



MEKOROT
Israel National Water Co.

2022 ESG Report



3

Senior officers’ statement

6

About the report

- 7 | Sustainable Development Goals
- 10 | Stakeholder dialogue
- 13 | Materiality

15

Developing and establishing ESG strategy at Mekorot

- 16 | ESG Administration
- 17 | Mekorot ESG strategy

20

Organizational profile and economic performance

- 23 | Organizational structure
- 26 | Mekorot creates value
- 27 | Development of the water sector in Israel
- 28 | Quality management at Mekorot

30

Mekorot – an innovation leader

35

Mekorot contributes to international development and to Israel’s geopolitical relations

- 36 | Regional collaborations
- 37 | International collaborations

38

Environment

- 39 | Integrative water management
- 46 | Transmission system efficiency
- 50 | Environmental management and the climate crisis
- 59 | Protecting ecosystems

65

Social

- 66 | Resilience of the water supply to the public
- 72 | Responsible behavior towards employees
- 85 | Occupational health and safety
- 88 | Activities of Mekorot with the community and customers

91

Responsible corporate governance

- 93 | Structure of the board of directors
- 96 | Business continuity
- 97 | Ethics and prevention of corruption
- 100 | Compliance with regulation
- 101 | Responsible supply chain
- 103 | Information security

104

GRI index and data annex



Statement of the Chairperson of the Board of Directors

The board of directors of Mekorot is proud to present the annual ESG and corporate responsibility report of the national water company of the State of Israel.

Over the last year, the need to prudently manage water resources was highlighted, amid global warming and the ever-escalating climate crisis. As a world leader in water-system management, Mekorot has expanded its international operations, in response to requests from many other countries to learn and share knowledge, based on Mekorot’s accumulated experience facing shortages in the continuous supply of water for agriculture, industry, and households. These circumstances have led to the formation of strategic collaborations in Europe and the Far East, in addition to our existing collaborations in South America, India, the Persian Gulf, and Morocco.

Concurrently, Mekorot has expanded its adoption of the United Nations’ Sustainable Development Goals, in the local context as well as from a long-term regional perspective. Last July, the company's efforts earned exceptional recognition in the form of a Platinum Plus rating from Maala, positioning Mekorot first among both public and private infrastructure and construction companies. As a company responsible for a life-sustaining product, for the domestic market and neighboring countries, we believe in seeking a precise equilibrium between the preservation of natural resources and the need for development and sustenance for life throughout the land.

Other areas accorded special attention include technological development and innovation, as new agreements have been signed with startup companies and world-leading technology companies. Maximizing our human capital and high execution capabilities contributes to progress on the challenges facing the water industry in Israel and globally, while creating a sustainable business environment.

Sincerely yours,

A stylized, handwritten signature in blue ink, consisting of a large 'Y' and a smaller 'A' joined together.

Yitzhak Aharonovich
Chairman of the Board of Directors, Mekorot
National Water Company



Statement of the CEO

I am honored to present the third ESG and corporate responsibility report of Mekorot, Israel’s national water company, for 2022.

The climate crisis and global warming have not passed over Israel. As countries around the world fight to find solutions to the supply of potable water and water for agriculture and industry, Mekorot is delivering a continuous and reliable response, in every climate situation. This fact, along with the company's significant achievements in relation to the United Nations’ Sustainable Development Goals, has drawn great interest from other countries. Last March, during the New York Water Week held by the UN, I therefore announced the foundation of an international water forum, and enthusiastic reactions soon followed. There is a thirst – literally – to learn from our immense knowledge in water industry management.

Mekorot's knowledge and experience are accompanied by continual investment of extensive resources in internal and external innovation, information security, and the adoption of groundbreaking environment-friendly technologies. Examples include covering water reservoirs with solar panels and reducing the use of hazardous substances.

Over the last year, Mekorot earned an unprecedented accomplishment – a Platinum Plus rating on the Maala index and the top place among infrastructure companies, tenth place in the BDI ranking of best workplaces, and AAA credit rating from Maalot, as it continued to invest in Israeli startups.

Mekorot also reached new heights in its plans for the development of the water industry. Over the last year, we completed national projects including the reverse carrier, which allows surplus desalinated water to be transferred to the Kinneret Sea, and the Jerusalem Fifth System, which expands the capacity to deliver water to Israel's capital and the surroundings for the coming decades.

All this and more are possible thanks to Mekorot's employees, who are motivated by the national mission and a sense of national responsibility to deliver creative solutions to the company’s challenges. Mekorot employees constantly demonstrate their capability and strength in providing a continuous, reliable water supply, in routine times and during emergencies, as was emphatically evidenced during the Swords of Iron War.

I am proud and thrilled to head Mekorot.

Sincerely yours,

A handwritten signature in blue ink, appearing to read 'Amit Lang'.

Amit Lang
CEO of Mekorot
National Water Company



Foreword

We are honored to present the corporate responsibility report of Mekorot for 2022, summarizing its activity and reviewing the environmental, social, and governance (ESG) aspects of our operations. For several years, Mekorot has made the choice to manage its corporate responsibility with transparency and excellence, reporting to our stakeholders. This reflects the conviction of Mekorot's board of directors and management that we must operate with the utmost integrity and endeavor to maximize value for our stakeholders and the general public.

In view of the climate crisis, a continuous supply of water can no longer be taken for granted. Mekorot works tirelessly to secure a reliable, quality, continuous supply of water for all citizens of Israel and for neighboring countries. The current report also emphasizes the process of formulating an ESG strategy and setting long-term goals.

The report was written with reference to the GRI Standards, and also addresses the Sustainable Development Goals (SDGs) of the United Nations. This report is being published in Hebrew, English, and Arabic, and is accessible on the company's website.

Mekorot is committed to continued action to benefit the environment, society, and citizens of Israel and to continual improvement as a leading government water company.

Although the report summarizes Mekorot's activities in 2022, this statement was written during the Swords of Iron War, as Mekorot maintains its key role, while serving as a source of stability for its employees and contributing everything in its power under these challenging circumstances.

Mekorot will continue to serve in its historical function, supplying water and developing the State of Israel, for households, agriculture, and industry, while incorporating social, environmental, and governance considerations as an integral part of our strategy.

We hope you enjoy reading the report.

Sincerely yours,

Riki Mor
Head of Customer Relations and ESG

Eyal Ben David
Acting VP Infrastructure Development and Customer Relations

About the Report

This is the third consecutive ESG report issued by Mekorot. The report describes the Company's environmental, social, and governance (ESG) activities for the reported year 2022. The report was written with reference to the GRI Standards. Mekorot has made a commitment to continue to publish ESG reports annually, as a reflection of its dedication to action in the areas of corporate responsibility and to communicating this activity to its stakeholders. The report presents a comprehensive overview of the Company's activity in Israel, encompassing economic, environmental, and social aspects.

This report describes the activity of Mekorot Water Company Ltd., and does not refer to subsidiaries unless otherwise noted. Sites operated but not legally owned by the Company are also not included in this report, unless otherwise indicated. In 2022, approximately 78% of all employees of the Mekorot Group were employed at the company Mekorot; unless otherwise noted, the report refers to this group of employees.

This report describes the ESG processes, data, and progress of the Company; its commitment to the United Nations Sustainable Development Goals (SDGs); and its strategic goals for the coming years.

Following the GRI guidelines, our reporting is focused on the topics most material to our activity, taking into consideration the expectations of the various stakeholders. Material topics are defined as topics that have a significant effect on the Company in areas of activity in which the Company has a significant impact on various internal and external stakeholders, in the areas of corporate responsibility and sustainability.

This report was written with the external assistance of the Corporate Responsibility Department of BDO Consulting, which is also providing guidance for the development and implementation of sustainability strategy at the Company.

To communicate on the topics in the report and for dialogue on the information presented, please contact:

Riki Mor

Head of Customer Relations,
External Functions, and ESG
Mobile: +972-50-631-2680
rmor@mekorot.co.il

Meirav Magal

Head of Corporate
Responsibility Department
Mobile: +972-50-595-7508
mmagal@mekorot.co.il

Ofra Hollander

Head of ESG Strategy,
ESG Unit
BDO
OfraH@bdo.co.il



Sustainable Development Goals

In 2015, Israel joined 192 United Nations members in adopting the seventeen Sustainable Development Goals (SDGs). These global goals and the derived targets refer to worldwide sustainability challenges in the areas of the environment, society, and economy, and establish a global agenda for development through 2030.

As part of its promotion of sustainable development, Mekorot is proud to take part in the national effort to achieve the SDGs. Of the seventeen SDGs, all of which have relevance to Mekorot’s work, we have designated six key goals closely linked to our activity as a water infrastructure company:



UN SDG	UN targets material to Mekorot activities	Mekorot actions to achieve the goals
<div><div>6</div><div></div></div> <div>Clean Water and Sanitation</div>	<ul style="list-style-type: none">6.1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all.6.3. By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.6.4. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.6.6. Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.	<ul style="list-style-type: none">Developing water infrastructures for remote, non-connected regions and implementing agreements to supply water to the Kingdom of Jordan, the Palestinian Authority, and the territories of Judea and Samaria.Performing ongoing work to improve efficiency of water infrastructures and investing in advanced technologies.Conducting environmental surveys and water sampling throughout the supply chain to ensure that the water is safe, free of pollutants, and of the highest quality.Inserting system water and floodwater to rehabilitate water sources and aquifers, and planning to use water resources efficiently.Formulating and promoting a national infrastructure plan to preserve reserves for extraction from aquifers for the coming years (National Infrastructure Plan 100).





UN SDG	UN targets material to Mekorot activities	Mekorot actions to achieve the goals
<div><div>7</div><div></div><div>Affordable and Clean Energy</div></div>	<ul style="list-style-type: none">› 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.› 7.4. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	<ul style="list-style-type: none">› Setting multi-annual goals for the reduction of energy consumption.› Generating green energy at company sites.› Promoting tenders to increase the use of solar energy in existing water infrastructures.› Promoting the construction of hydroelectric turbines.
<div><div>9</div><div></div><div>Industry, Innovation and Infrastructure</div></div>	<ul style="list-style-type: none">› 9.1. Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.› 9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.› 9.5. Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.› 9.a. Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing states.	<ul style="list-style-type: none">› Investing in high-quality infrastructures that are efficient and resilient for the long term.› Conducting research and development in the areas of water and infrastructure to examine ways of improving existing technologies.› Forming collaborations and agreements with other countries to improve their water infrastructures and facilities.› Collaborating on technology to promote environmental issues: environmental treatment of desalination concentrates and effluents, sustainable treatment of effluents, and reuse in agriculture.› Investing in local startups aimed at implementing innovative technologies and improving the efficiency of the water supply, in the areas of energy efficiency and savings, cyber defense, and more.





UN SDG	UN targets material to Mekorot activities	Mekorot actions to achieve the goals
<div><div>12</div><div></div><div>Responsible Consumption and Production</div></div>	<ul style="list-style-type: none">› 12.2. By 2030, achieve the sustainable management and efficient use of natural resources.	<ul style="list-style-type: none">› Developing efficient water technologies, to allow sustainable management of natural water resources.› Promoting research and implementing new technologies to treat wastewater and to treat the sludge generated in wastewater purification processes, in order to improve its quality and redirect it to agriculture and energy production.
<div><div>13</div><div></div><div>Climate Action</div></div>	<ul style="list-style-type: none">› 13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.› 13.2. Integrate climate change measures into national policies, strategies and planning.	<ul style="list-style-type: none">› Developing water infrastructures for remote, non-connected areas.› Initiating innovation in technologies to cope with climate impacts, with an emphasis on water shortages caused by factors including global warming.› Reducing carbon footprint by investing in energy-efficient systems and transitioning to green energy.› Forming a working committee in the Risk Management Department to manage climate risks at the company, set formalized targets, and embed climate-change metrics.
<div><div>15</div><div></div><div>Life On Land</div></div>	<ul style="list-style-type: none">› 15.4. By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.› 15.a. Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.	<ul style="list-style-type: none">› Collaborating with the Nature and Parks Authority and the Jewish National Fund on infrastructure and maintenance work.› Integrating environmental aspects in infrastructure construction.› Taking measures to prevent the proliferation of invasive species at company sites during development and maintenance work.› Discharging water into nature and streams (Kziv, Betzet, Southern Jordan, Yarkon, Bokek, and more; in the future, also Tzalmon Stream).› Working in accordance with environmental surveys and preserving biodiversity in work areas.› Reducing light pollution at facilities with high ecological sensitivity.

Stakeholder dialogue

Mekorot interfaces with multiple stakeholders that affect and are affected by its activities, directly or indirectly. The Company maintains dialogue with all of these stakeholder groups, at various levels and frequencies, through a range of channels. This dialogue primarily concerns the water sector in Israel and the ongoing operations of the Company. In 2021, Mekorot formulated a program serving as the foundation for a work plan designed to establish formalized methods in all areas related to managing its relationships, contacts, and communications with the general public. In 2022, the emphasis was on managing relationships with Mekorot's customers. During the year, the current status of Mekorot's dialogue with its customers was mapped and examined in depth; the full range of regulatory directives applicable to Mekorot in this area was studied; and a specifications process was initiated for a CRM system, to manage the Company's customer relations. The purpose of these efforts is to create a comprehensive customer relationship management strategy. In 2023, the Company's management approved a policy paper on customer relationship management, and specifications of the CRM system were completed, based on the work performed in 2022. In 2023-2024, Mekorot will work to instill this policy in its operations, building formalized implementation methodologies and creating more efficient and organized work processes and procedures.



In 2022, we communicated with our stakeholders in a number of ways:

Stakeholder categories	Description of principal stakeholders	Dialogue channels
Government ministries	<ul style="list-style-type: none">Ministry of EnergyMinistry of FinanceState Comptroller OfficeMinistry of Environmental ProtectionMinistry of AgricultureMinistry of HealthMinistry of DefenseKnesset committees	Mekorot maintains daily contact with the managerial tier, as part of its routine work and regular professional dialogue. Government ministries and statutory agencies oversee various aspects of the activity of Mekorot, including permits, water allocations, infrastructures, and more. Mekorot representatives also participate in meetings of the Infrastructure Companies' Forum, to generate ongoing dialogue on the removal of barriers to the progress of national infrastructures.
Statutory agencies	<ul style="list-style-type: none">Government Water and Sewage AuthorityNature and Parks AuthorityJewish National FundIsrael Land AdministrationDistrict planning committeesAntiquities AuthorityDrainage authorities	
Municipalities	<ul style="list-style-type: none">Heads of municipalitiesMunicipal engineersEnvironmental plannersEnvironmental units	Dialogue with these stakeholders is conducted as part of routine work, and within proactive synergy in the water industry, to strengthen relationships with local government and learn about needs. The main topics discussed are development and statutory issues.





