

SUSTAINABILITY REPORT

2023





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ABOUT THIS REPORT

Scope

GRI References 2-2, 2-3, 2-4, 2-5

EMICOOL is reporting its findings in reference with the GRI Standards for the period from January 1, 2023, to December 31, 2023. This report offers insights into our ongoing approach, procedures, and future commitments regarding Environmental, Social, and Governance (ESG) matters. It addresses key issues such as integrity, economic impact, responsible operations, natural resources, workforce, stakeholder relationships, and communities.

Business Sector

Emirates District Cooling (EMICOOL) L.L.C. is an established regional utility provider of commercial and residential district cooling within the UAE.

Aligning our GRI disclosures

International Level
United Nations’ Sustainable Development Goals (UN SDGs) Targets.

National Level
Dubai Integrated Energy Strategy 2030
National Climate Change Plan of the UAE
We the UAE 2031



Self Verification
EMICOOL follows its own validation process and did not appoint a 3rd party to audit its ESG data. In the future, we will consider engaging a rating authority to add credibility to our report and plan to benchmark ourselves against similar service providers in the region and overseas for competitive comparison.

Cautionary Statement
This report includes forward-looking statements regarding EMICOOL’s intentions for its operations. These statements use forward-looking language such as ‘plans, aims, assumes, continues, believes’ or variations thereof, indicating potential actions, events, or outcomes. While we have made diligent efforts to ensure accuracy, it’s important to note that forward-looking statements involve risks and uncertainties. Actual outcomes may differ from projected or implied statements due to factors beyond our control. Therefore, these statements do not guarantee that suggested events will transpire as described.

Restatement of Information
The rule of restatement of information is applied to the following data to ensure readability, accuracy, consistency, and comparability of information between the reporting years of 2022 and 2023:

- (1) Energy and water consumption using accurate data
- (2) Energy intensity and emissions intensity in terms of change in the measurement methodologies and usage of units.

We initiated a water efficiency program that led to a **43% increase in the utilization of treated sewage effluent (TSE)**.



CEO MESSAGE

Dear Stakeholders,

I am thrilled to announce the launch of our 2nd Sustainability Report. This report is a testament of our unwavering commitment to environmental stewardship and sustainability in all aspects of our operations. Since our establishment in 2003, EMICOOL has evolved over two decades into a premier provider of district cooling, playing a pivotal role in shaping a more sustainable future. We recognize the critical importance of preserving our planet for future generation, as responsible UAE utility company we will continue with proactive sustainable measures. Our journey has been characterized by innovation, excellence, and an unwavering dedication to reducing our environmental footprint.

Leveraging our expertise and extensive experience, we persist in delivering exceptional district cooling services aligned with our ESG principles, contributing to the global pursuit of a greener, more sustainable planet. In 2023, EMICOOL achieved several significant ESG milestones.

We initiated a water efficiency program that led to a remarkable 43% increase in the utilization of treated sewage effluent (TSE). This initiative not only conserved a substantial amount of potable water but also promoted water recycling, reduction, and reuse, in line with the United Nations Sustainable Development Goal of water efficiency. This accomplishment contributed to our recognition as the winner of the Sustainable Water Management Award and recipient of a platinum award for water conservation initiatives from the Global ESG Awards body.

Our success in enhancing the cycle of concentration for both potable and polished water further underscores our commitment to environmental sustainability. By reducing our reliance on potable water, we not only lower CO₂ emissions but also realize significant cost savings. Our dedication to employee welfare initiatives was acknowledged with our 9th place award in 'Best Workplace in the UAE'.

In November 2023, EMICOOL proudly participated in the 28th Conference of the Parties (COP 28) as the strategic partner of the World Green Economy Organization (WGEO). Recognized as a leading figure and innovator in the district cooling sector for our substantial environmental and sustainable efforts, we utilized the platform to showcase our case studies and cutting-edge technology, actively engaging in panel discussions. Our participation in COP28's discussion further underscores our support for the UAE's Net Zero plan to achieve carbon neutrality and enhance energy efficiency by 2050.

Sincerely,

Dr. Adib Moubadder
Chief Executive Officer

We successfully reused **26,000 tons of backwash water** from Reverse Osmosis plants



ESG COMMITTEE CHAIRMAN MESSAGE

Dear Stakeholders,

As Chairman of EMICOOOL's ESG Committee, I am pleased to present our Sustainability journey during 2023.

EMICOOOL continues to align with the reporting standards of the Global Reporting Initiative (GRI) framework, emphasizing our commitment to transparency and accountability in alignment with SDG 17: Partnerships for the Goals. In 2023, we further aligned our efforts with Dubai's Integrated Energy Strategy 2030.

Energy Performance

Throughout the reporting period, we remained steadfast in our commitment to Sustainable Development Goal (SDG) 7: Affordable and Clean Energy, reducing both our own carbon footprint and that of our customers. In 2023, EMICOOOL achieved total energy savings of 12,596,176 kWp, benchmarked against 2022. We decarbonized our energy mix by expanding our use of renewable energy, with the installation of additional solar panels generating 708.5 kWp Solar Capacity—an increase of 299 kWp compared to the previous year, with plans to add an additional 1.8 megawatts by 2024.

Water Conservation

In 2023, we significantly increased our utilization of treated sewage water by over 40%. This initiative not only reduces operating costs and aids in conserving precious freshwater resources but also aligns with SDG 6: Clean Water and Sanitation, fostering a more sustainable approach to water management. Additionally, we successfully reused 26,000 tons of backwash water from Reverse Osmosis plants. In the supply of chilled water (CHW), we reported a 12% decrease in losses for 2023. These endeavors were acknowledged as EMICOOOL was honored with the 'Winner of the Sustainable Water Management Award'—UAE.

Circular Economy

Our waste management initiatives during the year yielded positive outcomes, with the total waste generated (recycled and not recycled) decreasing by 3.5%, dropping from 282k to 272k tons. In 2023, we reduced our carbon footprint associated with paper production and waste management, collectively decreasing over 570,000 kg of CO₂ equivalent greenhouse gas emissions. These efforts align with our commitment to SDG 12: Responsible Consumption and Production, as we strive to minimize waste and promote sustainability.

EMICOOOL remains dedicated to creating long-term value for our stakeholders while upholding our ESG responsibilities to the environment and the communities we serve. We eagerly anticipate another year of progress, growth, and the implementation of new initiatives as we continue our journey toward a greener, more sustainable world.

Sincerely,

Mr. James Magor

Chairman, ESG Committee

ESG COMMITTEE

Comprising of dedicated professionals, this committee is deeply committed to advancing sustainability practices within the company. Led by Mr. James Magor and including members Mr. Abdulaziz Bin Yagub Al Serkal and Dr. Ralf Nowack, the committee holds a crucial role in overseeing and advising on EMICOOL’s sustainability efforts. Their focus is to ensure that the company’s initiatives align with ESG principles and objectives. Their main objective is to steer EMICOOL towards adopting responsible and ethical practices that benefit the environment, society, and governance, thereby fostering long-term sustainability and value creation.

Committee Members re-elected Sept 2023

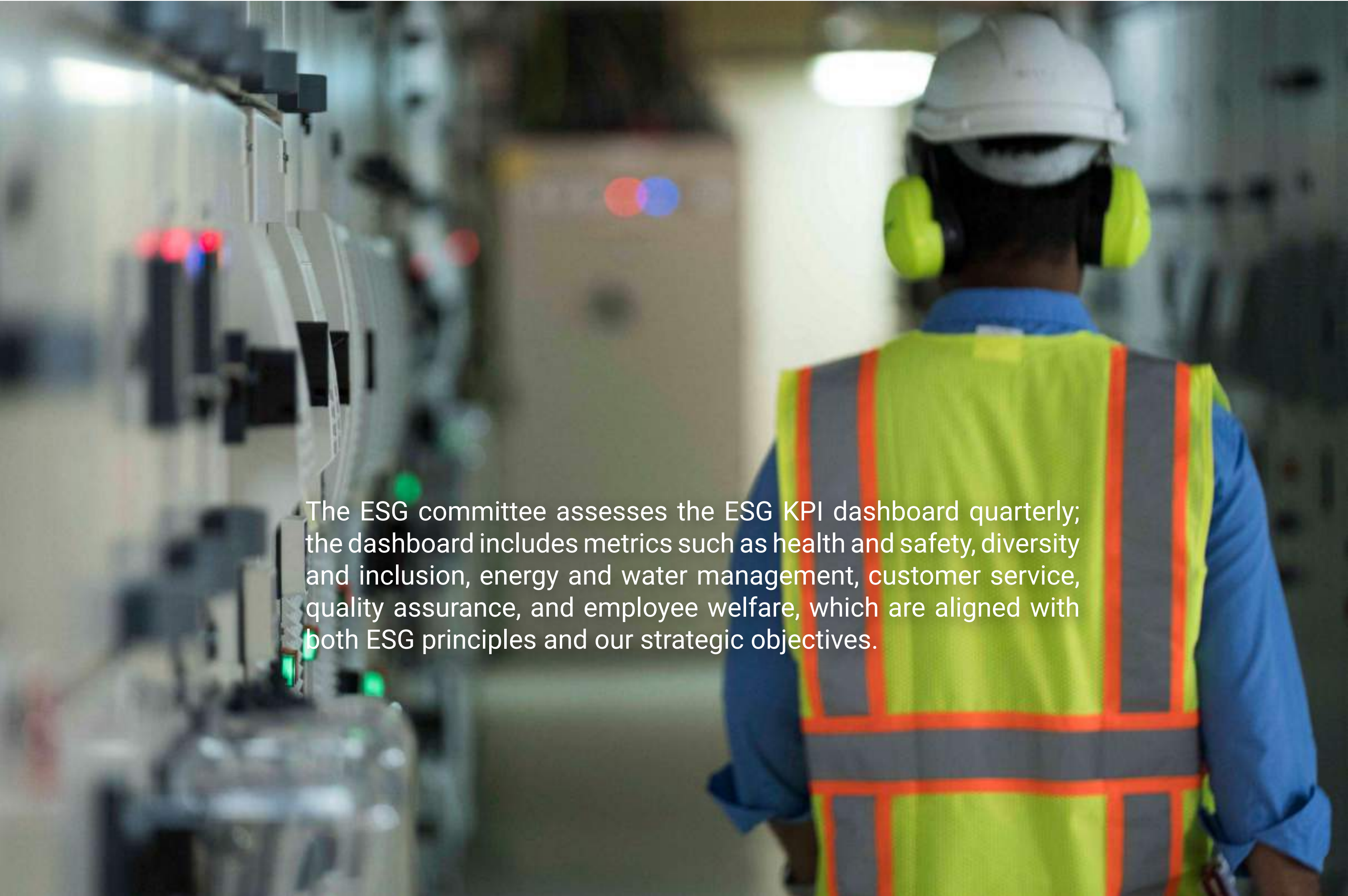
Mr. James Magor
Chairman, ESG Committee
28th Sept 2022
<https://www.linkedin.com/in/james-magor-8667727/>



Mr. Abdulaziz Al Serkal
Member, ESG Committee
28th Sept 2022
<https://www.dubaiinvestments.com/en/media-center/press-releases/dubai-investments-appoints/>



Dr. Ralf Nowack
Member, ESG Committee
28th Sept 2022
<https://www.linkedin.com/in/dr-ralf-nowack-76764583/>



The ESG committee assesses the ESG KPI dashboard quarterly; the dashboard includes metrics such as health and safety, diversity and inclusion, energy and water management, customer service, quality assurance, and employee welfare, which are aligned with both ESG principles and our strategic objectives.

EMICOOL AT A GLANCE

2023 HIGHLIGHTS

Established in 2003 and headquartered in Dubai, Emirates District Cooling (EMICOOL) L.L.C. is a subsidiary of Dubai Investments. On April 12, 2020, Dubai Investments formed a joint venture (JV) with Actis, which divested a 50% stake. The aim of this JV is to bolster EMICOOL's ambition of emerging as a premier provider of sustainable and efficient district cooling services across the broader MENA region.

Actis, a prominent global investor in sustainable infrastructure, has raised US\$24 billion in capital since its inception. Its Long Life Infrastructure team specializes in investing in stabilized operating assets across various infrastructure sectors, with a focus on generating operational value and delivering robust cash yields for investors while achieving measurable environmental, social, and governance (ESG) impact. Actis boasts a corporate valuation of AED 3.7 billion (US\$1 billion) and an equity valuation of AED 2.4 billion (US\$653 million).

Dubai Investments, established in 1995, has emerged as a key contributor to Dubai's and the UAE's economy, with strategic investments spanning diverse sectors and global markets, including real estate, industrial, financial, healthcare, and education. Listed on the Dubai Financial Market since 2000, Dubai Investments boasts 15,553 shareholders and a share capital of AED 4.25 billion. Through its diversified portfolio, Dubai Investments has played a pivotal role in fostering community empowerment and driving positive growth across various fronts.

With an extensive presence across multiple geographies, the JV aims to bolster EMICOOL's mission of becoming a leading provider of sustainable and efficient district cooling services throughout the broader MENA region.



Total amount invested, in climate-related infrastructure, resilience and product development (million AED)



* Benchmarked against 2022

Organizational Structure

Chief Executive Officer
Dr. Adib Moubadder



Board of Directors

EMICOOL’s Board of Directors is a dynamic body, consisting of six members. This group assumes a vital role in the governance and strategic direction of EMICOOL. Their primary responsibilities encompass overseeing, advising, and guiding the Executive Office, ensuring that EMICOOL maintains effective leadership in delivering sustainable value to all stakeholders.

The Executive Office comprises of EMICOOL’s CEO, senior paralegal manager and board secretary, who play a pivotal role in high-level decision-making within the organization. They are entrusted with the responsibility of formulating and executing strategic initiatives that drive EMICOOL’s success. Regular reporting to the Board on critical matters underscores the transparency and accountability integral to EMICOOL’s governance framework.

This collaborative synergy between the Board of Directors and the Executive Office is instrumental in shaping EMICOOL’s strategic vision, fostering innovation, and upholding the highest standards of corporate governance. Together, they work tirelessly to ensure that EMICOOL remains at the forefront of delivering sustainable and lasting value to our diverse stakeholder community.

