



# DEWA (PJSC) SUSTAINABILITY REPORT



2023



“

In achieving climate neutrality in the UAE by 2050, we aim to develop an approach that both drives sustainable economic growth and is an exemplar of working together to achieve a better future for humanity

”

His Highness  
**Sheikh Mohamed bin Zayed Al Nahyan**

President of the United Arab Emirates



The UAE has a clear vision to transform itself into one of the world's most sustainable nations. Our journey towards sustainability is comprehensive, encompassing advanced clean energy projects across diverse renewable sources, and innovative solutions integrated into various spheres of the economy and society



His Highness  
**Sheikh Mohammed bin Rashid Al Maktoum**

Vice President and Prime Minister of the UAE and Ruler of Dubai

# MD & CEO MESSAGE

## HE SAEED MOHAMMED AL TAYER

MD & CEO of DEWA



In line with our vision as a globally leading sustainable innovative corporation committed to achieving Net-Zero by 2050, we are advancing steadily towards reducing our carbon footprint and achieving sustainable carbon neutrality by 2050. We adopt sustainability across all our operations, processes, and decisions. Our robust strategies and policies align with the national and international strategies and policies, support the United Nations Sustainable Development Goals (SDGs) 2030, and contribute to achieving the environmental, social, and economic aspects of sustainability in the UAE and Dubai.

During 2023 (The Year of Sustainability), the UAE made significant achievements in climate action, and hosted the most successful edition of the United Nations Framework Convention on Climate Change (COP28) at Expo City Dubai. COP28 resulted in the historic UAE Consensus, which is an exceptional turning point in international climate action. During our participation as a Principal Pathway Partner of COP28, we contributed to introducing the world to Dubai's sustainability efforts through our clean and renewable energy projects. These support the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy 2050 to provide 100% of energy production capacity from clean energy sources by 2050 and the Dubai Carbon Abatement Strategy to reduce carbon emissions by 50% by 2030.

DEWA's 11th Sustainability Report highlights our efforts and accomplishments in supporting the sustainable development in all its economic, social, and environmental

aspects. It introduces partners and stakeholders to our performance and practices in sustainability, as well as our progress and contributions in realising the UN SDGs 2030. The report is a useful, transparent, and trusted reference that documents our achievements and efforts throughout the year.

DEWA has prepared the report following the latest 2021 Global Reporting Initiative (GRI) guidelines for the 2023 data, emphasising its keenness to keep pace with the latest developments. DEWA had aligned its previous report (Sustainability Report 2022) with the updated version of the 2021 GRI guidelines before their effective date, as the guidelines stipulate their application for data published during or after 2023. The report is also in line with GRI G4 Electric Utilities Sector Disclosures.

By the end of 2023, DEWA's total capacity increased to 16,270 MW of electricity and 495 million imperial gallons per day (MIGD) of desalinated water. The total power production capacity of clean energy in Dubai has reached 2,627MW using photovoltaic solar power (PV) and concentrated solar power (CSP). Compared to 2022, DEWA's annual consolidated revenue in 2023 increased by 7.0% to AED 29.2 billion, driven mainly by an increase in demand for electricity, water and cooling services.

We have become a global role model in energy efficiency and reliability; providing our services according to the highest standards of reliability, efficiency, and quality; and keeping pace with the increasing demand for power

and water. DEWA's adoption of the latest international technologies in the production, transmission and distribution of energy and water contributed to DEWA achieving the top position globally in more than 10 KPIs in its areas of work, surpassing leading utility companies in the European Union and the US in various indicators. In 2023, losses from electricity transmission and distribution networks were reduced to 2% compared to 6-7% in Europe and the USA. Water network losses were also reduced to 4.6% compared to around 15% in North America. DEWA has achieved a new world record in electricity Customer Minutes Lost (CML) per year. Dubai recorded 1.06 minutes per customer in 2023, breaking its 2022 record of 1.19 minutes per customer, compared to around 15 minutes recorded by leading utility companies in the European Union.

In 2023, we achieved the lowest Levelised Cost Of Energy (LCOE) of USD 1.6215 cents per kilowatt hour (kWh) for implementing the 1,800MW 6th phase of the Mohammed bin Rashid Al Maktoum Solar Park using photovoltaic (PV) solar panels based on the Independent Power Producer (IPP) model, with investments of up to AED 5.51 billion. We also signed an agreement for the construction of the 180 MIGD Hassyan desalination plant based on Sea Water Reverse Osmosis (SWRO) and at a cost of AED 3.357 billion. The plant, which is being developed using the Independent Water & Power Producer (IWPP) model, is highly efficient and will sustainably produce water at a world record low cost of USD 0.36536/m<sup>3</sup>. Coinciding with hosting COP28 in the UAE, we signed an agreement with Dubai Municipality to cooperate in a project to generate electricity from biogases extracted from the landfill in Muhaishnah 5. This supports Dubai's leading sustainability practices and supports the realisation of the UAE Net Zero Strategy 2050. In 2023, DEWA's generation plants maintained world leading availability factor and reliability factor of 91.15% and 99.86% respectively.

We achieved two new records in the Mohammed bin Rashid Al Maktoum Solar Park for 'The Tallest Concentrated

Solar Power Tower' at 263.126 metres, and 'the largest thermal energy storage plant' at 5,907 megawatt hours using CSP based on parabolic basin complex with Molten Salt technology. The records were achieved in the 950MW 4th phase of the solar park using CSP and photovoltaic solar panel technologies. The new achievements add to DEWA's global accomplishments and leadership in the clean and renewable energy sector.

Moreover, we have launched several initiatives to improve customers' experiences and develop our services and provide them through smart and innovative channels anytime, anywhere. This saves the time and effort of customers and make them happier. We are keen to invest in our human resources and provide a positive and encouraging work environment that ensures the happiness of employees, and in turn the happiness of all stakeholders. We believe our employees are the most important factor for ongoing success and excellence and keeping pace with the rapid developments to maintain DEWA's global leadership and excellence.

Implementing effective governance practices has contributed to DEWA achieving globally competitive results. Its practices have become a benchmark for numerous organisations around the world. In 2023, DEWA received the ISO 37301:2021 certification in Compliance Management. This recognises the implementation of all applicable laws, legislation, and requirements across all its operations. DEWA also received the ISO 37001:2016 in Anti-Bribery Management System. This accomplishment is a testament to the DEWA's unwavering commitment to transparency and the highest ethical standards across all its operations.

Through our projects, activities, and plans, we support the green economy and keep pace with the UAE's leading role in climate action. We will continue to implement more innovative projects to strengthen the role of the UAE and Dubai in supporting global efforts to address the repercussions of climate change and global warming.

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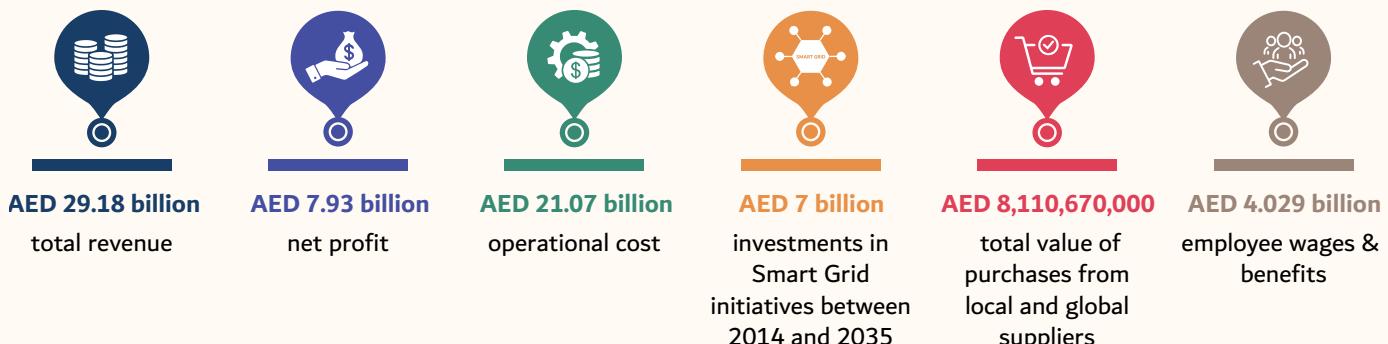
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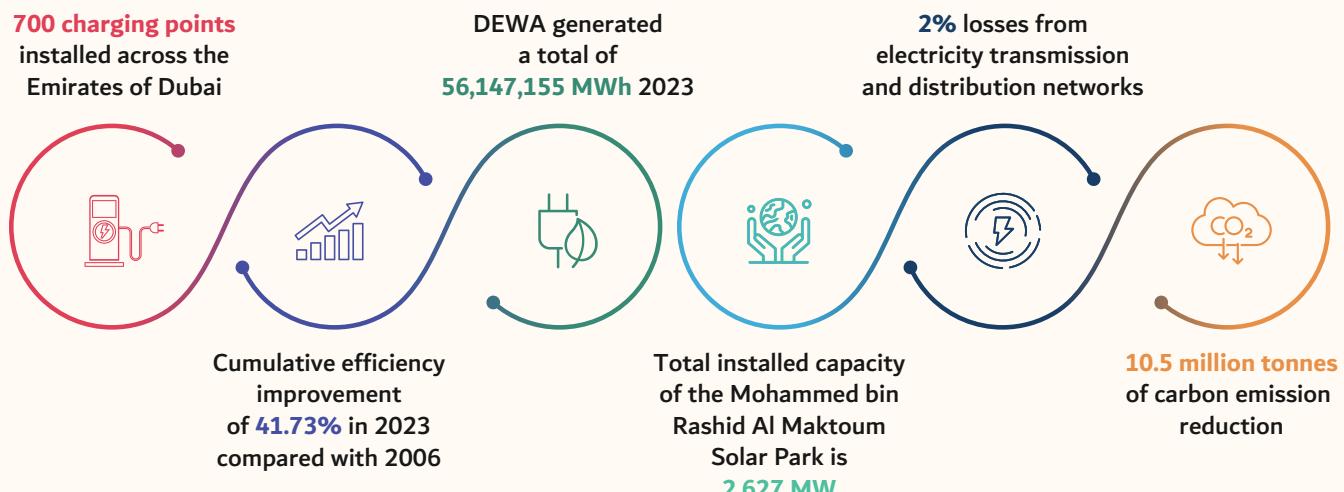


# SUSTAINABILITY HIGHLIGHTS

## ECONOMIC HIGHLIGHT



## ENVIRONMENTAL HIGHLIGHT



## SOCIAL HIGHLIGHT



# KEY HIGHLIGHTS IN 2023

## Q1

1. We inaugurated the green data centre of Moro Hub (Data Hub Integrated Solutions LLC), a subsidiary of Digital DEWA, our digital arm.
2. DEWA integrated ChatGPT technology into its services, becoming the first utility globally to use this technology.
3. Launched our virtual employee Rammas on Instagram, becoming the first government entity in the UAE to use a chatbot on Instagram.
4. Inaugurated Cyber Security Innovation Lab, Waee Cybersecurity Centre and Identity Intelligence Centre.
5. We won first place in the Ministry of Energy and Infrastructure's 'Research and Innovation Award' in the category of government sector organisations in balanced national energy.
6. We won the Hydrogen Project of the Year 2023 Award for our green hydrogen project at the Mohammed bin Rashid Al Maktoum Solar Park.
7. We won prestigious awards at the American Great Place to Work Institute 2023.

## Q2

8. Established the Disruptive Labs at Al Hudaiba building, which will serve as a hub to implement the Innovation and Future Shaping Framework.
4. We commissioned our 60 MIG Lusail water reservoir.
5. Our generation plants maintained a world-leading availability and reliability factor of 91.15% and 99.86% respectively, representing an increase in availability from the same period in 2022.

## Q3

1. We commissioned 676 11kV distribution substations across Dubai in the first half of 2023.
2. HH Sheikh Mohammed bin Rashid Al Maktoum witnessed the signing of an agreement between DEWA and Abu Dhabi Future Energy Company PJSC (Masdar) to build and operate the 1,800 MW 6th phase of the landmark Mohammed bin Rashid Al Maktoum Solar Park.

## Q4

1. We commissioned the second unit in the 4th phase of the Mohammed bin Rashid Al Maktoum Solar Park, adding 200MW of clean energy using parabolic basin complex technology. This phase uses the IPP model with total investment of AED 15.78 billion.
2. We signed a water purchase agreement and shareholder agreement with ACWA Power for phase 1 of the world's largest solar energy-powered desalination plant.
3. We received the ISO 37301:2021 certification in compliance management making us one of the first international and local entities to obtain this certificate. This recognises the implementation of all applicable laws, legislation, and requirements in all our business.
4. His Highness Sheikh Mohammed bin Rashid Al Maktoum, witnessed the signing of an agreement between Expo City Dubai and DEWA to fully power Expo City with renewable energy, marking a significant milestone in its journey towards achieving net-zero emissions by 2050.
5. His Highness Sheikh Mohammed bin Rashid Al Maktoum inaugurated the largest CSP project in the world within the fourth phase

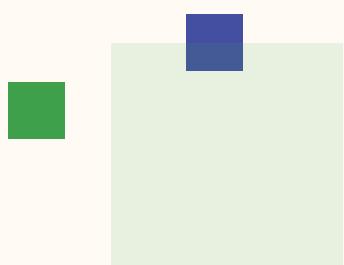
of the Mohammed bin Rashid Al Maktoum Solar Park.

6. We signed an agreement with Dubai Municipality on a project to generate electricity from landfill biogas.
7. We achieved two new records at the Mohammed bin Rashid Al Maktoum Solar Park; for 'The Tallest Concentrated Solar Power Tower' at 263.126 metres, and 'the largest thermal energy storage plant' at 5,907 megawatt hours using CSP based with Molten Salt technology. We received the two certificates from Guinness World Records representatives during COP28, which the UAE hosted at Expo City Dubai.

## General

1. Peak power demand in 2023 reached 10.408 GWH, an increase of 9% over 2022.
2. Peak daily desalinated water demand in 2023 reached 433.72 MIG, an increase of 4.91% over 2022
3. Our H Station at Al Aweer reached a project progress of 94.5%, while the Hatta pumped storage hydroelectric power plant has reached a project progress of 82.5% in 2023.
4. DEWA commissioned 14 new 132/11 kV transmission substations in 2023.

5. DEWA was honoured with the prestigious Sword of Honour Award by British Safety Council for health and Safety for unprecedented 16th consecutive year.
6. DEWA also received the Globe of Honor Award for environmental compliance for the 12th consecutive year.
7. DEWA received prestigious awards for Corporate Excellence in 2023, maintaining global leadership in "Innovation Kitemark" and "IDXCS" surveillance.
8. DEWA achieved 99.6% Smart Adoption and scored 98.3% in the Instant Happiness Meter ranking 1 among all Dubai Government Departments.
9. DEWA maintains strong infrastructure and network security controls and was successful in achieving Zero cyber breaches in the year.



# 01

## About DEWA PJSC



# DEWA (PJSC) & ITS REPORTING PRACTICES

## ABOUT DEWA (GRI 2-1, GRI 2-6, EU3)

Established on January 1, 1992, through a decree issued by the late Sheikh Maktoum bin Rashid Al Maktoum, DEWA emerged from the merger of Dubai Electricity Company and Dubai Water Department, previously operating independently since their establishment by the late Sheikh Rashid bin Saeed Al Maktoum in 1959. With full support from Dubai government, these entities were tasked with meeting the electricity and water needs of Dubai's citizens and residents.

Over the years, DEWA has achieved significant milestones, earning recognition as one of the world's premier utilities.

In April 2022, DEWA marked another milestone by being listed on the DFM and becoming the market's largest listed company with a market value of AED 124 billion (USD 33.8 billion). This was achieved by the sale of 9 billion shares, representing 18% of its capital.

Serving as the exclusive power and water provider and the dominant cooling services provider in Dubai, DEWA extends its services to 3.6 million people residing in the city and to an active daytime population exceeding 4.8 million. By 2040 we anticipate these numbers to increase to 5.8 million and 7.8 million respectively.

At the end of 2023, DEWA is catering to 1,211,475 customer accounts, marking an increase of 4.66% compared to the previous year. Notably 53,974 new customer accounts were added in 2023.

### VISION

A globally leading sustainable innovative corporation committed to achieving Net-Zero by 2050.

### MISSION

We are committed and aligned to Dubai's 8 Guiding Principles and 50-Year Charter supporting the UAE's directions through the delivery of global leading services and innovative energy and potable water solutions enriching lives and ensuring the happiness of our stakeholders for a sustainable Net-Zero carbon 2050.

### MOTTO

For generations to come

### VALUES

- Stakeholder Happiness
- Sustainability
- Innovation
- Excellence
- Good Governance

### PURPOSE

Providing globally leading sustainable, efficient, and reliable power and water services, and related innovative smart solutions towards Net-Zero Future.

## SUSTAINABILITY REPORTING AT DEWA (GRI 2-2, 2-3)

Since 2013, DEWA has issued 10 sustainability reports aligned with the Global Reporting Initiatives (GRI) Standards. The report is also prepared in accordance with the Sustainable Development Goals (SDGs), and the principles of the United Nations Global Compact (UNGC). DEWA remains steadfast in its commitment to sustainability and transparency, exemplified by its active participation as a member of the GRI Gold Community and its inclusion in the esteemed standards pioneers program. Notably, DEWA stands among the vanguard, being recognised as one of the inaugural 100 organisations worldwide to embrace the new standards starting from the 2016 reporting cycle under the core option.

In the previous report, DEWA demonstrated its proactive approach by aligning its disclosures with the revised universal standards 2021 well in advance of the mandatory implementation deadline on January 1, 2023. Building upon this momentum, DEWA proudly incorporates the latest updates on GRI standards and fulfils its disclosure requirements in the organisation's 11th sustainability report

This report precisely adheres to the GRI Reporting Principles, ensuring a comprehensive and accurate representation of DEWA's sustainability efforts. The principles encompass Accuracy, Balance, Clarity, Comparability, Completeness, Sustainability Context, Timeliness, and Verifiability. DEWA's dedication to upholding these principles reflects its unwavering commitment to transparency, accountability, and the highest standards of sustainability reporting.

This report serves as a comprehensive compilation, synthesising insights derived from its ongoing stakeholder engagement initiatives. It succinctly presents the economically, environmentally, and socially significant facets pertinent to the year 2023. Unless explicitly mentioned, all data within this report is reflective of the status as of December 23, 2023.

Furthermore, the report accentuates DEWA's concerted efforts in realising its enduring sustainability commitments. By articulating these commitments, DEWA aims to effectively convey its sustainability endeavours to stakeholders, fostering an enriched dialogue and strengthening its engagement with them.

**Note: for any questions about the report or the reported information, you may contact:**  
**sustainability@dewa.gov.ae**

## MATERIALITY ASSESSMENT (GRI 2-14)

The main starting point for developing a sustainability report is to identify the material topics of the report. Therefore, DEWA has engaged with the relevant internal and external stakeholders, including DEWA's top management, DEWA's employees, government entities, partners, suppliers, customers, society and investors. In September 2023, DEWA organised 3 virtual stakeholder engagement workshops through

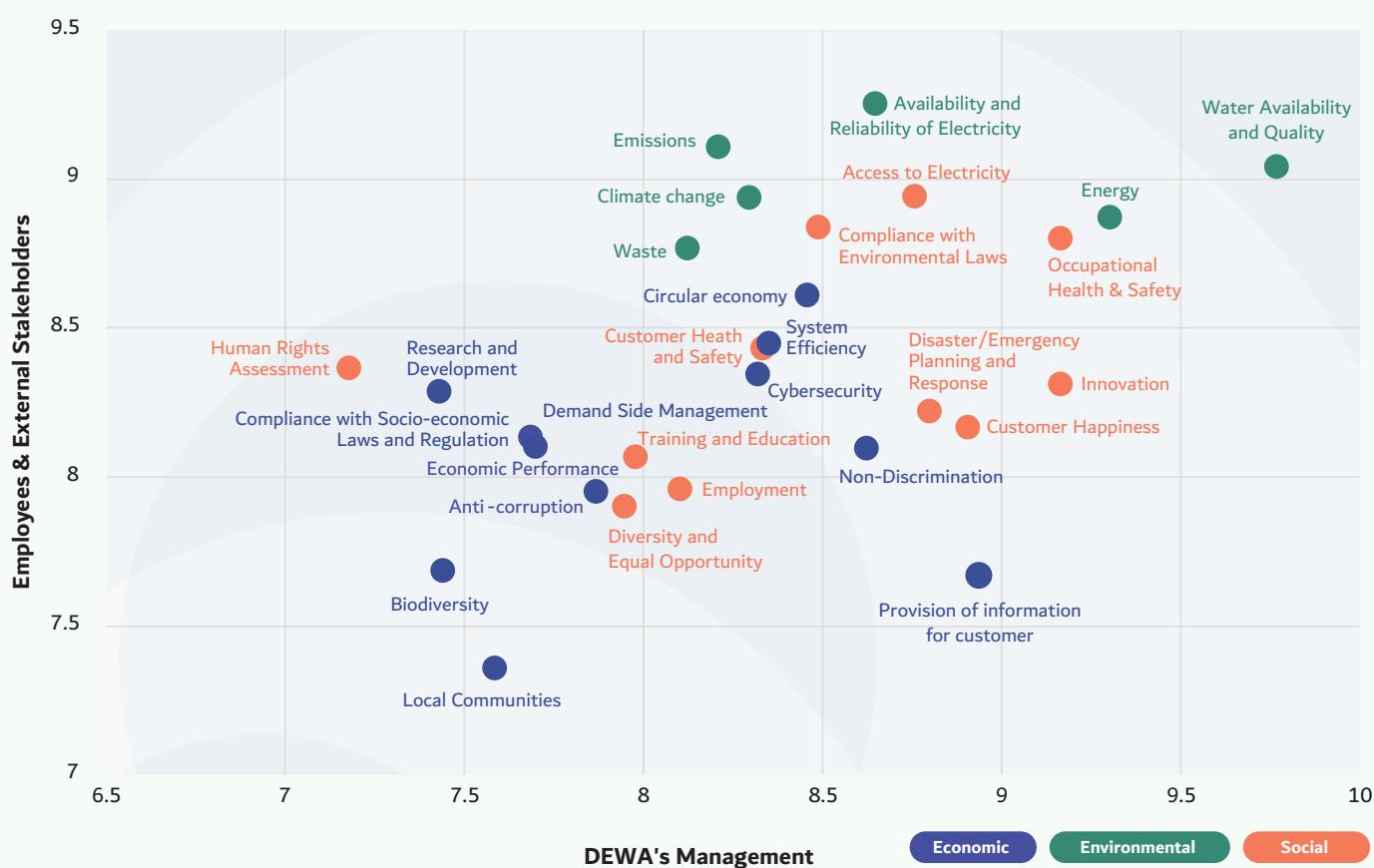
an innovative and interactive tool to assess 33 material topics. The aim was to rate the material topics and to assess the impact to be reported for the next sustainability reporting cycle 2023.

In addition to the GRI material topics, DEWA's 2023 sustainability materiality analysis accounted for the latest megatrends, including a circular economy, climate change, innovation, customer happiness, and cyber security.

As per the GRI standard requirements, the sustainability report is required to disclose the most significant impact on

the economy, environment, and people including impacts on their human rights because of the organisation's activities or business relationships. The materiality matrix below demonstrates the outcomes of the 2023 materiality assessment process. As part of DEWA's internal process, the below materiality matrix has been approved by DEWA's top management and used as a basis to develop the current sustainability report. The Y-axis represents DEWA's management rating on the materiality topics, whereas the X-axis depicts the viewpoints of DEWA's Stakeholders.

## MATERIALITY MATRIX 2023 RESULT



## FINANCIAL PERFORMANCE SCOPE



In 2022, DEWA began publishing its financial statement as part of DEWA's integrated report, which includes DEWA's Sustainability Report, Corporate Governance and financial statement. The integrated report is also published on the Dubai Financial Market (DFM) website.

For further details on DEWA's financial performance and results for 2023, please refer to DEWA's financial statement. The financial data presented in the financial statement is in accordance with International Financial Reporting Standards.

# VALUE CHAIN & OTHER BUSINESS RELATIONSHIPS

(GRI 2-6)

## SERVICES

In 2023, DEWA undertook a comprehensive review and update of its services catalogue, aligning with Dubai government directives. The revised catalogue encompasses 22 public services categorised under 6 main services, which are the following:

1. Electricity & Water Management Services
2. Billing Services
3. Sustainability & Consumption Management Services
4. No Objection Certificate Services
5. Electricity Network Services
6. Water Network Services

**For further details on DEWA services, please scan the QR code.**



## SUPPLIERS

In terms of suppliers, DEWA actively engaged with a diverse array of global and local suppliers in 2023, covering procurement of turnkey projects, supply of materials and equipment, as well as maintenance, consultancy, various services, for the generation, transmission, and distribution of electricity and water.

The collaboration extended to 1,753 suppliers, including 19 strategic, 187 core, and 1,547 basic

suppliers. Geographically, DEWA engaged with 12,294 local and 110 global suppliers, conducting 12,404 transactions valued at approximately AED 8,110,670,000 with 94.90% of products and services sourced locally.

DEWA emphasises sustainable environmental practices in collaboration with suppliers, utilising assessment criteria and green procurement standards based on environmental performance. Supplier selection considers the environmental impact of products or services. DEWA actively motivates suppliers to enhance their environmental, ethical, and social performance.

customers since Q4 2022. In 2023, the organisation generated 56.15 Terawatt-hour of electricity, marking a 6.15% increase, and produced 143,309.342 MIG of desalinated water, reflecting a 5.18% increase compared to the previous year.

DEWA's electricity accounts reached 1,173,631 accounts by the end of 2023 compared to 1,116,575 by the end of 2022, an increase of around 5%. DEWA's water accounts reached 1,048,913 accounts by the end of 2023 compared to 995,478 accounts by the end of 2022, an increase of around 5.37%. The increase reflects the economic prosperity Dubai is witnessing and the increase in demand for DEWA's services. This enhances DEWA's sustainable growth and supports the Dubai Economic Agenda (D33), which aims to double the size of Dubai's economy over the next decade and position it among the top three economic cities in the world.

## DEWA'S CUSTOMERS (EU3)

DEWA served 1,211,475 customers in 2023, reflecting a 4.46% increase from the previous year, with an addition of 53,974 new

**Number of Customers Accounts as of Dec 31st, 2023**

<b>Description</b>	<b>Electricity</b>		<b>Water</b>	
	<b>No. of customer accounts</b>	<b>%</b>	<b>No. of customer accounts</b>	<b>%</b>
UAE National	73,235	6.24%	68,377	6.52%
Expatriates	840,571	71.62%	820,336	78.21%
Commercial	234,166	19.95%	154,946	14.77%
Government Organisations	6,298	0.54%	2,010	0.19%
Industrial	3,220	0.27%	1,671	0.16%
EV	13,959	1.19%	0	0.00%
Port Sales	0	0.00%	424	0.04%
Exempted	2,182	0.19%	1,149	0.11%
<b>Total</b>	<b>1,173,631</b>	<b>100%</b>	<b>1,048,913</b>	<b>100%</b>

In 2023, DEWA received a total of 742,035 tenancy contract data compared to 648,065 contracts in 2022, an increase of about 14.5%. This data included new and renewed Ejari contracts from all customer categories. DEWA's systems are electronically integrated with the Ejari system from the Real Estate Regulatory Authority of the Dubai Land Department. The tenant's data is automatically transferred to DEWA, an account number is created for new tenants, and electricity and water services are activated after paying the security deposit through DEWA's smart channels.

## BUSINESS RELATIONSHIPS

DEWA aims to maximise positive impacts on the economy, environment, and people within its business activities and processes and prevent negative impacts through effective partnerships with its stakeholders. On the power generation side, DEWA maintains constant communication with original equipment manufacturers to stay informed about updates and new cost-effective technologies in the market. For example, after installing any kind of assets, DEWA continues to investigate updates and new cost-effective technologies throughout the assets life cycle, aiming to implement them in its installed assets. As a result of these practices, DEWA has successfully increased power generation capacity, efficiency & reliability and extended life span of assets beyond their minimum useful life. Additionally, this reflects DEWA's alignment with the UAE Circular Economy Policy by adopting the concept of repair and reuse

to reduce the consumption of natural resources. This approach reflects the sustainable business relationship between DEWA and its strategic suppliers throughout the supply chain in the long term.

Furthermore, in 2023, DEWA launched the OWNEK (Arabic equivalent of 'your help') awareness initiative to support contractors and consultants in obtaining DEWA's approval on the first attempt when requesting electricity connections. This will have a positive impact on speeding up the workflow and saving time and effort. The series of awareness sessions and detailed videos in Arabic and English are available on DEWA's official website to provide explanations of all the pillars, instructions, requirements to be considered, tips, and recommendations.

DEWA's commitment to strengthening strategic relations with all partners is according to the highest standards of integrity and transparency in all its operations. DEWA has a robust regulatory and monitoring environment that reflects its world-class governance system. During 2023, DEWA honoured 40 of its suppliers and members of Dubai SME, as well as the distinguished ones, for their commitments during its annual suppliers' awarding ceremony. DEWA continues to conduct a comprehensive annual assessment to ensure conformity with specifications and commitment to the specified time and supply quantities to achieve DEWA's standards. DEWA urges its partners to use its digital services to save their time and effort as well as to ensure they are satisfied with its processes and procedures.

## SOQOOR PROGRAMME

DEWA has approved 120,409 No Objection Certificates (NOC) applications in 2023 as part of the Soqoor programme, achieving a 30.62% increase compared to 2022. This is part of DEWA's efforts to keep pace with Dubai's prosperity and support the sustainable economic and social development in the Emirate. The Soqoor programme makes it easier for consultants and contractors to obtain DEWA's approval from the first time they submit applications and accelerates their projects to meet the expectations of project owners. The programme helps keep pace with Dubai's prosperity, saves time for all stakeholders, and ensures continuous adherence to the highest international standards of quality, safety, and excellence.

The Soqoor programme is the first government programme of its kind to evaluate consultants and contractors in Dubai and identify their compliance with the requirements, standards, terms and conditions, and guidelines when submitting NOC service applications. The programme is based on scientific means, such as the quality of submissions and protecting DEWA's network. The programme covers NOC services, water network services, and electricity network services. The best-performing consultants and contractors in various project categories receive a Soqoor award from DEWA.

Scan the below QR code for further details about the guideline for the Soqoor programme:



# DEWA'S PORTFOLIO

DEWA has a portfolio of related business interests, apart from its primary business activity of producing and supplying electricity and water:

## CORE PORTFOLIO



**Empower**, is currently the world's largest district cooling services provider by connected capacity, is 56% owned by DEWA, and it owns, manages, operates and maintains district cooling plants and affiliated distribution networks across Dubai.



**Mai Dubai** is a water-bottling, manufacturing and distribution company, which distributes water within the UAE and to other markets. Mai Dubai is a wholly-owned subsidiary of DEWA and it commenced operations in 2014. Mai Dubai is currently the number one ranked water-bottling company in the UAE for both distribution and sales.



**Etihad ESCO** is a wholly-owned subsidiary of DEWA. It was established under a mandate from the Dubai Supreme Council of Energy to implement energy efficiency projects in Dubai. Etihad ESCO is a commercial

energy services company, and its activities have been expanded to include solar PV projects, as well as electromechanical and facility management services. The company has successfully completed a number of significant building retrofit projects for major public and private sector clients in the UAE.



**Digital DEWA** was created as a holding company to group several subsidiaries that deliver digital business solutions. Three companies operate under Digital DEWA.



- **Moro (Data Hub Integrated Solutions)** is currently the backbone and core entity at the heart of Digital DEWA. Moro is a company that provides data centre services, cloud solutions and hosting services, managed business solutions and managed IT services for DEWA and other external public and private organisations.



- **Digital X** was formed in October 2019 to offer digital services, resource augmentation, intelligent automation solutions, robotics, advanced data analytics solutions for optimal decision-making and mission-critical analytical modelling systems.

DigitalX's services assist companies with designing, implementing and managing technologies to enhance their business capabilities as well as accelerating their digital transformation by building cutting-edge and easy-to-use systems powered by AI.



- **Infra X** was formed in October 2019 and focuses on connecting Digital DEWA's value-added services from its data centres and cloud services to customers. InfraX leverages DEWA's infrastructure to offer a secure, reliable, and independent super-fast network that meets the future digital transformation demands. InfraX is considered to be the first non-telecom company in the UAE to receive a special purpose IoT license from the Telecommunications and Digital Government Regulatory Authority (TDRA) to commercialise IoT networks and services. In addition, Infra X partners with local service providers to provide 5G technologies.

## IPP PORTFOLIO



- **Shuaa Energy 1** is a solar photovoltaic independent power plant project that has a contracted electricity generation capacity of 200 MW, which is located in, and constitutes the second phase of the MBR Solar Park.



- **Shuaa Energy 2** is a solar photovoltaic independent power plant project that has a contracted electricity generation capacity of 800 MW, which is located in, and constitutes the third phase of the MBR Solar Park.



- **Shuaa Energy 3** is a solar photovoltaic independent power plant project that will have a contracted electricity generation capacity of 900 MW, which is located in, and constitutes the fifth phase of the MBR Solar Park.



- **Shuaa Energy 4** is a solar photovoltaic independent power plant project that will have a total capacity of 1,800MW, located in, and constitutes the 6th phase of the MBR Solar Park.



- **NoorEnergy 1** is an independent power plant project that has a 700 MW CSP and 250 MW PV (contracted electricity generation) capacity, and which is located in, and constitutes the fourth phase of the MBR Solar Park. Upon completion, it is expected to become the largest single-site CSP plant in the world using a combination of a central tower and parabolic trough CSP technologies.



• **Hassyan Energy** Phase 1 is an independent power producer project with a total electricity generation capacity of 2,400 MW. While the plant was designed to be operated on dual fuel, DEWA, as off-taker, took the decision that the plant should operate using only natural gas as the primary fuel, and the formal shift was publicly announced by DEWA. In addition, the Hassyan Power Plant uses ultra-supercritical technology in its operations, in compliance with set international standards.