Stakeholder categories	Description of principal stakeholders	Dialogue channels
Civil society	<ul style="list-style-type: none">● Academia● Environmental organizations	<p>Academia: Mekorot holds ongoing dialogue with academic institutions in Israel. These contacts include academic and research collaborations, joint initiatives, support for designing courses on water, and guidance and mentoring for students on final projects. Mekorot also grants scholarships to support students in fields relevant to the group's core activity.</p> <p>Mekorot informs the Society for the Protection of Nature in Israel and other environmental organizations of changes and innovations in the field from time to time.</p>
Customers	<ul style="list-style-type: none">● Municipalities● Water and sewage corporations● Agricultural societies● Industry	<p>Mekorot has approximately 5,000 customers. The Company routinely maintains multiple interfaces with consumers, including various aspects of service pertaining to the water supply to connected consumers as well as customer-service communications.</p> <p>Contact with customers is generally maintained directly, by many functions, both proactively and in response to needs. Inquiries from the public are overseen by the Ombudsman in the Spokesperson Office of the Company.</p> <p>As part of its goals, the Company focuses on providing better and more efficient service, and on raising awareness of sustainability issues among its customers.</p> <p>A first-of-its-kind customer satisfaction survey was conducted at Mekorot in 2021 to measure customers' satisfaction with the services provided by the Company.</p> <p>In 2022, the Company held several roundtable meetings with various customer segments, to gain exposure to its customers' needs and requirements.</p>



As part of the varied dialogue with its stakeholders, Mekorot held meetings to promote collaboration and maximize shared value:

- › Israel Electric Corporation – Quarterly meetings of a team for the removal of barriers and promotion of collaborations between Mekorot and the IEC were held in 2022.
- › Netivei Israel National Transport Infrastructure Company – A unique collaboration on infrastructure development.
- › The Interministerial Forum for Standardization in the Construction and Infrastructure Industry in Israel.
- › The Government Companies' Infrastructure Coordination Forum – Mekorot participates in the forum to create shared value with a range of other government companies, in order to promote national infrastructures (transportation, electricity, water, and more). Within the forum, companies generate dialogue leading to collaborations, shared learning, the removal of barriers, and the creation of solutions to challenges.





Stakeholder categories	Description of principal stakeholders	Dialogue channels
Employees	<ul style="list-style-type: none">● Employees at Mekorot sites and headquarters divisions	<p>In 2021, the Employee Service Center was improved and expanded, and an innovative, advanced platform was established to assemble information and tools for employees’ use within the Company. The system contains information on essential topics relevant to employees.</p> <p>A number of channels for communication with management are available to employees, through the Human Resources Unit, which oversees employee inquiries, as well as through employee union representatives. Formal and informal meetings are also held throughout the year to allow open dialogue between management and employees: the CEO Cafe, roundtable meetings, employee conferences, and more.</p> <p>Within Mekorot's strategic plan, a series of objectives were established in the area of terms of employment: to maintain a respectful, fair work environment that protects employees’ safety and health; to encourage workplace diversity, inclusion, and belonging; and to support employees’ professional and personal development.</p>
Neighboring communities	<ul style="list-style-type: none">● Environmental activists● Town boards● Municipalities● Volunteer organizations in regions where Mekorot has significant operations	<p>Dialogue with these groups is conducted as part of the Company's managerial concept of public participation. For example, in its projects in the region of the Bedouin community in the Negev, Mekorot coordinated and communicated individually with members of the local population.</p> <p>Mekorot also holds explanatory conferences and meetings with local communities, and posts explanatory materials on social media and in traditional media outlets.</p> <p>In 2022, Mekorot held meetings with heads of municipalities as part of a water sector synergy project, under the heading “Mekorot – Listening to the Community.”</p>
Suppliers	<ul style="list-style-type: none">● Suppliers● Contractor companies	<p>Mekorot conducts dialogue with these stakeholders through a supplier conference, roundtable meetings, regular communication with purchasing and tender units, and district representatives responsible for contracts. In 2022, the Company conducted a supplier rating survey, and commended its outstanding suppliers.</p> <p>As part of its sustainability strategy, the Company promotes commitment to ESG values among its suppliers and in its supplier engagements.</p>

We believe that only a comprehensive sustainable perspective, in cooperation and dialogue with stakeholders, can enable us to cope with the sustainability challenges in the water sector.

Materiality

Materiality analysis is a process that allows the Company to identify and assess the topics most important to its various stakeholders. As a preliminary process prior to writing the Mekorot report for 2019-2020, a comprehensive review of the topics material to the Company was performed in 2020, in accordance with the methodology of the GRI:SRS reporting standards. For full details of the materiality process, see p. 10 of the 2019-2020 Corporate Sustainability Report.¹

Correspondingly, the 2022 report focuses on the material topics most relevant to the business operations of Mekorot in the areas of ESG, in line with the expectations of the various stakeholders, as approved by management and the board of directors.

¹ Mekorot ESG Report, 2019-2020 (mekorot-int.com)



List of the ten selected topics and boundaries of each topic's impacts (in order of importance)

Topic	GRI indicator	Main impact
1. Water supply resilience	GRI 3-3: Management of material topic: Water supply resilience; GRI 303-1: Interactions with water as a shared resource; GRI 416: Customer health and safety 2016	Within and beyond the organization
2. Integrative water management	GRI 3-3: Management of material topic: Integrative water management; GRI 303-3: Water withdrawal	Within and beyond the organization
3. Ethics and prevention of corruption	GRI 3-3: Management of material topics; GRI 205: Anti-corruption 2016	Within and beyond the organization
4. Transmission system efficiency	GRI 3-3: Management of material topic: Transmission system efficiency	Within and beyond the organization
5. Occupational health and safety	GRI 3-3: Management of material topics; GRI 403: Occupational Health and Safety 2018	Within the organization
6. Energy efficiency	GRI 3-3: Management of material topics; GRI 302: Energy 2016	Within and beyond the organization
7. Innovation and technology	GRI 3-3: Management of material topic: Innovation and technology	Within and beyond the organization
8. Fairness to customers and customer satisfaction	GRI 3-3: Management of material topic: Fairness to customers and customer satisfaction	Beyond the organization
9. Compliance with standards and regulation	GRI 3-3: Management of material topics; GRI 2-27: Compliance with laws and regulations	Within the organization
10. Environmental management and the climate crisis	GRI 3-3: Management of material topic: Environmental management and the climate crisis; GRI 305: Emissions 2016; GRI 2-27: Compliance with laws and regulations	Within and beyond the organization



Developing and Establishing ESG Strategy at Mekorot

15-19 →

As a large infrastructure company, Mekorot is committed to embedding ESG aspects in its activity and developing an ESG strategy aligned with its business strategy. These actions position Mekorot at the forefront of companies integrating ESG principles into their core business and operations. The strategy is an expression of Mekorot's dedication to sustainable growth, and sets targets for its attainment.

The development of an ESG strategy positions Mekorot at the forefront of companies integrating ESG principles into their core business and operations

The ESG Administration's work to formulate an ESG strategic plan for Mekorot

In late 2021, Mekorot established its ESG Administration, tasked with formulating a dedicated ESG strategy aligned with its business strategy.

Composition of the administration: The Company's ESG content experts took part in the administration, including senior executives in the areas of engineering, strategy, water quality and resources, human resources, protection of the environment, innovation, and planning. The ESG Administration was headed by the VP of Infrastructure Development and Customer Relations. Its work was managed by the Customer Relations Unit, with guidance from the Corporate Responsibility Department at the BDO Consulting Group.

The administration worked throughout 2022 through broad plenum meetings, issue-focused forum sessions, and work meetings of its management team with various relevant functions within the Company. A wide range of professional materials served as the foundation for this work, such as the code of ethics, the corporate strategic plan, the Threats and Opportunities Radar, a position paper on Mekorot's preparedness to execute the plans of the government and the water industry for 2050, and additional Mekorot content.

The ESG Administration's work encompassed formulating an ESG vision for Mekorot, updating its core values accordingly, and using the core values to derive strategic goals, objectives, and metrics.

Taken together, these elements formed the ESG strategic plan for Mekorot.



Mekorot’s ESG strategy

The strategic plan consists of 25 strategic objectives (of which eight are environmental, twelve social, and five related to corporate governance). During the process of instilling and establishing the ESG strategy, following approval of the strategic plan by management in late 2022 and by the board of directors in early 2023, professional work teams were created to address each of the strategic objectives. The teams were charged with promoting attainment of the goal and monitoring the Company's progress towards the objective. Since the approval of the strategic plan, the ESG Administration has assisted the work

teams in formulating operational implementation plans and preparing three-year action plans and working routines for embedding the objectives in the Company’s activities and operations. The administration is concurrently promoting initiatives with significant value, stimulating change in the Company's organizational culture, and more. Enterprise-wide working routines have been established to monitor progress in implementation of the strategic plan at the level of the Company; a decision has been made to form a steering committee to oversee this process, led by the Customer Relations Unit and the VP of Infrastructure Development and Customer Relations.

Mekorot's ESG strategy was designed to align with its strategic business plan:

Positioning Mekorot as a leading water company



The leading government company
in efficiency and innovation



A global knowledge hub
on technological innovation in the water industry



Cutting back emissions
by increasing the use of renewable energy

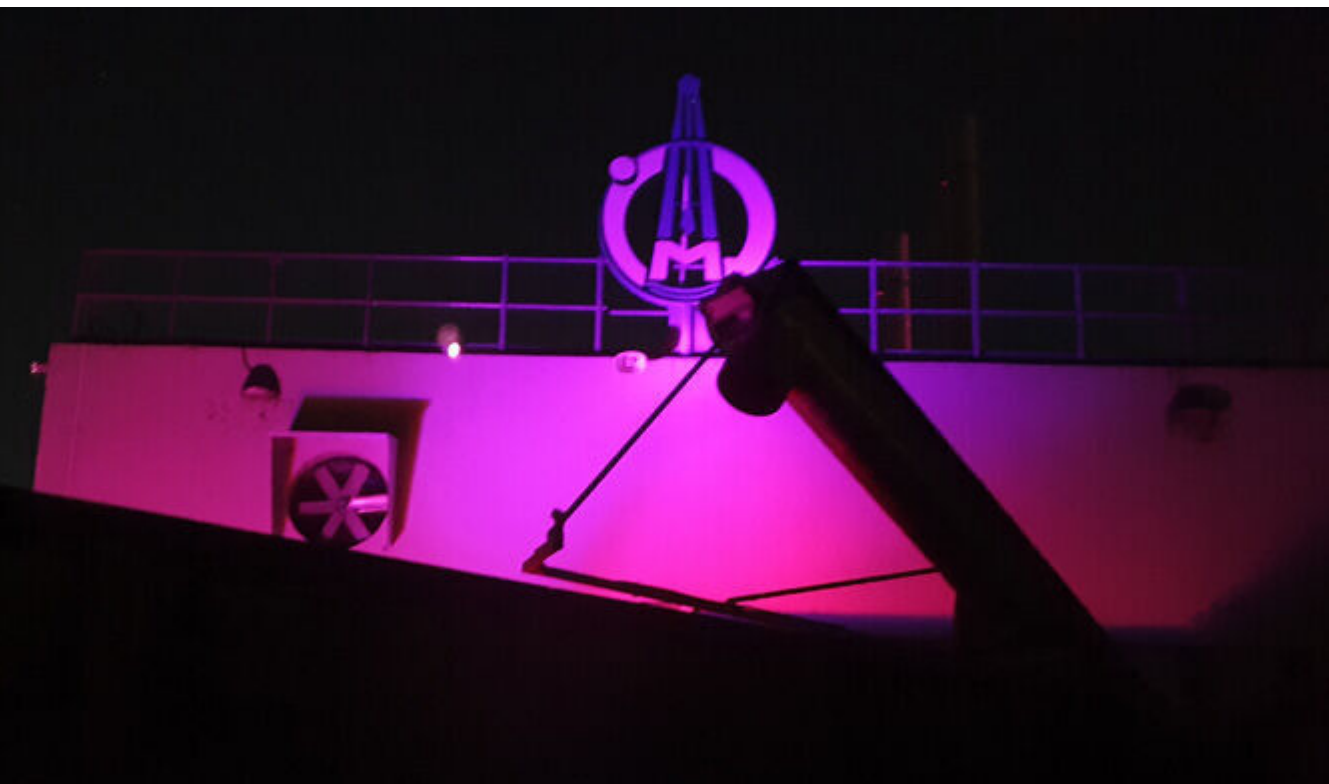
Mitigating environmental risks



Restoring the natural environment in Israel
by discharging water into nature



Preventing pollution of water sources and nature
through improved efficiency in effluent processing and wastewater exhaustion



The ESG vision at Mekorot



Mekorot is committed to the environment

- › Protect the environment and use natural resources responsibly, particularly the Kinneret Sea and groundwater, adhering to strict environmental standards
- › Reduce the environmental footprint of all of the Company's processes and activities, throughout the supply chain, through technological innovation
- › Prepare for climate change



Mekorot is committed to society

- › Supply the quantity of water needed by all consumers, present and future
- › Take responsibility for the stability and quality of the water system – a continuous supply of quality water, in routine times and during emergencies
- › Protect the health, safety, and security of employees, customers, suppliers, and contractors
- › Retain and develop employees; create a respectful, inclusive, fair, equitable work environment
- › Develop shared value with the community



Mekorot is committed to appropriate and effective corporate governance, and to economic and regional development

- › Integrity – prevent corruption and breaches of trust, and uphold all standards and regulations
- › Manage risks at the company, specifically in preparation for climate change, and continually seek technological solutions and innovations
- › Work transparently and collaboratively with government agencies
- › Supply the required quantity of water to our neighbors
- › Solidify Mekorot's standing as a hub for advanced knowledge in its field; develop international relationships through collaborations

Mekorot's strategic ESG goals



- > Preserve and protect natural water sources
- > Reduce environmental footprint
- > Prepare for climate change



- > A national commitment – provide a continuous, equitable, quality water supply
- > Develop and retain human capital at the company
- > Deliver high-quality, efficient service
- > Promote community initiatives
- > Raise awareness of ESG issues
- > Promote responsible purchasing



- > Maintain sound corporate governance
- > Instill ESG values at the company
- > Provide international development and geopolitical support for Israel's foreign relations
- > Maintain information security
- > Achieve technological leadership



Key strategic objectives approved in 2023 at a glance

Environment

- > Maintain a low rate of water loss
- > Reduce greenhouse-gas emissions intensity (metric tons of CO2 equivalent per cubic meter of water)
- > Increase solar-energy production on company premises

Social

- > Supply water to consumers in Israel (annual cubic meters per resident as coordinated with regulators)
- > Measure and maintain water quality – up to 0.5% deviations in testing
- > Promote policies of sustainability and corporate responsibility, including by releasing ESG reports and having major suppliers sign the Mekorot code of ethics
- > Ensure diverse hiring from underrepresented population groups

Corporate governance

- > Raise the percentage of women in senior management
- > Increase the quantity of water supplied to our neighbors

The full range of objectives, progress status, and work routines for implementation will be reported in Mekorot's ESG report for 2023. Attainment of the goals and indicators established by the Company for achievement by 2030 depends on amenable circumstances, particularly government objectives.

