



GREEN TECHNOLOGY AND ITS ROLE IN IMPROVING THE QUALITY OF WORK LIFE IN OIL COMPANIES-DHI QAR OIL COMPANY AS A CASE STUDY

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Abstract

The current study aims to examine the impact of green technology—through its various dimensions (green energy, green chemistry, and green nanotechnology)—on improving the quality of work life, as measured by work stress, job security, job satisfaction). The study was conducted on a sample of managerial leaders at Dhi Qar Oil Company, using a descriptive-analytical approach and testing two main hypotheses. The study touched a set of conclusions, most notably that the process of implementing green technologies is not a random or incidental process, but rather one that follows the company's organizational climate, where employees are the key players, and these employees have the benefits that enable them to implement awareness of green technologies. The study produced a set of approvals, the most notable of which is that Dhi Qar Oil Company must pay attention to the company's organizational structure, as it is one of the most important elements of the company's internal environment, and must raise awareness and encourage all industrial companies to use green technologies.



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Keywords: Green technology, quality of work life, Dhi Qar Oil Company.

Introduction

Green technology is a modern term that has gained attention in recent centuries due to the current challenges facing the world. These challenges manifest in numerous problems, including environmental pollution, resource scarcity, ecological imbalance, and declining security levels. Human activities are also a major cause of environmental disruptions, leading many countries to seek ways to improve the environment, particularly the workplace, to meet the present and coming needs of generations to come. Improving the quality of work life is a crucial factor for the success of any organization. One of the key challenges is providing a work environment characterized by clear communication, teamwork, participation in managerial and information distribution aimed at enhancing and developing cognitive skills. This fosters trust and appreciation for employee suggestions and ideas, and recognizes employee efforts. Achieving organizational goals requires fulfilling employee objectives and raising their job performance. A safer and more satisfied work environment leads to greater employee loyalty and dedication, ultimately contributing to better performance. This, in turn, motivates people to pay attention to the issue of environmental pollution, its impact, and its trends. Society is moving towards green technologies that provide environmentally friendly and modern methods aimed at protecting the environment, ensuring worker safety, and addressing one of the negative environmental impacts. Moving away from non-renewable energy sources involves using clean and renewable energy as an alternative, thus saving on environmental and economic costs to achieve a high level of safety in the workplace. Adopting green technologies provides a clean and safe work environment.

this study attempts to identify the role of green technology dimensions in improving the quality of working life. The current study seeks to provide a theoretical and empirical framework to demonstrate the nature of the relationship and effect of green technology dimensions specifically, green energy, green chemistry, and green nanotechnology on refining the quality of the work environment. This is achieved through describing and diagnosing the variables, examining their current status in



the field under study, arriving at and analyzing the results, drawing conclusions, and proposing suggestions and implementation mechanisms.

Research Methodology

First: Research Problem

The importance of green technologies, which address the removal of pollutants, reduce the harmful impact of production processes on the environment, and decrease emissions, has increased. These technologies, in turn, affect workers. This pioneering approach has involved the attention of many researchers due to its impact on various aspects, including the environment and human health. Many industrial companies, especially in Iraq, do not prioritize green technology and its environmental impact. The problem here lies in the following:

The main research question is: What is the impact of green technology dimensions on improving the quality of work life?

this mains to the following sub-questions:

1. To what extent is quality of work life present at Dhi Qar Oil Company?
2. To what extent are green technology dimensions present at Dhi Qar Oil Company?
3. Do managers at Dhi Qar Oil Company have an understanding of green technology and, its effect on quality of work life?

Second: Significance of the Research

Benefit from the results of this investigation, it is crucial to understand the level of quality of life at work in order to create a safe and clean work environment for workers, as the work environment is a primary determinant of productivity levels. Because workplaces strive to learn new skills and increase their motivation to find environmental tools and methods, the importance of green technology is defined through:

- 1) **Scientific Importance:** This sheds light on two variables: green technology and quality of work life. Both are imperative for modern and local companies, which benefit from the accumulation of theoretical knowledge to demonstrate the logical relationship between scientific institutions.



2) Practical Importance:

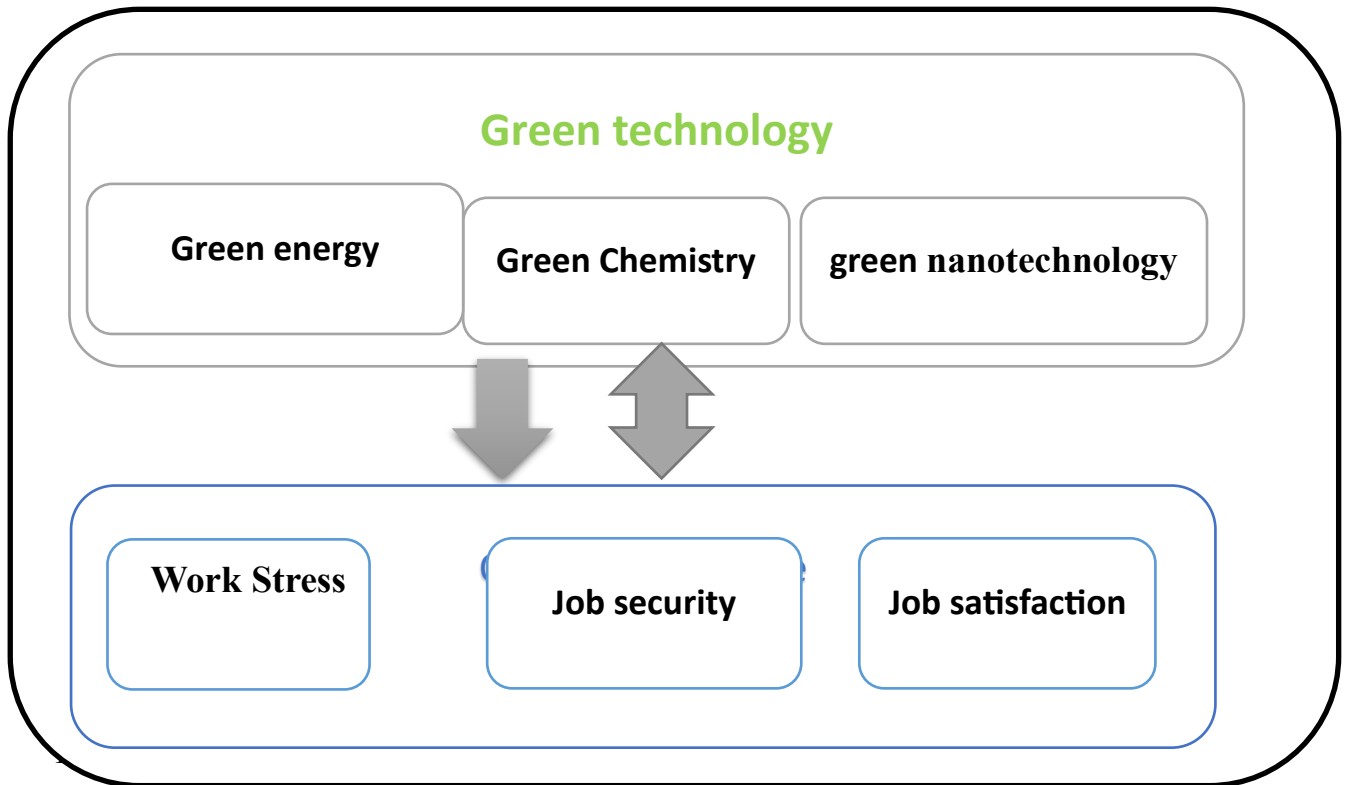
1. Solving the problems facing the company will help reduce environmental pollution and ensure employee safety.
2. Working to create a safe work environment, reducing negative environmental impacts, and thus affecting employee work efficiency, will give Dhi Qar Oil Company a competitive advantage.
3. Recognizing the importance of green technologies in reducing emissions and waste in the workplace.