• **Hassyan Water** is an independent water producer project with a total capacity of 180 MIGD of desalinated water.

## FORWARD

- **Forward Investments** is DEWA's corporate venture capital unit. Forward Investments was established in 2020 with a mandate to invest in venture investments in renewable energy, distributed generation, energy storage, utility digitisation, smart technology and security, cleantech and other diversification opportunities relevant to DEWA's strategy. To date, the company has entered into a number of successful investments across the United States and Asia.



- **Etihad Clean Energy Development Company** is a DED-licensed limited liability company with the main objective of financing solar-bot projects executed by Etihad ESCO.

The above-related business interests are excluded from the reported data found within this report.



• **Dubai Green Fund Investments** is the first specialised green impact investment fund in the MENA region. It is backed by the Government and is currently 100% owned by DEWA. Its mandate is to invest in green projects and support Dubai's position as a global hub for the green economy. Dubai Green Fund's current portfolio of green investments is expected to save approximately 8.5 million metric tonnes of CO<sub>2</sub> emission per year over the next 30 years.



# **DEWA'S GOOD GOVERNANCE**

**(GRI 2-9, 2-10, 2-11, 2-12, 2-14, 2-15, 2-16, 2-17, 2-18)**

As a PJSC utility organisation engaged in the production and supply of two life forces, namely electricity and water in Dubai, Good Governance; is a key component for DEWA being a key driver of Dubai's success story.

Governance is how DEWA is directed and controlled in line with its establishment. The organisation has implemented in letter and spirit the best principles of Good Corporate Governance by choice and voluntary action for the adoption of best practices to position DEWA against its peers and respond accordingly with improvement actions. Benchmarks are done with reference to international standards including the OECD, the World Bank, and UN organisations.

DEWA has adopted the four classic pillars of good governance, those being Trust, Transparency, Accountability, and Fair Practices. Thereafter, building upon the four pillars DEWA's governance drivers have evolved with changing technology and expectations over the last three decades.

DEWA Global Good Governance is a foundation for steady growth, and it has helped DEWA increase in income and profitability, create efficient budgeting processes and happy customers, which is reflected in DEWA's outstanding global results.



(See DEWA's Governance details for full details) – link

# DEWA'S ECOSYSTEM

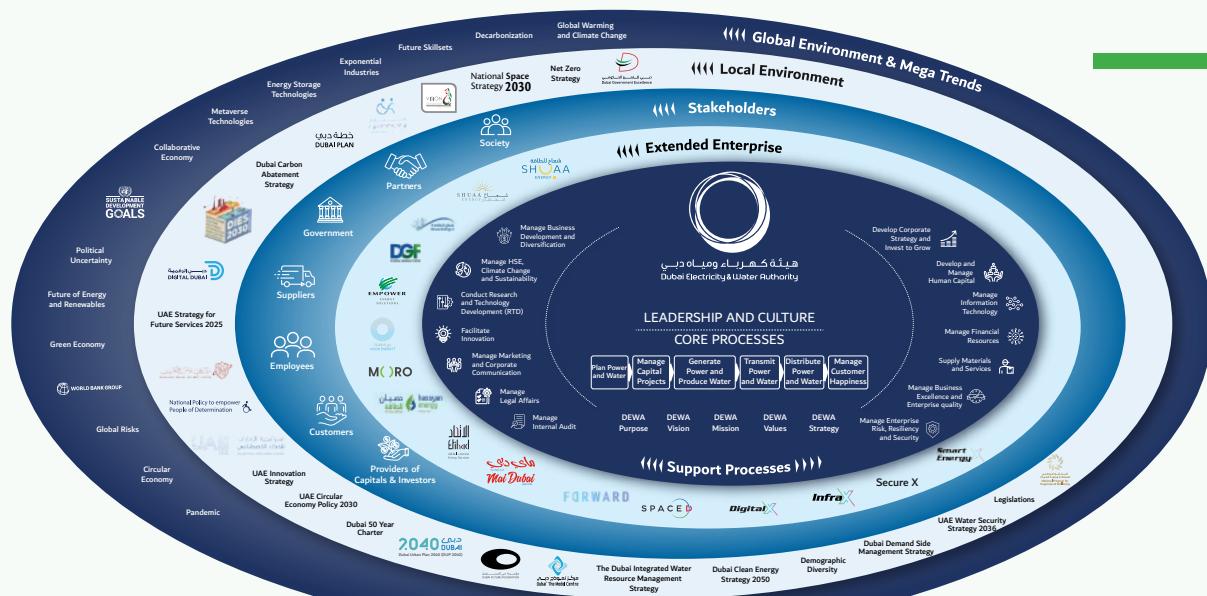
The DEWA ecosystem delineates DEWA's engagement with the external environment through its five key components which are:

- DEWA's core business and support activities
  - Extended enterprise (Subsidiaries)

- DEWA's stakeholders
- The local environment
- The global environment and megatrends.

This framework outlines the fundamental business processes from planning to customer happiness, underscored by auxiliary support functions. The interplay of these elements aims to generate sustainable value for all stakeholders, incorporating feedback mechanisms for continuous enhancement through innovative practices.

Furthermore, the ecosystem illustrates DEWA's influential role and leadership within its domain, motivating and exemplifying achievements that benefit both DEWA and others. The five integral components of the DEWA ecosystem encompass DEWA's core business and support functions, extended enterprises (subsidiaries), stakeholders, the local environment, and the global environment with its associated megatrends.



# STRATEGY, POLICIES, & PRACTICES

(GRI 2-23, 2-24, 2-25)

## STRATEGY

### Strategically Driven

As the UAE and Dubai continue to impress the world with sky-high aspirations and achievements, DEWA updates its strategy on an annual basis, and continuously aligns itself with major global developments and national

strategies, to ensure its effective and sustainable contribution to the long-term prosperity of Dubai and the UAE.

DEWA has an agile strategy that is always ready to cope with internal and external factors, as it closely tracks emerging trends and gathers facts and figures to increase its understanding of the macro-environment and considers

several corporate scenarios based on emerging trends and underlying drivers.

In addition, stakeholder engagement is a key component of the organisation's strategy formulation process, as it continuously gathers and analyses their inputs through different tools, ensuring exceeding their needs and expectations.

**DEWA Strategy Framework**



### DEWA's Strategy Framework

Consists of 3 consecutive phases, enriched by strategic intelligence, and powered by continuous learning, communication & innovation

#### Strategy Formulation

Define overall strategic direction and design the corporate strategy, leveraging strategic insights and foresight

#### Organisation Alignment

Align divisions and employees with DEWA's overall strategy, and plan strategic initiatives for its achievement

#### Execution & Assessment

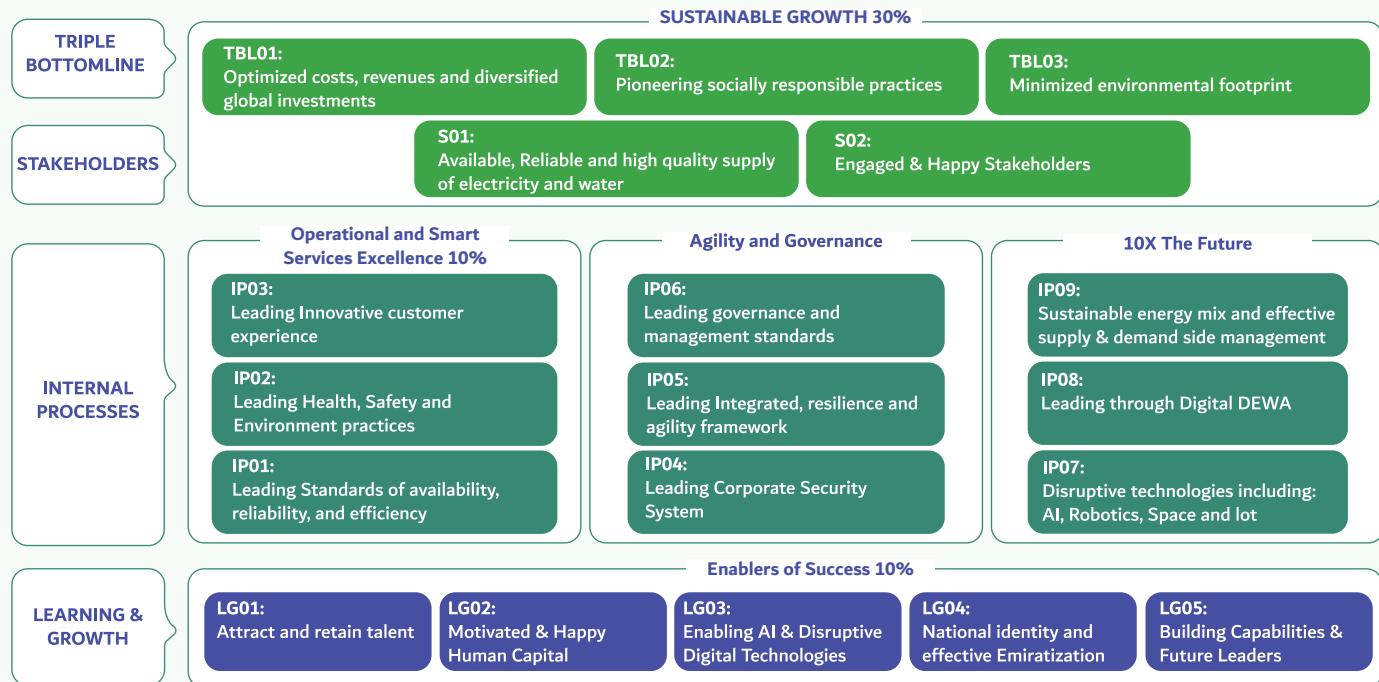
Implement corporate and divisional strategies, and assess implementation progress, including both performance (KPIs) and strategic initiatives

# STRATEGY FOCUSED ORGANISATION

DEWA is proud to be the first organization in MENA region to receive the Hall of Fame Award back in 2008 for implementing 3rd generation Balanced Scorecard in strategic plan, and the first organisation to score 4.3 higher than the global average in execution premium assessment (XPA) for strategic planning & execution practices that was conducted by Palladium Group the international authority for Balanced Scorecard framework.

## DEWA Strategy Map

A globally leading sustainable innovative corporation committed to achieving Net-Zero by 2050



## DEWA Strategic Priorities



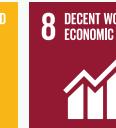
## The United Nations Sustainable Development Goals 2030

DEWA has taken proactive steps to recognise the importance of the United Nations Sustainable Development Goals (UNSDGs) 2030 since its announcement in 2015. It created an award-winning approach to the SDGs based on five essential pillars:

- Acknowledge and affirm the importance of the SDGs
- Identify the SDGs of greatest relevance
- Align DEWA's strategy to the SDGs
- Build capacity and embed SDGs into decision-making processes
- Report publicly on progress

## Prioritising the SDGs

The Sustainable Development Goals (SDGs) have been prioritised by DEWA into three main tiers. These tiers are based on the goals' relevance to DEWA as a stakeholder in Dubai and globally, as well as its business critical as a successful electricity and water utility, and its leadership commitments as a leading sustainable innovative global corporation.

Top Priority Goals	<b>6</b> CLEAN WATER AND SANITATION 	<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	<b>13</b> CLIMATE ACTION 
Second Priority Goals	<b>5</b> GENDER EQUALITY 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>14</b> LIFE BELOW WATER 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 	<b>17</b> PARTNERSHIPS FOR THE GOALS 	
Other Important Goals	<b>1</b> NO POVERTY 	<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>4</b> QUALITY EDUCATION 	<b>10</b> REDUCED INEQUALITIES 	<b>15</b> LIFE ON LAND 	

## A highlight on progress towards the SDGs

DEWA continues to enhance its operations and develop new projects to increase the reliability and efficiency of its power and water services. In 2023, DEWA has established its Distribution Network Smart Center.

Distribution Network Smart Center works as a centralized automated hub and repository that gathers, monitors and analyzes data from the smart devices installed in the distribution power network. Some of the key objectives of the Smart Centre are:

- To monitor and analyze the infrastructure of DEWA's smart initiatives.
- To get the best value and benefits from the remote capabilities of

the smart meters, green charging devices and smart applications.

- To provide data and analysis reports and support business needs on their operations.

It provides a real-time view and assessment of the current status of the network and conducts diagnostic analysis to find effective and proactive solutions to any disturbances that may occur. By utilizing artificial intelligence and automation, the Smart Centre minimizes human interference, automates system study, analyzes data, and derives detailed reports to enrich data-driven decision making. All of this is built on a robust security platform which protects sensitive data in compliance with security standards and data privacy rules. The Smart Centre currently has 27

use cases that serve the Advanced Metering Infrastructure for Electricity, Shams Dubai initiative and Green Charger initiative.

In serving these main initiatives and enhancing DEWA's electricity services with the use of the latest modern technologies, the Distribution Network Smart Centre contributes to Goal 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), Goal 9 (Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation) and Goal 11 (Make cities and human settlements inclusive, safe, resilient and sustainable) of the United Nations Sustainable Development Goals.

## POLICIES

Over the years, DEWA has built different policies to affirm its commitments and business activities that are in line with national and global strategies, goals, laws and regulations in relation to economic, environment, social and human rights aspects. For further details, you may refer to DEWA's policies on its website



## PRACTICES

### EMPLOYEE GRIEVANCES AND COMPLAINTS (GRI 2-25)

DEWA is dedicated to the enforcement of equitable, consistent, and expeditious administrative measures to discourage negative workplace behaviour. The organisation has instituted regulations and mechanisms for handling grievances and complaints from its employees, whether they are directly employed or seconded to DEWA. Utilising its internal platform, Freejna, DEWA offers employees extensive information and guidance on administrative procedures and complaints regulations, complemented by an electronic form for the submission of complaints. Additionally, DEWA has established the Grievances & Complaints Committee to oversee and adjudicate cases referred to it

pertaining to employee grievances and complaints.

## CUSTOMER FEEDBACK PROCESS

04 The Unified Interactive Platform Between Dubai Government and its Customers, is a system that enables customers to submit suggestions, comments and complaints smoothly via an omnichannel and seamless experience.

04 The Unified Platform aligns with Dubai's '360 Services' policy, which places customers at the heart of developing government services and provides them with a unified platform to voice their opinions, offer suggestions and raise any challenges or complaints.

In addition to the centralized portal, customers have additional channels to share their feedback which again will be tracked through 04 Portal, including:

- Website: [www.dewa.gov.ae](http://www.dewa.gov.ae)
- Email: [customercare@dewa.gov.ae](mailto:customercare@dewa.gov.ae)
- Customer Care Centre: Tel: 04-6019999
- Smart devices at Customer Happiness Centres
- Smart App
- Radio
- Chatbot
- Facebook
- X (Formerly Twitter)

## UNIVERSAL SERVICE CENTRE

The Universal Service Centre delivers a complete digital experience, providing customers with comprehensive, reliable,

and secure services. Leveraging the latest AI technologies, the centre assists customers in completing their transactions seamlessly. Additionally, it uses digital interactive solutions that enable customers to communicate remotely with the respective team.

## CUSTOMER CARE CENTRE

DEWA has transformed its Customer Care Centre into an innovative and interactive digital hub, enhancing the customer experience across various channels for seamless transactions. The centre, equipped with an Interactive Voice System (IVR) enhanced by AI, operates 24/7, offering a range of pioneering services. These include procedural and informational support for electricity and water requests, EV Green Charger services, and access to the Smart Living dashboard for comprehensive information on all DEWA services. The digital database, continually updated, prioritises calls based on customer segments, ensuring high standard of professionalism and service quality. AI is employed to identify caller accounts, modify options based on account status, and efficiently direct customers to the most suitable choices. The system also analyses calls, keywords, and customer satisfaction indicators, enabling DEWA to gather valuable insights for service improvement and quick decision-making to enhance customer happiness and experience. Based on the above transformation, the Customer Care Centre has been recognised as one of the top 3 Best Contact Centres in Dubai in 2021. This was announced by the Dubai Model Centre. DEWA's Customer Care Centre achieved

a high-performance in-Service Quality Level of 96.72% with an abandoned rate of 0.59%.

## THE CUSTOMER HAPPINESS CHARTER (GRI 3-3)

DEWA has developed the Customer Happiness Charter that sets its quality standards and defines customer service expectations in order to foster engaged stakeholder participation to ensure the excellence of Government services. It identifies the key responsibilities of the organisation, including the customers themselves in order to guarantee an outstanding customer experience.

The Charter comprises a set of commitments that outline various responsibilities, such as fair and equal services for all customers, catering to customer needs with full transparency, commitment towards the privacy of customer information and data, practising high principles in service delivery, provision of innovative solutions, in addition to other commitments. The Charter is reviewed and updated annually and is promoted to all stakeholders.

Note: For further details about the Customer Happiness Charter please scan the below QR code:



## MECHANISMS FOR SEEKING ADVICE AND RAISING CONCERNs (GRI 2-26)

DEWA acknowledges the importance of avoiding misconduct, such as violation of laws, in its operations and business connections. It is dedicated to conducting its business with honesty and ethics. DEWA commits to maintaining transparency and integrity in all business transactions and relationships, implementing an effective system to prevent, detect and address any offence across its operations.

DEWA has adopted a robust Ethics and Compliance management system supported by a comprehensive set of policies and procedures related to the Code of Conduct, Anti-Bribery & Corruption and Fraud, Anti-Money Laundering, and Whistleblowing Policy.

DEWA adopts a zero-tolerance approach towards any occurrence of fraud, bribery or corruption across its business activities and operations. DEWA recognises that the prevention of fraud, bribery and corruption is an integral component of good governance and affirms its commitment to conduct its business and operations in an honest, transparent and ethical manner and as per the applicable UAE federal laws and the Emirate of Dubai legislations.

For full details about the Mechanisms for seeking advice and raising concerns, please scan the below QR code:



## MEMBERSHIP ASSOCIATIONS (GRI 2-28)

DEWA plays an active role in several national and international organisations, councils, and committees. These include, but are not limited to, the following Councils and Committees:

1. Dubai Council
2. The Executive Council of Dubai
3. The Dubai Supreme Council of Energy
4. Dubai Future Council on Energy
5. Strategic Affairs Council
6. United Nations Global Compact
7. World Green Economy Organisation
8. The Carbon Abatement Committee
9. The Dubai Demand Side Management Committee
10. Dubai Supreme Fiscal Committee

### Committees

The Management team is assisted in its work by several additional committees, which include members of the management team or other DEWA division representatives. These include the Complaints & Grievances Committee; Women's Committee; DEWA Youth Council; Investment Committee; Takaful and Theqa Committee; Administration Violation Committee; Scrap Verification Committee; DEWA Excellence Award Committee; Crisis Management Committee; Group Risk and Resilience Committee; Health, Safety & Environment Committee; Corporate Governance

Committee; IT Security Response Team, Drones Robotics Committee, ISO 50001 Energy Management System-Top Management Committee, Cyber Emergency Response Committee, Tender Opening Committee and Digital Transformation Committee.

## STAKEHOLDER ENGAGEMENT (GRI 2-29)

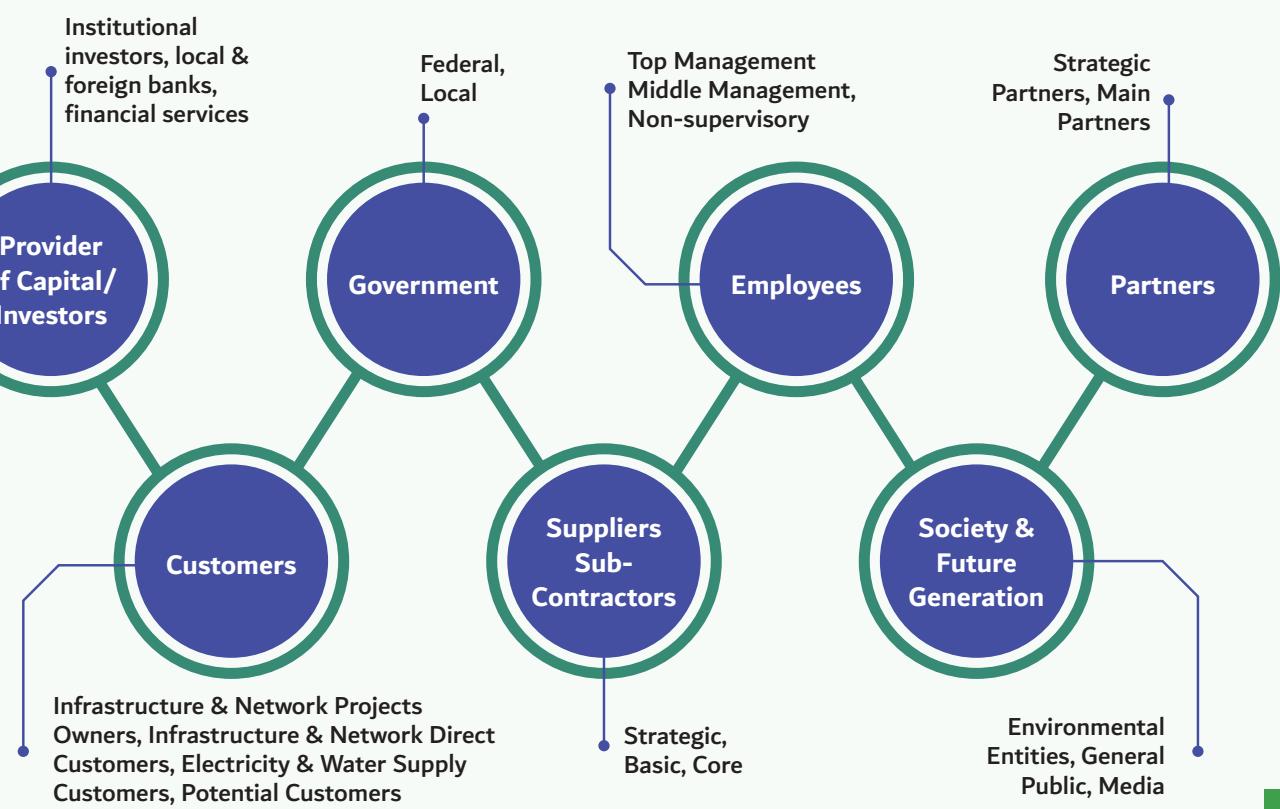
Every strategy revolves around the stakeholders, as they play a major role in assuring the success, continuity, and effectiveness of the strategy. DEWA positions stakeholders at the core of its strategic framework, fostering continuous communication and collaboration with them. For this reason, stakeholder engagement is crucial, along with understanding their needs and expectations. This enables DEWA to keep improving

its performance, services, and initiatives to ensure the best possible happiness results and service delivery.

The stakeholder management framework is DEWA's way of identifying the methods of delivering the best and most inclusive engagement to ensure valuable outcomes, in alignment with the principles of both the AA1000 Stakeholder Engagement Standard 2015 and the Global Reporting Initiatives' Sustainability Reporting Standards. DEWA's key strategic initiatives relating to its stakeholders were developed from the strategic objective **"S02 engaged and happy stakeholders"** key initiatives and are continuously reviewed. They include:

- Defining a compelling, overarching value proposition for each stakeholder group
- Managing and responding to stakeholders' needs and expectations
- Seeking new opportunities through multi-stakeholder partnerships to advance sustainable development
- Establishing community-based initiatives that benefit Dubai and the UAE.

DEWA's Corporate Strategy department in coordination with the Stakeholder department are annually responsible for reviewing the list and updating it, if necessary, as well as ensuring that DEWA's strategic plan includes fulfilling the needs and expectations of prioritised stakeholder groups.



# DEWA STAKEHOLDER ENGAGEMENT ACTIVITIES

DEWA has established a dedicated Stakeholder Happiness Department, tasked with overseeing and coordinating stakeholder management efforts across all DEWA divisions to meet stakeholder expectations effectively. The implementation of the Happiness Strategy is instrumental in enabling DEWA to discern the needs of its diverse stakeholder groups, including Customers, Employees, Government, Capital Investors, Partners, Suppliers, and Society. DEWA consistently strives to not only meet but exceed stakeholder expectations and proactively anticipates their future requirements. This commitment is upheld

through ongoing measurement of stakeholder happiness levels, enabling DEWA to make responsive adjustments. Collectively, these elements contribute to DEWA's mission to represent the UAE optimally on the global stage while fostering sustainable value for all stakeholders. In line with DEWA's dedication to creating sustainable value for its stakeholders, the Stakeholder Happiness Department has identified key divisions within DEWA to serve as champions responsible for managing the happiness of specific stakeholder groups. These Happiness Champions are tasked with monitoring and reporting on the outcomes of associated projects and initiatives.

To further enhance stakeholder engagement, DEWA has introduced a registry form designed to delineate stakeholder definitions, sub-

categories, preferred communication channels, factors influencing DEWA's relationship with each stakeholder, and the most effective modes of engagement.

DEWA runs an annual engagement lab with each of its stakeholder groups. During the meeting, DEWA presents its latest achievements, and the champions provide information and updates relevant to the stakeholder group. It is an opportunity to get direct feedback from, and brainstorm new ideas with stakeholders.

On a regular basis, DEWA engages with its stakeholders through a range of initiatives and communication channels, such as satisfaction surveys, roadshows, joint ventures, and partnerships with government agencies on regulatory matters as shown below.



## STAKEHOLDER NEEDS & EXPECTATIONS

DEWA strives to achieve a transparent and consistent communication approach to engage directly with its stakeholders in the most suitable manner. This is reflected in the stakeholders' register form, which documents the communication options available and preferred for each category to ensure accessibility for all. DEWA engages with its stakeholder groups in a variety of ways. In 2023, the Stakeholders' Happiness Department organised a Happiness Workshop for the Stakeholder Champions and Agents. This event marked the beginning of the year, where new plans were unveiled, achievements from the previous year were celebrated, challenges



were discussed, and team building took centre stage. The team building activity was held at Mohammed Bin Rashid Library and aimed at enhancing teamwork skills and fostering creativity in the workplace.



Another avenue for engagement involved the Stakeholders' Happiness Department participating in Agility Week. During this event in June 2023, the Stakeholders' Happiness team provided insights into stakeholders within DEWA and highlighted the connections between stakeholders and agility. For each stakeholder category, the following table shows the most important needs expressed during its engagement activities.

Stakeholder	Needs & Expectations		
Government	<ul style="list-style-type: none"> <li>Aligning with national development plans &amp; programmes</li> <li>Commitment to good citizenship</li> <li>Regulatory compliance</li> </ul>		
Customers	<ul style="list-style-type: none"> <li>Quality safety and cost - effectiveness of service</li> <li>Ethical business</li> <li>Reducing the environmental impact of organisation activities</li> </ul>		
Employees	<table> <tr> <td> <ul style="list-style-type: none"> <li>Secure working environment</li> <li>Competetive salaries</li> <li>Ethical behaviour</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>Non-discrimination &amp; recognition</li> <li>Investment in professional developments</li> <li>Career progression &amp; recognition</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>Secure working environment</li> <li>Competetive salaries</li> <li>Ethical behaviour</li> </ul>	<ul style="list-style-type: none"> <li>Non-discrimination &amp; recognition</li> <li>Investment in professional developments</li> <li>Career progression &amp; recognition</li> </ul>
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Partners	<ul style="list-style-type: none"> <li>Sharing best practices</li> <li>Continuous and systematic dialogue and engagement</li> <li>MoUs to collaborate on issues</li> </ul>		
Society and Future generation	<ul style="list-style-type: none"> <li>Transparency and effective communicaton</li> <li>Raising awareness on sustainability issues</li> <li>Supporting social and cultural initiatives</li> <li>Management of environmental impacts of organisation activities</li> </ul>		
Suppliers	<ul style="list-style-type: none"> <li>Supplier qualification based on cost and quality including environmental and social assessment</li> <li>Transparent procurement processes</li> <li>Profitability</li> </ul>		
Providers of capital/Investors	<ul style="list-style-type: none"> <li>Creating value in the short and long term</li> <li>Reliability, profitability and transparency</li> </ul>		

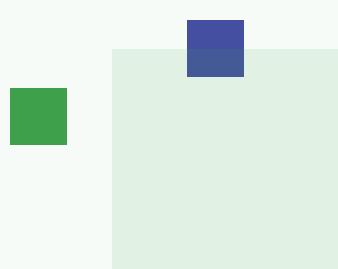
## STAKEHOLDER HAPPINESS RATE

DEWA recognises the importance of stakeholder management to the achievement of its business objectives. DEWA gives special attention to its stakeholder's voice and strives to collect their input and feedback through different channels, methodologies and frequencies, leveraging on the added-value from engaging all stakeholders in the journey to excellence.

In order to ensure the effectiveness of the stakeholders' management framework, DEWA systematically evaluates stakeholder experience, captures their perceptions about DEWA and regularly monitors the level of their happiness on both relationship and transactional dimensions.

DEWA's annual Stakeholder Happiness Survey is a key tool to understand stakeholder expectations to measure the effectiveness and improvement of its work. The survey addresses key

issues relating to various factors, including specific questions addressed to each stakeholder group. The outcomes from the survey are used to analyse gaps in DEWA's approach to Stakeholder Happiness and evaluate areas for further improvement. Finally, a continuous benchmarking of these KPIs is conducted for this purpose.



## DEWA Stakeholders Overall Happiness Results 2023 are as follows:

Survey	Result
Digital Dubai Authority Customer Instant Happiness Score	98.3%
Employee Happiness Rate	90.59%
Partner Happiness Rate	94.10%
Supplier Happiness Rate	90.78%
Society Happiness Rate	93.55%
Government Happiness Rate	95.81%
Provider of Capital Happiness Rate	94.83%

**DEWA is keen to engage with the stakeholders and measure their perception on DEWA's role towards sustainability:**

Topic	Rate
Understanding of DEWA's efforts in contributing to the United Nations Sustainable Development Goals 2030 - Employees	98.2%
Awareness of DEWA's efforts to communicate its commitment to circular economy - Employees	98.7%
Happiness with DEWA acting as a pioneer for sustainable solutions - Providers of Capital	92.50%
Readiness to supply DEWA with more sustainable and environmentally friendly products and/or services - Suppliers	92.28%

DEWA employs a centralised Happiness Index Dashboard that was fully revamped in 2023, making it easily accessible to top management, to evaluate the effectiveness of

stakeholder engagement activities. It also highlights specific happiness initiatives for stakeholder champions, tracks their progress, and presents benchmarking results

at local and international levels. Moreover, it includes stakeholders' prioritisation weights and registry information for comprehensive reporting and analysis.

## Overall - Stakeholder Happiness Index



## 2023



## SUSTAINABILITY CULTURE INDICATOR (SCI)

The Sustainability Culture Indicator (SCI) is an employee survey designed to gauge attitudes towards sustainability and identify factors that either facilitate or impede DEWA staff in achieving sustainability goals. The survey focuses on various aspects that contribute to a culture of

sustainability, including individual factors (such as psychological and attitudinal elements) and organisational factors (such as support mechanisms).

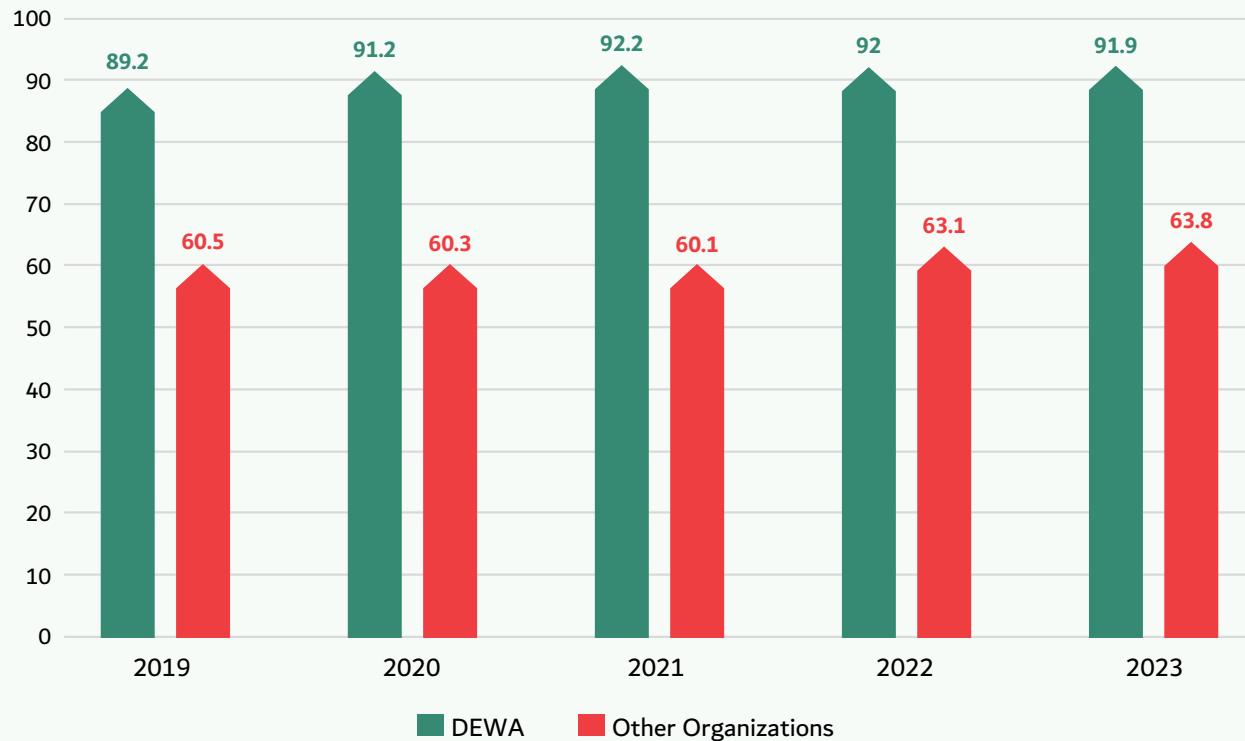
By evaluating the presence of these enablers within DEWA, the survey helps in prioritising and targeting activities aimed at integrating sustainability into the organisation's culture.

DEWA has conducted the SCI for the 10th consecutive time, with

3,181 employees completing a customised version of the survey in December 2023.