Organizational Profile and Economic Performance

International Business Activity



Argentina | Azerbaijan | Bahrain | Cyprus |
Dominican Rep | India | Italy | Mexico | Morocco |
Peru | Uruguay | Chile

20-29 →

Mekorot, Israel's national water company, has contributed since its foundation in 1937 to Israel's economic development and to the reinforcement of its economic and national resilience. The Mekorot Group is engaged in water extraction, drilling, pooling, quality treatment, transmission, and supply to all citizens of Israel, while preserving and securing water sources. The Company also builds and maintains the facilities used to deliver water, and provides consulting, construction, operating, and initiation services for water projects.

Mekorot is engaged in water extraction, drilling, pooling, quality treatment, transmission, and supply

Mekorot is considered a globally unique company due to the scope of its activity and its expertise in a wide range of fields, all under one roof:

- > Developing water sources and transmission systems, including increasing survivability
- > Supplying high-quality water to all sectors, 24 hours a day, at all times and under any conditions
- > Integrative management of all types of water in a uniform system
- > Groundwater and surface water extraction
- > Water treatment
- > Water quality monitoring, in line with and beyond regulations
- > Water production – desalination of seawater and brackish water
- > Advanced effluent system management and operation
- > Water security – water safety and security of water sources and supply processes, including responses to cyber threats
- > Hydrology and drilling
- > Floodwater capture
- > Command and control
- > Protection of the environment and sustainable development



Mekorot is the principal water supplier in the State of Israel. The Company produces approximately 49% of total water produced, purified, and desalinated in Israel, and transports and delivers approximately 65% of the total water supply in Israel (including supplying water to the Kingdom of Jordan and the Palestinian Authority) and approximately 79% of total water consumed by households in Israel.

Mekorot maintains optimal water availability, reliability, and quality through prudent integrative management. The Company operates responsibly, with a sustainable national perspective on the various sources of water.

Since 2011, the economic model at Mekorot has been based on regulatory rules enacted by the Water Authority Council under the Water Law. The regulatory rules have a different status than the previously prevailing system of agreements between the parties, in that the regulations constitute secondary legislation. Note that since 2008, the state budget no longer serves as a source of coverage for differences between the recognized costs and recognized income of the Company. It has been determined that any positive or negative difference should be reflected in an update of water tariffs, such that the full recognized costs of the Company are covered by income from the sale of water to consumers (a “closed water economy”).

Thus, Mekorot is not supported by the state budget. Its operations are independently financed by its own resources and through the use of bonds. Bonds were issued on the institutional market until 2019, including to raise foreign capital. Since 2019, when Mekorot became a reporting company on the Tel Aviv Stock Exchange, it has also begun to raise capital from the general public, and has continually worked to preserve and reinforce its financial robustness. Mekorot demonstrates its financial robustness through annual revenue estimated at approximately NIS 5 billion,



shareholders' equity of approximately NIS 4.9 billion, and total assets of approximately NIS 20.9 billion. Its responsible financial conduct and the satisfactory financial ratios it maintains have earned Mekorot the highest credit rating of ilAAA from Standard & Poor's Maalot, since 2003, and will enable it to double the scope of its development in the coming years, to fortify the water sector against prolonged droughts.

Organizational structure

Mekorot is a private company under government ownership, operating under the auspices of the Ministry of Energy and Ministry of Finance. The Company is defined as the national water company, under the power of Israel’s Water Law; its activity is subordinate to the Israel Water Authority, as the regulator that oversees its operations on behalf of the state. Beginning in 2019, Mekorot has been a reporting company that issues bonds. The Company and each of its employees are therefore subject to the provisions of the securities laws. Accordingly, an enforcement plan was formulated that year to ensure that the securities laws are upheld and help the Company identify and prevent breaches and offenses, and to maintain compliance of the corporation and its employees with the required directives.

Subsequent to a restructuring agreed upon with the government in 2007, Mekorot became a group of companies. The group is headed by the parent company Mekorot Water, which is engaged in all aspects of water supply and water plant construction, operation, and maintenance. At the top of the Company's organizational structure are the board of directors and board chairperson, who are charged with delineating policies, establishing the guiding principles for the Company's activity, and setting guidelines accordingly, as well as supervising policy implementation. The CEO leads the implementation of the Company's operations. The structure of the Company comprises the headquarters



in Tel-Aviv-Jaffa and four operational districts across Israel: Northern District, Central District, Southern District, and the National Water Carrier, which has a structure and responsibilities similar to those of the districts, applied to its facilities. In the reported period, five VPs report to the CEO within the Company's headquarters: VP Infrastructure Development and Customer Relations, VP Engineering and Technology, VP Human Resources and Administration, CFO, and VP Operations and Maintenance, who also serves as Deputy CEO. The following units also operate within company

headquarters, reporting directly to the CEO: Legal Counsel and Regulation, Internal Auditor (reporting to both the CEO and the chairperson), Corporate Secretary (reporting to both the CEO and the chairperson), Business Unit, Corporate Spokesperson, and Strategy (under the responsibility of the VP of Engineering and Technology). Together, these units constitute the main functions of the Company's management.² The three districts and the National Water Carrier are part of the Operations and Maintenance Division; each district works to carry out the Company's functions in the areas of water supply and contact with water consumers, within specified geographical borders, under the management of the district manager, who reports to the VP of Operations and Maintenance.

² For further information regarding the changes in organizational structure during the course of 2021, as part of a streamlining process at the Company, pursuant to Government Resolution 4514 of February 24, 2019, and the collective agreements signed by the Company and its employee unions, see the Company's 2021 ESG Report, in the section "Organizational structure," and the Company's 2022 Periodic Report, Chapter A, Section 20.1.

Mekorot Water's two subsidiaries³

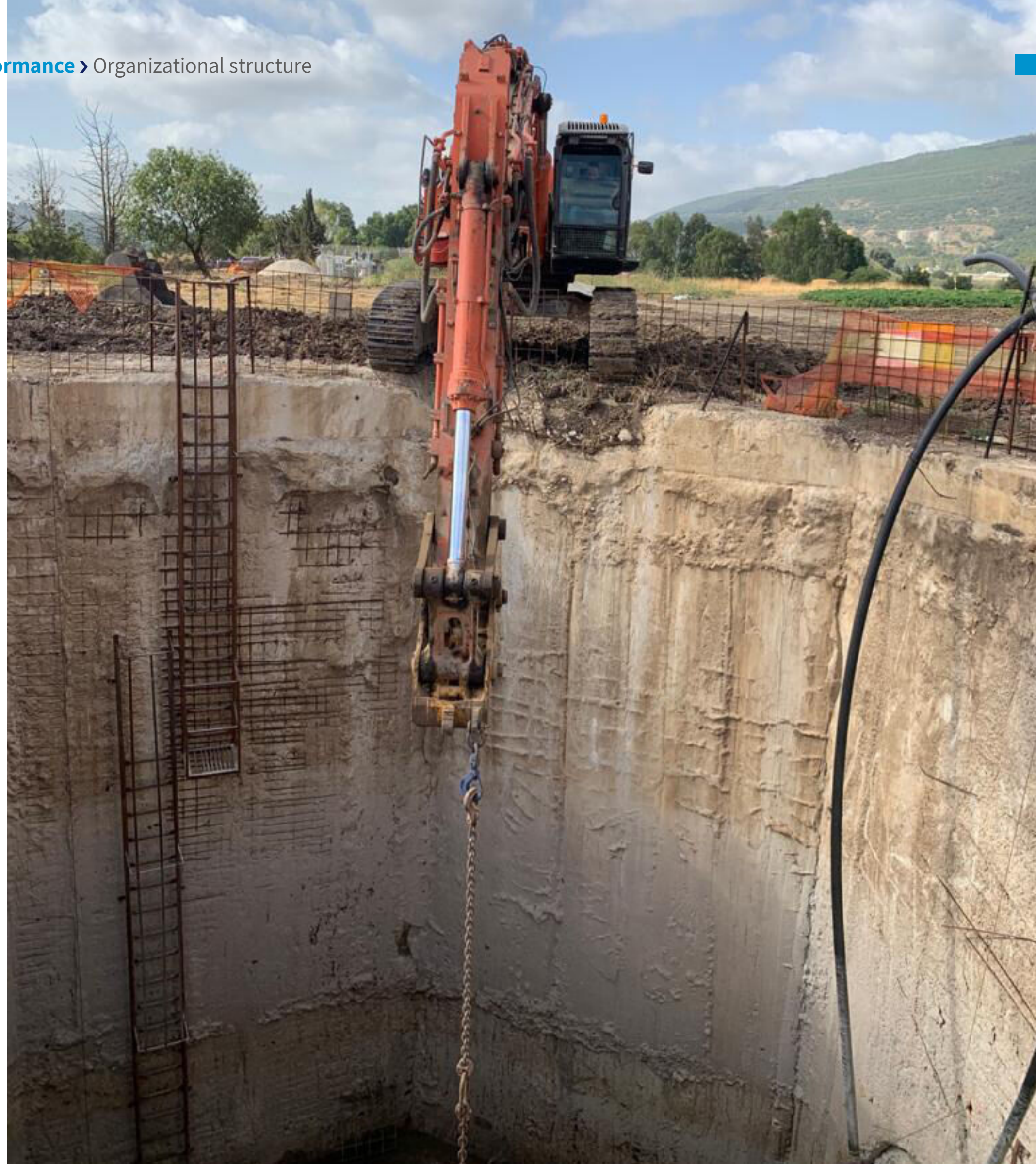
The subsidiary EMS Mekorot Projects is the contracting and execution arm of the group, engaged primarily in water plant development and renovation work for Mekorot, maintenance work for Mekorot, and additional work for external parties, including in the areas of production, electromechanics, drilling, laying water pipelines of up to 108", building pumping stations, restoration of pools and structures, and more.

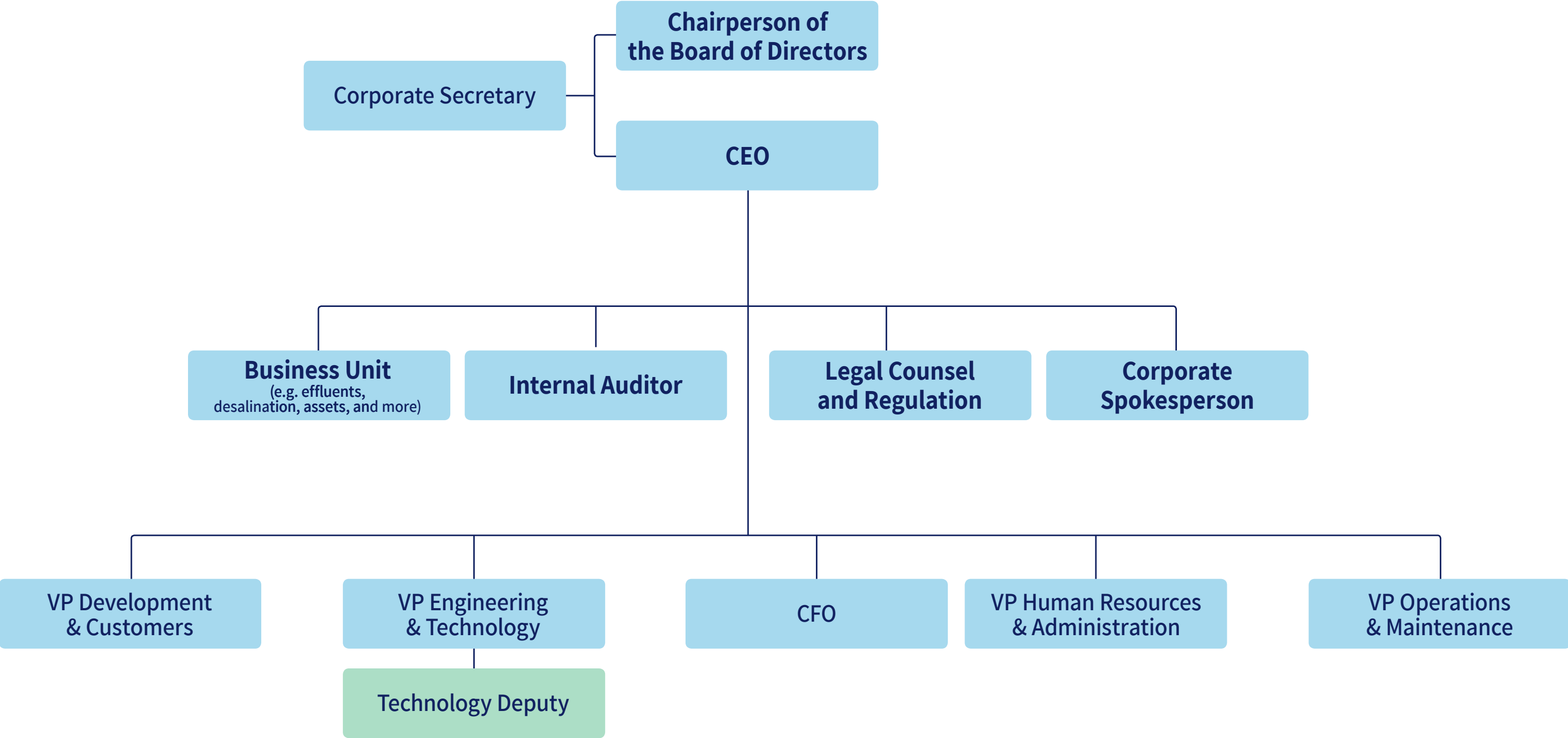
The subsidiary Mekorot Development & Enterprise is the international business arm of the group, engaged in enterprises, promotion, and consulting on water projects in the areas of desalination and wastewater treatment in Israel and in other countries, including Argentina, Mexico, Cyprus, Malta, Romania, Guinea, and more. The enterprise company also aims to operate in the area of energy and renewable energy, within Mekorot's own energy management system, to lower energy costs for Mekorot and enable it to achieve ESG goals.⁴

For additional information regarding the holding structure of the Company, see the Annual Financial Statements of the Company for 2022 (in Hebrew), beginning on p. 6.

³ The two subsidiaries operate independently; accordingly, their reporting and control mechanisms are also operated independently and separately from Mekorot.

⁴ The enterprise company's activities in this area are subject to discussions with the Government Companies Authority.





Mekorot creates value

- > Approximately 1.8 billion cubic meters of water supplied annually to some 4,800 clients and 8 million end consumers in Israel, and to the water systems of the neighboring Palestinian Authority, Gaza Strip, and Kingdom of Jordan.
- > Approximately 3,000 water production, transmission, storage, treatment and supply facilities, consisting of more than 10,300 km of pipelines; 1,086 drill sites, springs, and primary pumping stations; approximately 800 water quality improvement, chlorination, sanitization, and treatment facilities; close to 1,000 pools and reservoirs; and ten automated operations and control centers for remote command.
- > Approximately 270,000 water quality tests performed and 71,000 water samples taken annually by the central water testing laboratory and five regional laboratories. The laboratories perform chemical, bacteriological, and biological tests of water sources (drill sites, spring water, and water from the Kinneret Sea), in the transmission system, at reservoirs, and at town entry points.

