



DEWA (PJSC) SUSTAINABILITY REPORT 2022





Sheikh Zayed bin Sultan Al Nahyan, may his soul rest in peace

Founder of the UAE, 1918 - 2004



The UAE will continue to play a leading role in shaping initiatives which serve humanity and help to achieve stability, prosperity and sustainable development.



His Highness
Sheikh Mohamed bin Zayed Al Nahyan

President of the United Arab Emirates



We have developed a sustainable infrastructure that will serve new generations. This infrastructure has been built by young Emiratis who will lead our country through the next phase of growth. We are proud of our nation's advancements in clean energy and green economy.



His Highness

Sheikh Mohammed bin Rashid Al Maktoum

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

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MD & CEO MESSAGE

HE SAEED MOHAMMED AL TAYER

MD & CEO of DEWA
(GRI 2-22)

At Dubai Electricity and Water Authority (DEWA), we work to achieve the wise vision of His Highness Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE; and His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to enhance sustainability and the shift towards a diversified and green economy. Sustainability is an integral part of our vision and strategy in line with the strategies of Dubai and the UAE. We are the first government organisation to adopt sustainability in its strategic plan to achieve long-term sustainability goals and the 17 UN Sustainable Development Goals (SDGs) 2030 and promote the sustainable green growth and the economic, environmental, and social sustainability.

We are committed to the best effective governance practices within an integrated framework, in addition to regularly reviewing all our activities and operations to keep pace with the rapid developments and enhance DEWA's agility and resilience to deal with change. We have robust policies and programmes for environmental, social, and corporate governance (ESG) management. Implementing good governance practices has contributed to DEWA achieving globally competitive results. Our practices have become a benchmark for numerous organisations around the world. We adopt sustainability in all our operations, work mechanisms and decisions. We have a circular economy strategy that supports our ongoing efforts to optimise the use of resources and enrich social, economic and environmental value, promoting sustainability in the UAE and Dubai. We

adopt several policies and plans that align with the ambitious national strategies. We work to refine Emirati competencies and young talents, protect the environment and natural resources, mitigate the effects of climate change, and contribute to supporting the sustainable economic development.

We also work to diversify the energy sources and increase the share of renewable and clean energy in Dubai's energy mix. To achieve the Dubai Clean Energy Strategy 2050 and Dubai Net Zero Carbon Emissions Strategy 2050 to provide 100% of Dubai's total power production capacity from clean energy sources by 2050, we implement pioneering projects to diversify clean and renewable energy sources in Dubai to include the best and latest available technologies. We have, for many years, stopped launching new projects that produce energy using fossil fuels. We also restrict new water desalination projects to reverse osmosis technology using clean energy. All power generation and water desalination capacity expansions planned up to 2030 will be based on renewable and clean energy sources. The Mohammed bin Rashid Al Maktoum Solar Park is the most important clean energy project DEWA is implementing to achieve this goal and consolidate Dubai's position as a smart and sustainable city and a preferred destination for living, working, investing, and visiting. It is the largest single-site solar park in the world using the Independent Power Producer (IPP) model. It will have a production capacity of 5,000 MW by 2030. When completed, the solar park will reduce more than 6.5 million tonnes of carbon emissions annually.

Another project powering the Emirate's clean energy transition is our Green Hydrogen Project, the first of its kind in the Middle East and North Africa to produce hydrogen using solar power. We are also working on pumped-storage water technology using clean energy in Hatta. This is the first project of its kind in the GCC region. DEWA has also implemented several projects to increase energy efficiency.

DEWA contributed to reducing carbon emissions in Dubai by 21% in 2021, exceeding the target set in the Dubai Carbon Abatement Strategy 2021, which aimed to reduce 16% of carbon emissions by 2021. The updated target aims to reduce carbon emissions by 30% by 2030.

As part of our efforts to contribute to promoting Dubai's economy, DEWA has become a global role model in energy efficiency and reliability, providing its services according to the highest standards of reliability, efficiency and quality and keeping pace with the increase in energy and water demand. By the end of 2022, DEWA's capacity reached 14,517 megawatts (MW) of electricity and 490 million imperial gallons (MIG) of desalinated water per day. The production capacity of clean energy in Dubai has reached 2,027 megawatts (MW) using photovoltaic solar power (PV) and concentrated solar power (CSP). This is about 14% of Dubai's total power production capacity. In 2022, DEWA provided its services to 1,157,501 customers, according to the highest standards of sustainability, efficiency, availability, and reliability. This is an increase of 4.62% compared to 1,106,412 customers in 2021.

To promote green and sustainable mobility in Dubai and encourage the public to use environmentally friendly electric vehicles (EV), we launched the Green Charger initiative in 2014. We aim to increase the number of Green Chargers to over 1,000 stations by 2025. By the end of 2022, DEWA installed over 350 Green Charger stations with more than 620 charging points across Dubai.

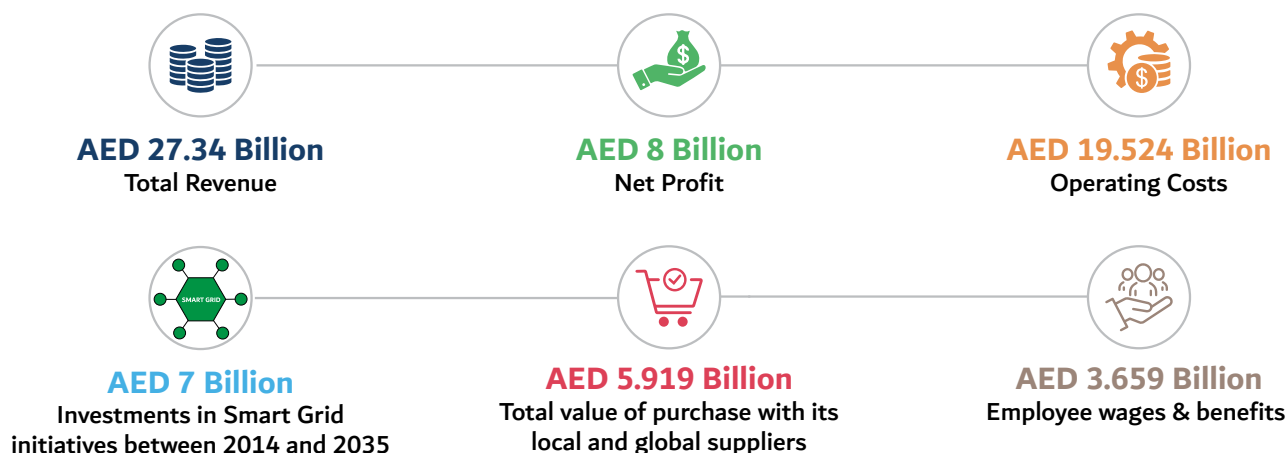
In April 2022, DEWA was listed on the Dubai Financial Market (DFM), becoming the largest company on the exchange by market capitalisation. Our initial public offering (IPO) was the world's largest in the utility sector in 2022, with strong investor demand, amounting to AED315 billion. The orderbook for the IPO was 37 times oversubscribed. The wide interest from local and international investors affirms DEWA's position as one of the most distinguished and pioneering utilities in the world. It also underlines the attractiveness of Dubai as a global capital market.

Adopting the latest global technologies in the production, transmission and distribution of energy and water contributed to DEWA's achieving world records in the performance indicators of the energy and water sectors. DEWA's results surpass major European and American utilities in several indicators. In 2022, losses from electricity transmission and distribution networks were reduced to 2.2% compared to 6-7% in Europe and the USA. Water network losses were also reduced to 4.5% compared to around 15% in North America. DEWA has achieved a new world record in electricity Customer Minutes Lost (CML) per year. Dubai recorded 1.19 minutes per customer, compared to around 15 minutes recorded by leading utility companies in the European Union.

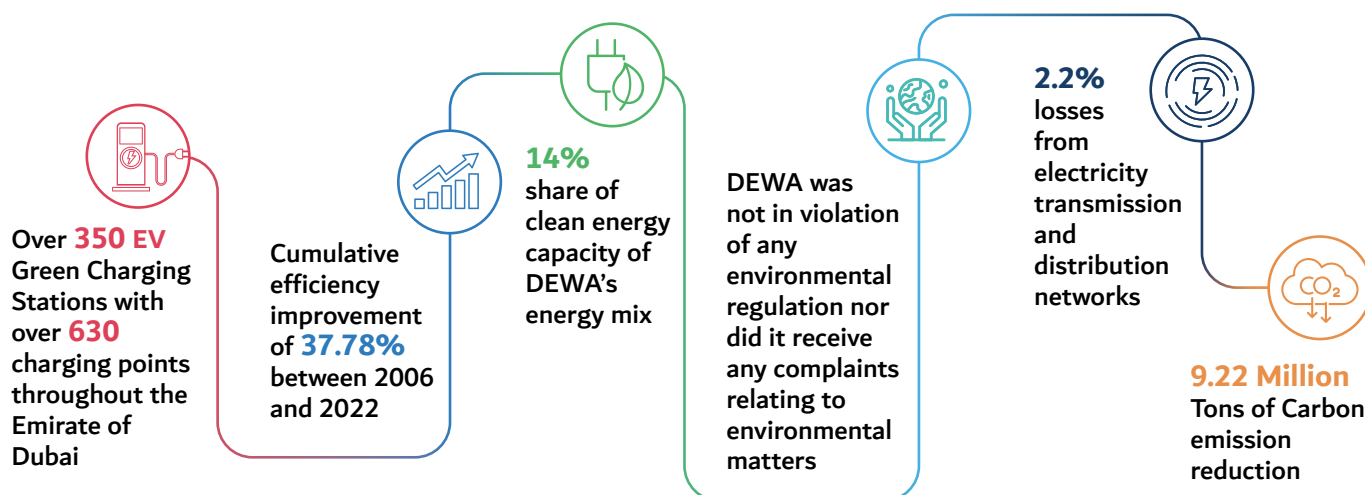
At DEWA, we are proud that we contribute to achievements that enhance the UAE's global position through major projects and innovative initiatives. These play an effective role in achieving the sustainable development and consolidating Dubai's position as a global hub for trade, finance, tourism and green economy. In the UAE, we do not rest on our laurels, but continue our relentless efforts to strengthen our record of achievements and consolidate the competitiveness of Dubai and the UAE at all levels to make the UAE the world's leading nation.

SUSTAINABILITY HIGHLIGHTS

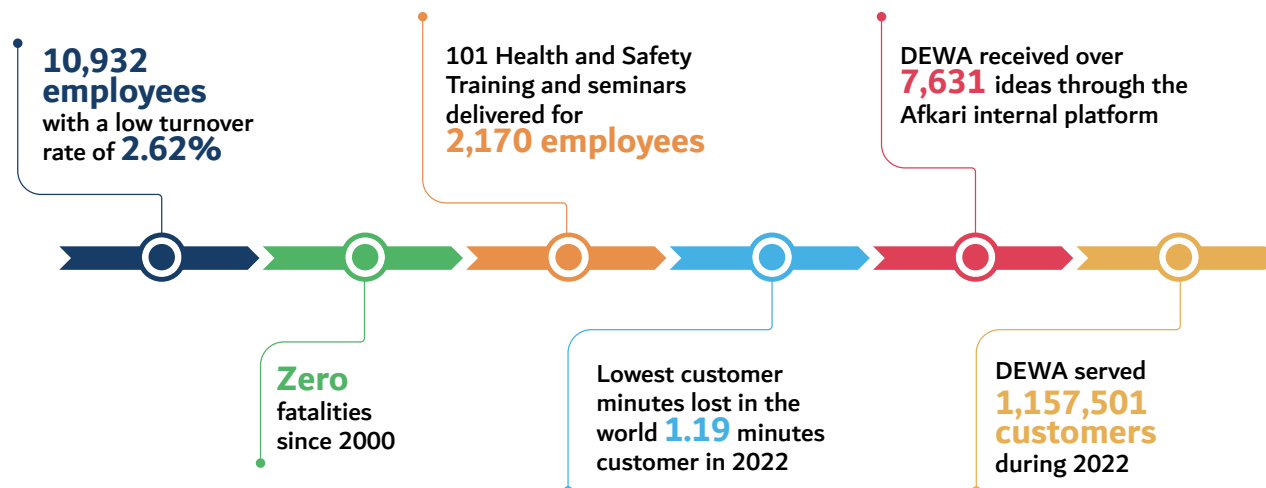
ECONOMIC HIGHLIGHT



ENVIRONMENTAL HIGHLIGHT



SOCIAL HIGHLIGHT



KEY HIGHLIGHTS IN 2022

Q1

1. Launched DEWA-SAT-1 nanosatellite (the world's first utility to use nanosatellite) on 13 January 2022 and has received its first signals from space
2. Won three diamond-level awards at the Harvard Business Council 2021 International Awards Second Cycle
3. Received the British Standards Institution (BSI) Kitemark for Innovation, making it the first government organisation to receive this certificate at a global level
4. DEWA received three international certifications from the British Standards Institute (BSI) for security management
5. Raised production capacity of the first project of the Mohammed bin Rashid Al Maktoum Solar Park's fifth phase from 300 MW to 330MW
6. DEWA achieved the highest score among international corporates in EFQM's Innovation Lens Award (First organisation in the world to receive 8 stars)

7. Implemented the smart ball leak detection technology in water transmission networks
8. Completed the construction of the first stage of the Aquifer Storage and Recovery (ASR) project for desalinated water and started the operations and testing stage

Q2

1. Registered a new patent for an innovative device for measuring the amount of water that can be extracted from the air during the condensation process
2. Added the Self-Assessment tool for residential customers to easily understand their consumption patterns
3. Launched the 'Dubai EV Community Hub' website for Dubai, aiming to increase EV adoption by centralising information regarding EV developments in Dubai
4. DEWA received effective governance certification BSi13500:2013 from BSI and a special award for 6 consecutive years

5. DEWA completed 98.83% of its project to extend its water transmission network by 36 kilometres across Dubai, at a total cost of about AED 266 million
6. DEWA completed 96.50% of the Sea Water Reverse Osmosis (SWRO) desalination plant at Jebel Ali Power Plant and Water Desalination Complex at a cost of around AED 897 million

7. Registered a new patent for an Unmanned Aerial Vehicles (UAV) charging system that enables continuous charging for UAVs and thus provide longer flying hours with a large storage capacity
8. Won three Global Excellence Assembly Awards 2022 in the same cycle. These awards were the Excellence in Innovation Award, the Business Innovation Award, and the Outstanding Customer Service Award
9. Commissioned 287 11kV substations in the first half of 2022, with 177,875 working hours according to the highest quality, efficiency, and safety standards, while following all precautionary measures

10. Won three Global Good Governance (3G) Awards from Cambridge IFA in the UK
11. Added 700MW of energy production capacity, totalling 14,117 MW, with 1,627 MW from renewable energy
12. DEWA completed 57% construction of water microfiltration units in Hatta
5. DEWA achieved the Guinness World Records title for owning and managing the Largest Single-Site Water Desalination Facility in the world with a production capacity of 490 (MIG) of water per day
6. DEWA's R&D centre published 103 research papers in international scientific conferences and international peer-reviewed journals
4. DEWA commissioned two new transmission substations in two residential areas in Dubai
5. DEWA completed 93% of 4th phase of H-Station in Al Aweer with investments totalling AED 1.1 billion
6. Won the Best Creative Electricity and Water Solutions Brand award from Global Brands Magazine Awards 2022

Q3

1. Received two ISO certifications in Information Security Governance and Information Technology Governance for the third consecutive year
2. DEWA registered a patent for a user-friendly robotic carrier to transport solar photovoltaic panels easily and safely from any surface
3. DEWA signed a partnership agreement with Dutch start-up Desolenator BV, to build a sustainable, carbon-neutral water purification and desalination system based on solar thermal energy, targeting a levelised cost of potable water production at a rate that is less than US\$0.02 per litre
4. DEWA reduced the maintenance outages for key inspection operations from 11 days to 9 days, a reduction in the maintenance duration of 18%, compared to the previous world record achieved by DEWA in 2019
7. DEWA commissioned 389 11kV substations in Dubai, resulted in a total of 404,712 man hours, according to the highest standards of quality, efficiency and safety
8. DEWA ranked the third most valuable utility brand in the Middle East and the third fastest growing brand in the UAE as per 'Brand Finance'
7. Launched the construction work for the Hatta Sustainable Waterfalls project
8. DEWA achieved first place worldwide in the International Digital Customer Experience Standard (IDCXS) with 100% score from first assessment
9. DEWA completed 58.48% of hydroelectric power plant in Hatta

Q4

1. DEWA's customers conducted around 8 million transactions using its digital channels and those of its partners
2. Added 600MW of clean energy production capacity from the 5th phase of the Mohammed bin Rashid Al Maktoum Solar Park
3. DEWA completed 75.9% of the water reservoir project in Hatta

10. DEWA achieved the best financial results in its operating history



01

DEWA PJSC AND ITS REPORTING PRACTICES

ABOUT DEWA PJSC

(GRI 2-1, GRI 2-6)

Dubai Electricity and Water Authority (DEWA) was formed on 1 January 1992, by a decree issued by the late Sheikh Maktoum bin Rashid Al Maktoum to merge Dubai Electricity Company and Dubai Water Department, which had been operating independently before then. Both organisations were established by the late Sheikh Rashid bin Saeed Al Maktoum in 1959. Dubai Government fully supported the two organisations to provide Dubai's citizens and residents with their electricity and water needs.

Since its establishment, DEWA has made considerable achievements, to be ranked as one of the best utilities in the world. Today, DEWA provides its services to more than one million customers in Dubai, according to the highest standards of efficiency, reliability, and availability.

In April 2022, DEWA was listed on the Dubai Financial Market (DFM). DEWA became the largest listed company in the market, with a marketing value of AED 124 billion (USD 33.8 billion). The offering included the sale of 9 billion shares, representing 18% of its capital.

As Dubai's exclusive power and water provider, DEWA provides its services to 3.541 million people living in Dubai

and the Emirate's active daytime population of over 4.7 million. These numbers are expected to grow to 5.8 million and 7.8 million, respectively, by 2040.

By the end of 2022, DEWA served 1,157,501 customers, representing an increase of 14,438 customers from the third quarter of 2022. DEWA added 51,089 new customers in 2022, which is a 4.6% increase from 2021.

PURPOSE

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

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

SUSTAINABILITY REPORTING AT DEWA

(GRI 2-2, 2-3)

Since 2013, DEWA has been issuing its sustainability reports in alignment with Global Reporting Initiative (GRI) Standards. We are pleased to prepare our sustainability report in accordance with the Sustainable Development Goals (SDGs), and the principles of the United Nations Global Compact.

DEWA is a member of the GRI Gold Community and part of the Standards Pioneers Programme,

being one of the first 100 organisations in the world to adopt the new standards for the 2016 report onwards for the Core option. In our previous report, DEWA had aligned its report to the Revised Universal Standards 2021 ahead of the effective implementation date on January 1, 2023. DEWA continues to implement the latest update on GRI standards and its disclosure requirements in DEWA's tenth report. The report has been developed by considering GRI Reporting Principles of Accuracy, Balance, Clarity, Comparability, Completeness, Sustainability Context, Timeliness and Verifiability.

Through this report and the outcomes of our continual stakeholder engagement processes, the report summarises the materially relevant economic, environmental and social perspectives for the year 2022. Unless otherwise stated, all data is as of December 31, 2022. In addition, the report highlights the ways in which DEWA is fulfilling its long-term commitments towards sustainability, enabling the organisation to communicate its sustainability to its stakeholders and to further enhance dialogue 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)

Stakeholder engagement is the fundamental starting point for an organisation to carry out its sustainability reporting cycle. DEWA has engaged with relevant internal and external stakeholders including DEWA's top management, DEWA's employees, government entities, investors, suppliers, customers, society, and partners.

In December 2022, DEWA organised 4 virtual stakeholder engagement workshops through an innovative and interactive tool (Mentimeter) to assess 35 material topics. The aim of the workshops was to identify the material topics and to assess the

impact to be reported for the next reporting cycle 2022.

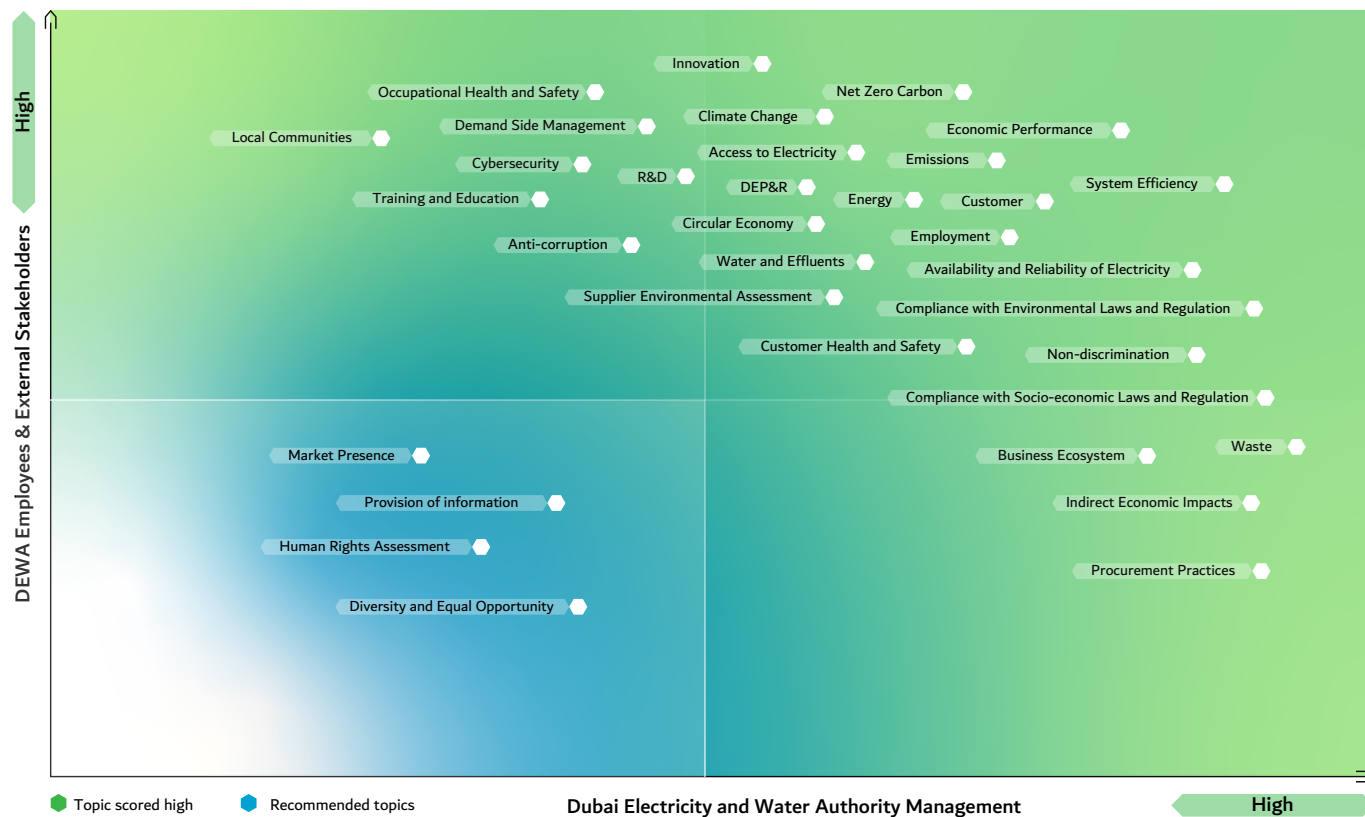
Besides the material topics of GRI, DEWA's 2022 sustainability materiality analysis accounted for the latest megatrends including net zero carbon emission, circular economy, cyber security and business ecosystem that are likely to become more relevant in the coming years.

In line with the GRI Standards, the sustainability report is required to disclose the highest ranked material topics, which have the most significant impact on the economy, environment and people including impacts on their human rights as a result of the organisation's activities or business relationships.

The materiality matrix below

illustrates the outcomes of the 2022 materiality assessment process. This matrix has been approved by DEWA's top management and used as a basis to develop the current report. The horizontal axis depicts DEWA management's viewpoints, whereas the vertical axis depicts the viewpoints of DEWA's stakeholders.

DEWA'S 2022 MATERIALITY ASSESSMENT RESULTS



FINANCIAL PERFORMANCE SCOPE

For detailed financial information on our performance and results for 2022, please check our (Financial statement for full details).

The financial data presented in the Financial statement is in accordance with International Financial Reporting Standards.



VALUE CHAIN AND OTHER BUSINESS RELATIONSHIPS

(GRI 204-1, 2-6, 308-1, 308-2)

SERVICES

In 2022 DEWA revised and updated its services catalogue to have 25 public services to its customers under 6 main services in response to Dubai government directives to reduce government procedures for doing business by 30%. The following are DEWA's 6 main services:

1. Electricity & Water Management Services
2. Billing Services
3. Sustainability & Consumption Management Services
4. NOC Services
5. Electricity Network Services
6. Water Network Services

For more information about consumer services, visit the following link:



SUPPLIERS

Across its upstream supply chain and operations in 2022, DEWA engaged with different global and local suppliers in the areas including, but are not limited to, maintenances, consultant, constructions services as well as materials and equipment for water and electricity services. It worked with 1,676 suppliers of which 22 are strategic suppliers, 183 core suppliers and 1,471 basic suppliers. Geographically, DEWA worked with 1,585 local suppliers whereas 91 were considered as global suppliers. The Number of Local transactions conducted during 2022 were 13,338 and the total value of Purchase with its local and global suppliers were AED 5,918,713,000, of which 94.53% products and services were purchased locally.

DEWA is committed to promoting sustainable environmental practices with suppliers, contractors and customers by applying supplier assessment, and green procurement criteria based on environmental performance. In addition, DEWA selects suppliers taking into consideration the environmental impact of their product or service.

DEWA has the responsibility and the ability to motivate its suppliers to improve their environmental, ethical and social performance

through actions that foster excellence in their management of sustainability.

DEWA'S CUSTOMERS (EU3)

During 2022, DEWA served 1,157,501 customers, representing a 4.62% increase compared to the last year. Accordingly, DEWA has added 51,089 new customers since the end of Q4 2021. During 2022, DEWA generated 52.89 Terawatt hour, representing a 5.36 % increase from the last year. Similarly, DEWA produced 136.254 MIG of desalinated water, representing an 8.01% increase from last year.

Number of Customer Accounts as of 31 December 2022

Description	Electricity		Water	
	No. of customer accounts	Percentage	No. of customer accounts	Percentage
UAE National	72,079	6.46%	67,965	6.83%
Expatriates	797,473	71.42%	772,036	77.55%
Commercial	226,667	20.30%	150,921	15.16%
Government Organisations	6,184	0.55%	1,992	0.20%
Industrial	3,150	0.28%	1,640	0.16%
EV	9,653	0.86%	-	-
Port sales	-	-	424	0.04%
Exempted	1,369	0.12%	500	0.05%
Total	1,116,575	100.00%	995,478	100.00%

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, which 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 two 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. Six 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 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 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 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 contracted electricity generation capacity of 900 MW, which is located in, and constitutes the fifth phase of the MBR Solar Park.
- **NoorEnergy1** 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 that has 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.

