

- Establishing a policy for developing and exploiting mineral and stone resources in the Kingdom.
 - Conducting the necessary geo-economic investigations and studies for the mineral resources
 - Technical supervision of mining and exploitation methods.
 - Providing technical and consultancy services for mining purposes.
-
- Types of licenses granted by EMRC in the mining sector
 - Mining rights licenses
 - Exploration licenses.
 - Quarries licenses.
 - Explosives expert licenses
 - Mineral ores export licenses
 - Licenses for investigation, exploration, development, operation, production and marketing of (petroleum, oil shale, coal, tar sands).
 - Licenses for investigation, exploration, development, operation, production and marketing of strategic minerals.

 - Types of permits granted by EMRC in the mining sector:
 - Transporting stone materials permit
 - Permit for land reclamation and sale of stone produced in Ajloun governorate and similar areas
 - Permit for development projects implementation
 - Investigation permit to practice the activity of inspection, research and ground surveying of (metal name) ores.

IN TERMS OF REGULATION, CONTROLLING AND INSPECTION

Regulatory decisions

- Issuing instructions for practicing stone material transportation.
- Issuing visual pollution regulations.
- Adopting the principles for controlling and inspection of the natural resources sector
- Adopting mechanisms for seizing and confiscating machinery and equipment
- Issuing "Instructions for submitting plans, drawings, and sections that show the performance of mining operations from a technical aspect from the licensee"
- Issuing "Instructions for notifying EMRC of the mined mineral quantities which supplied to entities that use minerals and their source".
- Adopting the investigation stage as a basis for obtaining exploration licenses.
- Determining the fees for services resulting from the seizure of machinery and equipment to be refunded upon the remedy of the situation or seizure of equipment, under the legislation in force, in the amount of (50) dinars for each day of the seizure.
- Adopting a policy to suspend any mining right for any person or entity for which a letter has been issued by the Department of Land and Survey or the Ministry of Finance to transfer the person or entity to the Emiri funds until the situation is corrected and to pay the amounts due according to the rules.
- Issuing "Instructions for Submitting Application for Obtaining Exploration License" 2019.
- Issuing a standard exploration license.
- Issuing "Instructions for Submitting Mining License Application".
- Adopting a regulatory decision approving the properties of clay (Silty Clay).
- Preparing standard licenses for:
 1. Practicing the activity of investigation, exploration, development, operation, production and marketing of (the strategic mineral subject of the license).
 2. Practicing the activity of exploration of (ore) to verify its existence and identify its quantities and qualities.
 3. Practicing the activity of investigation, exploration, development, operation, production and marketing of (oil shale, coal, tar sands).
 4. Practicing the activity of investigation, exploration, development, operation and phosphate production for downstream industries.
 5. Preparing an investigation permit to practice the activity of reconnaissance, research and ground surveying of (the mineral) ores.
 6. Developing the financial reward regulation for mineral discovery for the 2019 year.

7. Preparing a mineral exploration certificate.

The issuing of the above legislation, policies, documents and regulatory decisions preserved natural resources from waste and random exploitation, achieving the optimal use, good practicing, and improving their quality for construction and industrial purposes.

TYPES OF MINERALS AVAILABLE IN JORDAN

Table (11)

S.	Mineral	S.	Mineral
1.	Basalt	9	Gypsum
2	Bentonite / Clay	10	Kaolin
3.	Chalk	11.	Pure Limestone
4	Copper	12	Silica Sand
5	Diatomite	13	Zeolitic Tuff
6	Dolomite	14	Heavy metals
7	Feldspar	15	Phosphate
8.	Gold	16	Potash

Phosphate:

- Preparing a study on the needs of the local and global market for phosphate and indicating the best international practices in the field of competition for the production and marketing of this material.
- Preparing a detailed study on the mining rights granted to Jordan Phosphate Mines Company in terms of areas required to be assigned, reduced, or renewed, based on the reality of the inspection of all sites required by the Company.
- Preparing phosphate mining revenues for the treasury, which are regulated under the Phosphate Mining Revenue Regulation No. (50) of 2013.
- Issuing (2688) licenses in 2019. Licenses and permits were distributed as follows:
 - (2256) export licenses were issued for several mineral ores. The exported quantity amounted to (1,643,761) tons, which were exported to more than (41) countries.
 - Issuing (187) import licenses for quantities amounting to (47,342) tons.

- Issuing (186) quarry licenses.
- Issuing (23) explosives expert licenses
- Issuing (25) land reclamation permits.
- Issuing (5) exploration licenses.
- Issuing (4) mining rights.
- Issuing two accreditation licenses for two engineering offices for consulting services to obtain mining rights

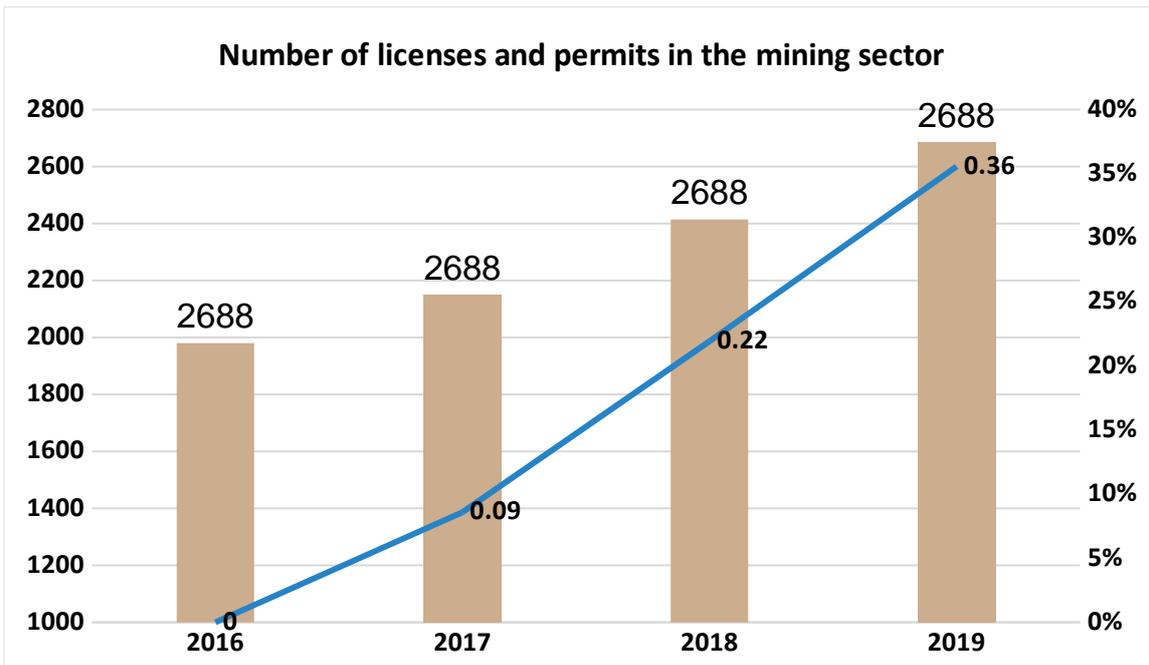


Figure (25)

- 2016 was adopted as the basic year for the growth rate of the number of licenses and permits.

- Conducting 995 inspection and control tours to mines and quarries across all governorates of the Kingdom.
- Issuing 128 decisions to close violating quarries.
- Issuing (55) warnings for licensed quarries that violate licensing conditions.
- Collecting and analyzing (165) sand and aggregates samples to control product quality.

Licensed quarries by number and type in 2019

Table (12)

Governorate	Aggregates	Spreading Materials	Construction stone	Natural Sand	Aggregates and Sand	Marble	Fractured marble/Basalt	Glass sand	Number
Capital	26	7		12	5			0	50
Balqa	10			1	3			2	16
Zarqa	16	4	3	1	2	5	7		38
Madaba	4				1				5
Irbid	25				1				26
Mafraq	12	3	4						19
Ajloun			21						21
Jerash	1			1					2
Karak	7								7
Tafleeh	5		1				2		8
Maan			7		2				9
Aqaba	4				3			3	10
Total	110	14	36	15	17	5	9	5	211

Type and quantities of exported raw materials for 2019

Table (13)

No.	Ore type	2019	2018	2017	2016
1	Natural Sand	817,650.0	688,403	771,958	522,765
2	Calcium carbonate	421,564.0	396,807	335,472	442,467
3	Construction stone	302,874.5	276,480	333,038	348,588
4	Fractured basalt + stone aggregates	16,991.0	-	-	-
5	Volcanic Tuff	33,568.0	30,041	40,593	21,770
7	Granite	1,596.2	5,465	3,773	1,589
8	Food Salt	1,317.0	5,127	2,359	3,707
9	Silica sand	14,389.3	4,326	22,758	9,899
10	Travertine marble	2,021.6	1,209	2,623	2,645
11	Marble	48898	3,739	19,425	6,166
12	Dead Sea salts	1,975.6	1,266	1,048	1,211

NATURAL RESOURCES SECTOR

13	Gypsum	150.0	500	0	0
14	Clay	13,801.0	3,396	2,840	830
15	Basalt stone	9154	36,522	13,684	5,009
16	Dead Sea Mud	128.1	159	203	116
17	Marble blocks + Stone blocks	1,691.0	-	-	-
	Total	1,643,761	1,453,439	1,549,774	1,366,762