⁵ **Report correction:** Mekorot's corporate responsibility report for 2021 (p. 7) stated that Mekorot operated more than 13,000 km of water pipelines. This was a clerical error; the correct figure is 10,300 km, as reported here.

⁶ In 2022, water loss was at 4.1%, an exceptional figure compared with recent years. Part of the change relative to the water loss rate of 3.3% in 2021 is attributed to measurement issues, while a small part of the change is actually ascribed to improvement in water meter precision.



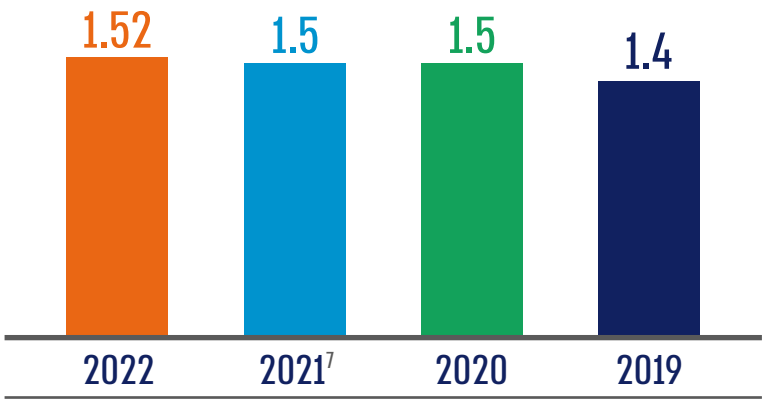
- > 24 brackish water desalination facilities and three seawater desalination facilities operated in and outside Israel.
- > Global leadership in effluent recovery for agriculture – approximately 60% of recovered effluent treated in Israel.
- > Drilling to exceptional depths of up to 1.5 km based on global expertise in hydrology.
- > Global leader with annual water loss of approximately 3%.
- > Water security and quality maintained at the highest global standards.
- > Development and implementation of innovative, groundbreaking water technologies through a dedicated center for water technology entrepreneurship and collaboration.
- > Construction and operation of the fourth-largest central filtering plant in the world, at a total cost of NIS 550 million. The plant positions Israel at the forefront of water treatment among Western countries, allowing efficient treatment processes and providing a high-quality ecological water supply solution.

Development of the water sector in Israel

Mekorot has a key role in the development of the national water sector; each year, it invests approximately NIS 1.5 billion in infrastructures for water production, capture, transmission, and treatment.

Main projects in Mekorot's three-year development plan for 2020-2022

- > The Jerusalem Fifth Water System
- > Connection of the Somech cluster
- > Southern Arava plan, immediate stage
- > Arava Tichona plan, immediate stage
- > Water supply to the Kingdom of Jordan
- > Melach (Water in Emergencies) development plan
- > Water supply to Druze communal societies in the northern Golan Heights
- > Reinforcement of the water supply in Judea and Samaria
- > Ge'ulat Hayarkon
- > Expansion of the Shfelat Lod plant
- > Reduction of water withdrawal from the Kinneret Sea
- > Supplying Shafdan water for agriculture
- > Integration of Sorek B desalination plant
- > Channeling water northward in the National Water Carrier
- > Western Galilee desalination plant
- > Increase in scope of drilling



The Company's development plan and its construction of water plants reflect water supply needs. The Water Authority Council has approved a new series of projects for the Company's three-year development plan for 2020-2022, at a volume of approximately NIS 230 million. Based on Government Resolution 4514 for "The creation of infrastructure to increase the scope of development of the water sector in order to cope with periods of prolonged drought," to cope optimally with the ongoing changes in the water sector, a decision was made to increase development activity at Mekorot, and accordingly to expand the scope of its development plan. The board of directors of Mekorot therefore approved a three-year development plan for 2020-2022 at a volume of NIS 1.5 billion per year. The main project in the Company's three-year plan is the Jerusalem Fifth Water System. Development of the western portion of the system was completed in 2014; development of the eastern portion began in 2017 and was completed in the third quarter of 2022. The tunnel has been fully activated, and plants at Ksalon and Ein Kerem are partially operational, based on water quantities available

in the national water system. The two-part project is unprecedented in both financial scope and technological engineering: a subterranean tunnel built to transport water over a distance of some 13 km, with excavation completed in March 2020, and some of the largest pumping stations in Israel and worldwide. The Fifth Water Tunnel became operational in June 2022. Final completion was achieved in November 2022, including approval by the Nature and Parks Authority and landscape restoration approval by the Jewish National Fund. A new three-year development plan for 2023-2025 was approved by the Water Authority Council in late 2022. The plan calls for cumulative investments of up to NIS 4.5 billion, at a rate of NIS 1.5 billion per year; commitments for the full completion of the projects total approximately NIS 8 billion. The 2023-2025 plan encompasses the completion of strategic projects initiated in previous years, primarily focusing on expansion of investments in the supply of water for agriculture through the Shafdan, expansion of the Negev Master Plan, connection of the eastern valleys, increased scope of production drilling, absorption of water from the Western Galilee desalination plant, and more.

⁷ **Report correction:** An investment in development projects in the amount of NIS 1.7 billion in 2021 was reported in the 2021 Corporate Responsibility Report. This figure has been corrected to NIS 1.5 billion here.

Quality Management at Mekorot

As part of the organizational change at Mekorot, the Quality Management Unit was created in 2020, in the Engineering and Technology Division, with the mission of planning, developing, and implementing quality assurance and control methods. Mekorot's approach to quality management focuses on understanding organizational processes and monitoring these processes, based on needs and required inputs. The quality management unit interfaces with all organizational processes and works in full collaboration with every unit of the organization. The unit is committed to providing assistance and support to all units of the Company as they deliver professional, reliable, available service, and aims to continually implement new methodologies for efficiency and savings in organization-wide processes. Within its work, the unit validates needs and interfaces, and embeds quality methodologies in the various processes and units.

Mekorot works to embody and implement quality standards through a calculated, controlled process. Quality management is performed in full cooperation among all units of the organization, in every area.

An initial strategic plan on this subject was formulated in 2021. In 2022, Mekorot set long-term goals in the area of quality in accordance with this plan, to guide the activities of the Company and the Quality Management Unit in the coming years.

Area	Strategic goal	Achievements in 2022
Mekorot quality policy	<ul style="list-style-type: none">> Formulate and implement quality policies, procedures, and specifications	<ul style="list-style-type: none">✓ Quality policy for the organization approved and signed, stressing the commitment of the Company's employees and managers to quality as a strategic objective of the utmost importance✓ Parameters and metrics for quality requirements in various fields established✓ Procedures and instructions written for quality assurance and control, to improve execution processes
The concept of quality in organizational culture	<ul style="list-style-type: none">> Instill the concept of quality at Mekorot> Find and manage quality gaps> Create and strengthen interfaces between the quality management unit and all Company units	<ul style="list-style-type: none">✓ Quality standards applied to projects, such as in planning and execution of construction✓ Processes begun to measure the costs of poor quality, in order to reduce quality gaps and implement improvement processes
Innovation and technology in quality management	<ul style="list-style-type: none">> Promote innovation and technological tools for optimal quality management	<ul style="list-style-type: none">✓ Creation of an IT system for the quality unit promoted
Implementing ISO standards at Mekorot	<ul style="list-style-type: none">> Implement all ISO standards relevant to Mekorot, under the leadership of the Quality Management Unit	<ul style="list-style-type: none">✓ Organization-wide certification under ISO standards by the Israel Standards Institute guided and completed, including application of internal and external tests

A professional quality committee was established in 2022, with representatives from every discipline at the Company, to examine and validate stages and outputs of quality processes at the organization on a quarterly basis.

Certification under ISO standards

Mekorot has set a goal of certifying the Company as a whole under the following ISO standards:

1. Quality management – ISO 9001 – entire company (certified in 2023)

2. Occupational safety and health – ISO 45001 – entire company

3. Environmental management – ISO 14001 – entire company

4. Information security management – ISO 27001 – information systems unit

5. Laboratories – ISO 17025 – all company laboratories

6. Energy management – ISO 50001 – entire company

7. Functional resilience management – ISO 24001 – entire company

> All of the preparations for the integrated safety and environment standards, in their new format, were made over the course of 2022; integrated internal and external testing was performed in early 2023.

> Mekorot is preparing for certification under the functional resilience standard ISO 24001 and the energy management standard ISO 50001.

> All of the Company's laboratories test all types of water samples and have been certified by the National Laboratory Certification Authority; the laboratories are in compliance with the Israeli standard ISO 17025 and the corresponding international quality standards.
- In addition, in 2021 the quality team began to provide support for five significant Design-and-Build (D&B) and Build (B) format development projects. This process began with writing of quality sections incorporating advanced quality assurance and control methodologies, which are **binding for the contractors** on the projects. The use of these methodologies allows for continuous, transparent technological monitoring by the quality system in each stage of the work, to ensure that the final product meets all of the requirements and specifications. Engineering surveys and a quality cost investigation were also performed with respect to completed infrastructure projects.

As an integral part of its activity, the unit guides and promotes certification and monitors the ISO standards listed above.

- > Preparations were made in 2022 for the first year of certification under the three major management standards: quality, safety, and environment (ISO 14001, ISO 45001, and ISO 9001), at the level of the Company as a whole.
- > Certification testing for ISO 9001 was performed in December 2022. Mekorot was certified at the national level in the first half of 2023.

Mekorot management is committed to the process, as a key to the Company's success.

Future goals

- Quantify costs of improvement processes leading to savings for the organization.

● Continue to implement quality assurance processes in projects and measure costs of poor quality.

● Promote and implement improvement processes in purchasing and logistics.

● Make progress in supplier reviews and ratings.

● Complete certification of the entire organization under management standards.

● Raise awareness of quality through digital and in-person activities for all managers and employees at the Company.



The Future Is Here

Mekorot – An Innovation Leader



Optical Fiber Based
Monitoring



Meeting End-
User needs:
Water quality



Cyber Security
and resilience



Circular Economy



30-34 →

Over the decades of our activity, we have accumulated knowledge, experience, and capabilities in the water industry that position us at the forefront of water companies globally. Through its combination of professional knowledge and technological leadership, the Company works to develop advanced water technologies, in four main areas: investment in startup companies; business collaborations; applied research; and patent development and internal innovation.

Innovation is interwoven with every aspect of the Company's operations, grounded in the belief that innovative and leading water-sector management requires the adoption of innovative technologies – predictive supply, smart control rooms, big-data analysis, and cybersecurity. The Company's innovation drive is primarily focused on responding to the growing needs of the Israeli economy as it faces the effects of climate change, which are expected to cause desertification and droughts, alongside natural population growth. These trends are expected to lead to a shortage of water. Mekorot is working continuously to find solutions for future needs by generating new water sources and rigorously maintaining water health and quality using innovative, advanced means.

Mekorot is working continuously to find solutions for future needs by generating new water sources and rigorously maintaining water health and quality using innovative, advanced means



⁸ Discovering What's Possible Today And Tomorrow (mekorot.co.il)

Our innovation endeavors relate to every area of activity at Mekorot, enabling us to lead, develop, and provide better solutions to our customers:

Investment in startup companies

Since 2019, Mekorot has invested in startup companies operating in its core areas. In 2022, the Company invested a record amount of NIS 2.6 million in various startups, compared with NIS 1.1 million in 2021. In addition to the monetary investment, the Company provides relevant ventures with support by allowing them to run pilot projects at Company sites, use its resources, and eventually embed their product at the Company.⁹ This collaboration creates shared value, as Mekorot gains development of its systems and improved quality of the water it supplies, while the startup companies gain a strategic client.

As part of the process of selecting technologies for investment, a committee has been established to delineate investment strategy and recommend companies to the board of directors; the CEO and the VP of Engineering and Technology are on the committee.

In 2022, Mekorot invested in the following projects:

› **Rapida** – Developer of an algorithm to detect cracks and flaws in concrete, including those invisible to the human eye. Data are gathered by drones; the technology serves as a property management system, and can be used to manage Mekorot's concrete pools more efficiently and improve their condition. Mekorot began to implement the system shortly after signing a commercial agreement with Rapida.



› **R2** – Detects intruders on Mekorot property by identifying radiation-emitting devices. As part of this investment, a commercial agreement was signed that is contingent on the success of a pilot project. This technology will improve security at Mekorot's sites nationwide.

› **Razor Labs** – A developer of artificial-intelligence products that will create a system to predict burst water pipelines. Implementing the system will improve efficiency in the operation of the pipelines, better

prioritization of routine pipeline replacement, and considerable monetary savings.

› **Ixden** – Developer of a unique artificial-intelligence system for identifying anomalies in the area of command and control for decentralized control systems, including detection of cybersecurity events and operational events. The technology has been implemented at approximately seventy of the Company's sites, and is planned to be installed in all water-supply facilities.

⁹ Pursuant to Government Resolution 3837.

Research and development

Entrepreneurship and Collaboration Center –

Within its multiannual plan, the Company initiates research and development (R&D) activities aimed at promoting knowledge and searching for new water technologies. Approximately forty applied-research studies were in progress during the year, by professional research staff at the Company in collaboration with leading Israeli and global academic institutions, as well as international research foundations and prominent industry companies.

Research is conducted at three advanced R&D sites:

- > Eshkol, in Beit Netofa Valley, for surface water research;
- > Sabha in Eilat, for research on brackish water and seawater desalination;
- > Laboratories and analytical devices.

Additional research is conducted at various experimental sites nationwide.

Within its commitment to the environment, Mekorot invests extensive resources in research in the area of sustainable development, and works assiduously to seek eco-friendly water technologies with maximum utilization of renewable natural resources.

The research is reviewed annually by the research committee, which consists of senior management members and is headed by the VP of Engineering and Technology. Research focuses on seven main fields: hydrology, desalination, water quality, models, engineering services, command and control, and wastewater purification. A subcommittee for each topic oversees the research within its field.

Undergraduate students participate in this research, and are offered scholarships to operate studies for six-month periods. The students gain the opportunity to experience a real-life work environment in the water industry, working on interesting and innovative research with close guidance from a Mekorot researcher. The Company believes that involving students in its research is valuable and generates mutual synergies. Seven students participated in research at Mekorot in 2022, most from colleges located in peripheral regions.

European Union research programs – Mekorot is an active participant in the European Union research programs Horizon 2020 and PRIMA. These programs focus on developing technologies in the area of effluent recovery for agricultural use, wastewater treatment technologies, and improving the resilience of water companies against cyber events and physical attacks. Mekorot has participated in five research groups composed of 20-30 research institutes, startup companies, and water companies from several European countries, including Ultimate, Stop-It, Smart-Plant, Suwanu, and Fit4Reuse.

Nofar program – Mekorot, in collaboration with the Innovation Authority and Israeli academia, supports early-stage technology development and participates in research financing, in the amount of approximately NIS 50,000. Projects in this program focus on developing new environmental knowledge. In 2022, Mekorot supported two developments in the areas of monitoring pollutants in coolers and monitoring algae toxins in reservoirs.