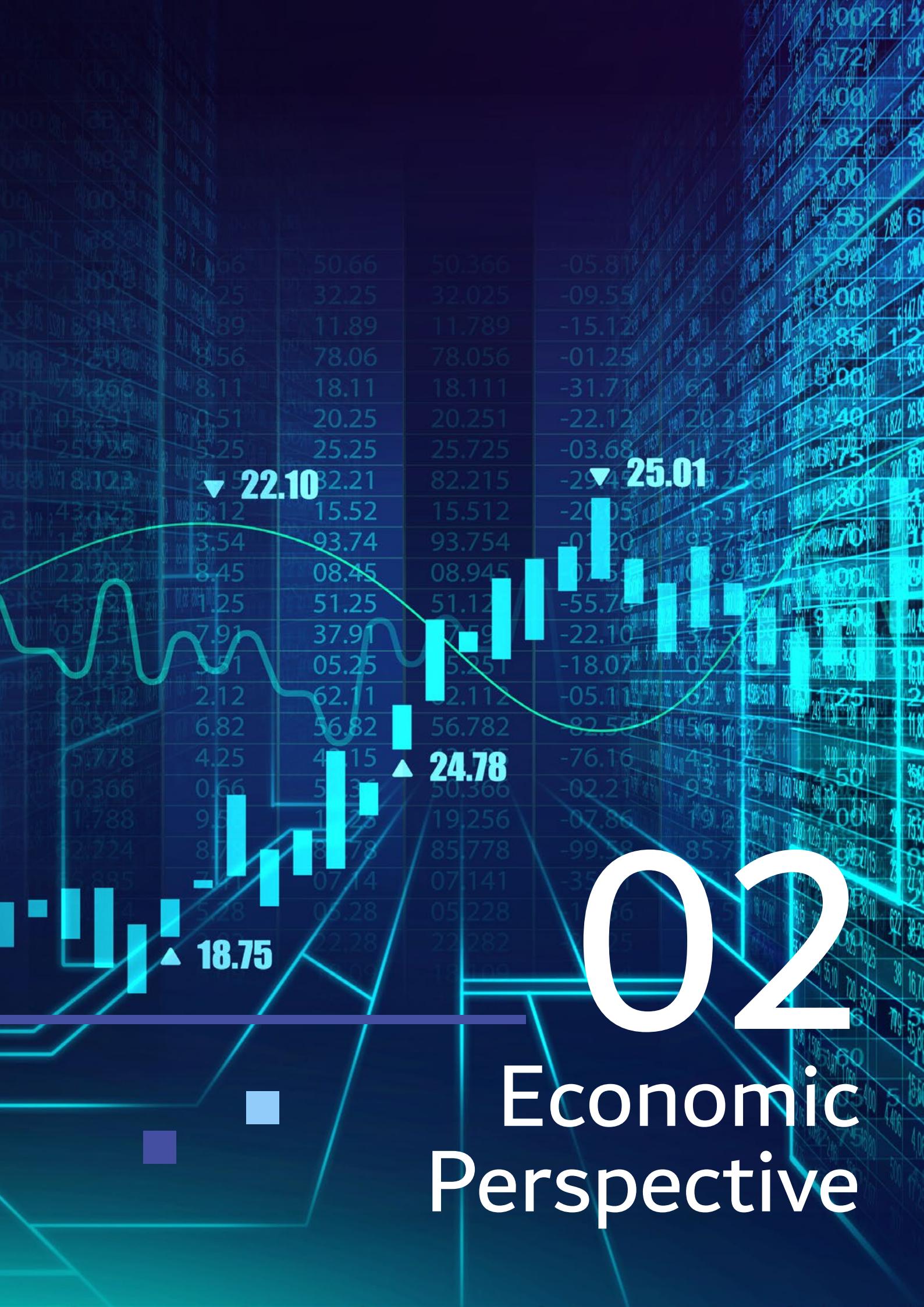
DEWA's sustainability effort stands at 91.9%, surpassing the results of all other participating organisations in the survey. Continued efforts to raise awareness and reinforce DEWA's sustainability commitments are expected to further embed sustainability into the organisational culture in the coming years.

**DEWA's Overall Sustainability Efforts Level**



02

# Economic Perspective



# ECONOMIC PERSPECTIVE

## ECONOMIC PERFORMANCE (GRI 2-1, 201-1)

### LISTING IN DFM

In April 2022, DEWA became a publicly listed company on the Dubai Financial Market (DFM) after a successful IPO valued at US\$ 6.1 billion, which was oversubscribed 37 times. With a valuation of AED 124 billion, DEWA became one of the largest companies by market value on the DFM, significantly enhancing the exchange's profile.

One year after its listing on the DFM, investors continue to place their trust in DEWA, drawn by its healthy balance sheet, track record of operational excellence and financial prudence, as well as its ESG strategy and commitment to a green future, including Dubai's ambitious 2050 net zero emission goal. The IPO also signified a strong

vote of confidence from both local and international investors in the Dubai Capital markets and the business-friendly environment offered by the Emirate.

### FINANCIAL PERFORMANCE

As part of the journey towards achieving Dubai's vision and long-term sustainability goal, the UAE Vision 2071 and Net Zero Emission Target by 2050, DEWA has endeavored to achieve operating and technical milestones that are comparable with the best utilities globally and at the same time, maintain a robust financial profile. In 2023, DEWA achieved record results and delivered a remarkable financial performance in its operating history. DEWA delivered on its strategic objective, which is focused on sustainable growth, staying at the forefront of smart and innovative operational excellence and optimising returns for its shareholders whilst

minimising its carbon footprint. The investments made in AI and digitalisation have streamlined internal processes, reduced costs while simultaneously improving operating efficiency across all lines of business while delivering an excellent customer experience. The consolidated revenue increase of 6.7% to AED 29.18 billion was mainly driven by an increase in demand for electricity, water, and cooling services. The consolidated net profit for the year 2023 was AED 7.93 billion compared to AED 8.04 billion in 2022. Consolidated Earnings Per Share remain same at AED 0.15. DEWA delivered a sector-leading dividend yield of 6.35% at the IPO price of AED 2.48 for the year 2023. Besides achieving excellent financial results, DEWA also set distinguished operating and technical benchmarks including the world's lowest line loss in electricity and water at 2.0% and 4.6% respectively; and the world's lowest CML time of 1.06 minutes.

### KEY FACTS ABOUT DEWA'S FINANCIAL PERFORMANCE

Year	2022	2023
Total Revenues - consolidated	AED 27.34 billion	<b>AED 29.18 billion</b>
Net Profit - consolidated	AED 8.04 billion	<b>AED 7.93 billion</b>
Operating Costs - consolidated	AED 19.524 billion	<b>AED 21.07 billion</b>
Employee Wages and Benefits - consolidated	AED 3.659 billion	<b>AED 4.029 billion</b>
Payment to Providers of Capital - consolidated	AED 16.155 billion	<b>AED 8.248 billion</b>
Unit Sold - Water	127.041 billion Imperial Gallons	<b>133.028* billion Imperial Gallons</b>
Units Sold - Electricity	47.312-Terawatt hour	<b>50.785* Terawatt hour</b>
Debt to Equity - consolidated	44.07%	<b>41.95%</b>
Return on Equity - consolidated	8.71%	<b>8.56%</b>
Capital Expenditure - consolidated	AED 10,120 million	<b>AED 8,120 million</b>

\*Preliminary data

Year 2023	Q1	Q2	Q3	Q4	Total
<b>Revenue</b>	AED 5.44 billion	AED 7.29 billion	AED 9.4 billion	7.05 billion	<b>AED 29.18 billion</b>
<b>Net Profit</b>	AED 763 million	AED 1,977 million	AED 3,390 million	AED 1,804 million	<b>AED 7,934 million</b>

## AVAILABILITY & RELIABILITY OF ELECTRICITY

(GRI 3-3, EU2, EU10)

DEWA, as the exclusive electricity and water service provider in the emirate of Dubai, committed to provide the services at globally leading level of efficiency, availability and reliability. This commitment is upheld through continuous improvements made in power & desalination plant infrastructures on par with customer demand with sufficient reserve. In 2023, DEWA generated a total of 56,147,155 Megawatt-hours (MWh). Natural gas serves as the primary fuel for power generation and water desalination; however, DEWA is substantially or greatly investing in renewable energy generation, solar energy in particular. Furthermore, DEWA supports the Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy 2050 to provide 100% of Dubai's total power production from clean energy sources by 2050.

Source of Energy		2020	2021	2022	2023
<b>DEWA Gas Plant</b>	Natural Gas	Generation (MWh)	42,025,853	43,025,633	44,322,308
		% of total generation	91.94	85.07	83.80
	Diesel Fuel Oil (DFO)	Generation (MWh)	20,547	35,495	13,651
		% of total generation	0.04	0.07	0.03
<b>Solar Energy</b>	Medium Fuel Oil (MFO)	Generation (MWh)	0.4	17	45
		% of total generation	0.000001	0.00003	0.00008
		Generation (MWh)	2,855,142	3,460,046	4,645,350
		% of total generation	6.25	6.89	8.78
<b>Waste to Energy</b> (Warsan Waste Management Company)		Generation (MWh)	-	-	174,377
		% of total generation	-	-	0.31
<b>Hassyan Power Plant (HPP)</b>	HPP-NG	Generation (MWh)	116,083	137,847	3,754,142
		% of total generation	0.25	0.27	7.10
	HPP-Clean Coal	Generation (MWh)	693,987	3,543,384	156,803
		% of total generation	1.52	7.06	0.30
<b>DEWA Gas Plant &amp; HPP-NG</b>	HPP-Total	Generation (MWh)	810,070	3,681,232	3,910,945
		% of total generation	1.77	7.33	7.39
<b>Total Generation (MWh)</b>		<b>45,711,612</b>	<b>50,202,424</b>	<b>52,892,299</b>	<b>56,147,155</b>

Gross generation by DEWA gas plants and DEWA Solar & Net electricity sent to DEWA network by Solar IPP, HPP & Waste to Energy (WWMC)

DEWA relies on two main sources for electricity generation: natural gas and solar energy. In the event of gas supply interruption (if any), backup fuels such as DFO, MFO and Clean Coal are reserved for emergencies. The consumption of DFO, MFO and Clean Coal throughout the year is attributed for testing and commissioning activities. With the annual rise in electricity demand, there is a corresponding increase in electricity generated from DEWA's main sources of energy (Natural Gas & Solar Energy). In addition, in 2023, a new source of energy, Waste to Energy was added to DEWA's total power generation from Warsan Waste Management Company (WWMC). WWMC contributed with a 0.31% of the total generation which is equivalent to 174,377 MWh.

## WARSAN WASTE MANAGEMENT CENTRE

During the World Government Summit 2023 in Dubai, DEWA and Dubai Municipality signed a 35-year Power Purchase Agreement (PPA) to purchase electricity generated from Warsan Waste Management Centre (WWMC), the world's largest and most efficient waste-to-energy centre. The agreement aims to support the Dubai Government's directions in the field of clean and sustainable energy, serving sustainability and the circular economy. It also supports DEWA's efforts to promote the green economy and achieve the goals of the Dubai Clean Energy Strategy 2050, which aims to provide 25% of Dubai's energy mix from clean sources by 2030 and 100% by 2050. The project is a key milestone in waste treatment and integrating waste-to-energy

technologies, aligning with the UAE's sustainable development goals.

The production unit of the project will be integrated into DEWA's main production units to ensure the maximum utilisation of its production capabilities, which are always available to supply the electricity grid.

The agreement contributes to supporting the project and achieving the sustainability of the assets, as the generated energy will be used to operate the WWMC and the Warsan Wastewater Treatment Plant. Additionally, plans are being developed to manage the operations of the wastewater treatment plants sustainably. This is achieved by increasing the efficiency of treatment operations and reducing costs by 50%, as well as reducing the operating costs of the plant by 30%.

## ACCESS TO ELECTRICITY (GRI 3-3, EU28, EU29, EU30)

DEWA assumes the critical responsibility for the generation, transmission, and distribution of electricity across the emirate of Dubai. Ensuring widespread access to electricity for residential, commercial, and industrial consumers, DEWA employs a robust network of power plants, substations, and distribution lines. The power generation portfolio encompasses diverse sources, including natural gas, solar energy parks, and co-generation plants, reflecting DEWA's substantial investment in renewable energy, particularly solar power, to diminish reliance on fossil fuels and reduce carbon emissions.

Aligned with the Dubai Plan 2030 and UAE Vision 2071, DEWA's corporate strategy map incorporates strategic objectives like "Engaged & Happy Stakeholders" (SO2) and "Leading Innovative Customer Experience" (IP03). Through comprehensive customer happiness surveys, DEWA diligently tracks and analyzes customer satisfaction, fostering a work mechanism that ensures a positive customer experience while enhancing their quality of life and well-being. Additionally, DEWA has implemented various initiatives to improve electricity accessibility and reliability, including:

- Smart Grid Technology: Implementation across the transmission and distribution grids enables real-time monitoring and control, enhancing reliability and efficiency.
- Connection of Solar PV Systems: Through the Shams Dubai initiative, customers can generate renewable energy for personal use, with surplus fed into the grid and deducted from bills under a net metering scheme.
- Advanced Metering Infrastructure (AMI): Replacement of traditional meters with smart meters provides accurate billing and empowers customers with daily consumption details.
- EV Charging Stations: DEWA installed 700 charging points, supporting the growth of electric vehicles (EVs) in Dubai. By 2025, DEWA is targeting to install a total of 1000 charging stations.
- Dubai EV Community Hub: DEWA launched a website centralizing information on EV developments in Dubai, aimed at increasing EV adoption.

- Customer services: DEWA provides various channels for customers to report power outages, request new service connections, or ask for other services which can all be completed through DEWA's official website or mobile application.

Moreover, DEWA's attainment of ISO certificates underscores its unwavering commitment to customer satisfaction, reflecting adherence to global standards for customer service. These include ISO 10001:2018, ISO 10002:2018, ISO 10003:2018, and ISO 10004:2018, affirming DEWA's dedication to providing high-quality services and continuously improving its ability to cater to customer needs.

## OPERATIONAL EXCELLENCE

DEWA has broken its world record in major inspection outage duration for the overhaul of gas turbines and desalination units, which was recorded in 2019. DEWA has reduced the maintenance outages for major inspection operations from 11 days to 9 days, marking an 18% reduction in maintenance duration compared to the previous world record achieved and an 84% decrease compared to 2006. This achievement has contributed to DEWA achieving 99.70% and 99.58% availability in the summer of 2022 for the E-Class and the F-Class fleet of Gas Turbines (GT), respectively, representing some of the highest percentages worldwide. Additionally, DEWA sustained its global record in the maintenance of desalination units, reducing outage duration from 21 days to 10 days. These accomplishments resulted in an availability increase of F-Class GT, equivalent to AED 3.55 million average cost savings

per GT per major inspection. Beyond providing electricity and water services according to the highest standards of availability, efficiency, and reliability, this advancement contributes to DEWA's environmental efforts by reducing carbon dioxide emissions by 49,329 tonnes per year, in addition to reducing operational and maintenance costs.

DEWA is committed to implementing the latest technologies to enhance its operations. Consequently, DEWA successfully launched its second nanosatellite, DEWA SAT-2, aboard the Falcon 9 rocket of SpaceX from Vandenberg Space Force Base in California, USA.

The launch of DEWA SAT-2 underscores DEWA's leadership in leveraging space technologies to improve the operations, maintenance, and planning of electricity and water networks. The nanosatellite was designed and developed by Emiratis at DEWA's Research and Development Centre in collaboration with NanoAvionics in Lithuania.

DEWA SAT-2, a 6U nanosatellite, is equipped with a high-resolution camera (4.7 metres) for Earth observation missions. The camera provides continuous line-scan imaging in seven spectral bands from an approximately 500km orbit. Additionally, the satellite is equipped with Infrared equipment to measure greenhouse gases.

The launch of DEWA SAT-2, our second nanosatellite, affirms our steady progression toward leadership in utilising space technologies to enhance DEWA's operational efficiency and provide electricity and water services according to the highest

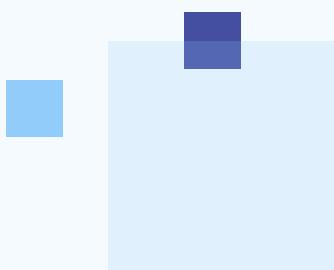
standards of availability, reliability, efficiency, and quality.

DEWA achieved the lowest electricity Customer Minutes Lost (the total number of minutes called CML, during which customers experience a power outage) globally in 2023. DEWA recorded just 1.06 minutes per customer, breaking its record of 1.19 minutes per customer in 2022. This is compared to around 15 minutes recorded by leading utility companies in the European Union.

DEWA's achievement of the lowest electricity CML in the world (1.06 minutes per customer) is the culmination of efforts in innovation and facility and service management through a smart and integrated smart grid. This utilises the latest disruptive technologies of the Fourth Industrial Revolution, including Artificial Intelligence (AI), blockchain, energy storage, Internet of Things (IoT), among others. These efforts contribute to providing electricity and water services according to the highest standards of availability, reliability, efficiency, and sustainability, while enhancing DEWA's agility, resilience, and readiness to meet the increasing demand for electricity and water in Dubai, thereby providing the best facilities for the best city in the world

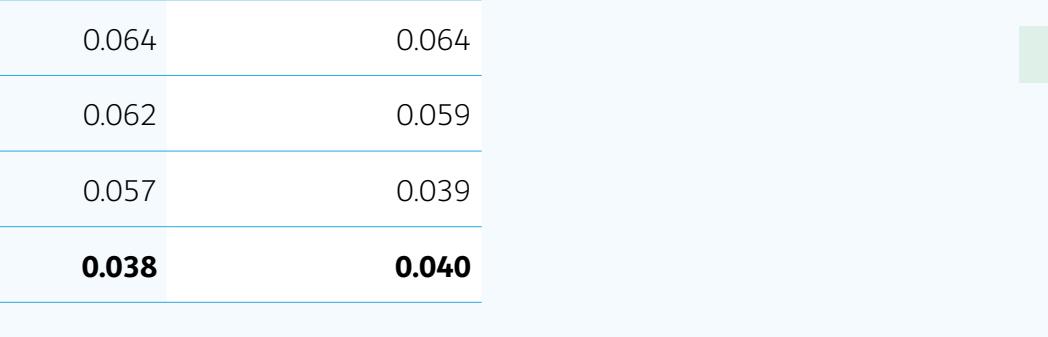
## THE SAIDI (CUSTOMER MINUTES LOST):

Year	Target	Actual	
2019	2.35	1.86	
2020	1.66	1.66	
2021	1.6	1.43	
2022	1.40	1.19	
<b>2023</b>	<b>1.15</b>	<b>1.06</b>	



## SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI):

Year	Target	Actual	
2019	0.087	0.071	
2020	0.064	0.064	
2021	0.062	0.059	
2022	0.057	0.039	
<b>2023</b>	<b>0.038</b>	<b>0.040</b>	



## AVAILABILITY FACTOR (AF), TARGET & ACTUAL 2019 – 2023

Year	Availability Factor (Summer) Target	Availability Factor (Summer) Actual	Availability Factor (Annual) Target	Availability Factor (Annual) Actual
2019	98.50%	99.18%	92.00%	92.10%
2020	98.50%	99.73%	92.00%	92.28%
2021	98.50%	99.66%	92.00%	92.35%
2022	98.50%	98.39%	90.00%	90.09%
<b>2023</b>	<b>98.50%</b>	<b>98.34%</b>	<b>91.00%</b>	<b>91.15%</b>



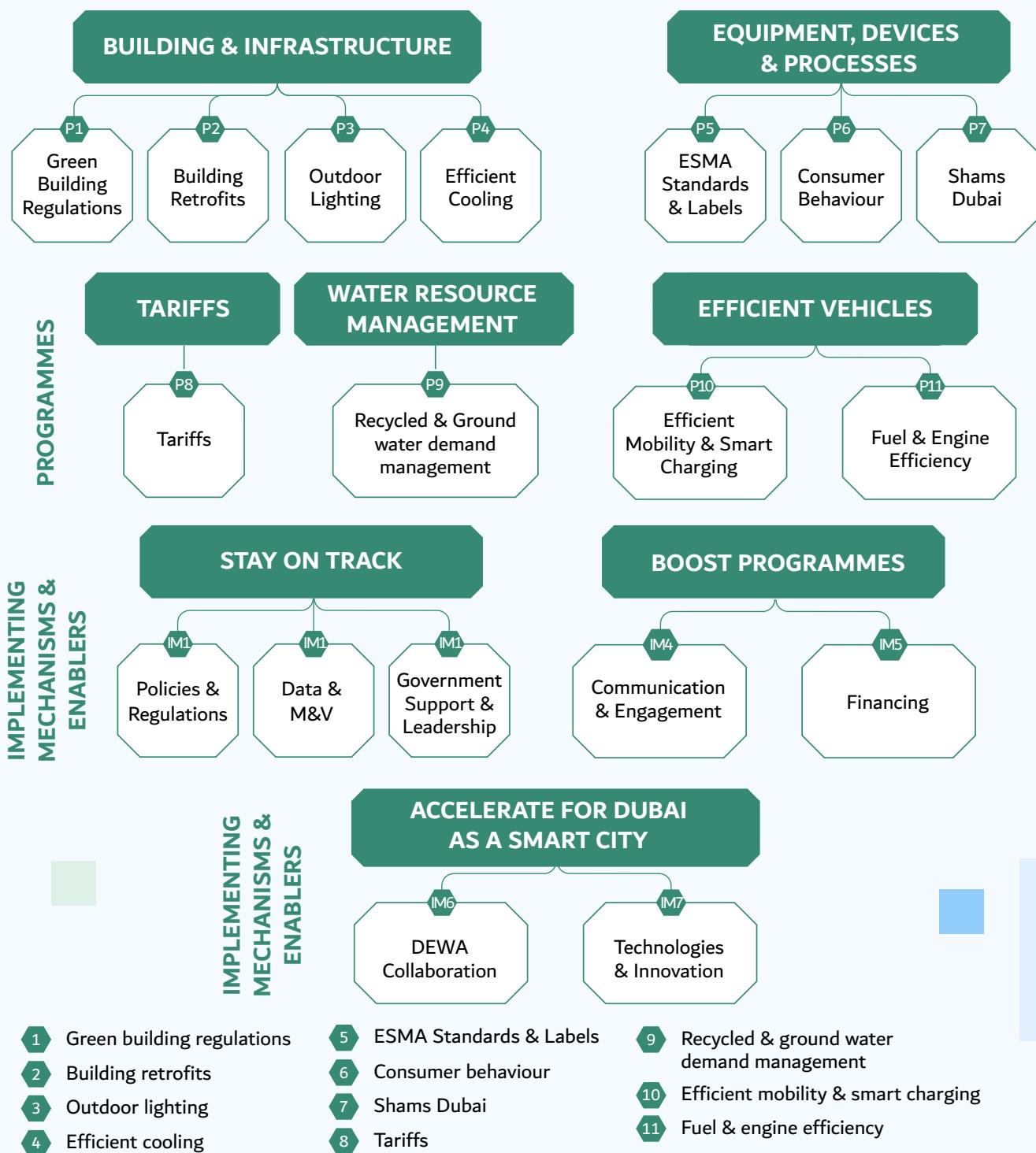
## DEMAND SIDE MANAGEMENT (GRI 3-3)

In 2013, the Dubai Supreme Council of Energy (DSCE) introduced, formulated, and released the Demand Side Management (DSM) Strategy with the primary objective of positioning Dubai as a frontrunner in effectively

controlling electricity and water demand. The strategy sets an ambitious target of achieving a 30% reduction in energy and water consumption by the year 2030. To expedite the realization of its primary targets, the DSCE updated the DSM Strategy in 2020.

Comprising 11 key programmes, 9 of which are directly aligned

with DEWA's core business and scope of work, the DSM Strategy encompasses various facets of demand-side management. Additionally, the strategy integrates seven implementation mechanisms designed to propel Dubai into the realm of a smart city and a trailblazer in electricity and water efficiency management. The DSM components include:



The DSM programmes are implemented and managed by eight different entities members assigned by the DSCE. Three programmes are owned and managed by DEWA, which are as follows:

1. Consumer Behaviour programme
2. Shams Dubai programme
3. Tariff Rate

<b>Programme</b>	<b>2021</b>		<b>2022</b>		<b>2023*</b>	
	<b>Electricity</b>	<b>Water</b>	<b>Electricity</b>	<b>Water</b>	<b>Electricity</b>	<b>Water</b>
Consumer Behaviour programme	43 GWh	202 MIG	82 GWh	416 MIG	86 GWh	432 MIG
Shams Dubai programme	459 GWh		668 GWh		813 GWh**	
Tariff Rate	1,177 GWh	2,084 MIG	1,161 GWh	2,248 MIG	1,241 GWh	2,256 MIG

\*Preliminary Data \*\*Connected capacity of Shams Dubai is 493 MW

DEWA stands among the leading global utility companies in terms of operational efficiency and reliability. In 2023, it witnessed an augmentation in electricity generation capacity to 15,717 MW, while maintaining a desalinated water production capacity of 495 MIG per day. Remarkably, the electricity transmission and distribution network losses were reduced to 2.0%, and water network losses at 4.6%. This surge in energy demand indicates the robust performance across all economic sectors in Dubai, coupled with the continual population growth and the expansive developments observed throughout the Emirate in various key activities.

## MY SUSTAINABLE LIVING PROGRAMME

“My Sustainable Living” programme for residential customers in Dubai, aims to enhance the efficiency of their electricity and water consumption and adopt a sustainable lifestyle. There are 607,657 residential customers enrolled in the Programme since its launch in October 2018 until the end of 2023. The programme is the first of its kind in the Middle East. It aligns with the Demand Side Management Strategy 2030 and the Dubai Clean Energy Strategy 2050. “My Sustainable Living” programme allows the customers to regularly check, compare and monitor their electricity and water consumption in comparison with efficient similar homes in their area.

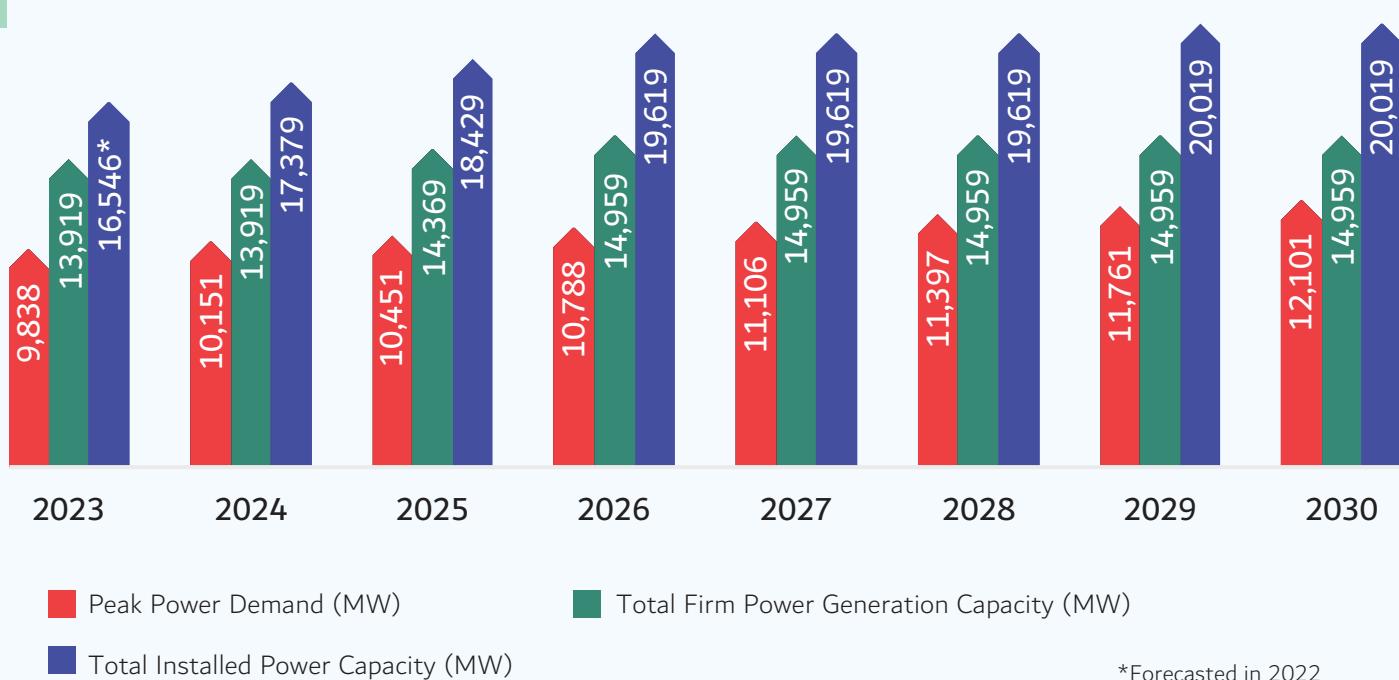
“My Sustainable Living” Programme helps customers to monitor their electricity and water consumption proactively and online without needing to contact DEWA. The programme uses Artificial Intelligence (AI) and behavioural science. It includes several key features, including a dashboard through which customers can compare their consumption with efficient similar homes in their area, a consumption profile that allow customers to update their details for more accurate comparison, a monthly report on customers electricity and water consumption, and tips to help customers take positive steps towards adopting a sustainable lifestyle.

## MEETING FUTURE DEMAND (EU10)

DEWA meticulously formulates and predicts the demand for electricity and water for short, medium, and long-term periods

as well as develops capacity expansion plans up to 2030. Employing internationally acknowledged methodologies and cutting-edge tools, DEWA factors in demographic and econometric growth and their impact on demand for electricity and water. Moreover, to ensure

readiness for future demands, DEWA adeptly assesses and quantifies the impact of potential uncertainties through scenario planning. Furthermore, DEWA consistently revises its demand forecasts and capacity expansion plans on an annual basis.



## RESEARCH & DEVELOPMENT (R&D) CENTRE (GRI 3-3, EU10)

The DEWA R&D Centre at the Mohammed bin Rashid Al Maktoum Solar Park is dedicated to developing and testing innovative solutions aimed at enhancing the efficiency and reliability of DEWA's operations while reducing its carbon footprint in line with DEWA's decarbonisation targets. The Centre focuses on research areas such as solar power, water, smart grid integration, and energy

efficiency. These core areas of R&D are supported by three key enablers: the Fourth Industrial Revolution (including AI, IoT, Robotics & Drones, 3D Printing & Advanced Materials), Energy System Analyses, and Space.

### RESEARCH INFRASTRUCTURE

The R&D Centre's infrastructure includes:

- Solar indoor testing and accelerated aging lab
- Outdoor test facility for continuous monitoring of solar photovoltaic module

performance in actual conditions, a building-integrated photovoltaics testing facility, and a cleaning test field for robotic solutions

- Labs to support Robotics and Drones, Advanced Materials and Characterisation, and IoT
- Several types of 3D printers (metal, plastic PLA, ABS, Nylon, composites, clay, etc.)
- High-Performance Computing Cluster
- Energy Storage Testing and Validation Field
- Green Hydrogen Pilot and a Hydrogen Refuelling Station

- Photovoltaic-driven Reverse Osmosis (RO) and Trans-Membrane Distillation system
- Satellite ground station for DEWA's space initiative (Space-D) and more

## RESEARCH AREAS ACTIVITIES

### SOLAR RESEARCH AREA

The Solar Research Area focuses on improving solar photovoltaic technologies to mitigate the effects of soiling and extreme desert conditions on the performance of Solar Photovoltaic panels. It leverages results and knowledge collected from long-term performance testing of PV modules to inform the production of desert-ready PV modules and develop appropriate standards. Additionally, the Solar Resource Assessment and Forecasting programme develops methods to accurately forecast solar irradiance and power output, aiming to improve the overall integration of solar into the DEWA grid.

### WATER RESEARCH AREA

The Water Research Area assesses and develops sustainable solutions for desalination, water purification, and leakage detection in water transmission. This includes enabling the use of solar power, detecting and reducing water transmission losses, and minimizing brine effluent for water systems.

### SMART GRID INTEGRATION RESEARCH AREA

The Smart Grid Integration Research Area evaluates and develops systems to facilitate and optimize the integration of renewables into the grid

while maintaining power quality standards and improving overall performance and reliability of grid operations. This involves the use of electricity storage systems (chemical, thermal, and mechanical technologies) and the aggregation of distributed energy and storage resources, such as Virtual Power Plants and EV chargers.

### ENERGY EFFICIENCY RESEARCH AREA

The Energy Efficiency Research Area promotes smart and sustainable development, reduces energy waste by improving the efficiency of energy systems (with a focus on cooling), and accelerates the clean energy transition. It identifies, develops, and validates innovative solutions for smart and efficient energy use in the built environment, guides demand response measures, provides detailed building energy forecasting models, and improves the efficiency of energy conversion processes.

### SPACE RESEARCH AREA

The Space Research Area supports DEWA with high-efficiency, low-cost remote sensing & operations using satellites and ground station capabilities. Its solutions address utility needs, including substation feeder monitoring, asset integrity, and enriching weather forecasting services. DEWA is the world's first utility to launch nanosatellites to enhance the maintenance and planning of electricity and water networks. DEWA launched its first IoT nanosatellite, DEWASAT-1, in 2022 and the remote sensing DEWASAT-2 in 2023.

## FOURTH INDUSTRIAL REVOLUTION (4IR)

The Fourth Industrial Revolution (4IR) enables the effective development of solutions that support the core research areas mentioned earlier. Its robotics and drone solutions are utilized to provide inspection and maintenance services using unmanned/autonomous operations across the entire utility value chain (e.g., photovoltaic plants, transmission line inspection, and maintenance). The AI team develops, tests, and integrates AI technologies for optimizing grid operations, short-term solar forecasting, etc. IoT enables remote monitoring diagnostics and power and asset management using smart sensors and analytics with AI and cloud capabilities. The advanced materials team provides expertise in forensic analysis of materials to detect failures and in the development of advanced energy storage systems (batteries and supercapacitors). Lastly, the 3D printing team is developing 3D printing capabilities to address DEWA's spare parts and rapid prototyping needs. The facility currently operates 16 3D printing systems that can utilise more than 20 materials, covering a wide range of applications and use cases within DEWA.