Third: Research Objectives: To highlight the ability of green technologies to enable a good work life:

1. To introduce green technology and improve quality of work life for employees in the companies under learning.
2. To identify the role of green technologies in achieving environmental equilibrium.
3. regulate the level of work-related stress and occupational health and safety within the company.

Fourth: Hypothetical Research Plan:

To address the research problems and achieve the research objectives and significance, a "what if" scenario was designed to illustrate the variables. The research demonstrates the direction and impact of the connection between The measurements of green technology and the quality of working life at Dhi Qar Oil Company, as shown in Figure (1).



Fifth: Research Hypotheses:

Based on a research hypothesis model, the main and sub-hypotheses of the research can be expressed. These sub-hypotheses will be measured in the practical aspect to prove or disprove their validity.

First: Main Hypothesis 1: There is a statistically important effect of green technology and its dimensions on the quality of work life and its dimensions at Dhi Qar Oil Company.

The resulting sub-hypotheses were derived from this main hypothesis:

1. There is a statistically significant effect of green energy on the overall quality of work life at Dhi Qar Oil Company.
2. There is a statistically significant effect of green chemistry on the overall quality of work life at Dhi Qar Oil Company.
3. There is a statistically significant effect of green nanotechnology on the overall quality of work life at Dhi Qar Oil Company.



Second: Main Hypothesis 2: There is a statistically significant correlation between green technology and its dimensions and the quality of work life and its dimensions at Dhi Qar Oil Company.

The resulting sub-hypotheses emerged from this:

1. There is a statistically significant correlation between green energy and overall quality of work life at Dhi Qar Oil Company.
2. There is a statistically significant correlation between green chemistry and overall quality of work life at Dhi Qar Oil Company.
3. There is a statistically significant correlation between green nanotechnology and overall quality of work life at Dhi Qar Oil Company.

Sixth: Research Methodology:

This research employs a descriptive and analytical approach, encompassing both theoretical and field aspects. This methodology facilitates data collection and interpretation, drawing upon a diverse range of evidence and readings. Information is gathered through questionnaires and analyzed to arrive at definitive conclusions regarding the research question.

Seventh: Research Population

- 1- Research Population: population consists of employees of the oil company in Dhi Qar Governorate.
- 2- Research Sample: The research sample comprises administrative leaders, including division heads, unit heads, and department managers, within the Dhi Qar Oil Company.

Theoretical Aspect

First: Green Technology

The Concept of Green Technology

Appeared as an submission of technology to protect the environment and the extent to which technological solutions can help reduce carbon emissions and global warming. Sessions, exhibitions, and seminars are prearranged for this purpose. A number of main international companies offer technological solutions and products that consider the environmental dimension by reducing costs in this field of



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information technology. Plummeting energy resources and using them in the best possible way is a step towards activating the concept of green technology. On the other hand, global technology companies have begun to integrate this concept into their future plans, develop strategies for it, and allocate research budgets for this technology (Quraishi & Zarqoun, 2018, p. 54).

The term "green technology" contains of two dissimilar words that have a significant impact on the world today. Beforehand delving into this field, a basic overview of the definitions of these two words is necessary. The term "technology" refers to a branch or application of practical scientific knowledge for practical purposes. It deals with the creation and use of practical means in engineering, applied sciences, pure sciences, and industrial arts, and their relationship to life, society, and the environment. "Green" is a common term referring to the color of nature (plants), and it is now a common term for things that are positively beneficial or less harmful to the setting. The combination of the words "green technology" and "technology" refers to the continuous development and application of technical or scientific knowledge and methods to produce energy-efficient and non-toxic products. In other words, this technology includes innovations or inventions that incorporate cost-effective features, functions, and components that will benefit the environment and society. It is also known as clean technology or green technology (Yhaya et al., 2018, p. 3). Green technology is also known as sustainable technology. It has an impact on the environment. It utilizes recycling, renewable resources, safety concerns, and the principles of reduction and reuse to create green technologies. Green technology protects the environment because it helps to balance the ecosystem and is known as green technology (Bhosale et al., 2020, p. 231).