Mekorot participates in two international programs promoting innovation and sustainability in the water sector: the Ultimate project, financed within the European Union's Horizon 2020 research and innovation program, and the Israeli-American program CoWERC, under the Bird Foundation. Over the coming years, we expect to carry out several pilot programs within these projects, to test and demonstrate various technologies for reducing energy consumption in waste treatment, including the use of advanced anaerobic membrane systems, biogas production and betterment, innovative concentrate reduction processes, brackish water desalination, and more.



Collaborations with companies in Israel

The Innovation Unit aspires to collaborate with large business organizations with similar characteristics to Mekorot, to promote activities in the area of innovation and research. A key collaboration with Microsoft in Israel has been underway since 2019, along with ties with additional companies, support for and participation in accelerators, and more, with the aim of promoting the implementation and development of innovative solutions. Among other efforts, Mekorot is promoting the creation of a data repository for research and pilot projects. The goal of this project is to provide researchers and entrepreneurs with access to extensive databases, enabling them to analyze the data using artificial-intelligence tools and derive insights relevant to detecting deficiencies, information gaps, and development opportunities.

Internal innovation – encouraging employee initiatives

Within the Innovation Administration, which consists of representatives from each division, Mekorot encourages its employees to suggest ideas for development at every level of its operations. Mekorot also has a digital knowledge-sharing system, to collect, screen, and evaluate ideas and subsequently realize the ideas, while reporting and monitoring key performance indicators (KPIs). Mekorot funded 21 projects created by employees in 2022, including adjustable orifices, leak repair without emptying pipelines, business WhatsApp, an efficient carrier for containers, and more. Licensing proceedings on three new patents continued in 2022, for projects involving air windows, a pressure gauge for turbid water, and a membrane charging robot. Mekorot also continued to manage its existing patent portfolio.

At an event held for the first time in 2022, with Mekorot management and its CEO in attendance, the employees who took part in these activities were commended. Fifteen teams consisting of forty employees received monetary rewards for their internal innovation endeavors and initiatives, and a workshop under the heading “From idea to product” was held for the participating employees.

Future goals

- Encourage and increase employee involvement in intra-organizational innovation by announcing new challenges to develop and present initiatives and technological solutions.
- Renew the operation of the Eshkol Visitor Center at Mekorot, which emphasizes innovation and technology.
- Perform two studies in 2023 on topics that promote protection of the environment through technology.
- Invest NIS 5 million in research and development by 2025.
- Further expand investment in Israeli startups that contribute to the Israeli and global water industry, while conducting joint pilot projects to implement the proposed technologies. The Company is setting an immediate goal of investing in two new startup companies in 2023.





Mekorot Contributes to International Development and to Israel's Geopolitical Relations

35-37 →



The geographical location of the State of Israel, climate change, and geopolitical complexities have led Mekorot, as the national water company, to continually endeavor to develop varied and innovative solutions. The Company focuses these efforts in two main arenas: routine water supply, and development of groundbreaking knowledge and technology. The Company supports the realization of the water-related goals of the government of Israel in the region, works to create and maintain long-term international partnerships with other countries, and strives to forge relationships and strengthen Israel's global standing in the area of water.

The Company focuses its efforts in two main arenas: routine water supply, and development of groundbreaking knowledge and technology

Regional collaborations

Under the peace agreements signed by the government of Israel and as part of its contribution to regional geopolitical relations, Mekorot also supplies water to Israel's neighbors – Jordan and the Palestinian Authority.

Kingdom of Jordan – Within the peace agreement between the State of Israel and the Kingdom of Jordan, the parties agreed to a water allocation arrangement. The Company supplied approximately 90 million cubic meters (MCM) of water pursuant to this agreement in 2021, and approximately 106 MCM in 2022. The quantity of water transferred to Jordan is increased in years of abundant rainfall, when the water level in the Kinneret Sea is sufficient. Within the agreement, the states also agreed to protect the common water in their jurisdictions, in the Jordan and Yarmouk Rivers, and the groundwater in the Arava region, against any pollution, harm, or unauthorized extraction of the allocations of either state.

Palestinian Authority – The Company supplies water to the Palestinian Authority, under a water costs agreement. The quantity of water transferred to the Palestinian Authority has consistently trended up in recent decades; the annual quantity supplied to the Palestinian Authority was approximately 80.6 MCM in 2022, compared with approximately 73.7 MCM in 2021. The quantity of water supplied by the Company to the Palestinian Authority is significantly larger than the 46.16 MCM per year that Israel is required to provide under the agreements.





Gaza Strip – The Gaza Strip is contending with a severe water crisis. The water shortage and poor sanitation pose a severe threat to the health of the residents. In accordance with an agreement with the Palestinian Authority of 2017, Israel supplied 18.5 MCM¹⁰ to the Gaza Strip in 2022, compared with 14.7 MCM in 2021.

Judea and Samaria – Due to the water scarcity in Judea and Samaria, to support development in these regions, as directed by the Minister of Energy, under the supervision of the Water Authority and in coordination with the Civil Administration, Mekorot is preparing to supply large quantities of water, based on the anticipated demand through 2030. The proposed plan responds to the water supply needs of Palestinians and of Jewish Israeli towns, including added water for agriculture for the Israeli settlements; routes have been upgraded and enlarged to meet the demand.

¹⁰ Of a total of 95 MCM of water supplied annually to the Gaza Strip.

¹¹ Abraham Accords – Agreements intended to normalize relations between Arab countries in the Middle East and Israel.

International collaborations

Mekorot works with governments around the world and a wide range of business organizations, offering a wealth of knowledge assets to create solutions to worldwide water challenges. Thanks to its technological leadership and development capabilities, proven over the years, with the support and backing of the Israeli government, Mekorot has led cross-continent collaborations helping local water sectors to exceptional achievements.

Several leading projects carried out within international activities in recent years are described below:

Punjab State, India – In 2020, Mekorot completed a consulting and planning project for the government on a master plan for the local water sector, aimed at stopping groundwater depletion and presenting a long-term plan for sustainable water management through 2050. The project ended in early 2023.

Maharashtra State, India – In this collaboration, consulting and planning were provided to the Maharashtra government on a master plan for a potable water supply system to meet the projected demand in 2050, required to respond to challenges associated with climate change.

Kingdom of Bahrain – In early 2021, Mekorot signed an agreement with the Kingdom of Bahrain for development and improvement of its water sector, as part of the Abraham Accords.¹¹ In 2022, within the agreement, the Company provided consulting, planning, and guidance services on desalination of seawater and brackish water, water resource management and supply, and more. Mekorot is the first Israeli government company to sign an agreement of this kind. The project was completed at the end of 2022; the Company is in talks to promote additional projects.



Government of Cyprus – Processes have been underway since 2021, in an international collaboration, to activate and operate two desalination facilities in Limassol, for a period of 25 years.

Government of Azerbaijan – In 2022, Mekorot continued working to build a mobile sampling system for coping with emergencies in the water sector, and to train and upgrade water quality testing laboratories.

Government of Mexico – Mekorot continued working with the Mexican government in 2022 to restore, manage, and plan water supply systems, based on treatment of aquifer sources in its territory.

Uruguay – Mekorot consulted for the national water company of Uruguay and the government of Uruguay on project prioritization, operational efficiency, and planning. The topics and scope of the consulting services are expected to expand in the coming years.

Argentina – In November 2022, Mekorot began to prepare master plans for two Argentinian provinces, Mendoza and San Juan, designed to address all sectors, with a planning horizon of up to 2050. Agreements were also signed in February 2023 to create master plans for three additional provinces (Rio Negro, Catamarca, and La Rioja) and provide consulting services, similar to Mekorot's services in Uruguay, in two provinces (Santa Cruz and Formosa).

Environment

38-64 →

Protection of the environment, including responsible use of natural resources, is an essential foundational principle for Mekorot, as a company engaged primarily in managing a life-giving resource. Mekorot embeds environmental considerations in its work processes, developing and adapting advanced technologies and environmental innovation, to reduce its environmental impacts and supply water with the optimal quality and efficiency. The Company believes in a direct connection between its actions and the environmental and human sphere, and is leading change within and beyond the organization to make the values of sustainability, environment, community, and society integral elements underpinning its activity. The Company honors its unwritten contract with the environment by upholding the values of fairness, integrity, respect for nature and ecosystems, and caring for humans and the environment everywhere. Mekorot also works to create and strengthen positive impacts and interactions with the community and environment, while maximizing value for itself and its employees.

Mekorot has set a goal of being a leader in energy efficiency and increasing its use of renewable and eco-friendly energies. Its strategic plan focuses on sustainable development and efficiency, and extensive resources are invested in realizing the multiannual goals set within the plan.

Mekorot initiates and promotes organization-wide environmental innovation, setting far-reaching environmental targets. This activity is essential both for the national water sector and for the continued global leadership of Mekorot. Mekorot works to reduce its carbon and environmental footprint by generating renewable energy on its premises, reducing emissions intensity, decreasing the use of chemicals, and preserving biodiversity

Integrative water management

Mekorot is responsible for supplying approximately 65% of total water consumed in Israel and approximately 79% of the country's household water consumption.¹² The health of the residents of Israel depends on water availability and quality. Mekorot therefore takes diligent care in producing water and improving its quality, while reducing the potential risk of pollution of water sources and the ground.

To respond to the evolving needs of the residents of Israel, in view of its shortage of natural water sources, the Company aspires to systemic water-sector management, with ongoing control, and seeks alternatives to conventional water supply. Accordingly, as part of its strategic plan, Mekorot produces water in a variety of ways to supply the needs of households, agriculture, and industry in Israel by generating, purchasing, and supplying potable water from a number of sources:

- › **Groundwater** – Water produced by drilling from aquifers: Yarkon-Taninim, the Coastal Aquifer, Kinneret Basin, Western Galilee, Carmel, Eastern Mountain, Negev, and Arava.
- › **Surface water** – Produced from the Kinneret Sea and from springs, primarily in the northern region.
- › **Desalinated water** – Produced at seawater and brackish water desalination plants, including desalinated water purchased from private producers.

We are working to expand the scope of desalination, while reducing water produced from natural water sources. This area is overseen by the Deputy CEO, VP Operations and Maintenance, VP Development, and VP Engineering and Technology.

¹² Based on Water Authority data, as shown in the general water consumption survey for 2021.

Water production and extraction

Extracting water from natural sources

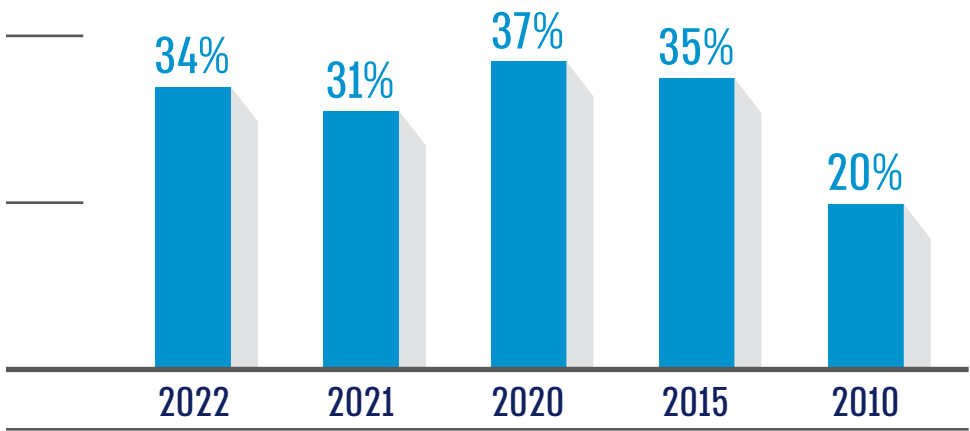
The main natural water sources on which the water supply relies are the Mountain Aquifer (Yarkon-Taninim), the Coastal Aquifer, the West Galilee Basin, and pumping from the Kinneret Sea. To preserve the water sources and prevent overpumping, water is pumped according to quantities established by the Operations Committee. Water levels in the aquifers are also monitored both by Mekorot and by the Water Authority, to ensure that excessive exploitation is avoided. When necessary, Mekorot reduces its pumping operations.

Desalination and membrane systems

The arid climate, population growth, and increase in water consumption in Israel mean that creative, innovative solutions to the problem of water scarcity must be sought and developed. Mekorot develops membrane systems¹³ in general, and desalination systems in particular, as an alternative water source, while concurrently promoting

education and public campaigns on the reduction of water use. The employees of the Company have over fifty years' experience with desalination of seawater and brackish water. Today, Mekorot is one of the leading companies in the world in planning, building, operating, and maintaining desalination plants. Mekorot desalination plants are monitored for functional, efficient, high-quality water supply and operate in accordance with regulation by the Ministry of Health and Ministry of Environmental Protection. The Company's investment in desalination will allow water desalination and membrane filtering from varied sources in the coming years, including secondary effluent water and river water, to maximize the utilization of water sources and rehabilitate natural water sources in Israel. Investment in desalination also allows the use of the facilities as emergency reservoirs, when seawater desalination facilities of private suppliers are shut down. In 2022, desalinated water constituted 34% of the water supplied by Mekorot to its customers.

Desalinated water as a percentage of total water supplied by Mekorot



¹³ Membrane systems are used to treat water by separating out pollutants.



Groundbreaking projects

In recognition of the national importance of desalination and membrane system solutions that enable it to significantly increase the available supply of water, Mekorot invests in research and development of new technologies in this field. This activity is aimed at continually improving the production process and reducing the associated environmental impacts.

Leading projects include:

- > **Addition of calcium and magnesium to desalinated water using innovative technology by Omya.**
- > **Project to reduce boron in water supplied to the city of Eilat.**
- > **Eastern drain project.**¹⁴
- > **Unique removal of concentrate (brine) from desalination plants.**
- > **Small desalination facilities in the Arava Tichona region.**
- > **Development of capability to add magnesium to desalinated water.**
- > **Implementation of AI capabilities to reduce consumption of chemicals and improve energy efficiency.**
- > **Examination of the use of phosphorus-free anti-scalants.**
- > **Energy efficiency at the Lahat facility – renovation of the turbocharger energy recovery device and addition of boosters to the energy recovery system.**
- > **Upgrades of energy recovery systems at Sabha desalination facilities.**
- > **Increasing the recovery ratio using reverse-flow technologies by Rotec at the Sabha C desalination plant.**

¹⁴ For further information regarding the Eastern drain project, see the section “Environment: protecting ecosystems,” p. 59.

In addition to these processes, five demonstration facilities have been built at Mekorot desalination plants to allow applied research at the sites, encouraging the development of innovative initiatives and implementation of advanced technologies.

Minimizing environmental impacts in the water desalination process

Mekorot works to minimize the potential impact of the brine formed in the desalination process on the marine environment. Accordingly, we examine new technologies and conduct advanced research to find environment-friendly chemicals, and test technologies to reduce nitrates in brine and means of minimizing the quantity of brine discharged into the sea, according to discharge permits. We continually promote reduced consumption of chemicals, energy efficiency, and process efficiency at the plants, including through conversion to more efficient pumping equipment and energy recovery equipment; replacing and increasing energy efficiency of membranes; cleaning membranes with unconventional materials; and more.