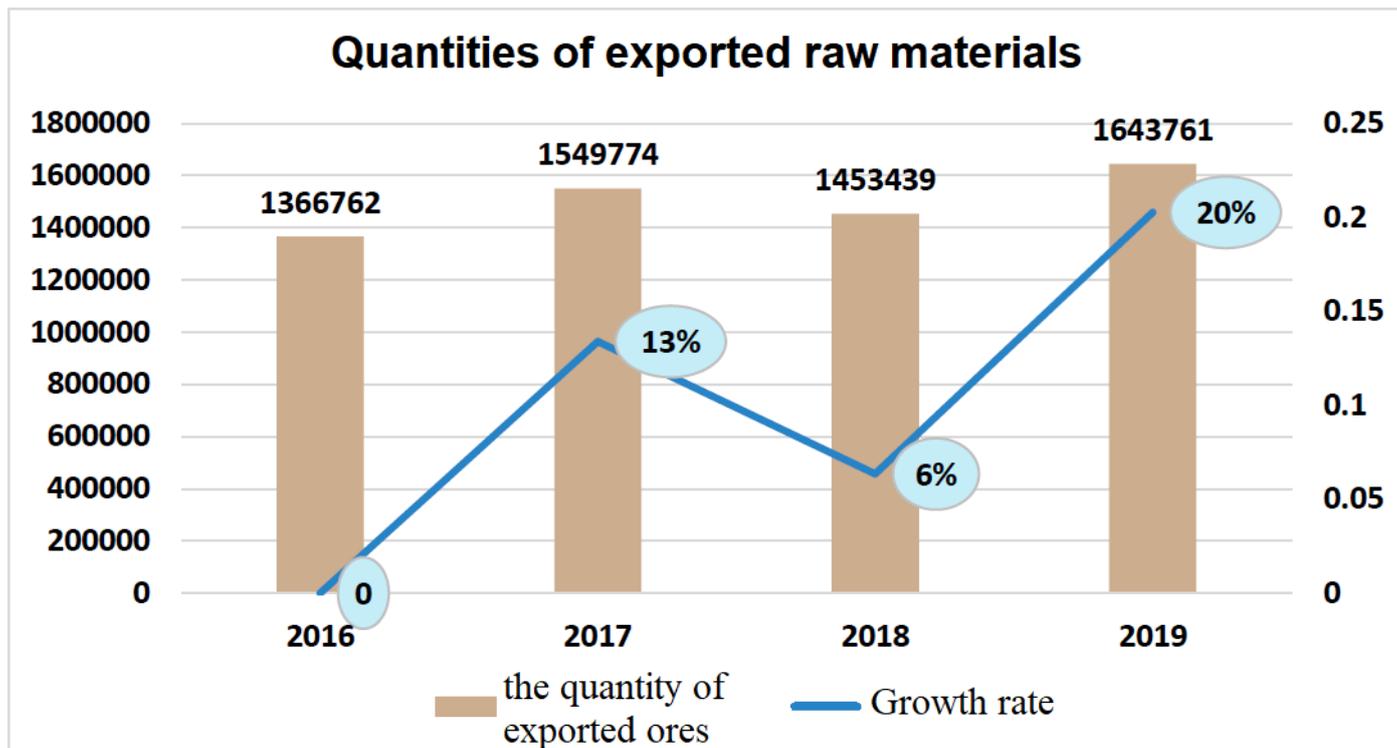


Figure (26)

PETROLEUM AND OIL SHALE /REGULATION, CONTROL AND INSPECTION

Regulatory decisions

- Granting an investigation permit to practice the activity of reconnaissance, research and land and air surveys of gold ores to Jordan Economic Development and Trading Company and the Chemical and Mining Industries Company.
- Instructions for submitting applications for oil shale exploration license for its mining and exploitation in the local industries.
- Regulating exploration and exploitation of the petroleum sector, oil shale and strategic minerals.
- Renewal of the license for exploration of copper, manganese and associated minerals granted to Jordanian Integrated Mining and Exploration Company for one and a half years from 2/14/2019 to 13/8/2020 .
- Updating the work plan to correct the situation of mining rights.
- Amending thr standard licenses for oil shale, petroleum and mineral ores.
- Preparing a draft gold ore investigation license form, based on copper ore exploration license.
- Conducting 12 inspection tours regarding the mining license granted to Attarat Power Company for electricity generation project by direct burning of oil shale to ensure the progress of work under the license conditions in accordance with the annual development plan.
- Conducting 12 inspection tours regarding thr exploration license No. (1/2016) for copper, manganese and associated minerals in Dana reserve area, which is granted to Jordanian Integrated Mining and Exploration Company to ensure the progress of work at the license area in accordance with the exploration plan.

OIL AND NATURAL GAS SECTOR LAW PROVISIONS

- EMRC undertakes the following tasks:
 - Granting permits and licenses to the sector workers and facilities.
 - Monitoring the licensees to ensure their compliance with the provisions of the laws related and the permits and licenses granted thereto. For this purpose, EMRC may conduct inspection to any other entity or body.
 - Participating in developing the technical standard specifications or rules for equipment, facilities and materials that related to the sector work, in consultation with other stakeholders to be issued by Jordan Standards and Metrology Organization (JSMO).
 - Participating with the competent authorities in the development of the necessary requirements for the implementation of environmental conditions to be met by the sector's facilities and establishments.
 - Developing draft EMRC regulations.

- **Petroleum Products Activities**
 - The activity of importing, selling, exporting, transporting, storing, and refining of crude oil.
 - The activity of importing, exporting, transporting, distributing, selling and storing natural gas or liquefied natural gas, and any activity related to them .
 - The activity of importing, exporting, transporting, manufacturing, filling, storing, loading, unloading, distribution and wholesale and retail selling of petroleum derivatives.
 - Central liquified petroleum gas (LPG) distribution activity.
 - The activity of LPG cylinders and tanks filling centers.
 - The activity of charcoal production, import, export, transport, processing, packing, storing, loading, unloading, distributing, and wholesale and retail sale.
 - The activity of biofuel production, import, export, transport, processing, packing, storing, loading, unloading, distributing, and wholesale and retail sale.
 - The activity of petroleum derivatives distribution stations.
 - LPG cylinder storage warehouse activity.
 - The activity of LPG cylinder distribution agencies.
 - Importing, exporting, transporting, manufacturing, filling, storing, loading, unloading and wholesale of liquefied petroleum gas (LPG cylinders filling centers).

- Importing and re-exporting petroleum products (transit).
- Distributing and selling diesel and kerosene in fuel stations to consumers using tanks.
- Transporting fuel oil and/or transporting petroleum products by pipelines.
- Natural gas transportation by pipelines.
- Storing and handling crude oil and petroleum products.

IN TERMS OF REGULATION, CONTROL AND INSPECTION

Regulatory decisions

- Amended instructions for licensing fuel stations to limit excess number and its impact on the economic viability of the existing stations.
- Charcoal import instructions.
- Instructions for submitting an application to obtain, renew or amend a permit or license for importing, selling, exporting, transporting, storing and refining fuel oil.
- Instructions for submitting an application to obtain, renew, or amend a permit or license for LPG storage activities for cylinders and tanks.
- Instructions for submitting an application to obtain, renew or amend a permit or license for natural gas or LNG import, export, transport, distributing, sale, storage and any activity related to it.
- Instructions for submitting an application for obtaining, renewing or modifying a permit or license for the activity of LPG cylinders warehouses storage.
- Instructions for submitting an application for obtaining, renewing or modifying a permit or license for the activity of charcoal production, import, export, transport, processing, packing, storing, loading, unloading, distributing, and wholesale and retail sale.
- Instructions for submitting an application to obtain, renew or amend a permit or license for the activity of LPG distribution agencies.
- Instructions for submitting an application for obtaining, renewing, or modifying a permit or license for the activity of importing, exporting, manufacturing, filling, storing, loading, unloading, distributing and retail and wholesale of petroleum products.
- Instructions for submitting an application to obtain, renew or amend a permit or license for the activity of petroleum derivatives distribution stations.
- Approving a mechanism for processing applications for licensing new fuel stations.
- Approving a mechanism for importing petroleum products by transit.

- Determining the allowance for handling and storing fuel oil in the tanks of Aqaba thermal station for the purposes of closing the financial entries and issuing financial statements with Jordan Oil Terminals Company.
- Amending the requirements and conditions for establishing a fuel distribution station.
- Setting the principles for extending the deadline for technical approval to establish fuel stations for more than one year in previous years.
- Replacing the required performance bond with a binding written undertaking for cement companies in the form EMRC deems appropriate.
- Approval of the instructions for implementing the emergency plan for petroleum products supply chain.
- Initial approval of the instructions for the distribution agencies of LPG cylinders.
- Instructions for the use of inspectors in the petroleum products sector for 2019.
- Instructions for detector use methods.
- Procedures approved by EMRC to apply the instructions for detector use methods.
- Approving the criteria for controlling licensing new fuel stations.

The finalization of the above legislation, policies, documents and regulatory decisions contributed to achieving the security of a sustainable supply of petroleum products and enhancing competition in the sector by balancing the interests of investors, consumers and the stakeholders.