FINANCIAL COMPANIES PORTFOLIO

- **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 CO2 emission per year over the next 30 years.
- **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-bat projects executed by Etihad ESCO.

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

DEWA'S GOOD GOVERNANCE

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

DEWA has implemented in letter and spirit the best principles of "Good Governance" by choice and voluntary action for the adoption of best practices. Its Good Governance model is based on four pillars: Trust, Fairness, Transparency and Accountability. The Company continuously benchmarks its activities with international institutions such as the OECD, the World Bank, UN organisations and global peers. DEWA's good governance framework cascades from the strategic directions of the Government of Dubai and the UAE, translated into the goals of its good governance practices and underlined by DEWA's good governance principles. DEWA is committed to having a robust governance framework that complies with the local requirements set by the Securities and Commodity Authority and the Dubai Financial Market.

DEWA currently positions itself as the benchmark for many local, regional and global companies due to its outstanding performance and achievements over the years.

See DEWA's Governance Report for full details



DEWA'S ECOSYSTEM

The ecosystem describes DEWA's business and interaction with the external environment of the five key components. It shows the core business starting from planning and ending with customer happiness, and how

this core business is supported by the other support functions to create a sustainable value for all stakeholders and collect feedback to improve the value provided through innovation.

It also demonstrates how DEWA has influence and is a leader in its ecosystem by motivating others and showcasing what can be accomplished for the benefit of others as well as DEWA.

The DEWA ecosystem is made up of five key components, which include:

- DEWA's core business and support activities
- Extended enterprise (Subsidiaries)
- DEWA's stakeholders
- The local environment
- The global environment and megatrends



STRATEGY, POLICIES, & PRACTICES

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

STRATEGIES

Strategically Driven:

The UAE and the Dubai government are continuing to adopt and establish several policies to secure the UAE's long-term development and growth. DEWA's strategy is constantly aligned with important international events and trends, as well as national strategies, to ensure its successful contribution to Dubai's and the UAE's long-term growth

DEWA'S STRATEGIC INTELLIGENCE FRAMEWORK

DEWA's Strategic Intelligence Framework is a systematic continuous past-forward, today-onward, and future-back assessment that feeds strategic intelligence into the organisation by using an existing insights ecosystem that supports the strategy on each phase through innovation.

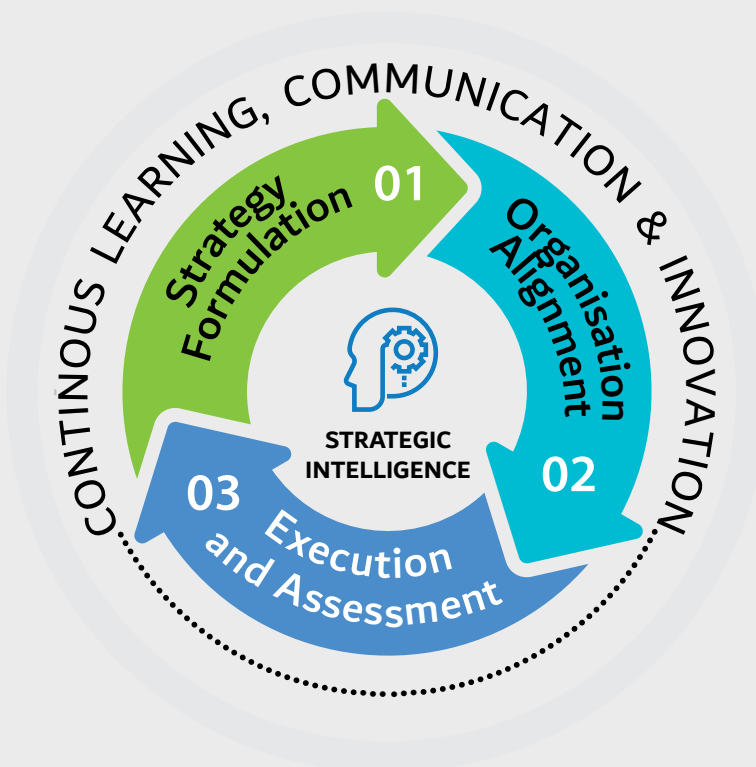
The Strategy framework is divided into three phases:

1. The **Strategy Formulation** process at DEWA includes

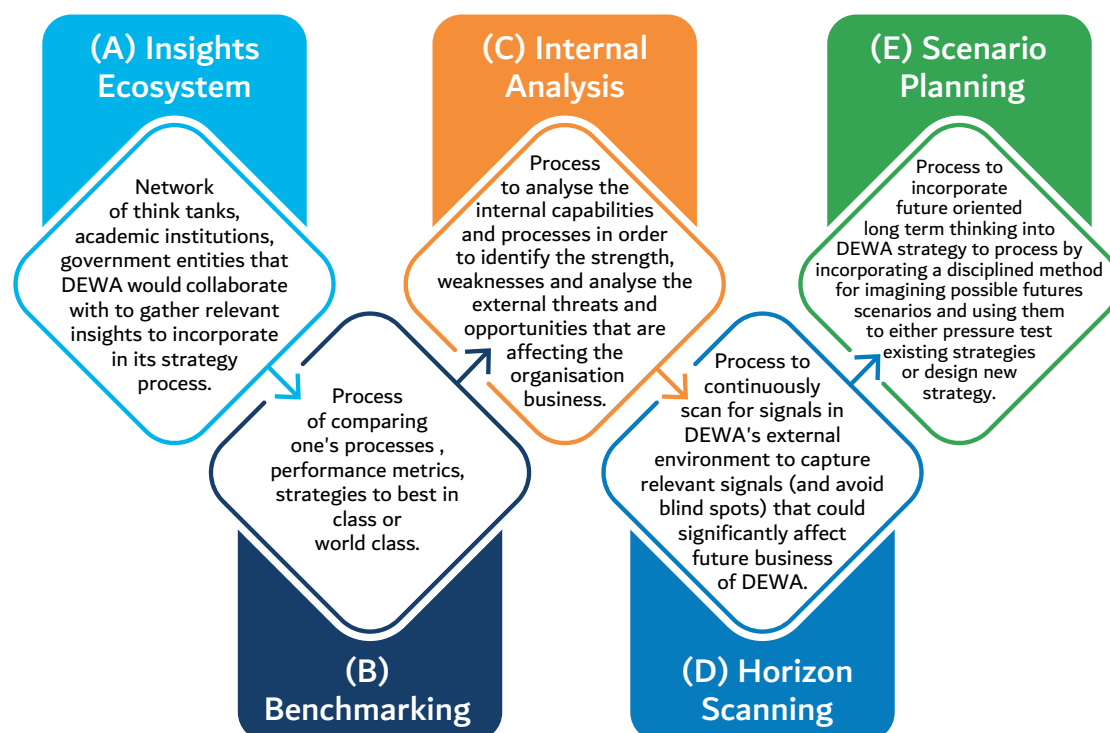
identifying the strategic direction and then constructing the corporate strategy using strategic insights.

2. The focus of **Organisational Alignment** is on aligning divisions with the overall strategy and developing strategic initiatives to achieve it.
3. The **Execution and Assessment** focus on putting the strategy into action and analysing progress in order to track business performance versus specified goals and targets.

DEWA's Strategic Intelligence Framework include the following:



The Strategic Intelligence Framework of DEWA is built on five major pillars:



DEWA STRATEGY ALIGNMENT:

DEWA's strategy is in line with global, UAE, and Dubai-level directives.

United Nations Sustainable Development Goals:

The SDGs came into effect in January 2016 and are a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. Each of the 17 Goals has specific targets to be achieved over the next 15 years.

10 Principles of the United Nations Global Compact:

The United Nations Global Compact is the world's largest corporate sustainability initiative, with more than 13,000 corporate participants in over 170 countries. The Global Compact is based on ten fundamental principles relating to human rights, labour,

environment and anti-corruption.

8 Principles of Dubai:

The 8 defining Principles of Governance for Dubai, endorsed by HH Sheikh Mohammed bin Rashid Al Maktoum, show the well-being of the UAE's people, the sustained progress of the nation, and the welfare of future generations. The Principles lay a strong foundation for the UAE's future growth, economic conditions, business, law and more.

50-Year Charter:

The Charter marks HH Sheikh Mohammed bin Rashid Al Maktoum's 50 years of service to the country and outlines plans to improve the quality of life in Dubai for its citizens and residents over the next 50 years. The Charter, issued in 2019, represents the pledge and promise to enhance the lives of people in Dubai. It

includes what will be undertaken to improve the quality of life, develop the community of Dubai and ensure a brighter future for generations to come.

UAE and Dubai Innovation Strategy:

The Dubai Innovation Strategy focuses on ten sectors that are aligned with the National Innovation Strategy and aim to improve living standards in Dubai. For DEWA, innovation is a priority for improving its services and initiatives, and a key element in developing its strategies and work plans.

UAE Centennial 2071:

The UAE Centennial 2071 plan focuses on human development through educational programmes with a concentration on Information Technology and engineering, promoting the UAE's

image and soft power globally, enhancing community cohesion and respect while strengthening Emirati values, and ethics and building a diversified and competitive economy.

UAE Water Security Strategy 2036:

The aim of the UAE Water Security Strategy 2036 is to sustain access to water under both regular and emergency conditions in keeping with national regulations and international standards set by the World Health Organisation. Some of the main targets for the strategy include: reducing the demand for water by 21%, increasing the reuse of treated water to 95% and increasing the national water storage capacity by up to two days.

UAE Strategy for Artificial Intelligence:

Launched in October 2017, the UAE Strategy for Artificial Intelligence is the first of its kind in the world. It aims to achieve the objectives of the UAE Centennial 2071, boost government performance at all levels, use an integrated smart digital system that can overcome challenges and provide quick, efficient solutions, make the UAE the first in the field of AI investments in various sectors, and create a new vital market with high economic value.

The UAE Strategy for the Fourth Industrial Revolution:

The UAE Strategy for the Fourth Industrial Revolution aims to achieve customer happiness and to position the UAE as a model for interactive cities using AI, innovative education,

intelligent genomic medicine and robotic healthcare to achieve sustainability.

Dubai Clean Energy Strategy & Demand Side Management Strategy (DSM):

The Dubai Clean Energy Strategy 2050 sets targets to have 25% of Dubai's total energy production capacity from clean energy by 2030 and 100% by 2050, while the DSM 2030 aims to reduce energy and water demand by 30% by 2030. DEWA plays an essential role in achieving these goals by reinforcing the renewable energy sector and fuel diversification to meet the objectives of the Dubai Clean Energy Strategy 2050, which maps out Dubai's energy sector over the next three decades. The Dubai Clean Energy Strategy 2050 and the Dubai Net Zero Carbon Emissions Strategy aim to obtain 100 per cent of Dubai's total power capacity from clean energy sources by 2050.

Dubai 10X:

HH Sheikh Mohammed bin Rashid Al Maktoum called on all Dubai Government entities to embrace disruptive innovation, to exploit available technologies to deliver new or existing services in radically different ways that are designed thinking-based and customer-focused. Disruptive innovation should be adopted by all government entities as the basis of their operations, and its methodologies should be incorporated into all aspects of their work.

Circular Economy Policy 2021-2031:

The UAE Circular Economy Policy

is a comprehensive framework for determining the country's approach to achieving sustainable governance and the ideal use of natural resources, by adopting consumption and production methods that ensure the quality of life for current and future generations. The policy comprises several key objectives, such as:

- Promoting environmental health
- Supporting the private sector in adopting clean production methods
- Reducing natural environmental stress, to achieve the country's vision to be a global pioneer of green development.

The UAE National Space Strategy 2030:

The UAE National Space Strategy 2030 aims to enhance the space sector's contribution to the national economy and promote the UAE's regional and international presence in the space sector.

Dubai 2040 Urban Master Plan:

Dubai 2040 Urban Master Plan maps out a comprehensive plan for sustainable urban development in Dubai. It focuses on enhancing people's happiness and quality of life and reinforcing Dubai as a global destination for citizens, residents and visitors over the next 20 years.

Dubai 3D Printing Strategy:

The Dubai 3D Printing Strategy aims to exploit technology for the service of humanity and promote the status of the UAE and Dubai

as a leading hub of 3D printing technology by the year 2030. Dubai's key goal is to ensure that 25% of buildings in Dubai are based on 3D printing technology by 2030

The United Nations Sustainable Development Goals 2030

Since the announcement of the United Nations Sustainable Development Goals (UNSDGs) 2030 in 2015, DEWA has taken proactive steps to acknowledge the importance of the UNSDGs

for global well-being. It designed an award-winning approach to the SDGs, built on five key pillars, which include:

- 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

DEWA has prioritised the SDGs into three main tiers, considering the goals as either business-critical priorities for DEWA as a successful water and electricity company, key to DEWA's leadership commitments as a leading sustainable innovative global corporation, or important for DEWA as a stakeholder in Dubai and internationally.



Progress towards the SDGs

It is crucial to reinforce global commitments and unify efforts towards achieving the SDGs. These include joint efforts of governments and businesses alike. Every year, DEWA reaffirms its position as a leading organisation striving to achieve sustainable development for Dubai, with an impact that extends beyond the UAE and the MENA region to the world. One such example is the Mohammed bin Rashid Al Maktoum Solar Park. In 2015, the MBR Phase II tender achieved a world record electricity price of 5.84c/kWh while the global average was above 10c/kWh. A second world-record was registered in 2017 as the first below 3c/kWh project for MBR Phase III. A third near-world record was achieved for Phase IV tender at 1.69c/kWh in 2019. These projects demonstrated that solar energy without subsidies can be competitive even with low-cost domestic fossil fuels. Not only did the success of the solar project in Dubai pave the way for other similar projects in the region, but it also played a significant role in driving down the global cost of renewable energy, making modern renewable energy more affordable in direct alignment with Goal 7 of the SDGs: Affordable and Clean Energy.

To learn more about DEWA's efforts towards specific goals or targets, please refer to the GRI content index available at the end of this report.

United Nations Global Compact

DEWA is a signatory of the United Nations Global Compact (UNGC) since 2017. In February 2019, DEWA was invited by the UNGC to take part in and chair the UNGC UAE Local Network. This came as a result of DEWA's proactive role in contributing to the United Nations Sustainable Development Goals 2030 and in recognition for the support DEWA has shown to the UN Global Compact since joining in 2017.

DEWA is committed to the 10 principles of the UNGC, which are integrated in the policies and processes of the organisation. DEWA previously used its annual Sustainability Reports as its Communication on Progress for the UNGC. The UNGC updated its reporting mechanism, effective as of 2023, for the 2022 reporting cycle and onwards. Participants of the Global Compact are to submit their commitments and progress towards the 10 principles through a new standardised online questionnaire directly on the UNGC website. As such, DEWA's annual Communications on Progress for each calendar year will be available on the UNGC website by the end of the 1st quarter of the following year.

POLICIES

DEWA has different policies to affirm its commitments and business activities that are in line with national and international strategies, laws, regulations and goals in relation to economic, environmental, social, and human rights aspects.

**See DEWA PJSC
(Policies for full details)**



PRACTICES

Employee Grievances and Complaints (GRI 2-25)

DEWA is committed to implementing administrative action procedures that are fair, consistent and uniform and prompt to discourage negative behaviour in the workplace environment. DEWA has grievances and complaints regulation/ mechanisms and systems for its employees, seconded or deputed to DEWA in order to raise any concerns/ complaints from their end. DEWA established the Grievances & Complaints Committee to oversee and determine employee grievances and complaints cases that are referred to it.

The following is the grievances process within DEWA:

- The employee submits a grievance either to HR directly or through email or to his/her direct manager, EVP or to the MD&CEO office.
- HR receives and forwards the grievance form to the employee's divisional head to provide his/her comments and/or justification.
- HR obtains approval from the MD&CEO to refer the grievance request to the Grievances & Complaints Committee for study.
- The Grievances & Complaints Committee studies the submitted grievance request along with the divisional head's comments and prepares its recommendation and forwards it to the MD & CEO for approval.
- The employee is notified officially of the Grievances & Complaints Committee's recommendation.

The following is the complaint process within DEWA:

- The employee submits his/her complaint either to HR directly or through email or to the MD&CEO's office
- HR receives and forwards the complaint form to the employee's divisional head to investigate and try to solve it. If the complaint is resolved by the divisional head, HR is notified and the case is closed.
- If the complaint is not closed at the level of the divisional head, the divisional head forwards the investigation report to HR for further action.

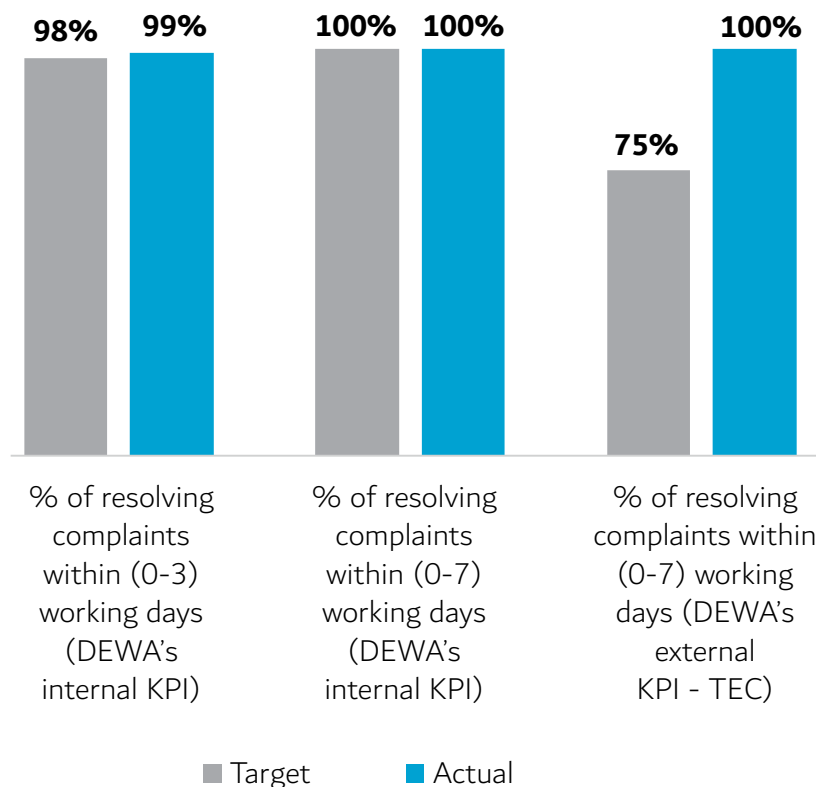
- HR obtains the MD&CEO's approval to refer the complaint request to the administrative violation committee for investigation.
- The administrative violation committee investigates the complaint and forwards their recommendation to the MD & CEO for approval.
- The employee is notified officially of the administrative violation committee's recommendation.

CUSTOMER COMPLAINTS & SUGGESTIONS PROCESSES

DEWA's customers can voice their complaints or provide suggestions related to DEWA services through Dubai Government's Unified eComplain System in order to improve the services and enhance practices. From the time of submitting complaints, complainants can get resolved within (0-3) working days. Please refer to the graph.

Besides the unified system, complainants can also approach DEWA to express their dissatisfaction through the below channels:

- 1. DEWA website**
www.dewa.gov.ae
- 2. Email:**
customercare@dewa.gov.ae
- 3. Smart devices at Customer Happiness Centres**
- 4. Customer Care Centre**
Telephone: 04-6019999
- 5. DEWA smart app**



MECHANISMS FOR SEEKING ADVICE AND RAISING CONCERNS

(GRI 2-26)

DEWA recognises the prevention of wrongdoings, including any breaches of the laws in its operations or business relationship, and affirms its commitment to conduct its business and operations in an honest and ethical manner. DEWA will ensure transparency and integrity in all its business dealings and relationships wherever it operates and will implement and enforce effective systems and procedures to ensure prevention, detection and action against wrongdoings.

DEWA adopts a **zero-tolerance** approach towards any wrongdoings in its business activities and operations; and

in line with best practices and procedures, and the DEWA Code of Conduct for employees, appropriate preventive and punitive action will be taken against such acts.

WHISTLEBLOWING

DEWA is fully committed to maintaining high standards of ethical and legal business conduct with honesty, accountability and integrity at all times. DEWA's Whistleblowing Policy was created to encourage a climate of open communication and trust through a transparent and confidential process for handling any concerns.

Employees and stakeholders can raise and disclose their concerns about any wrongdoing, including concerns about any illegal practices or financial and administrative irregularities or misconduct or any act violating DEWA's rules, regulations,

policies and procedures within or in connection with DEWA activities through dedicated standards and procedures. Any employee of DEWA or any other stakeholder can raise and report their concerns through the following channels:

1. Anonymously reporting through a Whistleblowing Hotline (04-3222202)
2. DEWA Smart Office Application – Whistleblower Smart Application
3. DEWA Ethics email: ethicshotline@dewa.gov.ae

In addition to the above, employees can report any concerns to Legal Affairs/ Business Support and Human Resources division, and the direct manager/divisional head of the employee, as the case may be.

MEMBERSHIP ASSOCIATIONS

(GRI 2-28)

DEWA plays an active role in a number of national and international organisations, councils, and committees. These include, but are not limited to, the following organisation's 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 Organization
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 a number of additional committees, which are made up of 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, and Digital Transformation Committee.

STAKEHOLDER ENGAGEMENT

(GRI 2-29)

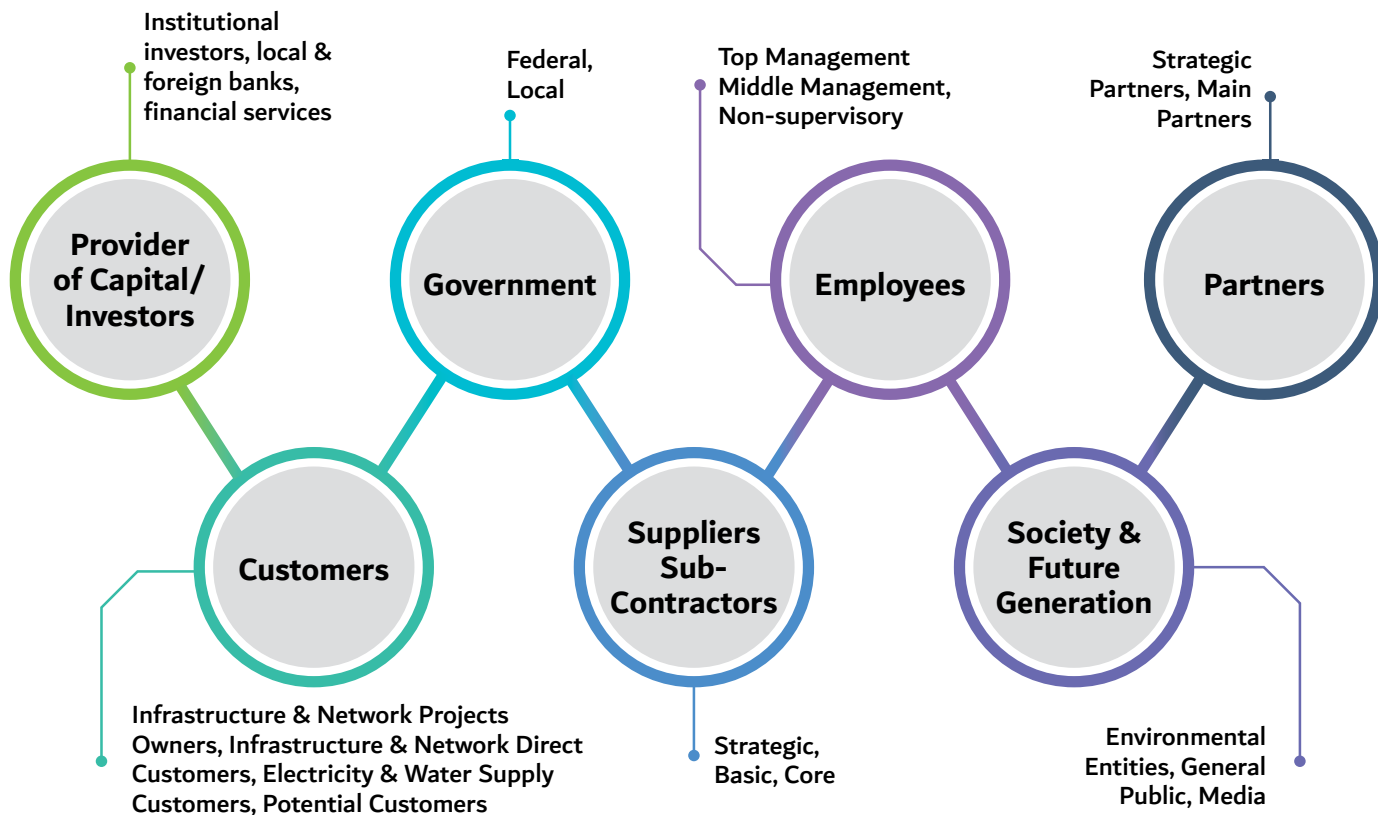
Every strategy revolves around the stakeholders, as they play a major role in assuring the success, continuity, and effectiveness

of the strategy. DEWA places stakeholders at the centre of its strategy and objectives and maintains 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 that 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:

- Organising stakeholder-engagement workshops for key stakeholder groups
- 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.

Annually, DEWA's Corporate Strategy department is responsible for reviewing the list below 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 an entire department dedicated to Stakeholder Happiness and its responsibility is to oversee and coordinate the efforts of stakeholder management across all DEWA divisions to meet stakeholder expectations.

Implementing the Happiness Strategy helps DEWA to understand the needs of all stakeholders (Customers, People, Government, Capital Investors, Partners, Suppliers & Society).

DEWA delivers products and services beyond stakeholder expectations and anticipates their future needs. DEWA constantly measures its stakeholder happiness level and responds accordingly. All these elements work together to ensure the best representation of the UAE to the world. In addition, this supports DEWA's aim to create sustainable value for all its stakeholders.

To support DEWA's aim of creating sustainable value for all its stakeholders, the Stakeholders Happiness department identified key divisions within DEWA as champions to be responsible for managing the happiness

of a stakeholder group. The responsibility of Happiness champions is to follow up and report on the outcomes of the associated projects and initiatives. In addition, DEWA has created a registry form to identify the definition of a stakeholder, its sub-categories, the preferred channel of communication, factors affecting DEWA's relationship with the stakeholder, and the best ways to engage.