23 desalination facilities for brackish water, seawater, and secondary effluent water, with production capacity of approximately **55** million cubic meters per year

5 demonstration facilities for the promotion of innovation on Mekorot premises

4 patents in desalination owned by Mekorot

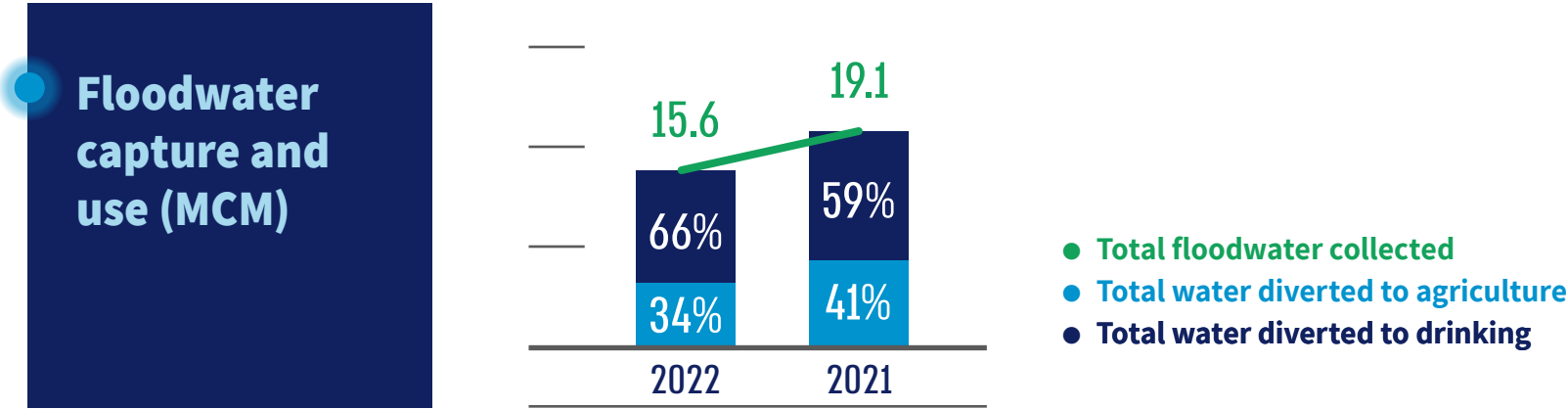
8-10 desalination studies conducted annually

Floodwater capture¹⁵

Floodwater capture helps to increase the quantity of available water and improve balance in the water sector. Floods and water flows in streams are directly linked to the integrity of ecosystems. To preserve natural systems, Mekorot usually endeavors to capture floodwater downstream, after it has traveled some distance in the stream channel. Some dams also allow water flow during a flood, in order to protect stream ecosystems.

Mekorot has two types of floodwater capture facilities:

- > **Facilities designated to supply water for household consumption** – Floodwater is diverted to settling basins and seepage basins, and inserted into the aquifer. This process allows natural filtration, does not require the use of energy, enriches groundwater quantity and quality, and allows integration of the water into the national water supply system during high-demand months.
- > **Facilities designated for irrigation** – Floodwater is captured and integrated into effluent water reservoirs, and used to irrigate agricultural land, as needed. Floodwater capture for agriculture allows a regular water supply for agriculture during drought years, reduction of the salinity level by diluting the water with effluent water, and a cheaper water supply, which improves the financial feasibility of agriculture.



¹⁵ **Report correction and update:** Different data regarding the extent of floodwater captured in 2021 were reported in the 2021 corporate responsibility report. The difference between the two reports mainly stems from Mekorot's replacement of data systems, in 2021, uses of which included managing data from the reservoirs used to capture floodwater. The methodology for gathering, analyzing, and presenting floodwater capture data in the Company's corporate responsibility reports was also updated. Accordingly, data for 2021-2022 are presented below to allow comparison over time based on the updated systems and methods. The data annex at the end of this report lists the relevant reservoirs and databases for this calculation.



Wastewater and effluents

Untreated wastewater is an environmental and sanitation hazard, and may pollute natural water sources. Mekorot has developed unique capabilities in the area of wastewater recycling and recovery for agriculture, across Israel, particularly in the desert, and aspires to continue to develop advanced technological capabilities in this field. Towards that end, the Company combines some of the world's most advanced mechanical, biological, and technological processes in wastewater treatment, thereby transforming wastewater from an environmental nuisance to a water resource supplied as effluents for agricultural irrigation, freeing up freshwater for household use. A globally unique technology is used to apply further biological enhancement of the water underground, bringing the reclaimed water to the highest quality level.

Effluent reclamation encompasses all of the complementary activities involved in secondary and tertiary wastewater treatment at the wastewater purification plants, aimed at making the effluents usable for agricultural irrigation. These actions include:

- › Planning and building pumping stations and transmission lines to transport effluents to consumption locations.
- › Planning and building operational and seasonal reservoirs to optimize the effluent supply between the collection season in winter and consumption in the summer.
- › Treatments required to maintain the engineering stability of reservoirs.
- › Treatments required to maintain stability of water quality in reservoirs, to prevent algae and zooplankton blooms and clogging of the irrigation systems; and as needed, chemical treatments against clogging factors.
- › Monitoring water quality in reservoirs to test for compliance with quality levels required for agriculture under the prevailing standards.
- › Installation of pumping stations and filtering systems at reservoir exits to remove clogging factors.
- › Delivery of effluents to consumers, with disinfection as required by the standards.

¹⁶ As of 2021, the overall environmental activity of the Shafdan is reported by the Dan Region Association of Towns for Sewage and Environmental Issues (Igudan), as Mekorot functions only as the operator.

Operation of the Shafdan

The Dan Region Wastewater Treatment Plant (Shafdan)¹⁶ is the largest and most advanced wastewater and sludge treatment plant in Israel and in the Middle East. The Shafdan wastewater purification plant, owned by Igudan (Dan Regional Association for Environmental Infrastructure) and operated by Mekorot, serves some 2.5 million residents, at a volume of approximately 150 MCM per year, or a quarter of all wastewater treated in Israel, with a 9% increase in treated wastewater compared with previous years.

Effluents undergo tertiary treatment to bring their quality to the highest level, and are then channeled to stream rehabilitation or agricultural use, with no restriction on irrigation of specific crops. The wastewater treatment process generates two main byproducts: sludge and biogas. As part of the sustainable development approach applied by Mekorot, the Company arranges for reuse of both byproducts, to achieve positive impact. The Shafdan has a system of eight thermophilic anaerobic digestors, which have made it possible to stop discharging sludge into the sea and transition to generating eco-friendly energy. The sludge generated is processed by an anaerobic digestion system until grade-A sludge is obtained, which is diverted for dispersal as fertilizer in agriculture or soil amendment for agriculture. Biogas, a byproduct of the digestion process, is collected and diverted for electricity production.

Pilot project to test feasibility of an industrial process for the Shafdan
– The Water Authority has charged Mekorot with examining the feasibility and construction of an advanced industrial plant for secondary effluent treatment, to generate better quality water than currently produced. The industrial Shafdan facility process would be based on a combination of technologies widely used globally, primarily for indirect potable reuse (IPR) and direct potable reuse (DPR) of reclaimed water. As of the end of 2022, results of the pilot project demonstrate that the proposed treatment system meets the required level of quality and leads to a positive increase in many functional indicators, beyond the requirements set in the preliminary planning. Full removal of all microorganisms was observed as early as the initial stages of the treatment, as well as more than 80% removal of most micropollutants. A full-scale treatment plant is currently being promoted, to treat 45-70 million cubic meters of water per year.

Environmental and social advantages of wastewater treatment and effluent reclamation:

- > Increased quantities of water for thriving agriculture, even in the most arid regions.
- > Cultivating nutritional security and independence.
- > Diversion of more freshwater to households.
- > Postponement of the need to build additional desalination facilities, which increase energy consumption and greenhouse-gas emissions.
- > Protection of the environment in general, and water sources in particular, by reducing ecological damage that may be caused by untreated wastewater and wastewater removal.
- > Use of sludge from wastewater purification plants as fertilizer, which reduces waste buried as well as the need to manufacture fertilizers, leading to reduction of the carbon footprint of Mekorot.
- > Production of biogas, allowing energy consumption savings in the operation of wastewater treatment plants.
- > Reduced potential for the spread of causes of disease in the population.
- > Reduced potential for smell nuisances in residential areas.
- > Reduced costs of water and of agricultural produce for consumers.

Mekorot treats approximately **29%** of wastewater treated in Israel, including through its enterprise company

Mekorot supplies approximately **40%** of effluents currently supplied for agriculture in Israel

Approximately **651 MCM** (Mekorot nationwide + private) of effluent water are piped for agriculture annually, freeing the equivalent quantity of freshwater for household use

Over **80%** of water is reclaimed for agricultural use, making Israel the world record holder in the reuse of water





Wastewater purification plants operated by Mekorot

- > Shafdan¹⁷
- > Karmiel¹⁸
- > Ashkelon

Effluent reclamation plants operated by Mekorot

- > Third line to the Negev (Shafdan)
- > Kishon conglomerate
- > Emek Hefer
- > Ayalon Latrun
- > Gush Etzion
- > Ge’ulat Hayarkon – in production

¹⁷ The Shafdan wastewater purification plant is owed by Igudan; Mekorot operates and maintains the plant under an agreement with Igudan.

¹⁸ Operated by Mekorot Enterprise.

Future goals

- Expand the desalination system at Sabha with additional capacity of 20 MCM per year.
- Rehabilitate the environment by restoring water to nature in accordance with the goals of the Water Authority for 2025.
- Reduce deviations from the groundwater pumping license by 2025, from six deviations in 2020.
- Build irrigation systems at the Lahat and Neve Zohar desalination plants.
- Set up an innovative stabilization system at Granot, using micronized limestone.
- Create data collection and processing systems for each desalination facility, in order to improve the efficiency of chemical use, energy consumption, and membrane replacement schedules.

Transmission system efficiency

Efficient management of the water supply

Water resources and the efficiency of the transmission system are at the core of Mekorot's business. We work to mitigate environmental impacts through more efficient use of water, investment in technologies to improve infrastructure efficiency and prevent leaks, and consumer education on water savings. These efficiency efforts reduce energy consumption, operating costs, and the need to expand infrastructures.

The transmission system is a key component of the ability to supply water to all of our consumers. We rigorously maintain the integrity of the transmission lines, thereby significantly reducing water loss during transmission; concurrently, we maintain the efficiency of pumping units at water sources and pumping stations in the transmission system, which directly affects energy consumption by the Company. The VP of Operations and Maintenance oversees the transmission systems. Efficiency and water loss are monitored at all managerial levels and presented to management and the board of directors as part of the BSC metrics. Monthly monitoring is also performed by the engineering departments and district managers.

Initiatives to increase efficiency, reduce water loss, and increase financial savings

- › Implementation of automation systems in control rooms to track levels of pools and reservoirs and efficiently operate pumping equipment.
- › Reliance on computer-based models to forecast consumption and optimize energy consumption in the water systems.
- › Smart use of varying energy tariffs during the day by redirecting pumping from peak hours to low and high hours¹⁹ and optimal use of storage volumes, while also increasing volumes.
- › Maximum protection of pumping equipment efficiency through routine monitoring, in accordance with the standards of the Ministry of Energy and the guidelines of the Engineering and Technology Division.
- › Replacement of dozens of pumps each year, to improve energy efficiency.
- › Replacement of low-efficiency engines and transformers.
- › Monthly monitoring of water balances in areas with exceptional pressure, to identify leaks or other malfunctions.
- › Operation of teams to prevent water theft and find hidden leaks.

We use computer-based mathematical models to operate water-supply systems optimally, in terms of energy efficiency as well as efficient use of water resources:

Models for optimal planning of annual operation – To examine various scenarios of annual production from natural water sources (the Kinneret Sea and the aquifers) and analyze the effects on the reliability of the water supply and on energy investments in the system.

Model for optimal operation of the water-supply system in real time – Allows translation of annual operating guidelines into daily operating guidelines, optimal system operation in terms of energy efficiency through hourly water consumption forecasts, calculation of optimal combinations of pumping units, and sound management of water levels in pools and reservoirs.

Grid solvers and hydraulic simulators – For planning and control of pressures in the supply system, and consequent reduction of leaks and water loss rates.

Models for planning optimal operation of effluent water plants – Allowing planning of seasonal reservoir filling and water supply to agricultural consumers during consumption season. The purpose of the models is to optimize the reliability of the water supply, save energy, and reduce water loss from seepage and evaporation in reservoirs.

Mekorot reports to the Ministry of Energy annually on efficiency results of pumping equipment, including pumping units noncompliant with standard requirements. Mekorot has 1,018 drill sites and 2,049 boosters (pressure enhancer pumps) with different structures. According to the standards of the Ministry of Energy, the minimum permitted efficiency is 55% for drill sites and 65% for pressure enhancers.

523 new field tests were performed in 2022; the average efficiency/capacity of all pumping units was found to be 73.3%, of which 71% at the drill units and 74.2% at the booster units.

¹⁹ Three sets of hours have been established for each season, in terms of electricity pricing: peak, high, and low. High hours are the middle level, while low hours are the lowest level; electricity prices are regulated accordingly.

The transmission system

The National Water Carrier and the New National Water Carrier are part of the national supply system. The National Water Carrier, Mekorot's flagship project, was created in the 1960s to transport water from northern Israel to the central region and the arid south; today, it carries more than half of the drinking water in Israel, over a distance of some 13,000 kilometers.

Due to the escalating climate crisis, population growth, and rising standard of living, demand for water has increased. With a view towards the future needs of the nation as a whole, for the current generation and for those to come, in the second decade of the twenty-first century Mekorot undertook an immense project: the New National Water Carrier. The new project is designed to capture desalinated seawater from five plants built along the Mediterranean coastline and a substantial part of the water drilled from aquifers for integration into the national water system, changing the direction of the water supply to flow from the west to the east and other points and implementing new technologies. Over the years, we have also connected additional areas and reinforced existing connections allowing water to be transported to new regions, supporting development. The New National Water Carrier will supply desalinated water to Jerusalem and its surroundings through the Jerusalem Water Supply Fifth System, designed to respond to the expected growth in water consumption in this area in the coming decades. Work on the system was completed in 2022, as planned. The new system

will make it possible to rehabilitate the Mountain Aquifer by reducing water pumping from drill sites in the mountain region and maximizing the use of desalinated water.

The national supply system is supervised and managed through sophisticated control rooms using advanced technologies, which allow real-time responsiveness to the changing demands of various water consumers (including households, factories, and agricultural fields), weighing in the production capacities of the desalination facilities.