KPI	Unit	2021	2022	2023
Percentage of Board seats occupied by independent directors	%	28.6	0	0
Percentage of Board seats occupied by women	%	0	0	0
Total number of board members	#	7	6	6
Total number of non-independent members	#	5	6	6
Total number of executive members	#	1	0	0
Total number of non-executive members	#	6	6	6
Total board seats occupied by men	#	7	6	6
Total board seats occupied by women	#	0	0	0



Adrian Mucalov
Vice Chairman



Khalid Kalban
Chairman



Jordan Anderson
Board Member



Max Burke
Board Member



Abdulaziz Bin Yagub Al Serkal
Board Member



Mohamed Saif Ahmed Al Ketbi
Board Member

Our Stakeholders

EMICOOL places strong emphasis on stakeholder engagement, recognizing their pivotal role in shaping a sustainable district cooling future. From employees and customers to suppliers, communities, and the environment, our commitment spans diverse interests, aligning with relevant Sustainable Development Goals (SDGs) to drive responsible practices in the UAE.



7 AFFORDABLE AND CLEAN ENERGY

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

For **employees**, we prioritize their well-being and professional growth, fostering a safe, inclusive workplace that promotes diversity and equality (SDG 5). Through training and development initiatives, we nurture their skills while ensuring their safety and security.

Customers are valued partners in our sustainability journey, driving our investments in innovative, energy-efficient district cooling systems aligned with SDG 7. By delivering reliable, cost-effective, and eco-friendly solutions, we reduce their carbon footprint while ensuring their comfort and satisfaction through responsive customer care.

Suppliers are integral to our supply chain, and we collaborate with those who share our sustainability values, encouraging responsible sourcing and eco-friendly practices in line with SDG 12.

Additionally, we engage with **local communities**, contributing to their well-being through community initiatives that support SDG 11. We also prioritize reducing our environmental footprint by continually enhancing the efficiency and environmental performance of our cooling systems, aligned with SDG 13.

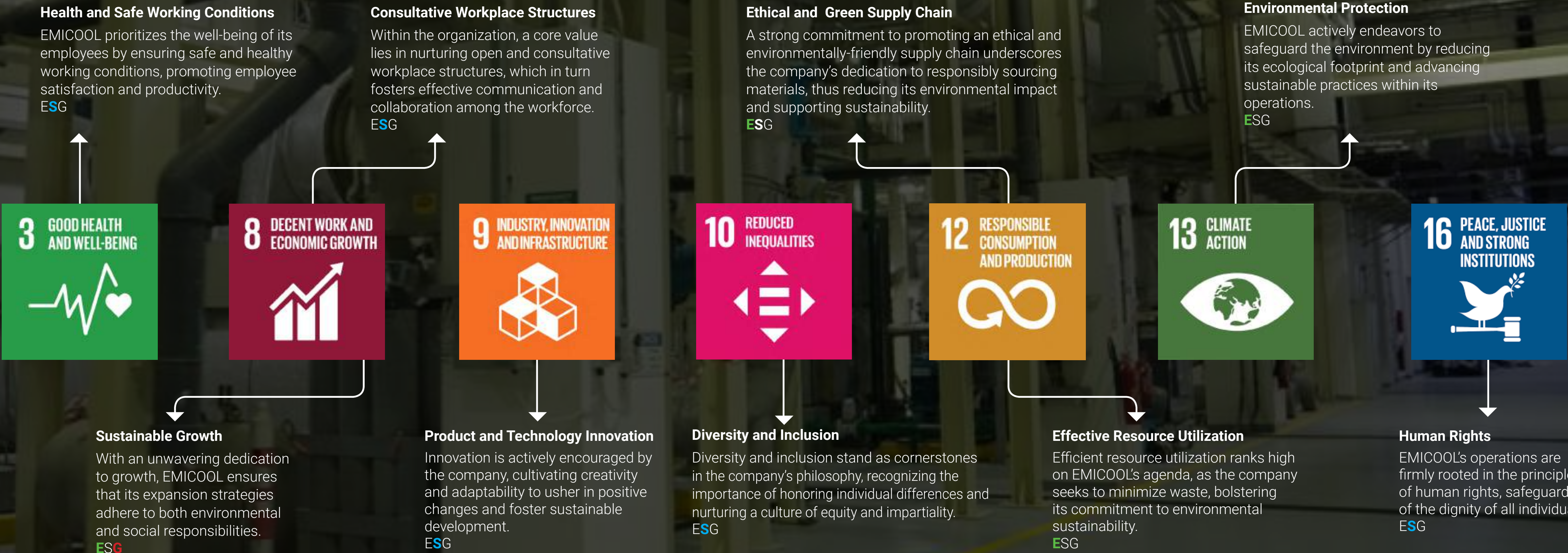
EMICOOL serves both residential and commercial communities managed by **developers and master developers** with whom we engage. These developers expect all their suppliers to comply with their own corporate policies and national regulations.

In summary, EMICOOL's commitment to stakeholders drives our efforts towards a sustainable, responsible, and environmentally conscious district cooling future in the UAE, aligning with relevant SDGs to create positive impacts across all areas of our operations.

Memberships of Associations

ESG Principles

EMICOOL considers the importance of their ESG commitments by aligning themselves with SDGs



Our Strategy

In a world where we are facing urgent climate challenges, finding new and creative solutions is more important than ever. Industries and governments all over the world are working hard to tackle the threats posed by climate change. The United Arab Emirates (UAE) has lots of sunshine, which is a high value resource. We can use it to generate renewable electricity and to create sustainable cooling systems. One such system is district cooling, which is the most energy-efficient way to cool buildings compared to traditional air conditioning. It can reduce energy use by up to 30%.

EMICOOL operates as a provider of district cooling solutions for both commercial and residential properties. We are committed to sustainability and actively seek out the latest practices to mitigate our environmental footprint. Annually, we strive for incremental enhancements across all areas of our operations, continually exploring innovative solutions to enhance efficiency and reduce emissions.

Our strategy is built around a recognised ESG framework. This framework covers our principles, goals, key performance indicators (KPIs), initiatives, and how we monitor and report on our progress. By using this approach, we ensure that sustainability is always at the heart of our business. EMICOOL is committed to reducing energy use, encouraging innovation, and creating sustainable communities, all while making sure we have strong governance in place.



Vision

Our vision is to achieve global recognition as a premier provider of dependable and highly efficient district cooling solutions.

Mission

Our mission is to consistently surpass customer expectations in the delivery of district cooling services. We are committed to achieving this by leveraging the dedication and competence of our workforce. Our services will be delivered reliably, safely, and efficiently, all while responsibly managing resources and prioritizing environmental stewardship.

Awards and Recognition



EMICOOL's recognition and efforts across these diverse areas underscore its dedication to sustainability, innovation, and positive contributions toward achieving the United Nations' Sustainable Development Goals.



ESGBusiness Awards 2023 - 'Climate Advocacy & Education' Award in UAE

SDG 4 - Quality Education: To promote education related to climate change, which is crucial for raising awareness and fostering action.
SDG 13 - Climate Action: The award specifically focuses on climate advocacy and education, which directly contributes to efforts aimed at addressing climate change.



Best Workplaces Awards - Best Workplaces in UAE

We achieved 9th place in the 'Best Workplace in the UAE' award. Employee Well-being and Positive Work Culture contribute to SDG 3 (Good Health and Well-being) and SDG 8 (Decent Work and Economic Growth) by fostering a skilled and motivated workforce.

Other Awards Received in 2023:

District Energy Space 2022 Beyond North America, 'Bronze Award' Number of Buildings Committed (IDEA) District Energy Space 2022 Beyond North America, 'Bronze Award' Total Buildings Area Committed (IDEA) ESG Business Awards 2023 'Sustainable Water Management' award – UAE Dubai Police Customer Forum award.



Global ESG Awards (GESGA) - Platinum Award Winner for Water Conservation Initiatives

SDG 12 - Responsible: Reflecting our dedication to the Environmental pillar, we prioritize efficient water resource use and reduced water waste. Our Leak Detection System actively identifies leaks, enabling rapid response and repair, thereby minimizing water loss and promoting sustainable consumption.
SDG 13 - Climate Action: Recognizing the link between water conservation and climate action, we installed Smart Valves (load Sensor Shut off valves) to improve water efficiency management, supporting sustainable water usage. Additionally, we plan to conduct a comprehensive Climate Risk Assessment in 2025 to prepare a robust mitigation plan that further aligns with our ESG objectives.



ESGBusiness Awards 2023 - Winner of the 'Sustainable Water Management' Award in UAE

SDG 19 - Industry, Innovation, and Infrastructure: With the installation of digital tools for calibration Computerized Maintenance Management Systems (CMMS): this helps improve Energy-Efficiency and Lowers
SDG 11 - Sustainable Cities and Communities: Using treated sewage effluent for projects helps conserve freshwater resources and supports the development of sustainable urban environments.
SDG 12 - Responsible Consumption and Production: The initiative promotes sustainable consumption patterns and reduces water waste. EMICOOL's asset consumption is reduced by lengthening the equipment replacement cycle, using CMMS. Condition-Based Maintenance sets out data driven service intervals to increase the life span of equipment which in turn minimizes resources on the supply chain and its impact on the environment.

SUSTAINABILITY AT EMICOOOL

At EMICOOOL, we are dedicated to sustainability beyond our business. We see ourselves as drivers of positive change in our industry and society. To achieve this, we focus on sustainability in line with global and national priorities, aiming for a better future for everyone.

6

CLEAN WATER
AND SANITATION



7

AFFORDABLE AND
CLEAN ENERGY



9

INDUSTRY, INNOVATION
AND INFRASTRUCTURE



12

RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13

CLIMATE
ACTION



Alignment with International and National Priorities

UAE Green Agenda

The UAE’s Green Agenda 2030 is a strategic framework aimed at transforming the nation’s economy and society into a sustainable and environmentally friendly model by the year 2030. Launched in 2015 by the UAE Ministry of Climate Change and Environment, the Green Agenda aligns with both the UAE Vision 2021 and the Sustainable Development Goals (SDGs) set by the United Nations, focusing on improving environmental sustainability, economic diversity, and social well-being.



Green Economy Transition:

Focusing on the development of green industries, renewable energy projects, and sustainable tourism to diversify the economy while reducing environmental impacts.

Environmental Goods and Services:

Encouraging investment and innovation in clean technologies, sustainable agriculture, and eco-friendly services that reduce reliance on carbon-intensive practices.

Climate Change Mitigation:

Working to reduce greenhouse gas emissions and enhance resilience to climate impacts by promoting sustainable practices in sectors like energy, water, and waste management.

United Nations’ Sustainable Development Goals

The United Nations Sustainable Development Goals (UN SDGs) outline 17 interconnected global goals, providing a roadmap for a more sustainable and equitable future. At EMICCOOL, we are committed to these goals, with a particular focus on the 9 goals most relevant to our operations. Through these, we aim to make a meaningful contribution to sustainable development on a global scale.

Goal 3 (Good Health and Well-being) To achieve this goal we have minimized workplace hazards, reduced the incidence of work-related illnesses and injuries, and through training programmes have managed to educate and foster a culture of health and safety that extends beyond the workplace into the broader community.

Goal 6 (Clean Water and Sanitation) is a top priority for us. We make sure to treat water properly and follow the best international practices for managing water.

Goal 7 (Affordable and Clean Energy) is targeted through renewable energy generation and efficiency upgrades. Currently, we have an installed solar capacity of 708.5 kWp.

Goal 8 (Decent Work and Economic Growth) involves fostering a workplace that’s diverse, inclusive, and supports employee growth and training.

Goal 9 (Industry, Innovation, and Infrastructure), involves transitioning to digitalization, and process automation, as well as using energy management systems to improve our operations.

Goal 10 (Reduce Inequalities) ensures that everyone has equal opportunities, regardless of socio-economic background, gender, disability, or nationality.

Goal 12 (Responsible Consumption and Production) involves recycling, responsible consumption of local goods and services, and lengthening the life span of equipment and assets through planning preventative maintenance.

Goal 13 (Climate Action) is a core driver of our business. We are dedicated to advocating for sustainable cooling by actively raising awareness about its benefits and efficiencies compared to conventional cooling systems. Through these efforts, we aim to reduce carbon emissions and play a vital role in combating climate change.

Goal 16 (Peace, Justice, and Strong Institutions) promotes enhanced accountability, and participation at all levels of decision-making to ensure that institutions represent everyone in society.



57%
EV's in
fleet



Dubai Clean Energy Strategy

“Clean energy mix will gradually increase the deployment of clean energy sources to 75% by 2050, making Dubai the city with the least carbon footprint in the world”.

Approach GRI 103

In our sustainability plan, we outline our approach using three key pillars. Each pillar represents different aspects of our commitment to creating a sustainable future.

Our People: This pillar extends beyond our workforce to include our customers and the communities we serve. It reflects our dedication to creating an inclusive environment where the well-being, safety, and satisfaction of all stakeholders are paramount.

Our Operations: This pillar encompasses our day-to-day activities, emphasizing our commitment to the highest standards of governance. We ensure that all aspects of our operations are in line with our core values and principles.

Our Impact: The pillar, “Our Impact,” focuses on the environmental effects of our business and operational activities. Here, we take responsibility for minimizing our footprint by implementing the best international practices to mitigate our impact wherever possible. EMICOOL’s management approach is designed to coordinate efforts to improve the quality of its services and how efficiently it operates business.

Our main focus is on taking care of the environment, and we have 4 main areas to focus on:

1.

We ensure we comply with the environmental laws in the UAE, obtaining necessary permits and following Dubai’s Regulatory Supervisory Bureau (RSB).
2.

When we plan projects, we consider our environmental impact. We simplify our processes to ensure they comply with regulations. We also set criteria for 3rd party suppliers and contractors to ensure they comply with health, safety, and the environment best practices by committing to a code of conduct.
3.

We plan next steps and objectives in ESG meetings such as the management review with the ESG committee. Our ESG committee leads these efforts and ensures all agenda items are actioned in reference to specific Global Reporting Initiative (GRI) Standards.
4.

We keep track of our environmental progress by presenting and discussing accumulated data in our management and board meetings. For transparency and comparison, all recorded data from previous years is publishing on our annual ESG Report; available for download on our website.



Materiality GRI 3-2

At EMICOOL, we understand the importance of focusing on sustainability aspects that have a significant impact on our business and stakeholders. We use materiality assessments to identify and address the most relevant sustainability topics. In line with international and national priorities, we've narrowed down key areas that reflect our commitment to ethical behavior, managing resources responsibly, protecting the environment, engaging with customers, supporting employee well-being, and promoting diversity and inclusion.

At EMICOOL, we prioritize sustainability above all else. Our commitment involves conserving energy, safeguarding the environment, ensuring customer satisfaction, and promoting sustainable growth in our region. Our core business is district cooling, which is about 40% more environmentally friendly than traditional cooling methods. We believe that district cooling is a forward-thinking industry that can play a significant role in combating climate change.