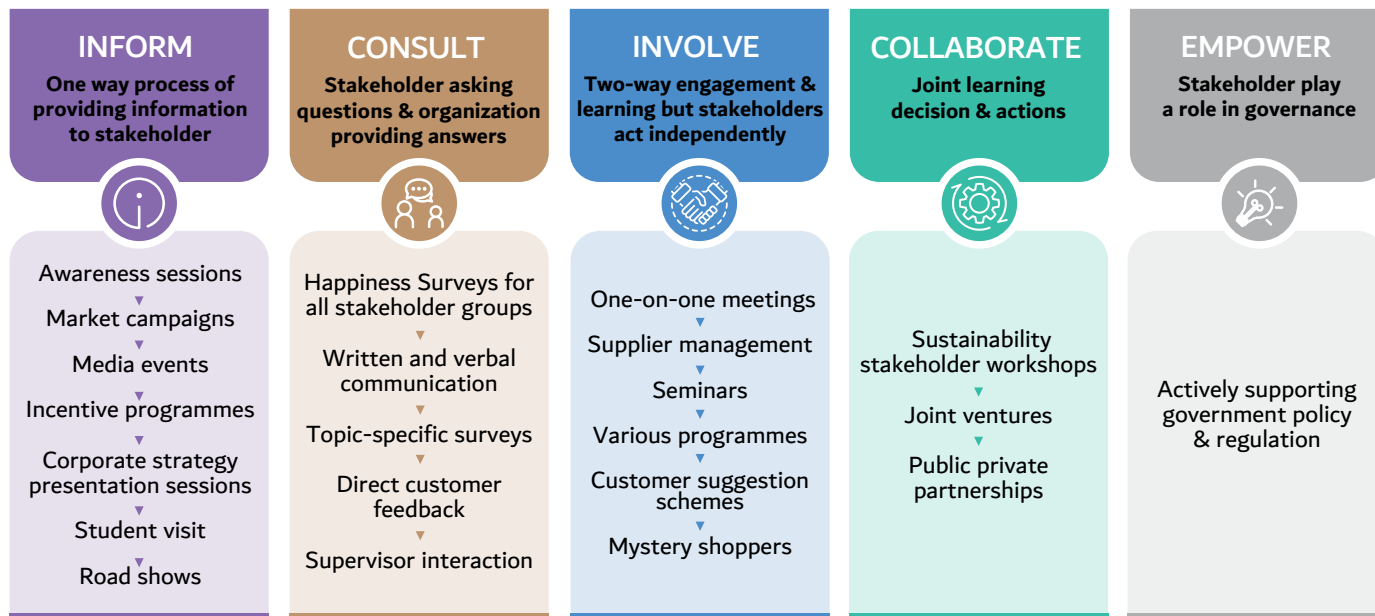
Below is a champions and agents workshop conducted for the happiness champions with the cooperation with the Agility team which was followed by a visit to Museum of the Future.

DEWA runs an annual creativity 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 in below.










STAKEHOLDER NEEDS AND 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. For example, in 2022, the Stakeholder Happiness Department conducted

its creativity labs to collect their needs and expectations. This feedback is recorded and shared with the management and concerned teams internally to be integrated into decision-making. 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"> • Aligning with national development plans & programmes • Commitment to good citizenship • Regulatory compliance
 Customers	<ul style="list-style-type: none"> • Quality safety and cost - effectiveness of service • Ethical business • Reducing the environmental impact of organisation activities
 Employees	<ul style="list-style-type: none"> • Secure working environment • Competitive salaries • Ethical behaviour • Non-discrimination & recognition • Investment in professional developments • Career progression & recognition
 Partners	<ul style="list-style-type: none"> • Sharing best practices • Continuous and systematic dialogue and engagement • MoUs to collaborate on issues
 Society and Future generation	<ul style="list-style-type: none"> • Transparency and effective communication • Raising awareness on sustainability issues • Supporting social and cultural initiatives • Management of environmental impacts of organisation activities
 Suppliers	<ul style="list-style-type: none"> • Supplier qualification based on cost and quality including environmental and social assessment • Transparent procurement processes • Profitability
 Providers of capital/ Investors	<ul style="list-style-type: none"> • Creating value in the short and long term • Reliability, profitability and transparency

Through a centralised Happiness Index Dashboard that is accessible to the top management, DEWA can measure the effectiveness of stakeholder engagement activities. The perceptions of all stakeholders group can be reflected within the dashboard. In addition to that, happiness initiatives also are shown for all concerned stakeholder champions along with the progress, showing benchmarking results at a local and international level, displaying the stakeholder's prioritisation weights, including the stakeholders' registry form.

STAKEHOLDER HAPPINESS RATE

DEWA recognises the importance of stakeholder management to the achievement of its business objectives. DEWA gives special attention to its stakeholders' voices and strives to collect their input and feedback through different channels, methodologies and frequencies, leveraging on the added value that DEWA could accomplish from engaging all its 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 for understanding 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 2022 are as follows:

Survey	Employee Happiness Rate	Partner Happiness Rate	Supplier Happiness Rate	Society Happiness Rate	Government Happiness Rate	Provider of Capital Happiness Rate
Rate	90.00%	92.47%	86.52%	93.02%	95.56%	94.87%

Results of Stakeholder Sustainability Satisfaction Survey 2022

						
Society (Community)	Society (Bunsiness)	Government	Suppliers	Customers	Partners	Provider of Capital
91.05%	95.34%	94.17%	90.33%	87.31%	92.90%	92.49%

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

Topic	DEWA has clearly defined and communicated its commitments to sustainability Employees	I understand DEWA's role in contributing to the achievement of the 17 UN Sustainable Development Goals Employees	How does the Sustainability performance of your organisation affects your investment decisions for providers of capital	Sustainable and environmental products and services DEWA Suppliers
Rate	92%	91.8%	57.1%	90.16%

DEWA ON DFM

في سوق دبي المالي



02

Economic Perspective

ECONOMIC PERSPECTIVE

ECONOMIC PERFORMANCE

(GRI 2-1)

LISTING IN DFM

In April 2022 DEWA became a public listed company on the DFM after a successful IPO for US\$ 6.1 billion, that was oversubscribed 37 times, becoming the largest IPO in UAE history and the biggest issue by any utility company in the world after 2008. With a valuation of AED 124 billion, DEWA became the largest company by market value on the DFM and significantly boosted the exchange's profile.

Investors acknowledged DEWA's healthy balance sheet, track record of operating excellence and financial prudence, its ESG strategy and commitment to a green future including Dubai's ambitious 2050 net zero emission goal. The IPO also signalled a strong vote of confidence by 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 2022, DEWA achieved record results and delivered the best 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 15% to AED 27.34 billion was

mainly driven by an increase in demand for electricity, water and cooling services. The consolidated net profit for the year 2022 was AED 8 billion compared to AED 6.6 billion in 2021 which is an increase of 22%, demonstrating sustainable growth. Consolidated Earnings Per Share increased by 25% from AED 0.12 in 2021 to AED 0.15 in 2022. DEWA delivered a sector-leading dividend yield of 8% at the IPO price of AED 2.48 for the year 2022. 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 2.2% and 4.5% respectively; and the world's lowest Customer CML time of 1.19 minutes.

KEY FACTS ABOUT DEWA:

- AED 27.34 Billion** Total Revenues - consolidated
- AED 8 Billion** Net Profit - consolidated
- AED 19.524 Billion** Operating costs - Consolidated
- AED 3.659 Billion** Employee Wages and Benefits - Consolidated
- AED 16.155 Billion** Payment to Providers of Capital - Consolidated
- 127.041 Billion Imperial Gallons** Unit Sold - Water
- 47.312 Terawatt Hour** Units Sold - Electricity
- 44.07% Debt to Equity** - Consolidated
- 8.88% Return on Equity** - Consolidated
- AED 10,120 Million** Capital Expenditure - Consolidated

AVAILABILITY AND RELIABILITY OF ELECTRICITY

(GRI 3-3, EU2, EU10)

DEWA is the sole electricity and water service provider in the

emirate of Dubai. Hence, DEWA prioritises ensuring the availability, reliability and uninterrupted supply of all services to its customers through its enhanced and developed facilities such as power stations, desalination plants, transmission networks, and distribution networks. In

2022, the total power generation in DEWA was 52,892,299 Megawatt-hours (MWh). The primary source of fuel for the power generation and water desalination operations is the natural gas. DEWA also ensure investing in renewable energies, specifically Solar Energy.

Source of Energy			2019	2020	2021	2022
DEWA Gas Plant	Natural Gas	Generation (MWh)	45,184,886	42,025,853	43,025,633	44,322,308
		% of total generation	96.75	91.94	85.07	83.80
	Diesel Fuel Oil (DFO)	Generation (MWh)	42,779	20,547	35,495	13,651
		% of total generation	0.09	0.04	0.07	0.03
	Medium Fuel Oil (MFO)	Generation (MWh)	42	0.4	17	45
		% of total generation	0.0001	0.000001	0.00003	0.00008
	Solar Energy	Generation (MWh)	1,476,015	2,855,142	3,460,046	4,645,350
		% of total generation	3.16	6.25	6.89	8.78
Hassyan Power Plant (HPP)	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
	HPP	Generation (MWh)	-	810,070	3,681,232	3,910,945
		% of total generation	45,184,886	1.77	7.33	7.39
DEWA Gas Plant + HPP - NG	Generation (MWh)	45,184,886	45,141,936	43,163,480	48,076,450	
	% of total generation	96.75	92.19	85.98	90.89	
Total Generation (MWh)			46,703,722	45,711,612	50,202,424	52,892,299

Gross generation by DEWA gas plant and DEWA Solar & Net electricity sent to DEWA network by Solar IPP and HPP

DEWA's two primary sources of electricity generation are natural gas and solar energy. DFO and MFO are backup fuels used only during an emergency in case of an interruption of gas supply. The DFO & MFO consumption during the year is due to testing and commissioning purposes. As the electricity demand increases every year, the electricity generated from DEWA's primary energy sources increases.

ACCESS TO ELECTRICITY

(GRI 3-3, EU28, EU29, EU30):

DEWA is responsible for the generation, transmission, and distribution of electricity in the emirate of Dubai. Hence, DEWA is responsible for providing the access to electricity for residential, commercial, and industrial customers through a network of power plants, substations, and distribution lines. DEWA operates a mix of power generation plants including natural gas, solar energy park, and co-generation plants. DEWA has been investing heavily in renewable energy, specifically solar power, in order to reduce its dependency on fossil fuels and lower its carbon emissions.

In line with Dubai Plan 2030 and the UAE vision 2071, DEWA's corporate strategy map included the strategic objective **(SO2: Engaged & Happy Stakeholders) and IP03 (Leading Innovative customer experience)**. Through Customer happiness survey, DEWA has tracked customer satisfaction to develop and implement a work mechanism that ensures a pleasant customer experience while also improving their quality of life, positivity, and well-being, as well as meeting and exceeding the community's demands and expectations.

DEWA has several initiatives in place to improve the accessibility and reliability of electricity, which includes the following (Not limited to):

1. Smart Grid Technology: DEWA has implemented smart grid technologies across the transmission and distribution

(T&D) of electricity and water, allowing real-time monitoring and control of the electricity and water grids. Such technology improves the grid's reliability and efficiency by reducing the outages' duration, optimizing resources, and allowing customers to understand their consumption behavior.

2. Connection of solar PV systems at customers' premises: under Shams Dubai initiative customers can generate renewable energy for their own consumption, also benefitting from any surplus fed into the grid, which is deducted from their bills under a net metering scheme. For more information, you may visit

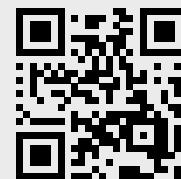


3. Advanced Metering Infrastructure (AMI) for electricity and water: DEWA replaced the traditional mechanical meters with smart meters for all electricity and water customers, allowing DEWA to bill customers based on the information received and allowing customers to get daily consumption details to compare themselves with their neighbors.

4. EV charging stations: As of December 2022, DEWA installed 350 charging stations with over 630 charging points throughout the emirate of Dubai to support the growth of EV

5. DEWA has also launched the 'Dubai EV Community Hub'

website, aiming to increase EV adoption by centralizing information regarding EV developments within the emirate of Dubai. For more information, you may visit



6. 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.

Furthermore, DEWA's accomplishment of receiving the ISO certificates is a result of intensive efforts to achieve the happiness and satisfaction of customers by providing an environment which gives them priority, providing high-quality services and improving DEWA's ability to further develop customer services. The ISO certificates reflect DEWA's ongoing efforts to adhere to the best global criteria for customer service, in accordance with clear guidelines and codes of conduct, customer charter, and customer complaints to increase customer happiness by upgrading the ISO 10000 series of standards successfully and upgrading to 2018 as follows:

1. ISO 10001: 2018 - DEWA Customer Happiness Department services pertaining to the Planning, Development 1 Implementation and Measurements of Customer Happiness Charter.

2. ISO 10002: 2018 - DEWA Customer Happiness Department services pertaining to the Operation and Maintenance of the Unified e-Complain System for Complaint Handling and Resolution Process.
3. ISO 10003: 2018 - DEWA Customer Happiness Department services pertaining to the Internal Grievance Resolution Process of the Unified e-Complain System.
4. ISO 10004: 2018 - DEWA Customer Happiness Department services pertaining to the Planning Development, Operation and Maintenance of

Monitoring & Measurement processes for Customer Happiness.

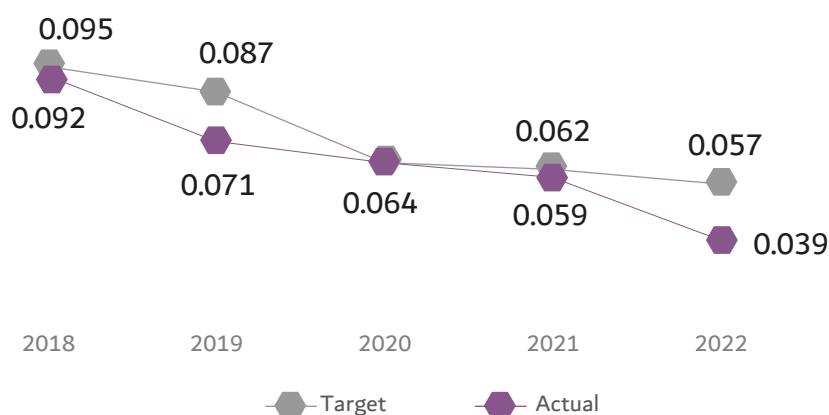
OPERATIONAL EXCELLENCE:

In order to meet the growing demand on electricity and water within the emirate of Dubai, DEWA continuously focuses on improving its services and operations by providing electricity and water services according to the highest standards of efficiency and reliability. DEWA achieved first place worldwide in the International Digital Customer Experience Standard (IDCXS) with full score 100% from first assessment.

Over the years, DEWA developed a wide range of exclusive services through DEWA's Customer Centres. Those services are endorsed by different technologies and solutions such as Interactive Voice System enhanced by AI and available around the clock to response to customers' needs and requests. Furthermore, DEWA adopted international standards, such as System Average Interruption Frequency Index (SAIFI), Availability Factor (AF) and CML, to validate and certify its performance excellence and ensure obtaining the highest levels of customer satisfactions.

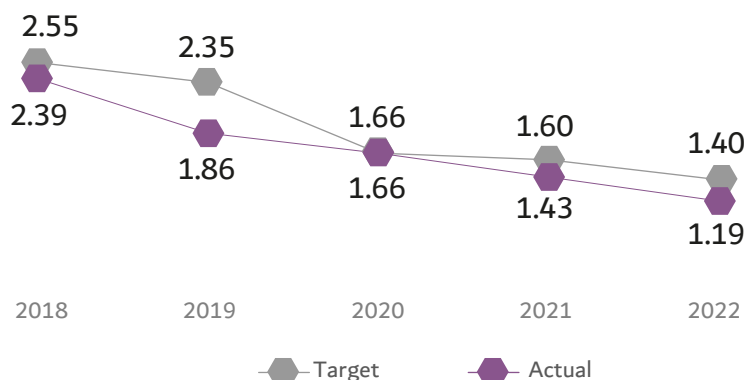
SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI):

System average interruption frequency index (SAIFI) Unplanned TARGET AND ACTUAL 2018 - 2022



THE SAIDI (CUSTOMER MINUTES LOST):

Customer Minutes Lost Unplanned (CML), Target & Actual 2018 - 2022



AVAILABILITY FACTOR (AF):**Availability Factor (AF), Target & Actual 2018 - 2022**

Year	Availability Factor (Summer) Target	Availability Factor (Summer) Actual	Availability Factor (Annual) Target	Availability Factor (Annual) Actual
2018	98.50%	99.46%	91.50%	91.72%
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%

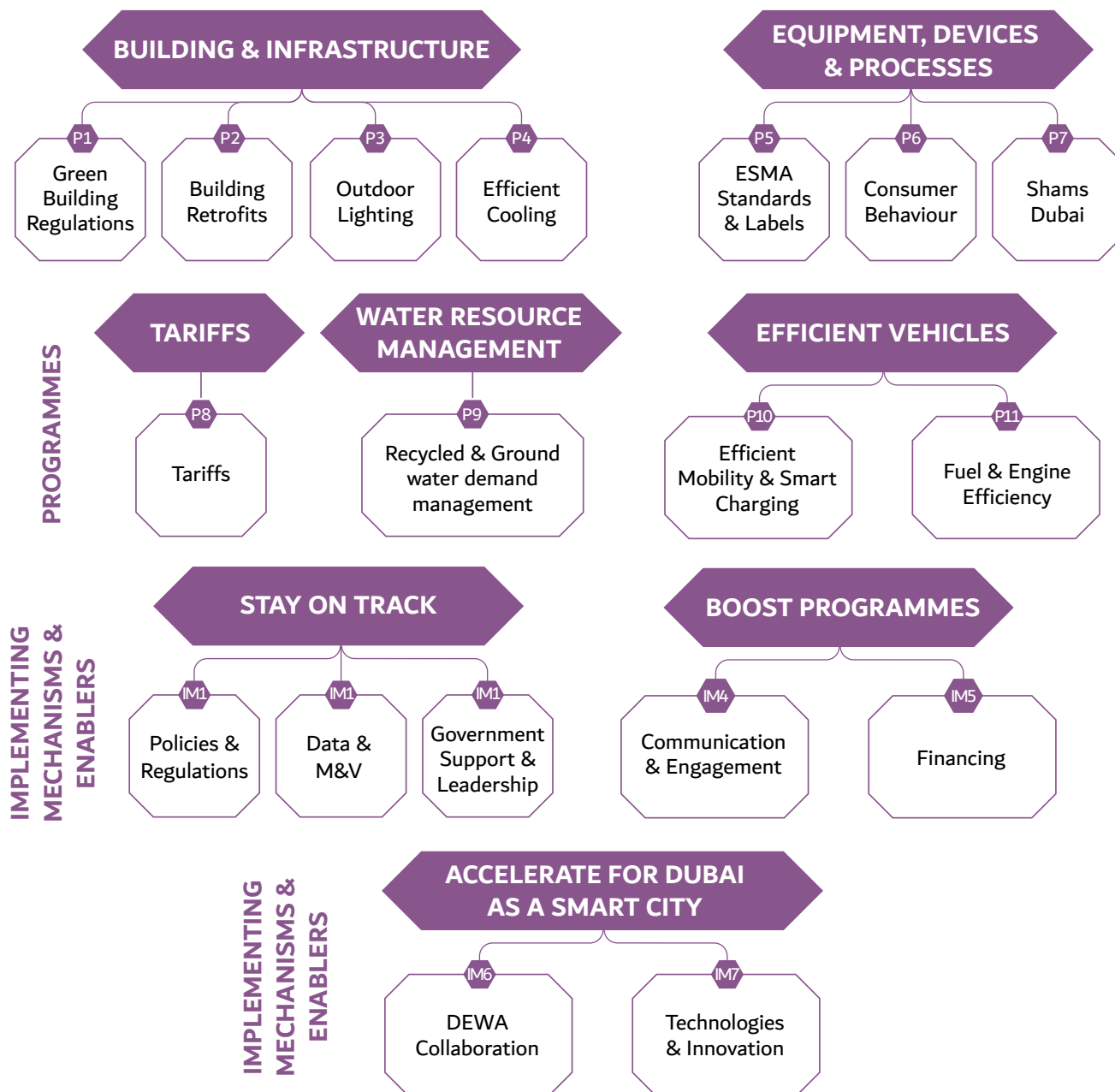
DEMAND SIDE MANAGEMENT

(GRI 3-3)

The DSCE announced, developed and published the DSM Strategy in 2013, which aims to make Dubai a leader in the efficient management of electricity and

water demand with an ambitious target of 30% reduction in energy and water consumption by 2030. The DSM Strategy was updated in 2020 by the DSCE to ensure expediting achieving the strategy's main targets. The DSM strategy consists of 11 main programmes. 9 of the programmes are related to

DEWA's core business and scope of work. The strategy includes seven implementation mechanisms that will allow the Emirate of Dubai to become a smart city and a pioneer in electricity and water efficiency management. The below chart demonstrates the 11 programmes and 7 mechanisms:



- | | |
|------------------------------|---|
| 1 Green building regulations | 7 Shams Dubai |
| 2 Building retrofits | 8 Tariffs |
| 3 Outdoor lighting | 9 Recycled & ground water demand management |
| 4 Efficient cooling | 10 Efficient mobility & smart charging |
| 5 ESMA Standards & Labels | 11 Fuel & engine efficiency |
| 6 Consumer behaviour | |

The DSCE has eight different entity members who are responsible for implementing and managing the DSM programmes. Three main programmes are owned and managed by DEWA, which are the following:

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

In 2022, those programmes achieved savings as shown in the table below:

Programme	2020		2021		2022*	
	Electricity	Water	Electricity	Water	Electricity	Water
Consumer behavior	40 GWh	241 MIG	43 GWh	202 MIG	85 GWh	315 MIG
Shams Dubai	311 GWh	-	459 GWh	-	668 GWh**	-
Tariff rates	1,076 GWh	2,051 MIG	1,177 GWh	2,084 MIG	1,190 GWh	2,153 MIG

*Preliminary Data **Connected capacity of Shams Dubai 493.4 MW

DEWA is one of the top utility companies globally in terms of efficiency and reliability. In 2022, its electricity generation capacity increased to 14,517 MW and desalinated water production capacity maintained at 490 MIG per day, where the electricity T&D network losses were improved to 2.2% and the water network losses improved to 4.5% compared to 2021. The increase in energy demand reflects the strong performance

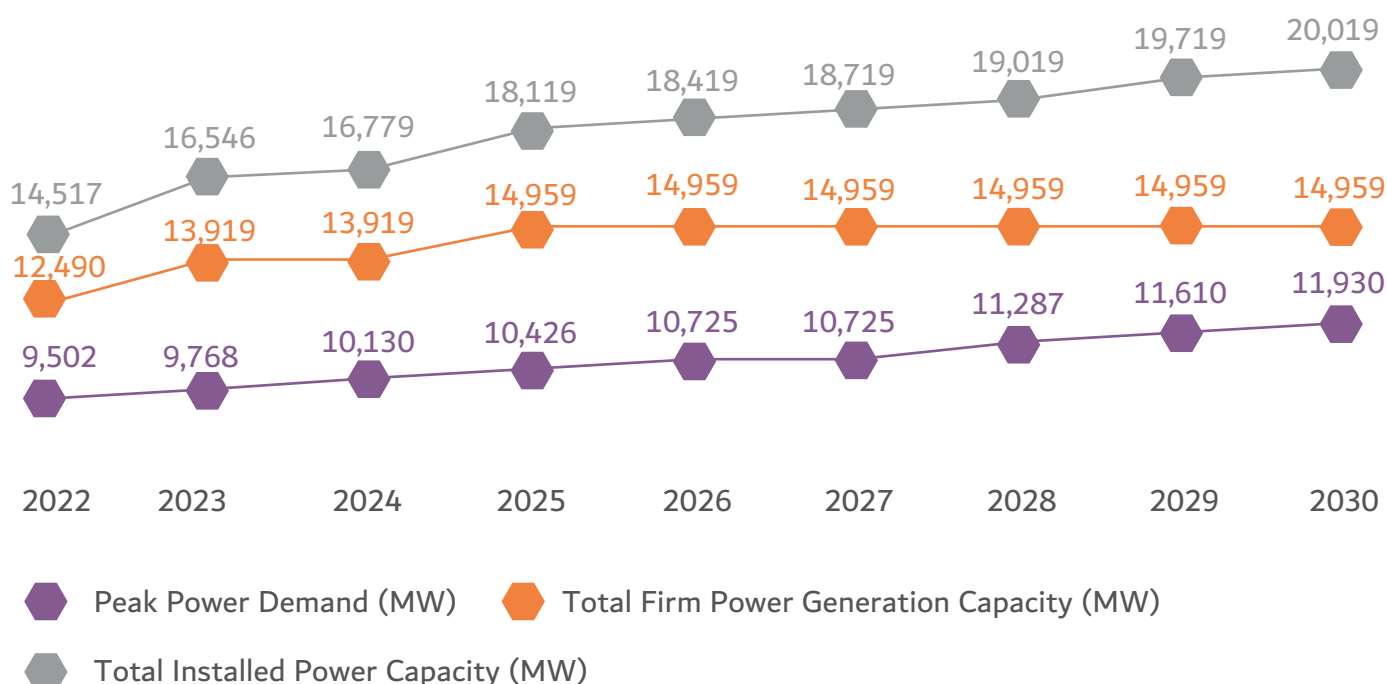
of all economic sectors in Dubai, in addition to the continuous growth in population and the expansion the Emirate of Dubai is witnessing in all key activities. The energy demand in Dubai increased in 2022 by around 5.5% compared to 2021.

MEETING FUTURE DEMAND (EU10)

DEWA developed and forecast the power demand for electricity

and water for the short, medium and long-term demand, along with capacity plans up to 2030 using recognised international practices and state of the art tools considering demographic and econometric growth. In addition, to ensure meeting future demand, DEWA captures and measures the effect of future uncertainties through scenario planning. Besides, DEWA updates the demand forecasts every year.

Peak Power Demand and Planned Capacity Additions (2022 - 2030):



RESEARCH & DEVELOPMENT (R&D) CENTRE

(GRI 3-3, EU10)

The DEWA R&D Centre, at the Mohammed bin Rashid Al Maktoum Solar Park, aims to become a global platform that develops and tests innovative solutions to enhance the operations and services of DEWA. The Centre's research areas include solar power, water, smart grid integration, and energy efficiency. These core areas of the R&D are supported by 3 Enablers: Fourth Industrial Revolution including AI, IoT, Robotics & Drones, 3D Printing & Advanced Materials), Energy System Analyses, and Space. Through Space-D, the Centre develops several niche use-cases for grid and water networks.

The R&D Centre infrastructure includes:

- Solar indoor testing and accelerated ageing 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 Drone, 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,
- 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 studies ways to improve solar photovoltaic technologies to mitigate the effects of soiling and extreme desert conditions on the performance of solar photovoltaic panels. It leverages the results and knowledge collected from testing PV module long-term performance to inform the production of desert-ready PV modules and for developing appropriate standards. The Solar Resource Assessment and Forecasting programme develops methods to accurately forecast solar irradiance and power output in order to improve the overall integration of solar in the DEWA grid.

WATER RESEARCH AREA

The Water Research Area assesses and develops sustainable solutions for the desalination and purification of water with a primary focus on RO enabling the use of solar power, detecting and reducing water transmission losses, and resource use by minimizing brine effluent.

SMART GRID INTEGRATION RESEARCH AREA

The Smart Grid Integration Research Area evaluates and develops systems to facilitate and optimise the integration of renewables in the grid, maintaining power quality standards, and further improving overall performance and reliability of grid operations. This includes 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 fosters smart and sustainable development, reduces energy waste by improving the efficiency of energy systems (with a focus on cooling), and overall accelerate the clean energy transition. Its research work identifies, develops, and validates innovative solutions that enable smart and efficient energy use in the built environment, guide demand response measures, provide detailed building energy forecasting models, and improve the efficiency of energy conversion processes.