Green technology protects the environment because it helps to balance the ecosystem (Bhosale et al., 2020, p. 231). Bharskar et al. (2020, p. 103) define green technology as a knowledge with the possible to significantly improve environmental presentation compared to other technologies. It is an applied branch of science that seeks to preserve the natural environment and minimize the harmful effects of human activities. Green technology is a dynamic technological system that promotes development of humankind and nature. Specifically, green technology refers to a technological system that can reduce contamination, improve efficiency, and protect the environment, thereby fostering the building of an ecological civilization and



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harmonious coexistence between people, the public, and nature (Guo et al., 2020, p. 4). Green technology is defined as a pattern of industrial production that prioritizes the lowest possible level of pollution. This is achieved by minimizing waste generation at the source and addressing waste generated in industrial processes through treatment and disposal. Green technology aims to achieve high efficiency in the production process, meaning the efficient use of resources (water, energy, and raw materials) and the recycling of as much waste as possible (Al-Awni, 2021, p. 199). Jiao et al. (2020, p. 1) also pointed out that green technology is an significant way to achieve energy upkeep, emissions reduction, and economic growth. Abdel Fattah (2022, p. 12) also defined green technology for green strategic management as relying on the project's ability to provide services and goods at a competitive cost and high quality through the use of modern inventions, designs, and technological developments, through the use of non-hazardous materials to reduce energy consumption and limit environmental pollution, which can be recycled, avoid future maintenance, improve the environmental performance of the operation process and products before, during, and after production, and achieve sustainable development.

Second: The Importance of Green Technology

Prasad and Rafi (2021, p. 1742) point out that the undeniable importance of green technology lies in developing, maintaining, and utilizing original technologies in a way that protects the environment. Protecting normal resources is a branch of renewable liveliness technology. Green technology is a new energy source for national development and the promotion of green industries. It is a strategic axis for green growth and the promotion of green employment, creating a synergy or virtuous cycle between environmental protection and industrial growth (Bhosale et al., p. 231, 2020).

The importance of this technology lies in developing and using products, tackle, and systems to protect the environment and resources, reduce the negative impact of human activities, and provide alternatives for boosting the national economy without harming nature (Jasmi and Kamis, 2019, p. 56). Vigneshkumar et al. (2010, p. 23) add that green technology, also known as modern or clean technology, focuses on protecting the setting and natural resources and minimizing the negative effects of human activity. green Technology utilizes environmental science and technology



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to create and use goods, devices, and systems that protect natural resources and the environment, while minimizing or mitigating the negative impact of human activities on the environment. Green technology includes All technologically advanced and environmentally friendly products and services used to improve the environment. Green technology saves money and energy (Shivangi, 2018, p. 164).

Third: Advantages of Green Technology

Proposals numerous advantages to both society and governments. Among the most important advantages are energy savings, environmental protection, cost-effectiveness, and the reuse of natural resources (Sultana, 2019, p. 3867). Akul and Banerjee (2014, p. 98) identify that green technology does not emit any harmful substances into the air and can bring economic benefits to specific regions. It also reduces maintenance requirements and can mitigate the effects of global warming by plummeting carbon dioxide emissions.

Qamar et al. (2020, p. 5) explain that because it aids in waste management and recycling, it is environmentally friendly as it emits no or minimally harmful substances into the environment. Maintaining green technology is highly cost-effective, and green technology helps conserve energy and restore the health of our ecosystems. Green technology is characterized by its ability to produce goods efficiently and provide services at a lower cost and with less energy consumption. It involves applying technologies, equipment, and products in a way that protects the environment, reduces harmful atmospheric impacts, slows aging, and positively impacts the urbanization and economic growth of communities, thus meeting the requirements of economic sustainability (Olaleru et al., 2021, p. 33).

Green technology distinguishes itself by reducing levels of waste, pollutants, and resource consumption, increasing the efficiency of urban services, and minimizing the negative impact of various economic and human activities on the environment (Laffta et al., 2018, p. 1). Green technology is the ability to produce high-quality goods and services at competitive prices by using new designs, innovations, and technologies that reduce pollutants in the environment, using non-hazardous materials in the manufacturing process, and allowing for recycling.



Sixth: Dimensions of Green Technology

1- Green Energy

process of producing clean energy that does not reason any contamination to the environment. Some forms are used continuously, such as biofuels and ocean energy, while others are used intermittently, such as wind and solar power. Energy is defined as self-sustaining energy found in nature. That is, it comes from renewable natural resources that are inexhaustible and available everywhere on Earth (Shahid & Defroy, 2017, p. 255). Natural resources are the source of this renewable energy, which will not be depleted. It is called sustainable or clean energy because it does not produce any waste that affects the environment, such as harmful gases (carbon dioxide), and does not contribute to global change when fossil fuels are burned. Renewable energy is one of the natural resources that most countries are actively investing in to maximize its use in order to meet the increasing demand for energy, avoid a global energy crisis, protect non-renewable energy sources, and keep the environment free from pollution caused by the consumption of non-renewable energy (Kazem & Majeed, 2020, p. 519). Kruse (2016, p. 10) and Umbach (2016, p. 4) identified the importance of green energy as the use of energy efficiency to obtain less polluting energy. This is crucial for controlling climate change to meet future energy demands, improving the efficiency of supplying large quantities of energy, raising living standards for human society, reducing air pollution, marine oil pollution, hydrocarbon pollution, and mineral soil contamination of groundwater, and conserving the resources necessary for maintaining energy for economic prosperity, slowing the rise in average global temperatures, and reducing long-term costs.

2. Green Chemistry:

likewise known as maintainable chemistry, is a research philosophy and chemical engineering approach that inspires producers to adopt theories that reduce the use of hazardous materials and their activation. As a chemistry philosophy based on problematization, green chemistry applies to carbon-based chemistry, inorganic chemistry, biochemistry, analytical chemistry, and even physical chemistry. While green chemistry may appear to focus on industrial processes, it is applicable to any



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chemical discipline. Click chemistry is often referred to as a chemical synthesis method that achieves the goals of green chemistry (Son, 2015, p. 4).

the creation design, and request of chemical products and processes to reduce or eliminate the use and generation of hazardous materials (Vigneshkumar et al., 2010, p. 23). Green chemistry has many names, such as benign chemistry, environmentally friendly or clean chemistry, and atomic economy. While it disregards the negative effects of chemicals, it should provide and develop a variety of safer and less harmful chemical methods. Green chemistry aims to use chemical techniques and methods to reduce or prevent the threats to human health and the environment posed by the use of raw materials and byproducts in manufacturing processes (Hassaniya, 2020, p. 13).