Initial selection process to identify material topics

To align with international best practices, EMICOOL engaged with each department to obtain their views on the rankings of the key Environmental, Social, and Governance (ESG) material topics identified for EMICOOL. These topics were selected and agreed to be of key importance to EMICOOL and its stakeholders, based on peer reviews, and alignment with international and national standards and best practices.

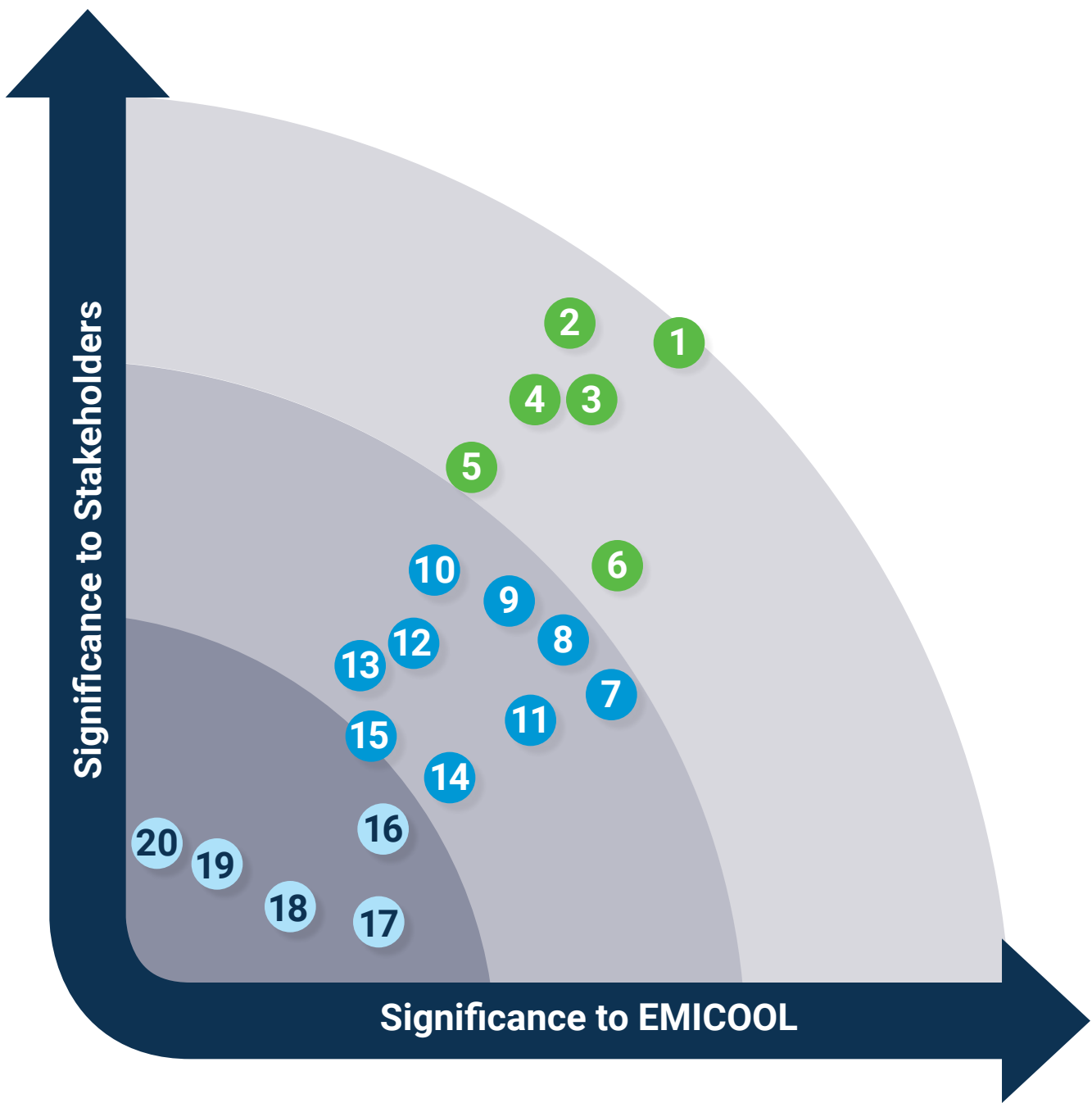
All topics are considered important to EMICOOL; however, their level of importance varies among departments. The process also takes into account the secondary stakeholders each department engages with.

EMICOOL has been working hard to support the UN's Sustainable Development Goals (SDGs). These goals shape how we run our business every day, from how we treat the environment to how we interact with our customers and community.

EMICOOL conducted its own study to determine what's most important for our sustainability report in 2023. This helped us identify the key materiality topics that matter most to our stakeholders and our business. With our findings, we can disclose our 2023 sustainability report that demonstrates our commitment to the environment and our stakeholders.

Our ESG committee were able to establish which areas are most relevant to our business after consulting our leadership team and our stakeholders to understand how best to approach our sustainability journey. We also surveyed our employees to learn what they think about our impact on the economy, environment, and society.

EMICOOL's Materiality Matrix



1	Ethics, Governance and Compliance
2	Customer Relations
3	Health, Safety and wellbeing
4	Product and Technology Innovation
5	Information and Cybersecurity
6	Employee Engagement and Satisfaction
7	Economic Performance
8	CSR and Community Engagement
9	Human Capital Development and Retention
10	Risk and Crisis Management
11	Energy Management
12	Human Rights Management
13	Supply Chain Management
14	Water Management
15	Diversity and Inclusion
16	Climate Change and GHG Emissions
17	Waste Management
18	Biodiversity
19	Product Risk and Stewardship
20	Circular Economy

As part of the alignment process, each department was asked the following:

- 1. Select the stakeholders your units engage with the most for operations.
- 2. Rank the material topics based on importance to your units from 1 (most important) to 20 (least important).

The survey results were put into a chart (above) that shows which topics are most important to our business and stakeholders. We aligned our chart and made sure it was properly mapped to ESG Committee recommendations. This chart helped us draft our sustainability report for 2023. It also helps us plan our future sustainability strategies.

Materiality GRI 3-2 continued

At EMICOOL, we are dedicated to driving sustainability by prioritizing material topics that have a meaningful impact on our business, stakeholders, and society. Guided by our materiality assessment, we align our strategic priorities with the UN SDGs and core ESG pillars to create long-term value and resilience. Below are the key areas we focus on and their alignment with the SDGs and ESG pillars:



Stakeholder Engagement GRI 2-29

At EMICOOL, we understand the importance of our stakeholders in our business. We value their views, expectations, and worries.

Prioritizing Stakeholder Engagement

Engaging with our stakeholders is a key part of our sustainability strategy. We aim to have open and honest conversations with all parties involved.

Listening and Learning

We believe that meaningful engagement involves actively listening and continually learning. We take note of the feedback, insights, and perspectives shared by our stakeholders. This helps us understand their expectations and concerns, allowing us to align our strategies and actions accordingly.

Centering Sustainability

Our stakeholder engagement process serves as a platform to explore impactful ideas that benefit all stakeholders. Through open lines of communication, we can connect directly and regularly with our stakeholders.

Empowering Positive Impact

Our commitment to effective stakeholder engagement is based on transparency, accountability, and sustainability.

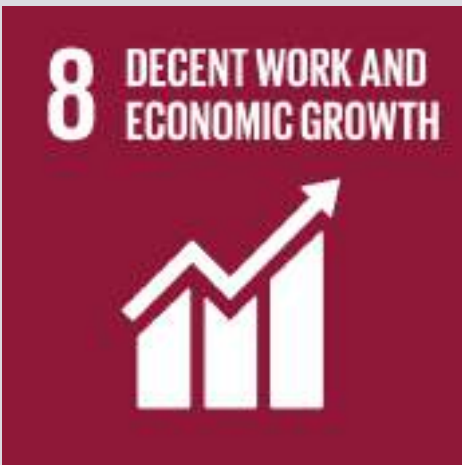




OUR PEOPLE

Our employees are the backbone of our success, and their health, safety, and well-being are our top priorities. In this section, we'll explore key indicators and metrics that demonstrate our ongoing efforts to ensure the welfare of our workforce.

From the combination of Health, Safety, and Environment (HSE) training we provide to the activities we host for our employees, EMICOOL is continuously working to create a safe, engaging, and supportive workplace. These initiatives are in line with our broader sustainability goals and echo the United Nations Sustainable Development Goals (SDGs), showing our commitment to making positive contributions to both our workforce and society as a whole.



Health, Safety and Wellbeing GRI 403, 404

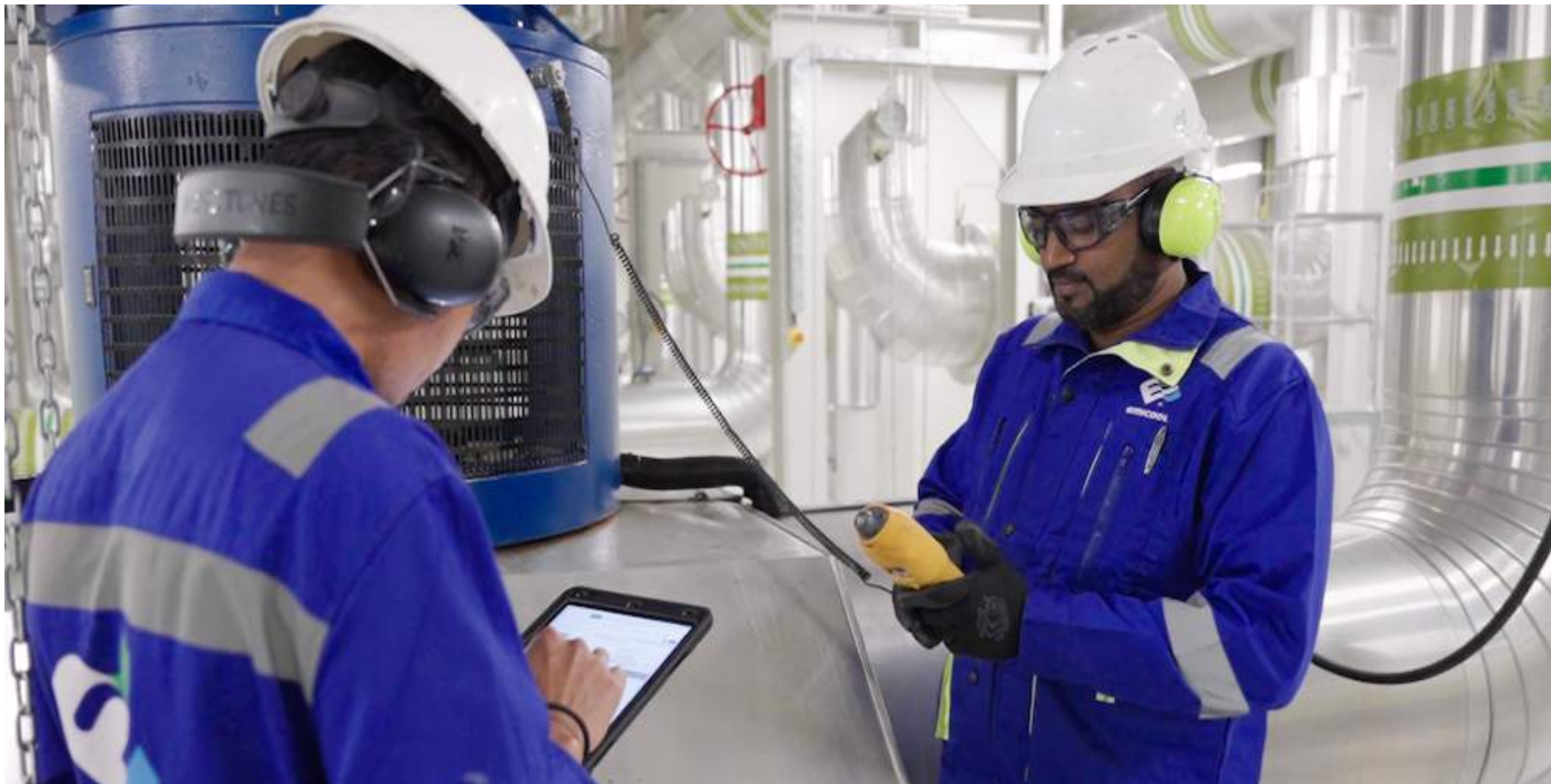
HSE Achievements in 2023

Social

Throughout the year, we made the safety of our employees a top priority by providing comprehensive safety training programs. These efforts paid off with zero workplace accidents or injuries. Additionally, we focused on promoting mental health among our employees by introducing mental health support programs.

Governance

Our HSE department conducted comprehensive comprehensive safety inspections across all our facilities to identify and mitigate potential risks, ensuring compliance with safety regulations and standards. Additionally, our incident reporting system was instrumental in maintaining a safe workplace, resulting in a significant reduction in incidents and a clean record throughout 2023. The HSE audit did identify minor non-conformities and observations; however, management and operations is fully committed to addressing and resolving these issues.