SPACE RESEARCH AREA

The Space Research Area aims to support DEWA with high-efficiency, low-cost remote sensing & operations using satellites and ground station capabilities. Its developed solutions are designed specifically to address utility needs including substation feeder monitoring, asset integrity, and

enriching weather forecasting services. DEWA launched its first IoT nanosatellite, DEWASAT-1, in 2022 and plans to launch the remote sensing DEWASAT-2 in 2023. DEWA was the world's first utility to launch nanosatellites to enhance the maintenance and planning of electricity and water networks.

FOURTH INDUSTRIAL REVOLUTION (4IR)

4IR enables the effective development of solutions that support the core research areas mentioned earlier. Its robotics and drone solutions are used to provide inspection and maintenance services using unmanned/autonomous operations across the whole utility value chain (e.g. photovoltaic plants, transmission line inspection and maintenance). The AI team develops, tests, and integrates AI technologies for the optimisation of 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 provide expertise in the form of forensic analysis of materials to detect failures and the development of advanced energy storage systems (batteries and supercapacitors). Finally, the 3D printing team is developing 3D printing capabilities for addressing DEWA's spare parts and rapid prototyping needs. The facility currently operates 16 3D Printing systems that can utilise more than 20 materials which can cover a wide range of applications and use cases within DEWA.

ENERGY SYSTEM ANALYSIS RESEARCH

Energy System Analysis Research develops and applies advanced capabilities for joint technical and economic assessment of energy-related technologies, systems, and policies. The area develops energy models, lifecycle assessment models, and business strategy assessments to support DEWA's future readiness. This area models and assesses new energy system configurations and technologies at the macro level with a focus on cost-optimal integration of renewable energy systems and strategies for the deployment of new energy technologies.

R&D TRANSACTION 2022



SYSTEM EFFICIENCY

(GRI 3-3, EU12, EU4)

POWER TRANSMISSION & DISTRIBUTION

In line with increasing the electricity generation to meet Dubai's electricity demand, DEWA expands the investment in the electrical T&D substations in order to secure delivering electricity to the consumers at the highest levels of reliability.

POWER TRANSMISSION:

In 2022, DEWA commissioned 17 nos. new Transmission Substations, which included fifteen 132 kV (kilovolt) Substations and two 400 kV Substations with a total investment cost of AED 11 billion (Between 2021 to 2024). So far, the cost of energised projects during 2021-2022 is about AED 6.1 billion, whereas for ongoing projects under execution, it is about AED 4.9 billion.

In 2022, the net increase in length for 400kV Transmission lines (including Overhead & Underground) was 2 kilometres, whereas for 132 kV Transmission lines (including Overhead & Underground), it was 215 kilometres.

The table below demonstrates details about the transmission substations and lines:

Transmission Substations

Type	2018	2019	2020	2021	2022
132 kV	258	285	307	319	334
400 kV	21	22	23	25	27

Length of Transmission Lines, 2022 (EU4)

Type		2018	2019	2020	2021	2022
Overhead lines (KM)*	132	402	402	402	369	367
	400	1,125	1,164	1,168	1,386	1,388
Underground lines (KM)	132	2,016	2,146	2,249	2,335	2,552
	400	24	24	24	25	25

*kilometres

Power Distribution:

By 2022 DEWA had 73 (33 kV) distribution substations and 42,771 (11-6.6kV) substations in services across the Emirate of Dubai. In 2022 the length of distribution lines for the 33kV overhead line and underground cables are 99.75 kilometres & 2,000.44 kilometres respectively, and the length of distribution lines for the 11-6.6 kV overhead line and underground cable are 613.28 kilometres and 35,441 kilometres respectively.

The table below demonstrates details about the distribution substations and lines:

Distribution Substations

Type	2018	2019	2020	2021	2022
33 kV	101	93	85	81	73
11-6.6 kV	35,500	38,240	40,588	41,814	42,771

Length of Distribution Lines, 2022 (EU4)

Type		2018	2019	2020	2021	2022
Overhead lines (KM)	33kV	112	111.88	104.33	100.1	99.75
	11- 6.6 kV	628	616.02	608.26	606.4	613.28
Underground lines (KM)	33kV	2,076	2,142	2,119.49	2,108	2,000.44
	11-6.6 kV	32,482	33,940	34,475	35,001	35,541

DEWA continuously focuses on improving and maintaining the best operational efficiency of its T&D network. Therefore, in 2014, DEWA developed its first Smart Grid strategy up to 2035, which is a key component of a smart city. One of the most important factors for the success of smart cities is the seamlessness and availability of round-the-clock integrated and connected services that meet daily living requirements, which is only possible via a Smart Grid. A Smart Grid ensures two-way communication between the utility and its consumer and allows for monitoring along the power and water grids. A Smart Grid consists of controls, computers, automation, and equipment working together. DEWA's Smart Grid will provide advanced features and includes automated decision-making and interoperability across

the entire electricity and water network.

For more details about DEWA's Smart Grid, you may visit the link below:



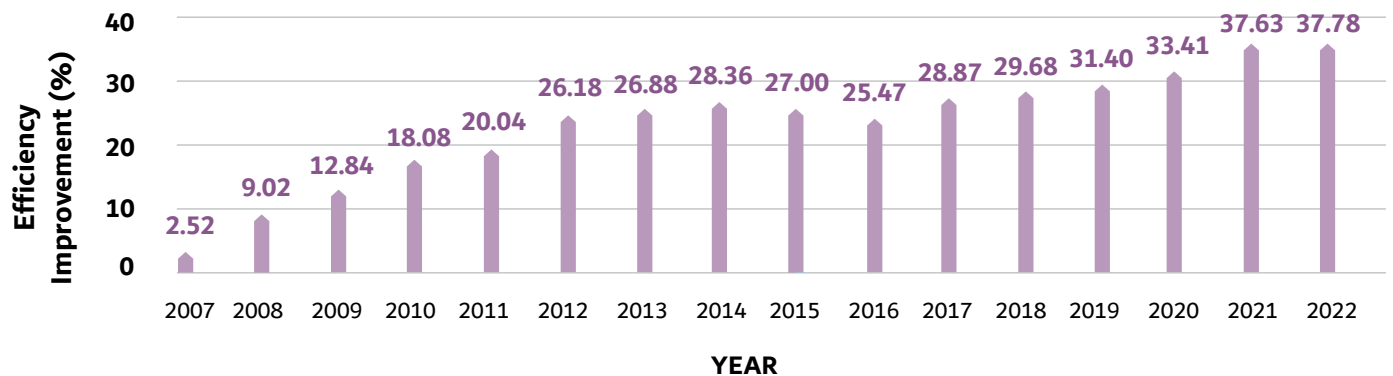
SUPPLY SIDE

(GRI 3-3, EU11)

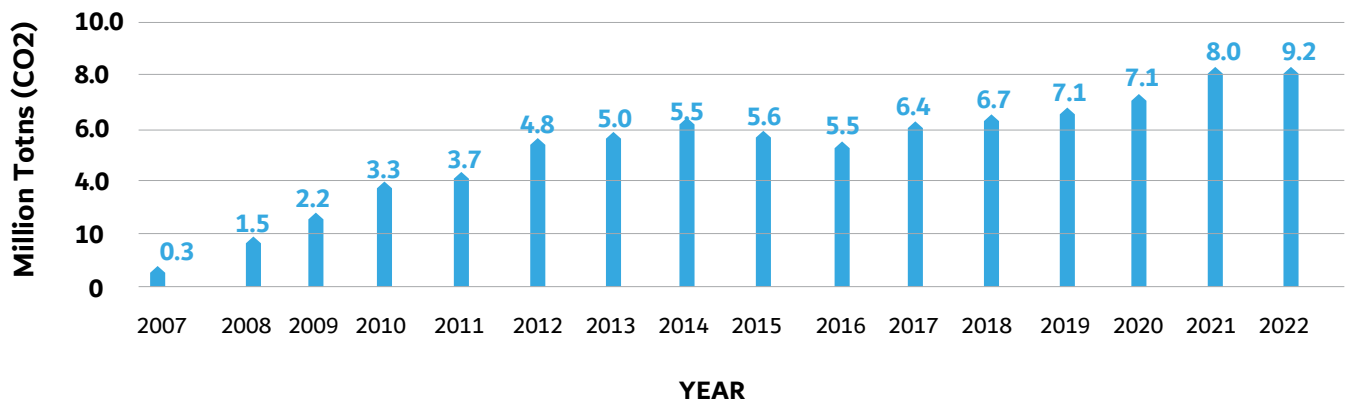
To increase production efficiency, DEWA produces electricity and water using cogeneration technology. Heat Recovery

Steam Generators uses waste heat from gas turbines and pass the steam through steam turbines to produce additional electricity and provide energy to the Multi-Stage Flashing (MSF) water desalination. DEWA adopts an ideal design for the water desalination plants using a hybrid system, in which water is produced using several technologies, such as desalination through MSF and Reverse Osmosis. This ensures the highest efficiency during the life cycle of the plant, at the lowest cost. In addition, DEWA implements innovative gas turbine upgrades as DEWA continues to follow up with original equipment manufacturers regarding new cost-effective upgrades and technologies throughout the turbine life cycle, increasing capacity and enhancing efficiency and reliability.

Efficiency Gains from improvement in Gross Heat Rate 2007-2022 compared to 2006



Carbon reduction (Million Tons CO2) due to efficiency improvements compared to 2006



DEWA consistently invests in efficiency improvements. From 2006 to 2022, DEWA achieved a 37.78% of improvement in cumulative efficiency, which is equivalent to 82.0 million tons of CO₂ emission reduction. These savings are due to improved generation efficiency with respect to 2006 mainly by decoupling of Power Generation & Water Production (Addition of Solar & Sea Water RO Plants), DEWA Initiatives and Optimum Design and Reengineering. The availability of cogeneration, reduced number of trips & optimised operation to meet the required power & water demand with minimum fuel consumption while maintaining system security and reliability enabled these savings.

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 its sustainable business and operations, the organisation continues to move along this pathway by developing a clear circular economy strategy, with the objective to shift away from the traditional linear business approach to a circular economy.

DEWA has set a clear ambition to become a circular leader in the region by focusing on optimal resource use, 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 towards many of the strategies and objectives set on a global, federal and local level, which include the UNSDGs 2030, UAE Net Zero 2050, UAE Vision 2021, UAE Circular Economy Policy, and the Dubai Clean Energy Strategy 2050.

DEWA's Circular Economy Model

is based on five key circular principles that serve as a 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 its focus, while moving its business to become more circular:



It aims to develop business and fully collaborate with stakeholders in the value chain by focusing on smart users, circular procurement and supplier engagement.

Smart Users

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.

Circular Procurement

DEWA sets circular procurement criteria for its assets and equipment, to aim for circular procurement throughout the value chain.

Supplier Engagement

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.

INNOVATION

(GRI 3-3)

FOSTERING INNOVATION

In line with the National Innovation Strategy launched by His Highness Sheikh Mohammed bin Rashid Al Maktoum, to make the UAE one of the most innovative nations in the world, and the Dubai Innovation strategy to make Dubai the most innovative city in the world, DEWA maintained its position as one of the biggest supporters of innovation in the UAE and Dubai,

It was awarded the ISO 56002: 2019 in Innovation Management, becoming the first organisation in the world to receive this certificate. DEWA also received ISO 30401: 2018 certification in Knowledge Management Systems; becoming the first utility in the world to receive this certification.

DEWA promotes a culture of innovation among its employees; it adopts innovation in its work through an institutional approach and is moving steadily toward the future by building a sustainable future.

DEWA also implements knowledge management activities and programmes in line with the directives of the Dubai Government and DEWA's vision, strategy, and global best practices based on accessibility, availability, accuracy, appropriateness, and sharing of knowledge.

It is committed to supporting and developing a culture of creating, learning, sharing, and exchange of knowledge among its employees, departments, and divisions, to support creativity, innovation, and excellence. DEWA has an integrated knowledge management system that includes a Knowledge Management policy, strategy, structure, and quality procedures to promote the growth of employee awareness, abilities, and practices through the following:

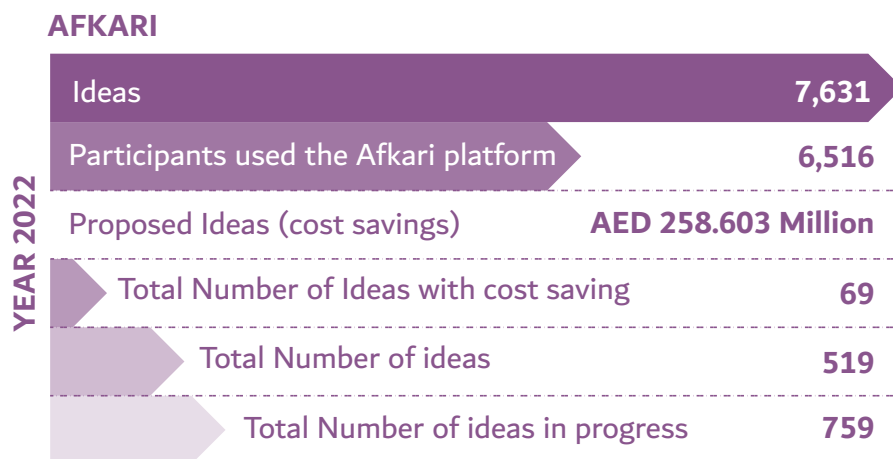
- Activities such as Knowledge Days, Knowledge Management training, Share an Hour, Annual ShareK Recognition award, Communities of Practice,

Ma'rifa Collaboration Platform, Expert Knowledge, Sessions, LinkedIn Learning, and the iAsk Reference & Research Service to promote the transfer of knowledge between individuals and groups.

- Access for all DEWA stakeholders to physical collections and creative spaces through the 7 DEWA Knowledge Centres, 6 Knowledge Chairs and 3, Reading Trees.
- DEWA Smart Library, Smart Office Application and DEWA Online Catalogue for all.

AFKARI

In 2022, DEWA received over 7,631 ideas through the Afkari internal platform. This brings the platform's total number of ideas received since 2015 to 54,839 ideas. DEWA organised 11 campaigns, 88 workshops, and 74 brainstorming sessions in 2022 to encourage employees to participate in its initiatives and projects, listen to their ideas, and study their suggestions.



DEWA has also established an innovation fund to support employees in implementing and developing creative ideas. Its Future Trends Platform, enables employees to access the most recent innovations from around the world. It demonstrates examples of innovation practices in various industries, as well as in products, services, technologies, and trending topics such as: digitalisation, cyber security, digital economy, smart society, and sustainability.

In addition, Catalogue is now available for all employees. This database and communication platform enables employees to log, search, and share signals, which are anything that is already happening today that could signal the future.

DIGITALISATION

Digitalisation has been at the centre of DEWA strategy for multiple years. It is considered a key enabler to improve its services, achieving sustainability objectives, introducing new lines of business, and the Digital Transformation Strategy has been determined to provide the following key benefits:

- Improved customer experience and enhanced customer value
- Cost optimization through improved asset utilisation, capacity planning
- Efficiency improvement through process optimisation & optimal resource utilisation
- Revenue enhancement through new business models and products

DEWA worked with partners to introduce the Digital Transformation House, which consists of six key pillars to drive digital transformation implementation smoothly across the organisation. The six pillars are Enablers; Governance & Operating Model; Technology Engine; Digital Applications/Use Cases; Strategic Objectives; Digital Ambition. The Digital Transformation House is aligned with DEWA's Strategy Map and the vision to be "A Globally Leading Sustainable Innovative Corporation Committed to Achieving Net Zero by 2050".

As a result of this strategy DEWA was able to achieve significant benefits. A total of 15 initiatives

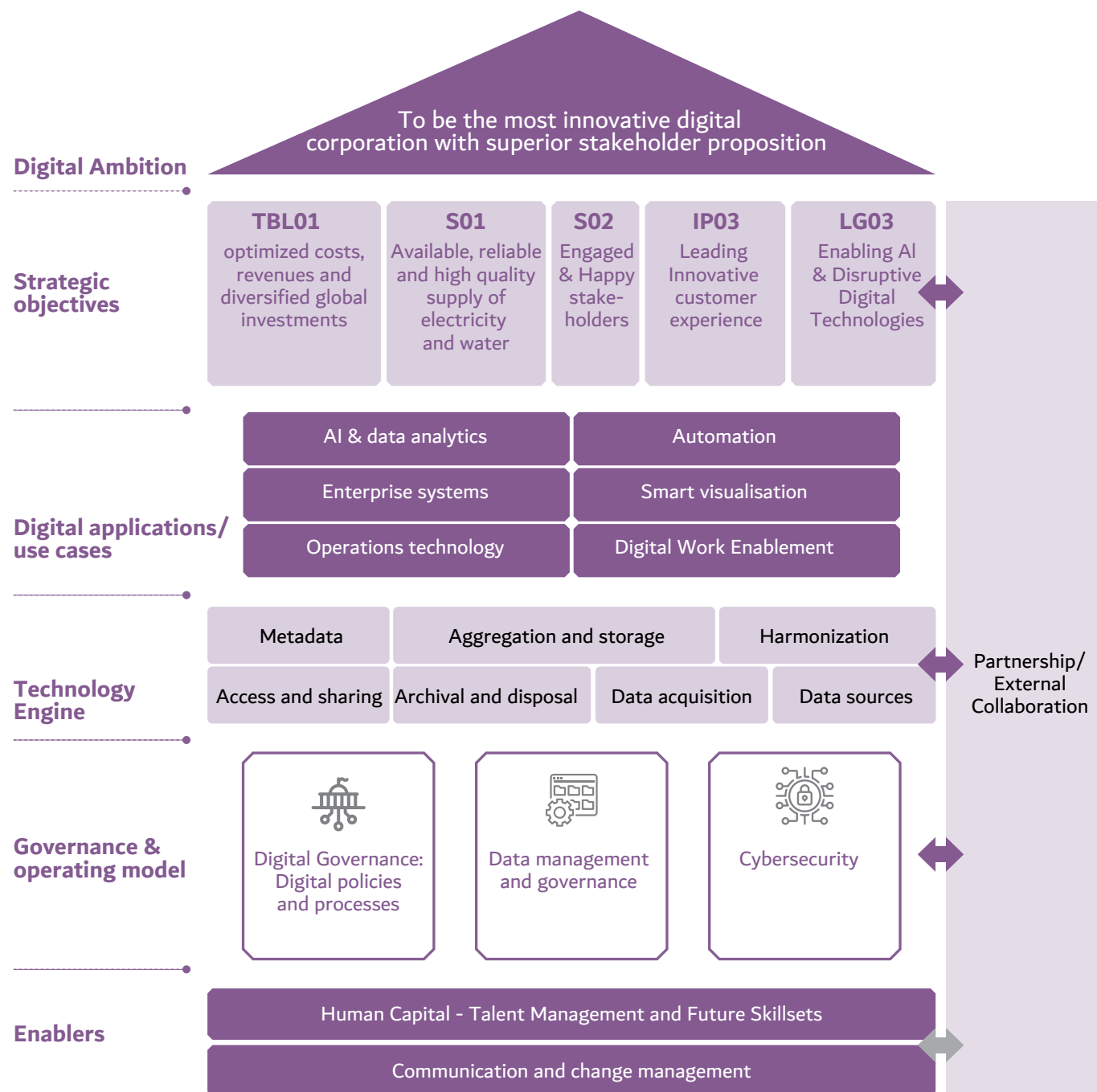
have been completed out of the 65 identified initiatives.

DEWAVERSE:

DEWA launched its 'DEWAVerse' platform on the Metaverse and became one of the first local government organisation to launch its platform on the Metaverse to provide its services to customers, employees, and members of society. DEWA invests in Metaverse technology to implement and develop its current and future projects, which contributes towards stakeholder happiness, the development of business, enhancing efficiency and production, and reducing costs. This is in line with the directives of His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to leverage digital technologies and AI to improve performance and improve people's lives, and His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of The Executive Council of Dubai, who launched the Dubai Metaverse Strategy that aims to turn Dubai into one of the world's top 10 Metaverse economies as well as a global hub for the Metaverse community.

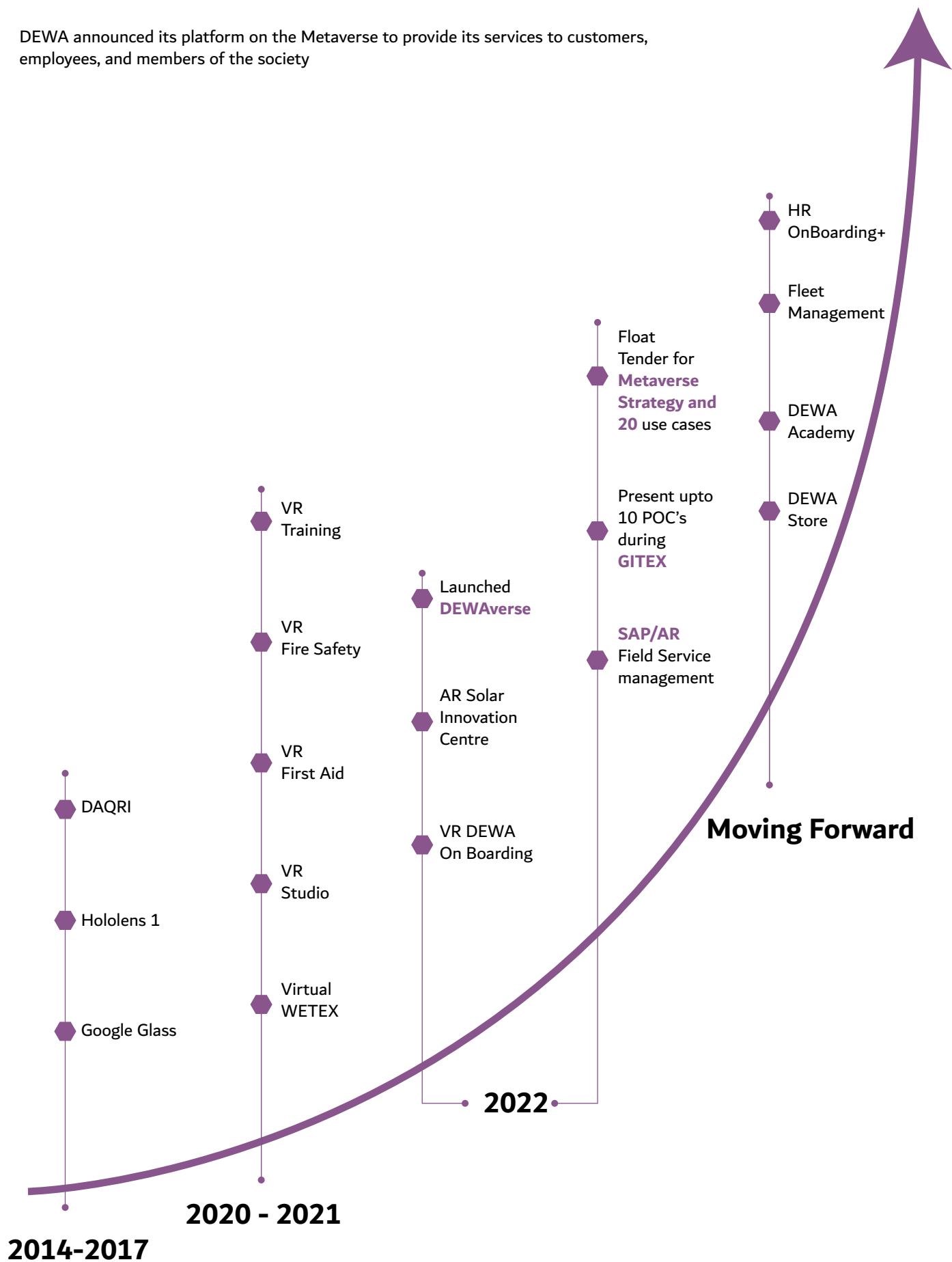
DEWA DIGITAL TRANSFORMATION STRATEGY

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



METaverse - DEWaverse

DEWA announced its platform on the Metaverse to provide its services to customers, employees, and members of the society



RAMMAS:

Rammas is the first robot launched by a governmental organisation to serve customers and answer their enquiries in both Arabic & English. Rammas was developed and launched to support DEWA's customer centre by simulating a

live agent to assist different types of customers while continuing to learn and understand their needs based on their enquiries, offer transactional and informational services, and provide two ways of seamless interaction either by menu selection or direct questions.

One of the main purposes of Rammas is to increase customer happiness and satisfaction records.

The following table demonstrate the environmental impact of Rammas:

Year	Total Payment transaction	Total cost saving (AED)	Total trees saved	CO ₂ emissions reduction (Tons)
2019	2,688	37,380,766	13,734	2,747
2020	5,882	9,165,602	17,455	3,491
2021	6,875	18,153,428	7,054	1,402.52
2022	7,284	15,281,151	11,897	2,365

DEWA'S SMART DOCUMENT SYSTEM:

DEWA Smart Document system consists of a mobile application where all employees can easily access the application at any time and from any location to perform their day-to-day work-related services.

Smart Document Savings 2022

Number of procedures (completed)	5,354,184 documents archived (completed the workflow process).
Number of services (provided)	66 process automations (excluding the sub-processes or systems integrations).
Saving (AED)	AED 104,430,271 (estimated).
Dubai Paperless Strategy	100% achieved (this is a Smart Government initiative & not related to Smart Document specifically).

Smart Design for Electricity Distribution Networks

In 2022, DEWA created new software for the 'Smart Design of Electricity Distribution Networks' and obtained the IP from the UAE Ministry of Economy. The innovation is based on merging

databases and electric network designs (11kV) through developed solutions to enable the Network Design Engineers to design a more effective and smoother network. All information is collected through advanced software from several data sources such as peak load, SAP system and other databases.

It includes several features such as automated calculations, and archiving them electronically.

Digital Integrations

DEWA also completed the digital integration of more than 70 projects with more than

30 government and private organisations. This is part of its continuous efforts to enrich the customer experience in Dubai and enhance the happiness of its stakeholders. These organisations include Digital Dubai Authority, Dubai Municipality, Roads and Transport Authority Dubai, Dubai Land Department, Dubai Health Authority, the Department of Economic Development, more than 20 banks, Etisalat, du, ENOC, EPPCO, Noqodi wallet, Western

Union, and Empay. Through this step, DEWA makes it easier to get a wide range of services, including bill payment, information updates, activation of electricity/ water (Move-in), housing fees adjustment, refunds, updating trade license and others.

Through the digital integrations and digital channels more than 10 million smart transactions have been completed in 2022, which contributed to reducing

more than 41,000 tonnes of CO₂. This is equal to planting more than 46,000 trees over an area equivalent to 88 football pitches until December 2022. DEWA provides all its services through its website and smart app for customers to complete their transactions anytime and anywhere, easily and safely. This is in addition to protecting the environment and preserving natural resources.