### ENERGY SYSTEMS ANALYSIS RESEARCH AREA

The Energy Systems Analysis Research develops and applies advanced capabilities for the joint technical and economic assessment of energy-related technologies, systems, and policies. This area develops energy models, lifecycle assessment models, and business strategy assessments to support DEWA's future readiness. It models

and assesses new energy system configurations and technologies at the macro level, focusing on the cost-optimal integration of renewable energy systems and strategies for deploying new energy technologies.

## **SUSTAINABILITY-ORIENTED DEWA R&D PROJECT HIGHLIGHTS IN 2023**

In 2023, the following sustainability-oriented projects have matured and are being considered for further advancement towards deployment:

- A Desert Standard for PV module testing aims to better reflect the conditions of desert regions. Once adopted, this standard will increase the longevity of PV modules in harsh environments, thereby reducing material waste.
- A short and medium-term forecasting system for solar irradiance using numerical modelling and machine learning on sky-camera imagers customized for the location of the MBR Solar Park. Once deployed, this system will improve the integration of PV systems and optimise fuel use for spinning reserves.
- Development of numerical models for reverse osmosis membrane fouling and the effects of elevated temperatures on water intake. Once deployed, these models can enhance the efficiency of water desalination operations.
- Demonstration of the capabilities of large-scale Battery Energy Storage Systems (BESS) and Virtual Power Plants (VPP) aggregating Distributed Energy Resources to provide

grid services and enhance the smooth integration of variable solar energy.

- Development of a Hydrogen Filling Station for mobility applications and continuing operation of the Green Hydrogen Plant with successful integration of BESS during the night to increase overall production.
- Commissioned the Hydrogen Refueling Station (HRS) at the Green Hydrogen Plant (GHP) in the R&D Center
- The R&D Centre has achieved 214 Scopus indexed publications and 29 patent applications registered in 10 jurisdictions.

## **SYSTEM EFFICIENCY (GRI 3-3, EU4, EU12)**

### **POWER TRANSMISSION & DISTRIBUTION**

Aligned with the goal of increasing electricity generation to meet Dubai's growing demand for power, DEWA is expanding its investments in electrical Transmission & Distribution (T&D) substations. This strategic initiative aims to ensure the consistent and reliable delivery of electricity to customers at the highest level of reliability.

### **POWER TRANSMISSION**

To keep pace with the growth and prosperity of Dubai and the increase in its population, DEWA is committed to continue providing a solid and advanced infrastructure to meet the increasing demand for electricity and water. During the year 2023, 14 nos. new 132 kV (kilo Volt) Transmission Substations

were commissioned by DEWA. This substantial infrastructure enhancement comprises total investment cost of AED 11 billion spanning the period 2021 and 2024. Notably, the energized projects during 2022 – 2023 accounted for an expenditure of approximately AED 5.3 billion, while the ongoing projects under execution represented a financial commitment of about AED 4.6 billion.

In response to the population surge in 2023, the electricity demand in the Emirate of Dubai increased to 56,516 GWh. DEWA remains steadfast in its commitment to furnishing a robust and state-of-the-art infrastructure to effectively meet the growing demands for electricity and water. The heightened demand prompted a cumulative extension of 81 kilometres in the length of transmission lines, which included a marginal net growth of 1 kilometre in the 400kV transmission lines and a net increase of 80 kilometres in the length of 132 kV transmission lines.

## The Below Table Demonstrates Details About the Transmission Substations and Lines:

### Transmission Substations (EU12)

Type	2019	2020	2021	2022	2023
132 kV (Nos.)	285	307	319	334	348
400 kV (Nos.)	22	23	25	27	27

### Length of Transmission Lines (EU4)

Type	2019	2020	2021	2022	2023
Overhead Lines (KM)	132 kV	402	402	369	367
	400 kV	1,164	1,168	1,386	1,388
Underground Lines (KM)	132 kV	2,146	2,249	2,335	2,552
	400 kV	24	24	25	26

### Power Distribution:

As on end of 2023, DEWA's distribution network have 75 nos. of 33 kV substations and 44,015 nos. of 11-6.6 kV substations in service across the emirate of Dubai. Alongside, the network includes underground cables of 1965.71 km and overhead lines of 99.75 km under the 33 kV voltage level. In addition, there are 36,174.451 km of underground cables and 607.29 km of overhead lines under 11-6.6 kV voltage level as well.

## The Below Table Demonstrates Details About the Distribution Substations and Lines:

Type	2019	2020	2021	2022	2023
33 kV	93	85	81	73	75
11-6.6 kV	38,240	40,588	41,814	42,771	44,015

### Length of Distribution Lines, 2022 (EU4)

Type	2019	2020	2021	2022	2023
Overhead Lines (KM)	33kV	111.88	104.33	100.1	99.75
	11-6.6 kV	616.02	608.26	606.4	613.28
Underground Lines (KM)	33kV	2,142	2,119.49	2,108	2,000.44
	11-6.6 kV	33,940	34,475	35,001	35,541

## DEWA SMART GRID

DEWA is consistently dedicated to enhancing and sustaining optimal operational efficiency in its T&D network. To achieve this goal, in 2014, DEWA formulated its inaugural Smart Grid strategy extending until 2035, a pivotal element in the development of a smart city. The critical success factors for smart cities hinge on the seamless availability of integrated, connected services meeting daily living needs – a feat achievable through a Smart Grid. Facilitating two-way communication between the utility and consumers, a Smart Grid enables comprehensive monitoring across both power and water grids. Comprising controls, computers, automation, and integrated equipment, DEWA's

Smart Grid incorporates advanced features, automated decision-making, and interoperability throughout the entire electricity and water network.

**For further insights into DEWA's Smart Grid, kindly scan the QR code.**

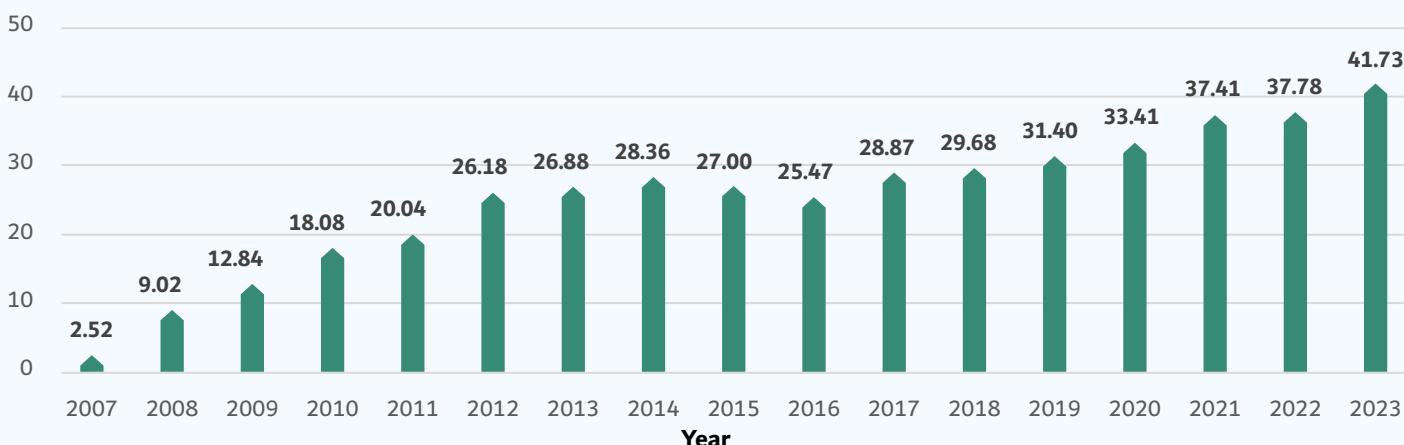


## SUPPLY SIDE (GRI 3-3, EU11)

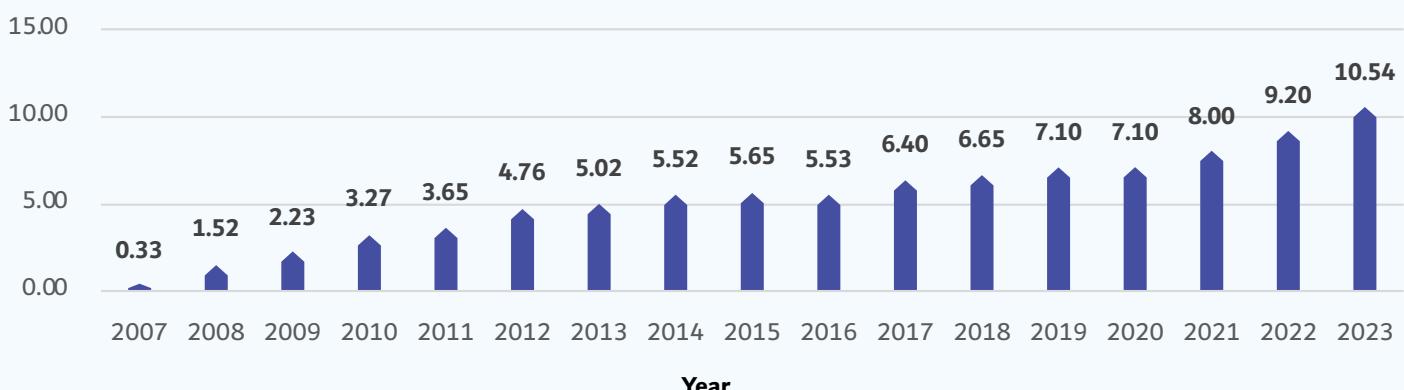
In pursuit of enhanced production efficiency, DEWA employs

cogeneration technology to generate electricity and water. Utilizing Heat Recovery Steam Generators, waste heat from gas turbines is harnessed to produce additional electricity, while supplying energy to the Multi-Stage Flashing (MSF) water desalination process. DEWA employs a hybrid system in its water desalination plants, combining various technologies, including MSF and RO, to achieve optimal efficiency over the plant's life cycle at minimal cost. Additionally, DEWA proactively engages in gas turbine upgrades, collaborating with original equipment manufacturers for cost-effective enhancements and innovative technologies, thereby increasing capacity, efficiency, and reliability throughout the turbine's life cycle.

### Efficiency Improvement wrt 2006 (%)



### Carbon Reduction (Million Tons of CO<sub>2</sub>) due to efficiency improvements compared to 2006



## TOWARDS A CIRCULAR ECONOMY (GRI 3-3)

DEWA already has a strong commitment to sustainability, which is reflected in the overall purpose, vision, and mission of the company. Building on the momentum of our sustainable business and operations, we continue to advance along this pathway by developing a clear circular economy strategy. Our objective is to shift away from the traditional linear business approach to a circular economy. We believe that circularity is a key lever to contribute to our existing corporate sustainability goals in an integrated manner. Hence, DEWA has set a clear ambition to become a circular leader in the region by focusing on optimal resource use and creating social, economic, and environmental value.

Through this strategy, DEWA continues to successfully perform its core activities in line with the best global practices. DEWA's circular economy model holds a particular mandate to contribute to many of the strategies and objectives set on a global, federal, and local level. These include the UNSDGs 2030, the UAE Net Zero by 2050 Strategic Initiative,

the UAE Vision 2071, the UAE Circular Economy Policy, and the Dubai Clean Energy Strategy 2050. DEWA is one of the first entities in the region to develop a comprehensive circular economy strategy. Our Circular Economy Model is based on five key circular principles that serve as the basis for circularity within DEWA:

1. Circular Design and Use of Circular Material
2. Optimise Asset Management
3. Value Retention and End-of Life Treatment
4. Circular Partnership
5. Renewable Energy, Energy and Water Efficiency

**DEWA's Circular Economy Model provides insight into our focus pillars, while moving our business to become more circular:**



We aim to fully collaborate with stakeholders in our value chain by focusing on Smart Users, Circular Procurement and Supplier Engagement:

<b>Smart Users</b>	DEWA aims to actively support its clients in optimising the energy consumption, lowering resource use by focus on real -life data and offering smart use solutions.
<b>Circular Procurement</b>	DEWA sets circular procurement criteria for its assets and equipment, to aim for circular procurement throughout the value chain.
<b>Supplier Engagement</b>	In order to ensure full value chain collaboration, DEWA engages with its suppliers on the use of circular material, the re -use of assets, and creating collaborations to jointly contribute to the transition towards a circular economy.

## DEWA'S SMART RECYCLE BIN

DEWA is committed to adopting sustainable practices and promoting a culture of sustainability among its employees. In line with the UAE circular economy policy and DEWA's Circular Economy Strategy, DEWA has installed two smart recycling machines within its premises (Head Office & Warsan). The primary goal of this initiative is to advocate for the recycling of plastic bottles, fostering awareness about environmental issues, circular measures, and emphasizing the significance of embracing sustainable behaviours. In collaboration with a local company, DEWA retains the value of the plastic bottles and converts them into products using sustainable manufacturing solutions. The initiative resulted in the collection of more than 470,557 plastic bottles and aluminium cans and diverted 6,931 kg of plastic from landfills.

The Smart Recycle Bin Machines seamlessly integrate with DEWA's Smart Office App, enabling employees to monitor their recycled bottles and cans. Furthermore, active participants in this initiative qualify for entry into monthly and mega raffle draws. Launched in October 2022, with the enthusiastic involvement of over 589 employees, 49 employees were rewarded during the first cycle.

## INNOVATION (GRI 3-3)

### FOSTERING INNOVATION

Aligned with the National Innovation Strategy led by His Highness Sheikh Mohammed bin Rashid Al Maktoum to position the UAE as a global innovation hub and the Dubai Innovation strategy to establish Dubai as the world's most innovative city, DEWA has consistently upheld its role as a major advocate for innovation in both the UAE and Dubai. Notably, DEWA achieved recognition by obtaining ISO 56002:2019 in Innovation Management, a distinctive honour as the world's inaugural recipient of this certification. Furthermore, DEWA secured ISO 30401:2018 in Knowledge Management Systems, marking a global milestone as the first utility worldwide to attain this certification. Fostering an innovative culture among its workforce, DEWA integrates innovation institutionally, advancing steadily towards a sustainable future.

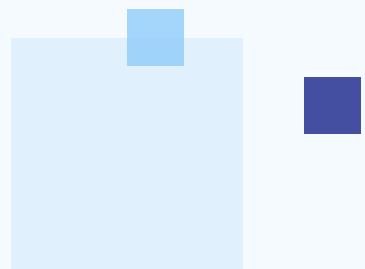
DEWA has an integrated Knowledge Management (KM) function based on ISO 30401: 2018, which includes a Knowledge Management Policy, Framework, Quality Procedures, and Processes to promote and embed KM awareness, capability, and

practices at DEWA. Activities such as Reading & Knowledge Days, KM Training (online and in person), Share an Hour, Communities of Practice, the Ma'rifa Collaboration Platform, Expert Knowledge Sessions, LinkedIn Learning, and the iAsk Reference & Research Service promote the transfer of knowledge between individuals and groups.

DEWA provides access for DEWA stakeholders to physical and digital knowledge resources and creative spaces through the 6 DEWA Knowledge Centres, 6 Knowledge Chairs, 3 Digital Reading Trees, the DEWA SMART Library, the Knowledge Corner on the DEWA Smart App, and the DEWA Online Catalogue.

### AFKARI

In 2023, DEWA received 6,235 ideas through the AFKARI ideation Platform. This brings the platform's total number of ideas received since 2015 to 61,074. DEWA organised 10 campaigns, 23 workshops, and 20 brainstorming sessions in 2023 to encourage employees to participate in its initiatives and projects, listen to their ideas, and study their suggestions.



AFKARI	2019	2020	2021	2022	2023
Ideas	7,249	7,053	7,845	7,631	6,235
Participants who used the Afkari platform	7,627	7,645	7,740	6,516	6,516
Proposed Ideas (Accumulative cost savings)	AED 54.51 million	AED 225.72 million	AED 247.078 million	AED 258.603 million	AED 272.962 million
Number of Ideas with Cost Saving	302	596	819	888	959
Cost Savings (Per Year)	AED 11.61 million	AED 171.24 million	AED 21.358 million	AED 11.525 million	AED 14.359 million
Number of implemented ideas	360	616	893	519	537
Number of ideas in progress	4,997	2,622	1,820	759	441

## DIGITALISATION

Digitalisation has been a focal point of DEWA's strategy for several years, serving as a crucial facilitator for service enhancement, achieving sustainability goals, introducing new business avenues, and implementing the Digital Transformation Strategy. This strategy yields the following key advantages:

- Improved customer experience and increased customer value
- Cost optimisation through enhanced asset utilization and capacity planning
- Efficiency enhancement via process optimization and optimal resource utilisation
- Revenue augmentation through innovative business models and products. DEWA collaborated with partners to launch the Digital Transformation House,

featuring six essential pillars to seamlessly drive digital transformation across the organization. These pillars include Enablers, Governance & Operating Model, Technology Engine, Digital Applications/ Use Cases, Strategic Objectives, and Digital Ambition. Aligned with DEWA's Strategy Map and the vision to become a "Globally Leading Sustainable Innovative Corporation Committed to Achieving Net Zero by 2050," the Digital Transformation House has enabled significant achievements. Out of the 65 identified initiatives, 15 have already been successfully implemented.

## GENERATIVE AI

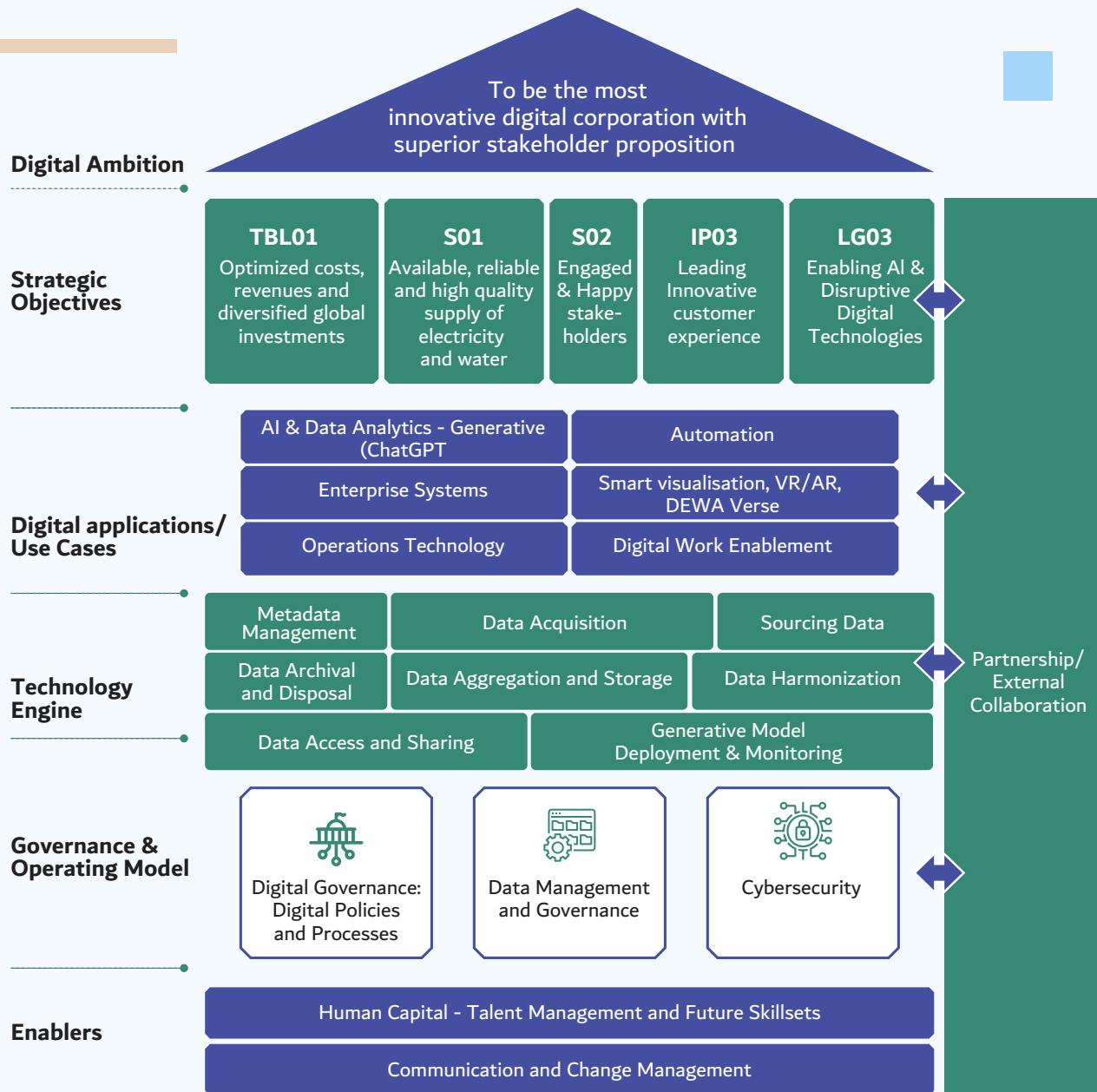
DEWA's AI initiatives encompass a broad spectrum of applications aimed at revolutionizing current processes. Key use cases include

the deployment of Gen AI for predictive maintenance and implementing Gen AI in smart grid technologies. AI is also pivotal in DEWA's customer service operations, where it powers "Rammas For You" powered by ChatGPT. Additionally, DEWA is greatly increasing its employees' efficiency by developing tools such as "Rammas At Work" (Knowledge Mining).

These AI-driven initiatives greatly benefit sustainability by optimizing resource utilisation, reducing wastage, and promoting energy conservation. By integrating AI into its operations, DEWA is not only enhancing efficiency and reliability but also significantly contributing to the UAE's sustainability goals, aligning with its vision of a greener, more sustainable future.

## DEWA DIGITAL TRANSFORMATION STRATEGY

The project aims to develop a corporate-wide digital transformation strategy that shall define DEWA's digital aspirations, key areas of action, and the roadmap to achieve effective and value-adding digital transformation across all divisions to support our stakeholders' happiness.



### RAMMAS

DEWA started using ChatGPT in April 2023 on its website and smart app through Rammas, DEWA's virtual employee supported by AI, to enhance customers' experience. ChatGPT improves Rammas' ability to learn, understand, and analyse customer enquiries based on available data and information to

respond promptly and accurately. Since the end of April and until December 2023, Rammas, supported by this advanced technology, has answered more than 138,600 queries through DEWA's website and smart app. Customer happiness towards Rammas' services during its pilot use of ChatGPT has reached 95%. Since its inception in the

first quarter of 2017, Rammas has responded to over 8.5 million enquiries. Rammas services are available round the clock in Arabic and English through DEWA's website, its smart app, Facebook, Amazon's Alexa, Google Assistant, robots, and WhatsApp Business. DEWA is the first government organization to launch Rammas in Arabic and English.

The move is part of DEWA's ongoing efforts to provide a seamless experience for its customers using the latest technologies. The table below demonstrate Rammas achievements:

<b>Year</b>	<b>Total Payment transaction</b>	<b>Total cost saving (AED)</b>	<b>Total trees saved</b>	<b>CO<sub>2</sub> emissions reduction (Tons)</b>
<b>2019</b>	2,688	37,380,766	13,734	2,747
<b>2020</b>	5,882	48,301	17,455	3,491
<b>2021</b>	6,875	18,153,428	7,054	1,402
<b>2022</b>	7,284	15,281,151	11,897	2,365
<b>2023</b>	7,761	14,023,956	10,921	2,171

## DEWA's Smart Document System

The Smart Document Platform is a comprehensive system designed to manage various types of documents and correspondence, including memos, circulars, quality procedures, and certificates. The platform aligns with Dubai's strategy towards a paperless government workflow.

### Smart Document Savings in 2023

Number of procedures (completed)	1,174,268 documents archived (completed the workflow process)
Number of services (provided)	73 process automations (excluding the sub-processes or systems integrations)
Savings (AED)	AED 127,436,533 (estimated)
Dubai Paperless Strategy	100% achieved (this is a Smart Government initiative, not related to the Smart Document specifically)

### Digital Integrations

DEWA completed the digital integration of more than 90 projects with more than 65 government and private organisations. These organisations include Digital Dubai Authority, Dubai Municipality, Roads and Transport Authority, Dubai Land Department, more than 20 banks, Etisalat, EPPCO/ENOC, Noqodi,

Western Union, and Empay. This is part of DEWA's continuous efforts to enrich the customer experience in Dubai and enhance the happiness of its stakeholders.

Through digital integrations and the digital channels more than 12.5M online transactions have been completed in 2023, which contributed to reducing more than

42,000 tonnes of CO<sub>2</sub>. This is equal to planting more than 48,000 trees over an area equivalent to 92 football pitches by December 2023. DEWA provides its services through website and smart app for customers to complete their transactions anytime and anywhere. This is in addition to protecting the environment and preserving natural resources.

## DEWA'S INNOVATION CENTRE

DEWA prioritises innovation to align with both the National and Dubai Innovation Strategies. The Innovation Centre at the heart of the Mohammed bin Rashid Al Maktoum Solar Park serves as a global platform for sustainable energy innovation. Supporting the Dubai Clean Energy Strategy 2050 and Net Zero Carbon Emissions Strategy 2050, the Centre aims to achieve 100% clean energy in Dubai by 2050.

In line with the vision of DEWA and the operational strategy of the Innovation Centre to Innovate, Educate & Inspire – multiple initiatives have been shaped within the Centre's Cleantech Hive. This myriad of projects and endeavors places DEWA's Innovation Centre as a pivotal global hub for clean energy and sustainability education. Capacity Building and awareness are strong pillars portrayed through, for example, the "CleanTech Connect" Program. Through this series, the Centre aims at bringing the best experts, scientists and leaders in the field of clean technology innovation to share their discoveries, insights, and best practices through this knowledge sharing platform for clean energy professionals. Additionally, the CleanTech Youth Program is a successful annual initiative aimed at empowering youth to become the next generation of energy leaders. Designed for university students studying renewable energy fields, it enhances their skills through both theoretical and experimental mentoring, crowning them with a significant graduation.

The Centre also acts as an essential core focused on bringing international names and crucial players to the benefit of the clean energy enthusiasts. Having successfully hosted the first ever regional IEEE Middle East and North Africa solar conference, and organized various professional training certifications with multiple international certification bodies mirroring the highest global standards, are only few accomplishments not only in serving the community professionals but raising Emirati and fellow DEWA employee calibers in sustainability, clean energy, and innovation.

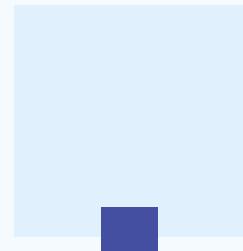
It also engages university and school students through enriching contests such as the Cleantech Hackathon and Young Inspirers Contest, encouraging innovation in renewable energy, visiting different exciting tracks year after year in order to foster the next generation of innovators.

In its efforts to raise further public awareness about sustainability and green initiatives, the Innovation Centre offers a pioneering experience through its public exhibit that showcases the latest innovations in clean energy technologies, where visitors can also witness drone and hologram shows whilst experiencing interactive displays.

Utilizing Metaverse technology, the Centre offers an immersive virtual experience of the Mohammed bin Rashid Al Maktoum Solar Park. The first-floor exhibition area features DEWA's journey, historical inventions, and innovations in energy, mobility and electricity. Moreover, the

Centre spotlights Smart DEWA, the application of solar technology in space, and the development of sustainable buildings. The exhibit is always undergoing periodic enhancements not only to present state-of-the-art technologies to the public, but to also highlight DEWA's efforts and project progress in solar, storage and various other renewable energy fields which are pioneering and cutting edge.

For more information about DEWA's Innovation Centre, scan the QR code below:



# 03

## Environmental Perspective



# ENVIRONMENTAL PERSPECTIVE

## ENERGY

### INSTALLED CAPACITY

In response to the increasing population in the Emirate of Dubai and the escalating energy demand, DEWA has diligently maintained the provision of electricity and water services at globally leading standards. A pivotal aspect of DEWA's strategic vision involves transitioning Dubai into a global hub for clean energy, aiming to achieve 100% reliance on clean energy by 2050. Since its inception in 1992, DEWA has undergone substantial development, resulting in an installed capacity of 15,717 MW, which encompasses 2,627 MW from renewable energy sources, particularly solar energy.

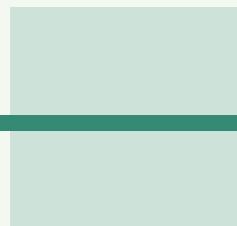
#### DEWA Gross Installed Capacity

Generation Plant	Capacity (MW)
Jabel Ali and Al Aweer	10,690
Mohammed bin Rashid Al Maktoum Solar Park	2,627
Hassyan Power Plant	2,400
<b>Total</b>	<b>15,717</b>

### MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK

The Mohammed bin Rashid Al Maktoum Solar Park in Dubai is the largest single-site solar park in the world based on the Independent Power Producer (IPP) model. The project supports the Dubai Clean Energy Strategy 2050 and Dubai Net Zero Carbon Emissions Strategy 2050. The solar park will be fully operational by 2030 with a total capacity of 5,000 MW. The project's completion will reduce 6.5 million tonnes of CO2 emissions annually.

Phase	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
<b>Status</b>	Completed	Completed	Completed	In progress	Completed	In progress
<b>Date of Completion</b>	2013	2017	2020	2024	2023	2026
<b>Energy Generated (Installed Capacity)</b>	13 MW	200 MW	800 MW	950 MW	900 MW	1,800 MW
<b>Technologies</b>	Photovoltaic	Photovoltaic	Photovoltaic	Photovoltaic & CSP	Photovoltaic	Photovoltaic
<b># Solar Cells Used</b>	153,000	2.3 million	3 million	791,560	2.2 million	3.7 million
<b>Emission Reduction</b>	15,000 tons	214,000 tonnes	1.055 million tonnes	1.6 million tonnes	1.18 million tonnes	2.36 million tonnes
<b>Investment</b>	AED 82.7 million	AED 1.2 billion	AED 3.47 billion	AED 15.78 billion	AED 2.058 billion	AED 5.51 billion
<b>Land Used (square kilometres)</b>	0.3	4.5	18	44	10.17	20
<b>Partners &amp; Shares</b>	DEWA (100%)	DEWA (51%) ACWA Power (24.99%) TSK (24.01)	DEWA (60%) Masdar (24%) EDF Energies Nouvelles (16%)	DEWA (51%) ACWA Power (25%) Silk Road Fund (24%)	DEWA (60%) ACWA Power (24%) Gulf Investment (16%)	DEWA (60%) Masdar (40%)
<b>End Users (Residences)</b>	3,900	50,000	240,000	320,000	270,000	540,000



## **MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK ACHIEVES TWO NEW RECORDS**

In December 2023, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, inaugurated the largest concentrated solar power (CSP) project in the world, within the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai.

The 950MW 4th phase is the largest project in the world that combines CSP and photovoltaic solar power with investments totaling AED 15.78 billion based on the IPP model. It uses three hybrid technologies to produce clean energy: 600MW from a parabolic basin complex (three units of 200MW each), 100MW from a solar power tower (based on Molten Salt technology), and 250MW from photovoltaic solar panels. It includes a Thermal Energy Storage System, which provides the capability of electricity generation around the clock.

A consortium led by DEWA and ACWA Power formed a project company, Noor Energy 1, to design, build, and operate the fourth phase of the Mohammed bin Rashid Al Maktoum Solar Park. DEWA owns 51% of the company, ACWA Power owns 25%, and the Silk Road Fund owns 24%. The fourth phase has been implemented in stages, the first stage became operational in Q4, 2021. This phase will provide clean energy for 320,000 residences and will reduce 1.6 million tonnes of carbon emissions each year.

DEWA has achieved two new Guinness World Records in the Mohammed bin Rashid Al

Maktoum Solar Park; for 'The Tallest Concentrated Solar Power Tower' at 263.126 meters, and 'The Largest Thermal Energy Storage Plant' in the world with storage capacity of 5,907 megawatt hours using CSP based on parabolic basin complex with Molten Salt technology. These new achievements add to DEWA's global accomplishments and leadership in the clean and renewable energy sector.

### **5<sup>TH</sup> PHASE OF THE MOHAMMED BIN RASHID AL MAKTOUM SOLAR PARK**

In June 2023, His Highness Sheikh Mohammed bin Rashid Al Maktoum, inaugurated the 900 MW fifth phase of the Solar Park. The fifth phase, which uses photovoltaic solar panels, provides clean energy to around 270,000 residences in Dubai. The AED2.058 billion project, implemented based on the IPP model, features a partnership between DEWA (60%) and a consortium led by ACWA Power and Gulf Investment Corporation (40%) through Shuaa Energy 3. DEWA achieved a world record by receiving the lowest bid of \$1.6953 cents per kilowatt hour (kWh) for the fifth phase.

### **AGREEMENT BETWEEN MASDAR AND DEWA TO DELIVER 6<sup>TH</sup> PHASE OF WORLD'S LARGEST SINGLE-SITE SOLAR PARK PV PROJECT**

The Abu Dhabi Future Energy Company (Masdar) was awarded the sixth phase of the Mohammed bin Rashid Al Maktoum Solar Park PV Project, that will have a capacity of 1,800 MW. The sixth phase will increase the solar park's total production capacity to 4,660MW and will be completed by 2026. The sixth phase will power over half a million residences while reducing

carbon emissions by 2.36 million tonnes annually. All phases of the Solar Park are expected to be completed by 2030, with a total investment of AED50 billion and a capacity of 5,000MW.

## **HYDROELECTRIC POWER PLANT IN HATTA**

The 250MW pumped-storage hydroelectric power plant in Hatta is the first of its kind in the GCC, with a storage capacity of 1,500 megawatt-hours and a life span of up to 80 years. The project supports the Dubai Clean Energy Strategy 2050 and is part of the Comprehensive Development Plan for Hatta, launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum to meet the social, developmental, economic, and environmental needs as well as provide innovative job opportunities for Emiratis in Hatta. The project is currently under construction and will be completed in Q1, 2025. The Hydroelectric power plant is an energy storage with turnaround efficiency of 78.9%. It utilises the potential energy of the water stored in the upper dam, which is converted to kinetic energy as the water flows through the 1.2-kilometre subterranean tunnel. This kinetic energy rotates the turbine, converting mechanical energy to electrical energy, which is then sent to DEWA's grid.