Workforce Health and Safety Performance Metrics

KPI	Unit	2021	2022	2023
Total employee man-hours	#	484,800	550,391	540,400
Total contractor man-hours	#	449,241	264,692	469,320
Total man-hours	#	934,041	815,083	1,028,083
Employee fatalities	#	0	0	0
Contractor fatalities	#	0	0	0
Employee total recordable injuries	#	1	0	0
Contractor total recordable injuries	#	0	0	0
Total recordable injuries	#	1	0	0
Total recordable injury frequency	#	2	0	0
Employee lost-time injuries	#	1	0	0
Contractor lost-time injuries	#	0	0	0
Total lost-time injuries	#	1	0	0
Lost-time injury frequency (LTIF)	#	2	0	0
High Potential Incidents (HPIOs)	#	1	0	0
Number of Safety Observations	#	194	187	423
Observations Actions Close-Out	%	85%	84%	91%
Number of workers covered by an occupational health and safety management system	#	226	252	248

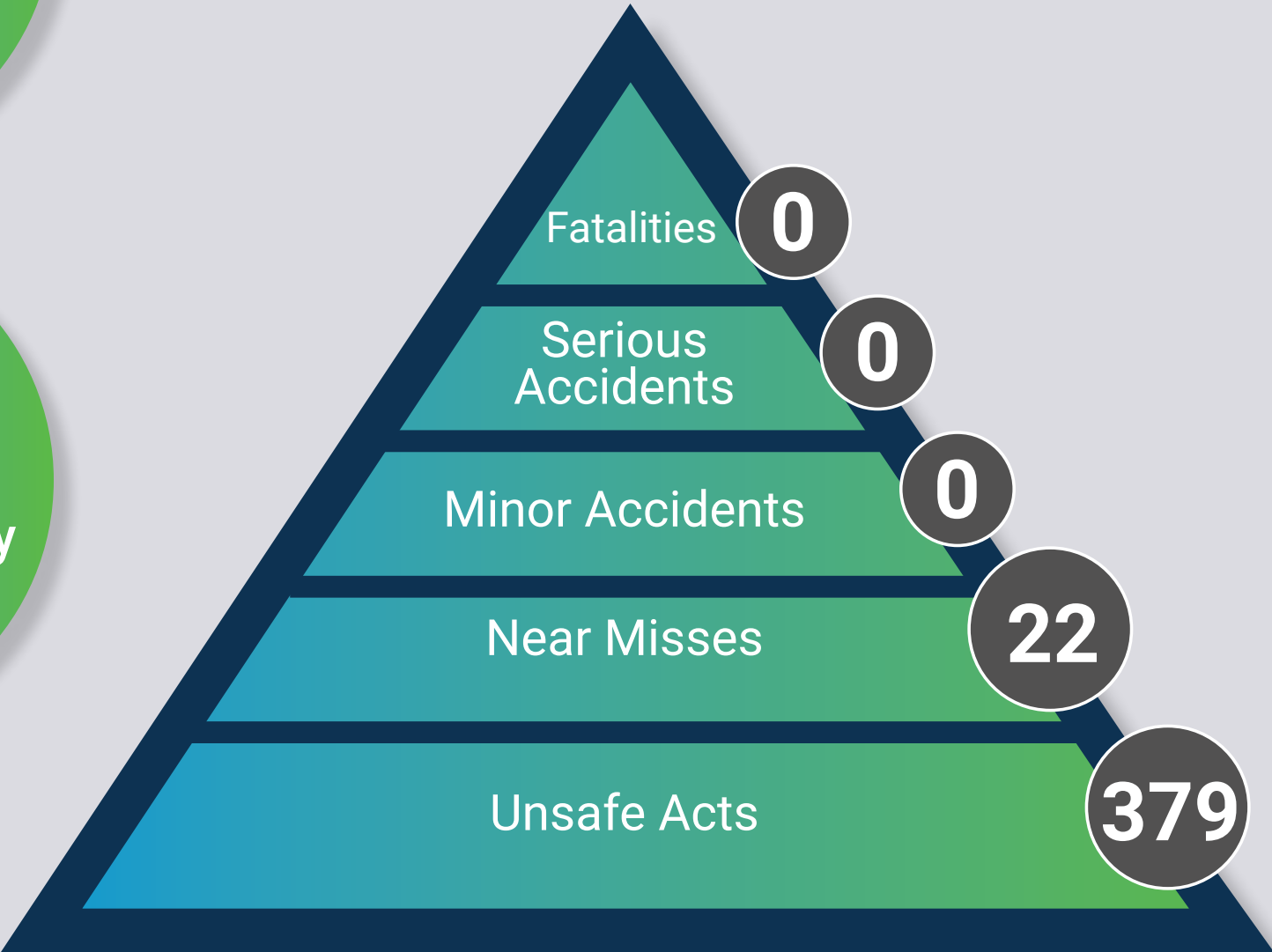
Health, Safety and Wellbeing GRI 403, 404 continued

Health and Safety Training

For 2024 and beyond, we will continue to initiate comprehensive training programs to educate our workforce on skills and best practices for maintaining a safe working environment. Well-trained employees are better equipped to identify hazards, respond to emergencies, and contribute to a safe workplace culture.



Heinrich Triangle
HSE Lagging and Leading Indicators



HSE Highlights *

Number of workers covered by an occupational health and safety management system increased by 71% from 231 to 397.

Total hours of HSE training increased by 233% from 504 to 1680 hours.

Number of Safety Observations increased by 126% from 187 to 423.

* all figures are benchmarked against previous year

Health, Safety and Wellbeing GRI 403, 404 *continued*

Our Health, Safety, and Environment (HSE) department aligned its efforts with sustainability goals:

Tracking Injuries and Illnesses: We monitored lost time injuries and work-related illnesses as well as workplace safety incidents.

Emergency Response: We measured evacuation times of our emergency response teams to ensure they are prepared for and equipped to deal with a crises situation.

Safety Audits: Regular safety audits helped us understand how well we adhere to safety standards and identify areas needing improvement.

Monitoring PPE Usage: We monitor employees use of personal protective equipment to keep them safe from workplace hazards.

Safe Work Permits: We tracked permits issued for high-risk activities to ensure they were properly authorized and followed safety protocols.



Planned Initiatives for 2024

- Environment**
Providing regular health and safety training to help employees identify and address potential hazards effectively.
- Enhancing emergency response plans and conducting realistic drills for swift, coordinated actions during crisis.
- Social**
Implementing wellness programs, conducting ergonomic assessments, and providing mental health support to promote the physical and mental well-being of our workforce.
- Governance**
Staying updated with regional health, safety, and environmental regulations.
- Establishing a comprehensive risk management framework to identify potential hazards, assess risks, and implement preventive measures to minimize incidents and enhance our commitment to governance and stakeholder compliance.



Human Capital Development and Retention GRI 202, 401, 404, 405, 413

At EMICOOL, we pride ourselves on fostering a robust organizational culture that places our people at the heart of everything we do. We organize regular sports tournaments to promote physical health and teamwork, and are planning to have a recreation center and centralized cafeteria at the head office for employee well-being. Our commitment to a people-centric approach is deeply rooted in ensuring employee satisfaction, promoting well-being, and creating an environment where everyone feels valued and supported. This dedication has been further reinforced through the wide range of innovative and impactful initiatives we introduced in 2023, each designed to enhance the employee experience and strengthen our organizational values.

Work-life balance

To further enhance work-life balance, we have introduced flexible work arrangements and extended flexible work hours by one hour, allowing employees to better manage their professional and personal responsibilities.

Dream Team Award

We have expanded the scope of our BATL Awards by adding new categories, including the “Dream Team Award,” which recognizes outstanding teamwork and collaboration within our organization. Through these initiatives, we continue to cultivate a positive and supportive work environment where all employees can thrive and succeed.

Support of Employee Wellbeing

In addition to promoting professional growth, we prioritize the well-being of our employees through various health-oriented programs. These initiatives include organizing Ramadan Iftar gatherings to promote unity and community spirit, offering free eye-checks to improve staff eye sight, and hosting a fitness challenge in partnership with FITZE to encourage physical activity and wellness.

New Arrival Gift Vouchers

Recognizing the importance of supporting our employees’ family life, we have introduced initiatives such as providing gift vouchers for newborns, celebrating the joyous arrival of new family members and demonstrating our commitment to work-life balance.

Emiratization

Successfully reaching the target of 2% YOY increase for Emiratization set by the UAE Government with an increase intake of National Graduate Trainees to support the local community EMICOOL has seen a total of 35% increase in UAE National employees since 2022.

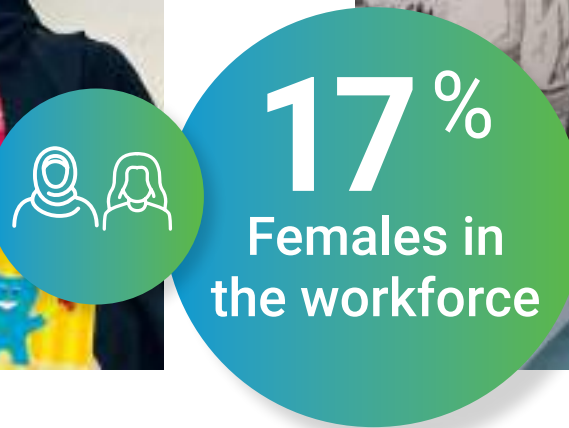
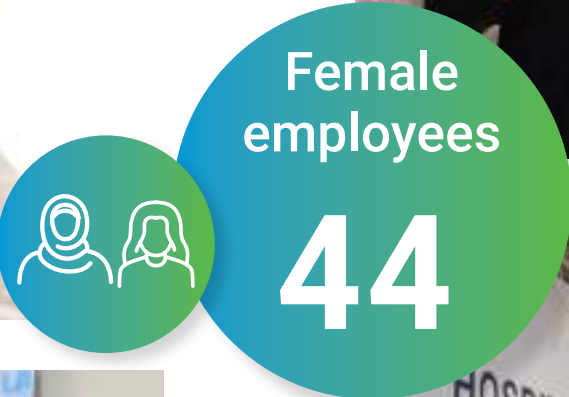


Human Capital Development and Retention GRI 202, 401, 404, 405, 413 *continued*

Women Inspiring Network

We are planning to launch Women Inspiring Network (WIN) in 2024. WIN is about empowering and supporting our female employees in their professional journeys. WIN provides a platform for networking, mentorship, and skill-building opportunities, fostering a culture of inclusivity and empowerment within our organization.

We also celebrate holidays such as International Women’s Day and Emirati Women’s Day, honoring the achievements and contributions of women in our workforce and society.



KPI	Unit	2021	2022	2023
Employee satisfaction score	%	90.00%	88.20%	90.00%
Employee absentee rate	%	0.12%	1.59%	0.96%

KPI	Unit	2021	2022	2023
Number of female employees that took parental leave	#	2	1	3
Number of female employees who returned to work after parental leave ended (return to work)	#	2	1	3
Number of female employees returned from parental leave who were still employed twelve months after return to work (retention)	#	2	1	3
Return to work rate	%	100%	100%	100%
Maternity retention rate	%	100%	100%	100%

KPI	Unit	2021	2022	2023
Number of grievances filed in the reporting period	#	2	2	1
Number of these grievance that are addressed or resolved	#	2	2	1
Number of grievances filed prior to the reporting period that were resolved during the reporting period	#	0	0	1

Human Capital Development and Retention GRI 202, 401, 404, 405, 413 *continued*

Workforce Overview

KPI	Unit	2021	2022	2023
Total number of employees	#	226	252	248
Total number of full-time employees	#	225	251	248
Total number of part-time employees	#	1	1	0

Workforce Distribution By Gender and Employment Level

KPI	Unit	2021	2022	2023
Total number of contractors and/or consultants	#	0	0	0
Female full-time employees	#	36	44	44
Male full-time employees	#	190	208	204
Total full-time employees in senior management	#	11	12	13
Female full-time employees in senior management	#	0	0	0
Male full-time employees in senior management	#	11	12	13
Total full-time employees in middle management	#	37	40	40
Female full-time employees in middle management	#	8	9	10
Male full-time employees in middle management	#	36	31	30
Total full-time employee staff (other levels)	#	178	200	195
Female full-time employee staff (other levels)	#	33	34	34
Male full-time employee staff (other levels)	#	165	166	161

Workforce Distribution by Age

KPI	Unit	2021	2022	2023
Full-time employees under 30 years old	#	48	52	38
Full-time employees between 30 to 50 years old	#	164	181	188
Full-time employees over 50 years old	#	14	19	22

New Hires

KPI	Unit	2021	2022	2023
Female New employee hires	#	9	8	9
Male New employee hires	#	27	19	20
Under 30 years old New employee hires	#	18	14	14
30 to 50 years old New employee hires	#	18	13	15
Over 50 years old New employee hires	#	0	0	0

Employee Turnover

KPI	Unit	2021	2022	2023
Total number of full-time employees who left the company	#	23	19	13
Total number of part-time employees who left the company	#	3	0	0
Total number of male employees leaving employment during the reporting period	#	20	17	7
Total number of female employees leaving employment during the reporting period	#	6	2	6

Training

KPI	Unit	2021	2022	2023
Total employee training hours	Hours	2,593	4,128	2,797
Average number of training hours per staff per month	Hours	11.47	16.38	11.28

Human Capital Development and Retention

GRI 202, 401, 404, 405, 413 *continued*

Emirati Workforce Overview

KPI	Unit	2021	2022	2023
Nationals among total full-time workforce	#	6	9	14
Female National full-time employees	#	3	4	8
Male National full-time employees	#	5	5	6
The number of personnel in executive and management positions and above that are nationals	#	3	3	3



COP28 Participation GRI 2-28

Actis & EMICOOL at COP28 in Dubai, November 2023

During the 28th Conference of the Parties (COP28), EMICOOL, was a strategic partner of the World Green Economy Organization (WGEO), and was recognized as a leading figure and innovator in the district cooling sector for its environmental sustainability efforts. At the event, EMICOOL took advantage of the platform

to present case studies and showcase cutting-edge technology, as part of the panel discussions. Our participation in COP28 Blue and Green Zone panel discussions, strengthens our support towards the UAE’s Net Zero plan to cut carbon emissions by 2050.

EMICOOL Delegation at the Blue Zone:

Ms. Shamiram, Dr. Adib, Mr. Yousuf, Mr. Ezzeddine, and Dr. Sherif represented EMICOOL highlighting best ESG practices Positioning EMICOOL in UAE as a pioneer and leader in sustainability

Networking goals:

- Explore green financing opportunities
- Facilitate business expansion
- Align with international regulations
- Approach
- Engage in panel discussions
- Utilize speaking opportunities
- Connect with high-level UN Delegates

EMICOOL presence in the Green Zone:

- EMICOOL employees actively contributing to sustainability goals
- Focus Areas at COP28 Green Hub Energy Management
- Climate Change Initiatives
- Diversity and Inclusion events



Dr. Adib El Moubadder
Chief Executive Officer



Ms. Shamiram Nissan
Partner, Actis Head of Sustainability



Mr. Yousuf Akbar Ali
Chief Financial Officer



Dr. Sherif Hesham Mohamed Elkholy
Partner, Actis Head of the Middle East & North Africa



Mr. Ezzeddine Jradi
Head of Business Excellence and Sustainability



“A Global Perspective on Accelerating Transition through Investing in UAE Climate Leaders”



[Click here to watch the panel discussion in COP28 Blue Zone](#)

Driving Inclusivity, Sustainability and Engagement

GRI 304, 413

This year we launched a green campaign to plant a tree for every employee; so far, we've planted over 300 trees in the Dubai Investment Park community.



CEO Dr. Adib Moubadder joined in to help plant the new trees.



2nd year of tree planting



300 new tree seedlings

This initiative enriches the greenery within Dubai Investment Park, actively reducing greenhouse gas emissions and promoting biodiversity. EMICOOL has been proudly planting trees in this area since 2022.

Driving Inclusivity, Sustainability and Engagement

GRI 413

Supporting People of Determination



Over
10
EMICOOL
Volunteers

In 2023, EMICOOL collaborated with Actis through the Actis Act initiative to support the inclusion of females in the STEM industry, starting from their academic journey and extending into their careers



Over
12Hrs
voluntary
work



KPI	Unit	2021	2022	2023
Donations and sponsorships	(AED million)	0.07	0.03	0

Driving Inclusivity, Sustainability and Engagement

GRI 202, 401, 404, 405, 413

Initiatives Implemented

Social

Expanded our engagement and well-being programs through various events and activities, promoting community involvement and recognizing employee contributions.