3- Green Nanotechnology:

The word nanos is derived from Greek and means "dwarf." In the field of nanoscience, it is one billionth (Al-Minshawi, 2017, p. 78). The Japanese scientist Norio Taniguchi was the first to use nanotechnology. When describing the manufacturing process of semiconductors at the nanoscale, nanotechnology is the process of manipulating, separating, and rearranging individual molecules or atoms of materials (Hulla, 2015, p. 1). Nasrollahzadeh et al. (2019, p. 146) indicate that green nanotechnology can help address environmental issues such as reducing the use of non-renewable resources, producing fewer greenhouse gases, and decreasing the use of fossil fuels. It aims to produce nanomaterials without harming the setting or human health, using the lowest likely energy levels and generating minimal waste.

Khamis (2021, p. 197) explains that nanotechnology is the study of extremely small objects of matter. It can be defined as the science and engineering involved in the design, synthesis, characterization, and implementation of materials and devices with the smallest functional arrangement, at least one nanometer or billionth of a meter in size.



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Quality of Work Life

First: The Concept of Quality of Work Life

Includes a set of programs and systems related to improving and developing all aspects of human capital. This impacts an person's Work life, cultural, social, and health environment, positively reflecting on employee performance and contributing to the achievement of organizational, Individual, and investor goals (Boujemaa, 2019, p. 12). The concept of quality of work life refers to the efforts and activities undertaken by human resources within an organization to provide a suitable work environment, involve employees in decision-making, ensure their safety and wellbeing, provide emotional stability, and offer appropriate opportunities for performance improvement (Manan, 2018, p. 7). Quality of work life also refers to the set of activities that lead to the preservation, growth, and development of human capital, as manifested in suitable working conditions, job security, fair wages, incentive systems, distinctive welfares and services, and participation in decision-making (Al-Ashwal & Chaouch, 2018, p. 29). Quality of work life (QL) refers to a set of practices developed by human resources, in conjunction with all other departments within an organization, to improve the overall work environment in a way that contributes to improved performance, a satisfactory working environment for all stakeholders, and increased organizational effectiveness across the organization (Zaher et al., 2012, p. 204).

A good quality of work life means "the extent to which members of an organization are able to meet important personal needs through their experience within the organization." As an indicator of the overall human experience in the workplace, QL occupies a prominent place in organizational behavior, playing a significant role in any organization and influencing people, their work, performance, self-esteem, and organizational development. It primarily refers to the relationship between workers and the ecosystem in which they live, focusing on creating a work environment where people work together and achieve results together (Daniel, 2019, p. 60).

Campos and Rueda (2017, p. 65) defined quality of work life as a set of creativities aimed at developing human experience in the workplace and improving structural competitiveness by redesigning its nature and achieving productivity gains. He also pointed out that (Easton, 2018, p. 9) is a set of activities undertaken by the organization to develop and improve work life, including productivity, which



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positively impacts individuals and enhances organizational performance. (Mukherjee, 2019, p. 274) also defined it as the reliability, comfort, and security that employees experience during their daily working hours in relation to the people, laws, materials, and working conditions around them.

(Al-Hajjaj, 2020, p. 29) explained that quality of work life is reflected in all the procedures and practices implemented by the various departments within the insurance company to improve the work environment and atmosphere in order to achieve employee goals.

Second: Quality of Life Objectives:

make available employees with a level of satisfaction and motivation that fosters their creativity and dedication (Mohammed, 2021, p. 518). Workplace quality of life is linked to organizational conditions, practices, and objectives, such as: work structure, workplace design, job requirements, and the work environment, including social, physical, internal, and administrative systems, and interpersonal relationships among employees. It also involves efforts not only to attract qualified workers but also to increase their competitiveness (Ismail, 2017, pp. 306-307).

Jibril (2020, p. 239) identified the objectives of quality of life at work as:

1. Evaluating the current quality of work life.
2. Recognizing that quality of life is variable and depends on organizational and personal values.
3. Incorporating objective evidence and subjective assessment.
4. Recognizing the multifaceted nature of quality of life at work.
5. Recognizing that self-esteem in work quality of life is determined by comparing personal expectations for the future with acquired experiences.
6. The quality of working life depends on an individual's goals or objectives in life and their pursuit of higher values.
7. It serves as the foundation for encompassing various levels of professional and social well-being.



Third: Dimensions of Quality of Work Life

1- Work Stress

This is an adaptive response to an individual's contact to external environmental factors that may have physiological, psychological, or behavioral consequences (Al-Shammari, 2018, p. 6). Harmful emotional and physical reactions to the employee's demands, needs, and abilities that differ from those of the job are what threaten the employee and increase their stress (Hawajreh, 2012, p. 3).

Agarwal and Tiwari (2019, p. 36) identify several organizational factors that contribute to work stress, including management style, poor communication, lack of support and resources, increased workload, impulsive behavior, depression, poor concentration, and fatigue. These factors affect job satisfaction and thus reduce job performance, as do structural changes within the organization.

There are two types of stress, positive and undesirable, depending on the effects these stressors cause. Positive work stress has a positive impact because the individual feels Capable of performing their assigned tasks with excellence and has a psychological effect as a result of being happy and content with their job. Positive work pressure creates motivation, stimulates thinking, maintains focus on results, makes employees appear happier, and empowers them to express feelings, emotions, and optimism about the future. Personally, This will be reflected in job performance and productivity levels, followed by depression and negative perceptions of work, low morale, confusion, dwelling on the effort expended, a feeling of work overload, anxiety, a sense of failure at work, and pessimism about the future (Hussein, 2020, p. 8).

2- Job Security

According to Mahapatro (2010, p. 402), a sense of security is crucial for generating a sense of belonging, stability, comfort, and safety in the workplace. It is a necessity for supporting the continuity and stability of human behavior, which helps raise morale, improve work efficiency and performance levels, increase productivity, and enhance the quality of services provided. According to the Cooperative and Economic Development Organization (OECD), job security has become the most important and controversial issue in the contemporary work environment, and it is the most prominent feature of QWL (Quality Workplace) because it signifies that



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regardless of the job, it is essential for job security. Environmental changes affect the ability of organizations to provide stable and regular employment opportunities (Teryima, 2016, p. 5). Hajar and Fahima (2016, p. 222) define job security and stability as individuals remaining within the same organization without any reduction in seniority, wages, or pensions. Job security is one of the most important aspects of quality of working life. Eliminating all forms of anxiety about the future allows employees to feel comfortable and psychologically stable, which boosts morale and is reflected in their performance.