Water loss

Mekorot works continually to reduce water loss in its water systems, through integrated activities to identify, resolve, and prevent leaks. The transmission system is regularly and continuously monitored, in terms of throughput as well as pressure, allowing immediate identification of leaks. The Company is examining innovative technological means to help maintain low water loss and further reduce loss. These include technologies to identify and monitor leaks, submarines traveling the lines to identify leaks early, optic fiber sensors, satellites, and hydraulic shock prevention systems.

The Company also ensures that pipeline segments that are outdated or have cumulative malfunctions are replaced. Pipeline purchasing is performed at Mekorot in accordance with stringent criteria aligned with international standards, to ensure that pipelines can be retained in the ground for 40-50 years. Mekorot makes constant efforts to improve the precision of its water-loss measurements.



Activities to monitor water measurements

- › Daily data monitoring and analysis – Analysis of characteristics of water consumption at an hourly level, comparison of monthly consumption in different years to identify changes and trends, expanded analysis of extreme variations in monthly consumption, development of a water balance model, real-time water balance analysis, and more. This monitoring improves water-loss reduction through immediate identification of deviations in consumption and/or measurement, reduction of water theft, more precise estimates where necessary, and more.
- › Installation of double consumer connectors (y-connectors) allowing precise estimates using a control meter. The double connection also allows continuous monitoring of exceptional discrepancies between measurements on the two meters installed in connections of this type, so that malfunctions are identified more quickly.
- › Minimization of water theft and leaks through tours and monitoring by the Security Unit of the Company and through the use of an AMI system.
- › A project for continuous monitoring of pressures in the Scada system, as an indication of burst pipelines.
- › A system of optic fibers to sense and provide alerts of pipeline breaches.
- › Quarterly monitoring meetings, attended by the Water Resources Unit.
- › Use of dedicated applications to record and track water loss.
- › Installation of water meters at facilities without measurement systems; addition of balancing water meters between operational areas; and replacement of water meters to fit the quantity of water consumed, in order to achieve precise measurements.
- › Testing and calibration of water meters according to the required standards.
- › Reduction of evaporation in effluent reservoirs using floating covers / solar cells / experimental floating balls on reservoir tops.



Mekorot reported 4.1% water loss in its financial statements and balance sheets for 2022, 0.8 percentage points higher than the water loss rate of 3.3% in 2021, and generally higher than its average in recent years. Mekorot implemented three new systems in 2022, each of which affected water-loss measurement in its field: water meters, a remote reading AMI system, and the Yuvalim water supply system. The concurrent replacement of three key core systems is an unusual event for Mekorot. The process was rapid and efficient overall, but the combined replacement of three key systems still seems to have impaired the ability to analyze water-supply data in real time. At the same time, malfunctions were discovered in several water meters of one of the Company's new suppliers

over the course of 2022. The issue was analyzed through individual testing, and estimates were performed where necessary, such that almost all of the unmeasured quantities were billed to customers. Mekorot professionals believe that the actual water loss was lower than the figure recorded in its balance sheets and reported in its official publications. This claim is explained by the water-loss rates measured in the first half of 2023, which indicate that water loss in 2023 will return to normal levels of approximately 3.2%. The quantity of water supplied grew by approximately 4% from 2021 to 2023, which also reaffirms the expected annual increase of 1.8% and indicates that Mekorot billed its customers accurately and reliably for the quantity of water consumed.



Water loss at Mekorot over the years stands at approximately **3-4%** of the water supplied in **13,000** km of water pipelines

Approximately **20** km of water pipelines are replaced annually

150-250 km of new water pipelines are installed annually

Mekorot has more than **700** pumping stations with over **1,800** pumping units

Objective achieved: Improve efficiency and water loss at the Company by developing an application to report water-loss data, such as discharges into the environment, allowing monitoring and analysis of operational water-loss data

Future goals

- Continue to examine water-loss quantities in each district, every quarter, and create a work plan for improvement based on the findings.
- Create a multiannual plan to address water loss.
- Conduct research aimed at formalizing water-loss testing in transmission systems.

Environmental management and the climate crisis

Mekorot is an infrastructure company, producing, transporting, and supplying water with broad geographical reach; its activities therefore affect the environment. The Company's main impacts stem from infrastructure work, such as construction of facilities, installation of pipelines, building water pools, and drilling, as well as from the routine operation of water supply systems, which consume large quantities of energy and generate water discharges into the environment. We work to promote the protection of the environment, protect natural water sources, and optimize the use of water resources, including effluents, for the long term, while advancing the use of green technologies. We have established four areas of action aimed at reducing our carbon footprint and protecting the environment: **energy efficiency; increasing the use of green energy; reduction of water loss; and decreased use and transportation of chemicals nationwide.**

Energy consumption at the Company is a consequence of the supply of water and production at its facilities; the majority of consumption derives from water pumping, through the operation of pumps. We are promoting energy efficiency initiatives in several areas:

- › Reducing consumption of materials and shipping.
- › Acquiring equipment from local suppliers, which generates dual value: reduced air emissions from shipping, and strengthening of the domestic economy.
- › More efficient use of chemicals at facilities and reduction of concentrate removed into the environment.

Environmental management at the Company is under the responsibility of the VP of Operations and Maintenance and the VP of Engineering and Technology. Within environmental management at



Mekorot, **an environmental enforcement plan** has been formulated, approved by management in 2021, and reapproved in 2023. Under the enforcement plan, an environmental compliance survey was conducted to map environmental regulatory requirements, the activity of Mekorot and its existing control mechanisms, and the directives and procedures for compliance with the requirements of the law.

Beyond the regulatory aspects, Mekorot proactively conducts an environmental risk survey every three years. The Company has also formulated an enforcement plan to improve its compliance with the environmental regulatory requirements to which it is subject, and the mitigation mechanisms to manage the requirements, including mapping of activities to reduce risk.

Raising awareness – Mekorot joins the Running Out of Time event

A global relay event under the heading “Running Out of Time” began on September 30, 2022, aimed at sending a message to world leaders about the severity of the climate crisis and the critical need to fully commit and act urgently. As a national company championing environmental responsibility and the commitment to protect the environment, Mekorot encouraged its employees to participate in the event. The Company fully subsidized participation in the relay and counted the time invested in the event by its employees as work hours.

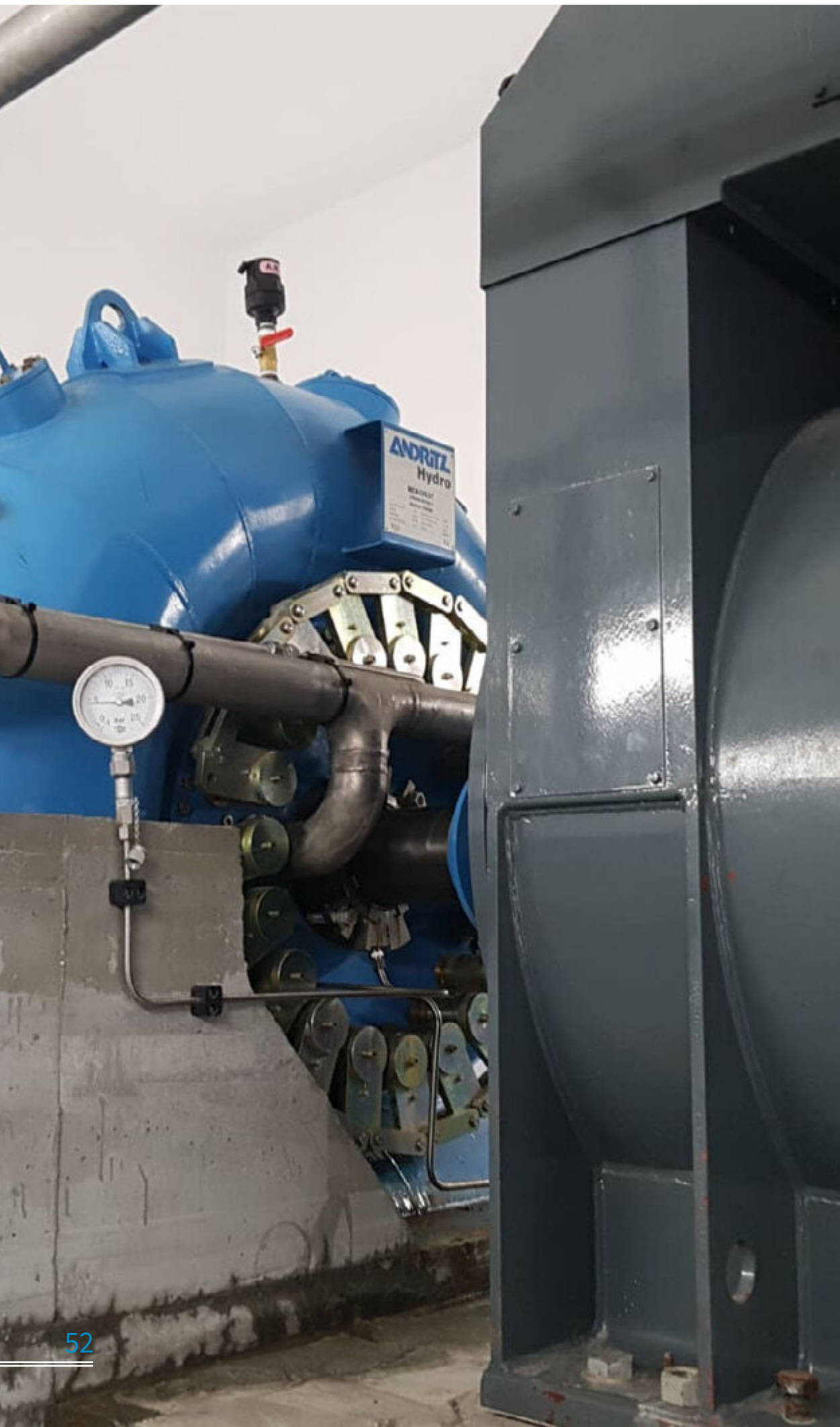
Energy efficiency

Mekorot consumes approximately 3% of the power consumed in Israel and is one of the largest electricity consumers in the country. The Company has set a goal of continuing to promote sustainable development, lead energy efficiency to the extent possible, and reduce the use of conventional energy sources. To save energy, Mekorot invests extensive resources in improving its efficiency in this area. Under the Sources of Energy Regulations, 5778-2018, of the Ministry of Energy, a survey was conducted in 2021 to identify energy conservation potential. The survey encompassed energy usage at the Company and presented actions executed and planned to improve energy efficiency. However, the survey was not aligned with the energy consumption patterns of Mekorot, as a major energy consumer with unique characteristics; accordingly, at the initiative of Mekorot, an agreement was reached with the Ministry of Energy regarding a unique outline for a survey adapted to the Company. This survey was submitted to the Ministry of Energy in June 2021; several months later, the survey was approved by the ministry and completed to its satisfaction. The results of the survey, which was designed to identify the potential for better energy efficiency, are being used by Mekorot as the baseline for energy efficiency processes in the coming years.

Strategic energy efficiency initiatives

- › **Technological innovation** – Advanced machine-learning and artificial-intelligence tools are used to improve nationwide energy consumption efficiency.
- › **Green energy** – To provide green electricity for internal use, Mekorot has built hydroelectric turbines and solar-power systems at or adjacent to its facilities. The Company has also signed a broad agreement for the acquisition of electricity from a fence-adjacent photovoltaic facility in the Be'er Tuvia region, and plans to install solar panels on the tops of its water reservoirs. Mekorot is currently considering pilot projects in the area of green hydrogen, to replace or reduce the use of diesel fuel in generators.
- › **Efficiency of pumping equipment** – The Company regularly measures the efficiency of its pumps and takes action to repair and replace energy-inefficient pumps. In 2019-2020, the frequency of pump replacement was increased, and an average annual sum of approximately NIS 20 million was allocated to this project. This effort allows reduction of annual energy consumption by approximately 20 million kWh on average. In 2021, approximately NIS 13.5 million was invested, with estimated energy savings of approximately 16 million kWh. **Pumping equipment was upgraded and replaced in 2022 to improve energy efficiency, through an investment of NIS 10.2 million. This process is expected to generate benefits in the form of energy savings of approximately 14.6 million kWh and cost savings on energy of approximately NIS 6.4 million.**





Use of diesel fuel in generators

Mekorot uses diesel-fueled generators as part of its emergency preparedness. The diesel-fueled generators provide a systemic backup for Mekorot in the event of a shortage of electricity. Mekorot also uses the generators as part of its shedding arrangement with the Israel Electric Corporation (IEC). Under the arrangement, when demand for electricity is high the IEC disconnects the power supply to Mekorot, and Mekorot relies on in-house power production using generators. In addition, under the directives of the Water Authority and the binding rules for emergency conditions in the Israeli economy, some Mekorot facilities are equipped with diesel-powered generators, which are required to be maintained in an available state to ensure the supply of water in emergencies. Each generator has an overhead diesel fuel tank located in a storage compartment.

²⁰ According to the emissions factor of the national power grid in Israel.

²¹ **Report correction:** Mekorot's corporate responsibility report for 2021 (p. 41) stated that the percentage of hybrid or electric vehicles in 2021 was 29%. The correct figure for 2021 is 27.3% – 246 hybrid or electric vehicles of 899 total vehicles. In 2022, this figure stands at 27.6%, or 247 out of 894 vehicles.

Mekorot supplied approximately **1.75 billion** cubic meters of water and consumed **2.35 billion kWh** of energy in 2022

The transition to renewable energy saved approximately **14.5 million kWh** in 2022, equivalent to about **6,840 metric tons of CO₂ equivalent**²⁰

2022 was a record year for monetary savings resulting from energy efficiency, at NIS **54 million**, compared with savings of NIS **36 million** in 2021

As of the end of 2022, approximately **27.6%** of vehicles at the Company are hybrid or electric²¹

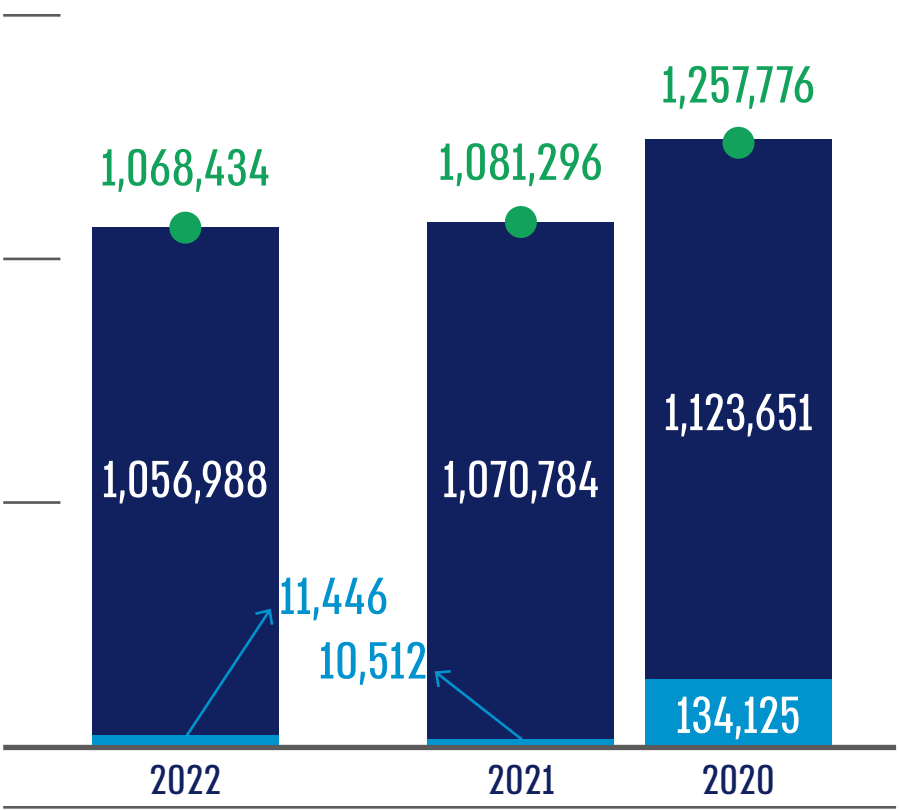
Carbon footprint

We measure our carbon footprint based on a methodology commonly used in this field, as part of an internal analysis of the overall environmental impact of the Company. Data on greenhouse-gas emissions of Mekorot refer to direct emissions and indirect emissions due to energy consumption.