03

Environmental Perspective

ENVIRONMENTAL PERSPECTIVE

ENVIRONMENTAL COMPLIANCE

(GRI 2-27, 3-3, 307-1)

DEWA has excellent environmental management system and programmes that strictly adhere to the local, federal, and international regulations. Its working culture prioritises sustainability and environmental management, which has led to ongoing environmental and sustainability improvement programmes.

Moreover, DEWA has a strong commitment to protect and preserve natural resources and the environment; starting from the top management, through the direct instructions of His Excellency the MD and CEO. This guides the organisation's mission, vision and values, while considering the needs and expectations of its stakeholders and business objectives. Furthermore, DEWA undoubtedly initiated a long-term strategy and has demonstrated its ongoing commitment to having state of the art environmental and sustainability programmes.

DEWA continuously engages in implementing a range of ISO standards with internal, external, and third-party audits to ensure continual improvement in its operations and business areas. DEWA's current IMS policy clearly outlines its intentions and principles, providing strong evidence of strategic leadership. The organisation allocates adequate resources to deliver environmental and sustainability programmes at all levels, aligning them with its mission statement, objectives, environmental values, and strategic plan.

ENERGY:

INSTALLED CAPACITY

With the population growth in the Emirate of Dubai and increasing demand for energy, DEWA continued to provide electricity and water services to the highest standards. DEWA is transforming Dubai into a clean energy global hub by targeting 100% of the city's total power capacity to be obtained from clean energy sources by 2050. Since 1992, DEWA has developed and expanded to reach an installed capacity of 14,517 MW (including 2027 MW from renewable energy source, especially from Solar Energy) and 490 MIGD for electricity generation and water production respectively. The share of clean energy in Dubai is about 14% of the total installed capacity.

DEWA Installed Capacity

Site (Dubai)	Station	Installed Power Capacity (MW) at 50 C & 30% R.H
	D	1,026.99
	E	615.50
Jebel Ali	G	818
	K	948
	L	2,400.60
	M	2,885.20
Aweer	H	1,995.86
Seih Al Dahal	Mohammed bin Rashid Al Maktoum Solar Park*	2,027
Hassyan	Hassyan Power Plant**	1,800
Total (MW)		14,517

* Solar PV Plant Capacity Maximum MWac.

** Net Generation capacity for Hassyan Power Plant

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. The project is aligned with the Dubai Clean Energy Strategy 2050 and Dubai Net Zero Emission Strategy 2050. The solar park will be fully operational by 2030 with a total planned capacity of 5,000 MW. The project's completion will reduce 6.5 million tons of CO2 emissions annually.

In 2022, DEWA used the latest solar photovoltaic bifacial technologies with Single Axis Tracking to increase energy production in phase 5. As a result, the production capacity of the first project of the fifth phase has increased from 300MW to 330MW. The 900MW fifth phase, with investments of AED 2.06 billion, is 60% completed with a 4.225 million safe working hours without injuries.

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
Status	Completed	Completed	Completed	In progress	In progress	Announced
Date of completion	2013	2017	2020	2024	2023	2026
Energy Generated (Installed Capacity)	13 MW	200 MW	800 MW	950 MW	900 MW	1,800MW
Technologies	Photovoltaic	Photovoltaic	Photovoltaic	Photovoltaic & CSP	Photovoltaic	Photovoltaic
# Solar Cells used	153,000	2.3 Million	3 Million	791,560	2.7 Million	5.4 Million (Estimated)
Emission Reduction	15,000 tons	214,000 tons	1.055 Million tons	1.6 Million tons	1.18 Million tons	2.36 Million tons (Estimated)
Investment	AED 82.7 Million	AED 1.2 Billion	AED3.47 Billion	AED 15.78 Billion	AED 2.06 Billion (Estimated)	AED 5.57 Billion (Estimated)
Land Used	0.3 sq.km	4.5sq.km	18 sq.km	44 sq.km	10.17 sq.km	20 sq.km
Partners & Shares	DEWA (100%)	DEWA (51%) ACWA Power (49%)	DEWA (60%) Masdar (24%) EDF Energies Nouvelles (16%)	DEWA (51%) ACWA Power (25%) Silk Road Fund (24%)	DEWA (60%) ACWA Power (40%)	DEWA (60%) Project Company (40%)
End Users (Residents)	Pilot Project	50,000	240,000	320,000	270,000	540,000 (Estimated)

In 2022, DEWA used the latest solar photovoltaic bifacial technologies with Single Axis Tracking to increase energy production in phase 5. As a result, the production capacity of the first project of the fifth phase has increased from 300MW to 330MW. The 900MW fifth phase, with investments of AED 2.06 billion, is 60% completed with a 4.225 million safe working hours without injuries.

HYDROELECTRIC POWER PLANT IN HATTA

(GRI 203-1, 203-2)

DEWA's hydroelectric power station in Hatta is the first of its kind in the region with investments of up to AED 1.421 billion. The hydroelectric power station expected to generate 250MW by making use of the water stored in Hatta Dam. The station will have a storage capacity of 1,500 MWh and a life span of 80 years.

The hydroelectric power station will use water in the Hatta Dam and an upper reservoir that is being built in the mountain. During off-peak hours, advanced turbines will use clean energy to pump water from the dam to the upper reservoir. Turbines operated by the speed of the waterfall from the upper reservoir will be used to generate electricity through a 1.2 kilometre subterranean water canal, with high efficiency in power generation and storage of up to 78.9% and with a 90-second response to demand for electricity. The project is 59.29% completed and planned to be operational by the end of 2024.

Furthermore, DEWA is implementing two main other projects in Hatta:

1. **The Dubai Mountain Peak:** The Dubai Mountain Peak project includes the construction of a 5.4-kilometre cable car to transport tourists to the summit of Um Al-Nesoor. At 1,300 meters above sea level, it is the highest natural summit in Dubai. The project is expected to be a major tourist attraction in the UAE. The cable car route passes over the Hatta Dam Lake and the Upper Dam Lake for the hydroelectric power station, as well as through mountains, ending at the summit of Um Al Nesoor Mountain.
2. **The Hatta Sustainable Waterfalls:** The Hatta Sustainable Waterfalls project will use the slope of the upper dam to create a natural waterfall. A waterway will be built along the parking area below the dam. The water used in the waterfall will be collected at the end of the stream, recycled, and pumped back to the top of the dam. Fish bred in the stream will provide an additional attraction for tourists and families.

Through these projects, DEWA aim to develop Hatta and provide innovative job opportunities for the citizens of the area, as well as promote society happiness. For instance, the Hatta Sustainable Waterfalls project aims to create a sustainable natural environment, in addition to developing the area and turning it into recreational spaces and a tourist attraction in the UAE. The idea began with creating a natural water stream aligning with Hatta's nature.

Investment opportunities abound with four oases that will have coffee shops, restaurants, and children's playgrounds, in addition to shops for selling natural honey, local products and souvenirs. The shops will be given as grants from His Highness Sheikh Mohammed bin Rashid Al Maktoum to the citizens of Hatta to create additional job opportunities and meet the needs of social, economic and environmental development.

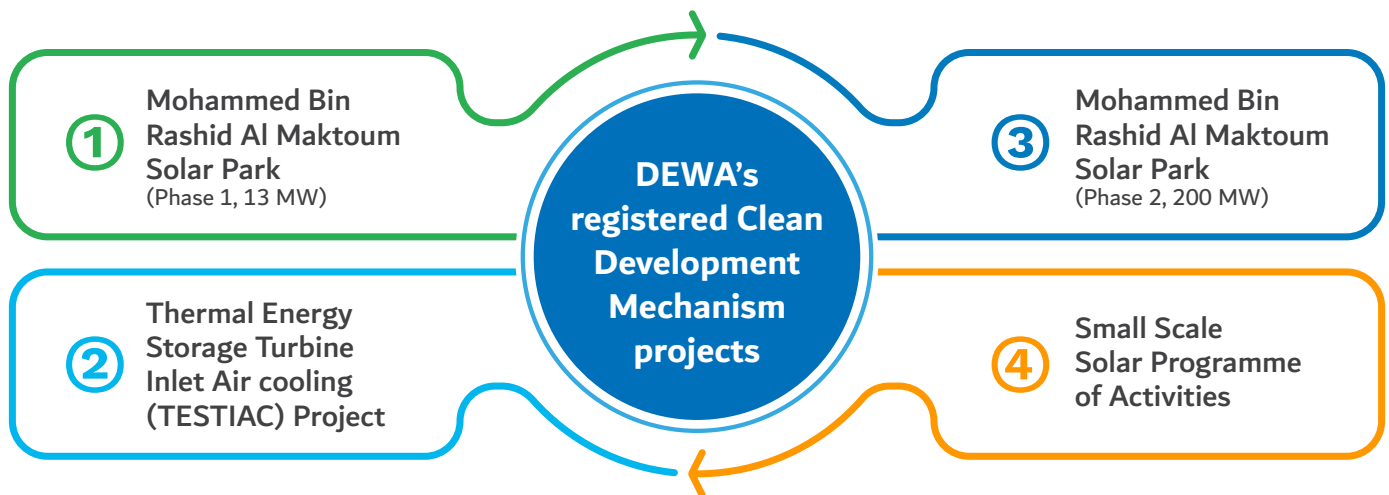
DEWA OFFSETTING PROGRAMME

(GRI 302-1, 304-4)

DEWA 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 CDM, of the UNFCCC. DEWA has issued 10,635 Certified Emission Reduction (CER) from its 13 MW Mohammed Bin Rashid Al Maktoum Solar Park's photovoltaic plant and 95,197 CERs from Thermal Energy Storage Turbine Inlet Air Cooling project. There was no issuance of CERs in 2022.



THE INTERNATIONAL RENEWABLE ENERGY CERTIFICATE (I-RECS):

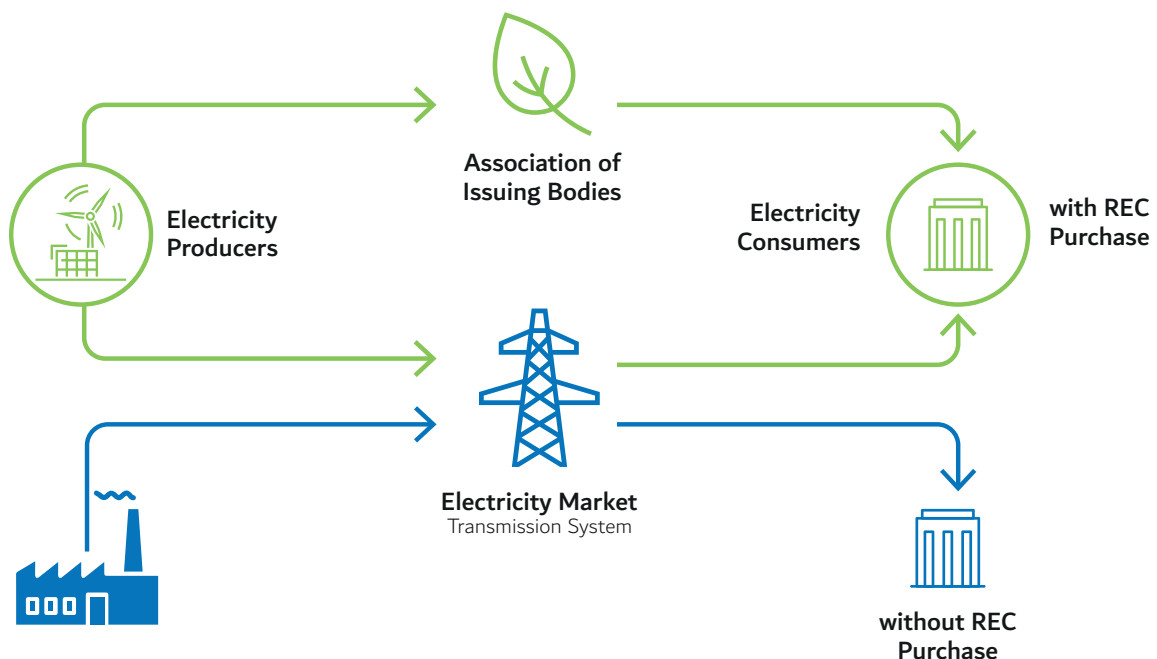
DEWA was the first entity in the MENA region in 2017 to join the renewable energy market via the I-RECs Registry Platform to issue the I-RECs from the Mohammed bin Rashid Solar Park 13 MW PV Plant, 200 MW and 800 MW PV Plants.

The I-REC Standard is a voluntary system for international trade in renewable energy certificates that was created to provide electric utilities with a financial incentive to increase the amount of renewable or clean energy in their supply mix relative to fossil fuels, and offset the environmental impact of the purchaser's non-renewable energy use by subsidising clean energy from renewable sources.

I-RECs are particularly useful to companies with global operations and a target to source 100% renewable energy for strategy or compliance purposes.

Participation in the I-REC system is aligned with DEWA's strategic objective to diversify its investment portfolio by issuing renewable energy certificates to stimulate the international development of renewable energy.

Renewable Energy Certification



SUSTAINABLE AND ENERGY-EFFICIENT BUILDINGS

(GRI 302-4)

ENERGY MANAGEMENT OF DEWA PREMISES AND ASSETS

DEWA is committed to creating a sustainable built environment that is energy, water, and material resource efficient by applying national and international standards for green

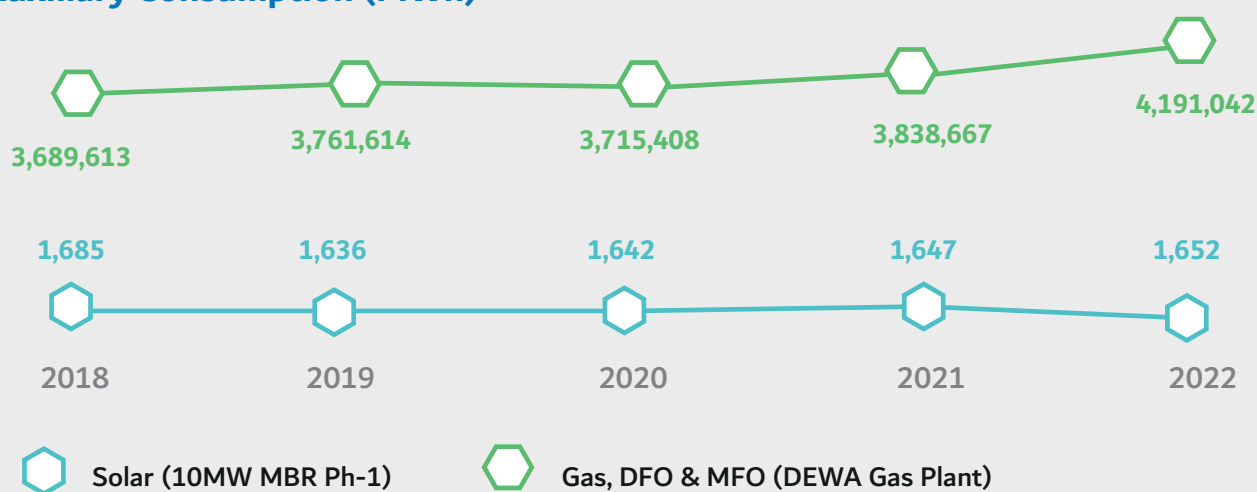
buildings at all its assets. DEWA's sustainable efficient buildings are in line with the UAE's efforts to create a green and sustainable economy, the Nationally Determined Contributions for the UAE against Climate Change, and the Dubai Digital Authority initiative.

DEWA applies an Energy Management System on its buildings which have been recently expanded to cover generations, plants its Substations,

administration buildings, and fleet. The Energy Management system allows DEWA to keep track of its energy performance and identify energy conservation opportunities which would also reflect a cost benefit for the organisation.

The below table demonstrates the total auxiliary energy consumption from power generation and water production facilities located at Jabel Ali, Al Aweer, and MBR Solar Park Phase 1 of the Jebel Ali facility:

Auxiliary Consumption (MWh)



Note: DFO: Diesel Fuel Oil, MFO: Medium Fuel Oil

DEWA has been continuously achieving progress in improving the energy production efficiency, Auxiliary Power Consumption Reduction, carbon emission reduction, and fuel savings. Since 2006, DEWA has achieved the

following in 2022:

1. 37.78% of efficiency improvement
2. 225,873 MWh of Auxiliary Power Consumption Reduction

3. 9.22 Million tons of Carbon emission reduction

4. Fuel savings of 172,973,272 Metric Million British Thermal Uni (MMBTU) due to efficiency improvement

	Efficiency Improvement compared to 2006 (%)	Auxiliary Power Consumption Reduction (MWh) compared to 2006	Carbon Reduction Million Tons of CO2 due to efficiency improvement compared to 2006	Fuel saving due to efficiency improvement compared to 2006 - MMBTU
2018	29.68	413,745	6.65	124,713,523
2019	31.40	408,148	7.06	132,295,018
2020	33.41	293,385	7.11	133,309,503
2021	37.63	314,781	8.04	150,786,454
2022	37.78	225,873	9.22	172,973,272

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 CO2 Emission Reduction Programme launched in 2012.

The Emission Reduction Program (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

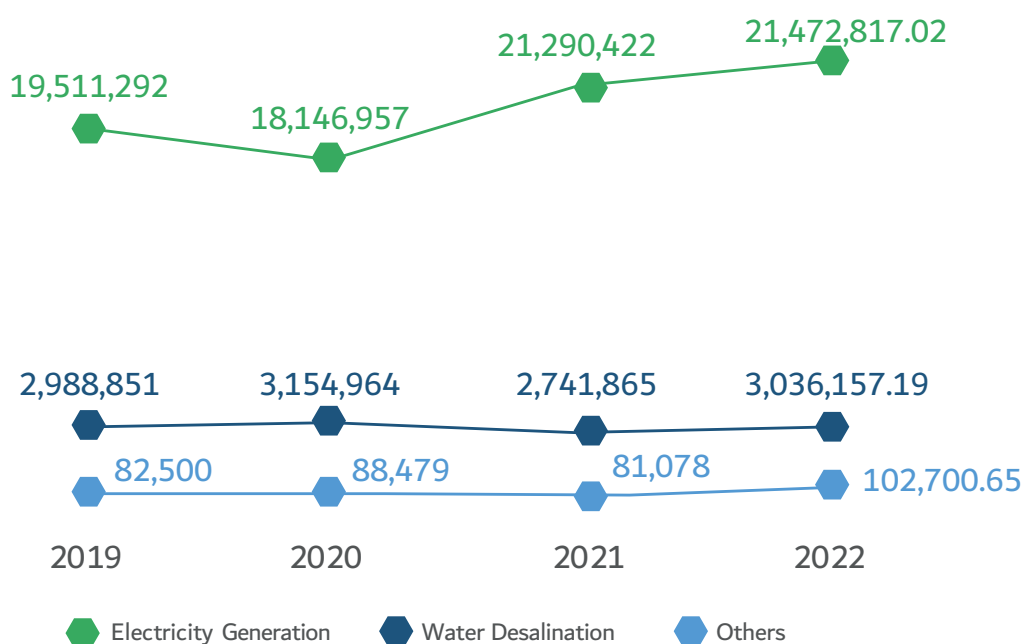
incorporates proposed emission reduction targets within its business decisions and overall growth strategies. DEWA's efforts have led to a significant reduction in carbon emissions in Dubai.

DEWA's CO2 ERP has three strategic pillars to ensure its strategic objectives are met: climate change functional strategy, emission reduction targets forecast model, robust monitoring reporting and verification system aligned with the annual performance management system.

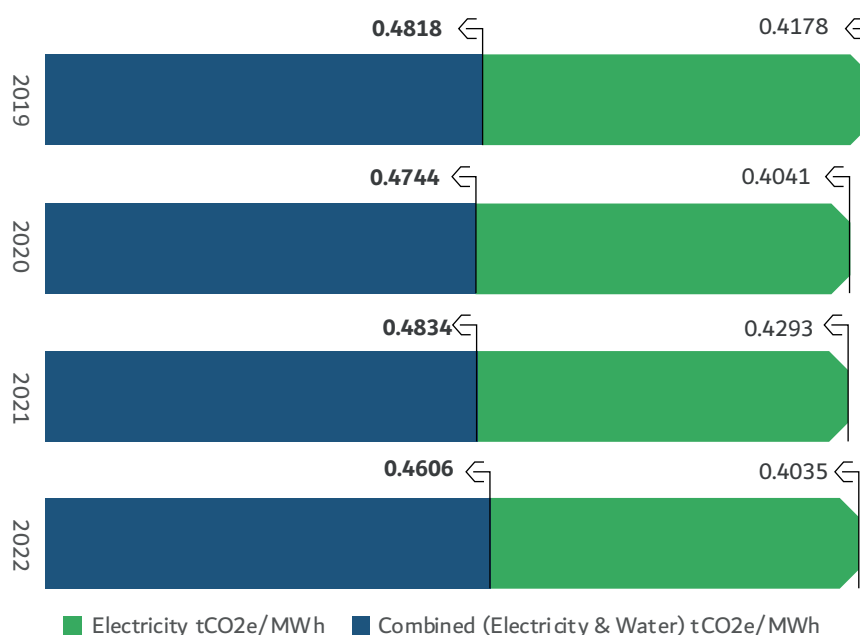
The ERP is a comprehensive programme that considers reductions from both the demand and supply sides. It considers several key factors: Dubai's energy and water growth requirements, Dubai's water and electricity

consumption rationalisation initiatives, DEWA supply-side efficiency improvements, and the diversification of its energy mix. The ERP targets were developed for both emission intensity (tCO2e/MWh) and the absolute emissions (tCO2e) for short-, medium-, and long-term emission-reduction tasks 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's CO2 ERP sets a planned reduction target of 35% of its scope 1 greenhouse gas emissions by 2030 against the BAU scenario. This is based on DEWA's 2020 Power and Water Master Plan, which is updated every year.

Emissions by Source from Scope 1 MtCO2e 2019-2022



Carbon emission intensity, tCO₂/MWh of electricity generated (2019-2022)



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 Gases (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 compatible with the ISO 14064-1, which also allows for integration with national and international GHG registries.

DEWA annually reports its Carbon Footprint Report, which quantifies and calculates its annual direct GHG emissions (Scope 1), covering CO₂, CH₄, N₂O, SF₆, HFCs and PFCs and indirect GHG emissions (Scope 2) from electricity imports. Scope 1 sources include fuel combustion during power generation and water desalination, sulphur hexafluoride (SF₆) 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:

- CO₂ usage in fire protection systems and labs
- Diesel used during emergencies (back-up generators)
- Acetylene usage for maintenance activities
- LPG usage for cable termination works
- Process emissions due to desalination
- Laboratory acetylene usage

DEWA follows an operational control approach in consolidating, monitoring and reporting on its GHG emissions, quantifying them in terms of CO₂ equivalent, and therefore its subsidiaries or affiliates were not considered. DEWA has gone to all reasonable lengths 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 2022, DEWA's total carbon emissions from Scope 1 were 24,61 MtCO₂e against BAU 31.15 MtCO₂e and the carbon intensity based on Grid Emission Factor for Electricity is 0.4035 tCO₂e/MWh. Since DEWA itself is the producer of the electricity it consumes, Scope 2 emissions from its own consumption are part of Scope 1 emissions to avoid double counting. Indirect emissions from the power purchased are reported under Scope 2 emissions only. In 2022, no power was purchased by DEWA from other electricity grids.

MINIMISATION OF AIR EMISSIONS (305-7):

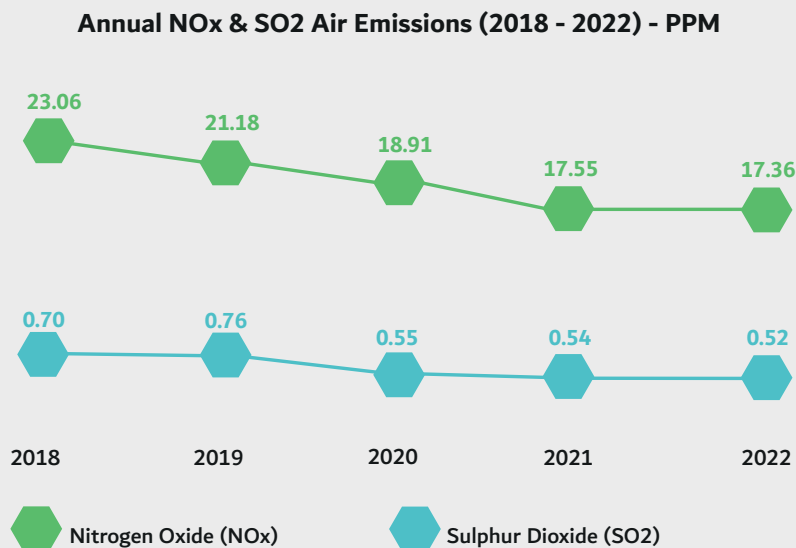
Similar to carbon emission reduction, DEWA focuses

on reducing air emissions by minimising and limiting other types of toxic emissions such as Sulphur Dioxide (SO₂), Nitrogen oxide (NO_x), and Sulphur Hexafluoride (SF₆). Such emissions are

considered are considered harmful and have a significant impact on the environment.

The SO₂ emissions have been slightly reduced to be 0.52 Parts Per

Million (PPM). Moreover, DEWA reduced its NO_x emissions from all units including all types of fuel, gas turbines, and boilers in 2022. The graphs below show the average annual NO_x and SO₂ emissions:



WASTE

(GRI 3-3, 306-4, 306-5):

WASTE MANAGEMENT

Waste is one of DEWA's focus areas therefore, the organisation has built an effective waste management system. Since each division has its own scope of work and different daily operational practices, DEWA customised the waste management systems for its 13 divisions differently. However, all systems have a unified target which is capturing and reducing the amount of waste generated. DEWA has recently created its own Circular Economy strategy which consists of five principles as mentioned in the Circular economy section. The third principle "Value Retention and End of life Treatment" is consistent with its waste management to include the process of mapping waste streams resulting from

various divisions activities and developing practices to minimise waste.

DEWA implements efficient management procedures for its non-hazardous material and waste management programme to preserve valuable landfill space and natural resources and to promote waste minimisation by adapting 5Rs (Refuse, Reduce, Reuse/Repair, Repurpose/Recover & Recycle) practice for managing its non-hazardous material and waste.

As for wastewater discharge, DEWA obtains a wastewater discharge permit bi-annually and follows Dubai Municipality regulations to ensure that both the quality and quantity of the wastewater discharged from Jebel Ali Power and Desalination Complex are within the permitted discharge quality and quantity limit.

DEWA collaborates with Dubai Municipality, the environmental regulatory body in Dubai, to manage the waste generated from its daily operations. In 2022, DEWA transported 5,297.68 tons of general waste to Dubai Municipality disposal areas. DEWA collaborates with third party companies that are certified by Dubai Municipality for hazardous waste management according to a comprehensive hazardous waste management system to ensure proper handling. This includes collecting, storing, transporting and disposal of hazardous waste in accordance with the best local, federal, and international procedures and standards. DEWA earned a total of AED 104 Million from selling scrap waste materials and waste oil and AED 29,716.25 from the recycled paper waste in 2022.