Implemented a new onboarding process that includes welcome gifts for new employees, enhancing their initial experience and fostering a sense of belonging.

Prioritized environmentally friendly packaging for our products and gifts, aligning with our commitment to minimize environmental impact.



Initiatives Planned for 2024 and Beyond

Social

Enhance employee engagement and satisfaction through robust feedback systems and continuous improvement plans.

Develop and implement employee-oriented programs and community service initiatives, such as ongoing support for local sports events and health awareness campaigns. Cultivate a diverse and inclusive work environment that prioritizes the professional growth and personal well-being of all team members.



For 2024, we are planning to collaborate with 'Companies for Good' for training in Diversity and Inclusion for approximately 150 of our employees. This is intended to raise awareness on this important topic. Training is planned for Q4 of 2024 and all participants will receive attendance certificates to mark the event.

Governance

Strengthen regulatory compliance through regular policy reviews and updates, ensuring adherence to legal requirements. Continue to improve system enhancements to support ISO compliance and meet stakeholder requirements effectively. Implement training programs that focus on ethical conduct and compliance for all, employees fostering a culture of integrity and accountability.

Driving Inclusivity, Sustainability and Engagement

GRI 413, 302, 305, 306, 307

Sustainability Week

During Sustainability Week at EMICOOL, we participated in a series of impactful activities aimed at fostering environmental consciousness and promoting sustainable practices within our organization and the community. Here's a summary of the key initiatives:

- 1. Visit to Rashid Center for People of Determination (June 20, 2023): EMICOOL representatives visited the Rashid Center for People of Determination, demonstrating our commitment to inclusivity and social responsibility.
- 2. Net Zero Simulation Workshop with Dr. Tim (June 21, 2023): We organized a workshop led by Dr. Tim Rogmans aimed at enhancing employees' understanding of net zero concepts, facilitating knowledge dissemination, and raising awareness about the importance of striving for carbon neutrality.
- 3. Customer Interaction – Quiz and Giveaways (June 21-23, 2023): Across our customer service sections and branches, we conducted engaging quizzes offering exciting prizes and giveaways. This initiative not only entertained our customers but also educated them on sustainability topics.
- 4. Best out of Waste Competition: Employees participated in a “Best out of Waste” competition, igniting their creativity and encouraging them to embrace the principles of recycling, reusing, and reducing waste.
- 5. ESG Photography Competition: To inspire creativity and promote awareness of Environmental, Social, and Governance (ESG) issues, we launched a photography competition among employees. Participants were encouraged to capture images within the EMICOOL office or its surroundings and accompany them with captions related to ESG themes.

Closing Ceremony: The week culminated in a vibrant closing ceremony, celebrating the collective efforts and achievements of Sustainability Week. It served as a reminder of our ongoing commitment to sustainability and encouraged continued engagement in environmentally conscious practices.



Net Zero simulation workshop hosted by Dr. Tim Rogmans



Driving Inclusivity, Sustainability and Engagement

GRI 413, 302, 305, 306, 307 *continued*

At EMICOOL, we recognize the importance of our communities in our journey towards sustainability as a district cooling services provider. We have always prioritized supporting these communities in meaningful way, and in 2023, our commitment to their well-being and the environment reached new heights.

Collaborative Recycling Initiatives

EMICOOL understands the impact of collective action in driving sustainable change. To actively participate in broader recycling initiatives and raise awareness about responsible waste management, we have formed close partnerships with local authorities and community organizations. Through these collaborations, EMICOOL aims to extend its impact and significantly contribute to promoting recycling and sustainable waste management practices within the community.

Education as a Catalyst for Change

EMICOOL recognizes its role in education and promotes awareness among employees and customers on sustainable issues. We launched a comprehensive educational campaign emphasizing the importance of recycling and proper waste management. These initiatives provide clear guidance on the effectiveness of segregating recyclable materials.

Investing in Recycling Infrastructure

Aligned with our educational efforts, EMICOOL has invested significantly in recycling infrastructure. We strategically placed recycling bins and collection systems throughout our facilities, making it convenient for both employees and customers to engage in recycling initiatives. This proactive approach not only makes recycling accessible but also reinforces our commitment to sustainable practices.

Empowering our Team

Our Operations and Maintenance team values the contributions of our team members. We provide the necessary training to enhance their skill set, broaden their understanding, and introduce them to innovative ideas and technologies. This proactive approach empowers our team, fostering a culture of continuous improvement and sustainability.

EMICOOL is committed to making a real difference in the environment and the communities we work in. We focus on managing waste responsibly and supporting education and sustainability.



Industrial flooring made from recycled tires



Repurposing used chemical containers



Driving Inclusivity, Sustainability and Engagement GRI 413, 302, 305, 306, 307 continued



Climate and Sustainability Program

We organized a Climate and Sustainability Virtual Experience Program run by the Boston Consulting Group (BCG) to help employees understand our carbon emissions reduction targets. The program was conducted over 6 sessions and was accompanied by assignments to the participants to help them better understand the concept of implementation of carbon emissions reduction.

Benefit to Employees: Participants gained access to valuable research data, providing insights into baseline metrics, benchmarking, cost-benefit analysis, value addition, risk assessment, and effective communication strategies. Additionally, each participant received a certificate of program completion from EMICOOL, recognizing their achievement.

Benefit to EMICOOL: Alignment with EMICOOL strategy, improved data reporting, and better understanding on the ESG criteria.

OUR OPERATIONS

Our focus on efficiency, responsible practices, and innovation is crucial to our growth as a leading district cooling provider in the UAE. We adhere to the highest standards of corporate governance and integrate global best practices into all aspects of our operations. This approach enables us to effectively meet the needs and expectations of all our stakeholders.



District Cooling Plants GRI 302, 303, 305, 306, 308, 414

At EMICOOL, we have a dedicated team overseeing the efficient functioning of the supply chain, from district cooling plants and underground chilled water networks to energy transfer stations and customer-side equipment, including digital controls and instrumentation.

By leveraging state-of-the-art technologies and retro-fitting, we use advanced systems such as underground chilled water leakage detection and unmanned machinery, that is all monitored from a Command Control Centre (CCC). We have enhanced our CCC to monitor more than 20 plants and 500 energy transfer stations, upgrading instrumentation and controls to enable automatic operation and reporting.

We have streamlined maintenance workflows and reporting processes, resulting in a 100% increase in the number of in-house maintenance orders closed, totaling 1550 corrective work orders across the plants. The total number of corrective work orders/tickets is 2,237, an increase of 45% from 2022.

The implementation of smart valves and fully centralized BTU meters further contributes to optimizing our district cooling efficiencies. The total number of active smart valves installed are 9,246 out of 31,101 properties representing 30%. In 2024, we plan to install an additional 5000 smart valves.

By embracing innovation and environmental responsibility, we are committed to a greener, more sustainable future in all aspect of our operations.

Site Name and Location

DCP - 1	Dubai Investments Park 1
DCP - 3	Dubai Investments Park 1
DCP - 4	Dubai Investments Park 1
DCP - 5	Dubai Investments Park 1
DCP - 6	Dubai Investments Park 2
DCP - 7	Dubai Motor City
DCP - 8	Dubai Motor City
DCP - 10	Uptown Mirdif – Dubai
DCP - 11	Al Jaddaf
DCP - 13	Dubai Sports City
DCP - 14	Expo City Dubai
DCP - 15	Rose Bay
DCP - 16	Mirdif Hills – Dubai
DCP - 17	Jumeirah Bay – Jumeirah 2
DCP - 19	Town Center – Fujairah
DCP - 20	Al Warqa
DCP - 22	The Terraces – Meydan*
DCP - 23	Park Gate Residence*
DCP - 24	Escan Tower – Dubai Marina*

*Cooling as a service



District Cooling Plants GRI 302, 305, 306, 307, 403, 418, 419 *continued*

Key Achievements

Environment

We improved plant efficiency by refining operational control systems to reduce energy losses. Three remote district cooling plants (DCP22, DCP23, and DCP24) were also integrated into the Command Control Centre (CCC), streamlining operations and lowering the carbon footprint. The integration of 2,379 data points into the advanced energy management system (EmiView) enabled data-driven enhancements in operational efficiency, leading to reduced carbon emissions. The extension of chilled water leak detection system coverage substantially reduced water and energy loss, resulting in cost savings and improved efficiency.

Social

We prioritized employee safety by delivering extensive safety training programs throughout the year, resulting in zero workplace accidents or injuries. Additionally, we introduced mental health support initiatives to promote overall well-being and resilience among our employees.

Governance

A steadfast commitment to governance and compliance is demonstrated through regular reviews and updates of workplace safety policies, prioritizing the safety and well-being of employees and contractors. Initiating cybersecurity measures and developing new Operational Technology (OT) cybersecurity policies and procedures ensured the reliability and security of district cooling services. Compliance with industry standards and regulations underscore our dedication to ethical business practices and regulatory adherence.



Challenges and Initiatives Taken

Our department encountered diverse challenges, requiring strategic initiatives for resolution. Among these challenges, cybersecurity emerged as a prominent concern due to the evolving cybersecurity landscape. With cyber-attacks growing in sophistication, protecting EMICOOOL’s OT systems became imperative. Conducting a cybersecurity assessment revealed a medium maturity level, prompting the development of a strategic roadmap to elevate our cybersecurity maturity.

Another challenge stemmed from the complexity of integrating new technologies to maximize energy efficiency, impacting our environmental footprint. Our current focus is on ongoing research and development efforts, particularly at DCP14, aimed at implementing artificial intelligence and machine learning solutions. This initiative aims to leverage advanced technologies to enhance energy efficiency, thereby positively contributing to environmental sustainability. Our commitment to ongoing research underscores our dedication to innovation and environmental responsibility.

Our efforts are focused on striking a delicate balance between these activities and work duties to ensure sustained engagement while maintaining operational efficiency. Thorough planning and coordination are essential to uphold our commitment to social responsibility without compromising daily work operations. This dual focus on social engagement and professional responsibilities reflects our commitment to fostering a balanced approach between social responsibility and operational excellence within the organization.

District Cooling Plants GRI 302, 303, 305, 306, 307, 403, 418, 419 continued

Key Initiatives

Recycling and Reusing Components

We emphasize recycling and reusing components, such as cables and wiring, whenever feasible instead of purchasing new ones to minimize waste and reduce environmental impact.

Predictive Maintenance

We use sensors and monitoring technologies to predict equipment failures and schedule maintenance proactively, reducing downtime, mitigating the need for emergency repairs, and extending equipment lifespan through regular planned maintenance, thus conserving resources.

Computerized Maintenance Management Systems (CMMS)

We utilize the Digital Control Technology (DCT) Help Desk portal for tracking and managing maintenance activities, including scheduling and identifying recurring failures, streamlining processes, and reducing reliance on paper documents.

Condition-Based Maintenance

We continuously monitor equipment conditions and perform maintenance only when necessary, rather than adhering to fixed schedules. This approach reduces maintenance costs, ensures energy-efficient equipment operation, and lowers energy consumption.

Implementation of Smart Devices

We are deploying smart sensors for motors and machinery to enable advanced analytics and maintenance planning. These devices monitor equipment performance, optimize maintenance schedules, and ensure energy efficiency, thereby reducing maintenance needs and enhancing operational efficiency.

Leak Detection System

We are installing a comprehensive leak detection system along the chilled water pipe network to identify and address water leaks early. Over the past four years, this technology has significantly reduced water loss due to leaks, conserving water and energy resources.

Digital Tools for Calibration

We are adopting digital calibration tools like the SITRANS FM verification, which generates automated verification reports for flow meters. This digitization reduces paper usage and carbon footprint associated with calibration activities, streamlining processes and enhancing efficiency.

Energy-Efficient and Low-Emission Devices

We prioritize the selection of energy-efficient and low-emission devices for new projects and replacements. This initiative minimizes environmental impact and promotes sustainability across operations.

Digital Tools for Monitoring and Control

We are implementing plant automation and central supervisory control and data acquisition (SCADA) systems for remote monitoring and control of district cooling plants and energy transfer stations (ETs). This enhances operational efficiency, allows proactive issue identification, and reduces the need for costly repairs and maintenance.

Document Handling with E-Signatures

We are integrating e-signatures into document workflows to reduce paper usage and streamline signing processes. E-signatures expedite document signing, enabling multiple parties to sign documents digitally from anywhere, thereby eliminating the need for physical documents and in-person meetings.



Leak detection system substantially reduced water and energy losses.

District Cooling Networks

Key Achievements

During 2023, the Networks department improved Delta T and achieved 12% in Chilled Water (CHW) Loss Reduction, exceeding their target of 10%. These achievements have multifaceted implications, notably in the following ESG aspects.

Environmental

The reduction of water losses presents a pivotal opportunity for environmental impact mitigation. By swiftly addressing water leaks on-site or employing efficient water transfer methods, such as tank systems, we are actively contributing to the elimination of underground contamination. Consequently, this proactive approach results in a tangible reduction in environmental impact.

Social

Especially regarding customer satisfaction, these accomplishments lead to improved energy efficiency, resulting in higher-quality chilled water delivery to end-users. This enhancement not only ensures better cooling experiences but also helps reduce complaints, promoting positive social outcomes.

Governance

Reducing CHW losses has considerable governance implications as it directly impacts external stakeholders and regulatory bodies involved. By effectively addressing water losses, we not only uphold our commitment to sustainable resource management but also align with the objectives and regulations set forth by master developers and authoritative bodies such as DEWA and RTA.

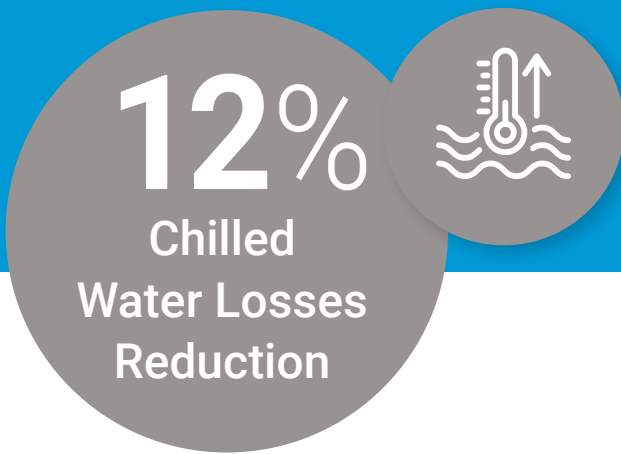
Furthermore, by reducing CHW losses, we indirectly support the overarching governance objectives related to resource efficiency, infrastructure resilience, and environmental sustainability. This collaborative approach to governance ensures that our efforts not only benefit our organization but also contribute positively to the broader and the stakeholders involved.