To store energy again, clean energy generated at the Mohammed bin Rashid Al Maktoum Solar Park is used to pump the water back through the tunnel to the upper dam. This process converts electrical energy into kinetic energy, which is stored as a

potential energy in the upper dam, which is 150 meters above Hatta Dam. This makes the entire project 100% renewable.

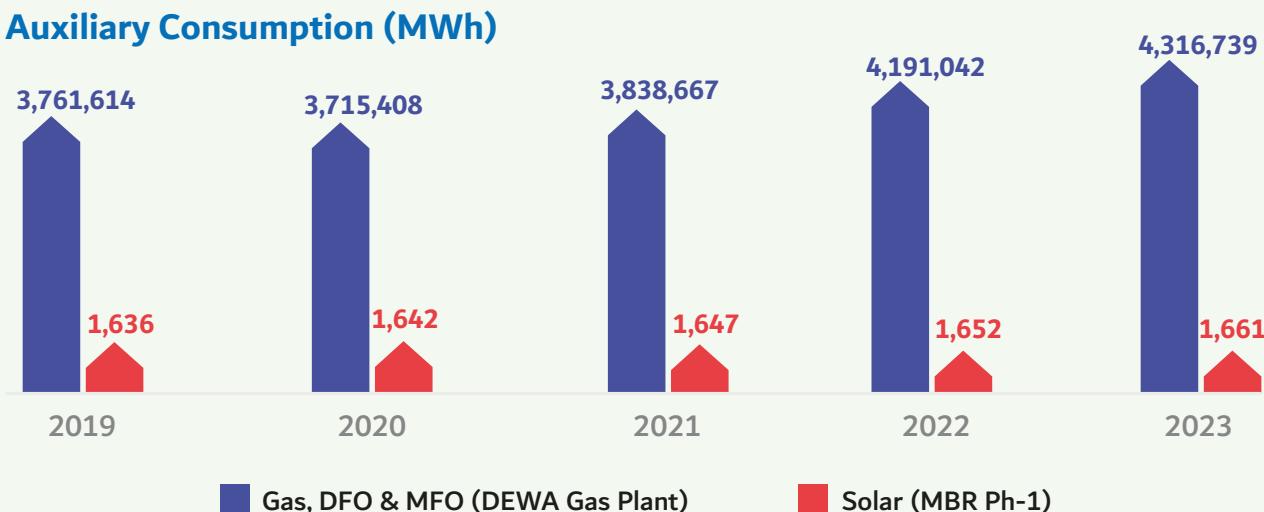
## ENERGY MANAGEMENT REPORT FOR DEWA PREMISES AND ASSETS (GRI 302-4)

DEWA is committed to establishing a sustainable built environment that prioritises energy, water, and material resource efficiency. This commitment is realised

through the implementation of both national and international standards for green buildings across all DEWA assets. The development of sustainable and efficient buildings aligns seamlessly with the UAE's broader objectives of fostering a green and sustainable economy, meeting the Nationally Determined Contributions for the UAE against Climate Change, and supporting the Dubai Digital Authority initiative. DEWA extends its dedication to energy management through the application of an Energy Management System across various facilities, encompassing

power generation plants, substations, administration buildings, and the fleet. Recently expanded, this system enables DEWA to monitor its energy performance meticulously and pinpoint opportunities for energy conservation. Such initiatives not only contribute to environmental sustainability but also yield cost benefits for the organisation.

The below table provides a comprehensive overview of the total auxiliary energy consumption derived from power generation and water production facilities at Jabel Ali, Al Aweer, and the Mohammed bin Rashid Al Maktoum Solar Park Phase 1 of the Jebel Ali facility.



DEWA has consistently made strides in enhancing energy production efficiency, reducing Auxiliary Power Consumption, lowering carbon emissions, and achieving fuel savings. Progress made from 2006 to 2023 includes:

- Efficiency Improvement: A significant achievement of 41.73% improvement in

efficiency in the year 2023 compared to 2006.

- Auxiliary Power Consumption Reduction: A notable reduction of 279,023 MWh in Auxiliary Power Consumption in 2023 compared to 2006.
- Carbon Emission Reduction: An impactful reduction of 10.54 million tonnes in carbon emissions in 2023 compared to 2006.

- Fuel Savings: Achieving fuel savings of 197,567,687 Million British Thermal Units (MMBtu) attributed to efficiency enhancements in 2023 compared to 2006.

These accomplishments reflect DEWA's ongoing commitment to advancing sustainability and efficiency in energy production.

<b>Year</b>	<b>Efficiency Improvement Percentage (compared to 2006)</b>	<b>Auxiliary Power Consumption Reduction (MWh) (compared to 2006)</b>	<b>Carbon Reduction (Million Tons of CO2) due to efficiency improvement (compared to 2006)</b>	<b>Fuel saving due to efficiency improvement MMBTU (compared to 2006)</b>
<b>2019</b>	31.40	408,148	7.06	132,295,018
<b>2020</b>	33.41	293,385	7.11	133,309,503
<b>2021</b>	37.63	314,781	8.04	150,786,454
<b>2022</b>	37.78	225,873	9.22	172,973,272
<b>2023</b>	41.73	279,023	10.54	197,567,687

## EV GREEN CHARGING STATIONS

### DEWA EV GREEN CHARGING STATIONS

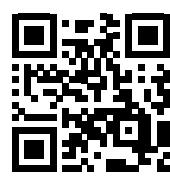
In 2014, DEWA launched the EV Green Charger Initiative to promote sustainable mobility in Dubai by encouraging the use of electric vehicles. DEWA plans to expand the number of EV charging stations in the Emirate to over 1,000 by 2025. By the end of 2023, DEWA had successfully installed more than 700 charging points across Dubai, attracting 13,959 registered customers in the EV Green Charger programme, in addition to the daily “Guest Mode” feature users. These users collectively covered approximately 117 million kilometres through electric vehicle travel. Simultaneously, the initiative contributed to the growth of EVs in Dubai, reaching over 25,700 by end of Q4 2023.

For more details about the EV Green Charger initiative, scan the below QR code:



Additionally, DEWA launched the ‘Dubai EV Community Hub’ website to further boost EV adoption. This platform centralises information on EV developments within Dubai, providing a valuable resource for those interested in electric mobility.

For more information on EV developments in the Emirate, explore the ‘Dubai EV Community Hub’ scanning the below QR code:



## EMISSIONS (GRI 3-3, 305-1, 305-4, 305-5, EU5)

### CO2 EMISSION REDUCTION PROGRAMME

DEWA aims to reduce its carbon footprint while maintaining a secure, reliable, and affordable supply of power and water. DEWA has systematically worked on reducing its emissions through its Carbon Dioxide Emission Reduction Programme launched in 2012.

DEWA’s CO2 Emission Reduction Programme (ERP) is a long-term carbon emissions abatement strategy that provides an extensive analysis of DEWA’s current greenhouse gas emissions, sets targets to reduce CO2 emissions up to 2030 from all operations, and incorporates proposed emission reduction targets within its business decisions and overall growth strategies. DEWA’s efforts have led to a significant reduction in carbon emissions in Dubai, successfully achieving the targets set under the Dubai Carbon Abatement Strategy 2021.

Three strategic pillars have been identified within the ERP to ensure that the strategic objectives are met: a climate change functional strategy, emission reduction targets long term forecast model, and a robust monitoring, reporting, and verification system aligned with the annual performance management system.

DEWA’s ERP is a comprehensive programme that considers reductions from both the demand and supply sides. It takes into account several key factors: Dubai’s energy and water growth requirements, Dubai’s water and electricity consumption rationalisation

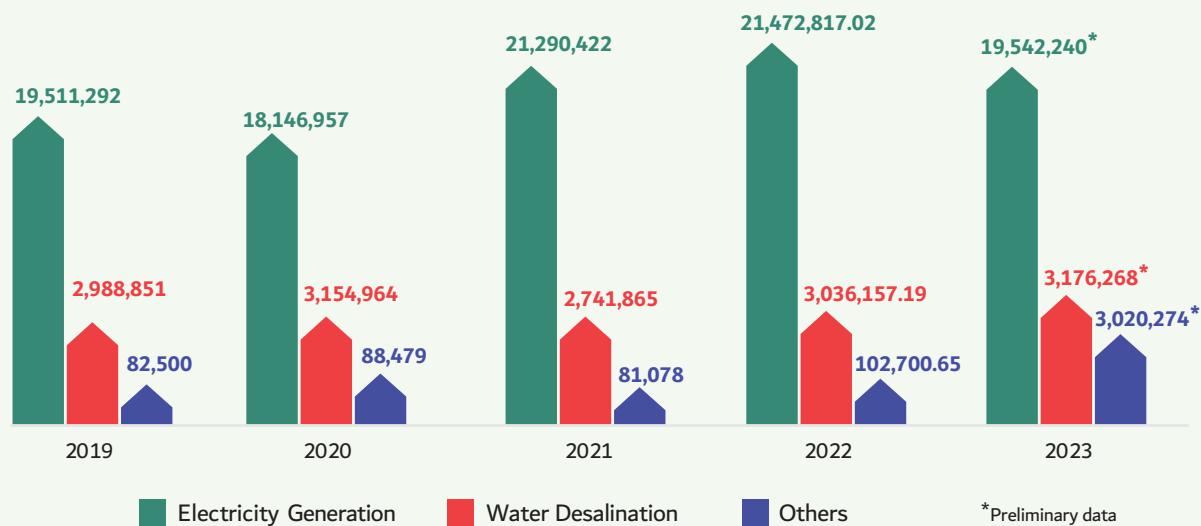
initiatives, DEWA's supply-side efficiency improvements, and the diversification of its energy mix. The ERP targets were developed for both emission intensity (tCO<sub>2</sub>e/MWh) and absolute emissions (tCO<sub>2</sub>e) for short-, medium-, and long-term emission reduction actions leading up to 2030, with 2010 used

as the baseline. DEWA's actual emission reduction performance is measured annually against the Business as Usual (BAU) scenario.

DEWA is committed to reducing the power and water sector's GHG emissions as part of the Dubai Carbon Abatement Strategy

2030 that sets a 50% GHG emissions reduction by 2030 in comparison to the 2018 baseline emissions. DEWA is committed to achieving Net-Zero by 2050 as part of the Dubai Clean Energy Strategy 2050.

### Emissions by Source from Category 1 MtCO<sub>2</sub>e 2019-2023



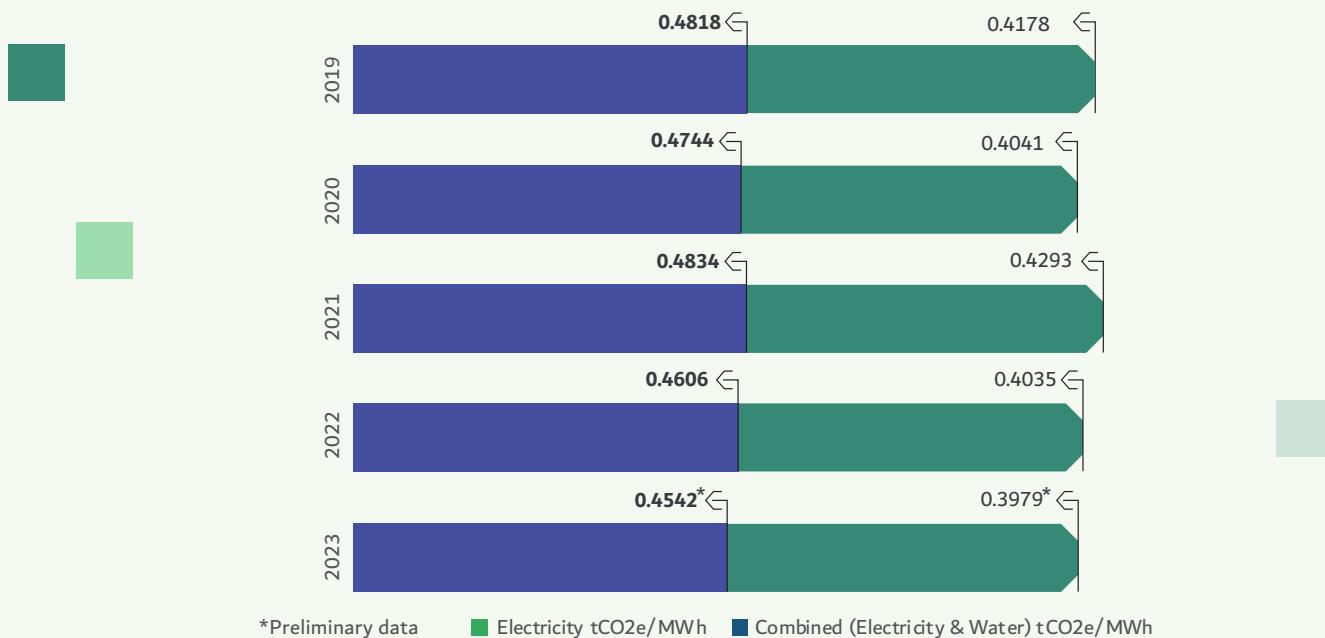
### DEWA'S CARBON FOOTPRINT

DEWA is one of the first entities in the region to develop a comprehensive Monitoring, Reporting and Verification (MRV) framework for its Greenhouse Gas (GHG) emissions since 2012, establishing that year as the baseline for reporting emissions. The MRV framework enables the reporting of emissions through DEWA's Carbon Footprint Report, which is prepared in accordance with the GHG Protocol and is compatible with ISO 14064-1, allowing for integration with national and international GHG registries.

DEWA annually reports its Carbon Footprint Report, which quantifies and calculates its annual direct GHG emissions (Category 1), covering CO<sub>2</sub>, CH<sub>4</sub>, Nitrogen Oxide (NO<sub>x</sub>), sulphur hexafluoride (SF<sub>6</sub>), Hydrofluorocarbons (HFCs), and Perfluorocarbons (PFCs) as well as indirect GHG emissions (Category 2) from electricity imports. Category 1 emissions sources include fuel combustion during power generation and water desalination, SF<sub>6</sub> usage in circuit breakers, fuel combustion in vehicles, and refrigerant usage for air conditioning and maintenance operations, in addition to emissions from small emission sources:

- CO<sub>2</sub> usage in fire protection systems and labs
- Diesel usage during emergencies (back-up generators)
- Acetylene usage for maintenance activities
- LPG usage for cable termination works
- Process emissions due to desalination
- Laboratory acetylene usage

### Carbon Emission Intensity, tCO<sub>2</sub>/MWh of Electricity Generated (2019-2023)



DEWA follows an operational control approach in consolidating, monitoring, and reporting its GHG emissions, quantifying them in terms of CO<sub>2</sub> equivalent, and therefore, its subsidiaries or affiliates were not considered. DEWA has gone to all reasonable measures to ensure the relevance, completeness, consistency, accuracy, and transparency of its Carbon Footprint Report. The quantification methodology employs the formula of GHG activity data multiplied by the GHG emission factor.

In 2023, DEWA's total carbon emissions from Category 1 were 25.74\* MtCO<sub>2</sub>e against the BAU 28\* MtCO<sub>2</sub>e, and the carbon intensity based on Grid Emission Factor for Electricity is 0.3979\* tCO<sub>2</sub>e/MWh. Since DEWA itself is the producer of the electricity it consumes, Category 2 emissions from the own consumption are part of Category 1 emissions to avoid double counting. Indirect emissions from the power purchased are reported under Category 2 emissions only.

To comprehensively manage its GHG related activities, DEWA has quantified Category 3 GHG emissions resulting from DEWA's business travel and employee commuting activities in 2023 which is 44,444.53 tCO<sub>2</sub>e.

Disclaimer: \*Preliminary data

### MINIMISATION OF AIR EMISSIONS (GRI 305-7)

In alignment with efforts to reduce carbon emissions, DEWA focuses on curbing air emissions by minimising

and restricting various toxic pollutants, including Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Oxide (NO<sub>x</sub>), and Sulphur Hexafluoride (SF<sub>6</sub>). These emissions are considered harmful and have a significant environmental impact. SO<sub>2</sub> emissions were marginally decreased to 0.49 Parts Per Million (PPM) in 2023. Furthermore, DEWA has successfully lowered NO<sub>x</sub> emissions from all units, encompassing diverse fuel types, gas turbines, and boilers to 16.69 PPM in the year 2023. The subsequent graphs depict the average annual emissions of NO<sub>x</sub> and SO<sub>2</sub>.

### Annual NO<sub>x</sub> & SO<sub>2</sub> Air Emissions (2019 - 2023) - PPM



## CLIMATE CHANGE (GRI 3-3)

Climate change is one of the major challenges of our time and adds considerable stress to both societies and the environment. From shifting weather patterns to rising sea levels, which increase the risk of catastrophic flooding, the impacts of climate change are global and unprecedented

in scale. Without drastic actions today, adapting to these impacts in the future will be increasingly difficult and costly. At DEWA, we recognise that utilities play a crucial role in decarbonising societies, and therefore, we have set clear strategies and action plans to address the impacts of climate change. Our commitment to climate action is unwavering as we strive to achieve our vision

to become a globally leading sustainable innovative corporation committed to achieving Net-Zero by 2050. DEWA has established itself as a regional leader in climate change mitigation and adaptation efforts over the past years. Below is an overview of DEWA's climate change mitigation and adaptation efforts, programmes and initiatives:

### DEWA's Mitigation Efforts and Initiatives

- DEWA's CO2 Emission Reduction Program aligned with Dubai Carbon Abatement Strategy 2030
- Comprehensive Monitoring, Reporting and Verification (MRV) framework for DEWA's carbon emissions in compliance with ISO 14064
- Main stakeholder for the UAE Climate Change Taskforce and international climate change negotiations.
- Driving the transition towards a low carbon economy by deploying initiatives critical to decarbonization.
- Key stakeholder in implementing the Demand Side Management Strategy 2030
- Supply side energy efficiency improvements and optimisation projects
- DEWA's Offsetting Programme
- Dubai Clean Energy Strategy 2050
- Dubai Net Zero Carbon Emissions Strategy 2050

### DEWA's Adaptation Efforts and Initiatives

- Comprehensive climate change resilience plan
- Setting adequate reserve margin for power generation and water production
- Diversification of generation & desalination sites
- Planning considerations and operational feats for reliability, security and stability
- Asset management planning and framework
- Managing quality of source water
- Reducing unaccounted water losses

# DEWA'S CLIMATE CHANGE RESILIENCE PLAN

Climate change has emerged as one of the foremost priorities worldwide, presenting one of the main challenges facing the international community. Globally, it is causing extreme heat, rainfall, floods, droughts, tropical storms, and hurricanes. Regionally, the power and water sectors in the

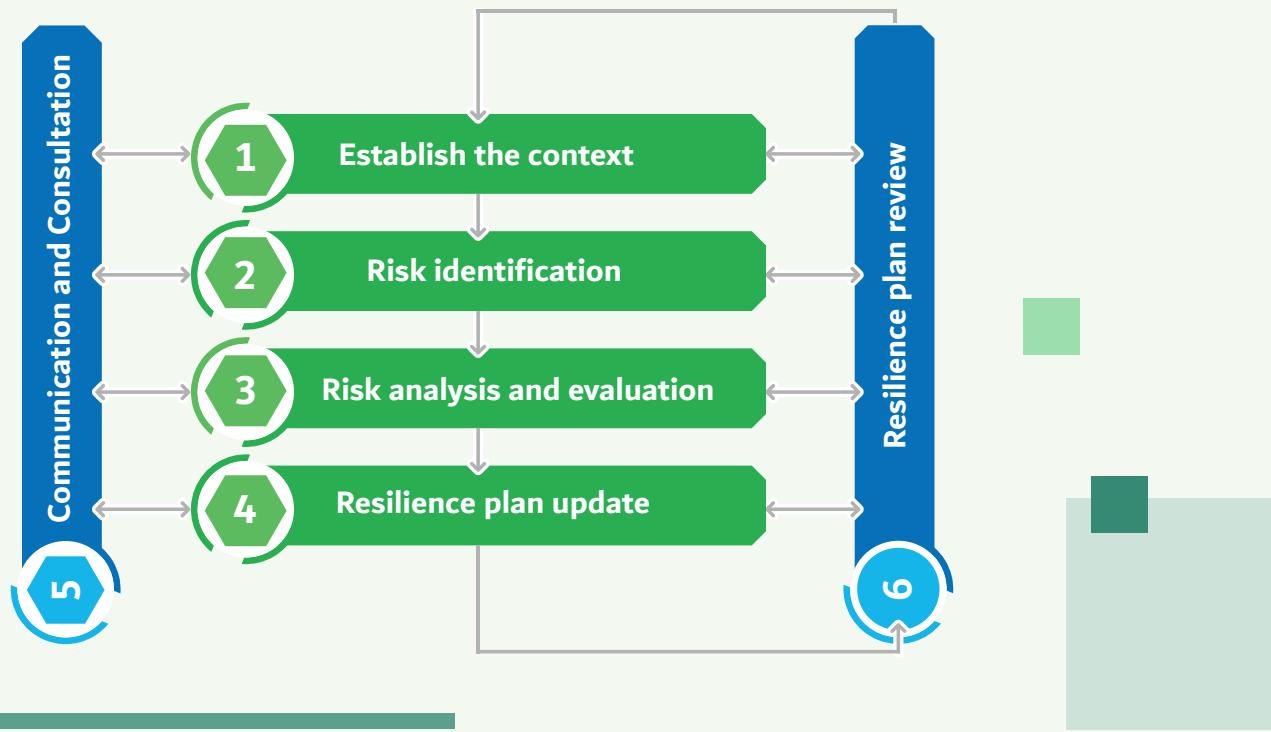
UAE are also vulnerable to the adverse effects of climate change. At DEWA, we recognise that climate change is a multifaceted risk that can have a physical impact on our operations and economic, regulatory, and reputational impact for our business. This is why climate action is one of DEWA's top priorities. To evaluate, understand and respond to the potential impacts of climate change on our assets and operations, DEWA has developed a comprehensive

Climate Change Resilience Plan.

DEWA is one of the first entities in the region to develop a Resilience Plan that identifies existing mitigation measures, preventive controls and future resilience actions that address the potential impacts of various climate change drivers. DEWA's Climate Change Resilience Plan is driven by a vision, guiding principles, approach, and goals to ensure resilience in the power and water sectors.

<b>Vision</b>	A climate-resilient utility ensuring sustainable, innovative and resilient operations and assets to withstand the impacts of climate change
<b>Guiding principles</b>	Robustness Resourcefulness Rapid Recovery Adaptability
<b>Approach</b>	Risk Assessment   Prevention and Management   Adaptive Practices   Stakeholder Engagement
<b>Goals</b>	<ol style="list-style-type: none"> <li>1. Integrate climate change considerations into business practices</li> <li>2. Align with local and national climate change resilience plans</li> <li>3. Maintain an evidence-based resilience plan</li> <li>4. Ensure safe and sustainable operations</li> <li>5. Build and maintain resilient infrastructure</li> <li>6. Maintain a business model aligned with national and international strategies and policies</li> <li>7. Improve DEWA's Adaptive Capacity</li> </ol>

DEWA's Climate Change Resilience Plan has been developed based on a detailed risk assessment and in line with best practices. The Plan is integrated into DEWA's Enterprise Risk Management (ERM) system and is also a part of its strategic planning. The annual management of the Climate Change Resilience Plan is developed according to DEWA's ERM framework:



# IDENTIFYING CLIMATE-RELATED RISKS

To prepare for an uncertain future where climate change may have far-reaching effects on the environment and socioeconomic conditions, we analysed and assessed climate change trends and projections using climate models. This provides an overview of observed climatic trends and projections at both global and local levels, which are essential in shaping an effective climate change resilience plan for DEWA. The output of these projections helped identify the climate change conditions that could pose potential physical and transitional risks on DEWA's business and operations. There are several ways to classify climate change risks; either based on the cause of the risk or its impact. DEWA has assessed two main drivers when identifying Climate-Related Risks: Policy drivers and Climate drivers.

For policy driver risks, we assessed global, national, and regional climate change policies and strategies relevant to DEWA to identify potential risks that DEWA may face in the coming years and decades. Regarding climate drivers, we considered climate variables identified based on available regional climate change trends and projections aligned with the Dubai Climate Change Adaptation Strategy. This is necessary due to variations in geography and climate conditions across the different Emirates in the UAE. Furthermore, variations in risks associated with specific power facilities result from factors such as location, age, design, and the adaptive capacity of facilities.

In 2020, DEWA identified and introduced a “Climate Change Risk” driven by both climate and policy drivers into its ERM system, governed by the Group Risk & Resilience Committee at DEWA and annually monitored. Following analysis and classification of potential impacts, consideration

of various interdependencies, development of risk heat maps, and identification of key risk indicators, the climate change risk reflects the potential impacts of both policy and climatic drivers on DEWA's strategy and operations, which could also have financial and non-financial consequences for DEWA.

In 2023, DEWA continued to adapt to potential impacts from identified climate change drivers through the implementation of key preventive controls and mitigation measures outlined in its Climate Change Resilience Plan. With an established climate change resilience governance and framework in place at DEWA, the climate change resilience team analyses climate change drivers and trends, classifies and ranks identified risks, and assesses vulnerabilities and opportunities arising from projected climate change scenarios. We are continuously monitoring various climate change drivers to mitigate potential impacts on our physical assets and ensure uninterrupted business operations.

# DEWA OFFSETTING PROGRAMME (GRI 302-1, 304-4)

DEWA has initiated the implementation of its offsetting programme by registering several emission-reduction projects under the Clean Development Mechanism (CDM) and the International Renewable Energy Certificates (I-RECs).

## THE CLEAN DEVELOPMENT MECHANISM (CDM)

In 2012, DEWA initiated the implementation of its Offsetting Programme by registering several emission-reduction projects under the Clean Development Mechanism (CDM) of the UNFCCC. DEWA has issued 75,793 Certified Emission Reductions (CERs) from its 13 MW Mohammed bin Rashid Al Maktoum Solar Park's photovoltaic plant in 2023.

In 2023, DEWA played a pivotal role in Dubai Financial Market's (DFM) pioneering **Carbon Trading Platform** pilot initiative for trading carbon credits.

The Carbon Trading Platform pilot is an integrated platform designed to explore the trading and utilisation of carbon credits. It provides a mechanism to assist companies in managing unavoidable and residual carbon emissions while pursuing direct decarbonisation strategies. Each carbon credit symbolises a tangible reduction in carbon emissions, with one credit offsetting one tonne of CO<sub>2</sub> equivalent emissions.

The carbon credits traded on the DFM were derived from DEWA's UN Clean Development Mechanism

(CDM) projects, namely the 13 MW first phase of the Mohammed bin Rashid Al Maktoum Solar Park and Thermal Energy Storage Turbine Inlet Air Cooling (TESTIAC).

This move positions DEWA, alongside DFM, at the forefront of climate action as a regulated platform exploring project capital raising, carbon credit trading, and safekeeping in support of the UAE Government's goal of achieving net zero emissions by 2050.

## THE INTERNATIONAL RENEWABLE ENERGY CERTIFICATE (I-RECS)

DEWA was the first entity in the MENA region to join the renewable energy market in 2017 through the I-RECs Registry Platform, issuing I-RECs from the Mohammed bin Rashid Al Maktoum Solar Park.

The I-REC Standard is a voluntary system for international trade in renewable energy certificates, created to provide electric utilities with a financial incentive to increase the proportion of renewable or clean energy in their supply mix compared to fossil fuels. It aims to offset the environmental impact of the purchaser's non-renewable energy use by subsidising clean energy from renewable sources. In 2023, DEWA issued more than three times the volume of I-RECs to its local and international clients compared to previous years.

## WATER & EFFLUENT (GRI 3-3, 303-1, 303-2, 303-3, 303-4, 303-5)

### SUSTAINABILITY OF WATER PRODUCTION

As Dubai experiences growth, the demand for water is increasing, and DEWA is committed to meeting this demand for its

customers. In 2023, the installed water production capacity of desalinated water was 495 MIGD. Following DEWA's strategy of decoupling power generation and water desalination, all future expansions in water production will rely on SWRO technology powered by renewable energy. By the end of 2023, the number of water customer accounts reached 1,048,913, compared to 995,478 accounts at the end of 2022. The subsequent table illustrates the Installed Capacity and total water production from 2019 to 2023 MIG.

Year	Installed Capacity (MIGD)	Total Water Production (MIG)
2019	470	123,090
2020	470	121,006
2021	490	126,147
2022	490	136,254
2023	495	143,309

In 2023, DEWA produced 143,309 MIG of desalinated water, while the installed capacity reached 495 MIGD. The peak daily water demand of 433.720 MIG occurred on 7 September 2023, marking a 4.91% increase compared to 2022. The average daily water demand in 2023 was 394.71 MIGD, compared to 375.28 MIGD in 2022, representing a 5.18% increase. The peak monthly average of 428.261 MIGD was recorded in September 2023, indicating a 5.04% growth compared to 2022.

The installed capacity from underground wells, which is maintained exclusively for emergency purposes, was approximately 35.56 MIGD (total production of 415.312 MIG). By 2023, the daily production from wells was approximately 1.13 MIGD from groundwater. This is to maintain the wells in an operational state for use in an emergency. The groundwater

production is monitored through meters installed on each well.

The total amount of water withdrawn through Seawater

in 2023 is 6,208.23 MIG. Furthermore, the total amount of water withdrawn through DEWA water wells is 415.31 MIG (approximately 1,569 mega litres).

This is considered 'Other Water' since the average Total Dissolved Solids (TDS) for well water is more than 1000 mg/L (i.e. 1286 mg/L precisely).

Water Data	Unit	2019	2020	2021	2022	2023
<b>Installed Capacity (Underground wells)</b>	MIGD	32	32	35	35.56	35.56

Furthermore, the potable water produced, transmitted and distributed by DEWA is in compliance with the requirements of the latest World Health Organization (WHO) potable water guidelines.

Sl. No.	Particulars Of Analysis		WHO Guideline Value(Max)	DEWA-JAPS	
				Specification	Typical Figure
1	pH value	at 25°C	6.5 ~ 8.5	7.90 - 8.50	8.37
2	Conductivity	at 25°C	µS/cm	-	200 - 900
3	TDS		mg/L	1000	100 - 450
4	Chlorine Dioxide	as ClO <sub>2</sub>	mg/L	-	0.40 - 0.50
5	Turbidity		NTU	-	< 5.0
6	M-Alkalinity	as CaCO <sub>3</sub>	mg/L	-	25 - 65
7	Carbonate	as CaCO <sub>3</sub>	mg/L	-	0 - 10
8	Bicarbonate	as HCO <sub>3</sub>	mg/L	-	30 - 80
9	Total Hardness	as CaCO <sub>3</sub>	mg/L	500	40 - 120
10	Calcium Hardness	as CaCO <sub>3</sub>	mg/L	-	25 - 65
11	Calcium	as Ca	mg/L	-	10 - 26
12	Magnesium	as Mg	mg/L	-	2 - 20
13	Chloride	as Cl	mg/L	250	25 - 250
14	Sulphate	as SO <sub>4</sub>	mg/L	250	2 - 35
15	Free Carbon dioxide	as CO <sub>2</sub>	mg/L	-	≤ 1.5
16	Fluoride	as F	mg/L	1.5	≤ 1.5
17	Chromium	as Cr	mg/L	0.05	< 0.05
18	Iron	as Fe	mg/L	-	≤ 0.3
19	Copper	as Cu	mg/L	2	≤ 1.0
20	Nickel	as Ni	mg/L	0.07	≤ 0.07
21	Cadmium	as Cd	mg/L	0.003	≤ 0.003
					<0.0020

22	Mercury	as Hg	mg/L	0.006	≤ 0.006	<0.0020
23	Sodium	as Na	mg/L	200	10 - 200	54.9
24	Lead	as Pb	mg/L	0.01	≤ 0.01	<0.0020
25	Boron	as B	mg/L	2.4	≤ 2.4	0.2693
26	Cyanide	as CN	mg/L	-	≤ 0.07	<0.005
27	Selenium	as Se	mg/L	0.04	≤ 0.04	<0.0020
28	Arsenic	as As	mg/L	0.01	≤ 0.01	<0.0020
29	Manganese	as Mn	mg/L	0.08	≤ 0.08	0.0026
30	Molybdenum	as Mo	mg/L	-	≤ 0.07	<0.0020
31	Antimony	as Sb	mg/L	0.02	≤ 0.02	<0.0020
32	Barium	as Ba	mg/L	1.3	≤ 0.7	<0.0020
33	Uranium	as U	mg/L	0.03	≤ 0.03	<0.0020
34	Nitrate	as NO3	mg/L	50	≤ 50	<0.05
35	Nitrite	as NO2	mg/L	3	≤ 3	<0.01
36	Bromate	as BrO3	mg/L	0.01	≤ 0.01	<0.0002
37	Chlorite	as ClO2	mg/L	0.7	≤ 0.7	0.1974
38	Chlorate	as ClO3	mg/L	0.7	≤ 0.7	0.2312
39	TTHMs (Concentration ratio)			1	≤ 1.0	0.1787
a)	Chloroform	as CHCl3	mg/L	0.3	≤ 0.3	<0.001
b)	Bromoform	as CHBr3	mg/L	0.1	≤ 0.1	0.018
c)	Dibromochloro methane	as CHBr2Cl	mg/L	0.1	≤ 0.1	0.001
d)	Bromodichloro methane	as CHBrCl2	mg/L	0.06	≤ 0.06	<0.001
40	Dissolved hydrocarbons		mg/L	-	< 0.01 (*)	<0.01
41	Total Coliform Bacteria	Present/Absent		-	Absent	Absent
42	E. Coli Bacteria	Present/Absent		-	Absent	Absent
43	Saturation pH			-	7.89 ~ 8.49	8.29
44	Saturation Index				Positive	Positive

- (\*) The taste and smell threshold value varies widely according to product and it is 0.0005 ppm (mg/L) for hydrocarbons and distillate should be dumped if it is having smell of oil
- DEWA JAPS typical figure is the average of individual station averages during the year 2023
- WHO guideline values is based on W.H.O guidelines for drinking water quality fourth edition incorporation the first and second addenda - 2022

## DEWA'S SMART METERING

As of 31 December 2023, DEWA had installed 1,053,550 smart meters, of which 1,033,641 are monitored and read remotely every 15 minutes. This allowed DEWA to enhance meter reading availability to 99.18%, with 1,025,333 water meters remotely billed in SAP. The implementation of Advanced Metering Infrastructure (AMI) has led to improved meter

reading and billing accuracy, enhanced customer satisfaction, and a reduction in Unaccounted for Water.