The importance of job security as a means to improve performance: When an employee feels that their job offers robust security, it meets their physical, psychological, and social needs, enabling them to achieve a dignified position in society. This allows them to dedicate themselves wholeheartedly to other jobs and strive to improve their performance. This assurance increases the employee's sense of security and eliminates their fears and worries about the future (Al-Hazazi, 2015, p. 27). The importance of job security becomes more pronounced when there are positive interpersonal and social relationships between management and employees. This motivates employees to persevere in their jobs and achieve high levels of faithfulness, commitment, and trust. Employees perceive their high level of job security as stemming from a stable and safe environment that protects them, fulfills their hopes and future aspirations, and alleviates anxieties and worries about the future (Al-Shalma & Al-Ubaidi, 2018, p. 245).

3- Job Satisfaction:

Rajanna (2016, p. 18) defined job satisfaction as the relationship between the employee and their job, as well as the organizational environment in which the duties of that job are performed. Job satisfaction is determined by a set of elements represented in job design, which aims to develop job tasks to meet the organization's requirements. The work environment is rich in positive trends and factors such as autonomy, diversity, clear task definition, employee feedback, guidance to work groups, and human resource organization activities aimed at improving organizational performance. Carbonell et al. (28-29, 2016) defined job satisfaction as the degree to which the material and spiritual needs of employees are met through the provision of working conditions, wages, opportunities for advancement, and



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chances to participate in ideas and ideas that enhance performance through the implementation of employee training and growth programs within the organization. Employees satisfied with their jobs are more productive and more engaged with their managers. Job satisfaction stems from a variety of factors, including a pleasant work environment, friendly management, a good compensation package, job security, organizational fairness, and career opportunities (Omer et al., 2016). Job satisfaction promotes retention, improves management effectiveness and team performance, reduces absenteeism, and enhances organizational engagement and civic behavior. Furthermore, job satisfaction has been found to have a positive impact on employees' attitudes toward change, as well as on their health and life satisfaction. Thus, employee job satisfaction (Muskat & Reitsamer, 2019, p. 6) is a significant factor.

Operational Framework

Research Community

The Dhi Qar Oil Company was established in 2016 as an affiliate of the Iraqi Ministry of Oil, following its separation from the South Oil Company. It independently manages and develops the oil fields in Dhi Qar Governorate. Its head office are located in the governorate, and its capital is US\$42 million. The company operates four major oil fields: Subba, Al-Gharraf, Nasiriyah, and Abu Al-Khaimah. It continuously strives to improve its production operations to maximize the utilization of the region's natural capitals.

The company recently achieved a significant melestone by increasing the production capacity of the Nasiriyah field to 90,000 barrels per day (bpd), up from 52,000 bpd, thanks to the efforts of its national workforce. The company continues to tool its ambitious development plans, which include Drilling 20 new oil wells distributed between the Subba and Nasiriyah fields, with the aim of increasing oil reserves and production capacity.

The company Places great importance on associated gas investment projects. It is working on projects to collect and process this gas to support the national grid, supply the electricity sector, and reduce flaring. The Company plans to produce 200 million cubic feet of associated gas. A standard cubic meter of gas per day is produced from the Nasiriyah and Gharraf fields. The company Is currently headed



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by Engineer Abdullah Abbas Bunyan, who assumed his duties as Director General in July 2024. company continues its journey towards achieving further accomplishments that support the national economy and improve the country's energy resources.

Research sample

The Research sample contained of employees of the oil company. It is worth noting that the researcher distributed 80 questionnaires to the respondents at their workplaces, but only 68 were returned. The researcher prepared these forms based on the results of the fieldwork.

Analysis results

Descriptive Statistical Analysis of the Study Sample According to Personal Data

Analysis of the personal data of the research sample exposed that the participation rate of males was 65%, while the participation rate of females was 35%. The age distribution of the sample was 50% for the 30-37 age group, 37% for the 38-43 age group, and 13% for the 44-55 age group. This aligns with the sample's age distribution. Regarding educational attainment, the distribution of participants was as follows: 29% held a Bachelor's degree, 31% held a Diploma, 19% held a Master's degree, and 21% held a Higher Diploma. According to the number of years of employment, we discovery that The percentage reached 34% for the 1-5 years category, 15% for the 10 years category, 22% for the 10-15 years category, and 29% for the 16 years and more category. As for the sample of specialization, the percentage of technical specialization reached 48% and administrative specialization reached 52%.



Table No. (2) Personal Data of the Sample

		Property distribution	Repetition	Percentage %
1	Gender	Male	44	65
		Female	24	35
		the total	68	100
2	the age	29-20	0	0
		37-30	34	50
		43-38	25	37
		50-44	9	13
		years and over 51	0	0
	the total	68	100	
3	Academic achievement	Bachelor's	20	29
		Diploma	21	31
		Higher Diploma	14	21
		Master's	13	19
		the total ^I	68	100
4	Years Of employment	5-1	23	34
		10	10	15
		15-10	15	22
		years and older 16	20	29
		the total ^{II}	68	100
5	Specialization	technical	33	48
		Administrative	35	52
		the total ^{III}	68	100

Descriptive Statistics of Study Variables

Section One: Green Technology:

1- **Green Energy:** We note That all items obtained a high arithmetic mean, higher than (4). This is evidence of the consistency of the investigation sample and acceptance of the green energy items, and it is evidence that the Dhi Qar Oil Company and its leadership are fully aware of green energy.



Table (3) shows the descriptive statistical analysis of the questionnaire items.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q1	68	3.00	2.00	5.00	4.1765	.10464	.86285	.745
Q2	68	2.00	3.00	5.00	4.0294	.08373	.69046	.477
Q3	68	2.00	3.00	5.00	4.0441	.05314	.43824	.192
Q4	68	2.00	3.00	5.00	4.1471	.06023	.49670	.247
Q5	68	2.00	3.00	5.00	4.1029	.08417	.69411	.482
Valid N (listwise)	68							

2- Green Chemistry: We note that all items obtained a high arithmetic mean, good scores, and a good standard deviation. This shows us that green chemistry has a broad understanding in the oil company under study, and that the sample members have similar viewpoints and their response to the questions was good.