Control and Inspection

- Issuing the standard license for importing and re-exporting petroleum products (transit).
- Adjusting the principles related to adding new areas to the allocation areas specified in the licenses granted to LPG cylinders distribution agencies
- Preparing a draft standard license to practice marketing and distribution of petroleum products.
- Draft emergency plans to supply petroleum products
- Assigning EMRC to supervise petroleum products sale and purchase agreement proposed to be signed between Jordan Petroleum Refinery Company and the three marketing companies.
- The license of Jordan Petroleum Refinery Company to practice the activity of importing, selling, exporting, transporting, storing and refining crude oil.

- The license of Jordan Petroleum Refinery Company to practice the activity of importing, exporting, transporting, manufacturing, bottling, storing, loading, unloading and wholesale of LPG/Amman Gas Station.

Approval in principle of the proposed forms for:

The license of Jordan Petroleum Refinery Company to practice the activity of importing, exporting, transporting, manufacturing, packing, storing, loading, unloading and wholesale of LPG in Salah Al-Din Station.

- The license of Jordan Petroleum Refinery Company to practice the activity of importing, exporting, transporting, manufacturing, packing, storing, loading, unloading and wholesale of LPG/Zarqa Gas Station.
- The license of Jordan Petroleum Refinery Company to practice the activity of base oils, improvers, ready-made lubricating oils, greases, and any other materials related to the activity of exporting, transporting, manufacturing, packaging, storing, loading, unloading, distributing, and retail and wholesale of these materials.
- The license of Jordan Oil Terminals Company to practice the activity of storing and handling crude oil and petroleum products.
- Standard license to practice the activity of LPG central distribution.
- Practicing the activity of natural gas import, compressing, liquefying, transporting, manufacturing, packing, sorting, loading, unloading, and wholesale and retail sale.
- The license of Modern Jordan Company for Oil and Fuel Services to practice the activity of natural gas import, compressing, liquefying, transporting, manufacturing, packing, sorting, loading, unloading, and wholesale and retail sale.

- Permits and Licenses

In 2019, EMRC completed 1721 transactions related to petroleum and petroleum products. The transactions are distributed as follows:

- Renewal of (3) licenses for the distribution of LPG by tanks out of 6 operating licenses for:
 - Elite Engineering Company for Gas and Fuels.
 - Advanced Central Gas Company.
 - Central Gas Technology Company.
- Approval to operate (486) facilities to receive LPG by tanks, bringing the cumulative number of facilities to (5733) by the end of 2019.
- Issuing (46) licenses for fuel stations, bringing the cumulative number of stations to 652 by the end of 2019.

Oil and natural gas sector

- Issuing (7) new licenses for operating gas cylinders warehouses.
- Renewal of (119) licenses to operate gas cylinders warehouses, bringing the cumulative number of warehouses to 129 by the end of 2019.
- Issuing (55) licenses for the distribution center of liquefied petroleum gas cylinders.
- Issuing (6) licenses for importing petroleum products, liquefied petroleum gas and petroleum coke.
- Issuing (7) licenses via transit.
- Issuing (2) industrial fuel licenses.
- Issuing (3) warnings to companies whose license has been renewed regarding adherence to the period specified in the license.

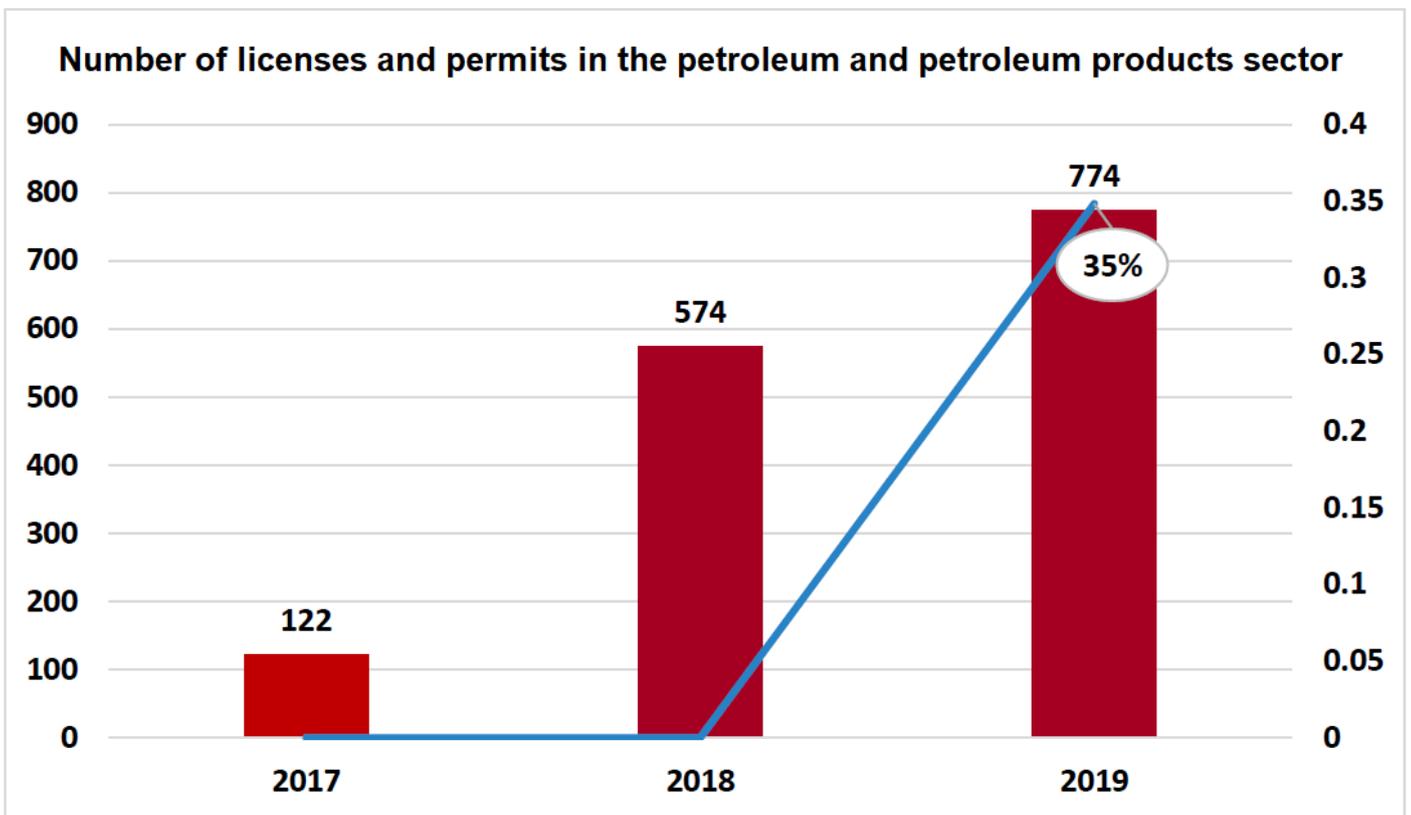


Figure (27)

2018 is the base year.

- Control and Inspection
 - Obliging Jordan Petroleum Refinery Company to apply for a license for its activities according to the requirements and principles approved by EMRC.
 - Obliging Jordan Oil Terminals Company to apply for a license for its activities according to the requirements and principles approved by EMRC.
 - 458 inspection and control rounds were conducted on the fuel stations operating in the Kingdom in order to verify the extent of the stations' commitment to pricing, stock adequacy, and public safety conditions.
 - Imposing 12 violations against fuel station owners due to the lack of kerosene in their stations.
 - 505 inspection and control tours were carried out for warehouses and gas cylinders distribution centers operating in the Kingdom.
 - Instructions for submitting an application for obtaining, renewing or modifying a permit or license for the activity of charcoal production, import, export, transport, processing, packing, storing, loading, unloading, distributing, and wholesale and retail sale.
 - Submitting an application to obtain, renew or amend a permit for the activity of importing charcoal for the purposes of private consumption.