The state-of-the-art infrastructure for smart meters has facilitated the detection of 1,811,681 water leakages, 36,005 defects, and 13,397 instances of increased load over the past six years. This has resulted in a total saving of AED 608.1 million for

customers. As part of the Smart Living initiative, the High-Water Usage Alert service assists customers in identifying leaks in water connections after the meter. The system sends instant notifications to customers in case of an unusual increase in consumption, prompting them to inspect internal connections and repair any leaks. This not only reduces wastage but also minimises costs for customers.

Data Point	2022	2023
Average Time for Response + Isolation (minutes) for Transmission Breakages	22.73 min	14.23 min
Response + Isolation Time for Transmission Breakages (40 minutes)	100%	100%

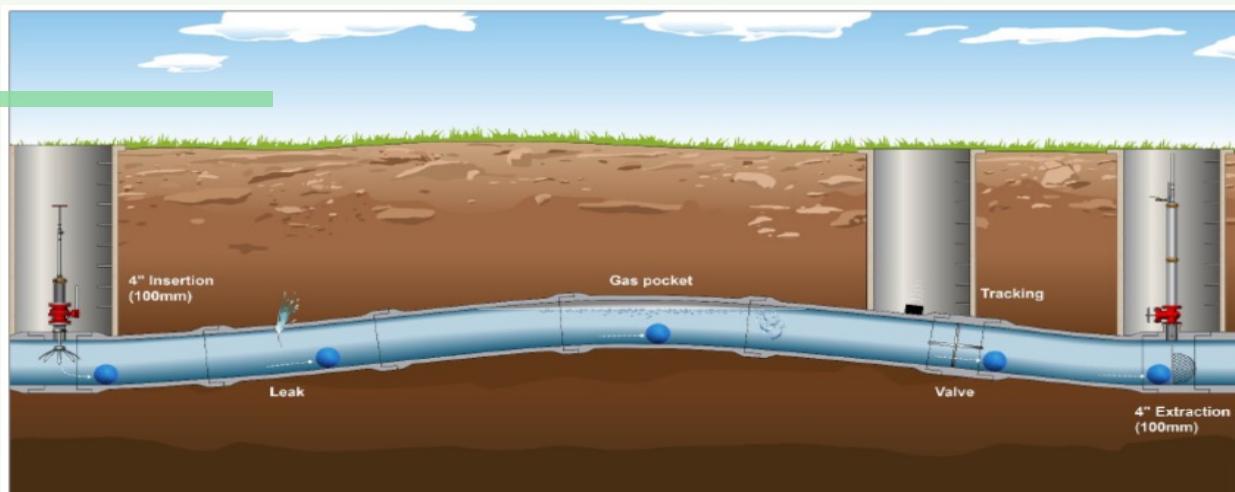
## SMART BALL LEAK DETECTION

DEWA harnesses innovation and the latest disruptive technologies to detect leaks in the underground water transmission pipelines. This resulted in DEWA saving 243 million gallons of water and AED 9.66 million in 2023. DEWA's Smart Ball technology allows for the detection of leaks that are typically challenging to identify using traditional methods. Since its introduction in April 2021 until

the end of 2023, the Smart Ball technology detected 81 leaks in the water transmission network in Dubai. This technology effectively reduces operational expenses by addressing small cracks in the water transmission pipelines before they escalate in size and lead to further water wastage.

The Smart Ball system comprises a small diameter sphere equipped with a highly sensitive acoustic sensor, which is inserted into the water network to travel

freely, driven by the water flow. It detects sounds produced by leaks and identifies gas pockets or anomalies, each with unique characteristics. Once retrieved, the Smart Ball's collected data is analysed by software employing mathematical algorithms to pinpoint the exact location of leaks, gas pockets, or anomalies. Travelling at a speed of around 3 kilometres per hour, the Smart Ball can inspect over 35 kilometres in a single day without disrupting the water flow.



## MINIMISATION OF WATER LOSS

With a significant number of activities related to the expansion of the water network, aging pipelines, and extreme weather conditions, DEWA frequently encounters emergencies such as pipeline breakages and leakages, leading to substantial water losses. Delays in reaching the site to isolate broken pipeline segments, particularly due to heavy traffic in Dubai, pose significant challenges. To address this issue, DEWA has implemented the Supervisory Control and Data Acquisition (SCADA) System to remotely monitor and control pipelines.

This system enables skilled operators to instantly detect breakages and emergencies by monitoring changes in pressure and flow transmitter readings. They can then remotely isolate

the broken pipeline segment using motorized valves. By adopting this innovative Water SCADA technology, DEWA has established several Key Performance Indicators (KPIs) to evaluate the return on investment associated with this project. These KPIs allow the organisation to reduce response and isolation times during emergencies and measure the percentage of the network that can be isolated remotely.

## WATER SECURITY AND STORAGE (GRI 303-5)

In alignment with the Dubai Integrated Water Resource Management Strategy 2030, the UAE Water Security Strategy 2036, and the Comprehensive Development Plan in Hatta, DEWA has constructed two reservoirs with a storage capacity of 30 MIG

of desalinated water at a cost of AED 86 million. DEWA is currently implementing a project to store 6 billion gallons of water in aquifers that can be retrieved when needed. This initiative will provide the Emirate with a strategic reserve of 50 MIG of desalinated water per day in emergencies for 90 days, while ensuring that the quality of the stored water remains unaffected by external factors. Through this project, DEWA aims to enhance the efficiency and reliability of the water network, improve water flow to meet the increasing demand for water in all parts of Dubai, and increase the volume of water storage capacity in Dubai to reach 961.30 MIG. This will help meet current and future needs and promote comprehensive sustainable development.

The below table demonstrate the change in water storage in the Emirate of Dubai:

Year	Total water storage at the beginning of the reporting period (MIG)	Total water storage at the end of the reporting period (MIG)	Change in water storage (MIG) (End - Beginning)
2019	622.130	611.788	-10.342
2020	611.788	412.436	-199.352
2021	412.436	661.600	249.164
2022	661.600	575.74	-85.86
2023	575.74	911	335.26

## WASTEWATER DISCHARGE

DEWA incorporates environmental solutions into its operational framework by implementing specific procedures aligned with Dubai Municipality's environmental regulations. In managing wastewater generated

from DEWA's Jebel Ali Power and Desalination Stations Complex, DEWA adheres to its wastewater management procedure, ensuring that discharged water meets prescribed standards and poses no harm to the surrounding ecosystem. Additionally, as part of this procedure, DEWA conducts

ecological assessments every two months, evaluating phytoplankton, zooplankton, and macrobenthos concentrations quarterly. These assessments are carried out by specialised environmental service providers at locations 0.5 km and 2.0 km away from discharge points D, K, and L stations

### TOTAL VOLUME (M3) DISCHARGE

Type of effluent	2019	2020	2021	2022	2023
<b>Process water from Power plant</b>	1,719,495,006	1,645,458,818	1,654,577,150	1,698,174,459	1,744,355,921
<b>Process water from Desal. plant</b>	3,594,972,940	3,573,859,485	3,540,695,341	3,777,922,079	3,822,486,281
<b>Water treatment plant effluent</b>	68,658	68,406	74,831	61,298	71,562
<b>Treated sewage water (to land)</b>	0	0	0	0	0
<b>Treated sewage water (to sea)</b>	11,968.10	15,849	15,814	40,673	33,173
<b>Total Treated sewage water</b>	11,968.10	15,849	15,814	40,673	33,173

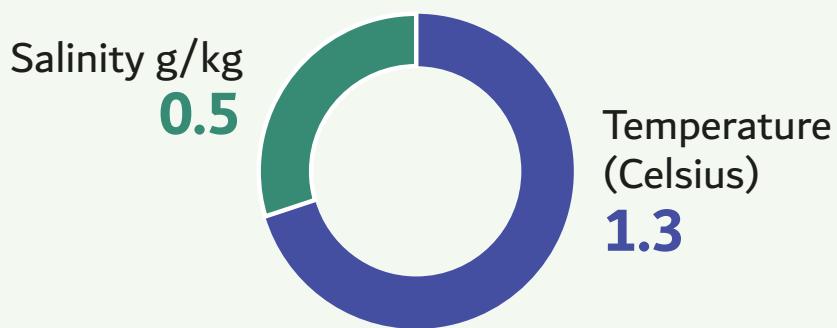
### The Average of Temperature and Salinity Difference between the Seawater at Mixing Zone and Ambient Seawater 2023:

Particulars sample	Salinity Difference between the Seawater at Mixing Zone and Ambient Seawater				
	2019	2020	2021	2022	2023
<b>D-I station</b>	0.7	0.6	0.5	0.6	0.5
<b>D-II station</b>	0.9	0.6	0.6	0.7	0.4
<b>E station</b>	0.5	0.6	0.6	0.6	0.6
<b>G station</b>	0.5	0.9	0.7	0.8	0.6
<b>K station</b>	0.5	0.7	0.4	0.7	0.3
<b>K-SWRO</b>	-	-	-	0.5	-0.1
<b>L station</b>	0.5	0.4	0.9	0.8	0.7
<b>M station</b>	0.6	0.7	0.9	0.9	1
<b>Average</b>	0.6	0.7	0.7	0.7	0.5

## Temperature difference between the seawater at mixing zone and ambient seawater (Celsius)

Particulars sample	Temperature difference between the seawater at mixing zone and ambient seawater				
	2019	2020	2021	2022	2023
<b>D-I station</b>	1.5	1.1	0.9	1.8	1.1
<b>D-II station</b>	2.1	1.2	1.3	1.8	1.5
<b>E station</b>	1.2	1.7	1.3	1.3	1.1
<b>G station</b>	1	1.5	1.5	1.5	1.1
<b>K station</b>	1	1.1	1.1	1.3	0.8
<b>K-SWRO</b>	-	-	-	1.1	1
<b>L station</b>	1.4	1.3	1.6	1.3	1.8
<b>M station</b>	1.6	1.3	1.6	1.7	2
<b>Average</b>	1.4	1.3	1.3	1.5	1.3

## The Average of Temperature and Salinity Difference between Seawater at the Mixing Zone and Ambient Seawater 2023:



## BIODIVERSITY (GRI 3-3)

DEWA continues to protect the environment and natural resources, mitigate the impact of climate change, and contribute towards sustainable economic development as part of its vision to become “A globally leading sustainable innovative corporation committed to achieving Net-Zero by 2050”. DEWA’s commitment involves complying with applicable local, federal, and international standards, legislation, and regulations in all its activities and operations. Through the utilisation

of cutting-edge Environmental Technology, DEWA has achieved distinguished environmental milestones, safeguarding elements such as air, land, and water. This dedication remains consistent and assertive in fulfilling its strategic objective of sustainability, supporting the UAE’s efforts to attain the Sustainable Development Goals (SDGs).

One of the pivotal aspects of DEWA’s commitment is the integration of Biodiversity Action Plans (BAPs) into all its projects. These plans go beyond mere compliance, as they outline

stringent mitigation measures aimed at preserving natural habitats. DEWA also takes a proactive stance by identifying biodiversity priority areas, avoiding operations in regions with the highest biodiversity value. Furthermore, the commitment extends to the incorporation of biodiversity preservation in DEWA’s overarching strategy and investment decisions.

A remarkable demonstration of DEWA’s commitment to biodiversity occurred through a collaborative event with the Emirates Marine Environmental

Group (EMEG). The initiative involved 225 DEWA employees, their families, subsidiaries, and students from DEWA Academy in cleaning the shores of the Jebel Ali Wetland Sanctuary, a significant natural reserve in Dubai. The collective effort resulted in the removal of 800 kilograms of waste and the collection of 8 tonnes of algae and seaweed. These materials, destined for scientific research, are pivotal for studying marine environments.

Beyond immediate cleanup efforts, the campaign holds far-reaching impacts. It significantly contributed to the enhancement of water quality and the marine habitat within the sanctuary. The seaweed, a byproduct of the cleanup, holds immense value. Not only can it be utilised as organic fertiliser, reducing dependence on artificial alternatives, but it also presents opportunities for biofuel production and other sustainable applications.

What stands out in this endeavour is the broad engagement, involving employees, youth, and stakeholders in supporting national efforts for environmental conservation. This sizable turnout underscores the growing societal awareness and commitment to creating a positive and sustainable impact. DEWA's role as a catalyst for change is evident not only in its operational strategies but also in its ability to mobilise individuals and communities towards shared environmental goals. This holistic approach exemplifies DEWA's dedication to environmental stewardship, setting a commendable standard for corporate responsibility and sustainable practices.

## DEWA'S WASTE MANAGEMENT (GRI 3-3, 306-1, 306-2, 306-3, 306-4, 306-5)

DEWA has a state-of-the-art waste management programme that adopts national and international best practices. It involves implementing proper waste segregation and disposal processes for all types of waste (hazardous, non-hazardous, and general waste) using appropriate methods. This programme ensures compliance with local and federal authority laws, guidelines, regulations, and DEWA's policies.

Recognising the paramount importance of waste management in DEWA's focus areas, the organisation has established a highly effective waste management system. Acknowledging the distinct scopes of work and diverse operational practices across the organisation, DEWA has customised waste management systems tailored to each division's unique needs. Despite these variations, all systems share a unified objective – capturing and reducing the volume of generated waste.

Recently, DEWA introduced its Circular Economy strategy, which consists of five principles. The third principle, "Value Retention and End of Life Treatment," aligns seamlessly with waste management. This involves mapping waste streams from various divisional activities and implementing practices to minimise waste generation. DEWA employs efficient management procedures for non-hazardous material and waste, adhering to the 5Rs practice (Refuse, Reduce, Reuse/Repair, Repurpose/Recover &

Recycle) to conserve landfill space, natural resources, and promote waste minimisation.

Regarding wastewater discharge, DEWA secures bi-annual permits and adheres to Dubai Municipality regulations to ensure that discharged wastewater from the Jebel Ali Power and Desalination Complex complies with permitted quality and quantity limits. Collaborating with Dubai Municipality, DEWA manages daily operational waste generation, transporting 338.35 tons of general waste to municipal disposal areas in 2023.

To handle hazardous waste responsibly, DEWA partners with third-party companies certified by Dubai Municipality, employing a comprehensive hazardous waste management system. This includes collecting, storing, transporting, and disposing of hazardous waste in line with local, federal, and international standards. In 2023, DEWA generated AED 101,300,000 from selling scrap waste materials and waste oil, and AED 34,262.50 from recycled paper waste, further exemplifying its commitment to sustainable waste management practices.

The table below demonstrates the hazardous and non-hazardous waste generated and methods of disposal from (2019-2023):

Category	2019	2020	2021	2022	2023
Hazardous Waste	100	120	150	180	200
Non-Hazardous Waste	500	600	700	800	900

<b>Waste</b>	<b>Unit</b>	<b>Year</b>				
		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>General waste</b>	<b>Tons</b>	5,335.45	4,823.64	4,378.53	5,297.68	<b>3089.7</b>
<b>Hazardous waste</b>	<b>Tons</b>	68.89	181.69	420.56	418.337	<b>338.35</b>
<b>Wooden packing reused</b>	<b>Cubic Foot</b>	7,049	6,462	11,905	9,278	<b>4,739</b>
<b>Wastewater recovered</b>	<b>MIG</b>	193.24	200.93	238.63	285.13	<b>293.86</b>
<b>Waste oil recovered for use</b>	<b>Liters</b>	23,636	18,184.4	5,455.31	15,911	<b>8,182.80</b>
<b>Recycled wastepaper</b>	<b>Tons</b>	277.78	269.59	127.18	118.87	<b>137.05</b>
<b>Spill Pallet made of IBC drum</b>	<b>No.</b>	223	117	95	150	<b>248</b>
<b>Revenue from scrap/waste materials sold - Consolidated</b>	<b>AED Million</b>	34	58	62	103	<b>104</b>



# 04

## Social Perspective



EX 2024  
وبيتكس

-3 October 2024 ٣-أكتوبر ٢٠٢٤

TIHAD DUBAI

# SOCIAL PERSPECTIVE

## EMPLOYMENT (GRI 3-3)

DEWA is dedicated to attracting, nurturing, and retaining top-tier talent to deliver reliable and efficient electricity and water services in Dubai. The organisation implements a comprehensive talent management strategy, emphasising the identification of requisite skills, provision of training opportunities, and fostering employee development. DEWA prioritises employee engagement through open communication, feedback channels, and regular surveys to gather insights and suggestions. The “Afkari” platform enables employees to propose solutions for enhancing overall performance. Additionally, DEWA emphasises performance management, evaluating employees based on their performance and offering feedback and coaching for skill enhancement. Continuous improvement is ensured through the organisation’s commitment to reviewing and updating policies and practices to provide optimal services to customers, employees, and the community.

## A WORLD-CLASS WORKFORCE (GRI 2-7, 2-8, 401-1, 404-1, 405-1, 406-1, EU15)

DEWA’s workforce embodies diversity, encompassing UAE nationals and expatriates across all genders, reflecting a blend of cultural diversity and varied educational backgrounds. The

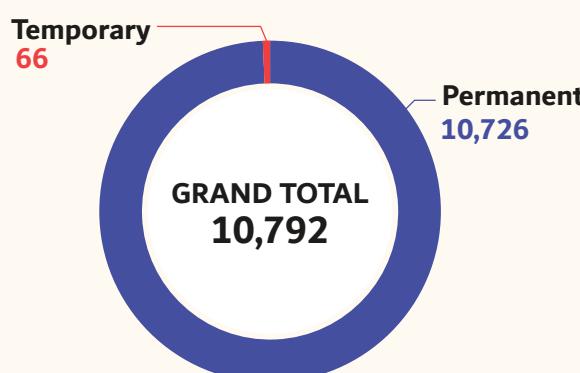
organisation maintains a steadfast commitment to recruiting and nurturing local talent, evident in a substantial representation of UAE nationals within its workforce.

The workforce of DEWA comprises skilled professionals, including engineers, technicians, and other experts equipped with the knowledge needed to deliver dependable electricity and water services. As of 2023, DEWA’s total employee count stood at 10,792, with 18% being females and 82% males, underscoring the organisation’s gender-inclusive employment practices.

Total number of newly hired Emirati employees during 2023	168
Number of newly hired employees (middle management positions)	16
Number of newly hired employees (nonsupervisory positions)	266
DEWA’s total number of employees in 2023	10,792
% of females (based on the total number of employees)	18%
% of males (based on the total number of employees)	82%

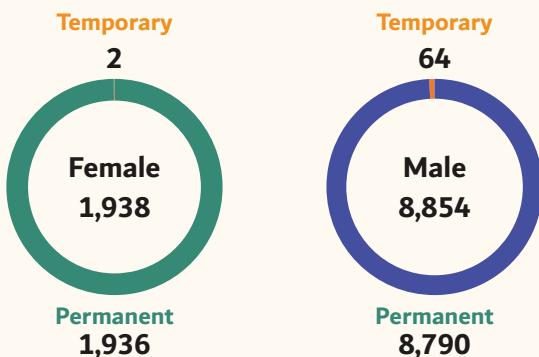
DEWA (PJSC) nurtures a culture that motivates employees to integrate innovation and excellence into their work, fostering sustainable long-term growth. The organisation ensures equal opportunities for all employees, regardless of gender, race, nationality, age, or creed, in accordance with UAE government policies and regulations. Importantly, there were no documented instances of discrimination during the reporting period in 2023.

### Total Number of Employees

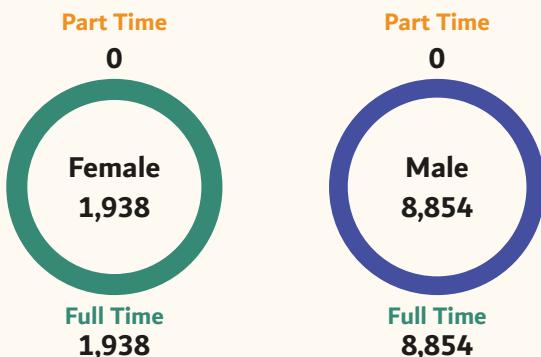


\*DEWA doesn’t have any non-guaranteed hours employees.

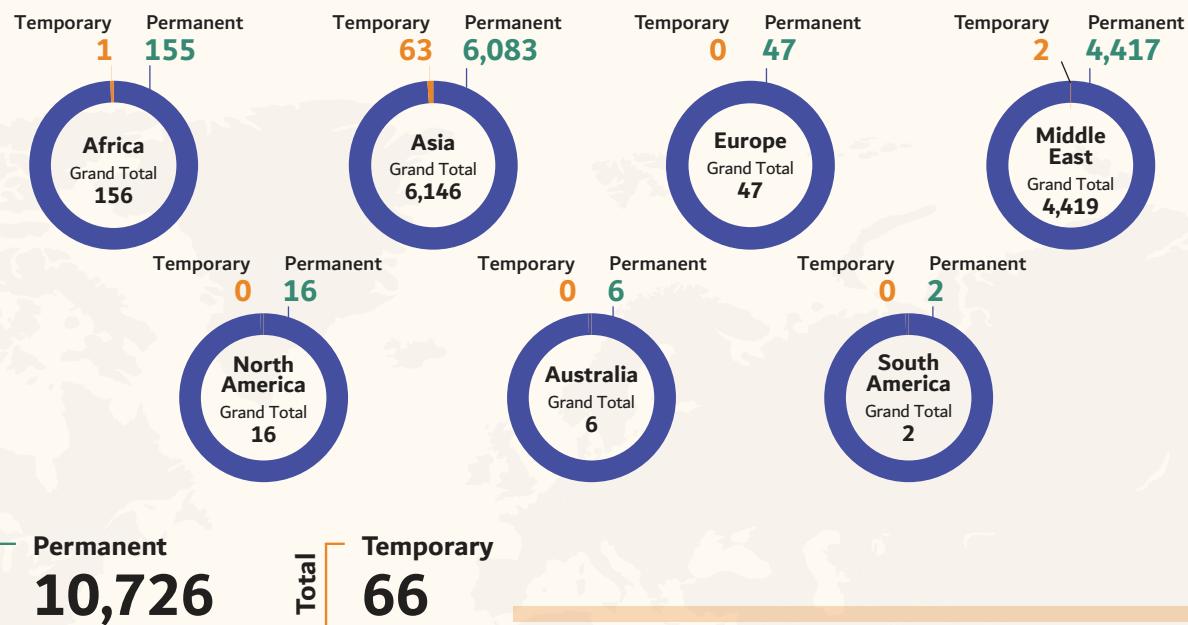
## Permanent & Temporary Employees Breakdown by Gender



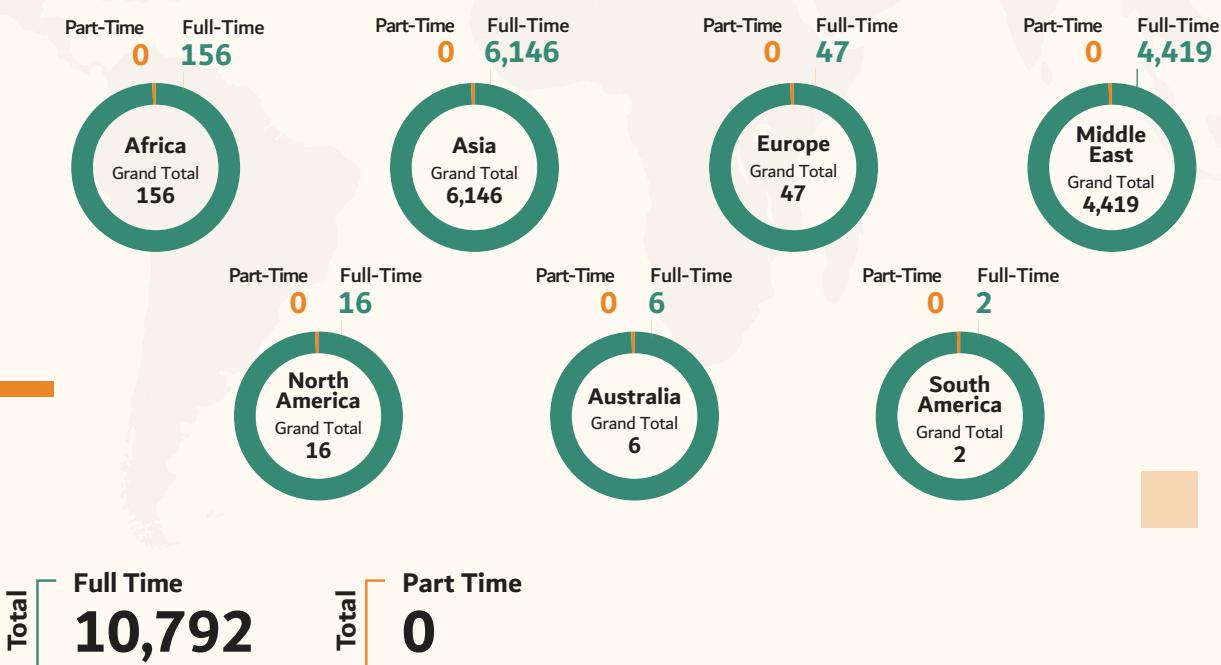
## Full-Time and Part-Time Employees Breakdown by Gender



## Permanent & Temporary Employees Breakdown by Region



## Full-Time and Part-Time Employees Breakdown by Region



## New Employee Hires and Employee Turnover by Age Group, Gender, and Region

		New Employee Hires			
Gender		2020	2021	2022	2023
Female		44	57	43	41
Male		172	231	155	272
<b>Total</b>		<b>216</b>	<b>288</b>	<b>198</b>	<b>313</b>
Based on the World's 7 Regions		2020	2021	2022	2023
Africa		2	6	10	27
Asia		210	279	186	281
Europe		2	3	1	2
North America		2	0	1	1
South America		0	0	0	1
Australia		0	0	0	1
<b>Total</b>		<b>216</b>	<b>288</b>	<b>198</b>	<b>313</b>
Age Group		2020	2021	2022	2023
18-29		170	218	113	177
30-39		35	57	67	106
40-49		9	10	15	25
50-59		2	3	3	5
60-69		0	0	0	0
70-79		0	0	0	0
<b>Total</b>		<b>216</b>	<b>288</b>	<b>198</b>	<b>313</b>

Employee Turnover										
By Gender	2019		2020		2021		2022		2023	
	Employees									
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
<b>Male</b>	251	2.66	156	1.67	211	2.33	244	2.78	232	2.70
<b>Female</b>	47	2.55	18	0.92	33	1.75	36	1.91	36	1.84
By Age	2019		2020		2021		2022		2023	
	Employees									
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
<b>Under 30</b>	36	2.68	12	1.02	15	1.48	17	1.92	24	2.99
<b>30-50</b>	224	2.65	133	1.57	203	2.44	240	2.96	224	2.83
<b>Over 50</b>	38	2.59	29	1.86	26	1.61	23	1.36	20	1.13
By Region	2019		2020		2021		2022		2023	
	Employees									
	Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
<b>Africa</b>	35	4.62	14	1.89	19	2.69	27	4.07	19	2.96
<b>Asia</b>	178	2.43	119	1.67	181	2.66	204	3.14	182	2.92
<b>Australia</b>	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
<b>Europe</b>	8	14.57	3	5.63	3	5.86	3	6.28	3	6.69
<b>North America</b>	6	24.53	2	10.20	1	6.00	0	0.00	2	12.04

<b>South America</b>	0.00	0	0.00	0	0.00	0	0.00	0	0.00	
<b>Middle East</b>	71	2.28	36	1.11	40	1.19	46	1.34	62	1.75
<b>Total</b>	<b>298</b>	<b>2.64</b>	<b>174</b>	<b>1.55</b>	<b>244</b>	<b>2.23</b>	<b>280</b>	<b>2.62</b>	<b>268</b>	<b>2.56</b>

### Percentage of Employees Eligible to Retire in the Next 5 Years by Category and Region

#### Retirement 5 Years

<b>Continent</b>	<b>Engineers</b>		<b>Operators</b>		<b>Linesmen</b>		<b>Mechanics</b>		<b>Others</b>		<b>Total</b>	
	<b>Employees</b>											
	Nos.	%										
<b>Africa</b>	4	0.0371%	1	0.0093%	0	0%	0	0%	15	0.1390%	20	0.1853%
<b>Asia</b>	132	1.2231%	61	0.5652%	2	0.0185%	27	0.2502%	410	3.7991%	632	5.8562%
<b>Europe Middle East</b>	0	0%	0	0%	0	0%	0	0%	19	0.1761%	19	0.1761%
<b>North America</b>	10	0.0927%	0	0%	0	0%	3	0.0278%	137	1.2695%	150	1.3899%
<b>South America</b>	0	0%	0	0%	0	0%	0	0%	4	0.0371%	4	0.0371%
<b>Australia</b>	0	0%	0	0%	0	0%	0	0%	2	0.0185%	2	0.0185%
<b>Grand Total</b>	<b>146</b>	<b>0.0135%</b>	<b>62</b>	<b>0.0057%</b>	<b>2</b>	<b>0.0002%</b>	<b>30</b>	<b>0.0028%</b>	<b>588</b>	<b>0.0545%</b>		<b>828</b> <b>(7.67%)</b>

The total number of employees eligible to retire in the next 5 years by category and region is 828.

### Percentage of Employees Eligible to Retire in the Next 10 Years by Category and Region

#### Retirement 10 Years

<b>Continent</b>	<b>Engineers</b>		<b>Operators</b>		<b>Linesmen</b>		<b>Mechanics</b>		<b>Others</b>		<b>Total</b>	
	<b>Employees</b>											
	Nos.	%										
<b>Africa</b>	8	0.0741%	1	0.0093%	0	0%	0	0%	26	0.2409%	35	0.3243%
<b>Asia</b>	303	2.8076%	136	1.2602%	14	0.1297%	83	0.7691%	950	8.8028%	1486	13.7695%
<b>Europe</b>	0	0%	0	0%	0	0%	0	0%	26	0.2409%	26	0.2409%
<b>Middle East</b>	27	0.2502%	5	0.0463%	0	0%	3	0.0278%	330	3.0578%	365	3.3821%
<b>North America</b>	1	0.0093%	0	0%	0	0%	0	0%	6	0.0556%	7	0.0649%
<b>South America</b>	0	0%	0	0%	0	0%	0	0%	1	0.0278%	1	0.0093%
<b>Australia</b>	0	0%	0	0%	0	0%	0	0%	3	0.0278%	3	0.0278%
<b>Grand Total</b>	<b>339</b>	<b>3.1412%</b>	<b>142</b>	<b>1.3158%</b>	<b>14</b>	<b>0.1297%</b>	<b>86</b>	<b>0.7969%</b>	<b>1342</b>	<b>12.4351%</b>		<b>1,923</b> <b>(17.82%)</b>

The total number of employees eligible to retire in the next 10 years by category and region is 1,923.

### Age Groups: Under 30 Years Old, 30-50 Years Old, Over 50 Years Old

#### Number of Employees



## EMPLOYEE BENEFITS (GRI 3-3, 401-2)

**As a world-class workplace, DEWA rewards its employees fairly and generously based on their performance, offering comprehensive benefits to meet their personal and professional needs. These benefits include:**

1. Allowances (such as house rent deduction, duty car, nature of work allowance, mobile phone allowance, shift allowance, special shift allowance, etc.)

2. Retirement Provision (Gratuity and Pension schemes)
3. Leave (earned, special, accident, condolence, sick, maternity, paternity, study or exams, Hajj, Idda, and confinement leave, etc.)
4. Accommodation (leased accommodation benefits, subsidised rent in DEWA accommodation buildings, and bachelor staff accommodation facilities)
5. Air Passage Entitlement
6. Children Education Allowance
7. Medical Insurance/Healthcare
8. Bonus
9. Joining & repatriating tickets
10. Disability Coverage
11. Residence visa costs for employees & family
12. Salary advance for new joiners
13. Voluntary life insurance scheme (optional for employees)
14. Golden visa for deserving and entitled employees

## EMPLOYEE PARENTAL LEAVE AND RESUMED DUTY, 2023 (GRI 401-3)

### Parental Leave

**Employee Parental Leave & Resumed Duty**

Leave Type	Entitled to Parental Leave	Took Parental Leave	Returned to work	Returned to work Rate*	Retained Employees	Retention Rate**
Maternity Leave	1,195	162	162	100%	145	96%
Paternity Leave	7,139	376	376	100%	332	94.32%
<b>Total</b>	<b>8334</b>	<b>538</b>	<b>538</b>		<b>477</b>	

\*Male employees returning to work immediately from 1 January 2023 to 31 December 2023 – 100%

\*\*Female employees returning to work immediately from 1 October 2022– to 30 September 2023 – 100%

\*\*\*Out of 153 female employees of 2022, 149 female employees are retained after 12 months (97.4%).

\*\*\*\*Out of 352 male employees of 2022, 332 employees are retained after 12 months (94.32%)

\*\*\*\*\* 538 employees have used parental leave as of 2023.

## DIVERSITY AND EQUAL OPPORTUNITIES (GRI 405-1)

DEWA adheres to all UAE government laws and regulations and is dedicated to offering equal opportunities to all employees and employment applicants. Its equal opportunities policy prohibits discrimination based on race, colour, religion, sex, national origin, age, disability, or gender. DEWA's policies guarantee fair treatment for all employees and employment candidates without discrimination. Additionally, DEWA provides training and development programmes to foster diversity and inclusion in the workforce and offers accommodation for employees with disabilities. Furthermore, DEWA has several initiatives and programmes aimed at supporting the development and advancement of women in the workplace.