Challenges Met And Overcome

Underground water losses and cooling complaints at peak summer are considered as top challenges. Certain measures are being followed to overcome these challenges. Leak detection systems that were developed in coordination with the control team are being implemented to overcome all underground losses. On the other hand, we have improved the quality of the chilled water by implementing filtration systems across the plants and ETs and carrying continuous and deep PPM for the Heat exchanger, which resulted in improved customer satisfaction.

Key Initiatives Supporting ESG Enhancement

- 1. Successfully launching a water recycling initiative, where the Networks team started saving the drained chilled water from pipes into flushed tanks. The collected water is carefully redirected into storage tanks within our plants, where it undergoes appropriate quality check for reuse within the network.
- 2. Switching to use reusable and washable filter bags for the filtration systems in the plants and ETs instead of using the disposable one. The washable filter bag can be used up to 7 times compared to the normal disposable bag. Subsequently, the aim is not limited into optimizing resource utilization but minimizing environmental impact and contributing significantly to the sustainability objectives outlined in EMICOOL mission and vision.



Initiatives Planned For 2024 and Beyond

Environment

Water recycling initiatives offer substantial benefits in terms of reducing environmental impact. Previously, our standard practice involved draining water through approved drain lines in collaboration with relevant regulatory bodies such as the Dubai Municipality (DM) and Master developers. However, this process necessitated the transportation of water to waste tanks for subsequent treatment by DM, resulting in associated gas emissions.

Furthermore, in certain scenarios, we tend to use gravity pressure to facilitate the drainage process, thereby eliminating the necessity for pumps that typically consume diesel. This innovative approach not only reduces operational costs but also leads to a tangible reduction in CO₂ emissions.

Social

This initiative positively impacts our customers, employees, and the community at large by demonstrating our commitment to sustainable practices, enhancing environmental stewardship, and fostering a sense of collective responsibility towards conserving vital resources.

Governance

From a regulatory standpoint, our water recycling efforts align with regulatory frameworks set forth by governing bodies such as Dubai Municipality. Moreover, these initiatives contribute to system enhancement by optimizing resource utilization and minimizing environmental impact. By adhering to ISO compliance standards and ensuring stakeholder compliance, we uphold the highest standards of corporate governance and ethical conduct.

Operations and Maintenance

GRI 302, 305, 413, 418

Key Initiatives Planned for 2024

Environment

Revise the operational control logic practice to optimize peak plant efficiency, reduce energy loss, and uphold the highest standards of performance and sustainability. The focus is on refining strategies and mechanisms to enhance overall operational efficiency, minimizing energy waste, and reinforcing our commitment to sustainable practices. This initiative involves integrating cutting-edge technologies and best practices to ensure that our operational control philosophy seamlessly aligns with environmental insights and long-term viability. By fine-tuning these principles, our goal is to establish a resilient and eco-aware operational framework that maximizes efficiency while minimizing our environmental footprint, contributing to a more sustainable and environmentally responsible operational landscape.

Social

Provide enhanced diagnostic support to customers, empowering them to identify and understand internal cooling system issues. By offering expert guidance and explanations, Digital Control Technology (DCT) aims to educate customers about their cooling systems and the importance of maintaining optimal operational parameters for energy efficiency. These initiatives will highlight the significance of responsible energy consumption and promote awareness about energy optimization practices among customers. EMICOOL is committed to ensuring customers have the information they need to feel empowered, fostering social engagement and sustainability.

Governance

EMICOOL established an internal audit department to govern areas of cybersecurity including OT CSMS (Cybersecurity Management System) to develop comprehensive OT security policies, procedures, and standards to enhance cybersecurity exposure. This involves crafting and documenting robust OT security policies, procedures, baselines, and standards aligned with industry best practices and the Cyber+ Framework. Close collaboration with multiple departments ensures that the designed policies and procedures are feasible for implementation and enforceable. Endorsement from top-tier management ensures organization-wide adoption and the consistent enforcement of security requirements, reinforcing the importance of cybersecurity across EMICOOL.



Operations and Maintenance

GRI 201, 302, 305, 307, 413, 416 *continued*

Overcoming Challenges through Initiatives

Meeting Regulatory Supervisory Bureau (RSB) Targets and Adherence to Dubai Municipality Guidelines: The Operations and Maintenance (O&M) department faces significant challenges in meeting RSB targets and complying with Dubai Municipality guidelines. Evolving regulations in environmental, safety, and energy efficiency demand strict adherence, posing hurdles in documentation, adapting to regulatory changes, and balancing operational efficiency with compliance. Navigating stringent regulations set by the Dubai Municipality adds complexity, requiring a proactive approach, continual monitoring of regulatory changes, and integration of compliant practices into daily operations.



Coping with Climate Change: Climate change and rising temperatures are increasing the demand for cooling in Dubai, putting more strain on district cooling systems. As temperatures rise, the need for energy-efficient cooling solutions grows, leading to higher operational costs and greater stress on infrastructure. In response, EMICOOL is proactively investing in climate-resilient infrastructure to address these challenges. The company has committed to enhancing its systems with innovations like Emivalves, energy retrofits, and electric vehicles, ensuring both efficiency and resilience in the face of escalating cooling demands.

We are planning to conduct Climate Risk Assessment to understand the impacts and prepare a robust mitigation plan in 2025.

Aligning with Company Strategy to Achieve Greener Targets: Integrating greener practices into daily operations poses challenges for the O&M department, including overcoming resistance to change and balancing environmental goals with operational efficiency. Ensuring alignment with sustainability targets while maintaining system reliability and meeting regulations requires strategic planning and ongoing efforts to foster a culture of environmental responsibility within the organization. Embracing greener initiatives necessitates proactive measures and continuous improvement to achieve the company’s sustainability objectives while sustaining operational effectiveness.



Operations and Maintenance GRI 301, 302, 303, 305, 306 *continued*

Energy Retrofit: Partnering with ESCO, we have undertaken energy retrofit projects across all district cooling plants, aiming to enhance efficiency and reduce environmental impact. These upgrades have led to a substantial decrease in energy consumption and operational costs, aligning with our commitment to sustainability. By transforming our plants into a digital landscape, we synergize with the Unmanned Machinery Space (UMS) project, demonstrating our dedication to continuous innovation.

Installation of Ceramic Filters/Upgradating of Reverse Osmosis Plants: To enhance water purification and conservation, we are upgrading Reverse Osmosis Plants with cutting-edge recycling technology, incorporating ceramic filters based on the innovative Home Port design. This advanced filtration system improves treated water quality and minimizes waste, contributing to higher sustainability and operational efficiency.

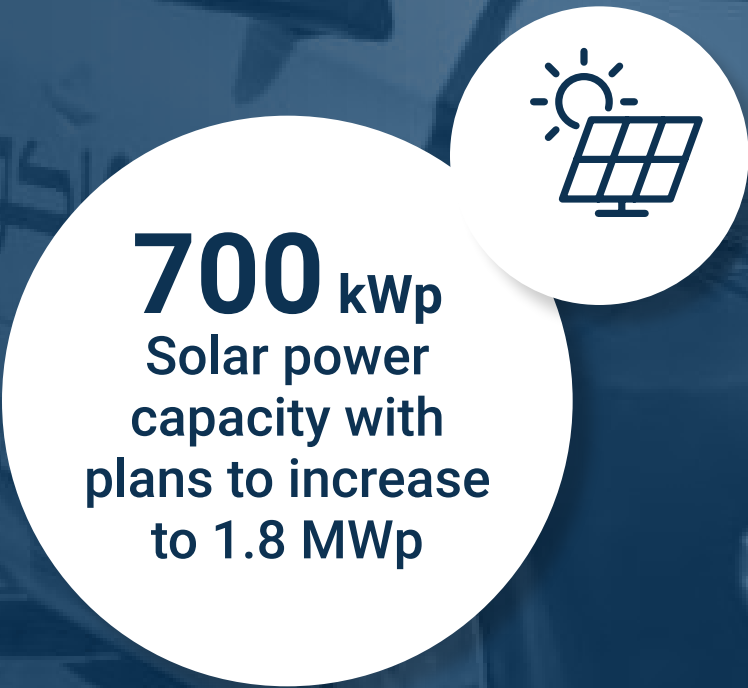
Expansion of Solar Panels: EMICOOL is expanding its reliance on solar energy, increasing solar capacity to 700 kWp with plans to add an additional 1.8 megawatts by 2024. The investment in Solar panels for EMICOOL's office was AED155,200. Additional solar panels are leased at AED43,623/- This initiative aligns with our strategy and Regulatory Supervisory Bureau (RSB) targets, positioning us as a leader in utilizing renewable energy.

Partnership with Leading Chemical Treatment Companies: Partnering with leading chemical treatment companies enhances water quality and performance through advanced chemical solutions. Tailored treatments ensure optimal water use, reduce consumption, and meet stringent environmental standards, demonstrating our commitment to sustainable water management.

Collaboration with Water Suppliers: Initiating meetings with key water suppliers, including DM, DI, and DSC, aims to address water quality concerns and establish comprehensive guidelines. By fostering collaboration and consistency, we ensure that water provided meets stringent criteria essential for community well-being and ecological balance.

Refurbishment and Upgradation of Cooling Towers: To address challenges posed by global warming, we are undertaking major refurbishments and upgrades of Cooling Towers (CTs). Engaging with CT specialists, we adapt our CTs to current weather conditions, ensuring optimal performance and sustainability.

In-House Water Recycling Initiative: In 2023, the Operations and Maintenance (O&M) department initiated an in-house water recycling project, successfully reusing 26,000 tons (equivalent to approximately 5,824,000 Imperial Gallons IMG) of backwash water from Reverse Osmosis plants. This initiative significantly enhances sustainability efforts, supporting strategic KPIs for better water performance.



Ethics, Governance and Compliance GRI 2-26, 205, 419

At EMICOOL, we understand the importance of good governance and compliance for responsible corporate conduct. We are committed to maintaining the highest ethical standards, following compliant practices, and ensuring sound governance across all our operations.

Key Achievements

EMICOOL committed to strengthening its governance practices as part of its ESG strategy. To achieve this, we have outlined several key initiatives for the year ahead.

Delegation of Authority and Chart of Authority Updates: During the reporting period of 2023, we revised our delegation of authority and chart of authority. These revisions will establish a structured framework for decision-making processes, promoting accountability and transparency across the organization.

Implementation of Whistle-blowing and Anti-Bribery Policies: We have recently finalized and are in the process of implementing approved versions of whistleblowing and anti-bribery and corruption policies. These policies underscore our dedication to upholding ethical business practices and fostering a culture of integrity.

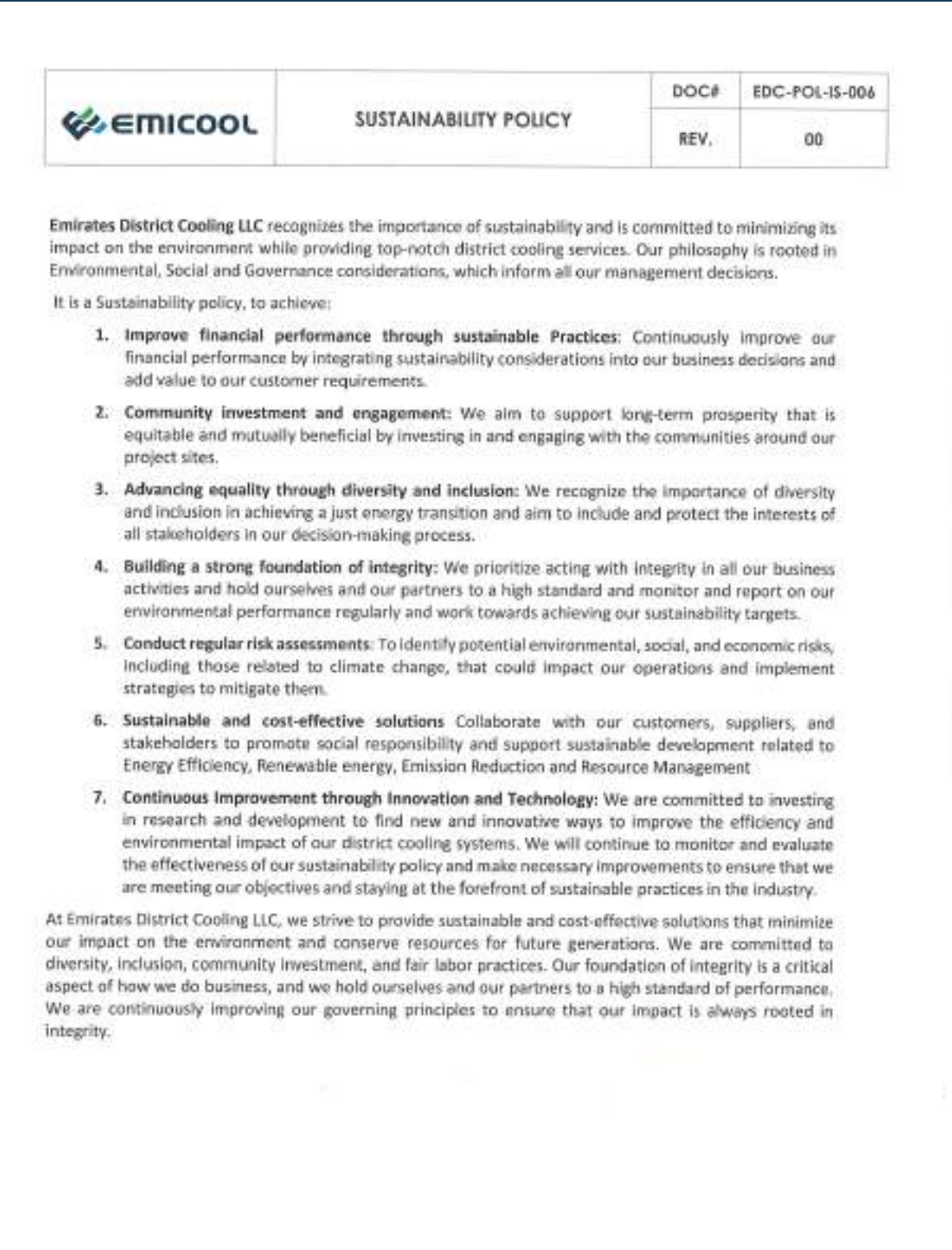
By prioritizing these governance initiatives, our department supports the business as a whole to reinforce its commitment to robust governance practices and responsible business conduct.