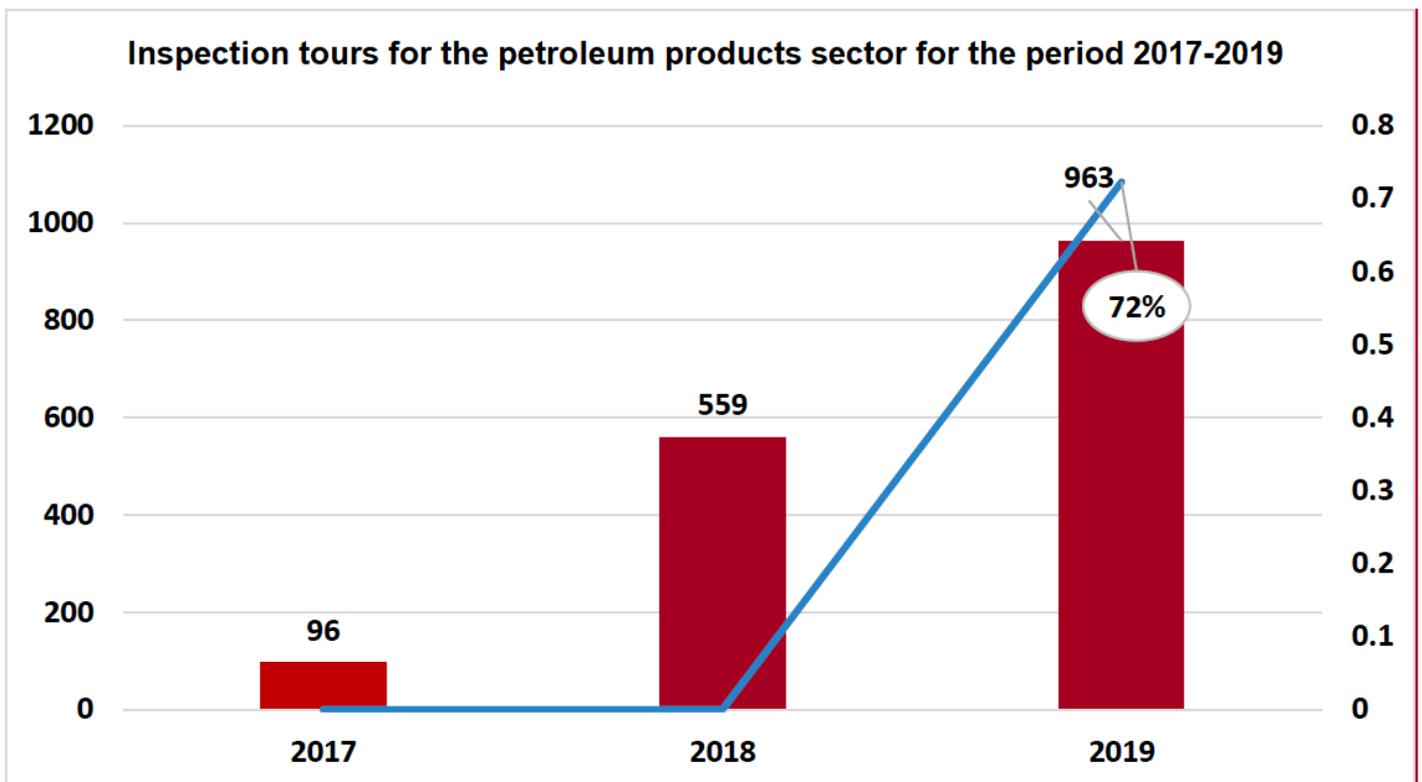


Figure (28)

The table shows the number of operating firms in the petroleum products sector

Table (14)

Year	Fuel Stations	Gas Cylinder warehouses	Gas Agencies	Central Distribution Companies	Gas
2019	652	129	679	6	
2018	604	123	624	6	
2017	547	131	890	7	
2016	518	126	1176	6	
2015	496	127	1112	6	

CORPORATE PERFORMANCE DEVELOPMENT AND QUALITY MANAGEMENT IN THE FIELD OF STRATEGIC PLANNING

Establishing the national information system framework for the sector for:

- Electricity and renewable energy
- Natural Resources Sector
- Petroleum Products Sector
- Radiation and nuclear sector.
- Adopting 18 local energy indicators and comparing them against global indicators. These indicators are related to energy supply, energy consumption, productivity, performance, among others.
- Approving the strategic plan (2019-2021) in line with the national directions related to the energy and minerals sector, including projects for each EMRC sector that were developed to serve EMRC regulatory and supervisory role.
- Updating and developing the risk management plan for the years (2019-2021).
- Preparing and evaluating implementation plans in coordination with all organizational units for the year 2019.
- Holding several meetings for all organizational units to review the strategic plan for the years (2019-2021).
- Preparing partner satisfaction study for 2019.

IN THE FIELD OF OPERATIONS AND SERVICES MANAGEMENT

- Approving an updated service guide, according to the directives of the Prime Ministry/Corporate Performance Development Department and policies through standards, performance indicators and targets for each service provided through EMRC.
- Addressing all complaints and suggestions received by EMRC during 2019 through the approved communication channels represented by (At your service portal), suggestions and complaints boxes, suggestions and complaints email, government complaints system (within the specified time and based on the methodology of managing suggestions and complaints at government agencies.
- Developing the improvement plan for the reports of King Abdullah Award for Excellence on the eighth session, and enforcing the plan within the implementation plan and EMRC operations and procedures.

- Revising and amending the tools for evaluating and improving the governance report for the three criteria: rule of law, effectiveness, efficiency, and transparency, in accordance with the requirements of the National Governance Team and finalizing the report.
- Holding two training and scholarship workshops, in coordination with the Civil Service Bureau, and a workshop for preparing the improvement plan for the Award criteria in coordination with King Abdullah II Center for Excellence.
- Granting EMRC to maintain ISO 9001: 2015 accreditation.
- Developing reports on the attendance HR system.
- **Setting up IMS project processes.**
- Preparing the annual report 2019 on the transactions received by At your service portal.
- Preparing customer satisfaction report for 2019.
- Preparing project progress reports included in the strategic plan 2019.
- Preparing a list of the sectoral licenses granted by EMRC, required documents and EMRC partner entities.
- Completing an illustration and banners explaining the customer journey from the car park to the public service counters, and preparing the infrastructure for customers with disabilities.
- **The total number of customers handled by the Service Center in 2019 is (12691), as follows:**

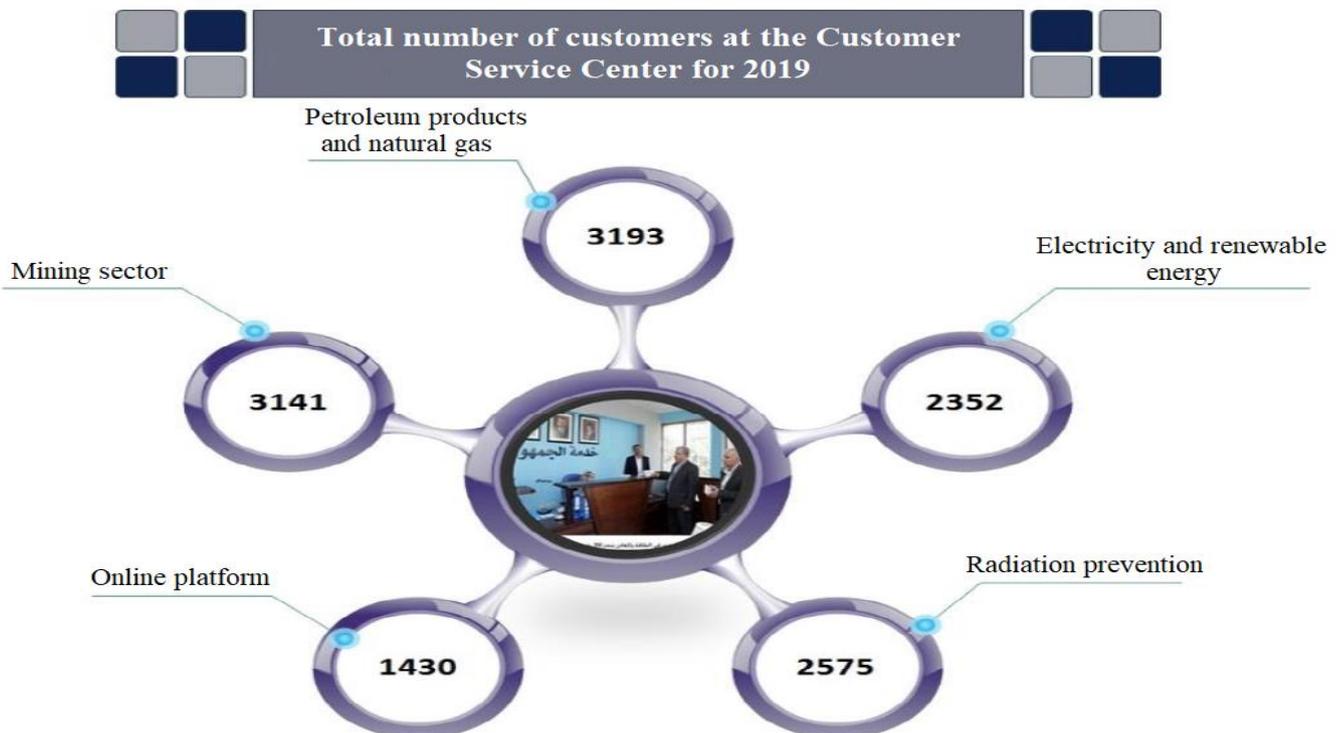


Figure (29)

ENFORCEMENT OF THE LAW GUARANTEEING THE RIGHT TO INFORMATION

- Preparing the monthly statistical booklet, pursuant to Article 17/a /3 of EMRC Law No. (8) of 2017, which stipulates the publication of the information included in the national information system for the sector and allowing any individual or institution, with the exception of information that EMRC considers confidential, according to instructions issued for this purpose.
- **Issuing instructions for classifying EMRC documents and information.**
- **EMRC institutionalized work with regard to law enforcement through several procedures, i.e. the designation of an information officer in EMRC and adding his duties to the directorate of the national information system of the sector in order to ensure the sustainability of the work.**
- **Automating the information request service.**
- **Educating EMRC employees about the right to information through various means, such as email, periodic meetings and lectures.**
- **Updating (classification of EMRC documents), according to the professional and technical principles in force and applicable legislation, pursuant to Article (14) of the Law on the Right to Information. More than 580 pieces of information have been classified.**
- **The number of applications submitted to EMRC for 2019 amounted to (5817). To reinforce the principles of transparency and ensure the right to access to information, lists of applications submitted to EMRC were prepared and published on a monthly basis on the website. 5741 monthly applications (first-time license, renewal, amendment, or cancellation) were admitted, while (76) applications were rejected (first time license, renewal, amendment or cancellation), across all sectors)**
- The number of information applications submitted to EMRC for 2019 was (33), distributed among the sectors as follows:
 - 19 applications for information in the electricity and renewable energy sectors.
 - 6 applications for information in the radiation and nuclear work sector.
 - 7 applications for information in the natural resources sector.
 - 2 applications in the petroleum products sector.