These initiatives include:

- For Her – Empowerment Programme
- Celebrating International Women's Day through various initiatives
- Celebrating Emirati Women's Day through various initiatives
- Celebrating International Women in Engineering Day through various initiatives
- Edha'aa bulletins
- Soft skills and social focused workshops
- Wellness and health programmes
- “Together... We Learn” Campaign

Overall, DEWA is committed to fostering an inclusive and diverse

workplace where all employees are treated with respect and have equal opportunities to succeed. Furthermore, through its Policy for Valuing and Managing HR Diversity, DEWA values and manages its HR diversity by planning, organising, administering, and supporting varied characteristics and plurality among its employees. It recognises them as individuals and teams, in a manner that positively impacts organisational performance and contributes to employee happiness.

Scan the QR Code to view DEWA's Diversity HR Managing and Valuing for Policy:



has been made mandatory in DEWA vendor registration and tender conditions respectively. This entails compliance with a good working environment, non-employment of child labour, the Universal Declaration of Human Rights, and ILO agreements.

All tender documents include a special clause on compliance with the SA 8000 standard, and tenderers must include a self-assessment form on SA 8000 compliance in their offers. 100% of DEWA's bulk purchase and project procurement activities are subject to human rights reviews based on tenderers' self-assessment forms and conformity with the SA 8000 norm.

All new employees of contracted organisations, as well as those who are already working, receive orientation training and departmental instruction circulars on the terms and conditions of contracts, which include the SA 8000 standards.

The Human Rights clause was incorporated into all 1264 bulk purchases and project contracts for the year 2023, totalling more than AED 7,714.09 million. Additionally, all 11,140 orders placed by the Local Procurement Department, valued at AED 396.58 million in 2023, were with vendors who declared compliance with human rights.

DEWA values and manages its HR diversity through planning, organising, administering, and supporting varied characteristics and plurality among its employees. It recognises them as individuals and teams, which positively affects organisational performance and contributes to employee happiness. In addition, the following is a list of other DEWA policies related to Human Rights:

## HUMAN RIGHTS ASSESSMENT (GRI 3-3, 412-1, 412-2, 412-3)

DEWA (PJSC) organised 40 sessions across its divisions involving various employee groups. These sessions focused on discussing human rights and other employee-related matters, including but not limited to HR Policies, Provisions, Rules of Conduct, Work Ethics in DEWA, HR Rules and Regulations, and HR Services. A total of 2,090 employees from all divisions participated in these sessions until December 2023, collectively known as the HR Awareness Sessions.

To ensure the upholding of human rights by contractors and suppliers engaged by DEWA, a requirement of complying with social responsibilities as per requirements of local laws and as outlined in International Standard SA 8000

**1. DEWA Policy for the Happiness, Accommodation, and Empowerment of People of Determination (POD):** This policy outlines Dubai Electricity and Water Authority's philosophy regarding the happiness, accommodation, and empowerment of People of Determination. It demonstrates DEWA's commitment to providing them with stable employment, an accessible environment, and equal opportunities for learning and personal development.

## 2. Employee Accommodation Procedure:

This policy offers housing assistance to our employees, aiding them in finding suitable accommodation. Additionally, DEWA provides accommodation facilities in various locations owned by DEWA, including Warsan, Jebel Ali, and Ruwaiya, as well as subsidised rent facilities by Suqia UAE for its employees.

## 3. DEWA Inclusive Education Policy:

This policy reflects Dubai Electricity & Water Authority's philosophy regarding inclusive education at its educational institutions. It highlights DEWA's commitment to meeting all students' social, personal, emotional, and academic needs without discrimination based on disability. The policy also outlines the provision of necessary support at all levels to achieve inclusive education objectives in line with the Emirate of Dubai's Inclusive education policies.

specific roles and cross-functional training to broaden organisational understanding. A comprehensive array of courses is tailored to enhance skills and foster career progression, covering areas such as leadership, management, communication, and technical expertise. DEWA actively promotes mentoring relationships between seasoned and newer staff, providing guidance as employees evolve in their roles. Encouraging participation in international training programmes, the organisation facilitates exposure to different perspectives and insights from global experts. Additionally, a range of flexible e-learning modules allows employees to access training from any location and at their convenience.

## TRAINING AND EDUCATION (GRI 3-3, 404-1, 404-2)

DEWA offers a diverse range of training and development opportunities for its employees, encompassing on-the-job training to gain hands-on experience in

### Average Training Hours Per Employee

Grade/Year	2019	2020	2021	2022	2023
Leadership	90.39	85.62	83.78	88.99	83.34
Management	55.73	52.96	51.00	54.56	55.36
Non-Supervisory	42.68	42.83	46.30	55.86	49.62
UAE Nationals	65.58	57.94	57.48	67.47	64.40

### Average Training Hours by Gender

Gender/Year	2019	2020	2021	2022	2023
Male	28.26	27.01	30.43	34.92	35
Female	65.62	65.88	62.40	75.41	64.22

DEWA employs various platforms, programmes, and initiatives to disseminate and localise knowledge while facilitating the transfer of expertise among its workforce. The organisation offers educational courses aimed at enhancing employee awareness of knowledge management, data types, information, knowledge, and intellectual property rights protection. Notably, in 2023, DEWA actively engaged in enrolling nominated employees in diverse international and national programmes, including a Masters in Future Energy Systems & Technology at UC Berkeley. In 2022, Batch 4 of this programme commenced in October with 30 participating employees. This batch graduated in November 2023 and are expected to complete the final project by end of 2024. Other initiatives include programmes such as the Capacity Building Programme and Robotic Process Automation Learning Programme. In essence, DEWA's strategic objective includes providing and facilitating employee enrolment in such programmes. This helps in the acquisition of essential skills and knowledge for employees relevant to their roles, thereby supporting their career advancement within the organisation.

DEWA is committed to involving its employees in long-term beneficial programmes. Various programmes were conducted in 2023 with different stakeholders, including:

## **LEADERS OF CHANGE PROGRAMME**

In 2023, DEWA enrolled 100 of its employees in the Leaders of Change Programme, a collaboration with Emirates Nature-WWF, the World Nature Fund, recognised as one of the leading volunteering

programmes. DEWA's employees had the opportunity to enhance their experiences through three pillars: training, ideation, and action. They actively participated in various training sessions, field visits, and interactive activities across different parts of the UAE, focusing on areas such as climate action, environmental preservation, carbon footprint reduction, and excellence in environmental work.

## **DEWA YOUTH AMBASSADOR PROGRAMME**

In line with DEWA's efforts to support youth and promote their participation in the sustainable development process, as part of its activities during the Year of Sustainability, DEWA launched the DEWA Sustainability Youth Ambassadors Programme in cooperation with the University of Cambridge Institute for Sustainability Leadership. The programme, which included 20 Emirati youth employees, aimed to prepare the next generation of sustainability leaders at DEWA, empowering them to drive sustainability and the green economy in the future. The programme commenced in March 2023 and concluded in September 2023, encompassing a series of workshops, one-to-one coaching sessions, group projects, and more.

## **OCCUPATIONAL HEALTH & SAFETY (H&S) (GRI 3-3, 403-1)**

Strategically driven, DEWA operates with an Integrated Management System (IMS) for Health and Safety (H&S) Management Systems, certified

by the International Organization for Standardization (ISO) standards 9001, 14001, and 45001, aligned with Dubai's Strategy (DIES-2030) both vertically and horizontally.

DEWA has intricately developed its IMS policy, along with IMS Procedures and process maps, in line with Federal Law no. 8 of 1980, Ministerial Order no. 32 of 1982, and Dubai Municipality's Guidelines and Code of Construction Code, with a governance system for H&S. These are further horizontally aligned with dedicated safety procedures at the divisional, departmental, and sectional levels, as well as Contractor Management. This approach is bolstered by the Dubai Excellence program guidelines, the 10X Dubai Accelerators strategy, and best practices in H&S at the international level, including those endorsed by the British Safety Council.

At DEWA, H&S work conditions are recognised as a human right and are addressed in authoritative intergovernmental instruments, including those of the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD), and the World Health Organization (WHO). DEWA was the first organisation to achieve the COVID-19 Assurance Certificate in 2020-2021.

## **PERFORMANCE MANAGEMENT**

DEWA utilises the RADAR European Foundation for Quality Management (EFQM) Methodology for performance management, which is aligned with its dedicated 10-steps of continual improvement.

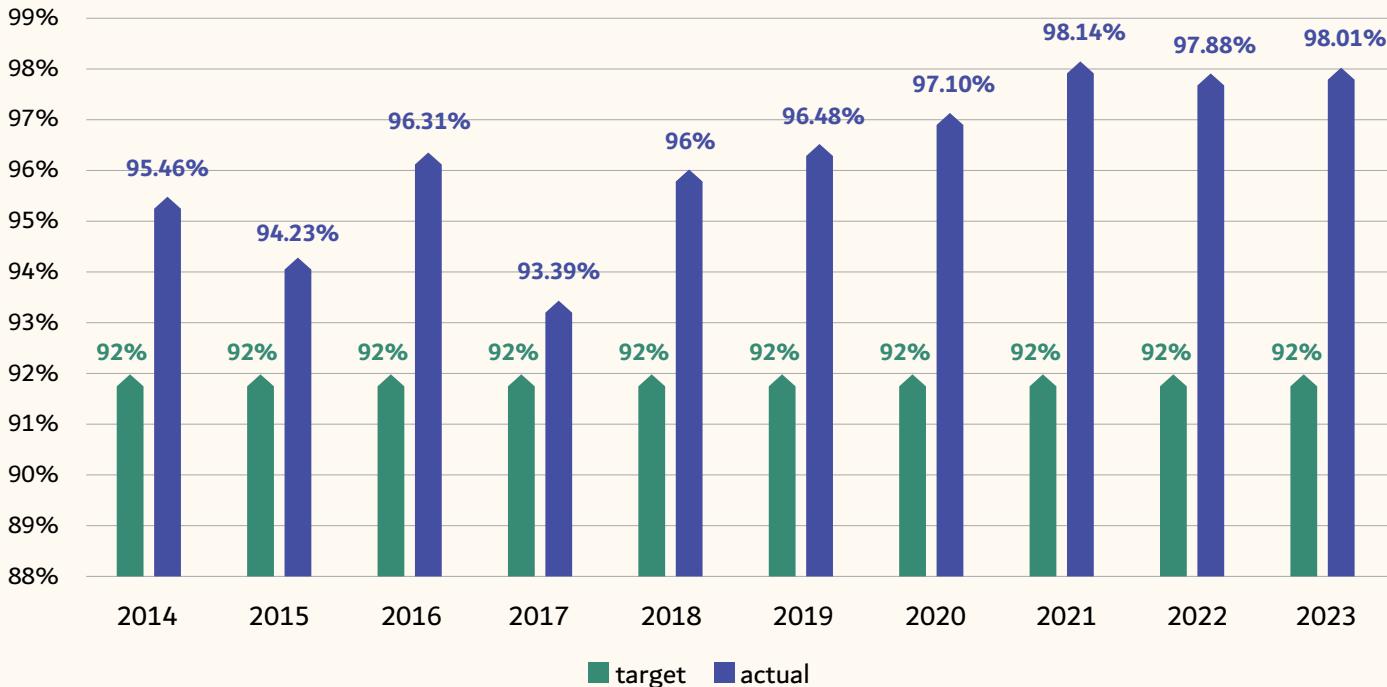
Complementing DEWA's Health and Safety (H&S) framework are key frameworks such as Crisis Management, Agility Framework, Risk Management Framework, and Business Continuity Plan, each supported by dedicated strategies for strategy execution (STRATEX), capital expenditure (CAPEX),

operational expenditure (OPEX), and H&S management objectives.

The Occupational Health and Safety (OH&S) Management System Manual classifies risks, crises, operations, functionalities, and controls for all employees, consultants, and contractors.

DEWA has implemented a dedicated COVID-19 prevention framework, recognised with a Diamond Award for COVID-19 from the Harvard Business Council, and holds a British Safety Council Assurance Certificate to authenticate its control measures.

### **British Safety Council, 5 Star Audit Source %**



The above is a testament of robust OH&S management system in DEWA.

## **HAZARD IDENTIFICATION & RISK ASSESSMENT (GRI 403-2)**

DEWA aligns with Dubai's 10X Accelerator Programme, focusing on key perspectives related to "Human Capital," where risk management and competency, with a 20% weighting, are directly linked to critical dependencies on people, processes, and systems throughout the operational hierarchy, termed as "Legal Risk" in IMSPO3- Health, Safety,

and Environment (HSE) Risk Management & Identification procedure. This involves vertical alignment via the ERM-framework, Agility framework, and Process Map-08 (PM08) for Human Capital Development. PM08 is integrated into DEWA-Strategy perspectives, with 8.3.5 specifically dedicated to the competency framework linked horizontally with departments and sections, encompassing both Behavioural Competency and Technical Competency within Talent Management & HR. Corporate procedure (Safety Procedure

(SP14))-Training, Awareness & Competency is aligned with process maps 12.6-Manager H&S and 12.6.1.-H&S Compliance.

Operational risks are assessed using defined KPIs/KRIs and managed and monitored through established action and mitigation plans according to the RACI Matrix, delineating roles and responsibilities both vertically and horizontally. DEWA's OH&S Manual emphasises key strategies, processes, and practices to address human error, process failure, inadequate processes, information

technology, and quality risks, in line with competency and training risk indicators within DEWA's agility framework for business continuity.

DEWA adheres to a comprehensive IMSP03: Hazard Identification and HSE Risk Assessment procedure, aligned qualitatively and quantitatively with ERM, ISO-45001 & ISO-14001, and Health & Safety Guideline (HSG-65) from the UK's HSE. DEWA upholds an "open-door" policy, safeguarding workers against retaliation, in accordance with Dubai's HR Act and coordinated with Employee Happiness Programmes.

DEWA offers world-class training programmes affiliated with the British Safety Council, delivered in various languages and formats, aligning with the SP14: Training, Awareness & Competency procedure and connected to employee performance, competency, and appraisals.

DEWA's Balanced Scorecard is linked to each strategic perspective and assigned objective, cascading to develop SMARTER objectives and defining core competencies to prevent operational risks. Tools utilised include KPIs/KRIs, LTIs, ASR, RIDDOR, happiness surveys, SWOT & PESTEL analysis.

## OCCUPATIONAL HEALTH SERVICES (GRI 403-3, 403-6)

The "Human-Capital" perspective within Dubai's 4th Generation Excellence Model, criterion 5, serves as a vital 10X Accelerator to DIES2020. It functions as an enabler to DEWA's strategy by aligning health, wellness, and well-being with strategic perspectives

IP03: World-class HSE practices and SO2: Engaged & Happy Stakeholders. IMS-policy's Clause 1.6 vertically aligns inputs of stakeholder happiness, ill-health, and work environment. DEWA's "Happiness Policy" ensures employee health and well-being through procedures SP12-Occupational Health, Business Support, Employee Happiness, Stress & Counselling (SC02), and SP16 for Welfare Wellbeing and Hygiene (WWH). This establishes strategic long-term objectives (LTOs) and functional/operational short-term objectives (STOs) covering workplace, physical, and mental health with dedicated SP12: Occupational Health Procedure and EP04: Employee Counselling & Stress Management procedure.

LTOs and STOs have dedicated action plans in line with IMSP03 – Hazard Identification & Risk Management Procedure. These plans encompass areas such as injury prevention, health screening, nutritional analysis, stress counselling, self-care, prevention, employee assistance programs, training, and mental health counselling/consultations. Action plans are transformed into workflows during the Deployment phase (PDCA), involving stakeholders, procedures, and practical measures with determined KPIs/KRIs.

Examples of health promotion, health checks, ill-health control, and monitoring include consultations/counselling, stress surveys and screenings, nutritional screenings, risk assessments, site inspections, one-on-one employee feedback, linking behavioural safety to performance, and stress assessments. Stress assessments are crucial to mental

health management and are carried out periodically through surveys, one-to-one sessions, and pre-counselling sessions. The ESTISHARATI program links behavioural and cognitive aspects to stress counselling, achieving a 79% success rate in 2022-2023.

Awareness campaigns on cardiovascular conditions, diabetes, stress management, lone working, wellbeing, and healthy nutrition are conducted through in-house communication channels, workshops, and e-shots. DEWA's Health & Safety Week serves as a platform to raise awareness of OH&S issues, attracting significant participation in both internal and public weeks. An annual Awareness Day for contractors, consultants, and suppliers reinforces DEWA's mission, vision, and integrated administrative systems. In 2023, the physical event witnessed active engagement from 125 participants, promoting learning and collaboration.

## H&S COMMUNICATIONS & REPRESENTATION (GRI 403-4, 403-7)

In the strategic alignment phases, aligning with DEWA's SO2: Engaged and Happy Stakeholders perspective, the H&S Business Impact Analysis (BIA) bridges gaps between crisis management (CM) and the agility framework, covering business processes, assets, human capital, and stakeholders. This ensures recovery plans during and post-events in accordance with ISO-22301:2019, Security & Resilience Business Continuity Management. DEWA's "Resilience Continuum," developed in line with ISO-31001:2019, links

enterprise risk management to BCM and CM, enhancing H&S agility by breaking down silos and boundaries. This results in the formulation of DEWA's top-down Business Continuity Plan (BCP), further aligned with IMS and Responsibility Accountability Consent and Inform Matrix (RACI) matrix through a two-way communication approach, as defined in the corporate communication policy and the IMSP06: Participation, Consultation & Communication procedure (Horizontal-alignment).

During the BIA phase, DEWA's stakeholder matrix is derived from the "influence & impact" in the BIA, identifying and prioritising relevant stakeholder groups, communicated proactively and interactively in line with the corporate communication manual and ISO14063:2006. The key objectives during business continuity processes involve various stakeholders, such as Government, Employees, Society, Partners, Customers, Suppliers, and Capital Investors.

Using the RADAR methodology, gaps related to availability, reliability, and recoverability are determined in the BIA phase through questionnaires, PESTEL & SWOT analysis, performance reports, and feedback. Solutions are determined at the enterprise and service levels, communicated through various channels like employee involvement, inspections, meetings, SLAs, SMARTER objectives, surveillance, Toolbox Talks (TBTs), surveys, risk assessments, forums, workshops/campaigns, trainings, mock drills, brainstorming sessions, and annual strategy workshops. HSE coordinators are involved annually in the review phase of strategy, procedures, budgeting, and process mapping.

The BIA is reviewed by the executive council in Dubai, involving the Strategy & Government Communication division, with feedback collected from RTA, Dubai Ambulance, DM, DHA, and Civil Defense, aligning with directives from the National Emergency and Crisis Management Authority 7000:2015. Customer feedback is gathered through satisfaction surveys, corporate social responsibility (CSR) campaigns, whistleblowers, and regular analysis of customer complaint systems.

For partners, suppliers, and contractors, alignment with HSE objectives and BCP is ensured through various activities such as workshops on crisis and emergency preparedness, site practices, IMS review meetings, and interactive sessions for operational and functional viability. Corporate and divisional level committees, along with communication channels like Afkari – Suggestion Scheme, Employee Happiness Survey, DEWA's Smart Office mobile app, SAP, and Freejna portal, contribute to effective planning and development during the Plan Do Check & Act (PDCA) phase.

## H&S TRAINING (GRI 403-5)

### TRAINING NEEDS ANALYSIS

Each employee undergoes a personalised Training Needs Analysis, connected to their specific competency requirements and aligned with employee appraisals, as per the performance gap analysis. The Learning and Development Department offers a detailed training programme focusing on the needs identified by employees.

## TRAINING DESIGN & DELIVERY

DEWA has its own specialised H&S Training section actively participating in training as per procedure SP14. They conduct both formal sessions and in-house programmes, coordinating with the Learning and Development department. Since 2020, DEWA has transformed its internal training by combining traditional in-person sessions with technology-based learning, incorporating AR-VR (Augmented Reality – Virtual Reality) technology into training programmes. The H&S training sessions are customised to cover different aspects like scope, operations, functions, and prevention, designed with a multilingual approach, including languages like Arabic, English, Urdu, and Hindi to reach a wider audience.

### TRAINING COST

Every employee receives job-specific training to enhance their skills and development, provided at no cost and tailored to their roles and work requirements.

### TRAINING EVALUATION

The talent management department evaluates training using feedback, performance improvements, skill acquisition, and knowledge retention as key assessment measures. Each division has its specific training attrition rate, which is monitored to maintain and achieve the Target Achievement Level for the number of training hours per employee. In 2023, approximately 2,036 employees participated in 117 training sessions, attended 27 awareness workshops, engaged in 202 one-on-one consulting sessions, and received 23 infographic E-shots released through internal communication channels.

### Number of DEWA Staff Attended H&S Training Conducted by H&S Department from 2019 - 2023

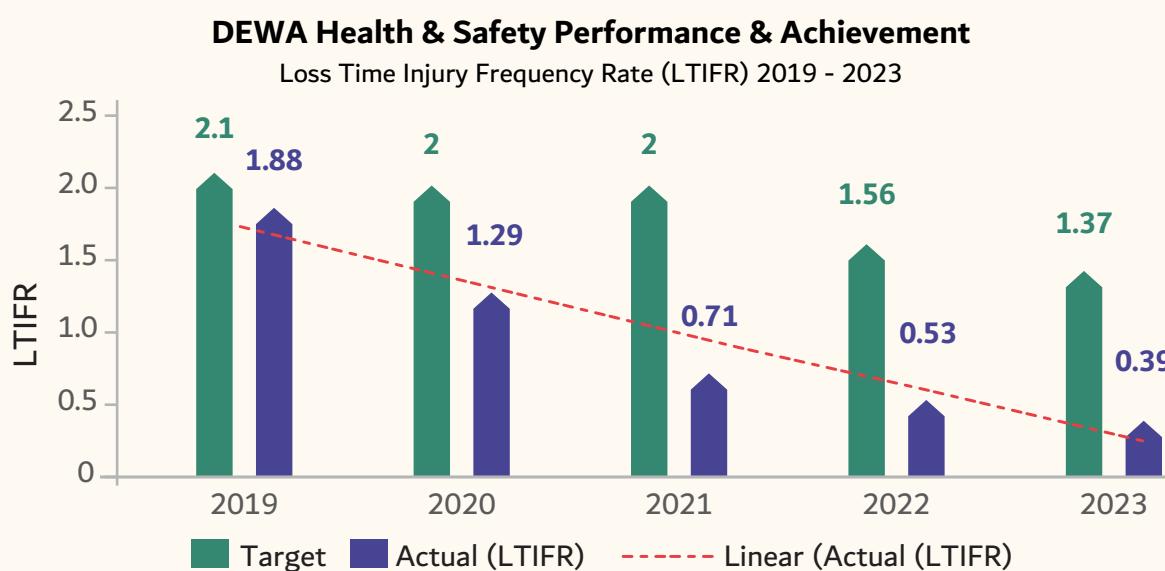


### DEWA'S RESPONSIBILITIES – WORK RELATED HAZARDS (GRI 403-9, 403-10)

Actions have been initiated to address and mitigate work-related

hazards, following the hierarchy of controls. DEWA incorporates its 10-step continual improvement process within key frameworks such as Corporate Leadership & Management, Energy, OH&S and Environment, and Enterprise Risk. This is complemented by the IMSP06 procedure for communication, participation,

and consultation, establishing clear HSE procedures, process maps, and KPIs for ongoing improvement toward long-term goals. Notable steps include refining the RACI matrix in August 2023, integrating a safety-culture maturity index, and aligning with a Risk Management maturity chart to enhance safety monitoring, attitudes, perceptions, competences, commitment, and behavioural patterns. Additionally, specific procedures, like SP02-Electrical Safe Work and SP09-Fire Prevention, have been reviewed and updated to incorporate best practices, addressing portable equipment and fire prevention measures. In September 2023, the HSE Training Section identified OH&S behavioural categories in SP14, linking mandatory and discretionary behaviours to a competency framework, contributing to continual improvement and the identification of Training Needs Analysis.



<b>Performance Indicators</b>	<b>Score as of 2023</b>
<b>Fatality</b>	Zero Since 2000
<b>The number and rate of high-consequence work-related injuries (excluding fatalities)</b>	Zero
<b>Injuries or incidents related to chemical exposure or hazard</b>	Zero
<b>Lost Time Injury Frequency Rate (LTIFR)</b>	0.39
<b>Total Recordable Injuries Rate (TRIR)</b>	0.08
<b>Fatalities related to work related Ill-health</b>	Zero
<b>Number of cases of recordable work-related ill health</b>	Zero

## LOCAL COMMUNITIES: INITIATIVES FROM DEWA TO THE COMMUNITY (GRI 413-1)

Through various initiatives, DEWA engages with the community on a yearly basis. In 2023, DEWA initiated 28 social and humanitarian initiatives, which included a total of 26,413 volunteering hours. The outcome of these initiatives was reflected in 14,901,641 beneficiaries.

### SCHOOL BAG

DEWA organised a supportive initiative (School Bag) for students from low-income families, orphans and people of determination, by preparing new school bags complete with stationery content. A total of 1,750 school bags have been donated by DEWA employees and 175 bags were contributed from Mai Dubai and Digital DEWA staff with a total of 48 volunteers from DEWA participating in preparing the school bags.

### MEER ALKHAIR

As part of DEWA's corporate social responsibility, DEWA launched the 'Meer Al Khair' internal community initiative, to provide in-kind goods support and food items for needy families with limited income, during the Holy Month of Ramadan. A total of 180 volunteers from DEWA employees' contributions resulted in the collection of 380 boxes of in-kind goods support and food items.

### STUDENTS' VOLUNTEERS COMMUNITY TRAINING

DEWA organises a programme that enables school & university students to complete the required volunteering & community hours that are requested from their schools & universities in order to graduate. Between 2020 and 2023, there were 13 students who volunteered in DEWA with a total of 1,072 volunteering hours.

### RAMADAN AMAN CAMPAIGN 2023

During the Holy Month of Ramadan, DEWA participated in the 'Ramadan Aman' campaign, launched under the theme 'Together during Ramadan without accidents', in collaboration with Al

Ihsan Charity Association and the traffic and police departments. The campaign aimed to distribute 200,000 Iftar meals to drivers at the roads and intersections during Maghrib. 180 volunteers from DEWA employees with a total of 360 volunteering hours.

## PROVISION OF INFORMATION (GRI 3-3)

### EMPOWERING PEOPLE OF DETERMINATION

DEWA has been proactive in creating an inclusive society that ensures empowerment and a decent life for people of determination (POD) and their families. It aligns its POD strategy with local and federal strategies to include and empower POD. DEWA continues to launch many community initiatives and smart solutions that enhance their inclusion into work and society and ensure that they have equal access to opportunities and experiences. This enables them to unleash their energies and prove their capabilities, helping them become active partners in building the prosperity of the nation. This is in line with the National Policy for Empowering People of Determination, launched by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to create an inclusive society that ensures empowerment and a decent life for POD and their families. It also supports the 'My Community... a City for Everyone' initiative, launched by HH Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, to transform Dubai into an accessible city for POD. DEWA implemented and sponsored

several CSR programmes & initiatives to include and empower POD. Between 2015 and 2023, there were 95 programmes and initiatives for POD. These initiatives have reached 3,526,572 people. In 2023, and for the fourth consecutive year, DEWA completed all strategic indicators in the field of including and empowering POD, most notably the happiness of employees of determination, and the happiness of their families about the safe and inclusive work environment at DEWA, as well as the equal job opportunities. The happiness of employees of determination reached 100% in 2023, while the happiness of their families reached 97.21%. The percentage of community happiness about DEWA's support for POD reached 94.27%, while the happiness rate of customers of determination about DEWA's services reached 97.48%.

## **ACCESSIBLE SERVICES FOR PEOPLE OF DETERMINATION SUPPORT**

DEWA supports the design of the urban environment, the people of Dubai, and the empowerment of people of determination (POD) to become more productive and effective. This is achieved by providing its employees and customers of determination with easy access to its services, buildings, and facilities, including its Customer Happiness Centres. In 2023, DEWA continued its efforts in converting all its newly constructed buildings and facilities to be 100% compliant with the Dubai Universal Design Code. Additionally, DEWA received the Golden Certificate (Universally Accessible), which is the highest certification granted by Dubai Municipality for public buildings based on accessibility compliance and the availability of innovative assistive technologies

for all its administrative buildings and customer happiness centres. Furthermore, DEWA has provided innovative assistive technologies at its facilities, including automated reading and translating pens, automated glasses that can read and identify different personnel, and dedicated workstations for automated reading, text magnification, and contrast adjustment.

Furthermore, DEWA has been recertified to conform with the international ISO standard 21542:2021 Building Construction – Accessibility and Usability of the Built Environment, further highlighting DEWA's continuous efforts to attain the highest standards in the wellbeing of the built environment users. In 2023, the POD H&S Standards, the inclusive COVID-19 Management System, and the DEWA H&S Management System were externally assured by the 45001:2018 audit conducted by Bureau Veritas as well as the British Safety Council 5 Star H&S Audit, in which DEWA achieved an excellent result of 98.01% and maintained its 5 Star Rating for 2023. DEWA won the British Safety Council Sword of Honour Award for its inclusive H&S Management System for the 16th time in 2023, which is considered the most prestigious award worldwide in the field of health and safety.

DEWA has successfully conducted three follow-up refresher POD H&S inclusive awareness sessions, and all Employees of Determination (EODs) have signed an EOD Individual Risk Assessment. Between 2020 and 2023, we trained 732 employees on POD evacuation processes, with 406 receiving training on POD evacuation chairs within 26 evacuation processes. DEWA is committed to providing a seamless experience and inclusive digital services that meet the needs of

POD, ensuring easy access to information and services through its website and smart app in accordance with Digital Dubai standards. DEWA has dedicated a page on its website to include and empower POD.

DEWA's website compliance scored 100%, while the smart application scored 10/10 in the POD Accessibility Evaluation Report by Digital Dubai 2022. Website accessibility measures include colour changes to accommodate colour-blind customers, the ability to increase font size for those with visual impairment, text-to-speech functionality, image descriptions enabling customers to click on images for details, and a shortcut feature facilitating navigation between pages. DEWA's smart app supports various platforms and incorporates the latest handset and smartphone technologies. DEWA achieved a Customer Happiness Rate of 97.48% for POD in 2023.

DEWA's buildings are equipped to handle emergencies with audio and visual alarms, alarms in toilets, and evacuation wheelchairs on all floors. All DEWA Customer Happiness Centres (Self Service) offer a range of services and facilities for Persons of Determination (POD), including special parking with a dedicated help line for assistance, customized entrances, wheelchair service, tactile audio maps with voice notifications, and directional tactile paving for those with visual impairments. Staff at these centres are trained to interact with POD, including proficiency in sign language, and DEWA's booklets are available in Braille. Moreover, dedicated virtual screens for video chatting remotely are provided, featuring hearing loops to enhance sound quality and filter background noise, thus aiding individuals with hearing disabilities. DEWA videos are also accessible in sign language, and Customer

Happiness staff are available to guide and educate POD on using digital services. These facilities demonstrate DEWA's commitment to facilitating streamlined services and access for POD.

DEWA has recently introduced a "digital sign language interpreter" powered by AI to improve information accessibility, translating webpage content into sign language for Persons of Determination (POD) with hearing disabilities. This feature is accessible on the DEWA website 24/7. Additionally, DEWA offers "Ash'ir," a live video chat service using sign language that enables customers with hearing impairments to communicate directly with the Customer Care Centre via DEWA's Smart Application round the clock. Another service, "Hayak," provides online text chat with an option for video chat, allowing customers to communicate with Customer Care Centre agents 24/7.

DEWA also utilises "Rammas," a virtual employee powered by AI, to answer customer enquiries in Arabic and English on the DEWA website and Smart Application. DEWA is the first UAE government organisation to have a verified WhatsApp business account supported by AI, allowing customers to communicate with DEWA 24/7 for all customer service enquiries. DEWA also employs Amazon's Alexa Service, Google Assistant, and Robots.

Moreover, DEWA has developed a "POD dashboard" web-based GIS application displaying a density map of the real-time location of POD customers and notifications related to POD across Dubai, prioritising and expediting service delivery. DEWA has launched several awareness campaigns and tutorial videos in sign language to educate customers on applying for various digital services through the

DEWA website, including activation and deactivation of electricity/water and bill payment.

Furthermore, DEWA conducted over 18 awareness sessions in 2023 to increase POD customers' knowledge and encourage them to adopt digital services. Engaging with stakeholders such as Customers of Determination and Employees of Determination, DEWA collected insights on various aspects, including the look and feel of Customer Happiness Centres, accessibility features, and measuring the ease of customer experience and journey at the centres. This was achieved through focus groups with individuals with different disabilities to capture customer needs and engaging customers prior to initiative implementation and marketing efforts.

Additionally, DEWA offers various discounts on service fees to Persons of Determination (POD) who hold Sanad Cards (for UAE Nationals). These discounts include reduced fees for the activation and deactivation of electricity and water services, as well as meter inspections (in cases where the meter is functioning correctly). Moreover, DEWA Store, an innovative initiative, provides exclusive offers and discounts from leading companies for all customers, with additional special privileges and discounts specifically tailored for Persons of Determination.

## EMPLOYEES OF DETERMINATION

DEWA has made significant strides in supporting and empowering its employees of determination (EOD) both in the workplace and within society. This commitment is evident through the implementation of various initiatives, programmes, and services designed to ensure an

inclusive employment journey for EOD employees.

DEWA has continuously enhanced its inclusive environment by providing assistive technologies, reasonable accommodations, and special equipment to accommodate employees with different disabilities. The establishment of the Absher Office, comprising a qualified team from the Human Resources department, further supports EOD employees throughout their employment journey, from recruitment to retirement. The Absher Office adopts best practices, locally and internationally, to provide administrative support and ensure the inclusion and empowerment of EOD employees in the workplace. In 2023, the Absher Office organised 12 virtual activities, events, and workshops, including museum visits, library visits, and participation in community expos, to engage EOD employees. Additionally, the office responds to their enquiries and provides reasonable accommodations such as suitable office furniture and technology.

DEWA also fosters a sense of community and engagement among EOD employees through various activities, initiatives, and community events aligned with DEWA's policies for inclusion and empowerment. In 2023, a special happiness gathering was arranged, attended by 52 EOD employees and their friends, along with representatives from the Absher team and HR department. Moreover, a special interaction session with His Excellency MD&CEO was organised, featuring engaging activities and a photo session, further enhancing EOD employee engagement.