The table below demonstrates the hazardous and non-hazardous waste generated and methods of disposal from (2017-2021):

Waste Figure	Unit	Year				
		2018	2019	2020	2021	2022
General waste	Tons	2,628.63	5,335.45	4,823.64	4,378.53	5,297.68
Hazardous waste	Tons	49.25	68.89	181.69	420.56	418.337
Wooden packing reused	Cubic Foot	16,409	7,049	6,462	11,905	9,278
Wastewater recovered	MIG	226.59	193.24	200.93	238.63	285.13
Waste oil recovered for use	Liters	60,566.6	23,636	18,184.4	5,455.31	15,911.0
Recycled wastepaper	Tons	38.4	277.78	269.59	127.18	118.87
Spill Pallet made of IBC drum	No.	100	223	117	95	150
Revenue from scrap/waste materials sold - Consolidated	AED	1,126,817.32	5,548,069.48	57,294,667	59,770,306	104,000,000

DEWA'S SMART RECYCLE BIN:

In line with its efforts to promote circularity within the organisation, DEWA has launched an initiative called the "Smart Recycle Bin". Currently, there are two such bins at: its Head Office & Al Warsan. The objective is to encourage & engage with employees to recycle plastic bottles and aluminum cans by a reward system that gives points each item they recycle. The employee will be able to scan through the machine using the smart office application to get reward points and enter into monthly raffle draw. During 2022, more than 68,829 bottles/

aluminum cans were collected. The plastic bottles/ aluminum cans at a later stage are picked up by a third party company that provides sustainable manufacturing solution, where they will convert the plastic bottles into T-shirts and recycle the aluminum cans in through the standard recycling mechanism. Such initiatives have encouraged employees to collect their bottles from office and home to be recycled. The project concept also follows DEWA's ongoing approach to increase awareness among employees about sustainability trends and alignment with Sustainable Development Goals.



CLIMATE CHANGE (GRI 3-3)

DEWA recognises that utilities play a crucial role in a decarbonising societies. It considers the impact of its operations on the climate and how tackling climate change may present key benefits for its business by improving brand reputation, cost reduction, resilience against harmful impacts, alignment with regulations and increasing investors' confidence. DEWA established itself as a regional leader in climate change mitigation and adaptation efforts over the past years.

Below is a snapshot of DEWA's climate change mitigation and adaptation efforts:

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

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 leading priorities worldwide and one of the main issues 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. Climate

change is a cross-cutting risk that can have a physical impact on DEWA's operations, and economic, regulatory, and reputational impact on its business.

This is why climate change action is one of DEWA's top priorities, and in efforts to evaluate, understand and respond to the potential climate change impacts 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 such 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 power and water sector resilience.

Vision	A climate-resilient utility ensuring sustainable, innovative and resilient operations and assets to withstand the impacts of climate change
Guiding principles	Robustness Resourcefulness Rapid Recovery Adaptability
Approach	Risk Assessment Prevention and Management Adaptive Practices Stakeholder Engagement
Goals	1. Integrate climate change considerations into business practices 2. Align with local and national climate change resilience plans 3. Maintain an evidence-based resilience plan 4. Ensure safe and sustainable operations 5. Build and maintain resilient infrastructure 6. Maintain a business model aligned with national and international strategies and policies 7. Improve DEWA's Adaptive Capacity

DEWA's Climate Change Resilience Plan was developed based on a detailed risk assessment and in line with best practices. The Climate Change Resilience 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 following DEWA's ERM framework:



IDENTIFYING CLIMATE-RELATED RISKS

To cope with an uncertain future where climate change may have wide-ranging effects on the environment, and on socio-economic conditions, DEWA has analysed and assessed climate change trends and projections using climate models to provide an overview of observed climatic trends and projections at the global and local levels; which are essential in shaping an effective climate change resilience plan for DEWA. The output of these projections helped indicate the climate change conditions that could impose potential physical and transitional risks on DEWA's business and operations.

There are several ways of classifying climate change risks; either based on the cause of the risk or its impact. DEWA have assessed two main drivers when identifying Climate-Related Risks: Policy drivers and Climate drivers.

For the policy driver risks, the global, national and regional

climate change policies and strategies relevant to DEWA were assessed to identify potential risks for each policy driver that DEWA may face in the coming years and decades. As for the climate drivers, it has considered the climate variables identified based on available regional climate change trends and projections aligned with Dubai Climate Change Adaptation Strategy. This is due to variations in geography and climate conditions across the different Emirates in the UAE. Furthermore, variations in the risks associated with the 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" index, based on the climatic and policy drivers in its ERM system, and overseen by the Group Risk & Resilience Committee. After analysis and classification of potential impacts, various interdependencies, outlining risk heat maps, and identifying key risk indicators, the risk of climate

change reflects the potential impacts of both policy and climatic drivers on DEWA's strategy and operations.

The risk of climate change could have financial and non-financial consequences for DEWA. These include revenue loss, service disruption, health and safety, environment, and reputation. Climate change is expected to bring warmer ambient temperatures, rising sea levels, more frequent and severe extreme weather events, and warmer seawater temperatures. Furthermore, there will be less fresh water, an increase in sea acidity and a change in precipitation levels. These may have several impacts on DEWA's business and operations.

In 2022, DEWA continued to be adaptive to the potential impacts of the identified climate change drivers due to all the key preventive controls and mitigation measures it has set. The organisation continuously monitors climate change drivers to be able to mitigate potential climate

change impacts on its physical assets and business operations. Through the established climate change resilience governance and framework, the climate change resilience team analyses climate change drivers and trends, classifies and rank the identified risks, studies vulnerabilities and opportunities from projected climate change scenarios.

WATER & EFFLUENT

(GRI 3-3, 303-1, 303-2, 303-3, 303-4, 303-5, 306-1, 306-5)

SUSTAINABILITY OF WATER PRODUCTION

As Dubai grows, the demand for water is increasing, DEWA is committed to delivering water service to its customers. In 2022, desalinated water production remains at 490 MIGD. In line with DEWA's decoupling strategy of power generation and water desalination, all future expansions in water production will be based on SWRO technology using renewable energy.

By the end of 2022, the number of water customer accounts was 995,478 compared to 960,032 accounts by the end of 2021. The table below demonstrates the Installed Capacity and total water produced between 2018 to 2022 MIG:

Year	Installed Capacity (MIGD)	Total Water Production (MIG)
2018	470	120,880
2019	470	123,090
2020	470	121,006
2021	490	126,147
2022	490	136,254

In 2022, DEWA produced 136,254 MIG of desalinated water, representing a 8.01% increase from last year and the installed capacity was 490 MIGD. The peak daily desalinated water demand of 413.427 MIG was recorded on 14-September 2022, an increase of 4.31% growth compared to 2021. The average daily desalinated water demand in 2022 was 375.278 MIGD compared to

352.346 MIGD in 2021, which is an increase of 6.51%. The peak monthly average desalinated water demand of 407.710 MIGD occurred in September 2022, an increase of 7.30% compared to 2021.

In 2022, the installed capacity from underground wells, which is maintained exclusively for emergency purposes, was approximately 35.56 MIGD (total production of 582.203 MIG). The daily production from wells was approximately 1.61 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 DEWA water wells is 582.203 MIG (approximately 2,201 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	2018	2019	2020	2021	2022
Installed Capacity (Underground wells)	MIGD	32	32	32	35	35.56

Furthermore, the potable water produced, transmitted and distributed by DEWA is in compliance with the requirements of the latest 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	407.8
3	TDS		mg/L	100 - 450	224.3
4	Chlorine Dioxide	as ClO ₂	mg/L	0.40 - 0.50	0.47
5	Turbidity		NTU	< 5.0	0.9

6	M-Alkalinity	as CaCO ₃	mg/L	-	25 - 65	50.3
7	Carbonate	as CaCO ₃	mg/L	-	0 - 10	0.4
8	Bicarbonate	as HCO ₃	mg/L	-	30 - 80	60.9
9	Total Hardness	as CaCO ₃	mg/L	500	40 - 120	58.9
10	Calcium Hardness	as CaCO ₃	mg/L	-	25 - 65	40.9
11	Calcium	as Ca	mg/L	-	10 - 26	16.4
12	Magnesium	as Mg	mg/L	-	2 - 20	4.4
13	Chloride	as Cl	mg/L	250	25 - 250	85.5
14	Sulphate	as SO ₄	mg/L	250	2 - 35	9.4
	Free Carbon					
15	dioxide	as CO ₂	mg/L	-	≤ 1.5	0.4
16	Fluoride	as F	mg/L	1.5	≤ 1.5	<0.05
17	Chromium	as Cr	mg/L	0.05	< 0.05	0.0035
18	Iron	as Fe	mg/L	-	≤ 0.3	0.0186
19	Copper	as Cu	mg/L	2	≤ 1.0	0.0732
20	Nickel	as Ni	mg/L	0.07	≤ 0.07	0.0093
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	51.3
24	Lead	as Pb	mg/L	0.01	≤ 0.01	<0.0020
25	Boron	as B	mg/L	2.4	≤ 2.4	0.3260
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	-	≤ 0.4	0.0030
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 NO ₃	mg/L	50	≤ 50	<0.05
35	Nitrite	as NO ₂	mg/L	3	≤ 3	<0.01
36	Bromate	as BrO ₃	mg/L	0.01	≤ 0.01	<0.0002
37	Chlorite	as ClO ₂	mg/L	0.7	≤ 0.7	0.2858
38	Chlorate	as ClO ₃	mg/L	0.7	≤ 0.7	0.1758
	TTHMs					
	(Concentration ratio)					
39				1	≤ 1.0	0.0952
a)	Chloroform	as CHCl ₃	mg/L	0.3	≤ 0.3	<0.001
b)	Bromoform	as CHBr ₃	mg/L	0.1	≤ 0.1	0.009
	Dibromochloro					
c)	methane	as CHBr ₂ Cl	mg/L	0.1	≤ 0.1	0.001
	Bromodichloro					
d)	methane	as CHBrCl ₂	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

Remarks:

- (*) 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 or taste of oil.
- DEWA JAPS typical figure is the average of individual station averages during the year 2022
- WHO guideline values is based on W.H.O drinking water guidelines values 4th edition with Addendum 1 of 2017.

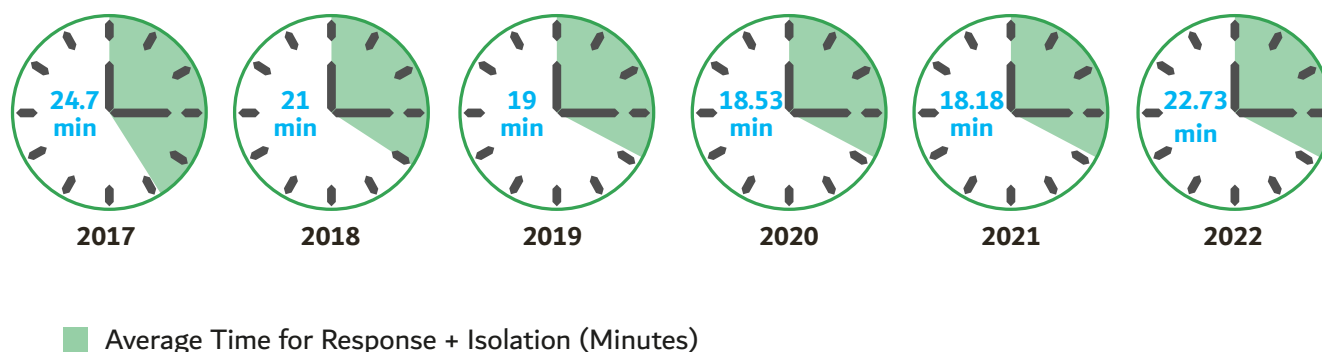
DEWA has also started operating the Smart Meters Analysis and Diagnosis Centre, where smart meters are read and monitored remotely every 15 minutes. As of 31 December 2022, DEWA installed 996,917 smart meters, out of which 985,144 are monitored and read remotely every 15 minutes. This allowed DEWA to improve the availability of meter readings to 99.22% with

978,430 water meters remotely billed in SAP. The AMI improves meter reading & billing accuracy, customer happiness, and reduces Unaccounted for Water.

The state-of-the-art infrastructure for smart meters helped detect 1,329,944 water leakages; 26,657 defects; and 13,172 increase load cases in the past five years. This saved customers a total of AED

540.3 million. The High-Water Usage Alert service, which is part of the Smart Living initiative, helps customers detect leakage in water connections after the meter. The system sends instant notifications to the customer if there is an unusual increase in consumption to check the internal connections and repair any leaks. This reduces waste as well as incurred costs for customers.

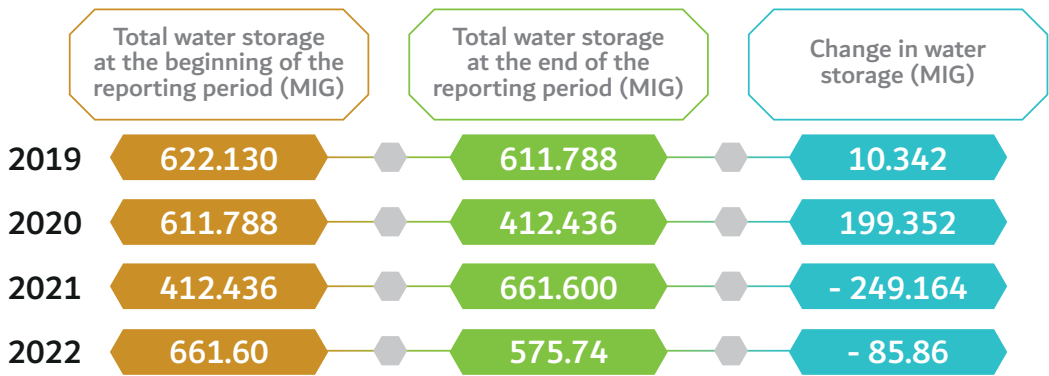
Average Time for Response + Isolation (Transmission Breakages)



DEWA has successfully completed the first stage of the ASR project for desalinated water. The full scale of the ASR project can store up to 6,000 MIG of water once completed by 2025 as a strategic reserve. This makes it the largest ASR of its kind in the GCC and world to store potable water and retrieve it in case of an emergency. This will secure the Emirate with an additional source of potable water strategic reserve of 50 MIGD for 90 days in emergencies, while ensuring the quality of the stored water.

DEWA plans to increase the storage capacity of Dubai through new projects to reach 7,212 MIG in 2025 as compared to the present storage capacity of 822MIG.

The table below demonstrates the water consumption within the Emirate of Dubai:



SMART BALL LEAK DETECTION

In 2022, DEWA adopted the smart ball leak detection to detect invisible water leakages in water transmission pipelines that are hard to detect or reach. This is part of DEWA’s ongoing efforts to reduce water losses. The smart ball system consists of a small diameter sphere that is inserted into the water network where it travels freely, driven by the water flow. Sounds generated by a leak, gas pocket or anomalies have unique characteristics. The system captures the sounds of these from inside the pipeline

with the software then able to detect the location of the leak. The technology has saved 68.45 million gallons and AED 2.74 million since its implementation in April 2021.

WASTE WATER DISCHARGE:

DEWA embeds environmental solutions into its business by developing specified procedures for its daily operations that are in line with the environmental regulatory body Dubai Municipality. To manage the wastewater generated from DEWA’s Jebel Ali Power and Desalination Stations Complex,

DEWA follows its wastewater management procedure to ensure that the water discharge quality is up to standards and safe for the surrounding ecosystem. Furthermore, as part of the procedure, DEWA conducts ecological assessments on a bimonthly basis to assess the phytoplankton, zooplankton, and macrobenthos concentrations four times a year. The assessments are carried out at distances of 0.5 km and 2.0 km away from D, K, and L stations discharge points by specialist environmental service providers.

TOTAL VOLUME (M3) DISCHARGE

Type of effluent	2018	2019	2020	2021	2022
Process water from Power plant	1,776,251,568	1,719,495,006	1,645,458,818	1,654,577,150	1,698,174,459
Process water from Desal plant	3,595,084,434	3,594,972,940	3,573,859,485	3,540,695,341	3,777,922,079
Water treatment plant effluent	74,318	68,658	68,406	74,831	61,298
Treated sewage water (to land)	38,636.3	0.00	0.00	0.00	0.00
Treated sewage water (to sea)	54,740.2	11,968.1	15,849	15,814	40,673.00
Treated sewage water	93,376.5	11,968.1	15,849	15,814	40,673.00

The Average of Temperature and Salinity Difference between the Seawater at Mixing Zone and Ambient Seawater 2022:

Particulars sample	Salinity difference between the seawater at mixing zone and ambient seawater (g/kg)				
	2018	2019	2020	2021	2022
D-I station	0.7	0.7	0.6	0.5	0.6
D-II station	1	0.9	0.6	0.5	0.7
E station	0.5	0.5	0.6	0.5	0.6
G station	1	0.5	0.9	0.7	0.8
K station	0.6	0.5	0.7	0.4	0.7
K-SWRO	-	-	-	-	0.5
L station	0.8	0.5	0.4	0.8	0.8
M station	0.4	0.6	0.7	0.9	0.9
Average	0.7	0.6	0.7	0.6	0.7

Temperature difference between the seawater at mixing zone and ambient seawater (°C)

Particulars sample	2018	2019	2020	2021	2022
D-I station	1.8	1.5	1.1	0.8	1.8
D-II station	2.4	2.1	1.2	1.0	1.8
E station	1.4	1.2	1.7	1.0	1.3
G station	2.4	1.0	1.5	1.4	1.5
K station	1.3	1.0	1.1	1.1	1.3
K-SWRO	-	-	-	-	1.1
L station	1.9	1.4	1.3	1.4	1.3
M station	1.6	1.6	1.3	1.5	1.7
Average	1.8	1.4	1.3	1.2	1.5

The Average of Temperature and Salinity Difference between Seawater at the Mixing Zone and Ambient Seawater 2022:



NET ZERO CARBON EMISSIONS

(GRI 3-3)

DEWA has set an ambitious goal of achieving net-zero carbon emission by 2050, which means to eliminate or offset CO₂ emissions. DEWA has identified and initiated

several steps to achieve this goal. One important step is to increase the use of renewable energy and to promote energy efficiency and conservation through various projects and initiatives. Through its Research and Development Centre, DEWA is researching and testing the use of carbon capture, utilisation and storage technologies which will

capture and store CO₂ emissions from power plants, thus reducing the overall emissions. DEWA also follows the UAE agenda, rules and regulations related to carbon emissions.



04

Social Perspective

SOCIAL PERSPECTIVE

EMPLOYMENT (GRI 3-3)

DEWA is focused on attracting, developing, and retaining the best talent in order to provide reliable and efficient electricity and water services to the people of Dubai. As such, DEWA has a talent management strategy in place, which also focuses on identifying the skills and competencies needed for different roles, as well as providing training and development opportunities to help employees grow and advance in their careers. Furthermore, DEWA emphasises employee engagement and participation in decision making processes by encouraging open communication and feedback, and regularly has surveys to gather employees insight, feedback and suggestions. DEWA has developed the “Afkari” platform for employees to suggest solutions that will enhance and develop its performance in all areas.

DEWA also focuses on performance management, where employees are evaluated based on their performance and provided with feedback and coaching to improve their skills through the employee’s development centre. In this way, DEWA ensures continuous improvement of their employees and performance. The organisation regularly reviews and updates its policies and practices

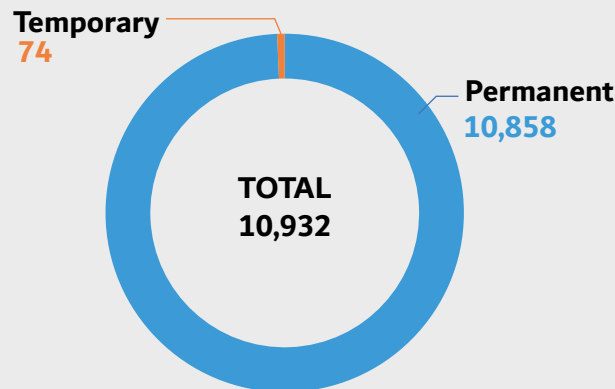
to ensure that it is providing the best services to its customers, employees and the community.

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

DEWA’s workforce is composed of a mix of UAE nationals and expatriates from all genders, representing various cultural and educational backgrounds and qualifications. DEWA is committed to hiring and developing local talent with a significant proportion of its workforces being made up of UAE nationals.

DEWA’s workforce consists of a range of skilled professionals including engineers, technicians and other staff with the expertise and knowledge to provide reliable and efficient electricity and water services. In 2022, DEWA’s total number of employees was 10,932, of which 17.76% are females and 82.23% are males.

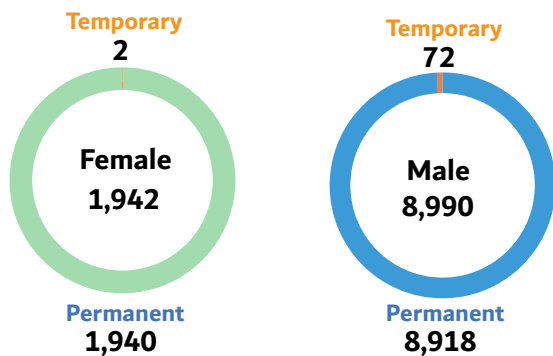
Total number of employees:



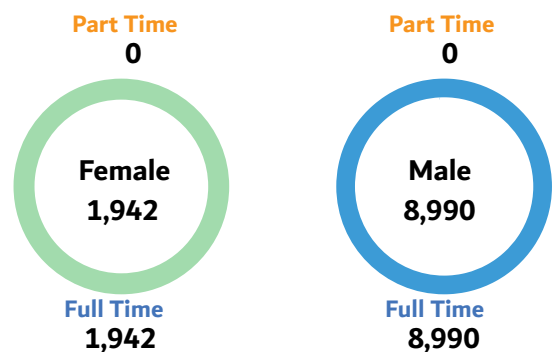
*DEWA doesn’t have any non-guaranteed hours employees.

DEWA fosters and supports behavior that drives employees to bring innovation and excellence into their work which contributes to sustainable growth for the long-term development by ensuring that all employees are given the same opportunities without discrimination based on sex, race, nationality, age or creed, in line with the policies and regulations of the UAE government. In 2022, no incidents of non-discrimination were recorded during the reporting period.

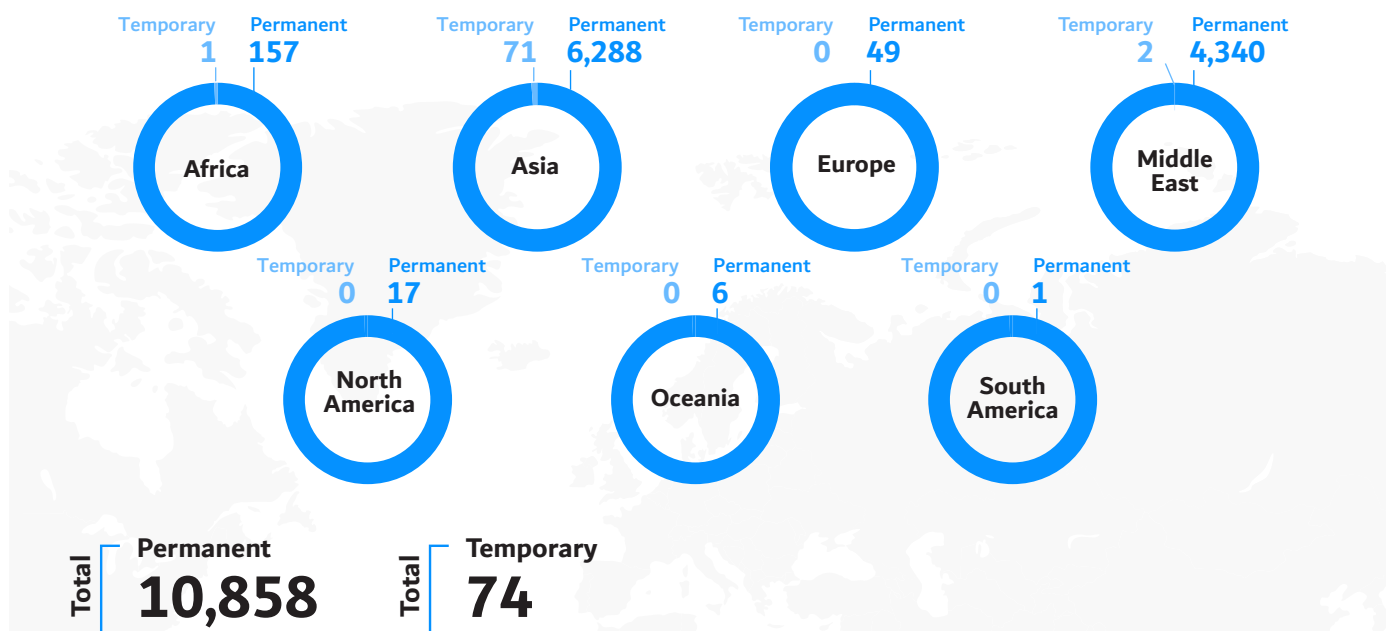
Permanent & Temporary employees, and a breakdown by gender



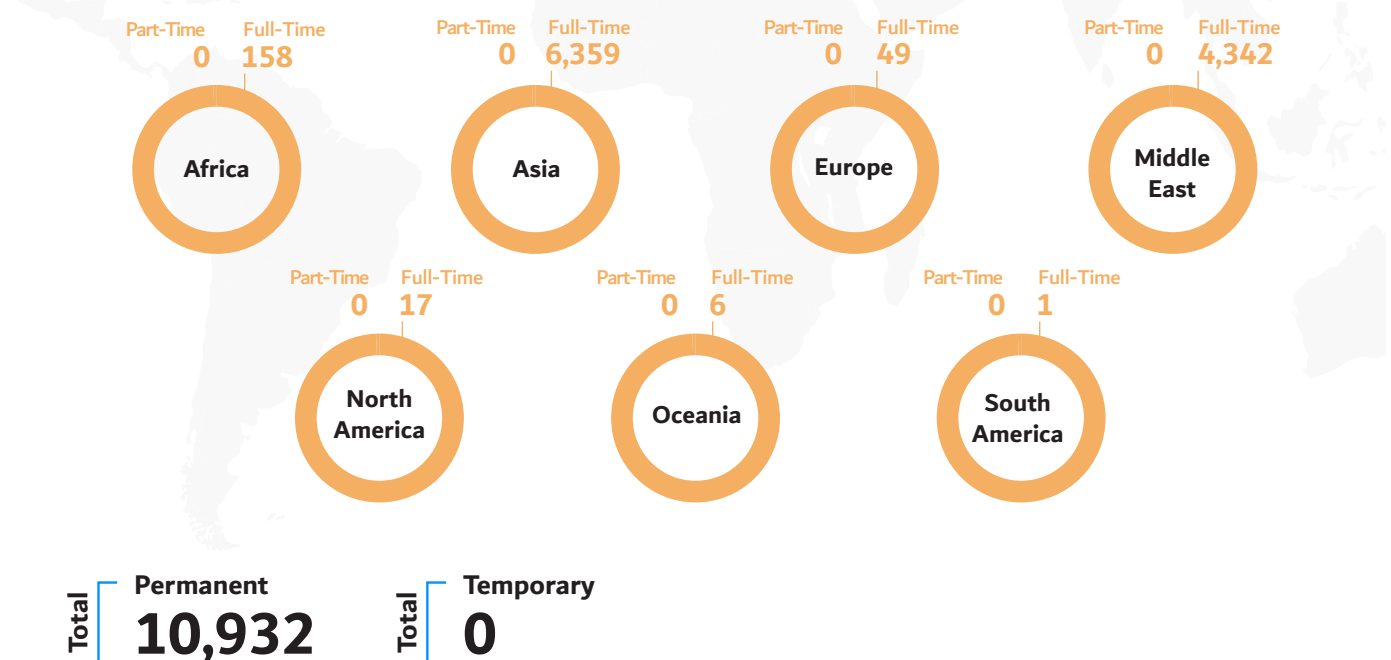
Full-time employees and Part-time employees, and a breakdown by gender



Permanent & Temporary employees, and a breakdown by region



Full-time employees and Part-time employees, and a breakdown by region



New employee hires and employee turnover by age group, gender and region

New Employee Hires

Gender	2019	2020	2021	2022
Female	51	44	57	43
Male	335	172	231	155
Total	386	216	288	198
Region	2019	2020	2021	2022
Africa	18	2	6	10
Asia	357	210	279	186
Europe	10	2	3	1
North America	1	2	0	1
Total	386	216	288	198
Age Group	2019	2020	2021	2022
18-29	226	170	218	113
30-39	121	35	57	67
40-49	29	9	10	15
50-59	9	2	3	3
60-69	1	0	0	0
70-79	0	0	0	0
Total	386	216	288	198

Employee Turnover

By Gender

Gender	2018	2019	2020	2021	2022
Male	260	251	156	211	244
Female	39	47	18	33	36

By Age

Category	2018	2019	2020	2021	2022
Under 30	48	36	12	15	17
30-50	219	224	133	203	240
Over 50	32	38	29	26	23

By Region

Region	2018	2019	2020	2021	2022
Africa	32	35	14	19	27
Asia	201	178	119	181	204
Australia	0	0	0	0	0
Europe	2	8	3	3	3
North America	3	6	2	1	0
Middle East	61	71	36	40	46
Total	299	298	174	244	280

Percentage of employees eligible to retire in the next 5 years by category and region

Retirement 5 Years						
Continent	Engineers	Operators	Linesmen	Mechanics	Others	Total
Africa	0.45%	0.00%	0.00%	0.00%	1.79%	2.24%
Asia	14.80%	9.87%	0.90%	1.79%	48.43%	75.78%
Europe	0.00%	0.00%	0.00%	0.00%	2.69%	2.69%
Middle East	0.90%	0.45%	0.00%	0.45%	17.49%	19.28%
North America	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Grand Total	16.14%	10.31%	0.90%	2.24%	70.40%	100%

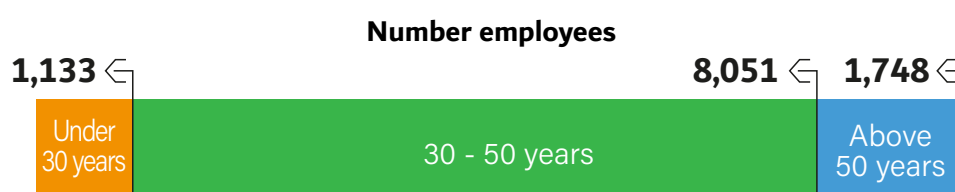
The total number of employees eligible to retire in the next 5 years by category and region is 223.