- **Control and inspection of economic activities: Programs for electronic inspection have been prepared for the natural resources and electricity sectors. This program aims to automate manual inspections through a number of applications to achieve the following objectives:**
 - Determining the inspection sites on digital maps and producing seizure records as part of an electronic database for all the facilities that are monitored to organize, arrange and classify information, and categorize and place the information in tables and statistical and geographical data on a permanent basis.
 - **Preparing and activating a special program to follow up complaints, judicial police data, and electrical loads in the Monitoring and Emergency Unit.**
 - **Preparing a program for the movement and maintenance of EMRC cars and vehicles and activating it at the Administrative Services Department.**
 - **Preparing a special program to follow up on mining companies' receivables.**
 - **Launching EMRC new website: www.emrc.gov.jo in Arabic and English. The new website is in line with King Abdullah II Award for Electronic Transformation. It has been designed according to the latest standards and technology in order to keep pace with the latest global developments in the organization and development of the energy and minerals sector.**
 - **Developing the necessary infrastructure to activate electronic payments through (efawateercom) based on the Cabinet circular in this regard. 64 services have been prepared that can be paid electronically through the electronic payment system.**
 - **Preparing a mobile application for EMRC. The application provides a range of information services, such as (service directory) and electronic services such as reporting electricity thefts, filing electronic complaints, requesting information, nearest fuel station service, and the nearest electric charging station.**
 - **Finalizing the infrastructure (rehabilitation and arrangement of internal network connection) of the main server room and implementing all the audit recommendations of ISO9001: 2015 certification through the installation of alarm devices for the server room and applying cyber information security policy to EMRC internal network.**
 - **Finalizing the transfer to automatic instead of manual receipt at Aqaba border center/Yard No. 4.**
 - **Applying information security policies based on the circular of the Prime Minister and the Ministry of Digital Economy and Entrepreneurship, in coordination with**

the Information Security Directorate at the National Information Technology Center to examine the internal network of EMRC and make appropriate recommendations to address any gaps in the internal network.

- Preparing a control panel to monitor the completion rates of control and implementation projects for directorates and organizational units electronically, with clear performance indicators measured semi-annually or whenever necessary.



- Activating QR CODE to identify all the required documents and procedures related to transactions and placing a signboard on the customer service counter.

Figure (30)

CONTROL AND EMERGENCY

- Maintaining the control of the energy and minerals sector around the clock, including air, land and sea border crossings.
- Coordination and participation in conducting mock drill prepared by the National Center for Crisis Management (Safety Land) and (Power of Right).
- Following up outages during depressions and emergencies, and ensuring the reconnection of electricity to affected subscribers.
- Arranging and coordinating control campaigns to ensure the sustainable provision of kerosene and petroleum derivatives at fuel and gas cylinders stations in warehouses and agencies before, during and after depressions.
- Inspecting exploration activities related to gold search activities in Abu Khashiba areas and inspecting all activities related to mining operations in the southern regions.
- Inspecting basalt quarries in the Hashemite region/Zarqa Governorate, and seizing violating machinery.
- The number of complaints and communications received by the Center during 2019 was (4409), which were monitored and closed by 100%.

- Following up all complaints received by the Center through all announced communication channels, in addition to complaints received through (at your service) portal for all sectors concerned with EMRC work, which amounted to about (1029) complaints.
- Controlling border crossings to verify the data that have been installed on the application of the National Information System concerned with the petroleum derivatives sector
- Following up power outages during and after depressions, and ensuring the reconnection of electricity to affected subscribers.
- Arranging and coordinating control campaigns that have been carried out in respect of electricity distribution companies to ensure their readiness to face exceptional and emergency cases.
- Conducting control campaigns on the mining sector, including exploration of the gold metal in Abu Khushaiba areas, inspecting all activities related to mining operations in the southern regions, and confiscating violating vehicles that operate on unlicensed sites.
- Executing monitoring campaigns to ensure the availability of petroleum products of all kinds with the licensees, including fuel stations, warehouses and agencies selling liquefied gas.
- Conducting control and inspection campaigns on the central liquefied gas distribution companies.
- Conducting control and inspection campaigns on the radiation work sector that include all companies, hospitals and health centers operating in the sector.

CAPACITY BUILDING

- EMRC achieved the target of 2019 training plan by more than 83%. EMRC employees participated in (360) internal and external (sessions, conferences, meetings, and workshops) as follows:
 - 168 external events
 - 192 internal events

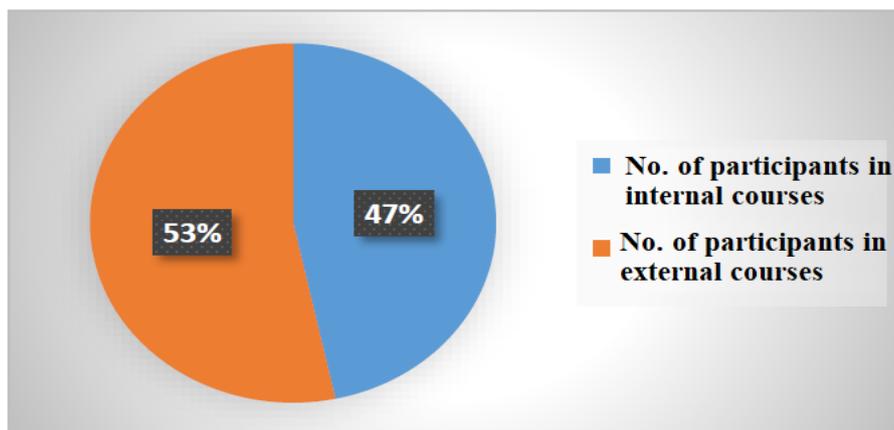


Figure (31)

MEDIA AND OUTREACH

	Publishing (30) press releases about EMRC achievements.
	Conducting (3) television interviews
	(3) interviews on the local radio
	Publishing official press releases on EMRC website, and circulating these news to all employees by email.
	Updating EMRC official social media profile on Facebook and announcing all activities, visits and news.

Figure (32)

COMMUNITY RESPONSIBILITY

The Community Responsibility Committee of the Energy and Minerals Regulatory Commission is based on achieving the concept of community responsibility in its comprehensive sense in terms of moral and voluntary commitment towards the local community and the environment, which made EMRC more responsive to the surrounding events, based on the internal motivation of the members of the Committee to carry out and coordinate voluntary activities related to the preservation of the environment, public safety and community service. Work is carried out based on clear foundations and frameworks for the activities and initiatives of the Committee based on the pillars and importance of community responsibility.



Activities towards EMRC employees

Promoting cooperation and social solidarity among EMRC employees, and strengthening ties between them.

Activities towards the local community

Demonstrating EMRC role as an active and influential element in the local community through voluntary community service activities.

Environmental activities

Demonstrating EMRC role as an effective g the environment through voluntary activities related to preserving the environment and public safety.





**Energy & Minerals Regulatory Commission
Amman, the Hashemite Kingdom of Jordan**

**FINANCIAL STATEMENTS AND
INDEPENDENT AUDITORS' REPORT
FOR THE YEAR ENDED DECEMBER 31, 2019**

**Energy & Minerals Regulatory Commission
Amman, the Hashemite Kingdom of Jordan**

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FINANCIAL STATEMENTS

Independent Auditor's Report

**Messrs. Chairman and Members of the Board of Commissioners of the Energy and Minerals Regulatory Commission
Energy & Minerals Regulatory Commission
Amman, the Hashemite Kingdom of Jordan**

Opinion

We have audited the accompanying financial statements of (Energy and Minerals Regulatory Commission), which comprise statement of financial position as at December 31, 2019, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory notes.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the (Energy and Minerals Regulatory Commission) as on December 31, 2019, its financial position, and its cash flows for the year then ended in conformity with International Financial Reporting Standards.

Basis of Opinion

We have audited the accompanying financial statements in accordance with international auditing standards. Our responsibility insofar as these standards is shown subsequently in our report in the paragraph of the responsibility of the Auditor for auditing the Financial Statements. We are independent of the Commission in conformity with the ethical requirements related to the process of auditing the Financial Statements, in addition to our adherence to other ethical responsibilities, as per the abovementioned requirements.

We believe that the data used in the audit which we obtained are adequate and suitable as a basis for our opinion in respect of the audit

Management's Responsibility and Officers Responsible for Governance of the Financial Statements

Management is responsible for the preparation and fair presentation of these Financial Statements in accordance with International Financial Reporting Standards and is likewise responsible for preparing an internal control system which the management considers necessary for purposes of preparing the Financial Statements that are free from material misstatement, whether due to fraud or error

Management is responsible upon preparing the Financial Statements for assessing the capability of the Commission to continue and disclose, as applicable, the matters related to continuity and the use of the ongoing concern accounting principle.

The persons responsible for governance are themselves responsible for overseeing the procedures of financial reports for the Commission.