DEWA places great emphasis on training its employees on how to interact with people of determination, with the number of trained employees increasing

from 4,458 in 2019 to 10,192 by 2023. Training courses conducted in 2023 included skills on how to deal with people of determination, coaching skills for managers, and inclusion and accommodation awareness. Additionally, all EOD employees completed their annual training plan for 2023.

Furthermore, DEWA has significantly increased the number of employees with determination from 19 in 2017 to 57 in 2023, showcasing its commitment to diversity and inclusion. At DEWA Academy, several initiatives were implemented to support students of determination and those with special educational needs. These initiatives include obtaining the Golden Certificate for universal accessibility, preparing comprehensive educational reports and learning support plans, extending psychological and behavioral measurement methods, and providing training for academy employees on various techniques for dealing with POD. Additionally, efforts were made to build bridges of cooperation with parents through open meetings, awareness workshops, and internal communication channels.

Overall, DEWA's efforts have resulted in a successful academic year in 2023, with students participating in volunteering activities to support people of determination, such as the wheelchair project.

## **FROM DEWA TO THE COMMUNITY 2023: INCLUDING AND EMPOWERING PEOPLE OF DETERMINATION**

DEWA's Society Happiness Department conducted an awareness session on Disability Etiquette for students at DEWA Academy and summer students. The session was attended by 109 students and covered topics on how to interact respectfully with different categories of people of determination (POD).

Additionally, DEWA organised a sports treatment hall at the Senses Residential and Day Care for Special Needs in Dubai, aiming to provide comprehensive treatment for children of determination in the areas of motor, functional, and mental rehabilitation. This initiative is part of DEWA's commitment to promoting Dubai's inclusive model for including and empowering POD in society.

As part of this effort, DEWA provided necessary equipment and devices to ensure the implementation of an inclusive treatment programme tailored to the needs and requirements of POD with various disabilities. A total of 31 volunteers from DEWA participated in preparing the hall to benefit more than 100 people of determination.

## **DEWA ACADEMY**

The Dubai Electricity and Water Authority launched DEWA Academy as part of its strategy to advance Dubai's energy sector and foster growth and progress. The aim is to invest in young minds and prepare a generation of young Emiratis who understand the importance of professional work and are aligned with the nation's interests in research and adherence to the highest international standards in scientific programmes.

Established in 2013 in collaboration with the Business and Technology Education Council (BTEC) – UK, the DEWA Academy offers a technical/vocational skills programme aimed at preparing a new generation of professional Emiratis. This programme contributes to the UAE's efforts to localise technical jobs in the energy and water sectors. Upon completion of their studies, students at the Academy are employed within various departments of DEWA based on their specialisations and DEWA's needs.

Since its inception, the Academy has welcomed hundreds of students who have graduated and are now employed across various divisions within DEWA, including Generations, Distribution Power, Transmission Power, and Water & Civil. For further information, please visit DEWA Academy's official website at



## **CUSTOMER HEALTH & SAFETY**

**(GRI 3-3)**

DEWA is committed to prioritising customer health and safety through the proactive development of comprehensive plans aimed at delivering services in accordance with the highest standards of availability, reliability, and efficiency. During the rainy season, DEWA reminds customers to take necessary precautions to mitigate internal interruptions and uphold the safety and continuity of electricity supply. DEWA strongly encourages customers to access its official website and social media platforms for comprehensive tips and guidelines aimed at ensuring the safe utilisation of its services. Furthermore, DEWA urges customers to adhere to precautionary measures, including the closure of all electrical cabinets, replacement of damaged meter windows, sealing of spare conduits on rooftops, and verification of proper earthing connections; all of which are essential to guarantee the uninterrupted provision of safe and stable electricity supplies.

# DISASTER & EMERGENCY PLANNING & RESPONS

(GRI 3-3)

## CORPORATE RISK & RESILIENCE

DEWA places a high priority on corporate risk management and resilience as essential elements of its strategic direction. The organisation takes a proactive approach to anticipating and adapting to potential risks and threats while effectively responding to and recovering from incidents to safeguard Dubai's critical infrastructure. This approach ensures that risks and threats are mitigated, and electricity and water demands are maintained in line with the highest international standards of reliability, availability, efficiency, and quality.

To embed and sustain resilience across the organisation, DEWA has implemented the Corporate Risk & Resilience Policy & Framework in alignment with both local (AE/ SCNS/NCEMA 7000:2015) and international (ISO 22301:2019, ISO 31000:2018, BS 11200:2014, PAS 60518:2020) standards and best practices.

Corporate Risk & Resilience is not just a function but a strategic imperative for DEWA, and the implementation of the Corporate Risk & Resilience Policy and Framework reflects DEWA's commitment to embedding resilience throughout

the organisation, aligning with Corporate Objective IP05: Leading Integrated, Resilient, and Agile Frameworks. This underscores the strategic importance placed on corporate risk and resilience management.

Since the introduction of the PAS 60518:2020 - Enterprise Risk & Resilience Management in Utilities Guide in 2020, DEWA and many of its peers have embraced the requirements of this standard to enhance risk and resilience management practices within the industry. Building on this success and industry advancement, DEWA has initiated efforts to develop a broader ISO energy resilience and critical infrastructure standard to further elevate risk and resilience best practices on an international scale.

## CORPORATE RISK MANAGEMENT (CRM)

Corporate Risk & Resilience is fundamental to DEWA's strategic direction and is supported by the Corporate Risk Management (CRM) framework. The purpose of CRM is to aid DEWA's organisational context by facilitating enhanced decision-making and planning through comprehensive awareness of all types of risks and threats. DEWA considers CRM as an integral aspect of its operations and is dedicated to fostering an organisational culture that integrates risk management into all activities, including decision-making and strategic planning.

CRM establishes a common

framework and policy for all staff, divisions, and departments within DEWA to identify, assess, evaluate, treat, monitor, and communicate risks and threats, while considering applicable regulatory requirements and broader organisational objectives and priorities. DEWA applies its CRM Framework in alignment with ISO 31000:2018 - Risk Management Guidelines to ensure consistent management of risks and threats across the organisation. Regular monitoring, review, and reporting of risks are crucial components of DEWA's CRM Framework to identify new risks and changes to existing risks, enabling the implementation of mitigation plans to address such risks.

Risks are identified using both a top-down (corporate) and bottom-up (divisional) approach to ensure that the full spectrum of risks to DEWA is identified and, where necessary, mitigated to an acceptable level as outlined in the CRM Framework. This process is overseen by the Group Risk & Resilience Committee, which continues to identify and mitigate new and emerging risks to safeguard the strategic priorities of the organisation.

To further enhance the efficiency and productivity of risk management, DEWA has and will continue to explore cognitive technologies such as AI and machine learning. This initiative aims to maintain its competitive advantage and utilise risk management to drive organisational performance.



## CRISIS AND BUSINESS CONTINUITY MANAGEMENT

DEWA applies its Crisis and Business Continuity Management in alignment with ISO 22301, NCEMA 7000, and BS11200. To further enhance the resilience level across the organisation, DEWA has developed division-wide BCPs, which are reviewed, tested, and updated annually or more frequently if necessary. During the testing phase, areas for improvement are identified and prioritised with support from the Corporate Risk & Resilience Department.

DEWA has developed joint response plans for external risks and scenarios with its strategic partners to ensure collaborative response and critical communication interchange during emergencies. Information sharing between local and national authorities is two-way and regular, ensuring that DEWA's preparedness for emergencies meets the required local and national requirements and standards.

DEWA conducts division-wide mock drill exercises based on risk-based crisis situations, including cyber-attacks, fires, accidents due to human error, and equipment malfunctions, to ensure preparedness and adaptive capacity for handling such emergent and crisis situations. Following each mock drill, a comprehensive review is undertaken to outline the crisis, assess the response of various teams, highlight observations, evaluate effectiveness in handling the emergency, and identify areas for improvement where necessary.

In support of Dubai, the wider UAE resilience ecosystem, and critical infrastructure, DEWA collaborates, coordinates, and communicates with multiple Dubai local government and semi-government entities, as well as federal UAE entities, to share best practices

and enhance the resilience of national critical infrastructure. This ensures continuous coordination and communication through participation, exercises, exchange of information, intelligence, and response.

Crisis and Business Continuity Management in DEWA is governed by the Crisis Management Committee.

## CRISIS MEDIA RESPONSE & COMMUNICATIONS

DEWA has a media response and crisis communications plan in place with pre-defined holding statements to ensure swift and effective communication to employees and the public during emergency situations. DEWA's Crisis Command Centre acts as the hub for directing, supporting, and provisioning all necessary steps during a crisis, with direct communication links to Dubai-level crisis management teams and the Dubai Media Office.

## CYBER SECURITY

Given its status as critical national infrastructure, DEWA places paramount emphasis on cybersecurity. To fortify its cybersecurity measures, DEWA has instituted a comprehensive framework consisting of four pillars. These pillars integrate unique technologies, processes, guidelines, and international and local standards, all managed by a dedicated team. The overarching goal is to establish a posture of cyber resilience by leveraging existing policies and frameworks.

The four pillars of DEWA's Cyber Resilience Framework are as follows:

- Manage & Protect:** Involves overseeing security defenses and safeguarding DEWA from cyber threats. This pillar identifies critical assets, assesses associated risks, and implements control measures, reviews, and audits. Various measures include information security policies,

malware protection, identity and access control, staff training, encryption, physical security, and supply chain risk management.

- Identify & Detect:** Focuses on monitoring DEWA's information, information systems, and industrial control systems for anomalies through security monitoring and active detection.
- Respond & Recover:** Aims to manage cyber incidents promptly and effectively, limiting harm and restoring functionality post-incident. This involves incident response management, IT service continuity management, business continuity management, and information sharing.
- Govern & Assure:** Encompasses activities at the board and senior management levels to ensure oversight and validation of cyber resilience. This pillar includes a comprehensive risk management program, external validation/certification, board commitment, governance structure, and continual improvement processes.

DEWA's Cyber Resilience Framework integrates unique technologies, such as AI, Big Data, Zero Trust, Automation, Simulation, and Integration. It further incorporates distinct processes, guidelines, and adherence to international and local standards. The dedicated and collaborative team ensures the framework's effectiveness. Moreover, the framework adheres to multiple international and local security standards, including ISO 27001, ISO 27014 for Corporate Security Governance, ISO/IEC 38500 for Corporate Governance of Information Technology, and Dubai Information Security Regulation (ISR).

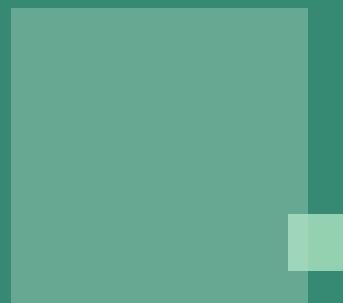
With this framework in place, DEWA's 24x7 Cyber Defense center has had 50M+ average threats prevented in 2023 and 0 security breaches in the past 9 years. With 50,000+ indicators of compromise processed by Cyber Defense center in 2023.

# OUR CYBER SECURITY FRAMEWORK





# Community member remark



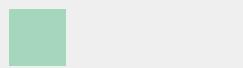
# MARTIAL TOPICS AND THEIR BOUNDARIES 2023

Material Topics	Material within the organisation or external	Relevant External Stakeholders					
		Customers	Suppliers	Partners	Community	Government	Investors
<b>Economic</b>							
Economic Performance	Both	✓	✓	✓	✓	✓	✓
Anti-corruption	Both	✓	✓	✓	✓	✓	✓
Availability and Reliability of Electricity	Both	✓	✓	✓	✓	✓	✓
Demand Side Management	Both	✓			✓	✓	✓
Research and Development	Both			✓		✓	✓
System Efficiency (Electric Utilities Sector Disclosures)	Both						✓
<b>Environmental</b>							
Energy	Both	✓	✓	✓	✓	✓	✓
Water and Effluents	Both	✓	✓	✓	✓	✓	✓
Biodiversity	Both				✓	✓	✓
Emissions	Both	✓	✓	✓	✓	✓	✓
Waste	Both		✓		✓	✓	✓
Compliance with Environmental Laws and Regulation	Both	✓	✓	✓	✓	✓	✓
Circular Economy	Both		✓	✓	✓	✓	✓
Climate Change	Both	✓	✓	✓	✓	✓	✓
<b>Social</b>							
Employment	Both					✓	✓
Occupational Health and Safety	Both	✓	✓	✓		✓	✓
Training and Education	Both					✓	✓
Diversity and Equal Opportunity	Both				✓	✓	✓
Non-discrimination	Both	✓	✓	✓	✓	✓	✓
Human Rights Assessment	Both		✓			✓	✓
Local Communities	Both				✓	✓	✓
Customer Health and Safety	Both	✓				✓	✓
Socioeconomic Compliance	Both			✓		✓	✓
Disaster and Emergency Planning and Response	Both	✓	✓	✓	✓	✓	✓
Access to Electricity	Both	✓	✓	✓	✓	✓	✓
Provision of Information	Both	✓	✓	✓	✓	✓	✓
Innovation	Both	✓	✓	✓	✓	✓	✓
Customer Happiness	Both	✓				✓	✓
Cybersecurity	Both	✓	✓	✓		✓	✓

# GRI CONTENT INDEX 2023

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<b>Diversity and Equal Opportunity</b>			
3-3	Management of material topics	75	
405-1	Diversity of governance bodies and employees	70-72, 75	5.1; 5.5; 8.5
<b>Training and education</b>			
3-3	Management of material topics	76-77	
404-1	Average hours of training per year per employee	76	4.3; 4.4; 4.5; 5.1; 8.2; 8.5; 10.3
404-2	Programs for upgrading employee skills and transition assistance programs	77	8.2; 8.5
<b>Occupational Health &amp; Safety</b>			
3-3	Management of material topics	77-78	
403-1	Occupational health and safety management system	77-78	8.8
403-2	Hazard identification, risk assessment, and incident investigation	78-79	8.8
403-3	Occupational health services	79	8.8
403-4	Worker participation, consultation, and communication on occupational health and safety	79-80	8.8, 16.7
403-5	Worker training on occupational health and safety	80-81	8.8
403-6	Promotion of worker health	79-80	3.6; 3.7; 3.8
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationship	79-80	8.8
403-9	Work-related injuries	81-82	3.6; 3.9; 8.8; 16.1
403-10	Work-related ill Health	81-82	3.3; 3.4; 3.9; 8.8; 16.1
<b>Human Rights Assessment</b>			
3-3	Management of material topics	75	
412-1	Operations that have been subject to human rights reviews or impact assessments	75-76	
412-2	Employee training on human rights policies or procedures	75-76	
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	75-76	
<b>Local Communities</b>			
3-3	Management of material topics	82	

<b>Disclosure</b>	<b>Description</b>	<b>Page</b>	<b>SDGs Linkage to GRI</b>
413-1	Operations with local community engagement, impact assessments, and development programs	82	
<b>Customer Health and Safety</b>			
3-3	Management of material topics	85	
<b>Socioeconomic Compliance</b>			
419-1	Non-compliance with laws and regulations in the social and economic area	No significant monetary or non-monetary sanctions for non-compliance with the laws and regulations in the social and economic area	16.3
<b>Disaster/Emergency Planning &amp; Response</b>			
GRI G4	Management Approach <b>(GRI G4 Sector Disclosures 2013 Electric Utilities)</b>	86-87	1.5;11.5
<b>Access to Electricity</b>			
GRI G4	Management of material topics	33-35	1.4;7.1; 11.1
EU28	Power outage frequency <b>(GRI G4 Sector Disclosures 2013 Electric Utilities)</b>	35	1.4; 7.1
EU29	Average power outage duration <b>(GRI G4 Sector Disclosures 2013 Electric Utilities)</b>	35	1.4; 7.1
EU30	Average plant availability factor by energy source and by regulatory regime <b>(GRI G4 Sector Disclosures 2013 Electric Utilities)</b>	35	1.4; 7.1
<b>Provision of Information</b>			
G4-DMA	Management of material topics	81-83	
EU22	Number of people physically or economically displaced and compensation, broken down by type of project	There were no people physically or economically displaced due to any of DEWA's project in 2023	1.4; 2.3
<b>Customer Happiness</b>			
3-3	Management of material topics	22-23	
Non GRI Disclosures	Results of surveys measuring customer happiness	28	
<b>Cyber security</b>			
Non GRI Disclosures	Cyber security framework	87-88	
<b>Non-discrimination</b>			
3-3	Management of material topics	70	
406-1	Incidents of discrimination and corrective actions taken	70	5.1; 8.8
<b>Innovation</b>			
3-3	Management of material topics	44 -47	
Non GRI Disclosures	AFKARI Platform Results	44-45	
	Digitalization	45-47	9.4

# ABBREVIATIONS

DEWA	Dubai Electricity and Water Authority
DEWA PJSC	Dubai Electricity and Water Authority (Public Joint-Stock Company)
USD	United State Dollar
GRI	Global Reporting Initiative
SDG	Sustainable Development Goal
UNGC	United Nations Global Compact
NOC	No Objection Certificate
IoT	Internet of Things
CSP	Concentrated Solar Power
PV	Photovoltaic Solar Power
MENA	Middle East and North Africa
CO2	Carbon dioxide
DED	Dubai's Department of Economic Development
UAE	United Arab Emirates
KPI	Key Performance Indicator
UNSDGs	United Nations Sustainable Development Goals
MBR Solar Park	The Mohammed bin Rashid Al Maktoum Solar Park
KWh	Kilowatt hour
ISO	International Organization for Standardization
MIGD	Million Imperial Gallons Per Day
MW	Megawatt
IPP	Independent Power Producer
IWP	Independent Water Producer
SWRO	Sea Water Reverse Osmosis
DFM	Dubai Financial Market
CML	Customer Minutes Lost
DFO	Diesel Fuel Oil
MFO	Medium Fuel Oil
HPP	Hassyan Power Plant
WWMC	Warsan Waste Management Company
NG	Natural Gas
SO2	Sulphur Dioxide
EV	Electric Vehicle
GT	Gas Turbine
MIG	Million Imperial Gallon
RO	Reverse Osmosis
Km	Kilometre
MSR	The Molten Salt Receiver
MSF	Multi-Stage Flashing
KM	Knowledge Management

T&D	Transmission & Distribution
GHP	Green Hydrogen Plant
BESS	Battery Energy Storage Systems
MWh	Megawatt-hours
DSM	Demand Side Management
HRS	Hydrogen Refuelling Station
DSCE	Dubai Supreme Council of Energy
VPP	Virtual Power Plant
AI	Artificial Intelligence
DCES	Dubai Clean Energy Strategy 2050
ERP	Emission Reduction Program
BAU	Business As Usual
MRV	Monitoring, Reporting, and Verification
GHG	Greenhouse Gases
NOx	Nitrogen Oxide
SF6	sulphur hexafluoride
PPM	Parts Per Million
ERM	Enterprise Risk Management
CDM	Clean Development Mechanism
AMI	Advanced Metering Infrastructure
SCADA	Supervisory Control and Data Acquisition
POD	People of Determination
IMS	Integrated Management System
LTOs	Long-Term Objectives
STOs	Short-Term Objectives
CM	Crisis Management
BIA	Business Impact Analysis
BCP	Business Continuity Plan
ILO	International Labour Organisation
H&S	Health & Safety
HSE	Health, Safety, and Environment
CSR	Corporate Social Responsibility
OH&S	Occupational Health and Safety
OHSMS	Quality, Health, Safety and Environment
CRM	Corporate Risk Management

# Independent Verification Statement

## Introduction

DNV Business Assurance Group AS - Dubai Branch ('DNV'), has been commissioned by Dubai Water and Electricity Authority ('DEWA' or 'the Company', commercial number: 1029366) to undertake an independent verification of the Company's selected quantitative disclosures for Calendar year 2023 which has been prepared in bespoke spreadsheets using selected topic-specific Standards from the Global Reporting Initiative (GRI) Standards 2021. The intended user of this Verification statement is the Management of DEWA ('the Management'). Our verification engagement was planned and conducted during March 2024.

## Responsibilities of the Management of DEWA and of the Assurance Provider

The Management ('Climate Change & Sustainability Department at DEWA) of the Company has the sole responsibility for the collection, analysis, aggregation, preparation, and presentation of the data presented to us. Company is also responsible for ensuring the maintenance and integrity of its website and any referenced disclosures on sustainability performance. In performing this assignment, DNV's responsibility is to the Management of the Company; however, this statement represents our independent opinion and is intended to inform the outcome of the verification to the stakeholders of DEWA.

Our verification engagement has been carried referring to DNV's assurance methodology VeriSustain<sup>TM1</sup> specifically referring to the process followed for managing the assurance, including the competencies, systems used, and the processes followed. While using DNV VeriSustain<sup>TM</sup> for this engagement, the assurance provided by DNV is limited to the selected indicators and information specified in the scope of the engagement. DNV has not assessed the reporting organization's overall adherence to reporting principles or the preparation of the report. Therefore, no conclusions should be drawn regarding the reporting organization's compliance with reporting principles or the quality of the overall report. The assurance provided by DNV is based on the selected indicators and information made available to us at the time of the engagement. DNV assumes no responsibility for any changes or updates made to the indicators or information after the completion of the assurance engagement.

In addition to DNV Verisustain<sup>TM</sup>, DNV team followed GRI 2021 reporting guidelines as assessment criteria for assessment of selected set of data points. As mutually agreed with DEWA, DNV provided a limited level of verification while applying a ±5% materiality threshold for errors and omissions. The engagement assumes that the data and information provided by the Company to us as part of our review have been provided in good faith and is complete, sufficient, authentic and is free from misstatements.

## Scope, Boundary and Limitations

The scope of work agreed upon with DEWA includes verification of the selected quantitative disclosure of GRI disclosures 2023 (as below) for all DEWA's sites in the Emirate of Dubai, UAE, and under its direct control for the period 1<sup>st</sup> January 2023 to 31<sup>st</sup> December 2023. Data verified for below disclosures is presented in Annexure-1.

GRI Standard	Disclosure
GRI 303: Water and Effluents 2018	GRI 303-3 Water withdrawal- a, c GRI 303-4 Water discharge- a, b
GRI 401: Employment 2016	401-1 New employee hires and employee turnover- a, b 401-3 Parental leave- a, b, c, d, e
GRI 403 Occupational Health & Safety 2018	403-5 Worker training on occupational health and safety 403-9 Work-related injuries- a 403-10 Work-related ill health- a
G4 Sector disclosures- EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime (2.1, 2.2, 2.3, 2.4)
G4 Sector disclosures- EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region (2.2, 2.3)

<sup>1</sup> The VeriSustain<sup>TM</sup> protocol is based on the principles of various assurance standards including International Standard on Assurance Engagements 3000 (ISAE 3000) Revised (Assurance Engagements other than Audits or Reviews of Historical Financial Information) and the GRI Principles for Defining Report Content and Quality, international best practices in verification and our professional experience; and is available on request from [www.dnv.com](http://www.dnv.com)

DNV disclaims any liability or co-responsibility for any decision a person or entity would make based on this verification statement. We did not engage with any external stakeholders as part of this engagement. During the verification process, we did not come across limitations to the scope of the agreed verification engagement.

### Basis of our Opinion

During the verification, we adopted a risk-based approach, and a sample-based verification was carried out towards the selection of samples for assessing the robustness of the underlying data management system, information flow, and controls, for a limited level of verification engagement. We carried out the following activities:

- Review of the data management processes that DEWA has in place to report the selected data based on chosen GRI topic-specific Standards. We examined and reviewed supporting evidence such as supporting documents, secondary data, and other information made available by DEWA to us;
- Review of systems and procedures for data collection and aggregation, including the calculation methodology and assumptions of the selected consolidated sustainability performance data prepared for the Company's internal reporting purposes;
- Assessment of DEWA's performance data through on-site audit at DEWA's Central facility for Health and safety in Dubai, UAE and remote audit assessment with DEWA's sustainability team and other representatives, including process owners from different divisions and departments of the Company to review the processes and systems for preparing, generating, aggregating, and reporting of the data. DNV was free to choose the site and interviewees interviewed for carrying out our verification.
- Verification of sample data to check accuracy and reliability for a limited level of verification through interaction with data owners.

### Opinion

On the basis of a limited level of verification undertaken and mutually agreed on the scope of work, nothing has come to our attention that would cause us not to believe that the data verified as listed in Annexure-1, is not reliable and accurate representation of DEWA's performance data. Some of the data inaccuracies identified during the verification process were found to be attributable to transcription, interpretation, and aggregation errors, and the errors have been communicated for correction and corrected.

### Statement of Competence and Independence

DNV applies its own management standards and compliance policies for quality control, which are based on the principles enclosed within ISO IEC 17029:2019 – Conformity assessment – General principles are requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

We have complied with the DNV Code of Conduct<sup>2</sup> during the assurance engagement and maintain independence as required by relevant ethical requirements relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of any statements or data included in the Report except for this Verification Statement. DNV maintains complete impartiality toward stakeholders interviewed during the assurance process. We did not provide any services to DEWA in the scope of assurance for the reporting period that could compromise the independence or impartiality of our work.

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<sup>2</sup> The DNV Code of Conduct is available on request from [www.dnv.com](http://www.dnv.com) (<https://www.dnv.com/about/in-brief/corporate-governance.html>)



For DNV Business Assurance Group AS - Dubai Branch,

Ankita Parab Lead Verifier, DNV Business Assurance India Private Limited, India	Sandeep Lele Project Manager, DNV Business Assurance Group AS - Dubai Branch	Anjana Sharma Assurance Reviewer, DNV Business Assurance India Private Limited, India
Mayank Kumar (Verifier)		

15<sup>th</sup> March 2024, Dubai, United Arab Emirates.

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*DNV Business Assurance Group AS - Dubai Branch is part of DNVI- Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. [www.dnv.com](http://www.dnv.com)*

## **Annexure 1: Verified Performance Data - 2023**

- **GRI 303: Water and Effluents 2018 – 303-3 (a, c), 303-4 (a, b)**

<b>Year</b>	<b>Installed Capacity (MIGD)</b>	<b>Total Water Production (MIG)</b>
2023	495	143,309

<b>Data</b>	<b>Unit</b>	<b>Year</b>
Installed Capacity (Underground wells)	MIGD	35.56

<b>Year</b>	<b>Unit</b>	<b>Total water storage at the beginning of the reporting period (MIG)</b>	<b>Total water storage at the end of the reporting period (MIG)</b>	<b>Change in water storage (MIG) (End - Beginning)</b>
2023	MIG	575.74	911	335.26

<b>Type of effluent</b>	<b>Total volume (M<sup>3</sup>) discharge</b>
Process water from Power plant	1,744,355,921
Process water from Desal. plant	3,822,486,281
Water treatment plant effluent	71,562
Treated sewage water (to land)	0
Treated sewage water (to sea)	33,173
Total Treated sewage water	33,173

- **GRI 401: Employment 2016- 401-1 (a, b), 401-3 (a, b, c, d, e)**

<b>Details</b>	<b>Total Employees</b>	
Total number of newly hired Emirati employees during 2023	168	
Number of newly hired employees (middle management positions)	16	
Number of newly hired employees (nonsupervisory positions)	266	
DEWA's total number of employees in 2023	10,792	
% of females (based on the total number of employees)	18%	
% of males (based on the total number of employees)	82%	

### **Permanent & Temporary Employees- Breakdown by Gender**

<b>Details</b>	<b>Permanent</b>		<b>Temporary</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
Total number of employees	8,790	1,936	64	2

### **Full-Time and Part-Time Employees- Breakdown by Gender**

<b>Details</b>	<b>Full time</b>		<b>Part time</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
Total number of employees	8,854	1,938	0	0

### Permanent & Temporary Employees Breakdown by Region

Region	Permanent	Temporary	Total
Africa	155	1	156
Asia	6,083	63	6,146
Europe	47	0	47
Middle East	4,417	2	4,419
North America	16	0	16
Oceania	6	0	6
South America	2	0	2
<b>Total</b>	<b>10,726</b>	<b>66</b>	<b>10,792</b>

### Full-Time and Part-Time Employees- Breakdown by Region

Region	Full time	Part time	Total
Africa	156	0	156
Asia	6,146	0	6,146
Europe	47	0	47
Middle East	4,419	0	4,419
North America	16	0	16
Oceania	6	0	6
South America	2	0	2
<b>Total</b>	<b>10,792</b>	<b>0</b>	<b>10,792</b>

### New Employee Hires

	New Employee Hires
<b>Gender</b>	
Female	41
Male	272
<b>Region</b>	
Africa	27
Asia	281
Europe	2
North America	1
South America	1
Australia	1
<b>Age Group</b>	
18-29	177
30-39	106
40-49	25
50-59	5
60-69	0
70-79	0

### Employee Turnover by Age Group, Gender, and Region

	Total Number of Employee Turnover	Turnover Rate (%)
<b>Gender</b>		
Female	232	2.7
Male	36	1.84
<b>Age Group</b>		
Under 30	24	2.99
30-50	224	2.83
Over 50	20	1.13
<b>Region</b>		
Africa	19	2.96
Asia	182	2.92
Australia	0	0

	<b>Total Number of Employee Turnover</b>	<b>Turnover Rate (%)</b>
Europe	3	6.69
North America	2	12.04
South America	0	0
Middle East	62	1.75

#### **Age Groups: Under 30 Years Old, 30-50 Years Old, over 50 Years Old**

<b>Age Group</b>	<b>Number of Employees</b>
Under 30 years	1,052
30 -50 years	7,890
Above 50 years	1,850

#### **Employee Parental Leave & Resumed Duty**

<b>Leave Type</b>	<b>Entitled to Parental leave</b>	<b>Took Parental Leave</b>	<b>Returned to work</b>	<b>Returned to work Rate</b>	<b>Retained Employees</b>	<b>Retention Rate</b>
<b>Maternity leave</b>	1,195	162	162	100%	145	96%
<b>Paternity leave</b>	7,139	376	376	100%	332	94.32%
<b>Total</b>	<b>8334</b>	<b>538</b>	<b>538</b>		<b>477</b>	

Note:

- Male employees returning to work immediately from 1 January 2023 to 31 December 2023 – 100%
- Female employees returning to work immediately from 1 October 2022– to 30 September 2023 – 100%
- Out of 153 female employees of 2022, 149 female employees are retained after 12 months (97.4%).
- Out of 352 male employees of 2022, 332 employees are retained after 12 months (94.32%) 538 employees have used parental leave as of 2023.

#### **• EU15 (2.2, 2.3)**

#### **Percentage of Employees Eligible to Retire in the Next 5 Years by Category and Region**

<b>Region</b>	<b>Engineers</b>		<b>Operators</b>		<b>Linesmen</b>		<b>Mechanics</b>		<b>Others</b>		<b>Total</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Africa	4	0.0371	1	0.0093	0	0	0	0	15	0.139	20	0.1853
Asia	132	1.2231	61	0.5652	2	0.0185	27	0.2502	410	3.7991	632	5.8562
Europe	0	0	0	0	0	0			19	0.1761	19	0.1761
Middle East	10	0.0927	0	0	0	0	3	0.0278	137	1.2695	150	1.3899
North America	0	0	0	0	0	0	0	0	4	0.0371	4	0.0371
South America	0	0	0	0	0	0	0	0	1	0.0093	1	0.0093
Australia	0	0	0	0	0	0	0	0	2	0.0185	2	0.0185
<b>Total</b>	<b>146</b>	<b>0.0135</b>	<b>62</b>	<b>0.0057</b>	<b>2</b>	<b>0.0002</b>	<b>30</b>	<b>0.0028</b>	<b>588</b>	<b>0.0545</b>	<b>828</b>	<b>-</b>

#### **Percentage of Employees Eligible to Retire in the Next 10 Years by Category and Region**

<b>Region</b>	<b>Engineers</b>		<b>Operators</b>		<b>Linesmen</b>		<b>Mechanics</b>		<b>Others</b>		<b>Total</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Africa	8	0.0741	1	0.0093	0	0	0	0	26	0.2409	35	0.3243
Asia	303	2.8076	136	1.2602	14	0.1297	83	0.7691	950	8.8028	1486	13.769
Europe	0	0	0	0	0	0	0	0	26	0.2409	26	0.2409
Middle East	27	0.2502	5	0.0463	0	0	3	0.0278	330	3.057	365	3.3821
North America	1	0.0093	0	0	0	0	0	0	6	0.0556	7	0.0649
South America	0	0	0	0	0	0	0	0	1	0.0278	1	0.0093
Australia	0	0	0	0	0	0	0	0	3	0.0278	3	0.0278
<b>Total</b>	<b>339</b>	<b>3.1412</b>	<b>142</b>	<b>1.3158</b>	<b>14</b>	<b>0.1297</b>	<b>86</b>	<b>0.7969</b>	<b>1342</b>	<b>12.4351</b>	<b>1923</b>	<b>-</b>

- GRI 403 Occupational Health & Safety 2018- 403-5 (only number of employees trained), 403-9 (a), 403-10 (a)**

<b>Performance Indicators</b>	
Fatality	0
The number and rate of high consequence work-related injuries (excluding fatalities)	0
Injuries or incidents related to chemical exposure or hazard	0
Loss Time Injury Frequency Rate (LTIFR)	0.39
Total Recordable Injuries Rate (TRIR)	0.08
Fatalities related to work related Ill-health	0
Number of cases of recordable work-related ill health	0
Number of DEWA Staff Attended H&S Training Conducted by H&S Department	2,036

- EU10 (2.1, 2.2, 2.3, 2.4)**

<b>Year</b>	<b>Peak Power Demand (MW)</b>	<b>Total Firm Power Generation Capacity (MW)</b>	<b>Total Installed Power Capacity (MW)</b>
2023	9,838	13,919	16,546*
2024	10,151	13,919	17,379
2025	10,451	14,369	18,429
2026	10,788	14,959	19,619
2027	11,106	14,959	19,619
2028	11,397	14,959	19,619
2029	11,761	14,959	20,019
2030	12,101	14,959	20,019

Note:

- The verification of above data is limited to the output of projection model developed by DEWA.
- \*Forecasted in 2022.