Regulatory Compliance: EMICOOL is actively engaged with regulatory bodies, particularly the Regulatory and Supervisory Bureau (RSB). We attend workshops to stay current on the latest published regulations, ensuring full compliance with all relevant laws and regulations and mitigating potential operational risks.

System Infrastructure Enhancement: We are enhancing our system infrastructure to streamline governance processes. The implementation of a board management platform has significantly improved organization and accessibility for our Board and Committee members. This platform also ensures the confidentiality of sensitive information.

Compliance and Accountability: Key Metrics on Legal and Regulatory Adherence

KPI	Unit	2021	2022	2023
Total incidents of non-compliance with laws and regulations	#	0	0	0
Total number of non-monetary sanctions	#	0	0	0
Total amount of legal and regulatory fines and settlements	AED	0	0	0
Percentage of legal and regulatory fines and settlements that resulted from whistle-blowing actions	%	0	0	0



Amended EMICOOL’s Sustainability Policy, bringing it in line with the ESG Committee’s recommendations.

Risk and Crisis Management GRI 200, 300

Corporate Gifts and Bribery Policy

At EMICOOL, we are committed to ethical conduct and governance across all operations, including our Human Resources (HR) department. We proactively cultivate an ethical work culture and ensure regulatory compliance. Our anti-corporate gifts and bribery policy is a key measure to prevent conflicts of interest in business transactions. By establishing guidelines and limits for such interactions, we promote transparency and uphold ethical business practices.

Proactive Risk Reduction - A Key Responsibility

Our proactive approach offers dual benefits. First, it minimizes the risk of costly and damaging legal disputes for our organization and employees. By staying current with evolving labor laws, we can swiftly adjust our policies and practices to ensure full compliance. Second, our commitment to ethical standards exceeds legal requirements, demonstrating our dedication to the highest moral and ethical principles in all HR-related decisions and actions. This commitment fosters a positive and harmonious work environment where employees feel respected and valued.

Looking Ahead - Our 2024 Risk Management Goals

In 2024 and beyond, we aim to enhance our risk management efforts by developing a comprehensive framework. This framework will facilitate the identification, assessment, and effective mitigation of risks across the organization. We will also closely monitor the issuance of safe work permits for high-risk activities to ensure proper authorization and adherence to safety protocols. By following this risk management framework, we can identify potential hazards, evaluate risks, and implement preventive measures to minimize incidents, further improving our safety and compliance record.



Digital Transformation

IT Department Achievements

EmiSign: Functions as a digital online document signing platform. It facilitates electronic signatures for various documents like contracts, memos, and receipts, streamlining approvals and reducing the need for paper, thus supporting both efficiency and sustainability goals. It contributed to saving 2000 man-hours in three months for the Customer Service department.

EmiQueue: Saved 1000 man-hours in two months by managing customer queues and integrating with Enterprise Resource Planning (ERP) for paperless token generation.

Environmental Impact: Saved 570 kg of CO₂, equivalent to 135,000 A4 sheets.

Social and Operational Impact

Customer Experience

Enhanced customer interactions with EmiSign, EmiQueue, and Emivcard applications.

Man-Hours Saved

Total of 2,938 man-hours saved, improving work-life balance.

Brand Visibility

In-house applications promoted EMICOOL's brand and improved customer satisfaction.

Governance Enhancements

ERP Fusion Phase 1: Streamlined financial, procurement, and asset management processes for compliance and transparency.

IT Policies and Standard Operating Procedures (SOPs)

Established guidelines for operations and data management, enhancing security and mitigating risks.

Cybersecurity

Achieved a 3.5/5 score, demonstrating commitment to digital asset protection and risk management.

These initiatives collectively aim to foster a sustainable, efficient, and secure operational environment at EMICOOL.



Challenges Overcome

Data Collection: Addressed compliance issues with user-friendly online forms and customer portal updates.

Service Level Agreement (SLA) Adherence: Developed in-house applications to improve operational efficiency and vendor compliance.

Security Measures: Conducted regular Vulnerability Assessments & Penetration Testing (VAPT) and implemented Security Event and Incident Management (SEIM) for real-time security monitoring, ensuring robust protection.

Initiatives Planned for 2024 and Beyond

Environmental

- Continue CO₂ reduction and eco-friendly practices.
- Optimize energy consumption and waste minimization.
- Select ISO-compliant, sustainable vendors.

Social

- Implement Phase 2 of ERP Oracle Utilities Customer Cloud Service (OUCCS) to enhance customer billing processes.
- Launch EMICOOL customer portal and mobile app for improved customer transparency and engagement.

Governance

- Migrate to Cloud infrastructure for better governance.
- Implement cybersecurity enhancements based on the 2023 maturity report.
- Deploy a mobile app for asset maintenance and align operations with RSB regulations.



Service and Technology Innovation

Key Achievements

The Infrastructure Data Control (IDC) department achieved significant milestones in 2023, particularly in the implementation of new technologies such as the Smart Shut-Off Valve (EMIVALVE). This innovative solution revolutionized the manual process of connecting and disconnecting cooling services, transitioning to automated processes through centralized software. Currently, this technology has been successfully installed in approximately 31% of EMICOOL's projects, with plans for full implementation in all future and existing projects. The remote shut-off function offers numerous benefits, including improved energy efficiency, benefiting society, utility companies, and consumers.

Additionally, IDC implemented various measures with direct impacts on environmental, social, and governance (ESG) benefits:

Environment

9,246 new smart valves were installed, impacting scope 1 carbon emissions by reducing logistical work in the technical team and enhancing customer satisfaction through real time monitoring and control.

Re-utilizing functional parts of dismantled equipment and BTU meters to minimize waste.

Replacement of ICE cars with 2 electric vehicles (EV's) to reduce emissions.

Enhancing environmental knowledge and awareness among teams, ensuring compliance with policies and legislation related to environmental sustainability and waste management.

Social

Introduction of the Smart Meter Management system (EMMSYS) for automatic detection of faulty actuators, improving service reliability and minimizing expenses for consumers.

Utilization of smart systems to enhance customer satisfaction through quicker service and streamlined processes. Continuous improvement initiatives focusing on service excellence and customer standards.

Governance

Development and implementation of quality assurance control processes to ensure compliance with ISO standards and specifications, with continual review and improvement.

Establishment of quality control measures and procedures to maintain compliance with standards and benchmarks.

Key Initiatives

Implementation of new ERP Software: The department is adapting to digital transformation by implementing new ERP software to enhance efficiency and productivity, mitigate economic impacts, and upskill employees to foster adaptability and talent retention.

Key Initiatives for Sustainability KPI Data Trend: This includes agility and adaptability to respond to changing business environments, regulatory compliance, environmental sustainability focusing on climate change and decarbonization, addressing diversity and social inequalities, and offering products or services that fulfill societal needs while reducing greenhouse gas emissions.

Planned Key Initiatives for ESG Enhancement

Environment

Implementing green initiatives, reducing greenhouse gas emissions, and promoting climate change mitigation efforts

Social

Enhancing customer, employee, and community engagement while addressing social inequalities.

Governance

Ensuring regulatory compliance, enhancing system enhancements, achieving ISO compliance, and ensuring stakeholder compliance.



2 EV
NEW VEHICLES
ADDED TO THE
FLEET.



Supply Chain Management GRI 308

Key Achievements

Promoting Sustainable Practices and Ethical Business Operations: EMICOOL is committed to advancing sustainability by fostering a responsible supply chain. Recognizing that they can't directly control every aspect of the supply chain, EMICOOL conducts thorough due diligence to ensure that all vendors adhere to best practices. EMICOOL's efforts are in line with the UAE Green Agenda to support the local economy.

KPI	Units	2021	2022	2023
Total number of suppliers engaged	#	288	287	284
Total number of local suppliers engaged	#	264	273	276
Procurement spending on local suppliers (AED Million)	Million	123.8	111.4	108.55
Percentage of procurement spending on local suppliers	%	91%	97%	93%
Total procurement spending (AED Million)	Million	136.04	115.3	116.4

Building a Resilient Supply Chain for Sustainability: EMICOOL has developed a strong supply chain network with deep knowledge of the local market. By carefully assessing vendors' strengths, their willingness to offer favorable payment terms, and their ability to maintain inventory levels over time, EMICOOL negotiates agreements with key vendors. This strategic partnership guarantees a steady and dependable supply of materials, contributing to the sustainability of the supply chain.

Implementation of a new supplier (Procurement Portal) by Oracle software systems designed to process, Purchase Orders and be operated by the vendor who manage and update their profiles with valid certification.

Staff training on the new Oracle system to complete a Certified Supplier Officer (CSO) course. Managing the tender process of procuring 2 new electrical vehicles for EMICOOL's EV transport fleet with a total investment of AED255,864/-.

Initiatives Implemented in 2023

Phone Support for Portal Navigation

Being available to support and guide vendors on our new Oracle Procurement Portal. Helping them navigate the site to upload relevant documentation.

Consolidating Shipping Advisory

Encouraging vendors to optimize their deliveries to reduce emissions by consolidating shipments to the same or nearby destinations whenever feasible.

System Alerts to Agree to Code of Conduct

Urging suppliers to commit to a code of conduct, via the Central Procurement (CP) system. A new feature now captures the suppliers code of conduct declaration on the Oracle ERP system.

Initiatives Planned for 2024

Environment

Rethinking buying goods from abroad, as overseas orders can harm the environment by causing higher greenhouse gas emissions from long distance shipping. Importing goods from overseas can raise the risk of introducing non-native species, potentially leading to environmental damage over time. Cutting down paper and stationery usage by promoting digital files and online application forms instead.

Social

Collaborating with local SME vendors to uphold our locally sourced procurement rate at 98% whilst maintaining high quality, price and delivery timings.

Governance

We are enhancing our new ERP System to ensure ISO compliance and stakeholder adherence, future-proofing its capabilities. Central Procurement identified vendors' non-commitment to a code of conduct, prompting the development of a mechanism within the Oracle ERP system to capture signed supplier declarations of our code of conduct.



OUR IMPACT

EMICOOL’s cooling services offer a sustainable advantage, as district cooling proves to be a more environmentally friendly approach to cooling communities compared to conventional air-conditioning. However, our commitment to environmental stewardship extends to all aspects of our operations. We actively explore innovative technologies and initiatives that allow us to further minimize our environmental footprint across the company.

6 CLEAN WATER AND SANITATION



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



13 CLIMATE ACTION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION







Energy Management

EMICOOL’s Energy department plays a crucial role in managing energy aspects within the company, aligning with our commitment to sustainable development.

Key Achievements

Energy Efficiency Retrofit
Energy efficiency retrofit projects were secured for DCP-1,3,7, and 13, and DCP 17, while implementations were completed for Plants 4,5,6,8 and 11 during the reporting period. Plant 7’s retrofit was completed and commissioned in Q2 of 2023.

Solar Energy Integration
A 400 KWp solar panel system was installed at DCP-1, which also powers the neighbouring HQ office, increasing renewable energy integration. Additionally, DCP 6 is powered by a 300 KWp solar panel, totalling to a capacity of 700KWp.

Energy Management System Implementation of Energy Management Information System (EmiView)
This initiative supports reduction in Energy Consumption intensity KPI through digital platform.

Adiabatic Cooling Systems
Adiabatic cooling systems were implemented at Al Warqa and ‘The Terraces’ air-cooled plants (DCP-20), which reduces the energy consumed to produce cooling RTH (refrigeration ton-hours).

Technical Workshops for Engineers
A series of energy-related workshops were organized which aimed at familiarizing engineers with the EmiView system. A technical workshop was conducted for plant operators and engineers focusing on the Desigo System (BMS, Building Automation System), particularly relevance to ESP projects (Energy service provider).

Energy Management *continued*

Corporate Energy Awareness Program

EMICOOL’s Energy department initiated a corporate energy awareness program to facilitate internal communication and educate stakeholders on ways to contribute to the community and environment through energy-conscious practices.

Governance and Compliance

We uphold regulatory compliance by maintaining ISO certifications and engaging with stakeholders regularly. These efforts align with our sustainability objectives, which demonstrate our commitment to environmental stewardship and transparency.

Regulatory Compliance

EMICOOL is prioritizing its efforts to adhere to environmental and sustainability regulations set by local authorities and relevant governing bodies. This approach ensures that EMICOOL’s practices align with the broader national and international sustainability objectives. The Energy department’s planned initiatives play a significant role in ensuring regulatory compliance.



ISO Compliance

EMICOOL aims to obtain or maintain relevant ISO certifications related to environmental management and sustainable practices. These certifications serve as a testament to EMICOOL’s commitment to adhering to international standards in environmental stewardship.

Currently, we are maintaining and following up on ISO 50001 for DCP 1 and our offices. For 2024 and beyond, we plan to achieve ISO-50001 certified for all EMICOOL Plants.

Stakeholder Compliance

As part of EMICOOL’s compliance commitment, monthly executive management meetings are held with board members to share and discuss energy performance, energy projects progress, and any initiative that intends to support the company’s sustainability goals.

Energy Consumption Overview

Energy KPI's	Unit	2021	2022	2023
Petrol consumption from vehicles	L	84,114.40	71,839.47	20,539.17
Diesel consumption from operations	L	2,943,343	0.00	5,910
Total direct energy consumption*	GJ	110,470	0.00	702.44
Electricity consumption (office, storage, facilities, etc.)	kWh	377,893,495	395,334,188	406,345,507
Renewable energy consumption (office, storage, facilities, etc.)	kWh	568,254	555,288	778,974
Total indirect energy consumption	GJ	1,360,417	1,423,203	1,462,844
Total direct and indirect energy consumption	GJ	1,470,887	1,423,203	1,463,546
Energy Intensity	GJ/ RTH produced	0.0034	0.0032	0.0031

*This value only considers consumption from diesel generators for temporary cooling.

EMICOOL’s Head Office is on track to achieve net zero energy consumption in 2024, with Solar PV production currently meeting 99% of the office’s energy needs.

71%
Reduction in
petrol
consumption



GHG Emissions

Key Achievements

Promoting Electric Mobility

In efforts to lower emissions, EMICOOL is actively promoting electric vehicles (EVs) within its operations. The Operations & Maintenance (O&M) department have access to the EV fleet of 15 electric vehicles showcasing a proactive approach to reducing carbon emissions. Additionally, investments in EV charging infrastructure further emphasize the company’s shift towards low-carbon transportation.