Notes

-Pursuant to the Decision of the Council of Ministers No. 1534 dated 15/10/2018 and No. 1656 dated 22/10/2018, EMRC budget was transferred from the Government Units Budgets to the Public Budget Law.

-According to Decision of the Board of Commissioners No. 403/2020, dated June 3, 2020, and subsequent to the Board of Commissioners Resolution No. 2020/222 , dated 2020/2/23 , the registration of mining companies' receivables until the end of 2018 amounting to JOD 15,254,825/ - in the financial statements of 2019 was postponed until the conclusion of the agreement on the final calculation of values between EMRC and the entities operating in the mining

sector due to the delay in completing the settlement as a result of Covid-19 crisis. This issue will be followed up according to the rules.

Auditor's Responsibility for the Audit of Financial Statements

Our objective is to obtain reasonable assurance as to whether the Financial Statements as a whole are free from any material misstatement, whether due to fraud or error, and to issue our report containing our opinion in this regard.

Reasonable assurance is a high level of assurance, but it is not a guarantee that the audit performed in accordance with international auditing standards will always uncover any material misstatement.

The errors could arise from fraud or error, and are considered substantive in case they, individually or in general, may reasonably affect the economic decisions taken by the users on the basis of these Financial Statements.

As a part of the audit process in accordance with international auditing standards, we exert professional efforts and comply with the principle of professional scrutiny during the audit, in addition to the following:

- Determine and assess the risks of substantive errors in the Financial Statements, whether arising from fraud or error, and also design and implement the auditing procedures that are responsive to those risks, and obtain adequate and suitable auditing evidence to constitute a basis for our opinion. The risk of not uncovering material misstatements resulting from fraud is greater than the risk resulting from error. Fraud could include collusion, forgery, willful omission, misrepresentation or infringement of the internal control systems.
- Acquire an understanding of the internal control systems related to auditing for purposes of designing suitable auditing procedures according to circumstances, rather than for the purpose of expressing an opinion on the efficiency of the internal control systems in the Commission.
- Evaluate the suitability of the adopted accounting policies and the extent of the reasonableness of the accounting estimates and the relevant explanatory notes prepared by management.
- Reach a conclusion concerning the suitability of the management's use of the ongoing concern accounting principle, based on the audit evidence obtained, insofar as whether there is a lack of certain belief related to events or circumstances which could raise substantive doubt concerning the ability of the Commission to continue. In case we deduce the absence of certain belief, we are required to point out this fact in the audit report to the relevant explanatory notes in the Financial Statements, and in case disclosure of such information is inappropriate, we shall then alter our opinion. Our conclusions depend on the auditing evidence, which was obtained until the date of the Audit Report. Nevertheless, it would be possible for future events or circumstances to prevent the Commission from continuing to exist.
- Evaluate the general presentation and the form and content of the Financial Statements including disclosures, and whether the Financial Statements represent the transactions and events in a fair and balanced manner.

Communicate with those responsible for governance insofar as the scope and timing of the planned auditing and the significant auditing remarks, including any significant deficiencies in the internal control system which were identified in our audit.

Report on the Other Legal and Legislative Requirements

The Commission maintains organized and proper accounting records, which are consistent in all substantive aspects with the attached Financial Statements.

By the Certified Auditors

FINANCIAL STATEMENTS

Jamal Hamoudeh (JCPA, ACPA)
License Number 478

Amman on May 20, 2020

FINANCIAL STATEMENTS

**Energy & Minerals Regulatory Commission
Amman, the Hashemite Kingdom of Jordan
Statement - A**

Statement of Financial Position as at 31 December 2019

	<u>Notes</u>	<u>2019</u> <u>JOD</u>	<u>2018</u> <u>JOD</u>
Assets			
Current Assets			
Cash and Cash Equivalents	3	652,500	763,333
Accounts Receivable	4	3,222,363	2,259,020
Total Current Assets		3,874,863	3,022,353
Non-Current Assets			
Lands		2,944,000	2,944,000
Property, Machinery and Equipment	5	5,128,597	6,913,149
Net Other Assets	6.	1	1
Total Non – Current Assets		8,072,598	9,857,150
Total Assets		11,947,461	12,879,503
Liabilities & Shareholder’s Equity			
Current Liabilities			
Accounts Payable	7	471,694	512,981
Other Accounts Payable	8	276,381	153,642
Total Current Liabilities		748,075	666,623
Shareholder’s Equity			
Surplus of Revaluation of Fixed Assets	9	2,967,630	2,967,630
Deferred Income on Grant of Assets	10	4,480,147	5,815,637
Accumulated Surplus	11	3,751,609	3,429,613
Total Shareholders’ Equity – Statement C		11,199,386	12,212,880
Total Liabilities & Shareholder’s Equity		11,947,461	12,879,503

THE ATTACHED EXPLANATORY NOTES CONSTITUTE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

FINANCIAL STATEMENTS

Energy & Minerals Regulatory Commission Amman, the Hashemite Kingdom of Jordan

Statement (b)

Statement of comprehensive income for the year ended December 31, 2019

	<u>Notes</u>	<u>2019</u> <u>JOD</u>	<u>2018</u> <u>JOD</u>
<u>Revenue</u>			
Revenues of License Fees for Electricity Sector	12	5,385,805	5,626,853
Revenues of natural resources fee	13	6,084,638	6,127,407
Revenues of Radiation and Nuclear Activity License Fees	14	2,491,022	2,649,206
Revenue from the Natural Gas Directorate		10,000	-
Other revenue		16,831	19,206
Amortization of deferred revenue for assets		1,335,490	1,335,490
Revenues of oil and oil products	15	1,024,356	603,925
Total Revenue		<u>16,348,142</u>	<u>16,362,087</u>
<u>Expenses</u>			
Salaries and Wages and Other Benefits	16	(3,736,645)	(3,630,041)
General and Administrative Expenses	17	(392,766)	(484,900)
Capital Expenditures	18	(550,281)	(622,901)
Studies and Consultation		(11,761)	(80,622)
Depreciation and Amortization		(1,839,363)	(1,714,376)
Devaluation of Obsolete Accounts Receivable		(870,604)	(200,000)
Previous Years Revenues (Expenses)	19	(91,491)	(351,868)
Total Expenses		<u>(7,492,911)</u>	<u>(7,084,708)</u>
Year Surplus – Statement C		<u>8,855,231</u>	<u>9,277,379</u>

THE ATTACHED EXPLANATORY NOTES CONSTITUTE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

FINANCIAL STATEMENTS

Energy & Minerals Regulatory Commission Amman, the Hashemite Kingdom of Jordan

Statement C

Statement of Changes in Shareholders' Equity for the Year Ended December 31, 2019

	<u>Total</u>	<u>Accumulated</u>
	<u>JOD</u>	<u>Surplus</u>
	<u>JOD</u>	<u>JOD</u>
Balance as of 1/1/2018	11,700,392	11,700,392
Amount transferred to the public treasury	(8,232,079)	(8,232,079)
Deferred Income on Granted Assets	802,678	802,678
Deferred Revenue Amortization	(1,335,490)	(1,335,490)
Year surplus - Statement B	<u>9,277,379</u>	<u>9,277,379</u>
Balance as of December 31, 2018	12,212,880	12,212,880
Amount transferred to the public treasury	(8,533,235)	(8,533,235)
Deferred Income on Granted Assets	-	-
Amortization of deferred revenue for assets	(1,335,490)	(1,335,490)
Year surplus - Statement B	<u>8,855,231</u>	<u>8,855,231</u>
Balance as of December 31, 2019 -Statement A	<u>11,199,386</u>	<u>11,199,386</u>

THE ATTACHED EXPLANATORY NOTES CONSTITUTE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

**Energy & Minerals Regulatory Commission
Amman, the Hashemite Kingdom of Jordan**

Statement (D)

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2019

THE ATTACHED EXPLANATORY NOTES CONSTITUTE AN INTEGRAL PART OF THESE FINANCIAL STATEMENTS

FINANCIAL STATEMENTS

Energy & Minerals Regulatory Commission Amman, the Hashemite Kingdom of Jordan

Notes to the financial statements

	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
<u>CASH FLOWS FROM OPERATING ACTIVITIES</u>		
Year Surplus	8,855,231	9,277,379
Depreciation and amortization	1,839,363	1,714,376
Operating surplus before change in working capital items	10,694,594	10,991,755
<u>Change in current assets and liabilities</u>		
Accounts Receivable	(963,343)	(1,304,098)
Accounts Payable	(41,287)	(205,124)
Other Accounts Payable	122,739	83,734
Net cash flow from operating activities	9,812,703	9,566,267
<u>CASH FLOWS FROM INVESTMENT ACTIVITIES</u>		
Property and equipment	(54,811)	(899,394)
Net cash from investing activities	(54,811)	(899,394)
<u>CASH FLOWS FROM FINANCE ACTIVITIES</u>		
Amount transferred to the public treasury	(8,533,235)	(8,232,079)
Deferred grants	(1,335,490)	(532,812)
NET CASH FLOWS FROM FINANCE ACTIVITIES	(9,868,725)	(8,764,891)
Net cash flows from activities	(110,833)	(98,018)
Cash and cash equivalents – beginning of the year	763,333	861,351
Cash and cash equivalents – end of the year	652,500	763,333

1. **Legal Status and Activities**

About the Commission

The Energy and Minerals Regulatory Commission is a government organization established under the Law of Restructuring Governmental Institutions and Departments No. (17) of 2014. It has a legal personality with financial and administrative independence. In this capacity, it may acquire movable property required to achieve its objectives and to carry out all legal actions. It is the legal successor of the Electricity Sector Regulatory Commission, Radiation and Nuclear Regulatory Commission and the Natural Resources Authority in respect of the administrative tasks designated to the Commission. The Commission is represented by the Chairman of the Board of Commissioners/CEO before all other bodies. It comprises the Board of Commissioners and the Executive Body. In April 2018, the Energy and Minerals Sector Regulation Law No. 8 of 2018 was enacted, which organized the work of the Commission and identified its objectives and the functions and powers of the Board of Commissioners and Chief Executive Officer.