Table (5) expressions the descriptive statistical analysis of the questionnaire items.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q6	68	2.00	3.00	5.00	4.1912	.07030	.57969	.336
Q7	68	2.00	3.00	5.00	4.0735	.05667	.46733	.218
Q8	68	2.00	3.00	5.00	4.1618	.06148	.50698	.257
Q9	68	2.00	3.00	5.00	4.1029	.05192	.42811	.183
Q10	68	3.00	2.00	5.00	3.9412	.10451	.86183	.743
Valid N (listwise)	68							

3-Green nanotechnology: We note that all items obtained a high arithmetic mean, good scores, and a good standard eccentricity. This shows us that green nanotechnology, which includes clean production and the facility of green products, has a broad understanding in the oil company, and that the sample members have similar viewpoints and their response was good to all the question items.



Table (6) expressions the descriptive statistical analysis of the questionnaire items.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q11	68	2.00	3.00	5.00	4.2941	.06645	.54796	.300
Q12	68	2.00	3.00	5.00	4.0588	.07222	.59556	.355
Q13	68	2.00	3.00	5.00	4.0000	.06626	.54636	.299
Q14	68	3.00	2.00	5.00	4.2353	.09628	.79396	.630
Q15	68	3.00	2.00	5.00	4.2059	.10170	.83860	.703
Valid N (listwise)	68							

Section Two: Quality of Work Life

1- Work Stress: We note in the table below that all items obtained a high arithmetic mean, good scores, and a good standard deviation. This shows us that the leaders in the company have good behaviors to cope with work stress and enjoy a spirit of patience and perseverance in work.

Table (7) expressions the descriptive statistical analysis of the questionnaire items.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q16	68	3.00	2.00	5.00	4.1324	.12200	1.00602	1.012
Q17	68	3.00	2.00	5.00	3.6765	.08750	.72155	.521
Q18	68	3.00	2.00	5.00	3.8382	.09039	.74534	.556
Q19	68	2.00	3.00	5.00	4.0882	.07477	.61657	.380
Q20	68	2.00	3.00	5.00	4.1029	.08417	.69411	.482
Valid N	68							

2-job security: We note that all substances obtained a high arithmetic mean, good scores, and a good standard deviation. This shows us that the concept of job security is applied perfectly in the company under study and that the employees have a good feeling of job security, equality, fairness, and promotions based merit and seniority, as all items obtained a good arithmetic mean.



Table (8) expressions the descriptive statistical analysis of the questionnaire items.

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q21	68	3.00	2.00	5.00	3.9706	.11660	.96151	.924
Q22	68	3.00	2.00	5.00	3.8235	.09356	.77153	.595
Q23	68	2.00	3.00	5.00	4.0882	.08043	.66322	.440
Q24	68	3.00	2.00	5.00	3.9853	.11758	.96958	.940
Q25	68	2.00	3.00	5.00	4.2500	.08981	.74061	.549
Valid N (list wise)	68							

3-Job satisfaction: the degree to which the material and mystical needs of workers are met by providing working conditions, wages, opportunities for advancement, and opportunities to participate in ideas and concepts that enhance performance through the implementation of training and development programs for workers in the organization. Through the responses of all paragraphs, it was found that the above concept is well applied by the workers.

Table (9) shows the descriptive statistical analysis of the questionnaire items

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Q26	68	3.00	2.00	5.00	4.0147	.09937	.81940	.671
Q27	68	2.00	3.00	5.00	3.9118	.08311	.68535	.470
Q28	68	1.00	4.00	5.00	4.2500	.05290	.43623	.190
Q29	68	3.00	2.00	5.00	4.0588	.10659	.87898	.773
Q30	68	3.00	2.00	5.00	4.1765	.10464	.86285	.745
Valid N	68							

Testing the Hypothesis of the Effect Between Study Variables

The content of this relationship signifies a test of the first study hypothesis, which states that "there is a statistically significant effect of green technology and its extents on the quality of work life and its dimensions at Dhi Qar Oil Company."

Table (10) clearly shows a significant effect of the independent variable on dependent flexible. This effect is supported by the calculated F-value of (162.370), which is greater than the critical value of (1.453) and within a



significance level of (0.05) with two degrees of freedom (1.67). This indicates a coefficient determination (R^2) of (0.730), which confirms the causal relationship between the research variables. The effect between the dimensions the study variables was also statistically proven.

Table (10) Effect of Green Technology on Quality of Work Life

		F		Green technology		independent variable dependent variable
		Calculated		β_1	β_0	
0.730	The schedule					
		3.995	162.370	0.842	0.854	Quality of work life

Correlation Relationships Between Study Variables

This section will test the second main hypothesis, which states that (there is a significant correlation between green technology and quality of work life). Table (11) was prepared, indicating a significant correlation between green technology and quality of work life, with an overall index of (0.879). This confirms the first main hypothesis, which we will analyze only because the sub-hypotheses were proven stable through statistical analysis. Thus, the dimensions of green technology are linked to the quality of work life variable.

Table (11) Correlation Relationships Between Green Technology and Quality of Work Life

Green technology	independent variable dependent variable
0.879	Quality of work life



Conclusions and Recommendations

Conclusions

1. The consequences showed that the arithmetic means for the green technology variable (energy, chemistry, and nanotechnology) were higher than 4, indicating a deep cognitive awareness among the leadership and staff of Dhi Qar Oil Company regarding the importance of transitioning sustainable environmental Practices.
2. The low level of dispersion (standard deviation) in the responses of the sample regarding the green technology items indicates a high degree of constancy and agreement in viewpoints within the company, reflecting an organizational environment conducive Adopting environmentally friendly policies.
3. The correlation coefficient (0.879) demonstrated a very robust positive relationship between the adoption of green technology and improved quality of work life, meaning that the company's environmental orientation positively impacts employee well-being.
4. The coefficient of determination (0.730) designates that green technology explains 73% of the changes in quality of work life, a high percentage that confirms that investment in sparkling technologies is a key driver for enhancing the work environment.
5. Based on the results of the "Work Stress" axis, it is evident that the leadership of Dhi Qar Oil Company possesses high resilience and positive attitudes in dealing with professional challenges, which contributes to maintaining stable performance under stressful conditions.
6. The high scores for the "Job Security" and "Job Satisfaction" axis reflect the company's success in implementing standards of fairness, merit-based promotion, and meeting the material and Moral needs of its staffs, thus enhancing their Organizational loyalty.

Recommendations

1. The study indorses integrating green technology measurements (especially green chemistry and nanotechnology) into the company's strategic plans, transforming them from mere "knowledge awareness" into daily working practices Oil fields and facilities.