Percentage of employees eligible to retire in the next 10 years by category and region

Retirement 10 Years						
Continent	Engineers	Operators	Linesmen	Mechanics	Others	Total
Africa	0.38%	0.05%	0.00%	0.00%	1.32%	1.76%
Asia	15.44%	7.97%	0.88%	4.56%	49.51%	78.35%
Europe	0.00%	0.00%	0.00%	0.00%	1.32%	1.32%
Middle East	1.32%	0.33%	0.00%	0.16%	16.37%	18.19%
North America	0.05%	0.00%	0.00%	0.00%	0.33%	0.38%
Grand Total	17.20%	8.35%	0.88%	4.73%	68.85%	100%

The total number of employees eligible to retire in the next 10 years by category and region is 1820.

Age Group under 30 years old, 30-50 years old, over 50 years old.



EMPLOYEE BENEFITS

(GRI 3-3)

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

1. Allowances (house rent deduction, duty car, nature of work allowance, mobile phone allowance, shift allowance, special shift allowance etc.)
2. Retirement Provision (Gratuity & Pension schemes)
3. Leaves (Earned, special, accident, condolence, sick, maternity, paternity, study or exams, Hajj, Idda, and confinement leave etc.)
4. Accommodation/ Air Passage Entitlement
5. Children Education Allowance

6. Medical Insurance/Healthcare
7. Bonus
8. Joining & Repatriating tickets
9. Disability & Invalidity Coverage
10. Residence Visa costs for employees & family
11. Salary Advance for New joiners
12. Life insurance is voluntary. In DEWA if the employee wishes he/she can enroll in the scheme and it is optional.

Honouring distinguished employees is part of DEWA's strategy to recognise excellent and creative employees to raise its competitiveness and ensure the happiness of customers and society. This also supports top management's commitment to providing a motivational work environment that consolidates creativity, innovation and encourages positive competition among staff.

In line with this strategy the top management honoured 1,868

distinguished employees and 54 distinguished teams with the Nujoom Awards 2022, the new name for its internal excellence awards. The categories included Distinguished Supervisory Employee, Distinguished Administrative Employee, Distinguished Innovative Employee, Distinguished Field Employee, Youth Employee, Distinguished Technical Employee, Distinguished Financial Employee, Distinguished Specialised Employee, Unknown Soldier, Distinguished Technical Project, Distinguished Innovative Administrative Initiative, Best Agile Project, Best Project / Initiative Attaining Sustainability, Best Project In Data Science and AI, Share.K, Long Service Employee and Special Recognition for those who help achieve DEWA's vision.

Through the Nujoom awards, DEWA promotes sustainable excellence by encouraging creativity, innovation and positive employee competitiveness. This is achieved by adopting constructive ideas that contribute to the development and upgrading of services as well as the happiness of all stakeholders.

EMPLOYEE PARENTAL LEAVE AND RESUMED DUTY, 2022

(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	1,181	151	151**	100%	161***	96%
Paternity Leave	7,270	352	352*	100%	320****	93%
Total	8451*****	503	503		481	

*Male employees returning to work immediately from 1 January, 2022 to 31 December, 2022 – 100%

**Female employees returning to work immediately from 1 September, 2021 – to 31 August, 2022 – 100%

***Out of 168 female employees of 2021, 161 female employees are retained after 12 months (96%).

****Out of 343 male employees of 2021, 320 employees are retained after 12 months (93%)

***** 539 employees have used parental leave as of 2022

DIVERSITY AND EQUAL OPPORTUNITIES

(GRI 405-1)

DEWA follows all UAE government laws and regulations and is committed to providing equal opportunities for all employees and applicants for employment. its equal opportunities policy prohibits discrimination against any applicant on the basis of race, color, religion, sex, national origin, age, disability, and gender.

DEWA's policies ensures that all employees and applicants for employment are treated fairly and without discrimination. DEWA also

provide training and development programmes to promote diversity and inclusion in the workforce, and it also provides accommodations for employees with disabilities.

Furthermore, DEWA has a number of initiatives and programmes to support the development and advancement of women in the workplace. These initiatives includes the following:

- For Her – Empowerment programmes
- 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.

HUMAN RIGHTS ASSESSMENT

(GRI 3-3,412-2,412-3)

DEWA's divisions, business units, and subsidiaries, are committed to conducting business with the highest level of integrity and in accordance with the letter and spirit of Dubai and UAE laws. DEWA is a morally conscious organisation, and uses its position as a responsible organisation to promote ethical work practices in compliance with the human rights laws of the country and international best practices as applicable.

In 2022, DEWA conducted 33 sessions across its divisions spanning different employee groups, to discuss human rights and other employee related rights including but not limited to; HR Policies, Provisions and rules of conduct and work ethics in DEWA, HR Rules and Regulations, HR Services. A total of 623 employees across all divisions have attended these sessions till November 2022 which were under the name HR Awareness sessions.

Furthermore, DEWA's Code of ethics for Contractors has included a requirement in all procurement contracts to comply with the SA 8000 Standard, which includes a good working environment, 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 SA8000 compliance in their offers. 100% of 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 the procurement organisation, as well as those who work in procurement, receive training on the terms and conditions of contracts, which includes the SA8000 standards. The Human Rights clause was incorporated in all 357 bulk purchases and project contracts for the year 2022. In the year 2022, the aforementioned sum and percent represent procurement contracts worth more than AED 2 million.

DEWA values and manages its HR diversity through planning, organising, administering as well as supporting varied characteristics and plurality amongst its employees and by recognising them as individuals and teams, in a way that adds tangible and positive effect in the organisational performance and contributing to the happiness of employees. In addition, the below list is other DEWA's policies that are related to Human Rights:

1. DEWA Policy For The Happiness, Accommodation and Empowerment of The People of Determination (POD)

2. Employee Accommodation Procedure
3. DEWA Inclusive Education Policy

TRAINING AND EDUCATION

(GRI 3-3, 404-1, 404-2,404-3)

DEWA provides various training and development opportunities for its employees such as on-the-job training where employees receive hands-on training in their specific roles and responsibilities, as well as cross-functional training to gain a broader understanding of the organisation.

The wide range of courses are designed to help employees improve their skills and advance their careers. These courses cover topics such as leadership, management, communication, and technical skills. DEWA also encourages mentoring relationships between experienced employees and newer staff members, to provide guidance and support as employees learn and grow in their roles. Employees are encouraged to participate in international training programs to gain new perspectives and learn from experts in other countries. A variety of e-learning modules are available for employees with flexibility to access the trainings from anywhere and at any time.

Below is the Average Training Hours per Employee and by Gender:**Average Training Hours Per Employee**

Grade/Year	2018	2019	2020	2021	2022
Leadership	109.48	90.39	85.62	83.78	88.99
Management	49.31	55.73	52.96	51.00	54.56
Non-Supervisory	42.22	42.68	42.83	46.30	55.86
UAE Nationals	58.39	65.58	57.94	57.48	67.47

Average Training Hours by Gender

Gender/Year	2018	2019	2020	2021	2022
Male	26.27	28.26	27.01	30.43	34.92
Female	55.35	65.62	65.88	62.40	75.41

DEWA provides a range of platforms, programmes, and initiatives to spread and localise knowledge and transfer expertise among its employees. Many educational courses to raise employee awareness on knowledge and its management, types of data, information and knowledge, intellectual property rights and ways to protect them. For instance, in 2022, DEWA enrolled their nominated employees in several international and national programmes, such as:

1. Masters in Future Energy Systems & Technology from UC Berkeley. In 2022, 30 employees enrolled in the program (Batch 4). The programme started in October 2022 and is expected to end in November 2023
2. Capacity Building Programme

3. Robotic Process Automation Learning Programme

Overall, one of DEWA's goals is to provide and enroll its employees in such programmes to develop the necessary skills and knowledge needed for their roles, and to help them advance their careers within the organisation.

OCCUPATIONAL HEALTH AND SAFETY

(GRI 3-3)

DEWA is a strategically focused organisation incorporating the IMS comprising ISO-9001; ISO-14001 & ISO-45001 cascading the same within its management system through a dedicated IMS Policy, IMS procedures and process maps; in line with Federal Law No. 8 of 1980, Ministerial Order No. 32 of

1982, Dubai Municipality Code of Construction, Dubai Municipality Guidelines, and the fourth-generation Dubai Government Excellence Programme, supported by Dubai Accelerators' 10X Strategy for future generations. The key methodology in DEWA's Performance Management is based on RADAR and 10-steps of continual improvement. DEWA has a dedicated STRATEX, CAPEX and OPEX for health, safety, and environment (HSE) management & objectives.

This is further complemented with policies on risk management, social responsibility and agility framework (vertical-alignment). The OHSMS Manual classifies risks, crisis, operations, functionality & controls for all employees, consultants and contractors. DEWA has a dedicated COVID-19 prevention framework for its control, authenticated with

Diamond Award for COVID-19 from Harvard Business Council and British Safety Council Assurance Certificate.

HAZARD IDENTIFICATION AND RISK ASSESSMENT (GRI 403-2)

DEWA has a comprehensive and intricate qualitative & quantitative IMSP03: Hazard Identification and HSE Risk assessment procedure aligned to Enterprise Risk Management in line with ISO-45001 & ISO-14001 and HSG-65 Guidelines, HSE, UK.

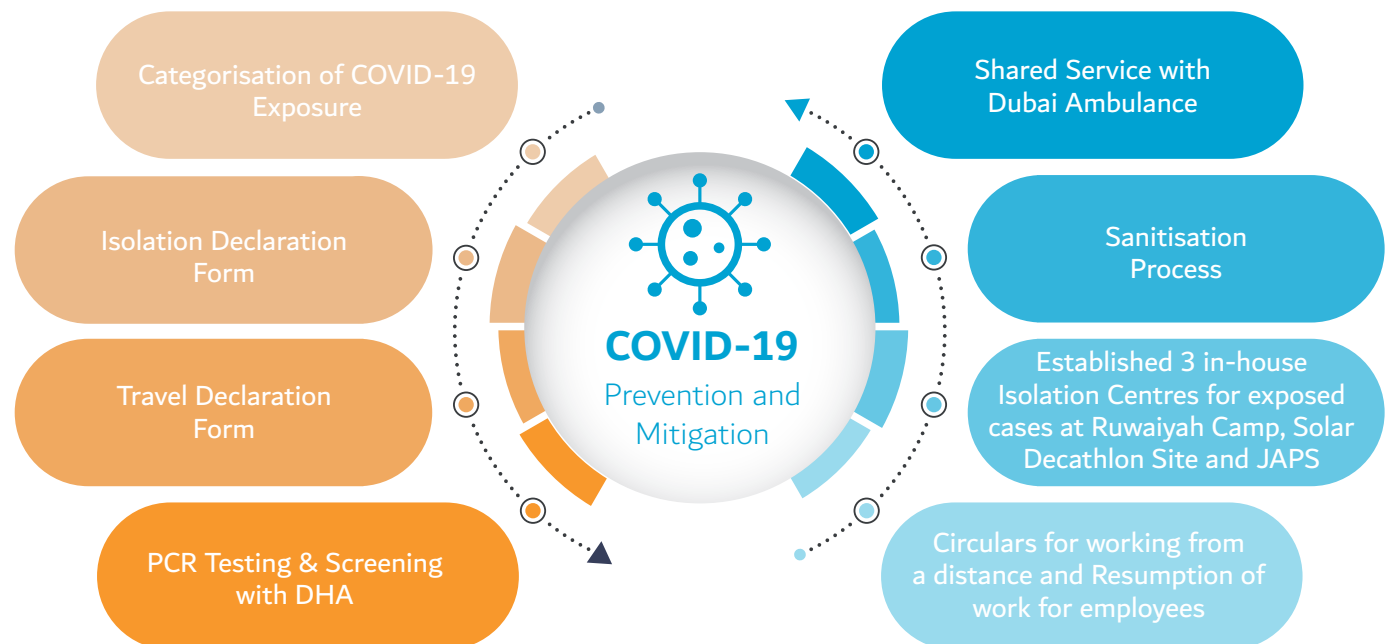
It is a British Safety Council recognised affiliate HSE training centre for DEWA employees and has a dedicated SP14: Training, Awareness & competency procedure aligned to employee performance, competency and appraisals.

OCCUPATIONAL HEALTH SERVICES (GRI 403-3)

In line with ISO-45001, DEWA has a dedicated SP12: Occupational Health Procedure and EP04: Employee Counselling & Stress Management procedure that controls and monitors overall health, well-being

and happiness of employees. Furthermore, there are dedicated guidelines for POD, Noise, Vibration, Musculoskeletal Diseases, HACCP and Welfare & Wellbeing.

Regular stress assessments are carried out, referrals to counselling (ESTISHARATI programme); welfare, wellbeing & hygiene assessments and COSHH air monitoring are done. DEWA meticulously crafted its own COVID-19 prevention and mitigation guidelines, which were then distributed to all of its divisions, departments, sections, contractors, and vendors. The following were the main points:



H&S COMMUNICATIONS AND REPRESENTATION (GRI 403-4)

At the strategic level, **SO2: Engaged and happy stakeholders perspective and IMS policy (Vertical-alignment)** with The IMSP06: Participation, Consultation & Communication procedure has defined a two-way approach (Horizontal-alignment). Trainings, awareness, ideas Afkari, consultations, participation in events/workshops/surveys are carried out on a regular basis and employee happiness survey results are evaluated. Other tools are the dedicated DEWA Mobile App (Smart Office); SAP-integration and Freejna portal. The strategic direction, objectives (SMARTER) and KPIs (Leading & Lagging) are defined post a 360 degree. evaluation using RADAR through a dedicated HSE corporate committee that quarterly reviews performance and short-term strategic plans.

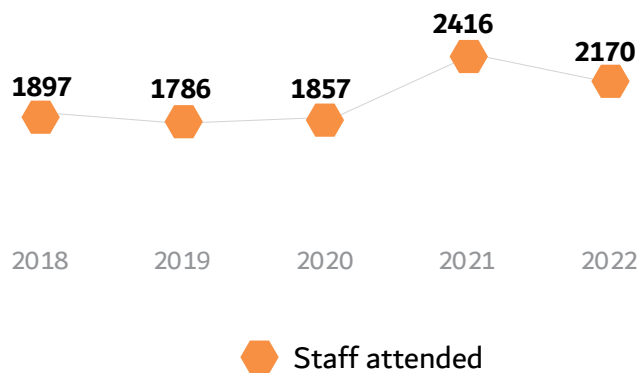
H&S TRAINING (GRI 403-5):

Since 2020, DEWA's in-house training deliverables have become hybrid, AI-oriented with adoption of AR-VR (Augmented Reality - Virtual Reality) tech. The trainings are customised in terms of scope, operations, functions and preventive using multilingual approach e.g. Arabic, English, Urdu/Hindi. Each employee has a dedicated Training Needs Analysis which is linked to his/her competency requirements and aligned to employee-

appraisals. Each division has a dedicated training attrition rate to maintain and achieve the Target Achievement Level for hours of training per employee. DEWA has its own dedicated HSE Training section which is also a BSC Certified training affiliate. In

2022, around 2170 employees attended 101 training sessions, 87 Covid-19 Awareness workshops, 74 one-one consulting sessions, and 96 infographic E-shots that were released through internal communication channels.

Number of DEWA Staff attended H&S Training conducted by H&S Department from 2018 - 2022



PROMOTION OF EMPLOYEE HEALTH & SAFETY (GRI 403-6)

The SO2: Engaged & Happy Stakeholder perspective is cascaded from key Dubai Strategic Accelerator (10x) Health & Wellbeing complemented by the strategic perspectives **IP02: Leading HSE practices, LG02: Motivated & happy human capital and TBL02: Pioneering socially responsible practices**. Each employee has an insurance cover locally & internationally. Screenings for health parameters, stress indicators, nutrition and counselling are key practices. Each location is "safe-secure" with first-aid kits, evac-chairs & maps, AED Machines, POD-friendly e.g. Braille text, audio-loop, tactile paving and voice assist centres. All premises are CCTV monitored, with dedicated emergency & response command framework. DEWA also annually hosts its Sports Week and sporting events. Key health campaigns are carried out in line with WHO objectives and promotional campaigns. Some highlights are:

HEALTH & SAFETY WEEK OF DEWA:

The H&S Week is a participatory and interactive platform for creating and increasing awareness of Occupational Health and Safety issues among employees and the general public. In 2022 the H&S Internal Week successfully completed with 5700 attendees and H&S Public had with 8313 attendees.

ANNUAL CONTRACTOR DAY:

Annual Awareness Day was conducted for contractors, consultants, and suppliers in order to reinforce DEWA's mission, vision, and policy of integrated administrative systems.

DEWA'S RESPONSIBILITIES

(GRI 403-7, 403-9, 403-10)

The IMS Policy of DEWA is a testament of its commitment to Quality, Health, Safety and Environment (QHSE) and responsibilities along with the CSR Policy and Stakeholder Policy (www.dewa.gov.ae) stating

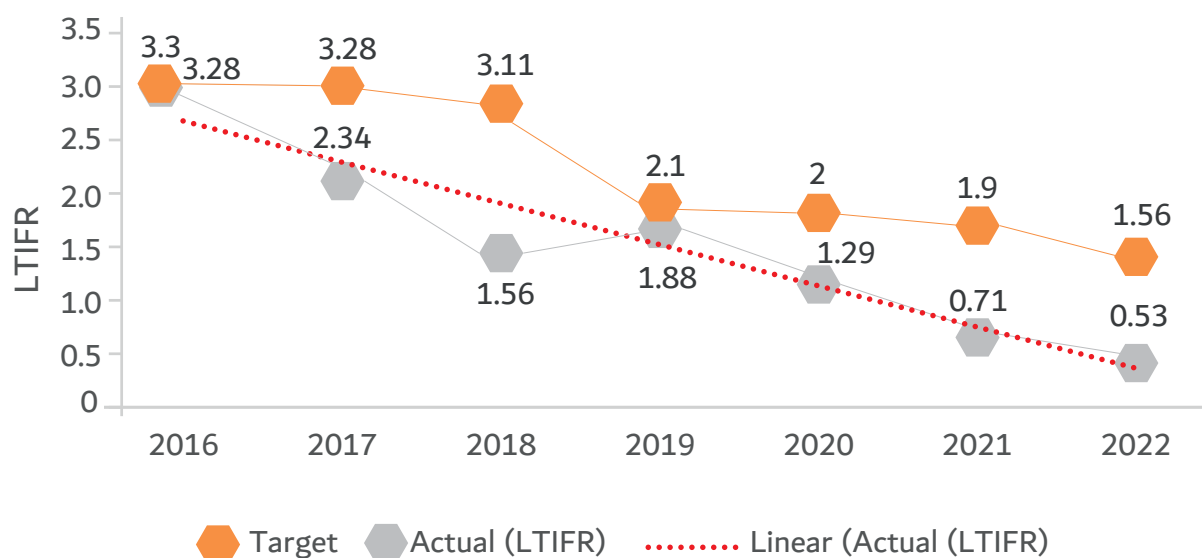
that DEWA is committed to effective implementation of QHSE management within its businesses, in order to attain its purpose by services, and related innovative smart solutions minimising HSE risk, incidents/accidents, injury/illness and environmental footprint (Vertical-alignment to Dubai Strategy). The Corporate IMS procedures cascade to divisions and departments to formulate procedures and process-maps linked to RACI matrix and Balanced Scorecard (Horizontal Alignment). The approach to responsible & accountable implementation is governed by procedures and monitored by proactive steps such as inspections, surveillances, screenings and near-miss

reporting along with reactive steps of incident and crisis & emergency management and evaluating the gaps to make corrections.

DEWA's Health & Safety Performances & Achievements

Performance Indicators	Score as of 2022
Fatality	Zero since 2000
Lost Time Injury Frequency Rate (LTIFR)	0.53
Total Recordable Injuries Rate (TRIR)	0.1

LOSS TIME INJURY FREQUENCY RATE (LTIFR) 2016-2022



LOCAL COMMUNITIES: FROM DEWA TO THE COMMUNITY

(GRI 413-1, EU22):

Through various initiatives, DEWA engages with the community on a yearly basis. In 2022, DEWA initiated 30 social and humanitarian initiatives which included a total of 44,067 volunteering hours. The outcome of these initiatives was reflected on 13,943,554 beneficiaries.

PROVISION OF INFORMATION

EMPOWERING PEOPLE OF DETERMINATION

As a socially responsible governmental organisation, in 2022, DEWA continued its contribution to achieving the vision of the wise leadership to include and empower POD. This supports the National Policy to Empower POD, launched by His Highness 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 His Highness Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Executive Council of Dubai, to transform Dubai into a city that is accessible to POD. DEWA sustain its efforts to include and empower

POD through four strategic pillars: Employees, Customers, Society, and Partners.

DEWA collaborated with its strategic and community partners to promote POD inclusion into society and at the workplace. In collaboration with the Ministry of Community Development, it organised an "Arabic and Emirati Sign Language" Training courses, in addition to Coaching Skill Training for Managers & Sadiqi of Employees of Determination (EOD). DEWA collaborated with Dubai Club for POD in conducting and participating in several events to empower POD in sport and community events such as: Expo 2020, World Autism Day, and the World Archery Championship for POD. It also, sponsored the summer activity of Dubai Club for POD.

DEWA implemented and sponsored several corporate social responsibility programmes & initiatives to include and empower POD. Between 2015 and 2022, there were 82 programmers and initiatives for POD that reached 3,509,986 people. The Society Happiness score for DEWA's support to POD was 94% in 2022.

WORKING WITH EMPLOYEES OF DETERMINATION TOWARDS AN INCLUSIVE WORKPLACE:

DEWA has come a long way in supporting and empowering people of determination (PODs) at work and in society. It has launched many initiatives, programmes and services in accordance with careful plans and strategies that ensure an inclusive employment journey for its employees of determination

(EODs). DEWA has continued its efforts in developing an inclusive environment for its employees by providing all assistive technologies, reasonable accommodation, and special equipment to its EODs with different abilities.

Abshir Office - the dedicated HR team for supporting the inclusion of EODs in the workplace collaborated with other departments in 2022 to ensure the engagement of EODs by coordinating and conducting 14 virtual activities, events, and workshops, including 'Emirati Women's' Day', events, sports competitions and virtual lectures. Thirty-nine awareness circulars were sent to DEWA EOD on Safety Protocols Upon Returning to Work.

In 2022, a special happiness event was arranged for EODs, with the participation of 38 employees and their friends to provide insights into happiness hacks as well as indoor sports, quizzes and fun activities.

DEWA has enhanced its capabilities as an inclusive organisation, with the total number of employees trained to deal with PODs increasing from 8443 in 2021 to 9688 by 2022. Examples of training courses conducted in 2022 include 'Skills On How To Deal With People Of Determination' (Smart Learning), 'Coaching Skills For Managers'/Sadiqi Of EOD, Sanad Toolkit (Arabic) and Inclusion & Accommodation Awareness for PODs. 100% of EODs have completed their annual training plan for 2022. The number of EODs of various disabilities increased from 19 in 2017 to 41

in 2022. The happiness level of EODs reached 100% in 2022, while the happiness level of their relatives reached 96.60% in 2022.

In 2022, the POD Health & Safety (H&S) Standards, the inclusive COVID-19 Management System and the DEWA H&S Management System were externally assessed by the 45001:2018 audit conducted by Bureau Veritas as well as the British Safety Council 5 Star H&S Audit. DEWA has achieved an excellent result of 97.88% and maintained its 5 Star Rating for 2022. The British Safety Council has awarded DEWA with a 'Double Sword and Globe of Honour Supreme Achievement Award – 2022', which is considered the most prestigious award worldwide in the field of health, safety, and environment, recognising DEWA for simultaneously winning the Globe of Honour Award for Environment and the Sword of Honour for Health and Safety, for eleven years running.