- General Electricity Law No. 64 of 2002, as amended.
- Radiation Protection and Nuclear Safety and Security Law No. 43 of 2007, as amended
- Renewable Energy and Energy Conservation Law No. 13 of 2012, as amended
- Petroleum Products Law No. 11 of 2019.
- Natural Resources Law No. 19 of 2019.

Strategic, Sectoral, and National Objectives to which EMRC Contributes:

National objectives to which EMRC contributes:

1. Maintain financial and monetary stability, control budget deficit, and develop an efficient and low-risk financial system.
2. Create an attractive investment environment capable of attracting foreign capital and encourage local investment.
3. Improve the level of services provided to citizens and the fairness of their distribution.

Sectoral objectives to which EMRC directly contributes:

1. Regulate the sector on the basis of balance between the interests of consumers, investors, licensees and any other stakeholders.
2. Maintain the interests of consumers provided that they comply with the conditions of providing the services approved by EMRC, which are provided by the licensees.
3. Maintain an efficient environment for the sector, which will enhance the economic feasibility of the sector and improve its efficiency.
4. Ensure the provision of secure, stable, durable and high- quality services in the sector.
5. Ensure the provision of public safety conditions and requirements and protect the environment and people health and property.
6. Ensure that the services required from licensees are provided to consumers sufficiently and with high quality.

There are other sectoral objectives set out in the legislation related to the work of the energy and mineral sector, which EMRC is seeking to achieve, including the objectives set out in the Comprehensive Energy Sector Strategy.

EMRC Strategic Objectives:

1. Regulate the energy and minerals sector on the basis of balance between the interests of consumers, investors and any other stakeholders.
2. Develop an effective control and inspection system for the sector to improve and enhance the confidence of consumers and investors and achieve competitiveness and protect human and environment.
3. Develop cost-based pricing systems and methodologies to ensure improved performance and lowest costs.
4. Enhance EMRC efficiency and effectiveness.

EMRC Financial Resources:

EMRC Financial Resources consist of the following:

1. Amounts allocated to these resources in the general budget.
2. Revenues derived from license and permit fees and their renewal.
3. Remuneration for services provided by the Commission.
4. Aid, grants, and donations, if approved by the Council of Ministers, if they are of a non-Jordanian source.
5. Proceeds of fines imposed by the Commission under the legislation relevant to the sector regulation.

Annual Surplus

The annual surpluses accruing to the Commission, after deducting all expenses, devolve to the Public Treasury.

Exemptions

- The Commission avails of all the exemptions and facilities enjoyed by ministries and government departments.
- The Commission funds and its entitlements are considered Public Funds and are collected in conformity with the rulings of the Public Property Law in force, and for this purpose, the Chairman exercises the powers assigned to the district governor or the Committee for Collection of Public Property stipulated in that law.

Number of Employees

- The numbers of employees of the Commission by the end of the year 2019 were (353), 5 seconded employees, 4 suspended employees, 0 employee assigned to a government entity, and 41 employees on unpaid leaves.

Approval of the Financial Statements

- The Financial Statements were approved by the Board of Commissioners of the Commission in its session Number (68) convened on 3/2/2020.

2. SIGNIFICANT ACCOUNTING POLICIES

The attached Financial Statements are prepared in accordance with the International Financial Reporting Standards, and the following is a summary of the significant policies applied:

a. Basis of measurement

The financial statements are prepared according to the historical cost principle. This principle has been amended for certain assets as indicated below.

The Jordanian Dinar is the currency of the Financial Statements which represents the official currency of the Commission.

The Commission follows the accrual basis in recording its revenues and expenses for electricity, while other revenues are recorded on a cash basis.

b. Property, machinery and equipment

Property, machinery and equipment are recorded at cost, less accumulated depreciation and any impairment in value allowance. The Commission uses the straight-line method for depreciating its property, machinery and equipment, excluding lands, over estimated useful lives at the following percentages:

Buildings	2%
Furniture and furnishing	10%
Vehicles	15%
Machinery and equipment	15%

If any of the property and equipment is disposed of, the net book value for the disposed asset on the date of disposition is omitted from the Commission's records, and the result, whether income or loss, is forwarded to the statement of income.

The major additions and improvements are capitalized at cost. As to maintenance and repair expenses they are charged to current transactions as they occur.

When the sum recoverable from any of the properties and equipment is less than their net book value, then its value is reduced to the recoverable value. Any impairment is entered in the comprehensive income statement.

The production life and method of depreciation are reviewed regularly to verify that the method and period of depreciation are consistent with the economic benefits anticipated from the properties and equipment.

c. Intangible Assets

The intangible assets are classified on the basis of estimating their presumed lifespan for a definite or indefinite period. Intangible assets that have a specific lifespan are amortized during this lifespan.

Amortization is recorded in the statement of income. As for intangible assets with an indefinite lifespan, the decline in their value is reviewed at the date of the financial statements. Any devaluation is recorded in the statement of income.

The intangible assets resulting from the activity of the Commission are not capitalized and are recorded in the comprehensive income statement in the same year.

Any indicators of the devaluation of the intangible assets are reviewed as at the date of the Financial Statements. Moreover, the estimate of the lifespan of those assets are reviewed and any amendments are done for the subsequent periods.

The intangible assets consist of computer programs, which are amortized by 15% annually.

d. Cash and cash equivalents

For the purpose of preparing the cash flow statement, “cash and cash equivalents” item represents cash in hand, current accounts and demand deposits with banks, which have value dates of three months or less.

e. Foreign currencies

Foreign currency transactions occurring during the year are expressed in Jordanian Dinars at the market prices prevailing on the transaction date. Assets and liabilities denominated in foreign currencies are expressed in Jordanian Dinars at rates of exchange prevailing at the end of the financial year. The differences stemming from change in the rates of exchange are entered in the income statement.

f. Provisions

Provisions are recognized when the Commission has obligations due at the date of statement of financial position from past events and the payment of obligations is possible and the amount of these obligations can be measured reliably.

g. Other payable balances and accounts

The liabilities in terms of payments that have fallen due in future are recorded for the received goods or services, whether claimed or not claimed by the supplier.

h. Accounts receivable

Accounts receivable and payable are recorded in the value of contracts or claims held by the Commission. The impairment provision of accounts receivable is made when it appears to the management that it is not possible to complete the collection of all these receivables. The provision is calculated based on the difference between the book value and recoverable amount.

i. Revenue recognition

The revenues from the sale of lands are recorded when the benefits and risks of ownership are transferred to the buyer and when the revenues can be reliably measured.

The other revenues are recognized based on the accrual principle.

j. In-Kind and Cash Grants

The in-kind grants are entered as deferred revenues within the item of liabilities upon receiving them and afterward those contributions are recognized as a part of the revenues, such in a manner suitable

for the uses of those properties and equipment. As to cash grants, they are recognized in the income statement.

k. Financial instruments

A financial instrument is any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise.

The Commission's financial instruments are principally comprised of cash, cash equivalents, bank balances, accounts receivable and payable.

l-Changes in Accounting Policies

The accounting policies used in the preparation of financial statements for the year are consistent with those followed in the preparation of financial statements for the previous year.

m. Use of Estimates

The preparation of financial statements and application of accounting policies require EMRC management to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities. These estimates and judgments also affect revenues, expenses and provisions, and in particular, requires EMRC management to make important judgments to estimate the amounts and times of future cash flows resulting from the conditions and circumstances of those estimates in the future. The estimates stated above are necessarily based on numerous assumptions and factors involving varying degrees of judgment and uncertainty. The actual results may differ from estimates as a result of future changes in the conditions and circumstances of such provisions.