Transitioning to Renewable Energy

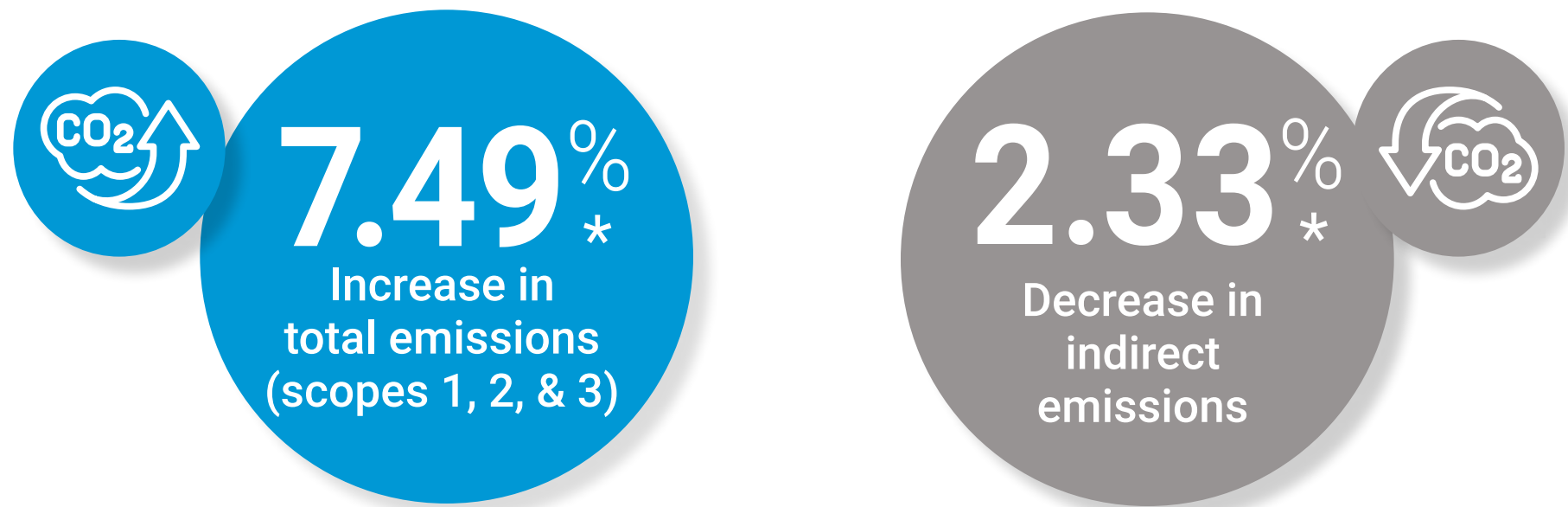
To accelerate sustainability efforts, EMICOOL is gradually transitioning to renewable energy sources for electricity consumption. Plans for new solar projects and the implementation of solar systems in multiple locations demonstrate the company’s commitment to clean and sustainable energy practices.

Energy Efficiency Improvements

EMICOOL is actively involved in improving energy efficiency to reduce GHG emissions. Continuous monitoring of assets and process parameters enhances operational efficiency. Initiatives such as replacing traditional lighting with LED, automating processes, and installing smart thermostats exemplify the company’s dedication to sustainable practices and GHG reduction.

Green Materials Usage

The new store in DCP 4 was created using green cement, as per (Circular No. 225) of Dubai Municipality guideline. The Steel structure of the building is made using recyclable materials including a bolted system so that it can be dismantled in the future. To reduce HVAC energy, the retaining walls use sandwich panels with core installation.



*Benchmarked against 2022

EMICOOL is committed to reducing its carbon footprint through renewable energy integration and energy efficiency improvements.

In 2023, EMICOOL conducted an independent third-party GHG inventory accounting exercise for its data, enhancing data collection and inventory analysis for all three scopes according to the GHG protocol.

GHG Emissions Overview

KPI	Unit	2021	2022	2023
Direct GHG Emissions (Scope 1)	tonnes of CO ₂ e	8,289	166*	4,695
Indirect GHG Emissions (Scope 2)	tonnes of CO ₂ e	163,613	171,057	167,072
Other indirect GHG Emissions (Material Scope 3)	tonnes of CO ₂ e	1,261	1,315	14,204**
Total GHG Emissions (Material Scope 1, 2 & 3)	tonnes of CO ₂ e	173,164	172,539	185,972
GHG Emissions intensity (Scope 1, 2, 3)	kg CO ₂ e/RTH	0.42	0.39	0.38

*For Scope1 GHG Emissions inventory, we have incorporated Fugitive Emissions from 2023 onwards.

**In previous years, only emissions from business travel were calculated. In 2023, we incorporated more relevant Scope 3 emission categories, resulting in a significant increase from 2022.

Water Management GRI, 303-3, 303-4, 303-5

Key Achievements

Environment

In 2023, we started a water efficiency program that boosted the use of treated sewage water by 43%. This saved a large amount of drinking water and supported water recycling, reduction, and reuse, aligning with the UN’s SDG targets 6.4 and 6.5.

This project’s success in improving the cycle of concentration for both potable and polished water further demonstrated our commitment to environmental sustainability. By reducing potable water use, we also contribute to a reduction in CO₂ emissions and realize cost savings.

Moreover, in 2023, eco-friendly disinfection (chlorination) was implemented in three District Cooling Plants (DCPs 3, 6, and 14), earning an award for the implementation of the same technology in eight other DCPs in 2024. The Chronoselectro system can produce Ozone, Active Chlorine, and Hydrogen Peroxide from natural salt (NaCl) through electrical reactions without releasing any toxic gases such as chlorine or hydrogen gas. Therefore, the system is safe and environmentally friendly, supporting our company’s mission and vision to align with sustainable and green energy practices and reduce chemical consumption on sites.

Governance

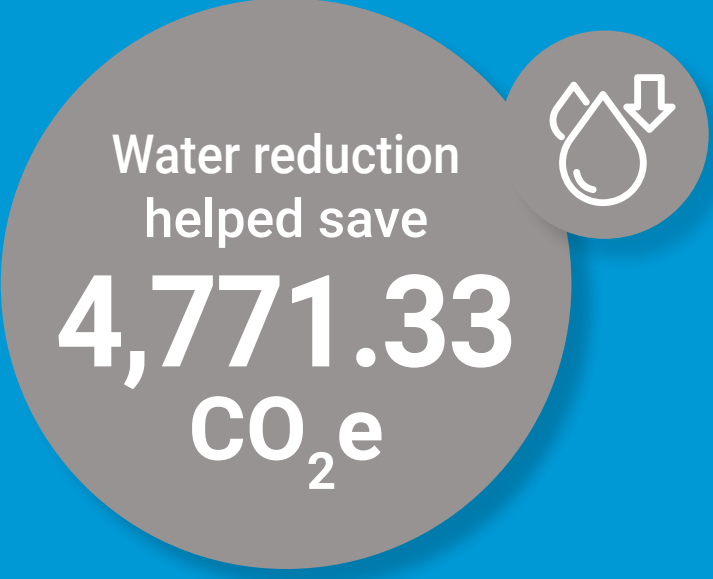
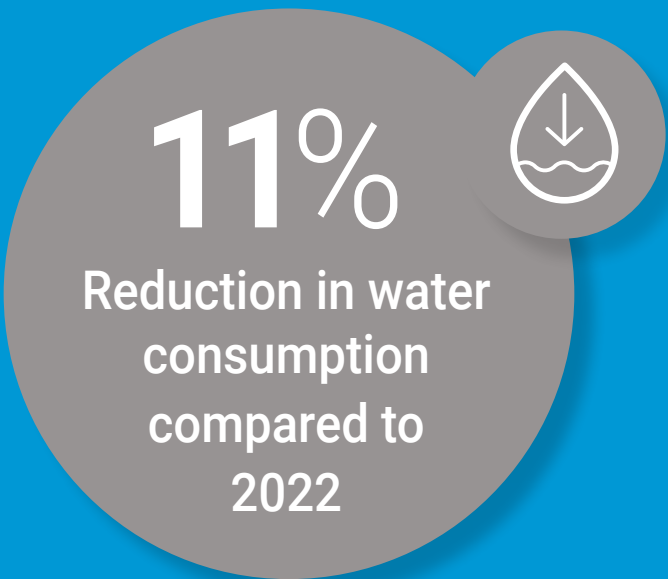
Adherence to regulatory standards and achievement of the ISO 46001 certification for water efficiency management stand out as notable accomplishments. This certification reflects EMICOOL’s commitment to transparency, efficiency, and sustainable development. Through rigorous monitoring, real-time data analysis, and compliance with local and international standards, EMICOOL has established a benchmark for operational excellence and governance in the industry.



In 2023, EMICOOL achieved a 43% increase in the penetration of treated sewage effluent (TSE)

Water Consumption Overview

KPI	Unit	2021	2022	2023
Total water consumption	m³	2,106,068	2,335,286	2,293,967
Water consumption intensity	m³/ RTH produced	0.0049	0.0071	0.0070
Blowdown and Reject Water	m³	414,036	730,755	1,139,476
TSE water consumption	m³	1,516,506	1,170,934	1,640,935
Potable water ratio to cooling towers make up water consumed	%	65%	71%	66%



Waste Management GRI 306-3, 306-4, 306-5

Non-hazardous Waste Overview

KPI	Unit	2021	2022	2023
Total non-hazardous waste produced	tonnes	30.0	281	275
Total non-hazardous waste reused or recycled	tonnes	10	22	16
Total non-hazardous waste disposed	tonnes	10	-	259

Hazardous Waste Overview

KPI	Unit	2021	2022	2023
Total hazardous waste produced	tonnes	-	1.47	3.195
Total hazardous waste reused or recycled	tonnes	1.2	0	1.99
Total hazardous waste disposed	tonnes	1	1.47	1.2
Percentage of hazardous waste recycled	%	-	0%	38%

Recycling and Reuse of Materials and Waste Overview

KPI	Unit	2021	2022	2023
Recycled Hydrocarbons/Oil	tonnes	0.31	0	1.99
Recycled Mixed Materials (Plastic, paper, Metal etc.)	tonnes	8	22	16

Recycling Education

EMICOOL launched educational campaigns to raise awareness about recycling and proper waste management among employees and customers.

Collaboration

EMICOOL collaborates with local recycling facilities and waste management companies to process and reuse collected recyclable materials. This collaborative approach strengthens the recycling ecosystem.

Circularity and Recycling

EMICOOL remains committed to promoting circularity and increasing recycling efforts. Circularity is a holistic approach to sustainability that seeks to create a closed-loop system where resources are used efficiently, waste is minimized, and environmental impact is reduced.



GRI Content Index

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE LOCATION	GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE LOCATION
GRI 2: General Disclosures			GRI 3: Material Topics		
2-1	Organizational details: Emirates District Cooling (EMICOOL) LLC, Dubai Investment Park 1, Jebel Ali, PO Box 9152, Dubai, UAE www.emicool.com	Page 3,7	3-1	Process to determine material topics	Page 18
2-2	Entities included in the organization's sustainability reporting	Page 3,7	3-2	List of material topics	Page 19
2-3	Reporting period	January 1 to December 31, 2023. Annually	3-3	Management of material topics	Page 19, 20
2-4	Restatements of information	Page 3	GRI 302: Energy 2016		
2-5	External assurance	No external assurance	302-1	Energy consumption within the organization	Page 50, 51
2-6	Legal ownership structure	Page 8	302-4	Reduction of energy consumption	Page 50
2-7	Employees and workforce breakdown	Page 22	GRI 303: Water and Effluents 2018		
2-8	Workers who are not employees	Page 22	303-1	Interactions with water as a shared resource	Page 53
2-9	Governance structure and composition	Page 6,9	303-5	Water consumption	Page 53
2-22	Statement on sustainable development strategy	Page 12	GRI 305: Emissions 2021		
2-26	Mechanisms for seeking advice and raising concerns	Page 45	305-1	Direct (Scope 1) GHG emissions	Page 52
2-27	Compliance with laws and regulations	Page 45	305-2	Energy indirect (Scope 2) GHG emissions	Page 52
2-28	Membership associations	Page 10, 32	305-3	Other indirect (Scope 3) GHG emissions	Page 52
2-29	Approach to stakeholder engagement	Page 20	305-4	GHG emissions intensity	Page 52
2-30	Collective bargaining agreements	Illegal in the U.A.E.			



GRI Content Index *continued*

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE LOCATION
GRI 413: Local communities		
413	Local communities	Page 29, 30, 31, 32, 33, 34
GRI 414: Supplier social assessment		
414	Supplier social assessment	Page 48
GRI 201: Economic performance 2021		
201-1	Direct economic value generated and distributed	Not disclosed*
GRI 204: Procurement practices 2021		
204	Supplier Environmental Assessment.	Page 48
204-1	Proportion of spending on local suppliers	Page 48
GRI 306: Waste 2020		
306-3	Waste generated	Page 54
306-4	Waste diverted from disposal	Page 54
306-5	Waste directed to disposal	Page 54

* EMICOOL contributes significantly to the economy through operating costs, employee wages, and community investments, however it does not publicly disclose detailed financial information.

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	PAGE LOCATION
GRI 205 Anti-corruption		
205	Anti-corruption practices and reporting	Page 44
GRI 401: Employment 2021		
401-1	New employee hires and employee turnover	Page 27
401-3	Parental leave	Page 26
405	Diversity and Equal Opportunity	Page 25, 26
419	Social economic compliance . Labour practice, human rights, community impacts	Page 44
GRI 403: Occupational health and safety 2018		
403-1	Occupational health and safety management system	Page 22, 23, 24
403-5	Worker training on occupational health and safety	Page 22
403-9	Work-related injuries	Page 22
403-10	Work-related ill health	Page 22
GRI 404: Training and education 2021		
404-1	Average hours of training per year per employee	Page 23
404-2	Programs for upgrading employee skills and transition assistance programs	Page 35

Feedback

Our aim is to enhance our reporting year by year. We appreciate your feedback on our progress and aspirations. Please don't hesitate to get in touch through the following channels:

Email:

Sustainability@emicool.com

Media & Corporate Communications:

Hanisha@emicool.com

Phone: +971 4 885 2454

Social Media:

Facebook: [Facebook.com/EmicoolUAE](https://www.facebook.com/EmicoolUAE)

Instagram: [Instagram.com/emicooluae](https://www.instagram.com/emicooluae)

LinkedIn: [LinkedIn.com/company/emicool-llc](https://www.linkedin.com/company/emicool-llc)

Address: Dubai Investment Park 1, Jebel Ali, PO Box 9152, Dubai, UAE

Feel free to contact us through your preferred method, and we value your input.

Thank you for your engagement in our sustainability journey.
Download link to the GRI 2024 Standards:



<https://www.globalreporting.org/how-to-use-the-gri-standards/gri-standards-english-language/>