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2. Given the high value of the green energy variable, Dhi Qar Oil Company should increase its investment in renewable energy technologies to reduce carbon emissions from oil operations, in agreement with international standards.

3. It is essential to intensify specialized training programs in "green nanotechnology" for the company's engineers and technicians to ensure they keep pace with global developments in providing less environmentally damaging oil harvests and services. 4. Senior management should maintain current levels of job satisfaction by developing a system of tangible and insubstantial incentives, linking them to departments' adherence to ecological standards (green incentives).

5. Despite the positive results, it is recommended to establish specialized counseling units for psychological and professional support, aimed at helping frontline workers cope with the physical and psychological pressures associated with the oil industry environment.

6. Reinforce the "sharing ideas and concepts" policy, which has proven successful in the area of job satisfaction, by creating digital stages to receive employee suggestions on how to improve environmental and professional performance within the corporation.

References

1. Agarwal, S., & Tiwari, S. (2019). Working personnel police women by faced stress workplace in police department. *International Journal of Home Science*, 5 (2), 36-38.
2. Akul, R. K., & Banerjee, S. (2014). Advantages of green technology. *Recent Research in Science and Technology*, 6 (1), 97-100.
3. Al-Ashoul, M. A., & Shawesh, Z. N. (2018). The impact of quality of work life on organizational silence in Dar Al-Salam International University for Science and Technology. *Journal of Economic, Administrative and Legal Sciences*, 2 (12).
4. Al-Awniyah, B. Z. (2021). The environment and the importance of clean technology in light of the Corona pandemic. *Journal of Advanced Economic Research*, 6 (1). University of Mascara, Algeria.



5. Al-Hajjaj, A. M. H. (2020). The impact of recruitment strategies on quality of work life: A field study on Jordanian insurance companies (Unpublished master's thesis). Middle East University, Jordan.
6. Al-Hazazi, A. B. A. (2015). Human resource planning and its relationship to job security from the viewpoint of employees in the Ministry of Commerce and Industry (Unpublished master's thesis). Naif Arab University for Security Sciences.
7. Al-Mannaan, H. A. M. A. (2018). Quality of work life and its impact on job involvement: The mediating role of psychological capital (Unpublished master's thesis). Sudan University of Science and Technology, Sudan.
8. Al-Manshawi, A. N. (2017). Nanotechnology as an approach to green architecture. *Journal of Environmental Sciences*, 37 (3). Institute of Environmental Studies and Research, Ain Shams University.
9. Al-Sarraf, S. N. M. (2018). Diagnosis of dimensions of quality of work life: A survey study of the opinions of a sample of employees in the Northern Region Gas Filling Company in Nineveh. *Journal of Economics and Administrative Sciences*, 24 (108).
10. Al-Shalmah, M. A. A., & Al-Obaidi, N. A. A. (2018). The extent of organizational capabilities contribution in crystallizing job security for working individuals: An applied study of the opinions of a sample of employees in the State Company for Drug Industry and Medical Appliances. *Tikrit Journal of Administrative and Economic Sciences*, 1 (41).
11. Al-Shammari, M. H. A. (2018). Time management and work stress and their relationship to administrative leadership: A case study in the Higher Institute for Security and Administrative Development. *Iraqi Journal of Market Research and Consumer Protection*, 10 (1).
12. Boughamza, A. (2019). The impact of quality of work life on reducing work accidents: A case study of Soufia Mills Organization - El Oued (Unpublished master's thesis). University of Mohamed Khider, Biskra, Algeria.
13. Campos, M. I. D., & Rueda, F. J. M. (2017). Effects of organizational values on quality of work life. *Paidéia (Ribeirão Preto)*, 27 , 65-75.
14. Carbonell, P., & Rodríguez-Escudero, A. I. (2016). The individual and joint effects of process control and process-based rewards on new product



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-
- performance and job satisfaction. *BRQ Business Research Quarterly*, 19 (1), 26-39.
15. Daniel, C. O. (2019). Analysis of quality work life on employees performance. *International Journal of Business and Management Invention*, 8 (2), 60-65.
16. Easton, S., & Van Laar, D. (2018). User manual for the work related quality of life (WRQoL) scale: A measure of quality of working life . University of Portsmouth.
17. Fadel, A. A., & Al-Khalaf, N. M. R. (2021). The role of nanotechnology in achieving sustainable development dimensions. *Journal of the College of Administration and Economics*, 129 . Al-Mustansiriya University.
18. Frihi, H., & Badisi, F. (2016). Quality of work life and its role in improving job performance: A case study of the Faculty of Economic, Commercial and Management Sciences. *Economic Studies Journal*, (3) . University of Constantine, Algeria.
19. Guo, R., Lv, S., Liao, T., Xi, F., Zhang, J., Zuo, X., ... & Zhang, Y. (2020). Classifying green technologies for sustainable innovation and investment. *Resources, Conservation and Recycling*, 153 , 104580.
20. Hajji, J. (2013). Dhi Qar Oil Company . Retrieved from <https://www.alayam.com/alayam/economic/230668/News.html>
21. Hassania, S. (2020). Mechanisms of green technology and their role in achieving sustainable environmental development. *Journal of Governance, Social Responsibility and Sustainable Development*, 2 (2).
22. Hawajreh, M. K. (2012). Exploring relationship the between occupational stress and organizational commitment among nurses in selected Jordanian hospitals. *Dirasat: Administrative Sciences*, 39 (1), 119-135.
23. Hulla, J. E., Sahu, S. C., & Hayes, A. W. (2015). Nanotechnology: History and future. *Human & Experimental Toxicology*, 34 (12), 1318-1321.
24. Hussein, A. (2020). Work pressures and their impact on employee performance. *Journal of Psychological and Social Studies*.
25. Hussein, A., Hammadi, A., & Takrart, Y. (2017). Green technology as a mechanism for activating social responsibility in contemporary business organizations: A case study of pioneering Arab and international experiences,