3. Cash and Cash Equivalents

This item consists of the following:

	2019	2018
	JOD	JOD
Central Bank	-	4,713
BLOM Bank	-	7,043
Cairo Amman Bank	652,500	751,577
Total	652,500	763,333

4. Accounts Receivable

This item consists of the following:

2019	2018
JOD	JOD

FINANCIAL STATEMENTS

Electricity Companies Receivables

National Electric Power Company	4,938,869	3,103,622
Total Electricity Companies Receivables	4,938,869	3,103,622
Staff receivables	595	1,715
Receivables of Green Technology Group Company	3,393	3,393
Temporary and permanent advances	110	290
Total	4,942,967	3,109,020
Impairment of Electricity Companies Receivables Provision	(1,720,604)	(850,000)
Accounts Receivable after Provision	3,222,363	2,259,020

6. Net Other Assets

This item consists of the following:

	<u>2019</u> <u>JOD</u>	<u>2018</u> <u>JOD</u>
Computer software	485,441	485,441
Accumulated amortization	(485,440)	(485,440)
Total	1	1

7. Accounts Payable

This item consists of the following:

	<u>2019</u> <u>JOD</u>	<u>2018</u> <u>JOD</u>
Electricity Companies Receivables	-	27,205
Payable suppliers	376,004	471,592
Staff receivables	170	76
Accounts payable of electricity generation from renewable energy companies	4,029	4,330
OTHER ACCOUNTS PAYABLE	-	9,778
Central Electricity Generating Company (CEGCO)	91,491	-
Total	471,694	512,981

8. OTHER ACCOUNTS PAYABLE

This item consists of the following:

	<u>2019</u> <u>JOD</u>	<u>2018</u> <u>JOD</u>
Deposits of the judicial control	18,114	37,491
Outstanding cheques deposits	8,279	1,409
Staff deposits	1,962	1,962

FINANCIAL STATEMENTS

Guarantee liquidation deposits	53,192	16,192
ADSTM Company	7,403	7,403
Deposits of border crossings maintenance	3,402	-
Deposits of the Ministry of Finance and Income Tax	-	40
Deposits of the electrical system development	100	100
Local and regional training deposits	17,138	17,138
Payment certifier deposits	-	1,591
Technology training, stimulation and transfer deposits	106,248	70,308
Deposits of Awraq Al-Sandyana Logistics Establishment	-	8
Deposits of the National Center for Nuclear Security	16,396	-
Guarantee deposits	22,000	-
Deposits of spare parts maintenance	21,270	-
Deposits of EMRC nursery	690	-
Deposits of trading companies and establishments	187	-
Total	276,381	153,642

9. Surplus of Revaluation of Fixed Assets

This item consists of the following:

	2019	2018
	JOD	JOD
Lands	2,192,200	2,192,200
Machines and Equipment	128,451	128,451
Furniture and furnishings	10,879	10,879
Vehicles	133,000	133,000
Buildings	503,100	503,100
Total	2,967,630	2,967,630

10. Deferred Income on Grant of Assets

This item consists of the following:

	2019	2018
	JOD	JOD
Computers and equipment	10,520,288	10,520,288
Vehicles	276,037	276,037
Caravan	31,000	31,000
Furniture and furnishings	25,303	25,303
Total	10,852,628	10,852,628

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Total Amortization of Deferred Income	(6,372,481)	(5,036,991)
Total	4,480,147	5,815,637

11. Accumulated Surplus

This item consists of the following:

	2019	2018
	JOD	JOD
Retained profit surplus	3,429,613	2,384,313
Year Surplus	8,855,231	9,277,379
Transfers to the Ministry of Finance	(8,533,235)	(8,232,079)
Total	3,751,609	3,429,613

12. Revenues of License Fees for Electricity Sector

a. This item consists of the following:

	2019	2018
	JOD	JOD
Revenues from the license of the Central Electricity Generating Company (CEGCO)	-	335,712
Revenues from the License of the National Electric Power Company (NEPCO)	1,835,248	1,860,378
Revenues from the License of Electricity Distribution Company (EDCO)	309,049	318,005
Revenues from the License of Samra Electric Power Generation Co. (SEPGCO)	621,709	674,716
Revenues from the License of Irbid District Electricity Company (IDECO)	319,597	321,765
Revenues from the License of Amman East Power Plant	283,993	238,175
Revenues from the License of Xenel- Kepco/ Qatrana	297,353	279,573
Revenues from the License of Jordanian Electric Power Company (JEPCO)	889,334	1,067,179
Revenues from Asia Company license	84,413	29,550
Revenues from AES license	64,861	95,776
Revenues from renewable energy license applications	136,860	295,966
Revenues from supply of self-generated electrical energy	78,305	48,957
Revenues from discharge and approval of electric power meters	22,732	8,631
Revenues from Al-Badia Power General Company license	2,221	1,108
Revenues from Jordan Wind Renewable Energy license	19,252	16,287
Revenues from Shamsona Energy Company license	955	926
Revenues of Sun Addison Company license	2,453	2,536
Revenues from Sakatik Solar Company license	1,176	1,097
Revenues from Ard Al-Amal Power Generation Company license	1,147	1,194
Revenues from Anwar Al-Ard Power Generation license	2,385	2,549
Revenues from the Arab First Investment Company for Clean Energy license	1,097	1,124
Revenues from Ward Al-Jory Solar Power Generation Company license	1,244	1,193
Revenues from Zahrat Al-Salam Solar Power Generation Company license	1,242	1,179

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Revenues from Al-Zanbaqa Solar Power Generation Company license	1,248	1,170
Revenues from Jordan Solar Power Generation Company	2,394	2,283
Revenues from Saqr Maan Solar Power Generation Company license	2,231	2,121
Revenues from Shams Maan Solar Power Generation Company license	7,416	17,703
Revenues from Green Energy Renewable Energy license	15,969	-
Royal Air Force Solar Power Station license revenue	1,824	-
Revenue from the Local Company License for Water and Solar Energy license	6,780	-
Revenue from Zarqa Power Generation Company license	371,317	-
Total	5,385,805	5,626,853

13. Revenues of natural resources fee

This item consists of the following:

	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
Mining license revenues	2,498,758	2,199,025
Quarries license revenues	233,426	261,021
Follow-up and inspection revenues	3,350,604	3,634,161
Mineral exploration license revenues	1,850	33,200
Total	6,084,638	6,127,407

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14. Revenues of Radiation and Nuclear Activity License Fees

This item consists of the following:

	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
Revenues of border gates	2,253,747	2,224,268
Revenues of licensing and inspection	231,603	421,146
Revenues of samples testing fees	5,672	3,792
Total	2,491,022	2,649,206

15. Revenues of oil and oil products

This item consists of the following:

	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
Gas agencies revenues	99,475	55,914
Gas warehouses revenues	22,050	28,856
Fuel stations revenues	586,909	485,255
Revenues of petroleum materials import fees	315,922	33,900
Total	1,024,356	603,925

16. Salaries and Wages and Other Benefits

This item consists of the following:

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	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
Employee salaries	1,005,767	993,692
Employee allowances	1,862,053	1,844,282
Employee bonuses	446,151	399,997
EMRC social security contribution	385,945	354,999
EMRC provident fund contributions	36,729	37,071
Total	<u>3,736,645</u>	<u>3,630,041</u>

17. General and Administrative Expenses

This item consists of the following:

	<u>2019</u>	<u>2018</u>
	<u>JOD</u>	<u>JOD</u>
Postage, telephone and internet	20,991	20,999
Fuel expenses	64,597	82,937
Stationary and printing	12,920	21,849
Electricity and water	55,582	106,569
Cleaning	34,000	33,615
Maintenance	43,112	43,915
Business trips expenses	57,057	41,450
Training and scholarships	7,635	8,289
Car insurance	22,628	29,995
Materials and raw materials	4,867	4,970
Workshop entertainment expenses	1,258	1,399
Advertising expenses	756	6,176
Bank expenses	477	1,721
Bonuses for non-staff expenses	12,585	18,085
Other expenses	31,301	40,322
Rents	23,000	21,804
Pension and compensation	-	805

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Total

392,766

484,900

18. Capital Expenditures

This item consists of the following:

	2019	2018
	JOD	JOD
Machines & Equipment	-	33,166
Miscellaneous Materials and Supplies	15,311	34,932
Training and qualification, research studies and sites expenses	20,845	49,707
Subscription and deposits expenses	79,263	79,141
Maintenance of buildings and various facilities	-	73,619
Administrative support for monitoring EMRC sectors projects	378,743	309,113
Radiation monitoring plant	-	390
Operational licenses and systems	42,840	25,870
Promotion, advertising, outreach, and printing	6,759	7,653
Expenses for organization of the petroleum products distribution sector	6,520	9,310
Total	550,281	622,901

19. REVENUES (EXPENSES) FROM PREVIOUS YEARS

This item consists of the following:

	2019	2018
	JOD	JOD
Refund of electricity companies revenues estimated for previous year	(91,491)	(351,868)
Total	(91,491)	(351,868)

20. Legal Consultant Letter

The balance of the cases filed by third parties against EMRC amounted to JD 1,686,735.

21. FINANCIAL INSTRUMENTS

a. Fair value

Carrying values of financial assets and liabilities are approximately equal to their fair values. The notes to the financial statements indicate the fair value of those instruments. In addition, some of the accounting policies in note (2) present methods used in evaluating those instruments.

b. Market risk

Market risk is defined as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. It comprises the following risks:

Currency risk

Currency risk is defined as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.

Other price risk

Other price risk is defined as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices -other than those arising from interest rate risk or currency risk- whether those changes are caused by factors specific to the financial instrument or its issuer or factors affecting all similar financial instruments traded in the market.

- The financial instruments indicated in the financial position statement are not subject to other price risk.

Interest rate risk

Interest rate risk is defined as the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.

The financial instruments indicated in the financial position statement are not subject to interest rate risk on its interest bearing assets, which consist of deposits in the banks.

c. Credit risk

Credit risk is defined as the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge its obligations.

The Commission maintains cash at financial institutions with suitable credit rating.

The Commission maintains a proper control over the customers' credit limits and collection process.

22. COMPARATIVE FIGURES

Some comparative figures were reclassified to conform to the current year financial statements presentation.