DEWA won the Globe of Honour Award for Environment for the 11th consecutive time and the Sword of Honour for its inclusive H&S Management System for the 15th time. In addition, DEWA successfully conducted four follow-up refresher POD H&S Awareness sessions, and all EODs signed an EOD Individual Risk Assessment.

DEWA has come a long way in supporting and empowering people of determination (PODs) at work and in society. It has launched many initiatives, programmes and services in accordance with careful plans and strategies that ensure an inclusive employment journey for its employees of determination (EODs). DEWA has continued its

efforts in developing an inclusive environment for its employees by providing all assistive technologies, reasonable accommodation, and special equipment to its EODs with different abilities.

Abshir Office - the dedicated HR team for supporting the inclusion of EODs in the workplace collaborated with other departments in 2022 to ensure the engagement of EODs by coordinating and conducting 14 virtual activities, events, and workshops, including 'Emirati Women's' Day', events, sports competitions and virtual lectures. Thirty-nine awareness circulars were sent to DEWA EOD on Safety Protocols Upon Returning to Work.

CUSTOMERS OF DETERMINATION

DEWA supports the design of the urban environment, the people of Dubai, and the empowerment of POD to become more productive and effective. This is done by providing its employees and Customers of Determination with easy access to its services, buildings, and facilities, including its Customer Happiness Centres. In 2022, DEWA continued its efforts in converting all of its newly constructed buildings and facilities to be compliant 100% with the Dubai Universal Design Code. In addition, DEWA received the Golden Certificate (Universally accessible) for its Head Office Building, which is the highest certification to be granted by Dubai Municipality for a public building based on accessibility compliance and the availability of innovative assistive technologies. Furthermore, DEWA has been

re-certified to be in conformance with the international ISO standard 21542:2021 Building Construction – Accessibility and Usability of the Built Environment, further highlighting DEWA's continuous efforts in attaining the highest standards in the well-being of the built environment users. DEWA Customer Happiness Rate for POD achieved 95.24% in 2022.

DEWA's buildings have been equipped to be ready for all emergencies by placing audio and visual alarms, alarms in toilets, and evacuation wheelchairs on all floors. Its Customer Happiness Centres (Self-Service) provide many services and facilities for POD such as special parking with a dedicated helpline for assistance, customised entrances, wheelchair service, directional tactile paving for people with visual impairments, staff trained on how to deal with POD and certified in sign language, dedicated virtual screens to communicate with POD, DEWA's booklets in Braille, tactile map with voice notifications, and hearing loop technology, which is an advanced hearing aid technology designed to assist people with hearing disabilities. In addition, DEWA videos are available in sign language. Customer Happiness staff are also present to guide and educate POD on how to use digital services.

DEWA is committed to providing seamless access to information for Customers of Determination through its website, and smart app according to Digital Dubai standards. DEWA has created a section on its website to include and empower POD. DEWA's website compliance scored 100%

while the smart app was scored 10/10 by the POD Accessibility Evaluation Report by Digital Dubai 2022. In addition, DEWA provides a number of discounts on service charges to POD who are Sanad Card holders (UAE Nationals), such as discounts on fees for activation and de-activation of electricity and water, and meter inspection (in case meter is working in order). The DEWA Store provides exclusive offers and discounts from some of the biggest companies, with extra special privileges and discounts for POD.

DEWA'S PAVILION AT EXPO 2020 DUBAI

DEWA's pavilion at Expo 2020 Dubai welcomed 547,493 visitors from 1 October 2021 to the end of February 2022. Several local and international officials from public and private organisations visited DEWA's pavilion in the Sustainability District. These included a 40-person Brazilian delegation, many university professors and students, researchers, and stakeholders in different areas of clean and renewable energy. DEWA's pavilion also displayed its key projects and initiatives, such as the Mohammed bin Rashid Al Maktoum Solar Park, the largest single-site solar park in the world; the Green Hydrogen project, the first of its kind in the Middle East and North Africa to produce hydrogen using solar power; Digital DEWA, the digital arm of DEWA, which is making DEWA the first digital utility in the world with autonomous systems for renewable energy and storage with the expansion in AI and digital services; and the 250MW hydroelectric pumped-storage power plant in Hatta. The pavilion

provided unique and innovative experience for visitors to introduce them to its efforts that contribute to making Dubai the smartest and happiest city in the world through pioneering projects and initiatives, especially in clean and renewable energy using the Fourth Industrial Revolution technologies to redefine the concept of a utility and become the world's first digital utility.

FUTURE ENGINEER CAMP – 13TH CYCLE

DEWA organised the 13th Future Engineer winter camp, virtually, from 12 to 23 December 2022, with the participation of 30 students aged 11 to 14 years. The camp aimed to expand knowledge in cybersecurity, basics of electronic engineering, 3D printing, developing smartphone apps, and using advanced programming languages. The camp activities also included a field visit to DEWA's Innovation Centre at the Mohammed bin Rashid Al Maktoum Solar Park, where the participants went on a virtual tour across the Solar Park using metaverse technology. It also allowed students to attend innovative shows using drones and hologram technology, try the autonomous bus ride, and explore the latest innovations in clean energy technologies. The Future Engineer camp aligns with DEWA's efforts to prepare students for promising careers by strengthening their technical skills and promoting scientific research, innovation and creativity. DEWA also encourages the next generation towards scientific specialisations.

The Future Engineer camp has

attracted 374 students over its past editions. Students' happiness was 99%, while their parents' happiness was 100% for the 13th edition of the camp.

DEWA'S CLEANTECH HACKATHON

In conjunction with UAE Innovates 2022, DEWA's Innovation Centre launched Cleantech Hackathon to encourage innovators, university students, and specialists to compete in the latest innovations in energy, urban environment, digital transformation, and a sustainable lifestyle. Centre also launched the second batch of the Cleantech Youth Programme. It comprised a wide range of training workshops, specialist education sessions, and field visits to accredited institutions with the participation of academics, specialists, and experts from several schools, universities, start-ups, and local and global organisations. The programme sheds light on different fields of clean energy and the uses of disruptive technologies. The second batch of the programme witnessed the participation of 25 graduates or those pursuing university degrees in 15 different majors including engineering or science fields at 13 accredited academic institutions in the UAE. It attracted 145 applications. The programme graduated 25 youth leaders from across all UAE universities, who presented innovative projects during the programme.

EARTH HOUR 2022

Earth Hour is one of the largest international environmental initiatives that unite millions

of people around the world to tackle the threats posed by the growing issue of climate change, by making a concerted effort to switch off unnecessary lights and electronic appliances for an hour. In 2008, Dubai became the first city in the Arab world to participate in Earth Hour. The “EarthHourDubai” initiative is held under the patronage of Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum, Crown Prince of Dubai and Chairman of the Dubai Executive Council, and in cooperation with the Dubai Supreme Council of Energy and the Emirates Nature - WWF, in association with the World Wide Fund for Nature (EWS-WWF). This initiative exemplifies the pioneering role of Dubai, continuously supporting initiatives to raise awareness around environmental issues, and supporting sustainable development locally, regionally, and internationally.

In 2022, the EarthHourDubai initiative theme “Speak Up For Nature” aimed to raise responsibility between community groups and government entities to connect positively with our environment, by promising to protect planet Earth by adopting a sustainable lifestyle.

RAMADAN AWARENESS CAMPAIGN

DEWA launched its annual Ramadan awareness campaign to raise awareness about conservation and having a sustainable and responsible lifestyle. This supports Islamic values that encourage moderation and reducing waste. DEWA also organised

a series of virtual and physical awareness lectures to encourage the community to contribute to sustainable development, protecting the environment, and reducing emissions. The campaign focuses on senior citizens, POD, Qur'an recital centres, participants of the Ramadan Aman campaign, sport club members, orphans, and recent converts.

For the Holy Month, DEWA also organised several virtual events, competitions, and internal lectures in Arabic and English, about the values of Ramadan. DEWA also launched an awareness page on its internal website Freejna about Ramadan as the month of worship, righteousness, piety, and tolerance.

SUSTAINABLE SUMMER CAMP

DEWA in cooperation with the UAE Ministry of Education, organised a series of physical awareness workshops as part of the ‘Sustainable Summer Camp’ held by the Ministry. This is part of DEWA's social responsibility and its strategy to promote a culture of creativity and innovation among the new generation. More than 250 female students from Mariya AlQubtya High School in Dubai participated in the workshops. The workshops highlighted the latest disruptive technologies such as AI, 3D printing, and robotics, in addition to project management. DEWA endorses the national efforts to empower and train the youth and invest in their potential, time, and skills. This qualifies them to become the next generation of sustainability leaders and to carry on the journey of development in the UAE in all areas.

COMMUNITY CYCLING CHALLENGE

DEWA is keen to encourage community members to adopt a healthy and vibrant lifestyle, in line with the wise leadership's vision to make sports part of Emirati society. Therefore, DEWA hosted the Community Cycling Challenge organised by Peloton Events, with the participation of 11 teams from across the UAE. The event was held under the patronage of the Dubai Sports Council and spanned 66 kilometers. The participants in the challenge praised DEWA's efforts to promote harmony and cultural rapprochement among all members of society. They also pointed to DEWA's fruitful efforts to ensure a brighter and more sustainable future. This is by supporting the future of sustainable energy through pioneering global projects, such as the Mohammed bin Rashid Al Maktoum Solar Park.

CUSTOMER HEALTH & SAFETY

DEWA prioritise the customer health and safety by developing proactive plans to provide all services according to the highest standards of availability, reliability and efficiency. DEWA called on customers to undertake necessary measures during the rainy season to avoid any internal interruptions and ensure the safety and continuity of electricity supply. DEWA urges its customers to visit its website and official pages on social media for all tips and guidelines to be followed to ensure a safe use of its services. In addition, DEWA urged customers to close all electrical cabinets,

replace any damaged meter windows, seal all spare conduits on rooftops and check if all the connections are properly earthed to ensure the continuity of safe and stable electricity supplies.

CUSTOMER HAPPINESS

In line with its 2022 Strategy, DEWA is dedicated to achieve excellence in service provision to attain customer happiness and exceed their expectations. As such DEWA, transformed all of its Customer Happiness Centres into Unmanned Self-Service Centres, effectively adapting a new strategy to ensure successful business operations. DEWA adopted a state-of-art Customer Happiness Framework, aligned with many of the new national and local development plans focusing on: Collecting Customers' insights/needs, designing convenient services/products, delivering them through targeted channels, and measuring Customer Experience through consolidated and continuously improved set of tools, in addition to customer feedback.

In 2022, DEWA achieved 100% in the Complaints resolved within 7 Working Days (WDs), 100% in the % of suggestions responded within 15WDs, 99% in the DEWA Mystery Shopper Index, and 96.47% in the Service Quality Level - Customer Care Centre. DEWA also accomplished 98% in Instant Customer Happiness Meter for Dubai Digital Authority. DEWA scored 98% in the instant Customer Happiness Meter with high utilisation of DEWA digital

services by customers, and reached to 99% in Smart Adoption. With such achievements, DEWA won several Customer Happiness such as:

1. Dubai Awards Model Centre for BestContact Centre –Managed by Moro Hub- (Top 3)
2. First organisation to achieve 100% in the “International Digital Customer Experience Standard” (IDCXS: 2022) certificate from the first assessment.
3. Achieved the 1st global position in implementing the requirements of the International Customer Experience Standard (ICXS) 2019 by, achieving 100% in the updated International Customer Experience Standard.
4. ISO 10000 series certifications
5. ISO 18295:2017 for Customer Contact Centres.
6. Won in 4 different Categories in Insights award.

As part of DEWA's Customer Happiness journey, DEWA launched the Universal Service Centre concept to provide a full digital experience that provides comprehensive, reliable and secure services to customers. The centre uses the latest AI technologies and interactive digital solutions for customers to communicate remotely with representatives from departments such as Finance, Human Resources, Contracts, Procurement, and Legal Affairs.

DISASTER AND EMERGENCY PLANNING AND RESPONSE

CORPORATE RISK & RESILIENCE

Corporate Risk and resilience are integral to DEWA's strategic direction, and the organisation proactively anticipates for, and adapts to risks and threats whilst responding to, and recovering from incidents to safeguard Dubai's critical infrastructure. In doing so, ensuring risks and threats are mitigated and electricity and water demands are maintained according to the highest international standards of reliability, availability, efficiency, and quality.

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

Following the launch of PAS 60518:2020 - Enterprise Risk & Resilience Management in Utilities Guide launch in 2020, DEWA and many of its peers have implemented the requirements of this risk and resilience standard. Following its success and industry breakthrough, DEWA has initiated work on a broader International Standard Organization (ISO) critical infrastructure standard to further enhance risk and resilience best practices at international level.

ENTERPRISE RISK MANAGEMENT (ERM)

Corporate Risk & Resilience is guided by ERM. The purpose of ERM is to support DEWA's organisational context by facilitating enhanced decision making and planning through awareness of all types of risks and threats. DEWA proactively anticipates for and adapts to all types of risks and threats to safeguard the organisation.

DEWA applies its ERM Framework in alignment with ISO 31000: 2018 - Risk Management Guidelines to ensure that risks and threats across the organization are managed consistently. The Framework defines the management policies, procedures, and practices to be applied to the risk management process steps of identifying, analysing, evaluating, treating, and continuing to monitor risks. Regular monitoring, review and reporting of risks is an important component of DEWA's ERM Framework, as it ensures new risks and changes to existing risks are identified and mitigation plans are implemented to address such risks.

Risks are identified using a top-down (corporate) and bottom-up (divisional) approach to ensure the full spectrum of risks to DEWA are identified and, where required, mitigated to an acceptable level as articulated in the ERM Framework and governed by the Group Risk & Resilience Committee (GRRC); who continue to identify and mitigate new and emerging risks to ensure the strategic priorities of the organisation are not compromised. To further improve the efficiency and productivity of risk management, DEWA has and

will continue to explore cognitive technologies such as AI and machine learning (ML) to maintain its competitive advantage and use risk management to power and drive organisational performance.

BUSINESS CONTINUITY AND CRISIS MANAGEMENT

To further enhance the resiliency level across the organisation, DEWA has developed Division-wide Business Continuity Plans (BCP) which are reviewed, tested, and updated annually or more frequently if necessitated. During the testing phase, areas for improvement are identified and prioritised with support from the Corporate Risk & Resilience Department.

For externally facing risks and scenarios, DEWA has developed joint response plans 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 undertakes division-wide mock drill exercises based on risk-based crisis situations including cyber-attacks, fire, accidents due to human error and equipment malfunction to ensure the preparedness and adaptive capacity for handling such emergent and crisis situations. Following each mock drill, a comprehensive review is undertaken indicating the outline of the crisis, response of the various teams, observations,

and effectiveness for handling the emergency and scope for improvements, where necessary.

In supporting Dubai, the wider UAE resilience ecosystem and critical infrastructure, DEWA collaborates, coordinates, and communicates with local and national level ministries and authorities to share best practices to enhance the resilience of national critical infrastructure, ensuring continuous coordination and communication through participation, exercising, exchange of information, intelligence, and response.

Business Continuity & Crisis Management in DEWA is governed by the Crisis Management Committee (CMC).

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 communications to employees and the public during emergency situations. DEWA's Crisis Command Centre (CCC) acts as the hub for directing, supporting, and provisioning all the necessary steps during a crisis with direct communication links to Dubai level crisis management teams and Dubai Media Office.

CYBER SECURITY

DEWA places a high priority on Cybersecurity due to the fact that it is a critical national infrastructure. Therefore, DEWA has established a comprehensive Cybersecurity framework that consists of four pillars, with unique technologies, processes,

guidelines, international and local standards and a dedicated team.

The purpose of this framework is to leverage existing policies, procedures, frameworks and other guidelines to enable DEWA to adopt a posture of cyber resilience.

The four pillars are:

- Manage & Protect
- Identify & Detect
- Respond & Recover
- Govern & Assure

The first element of DEWA's Cyber Resilience Framework is Manage & Protect which involves managing security defenses and protecting DEWA from cyber threats. Critical assets are identified and their associated risks are identified to target areas for improvement through implementation of control measures, reviews and audits. This is done through information security policies and

security Programmes, malware protection, identity and access control, security team competence and training, staff awareness training, encryption, physical and environmental security, patch management, systems, network, and communications security, asset management and supply chain risk management. The second element of the Cyber Resilience Framework is Identify & Detect which focuses on monitoring DEWA's information, information systems and industrial control systems for anomalies through security monitoring and active detection. The third element of the Cyber Resilience Framework is Respond & Recover to manage incidents quickly and effectively to limit harm and return to functionality after a cyber-incident has occurred. This is done through incident response management, IT service continuity management, business continuity management, and information sharing and collaboration. Finally, the fourth element of the Cyber Resilience Framework is Govern

& Assure which includes activities for the Board and senior managers to ensure that cyber resilience is overseen and validated by DEWA Top Management. This is done through a comprehensive risk management programme, external validation/ certification, board level commitment and involvement, governance structure and processes, and continual improvement process.

1. Unique technologies such as AI, Big Data, Zero trust, Automation, simulation and integration.
2. Unique processes, guidelines, international and local standards
3. A dedicated and collaborative team

The framework is also governed and compliant with multiple international and local best security standards such as ISO 27001 and Dubai ISR.

OUR CYBER SECURITY FRAMEWORK

Manage & Protect

Managing security defenses and protecting DEWA from Cyber threats

Identify & Detect

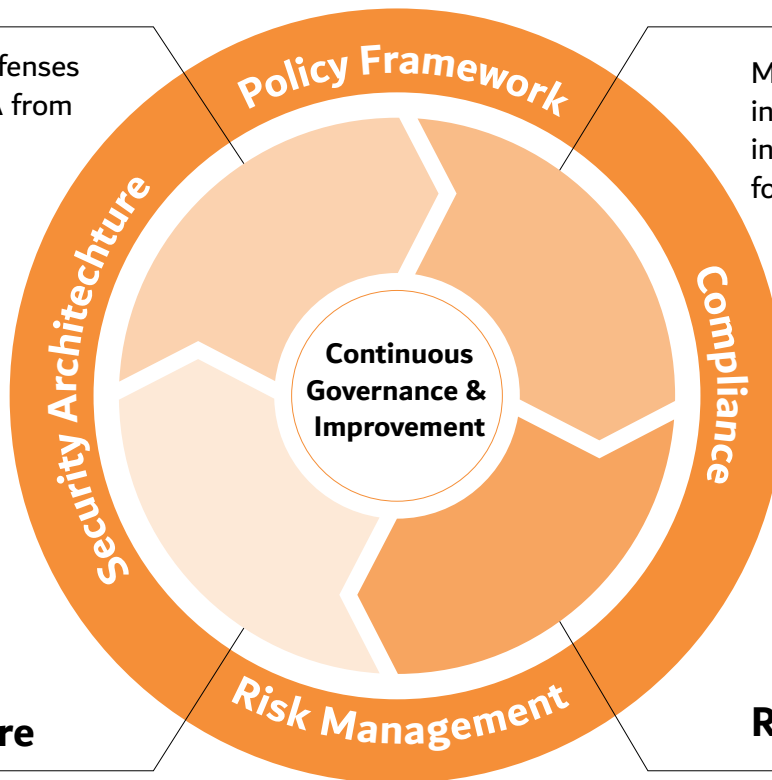
Monitoring DEWA's information systems and industrial control systems for anomalies

Govern & Assure

Overseeing and ensuring cybersecurity and cyber resilience in DEWA

Respond & Recover

Develop and implement the appropriate activities to take action regarding a detected cybersecurity event and restore impacted services





COMMUNITY MEMBER

2023

We are a member of the GRI Community and support the mission of GRI to empower decision makers everywhere, through GRI Sustainability Reporting Standards and its multi-stakeholder network, to take action towards a more sustainable economy and world.



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Non-GRI Disclosure	Customer Health and Safety	82	
Socioeconomic Compliance			
3-3	Management of material topics	23	
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
Disaster/Emergency Planning & Response			
3-3	Management of material topics	83 - 84	
GRI G4	Management Approach (GRI G4 Sector Disclosures 2013 Electric Utilities)	83 - 84	1.5;11.5; 11.6
Access to Electricity			
3-3	Management of material topics	33	1.4;7.1; 11.1
EU28	Power outage frequency (GRI G4 Sector Disclosures 2013 Electric Utilities)	33 - 35	1.4; 7.1
EU29	Average power outage duration (GRI G4 Sector Disclosures 2013 Electric Utilities)	33 - 35	1.4; 7.1
EU30	Average plant availability factor by energy source and by regulatory regime (GRI G4 Sector Disclosures 2013 Electric Utilities)	35	1.4; 7.1
Provision of Information			
3-3	Management of material topics	78	
EU22	Number of people physically or economically displaced and compensation, broken down by type of project	78 - 80	2.2
Non GRI Disclosures	Results of surveys measuring customer happiness	29	

Customer Happiness			
3-3	Management of material topics	33-34, 82	
Non GRI Disclosures	Results of surveys measuring customer happiness	29	
Cyber Security			
3-3	Management of material topics	84	
Non GRI Disclosures	Cyber security framework	84	

ABBREVIATIONS

4IR	Fourth Industrial Revolution
AF	Availability Factor
AI	Artificial Intelligence
AMI	Advanced Metering Infrastructure
ASR	Aquifer Storage and Recovery
BAU	Business As Usual
CDM	The Clean Development Mechanism
CEO	Chief Executive Officer
CER	Certified Emission Reduction
CML	Customer Minutes Loss
CO ₂	Carbon Dioxide
CSP	Concentrated Solar Power
DEWA	Dubai Electricity and Water Authority
DEWA PJSC	Dubai Electricity and Water Authority (Public Joint-Stock Company)
DFM	Dubai Financial Market
DFO	Diesel Fuel Oil
DSCE	Dubai Supreme Council of Energy
DSM	Demand Side Management Strategy
DUSUP	Dubai Supply Authority
EOD	Employees of Determination
ERM	Enterprise Risk Management
ERP	Emission Reduction Program
EV	Electric Vehicle
EWS-WWF	Emirates Nature - World Wide Fund for Nature
GHG	Greenhouse Gases
GRI	Global Reporting Initiative
GWh	Gigawatt Hour
H&S	Health and Safety
HPP	Hassyan Power Plant
HR	Human Resources
HSE	Health, Safety, and Environment
IDCXS	International Digital Customer Experience Standard
IMS	Integrated Management System
IoT	Internet of things
IPP	Independent Power Producer
I-RECs	Renewable Energy Certificates
ISO	International Organization for Standardization
KM	kilometres
KV	kilovolt

MBR	Mohammed bin Rashid
MD	Managing Director
MENA	Middle East and North Africa
MFO	Medium Fuel Oil
MIG	Million Imperial Gallons
MIGD	million imperial gallons per day
MMBTU	Metric Million British Thermal Units
MRV	Monitoring, Reporting and Verification
MSF	Multi-Stage Flashing
MW	Megawatts
MWh	Megawatts Hours
NO _x	Nitrogen oxide
POD	People of Determination
PPM	Parts Per Million
PV	Photovoltaic Solar Power
QHSE	Quality, Health, Safety and Environment
R&D	Research and Development
RO	Reverse Osmosis
SAIFI	System Average Interruption Frequency Index
SDGs	The Sustainable Development Goals
SF ₆	Sulphur Hexafluoride
SO ₂	Sulphur Dioxide
SWRO	Sea Water Reverse Osmosis
T&D	Transmission and Distribution
TDS	Total Dissolved Solids
UNGC	United Nations Global Compact
UNSDGs	United Nations Sustainable Development Goals

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 2022 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 January 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™¹ specifically referring to the process followed for managing the assurance, including the competencies, systems used, and the processes followed. While using DNV VeriSustain™ 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 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 $\pm 5\%$ 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 2021 (as below) for all DEWA's sites in the Emirate of Dubai, UAE, and under its direct control for the period 1st January 2022 to 31st December 2022. Data verified for below disclosures is presented in Annexure-1.

GRI Standard	Disclosure
GRI 303: Water and Effluents 2018	303-3 Water withdrawal- a, c 303-4 Water discharge- a, b
GRI 305: Emissions 2016	305-1 Direct (Scope 1) emissions- a. 305-2 Energy indirect (Scope 2) GHG emissions- a 305-4 GHG emissions intensity-a
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- EU2	Net energy output broken down by primary energy source and by regulatory regime (2.1)
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)

¹ The VeriSustain™ 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

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 and DEWA Water and Civil Division 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 Conduct² 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.

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

For DNV Business Assurance Group AS - Dubai Branch,

Karthik Ramaswamy Lead Verifier, Sustainability Services, 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)		

15th May 2024, Dubai, United Arab Emirates.

 DNV Business Assurance Group AS - Dubai Branch is part of DNV- Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnv.com

Annexure 1: Verified Performance Data - 2022

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

Year	Installed Capacity (MIGD)	Total Water Production (MIG)
2022	490	136,254

Data	Unit	Year
Installed Capacity (Underground wells)	MIGD	35.56

Year	Unit	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)
2022	MIG	661.60	575.74	-85.86

Type of effluent	Total volume (M³) discharge
Process water from Power plant	1,698,174,459
Process water from Desal. plant	3,777,922,079
Water treatment plant effluent	61,298
Treated sewage water (to land)	0
Treated sewage water (to sea)	40,673
Total Treated sewage water	40,673

• GRI 305: Emissions 2016 - 305-1 (a), 305-2 (a), 305-4 (a)

Performance Indicators	
Gross direct (Scope 1) GHG emissions in metric tons of CO ₂ equivalent.	24,61 MtCO ₂ e
Gross location-based energy indirect (Scope 2) GHG emissions in metric tons of CO ₂ equivalent.	No purchased power from the grid
GHG emissions intensity ratio for the organization.	Electricity 0.46 tCO ₂ /MWH Combined (Electricity & Water) 0.4035 tCO ₂ /MWH

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

Performance Indicators	
Fatality	0
Loss Time Injury Frequency Rate (LTIFR)	0.53
Total Recordable Injuries Rate (TRIR)	0.1
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	2,170

• EU2 (2.1)

Performance Indicators (Source of Energy)	Generation (MWh)	% of Generation
DEWA Gas Plant		
Natural Gas	44,322,308	83.80
Diesel Fuel Oil (DFO)	13,651	0.03
Medium Fuel Oil (MFO)	45	0.00008
Solar Energy	4,645,350	8.78
Hassyan Power Plant (HPP)		
HPP-Natural Gas	3,754,142	7.10
HPP-Clean Coal	156,803	0.30
HPP	3,910,945	7.39
DEWA Gas Plant + HPP NG	48,076,450	90.89
Total Generation	52,892,299	

• **EU10 (2.1, 2.2, 2.3, 2.4)**

Year	Peak Power Demand (MW)	Total Firm Power Generation Capacity (MW)	Total Installed Power Capacity (MW)
2022	9,502	12,490	14,517
2023	9,768	13,919	16,546
2024	10,130	13,919	16,779
2025	10,426	14,959	18,119
2026	10,725	14,959	18,419
2027	10,725	14,959	18,719
2028	11,287	14,959	19,019
2029	11,610	14,959	19,719
2030	11,930	14,959	20,019

Note:

- The verification of above data is limited to the output of projection model developed by DEWA.
- *Forecasted in 2021.