-
- opportunities and challenges. The Third Scientific Conference: Knowledge Economy and Comprehensive Development of Societies , 7-10.
26. Ismail, I. A. (2017). The role of using conflict management strategies in achieving quality of work life applied to the Arab Contractors Company. *Scientific Journal of Economics and Trade*, 47 (3).
27. Jasmi, N. F., & Kamis, N. (2019). Importance of green technology, education for sustainable development (ESD) and environmental education for students and society. *Journal of Engineering Research and Application*, 9 (2), 56-59.
28. Jawad, K. H., & Majeed, M. M. (2020). The possibility of transitioning from depletable energy to renewable energy and its impact on sustainable development in Iraq. *Wasit Journal for Human Sciences*, 16.
29. Jiao, J., Chen, C., & Bai, Y. (2020). Is green technology vertical spillovers more significant in mitigating carbon intensity? Evidence from Chinese industries. *Journal of Cleaner Production*, 257 , 120354.
30. Jibril, F. M. (2021). Quality of work life and emotional work as predictors of creative self-efficacy among special education teachers. *Journal of University Performance Development*, 1 (2).
31. Khamis, M. A. (2021). Employing nanotechnology in addressing environmental problems. *Journal of Environmental Sciences*.
32. Kruse, J. (2016). Empirical essays on energy, the environment, and innovation (Doctoral dissertation). University of Cologne.
33. Laffta, S., & Al-rawi, A. (2018). Green technologies in sustainable urban planning. *MATEC Web of Conferences*, 162 , 05029.
34. Madi, K. I. I. (2014). Quality of work life and its impact on the level of job performance of employees: An applied study on Palestinian universities (Unpublished doctoral dissertation). Suez Canal University, Faculty of Commerce, Egypt.
35. Mahapatro, B. B. (2010). *Human resource management* . New Age International.
36. Mohamed, H. M. A. (2021). The moderating role of participation in decision-making in the relationship between quality of work life and administrative empowerment. *Journal of Financial and Commercial Research*, 22 (4).



***Modern American Journal of Business,
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-
37. Moussa, R., & Bekkari, J. D. (2021). Green technology innovations as a mechanism for transitioning towards a sustainable economy and comprehensive development: The experience of the United Arab Emirates. The First International Forum on Green Economy as a New Development Model to Support the Dimensions of Sustainable Development in Algeria - Studying Experiences.
 38. Mukherjee, S. P. (2019). Quality: Domains and dimensions . Springer Nature.
 39. Muskat, B., & Reitsamer, B. (2019). Quality of work life and Generation Y: How gender and organizational type moderate job satisfaction. *Personnel Review*, 49 (1), 265-283.
 40. Nasrollahzadeh, M., Sajjadi, M., Sajadi, S. M., & Issaabadi, Z. (2019). Green nanotechnology. In *Interface Science and Technology* (Vol. 28, pp. 145-198). Elsevier.
 41. Nawal, D. (2021). The contribution of quality of work life in achieving organizational commitment. *Journal of Commercial Research and Studies*, 5 (1).
 42. Olaleru, S. A., Kirui, J. K., Elegbeleye, F. I., & Aniyikaiye, T. E. (2021). Green technology solution to global climate change mitigation. *Energy, Environment and Storage Journal*, 1 (1), 26-41.
 43. Omer, B. O., Karim, M. A., Rafii, F., & Mahmoudi, F. (2016). Job satisfaction among nurses in Rzgary Teaching Hospital in Erbil City. *Kufa Journal for Nursing Sciences*, 6 (2).
 44. Prasad, N., & Rafi, M. (2021). Study on green tech knowledge of construction workforce and empowerment of knowledge in construction. *IJCRT*, 9 (3), 1742-1750.
 45. Qamar, M. Z., Ali, W., Qamar, O., & Noor, M. (2021). Green technology and its implications worldwide. *The Inquisitive Meridian Journal*, 3 (1).
 46. Qureshi, H. E., & Zarqoun, M. (2018). Environmental innovations and green technologies to enhance green marketing practices in petroleum institutions operating in Arab countries. *Journal of Economic Sciences and Business Administration*, 2 (2).
 47. Rababah, A. (2021). Research on renewable energy . Retrieved from <https://mawdoo3.com>



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-
48. Rajanna, S. (2016). Job satisfaction among faculty members: A study of selected degree colleges in Chikkaballapura town (Doctoral dissertation). Sri Devraj Urs Academy of Higher Education and Research.
49. Shahed, E., & Defrawi, A. (2017). Renewable energy and its role in supporting the trend towards green marketing. *Journal of Research and Studies*, 14 (24).
50. Shawish, Z. N., & Al-Ashoul, M. A. (2018). The impact of quality of work life on organizational silence in Dar Al-Salam International University for Science and Technology. *Journal of Economic, Administrative and Legal Sciences*, 2 (12).
51. Shivangi. (2018). An overview on green technology & its benefits. *Journal of Emerging Technologies and Innovative Research*, 5 (9), 164-170.
52. Son, G. D. (2015). Advantages of green technology. *Social Issues and Environmental Problems*, 3 (9), 97-100.
53. Sultana, S. M. (2019). Green technology-An emerging trend. *International Research Journal of Engineering and Technology*, 6 (3), 3867-3870.
54. Teryima, S. J., Faajir, A., & John, E. (2016). Examining employee quality of work life (QWL) as a determinant of managerial effectiveness in business organizations: A study of Nigeria Breweries Plc, Lagos. *The Business & Management Review*, 7 (3), 268-280.
55. Toufiq, A., Nasr El-Din, S., & Rayan, M. A. (2019). Strategies for coping with occupational stress and their relationship to occupational satisfaction among physical education and sports teachers in the secondary stage. *Journal of Sports Performance Sciences*.
56. Umbach, F., & Raszewski, S. (2016). Strategic perspectives for bilateral energy cooperation between the EU and Kazakhstan: Geo-economic and geopolitical dimensions in competition with Russia and China's Central Asia policies . *Kazakhstan Energy Study, KAS*.
57. Vigneshkumar, P., Dineshkumar, B., Bhuvaneshwaran, S. P., & Mitra, A. (2010). Green technology and its benefits-A review. *International Journal of Bioengineering and Technology*, 1 (1), 23-29.
58. Yhaya, M. F., Tajarudin, H. A., & Ahmad, M. I. (2018). *Renewable and sustainable materials in green technology* . Springer.



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-
59. Zaher, B., Abu Dawla, J., & Zein El-Abidin. (2012). The role of quality of work life in enhancing job satisfaction among faculty members at Tishreen University. *Tishreen University Journal for Scientific Research and Studies, Series of Economic and Legal Sciences*, 34 (5).