- > **Direct emissions:** Direct (Scope 1) emissions of Mekorot primarily result from fuel burned by its vehicle fleet, fuels burned in generators under agreements with the IEC and as part of emergency preparedness, and emissions generated by the wastewater treatment process.
- > **Indirect emissions:** Indirect (Scope 2) emissions of Mekorot arise from electricity consumption and depend on the composition of fuels and water supply requirements.

● **Segmentation of the carbon footprint of Mekorot by scope**
(in metric tons of CO2 equivalent)

● Total | ● Scope 2 | ● Scope 1



²² Calculated according to the GHG protocol. The sharp decrease in the Scope 1 carbon footprint between 2020 and 2021 resulted, among other factors, from an update of the reporting methodology for emissions associated with treatment at the Shafdan.

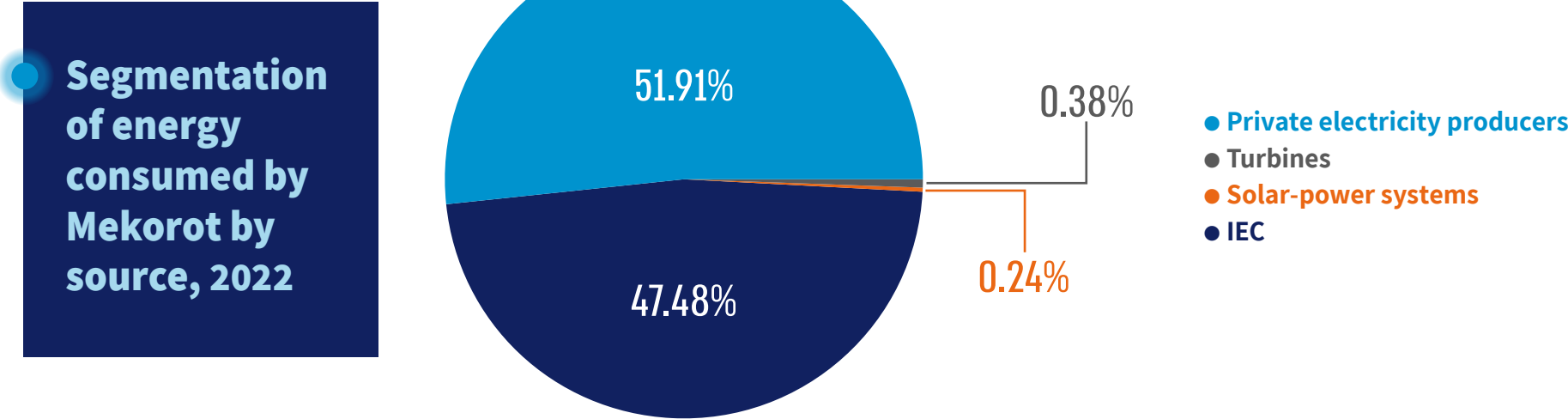
Over the three years since Mekorot initiated ESG reporting, its carbon footprint has fallen continuously, decreasing by 15% between 2020 and 2022.



The carbon footprint of Mekorot in 2022 was 2% lower than in 2013. This decrease is especially significant in view of the population growth and rising standard of living in Israel, which lead to constant increases in demand and in the volume of water supplied by Mekorot. These factors have a direct effect on increased energy consumption, a key component of the carbon footprint of Mekorot. This achievement is a direct outcome of Mekorot's strategic plan, which emphasizes the transition to self-production based on renewable energy sources.

Independent electricity production projects at Mekorot:

Hydroelectric energy	Solar energy
<div><div>> Surplus-pressure-based turbines: Pressure surpluses formed by water traveling from a higher pool to a lower pool are used to produce energy. Turbines are in operation at the Kfar Yehoshua site, the Tavor reservoir, the Metzger site in the Jordan region, and the Sabha site in Eilat. Total average capacity 1.7 MW; annual production of approximately 8.9 million kWh.²³</div><div>> Hydroelectric turbines: Two hydroelectric turbines built at the Tsafit pool (in the Sodom region) and Katef Tsofim (Ma'ale Adumim), with capacity of 0.5 MW each.</div></div>	<div>> Use of photovoltaic (PV) systems installed on building rooftops at the Sabha desalination plant in Eilat, rooftops of potable water pools in the Jerusalem water system, the Emek Hefer North plant, the Menashe station, and office rooftops in the Negev and Arava regions. Annual production approximately 5.6 million kWh.²⁴</div>



²³ The data are lower than in the preceding year due to a decrease in the operation of the turbines in Kfar Yehoshua in comparison to 2020, as a result of a malfunction.

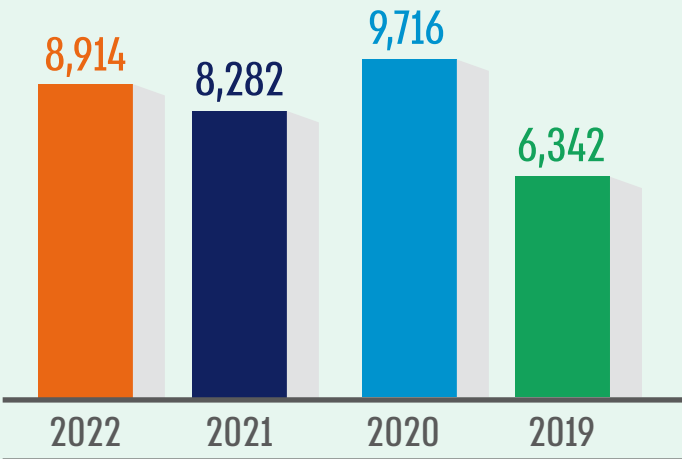
²⁴ Relative to data for 2021, the annual production of the systems decreased due to malfunctions at some of the plants and degradation of their efficiency.

Electricity generated by turbines grew by approximately 7% in 2022, while electricity generated by solar-power systems decreased by approximately 11%. The decrease in output of the solar-power systems mainly resulted from malfunctions of two transformers, which impaired

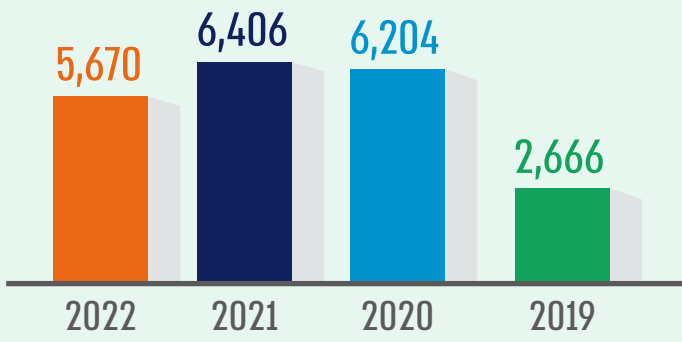
the efficiency of the solar-power plant at Sabha, as well as a natural and expected decrease in the plants' yield over time. Following a technical and economic examination by Mekorot, in 2023 it approved an upgrade of the solar-power plants aimed at maximizing yields.



Electricity production from renewable sources by year, 2019-2022
(thousand kWh)



Hydroelectric turbines



Solar-power systems for self-consumption



Green, sustainable action

Recognizing that our actions today affect future generations, we have set a goal of managing our intra-organizational activities and the services we provide sustainably. The green vision of Mekorot requires us to establish continuous sustainable processes for the long term. As part of this drive, we are leading a shared-value strategy, interweaving the Company's business objectives with national, social, and environmental benefits. Accordingly, we are committed to continual implementation of activities and projects that promote a holistic green perspective in all areas of research, development, and entrepreneurship, at all of our sites, for the well-being of the public, the environment, and our employees.

Our vision is based on the values of fairness, integrity, respect for nature and ecosystems, and caring for people and the environment everywhere. We work to create a positive impact that strengthens our interactions with the community and environment and maximizes value for the Company and our employees.



Resource consumption

The principal form of waste generated by Mekorot, as a water infrastructure company, is hazardous waste formed in water quality enhancement and testing processes, most of which is removed for burial at licensed sites, and sludge waste formed during the waste treatment process.

In 2022, Mekorot was responsible for generating 276.85 tons of hazardous waste. This figure reflects a decrease of approximately 7.5% from the quantity of hazardous waste in the preceding year. Two hazardous-substance incidents occurred and were reported in 2022 due to theft and leakage into the ground of diesel fuel. Mekorot was consequently required to remove contaminated soil from the sites as hazardous waste. The incident was reported to the Ministry of Environmental Protection immediately when the leak was discovered, as required. The Company mobilized promptly to address the incident, in cooperation with the Contaminated Ground Division of the Ministry

of Environmental Protection, the Water Authority, and the Nature and Parks Authority. The contaminated soil was removed for treatment, and later used for coatings at Mekorot facilities. An investigative committee was subsequently established to inquire into this severe event, in order to draw conclusions and make decisions to prevent the recurrence of such incidents. Mekorot acted and is acting to implement the recommendations, in coordination with representatives of the regulatory agencies. In addition, a lessons-learned tutorial video was produced and distributed to all employees, describing the preventive actions to be taken; employees who viewed the video were required to sign a declaration. No sanctions or fines were imposed in connection with this incident. Total solid waste of Mekorot stood at 1,161.82 tons in 2022.²⁵ The waste includes scrap and grit, which are transferred to Evron.

²⁵ This figure does not include the solid waste of the Karmiel and Shafdan wastewater purification plants, as Mekorot is not the owner of the plants and therefore does not report on their activity in this area. Also note that the data do not include data on water supply units in the northern district.

Mekorot is taking the following measures to prevent environmental nuisances:

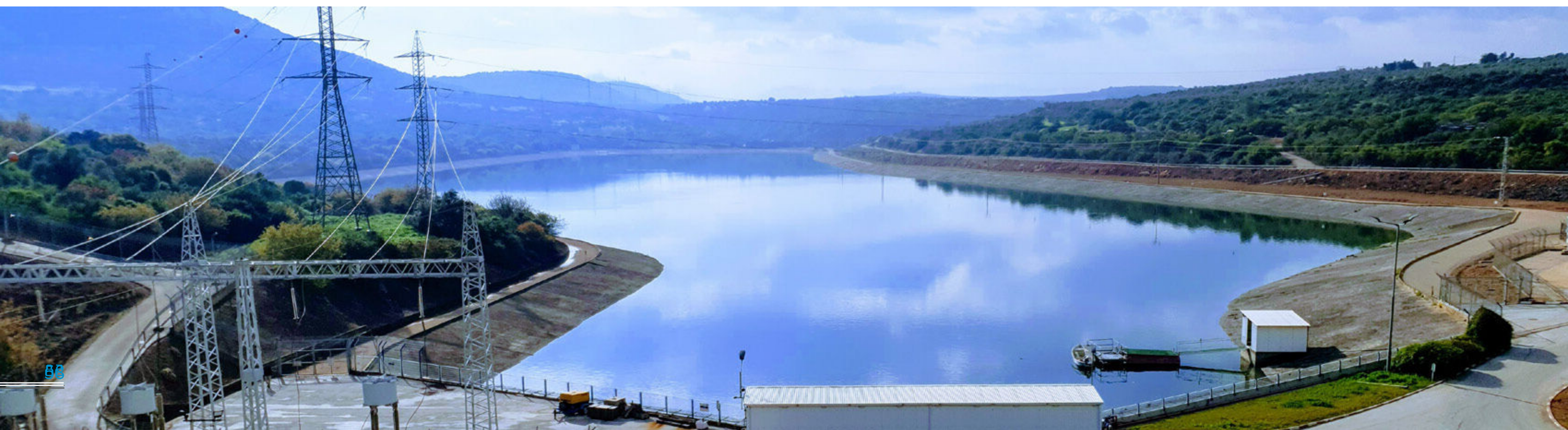
- › **Use of eco-friendly pesticides that do not harm water sources**
- › **Use of phosphorus-free anti-scalants**
- › **Production of chlorine on site and avoidance of shipping and transporting hypochlorite**
- › **Minimization of noise nuisances**
- › **Reduction of the use of chemicals and transition to biological pest control**
- › **Collaborations with the Ministry of Environmental Protection**

Green initiatives at Mekorot

- › **Mileage reduction – The Derech Erech campaign, calling for changes in travel habits; online meetings encouraged; transition to work from home**
- › **Remote work and learning**
- › **Reduced printing (mail, deliveries, Finance Department)**
- › **Printer scrapping – Reduction of the number of personal printers and transition to printing at printing centers**
- › **Efficient gardening**
- › **Hybrid vehicles used; expanded use of electric vehicles considered**

Future goals

- Expand the use of green energy, particularly solar energy, hydroelectric energy, and energy storage:
 1. Issue a tender for covering National Water Carrier channels, at a volume of approximately 80 MW.
 2. Begin construction of solar-energy facilities at Granot, at a volume of 10 MW, and at the Sorek pools, at a volume of 2.8 MW.
 3. Prepare framework agreements for the construction of solar-energy facilities at Mekorot sites, and allow the use of fences for the installation of solar panels.
- 4. Issue a framework tender for the acquisition of lower-cost electricity from private power producers, with preference for green electricity.
- 5. Examine the possibility of building extra-high voltage energy storage facilities at Mekorot sites.
- 6. Expand the use of hydroelectric turbines to generate electricity in additional regions.
- 7. Build solar-power systems (on land, and floating on open water reservoirs) in the areas and facilities of the Company at a volume of approximately 40 MW.
- 8. Operate a pumped-storage power plant at Tsuk Manara with capacity of 156 MW.
- Promote virtual power supplier licensing and reduce electricity purchasing costs: in 2022, Mekorot applied for a license as a virtual power supplier, with the aim of reducing the costs of purchasing electricity.
- Continue to reduce the use of chemicals by developing independent electrolysis-based chlorination capabilities, including the reduction of energy consumed to transport disinfection materials, according to the strategic environmental goals that have been set.
- Continue the activity of the working committee established in 2022 to manage climate risks.

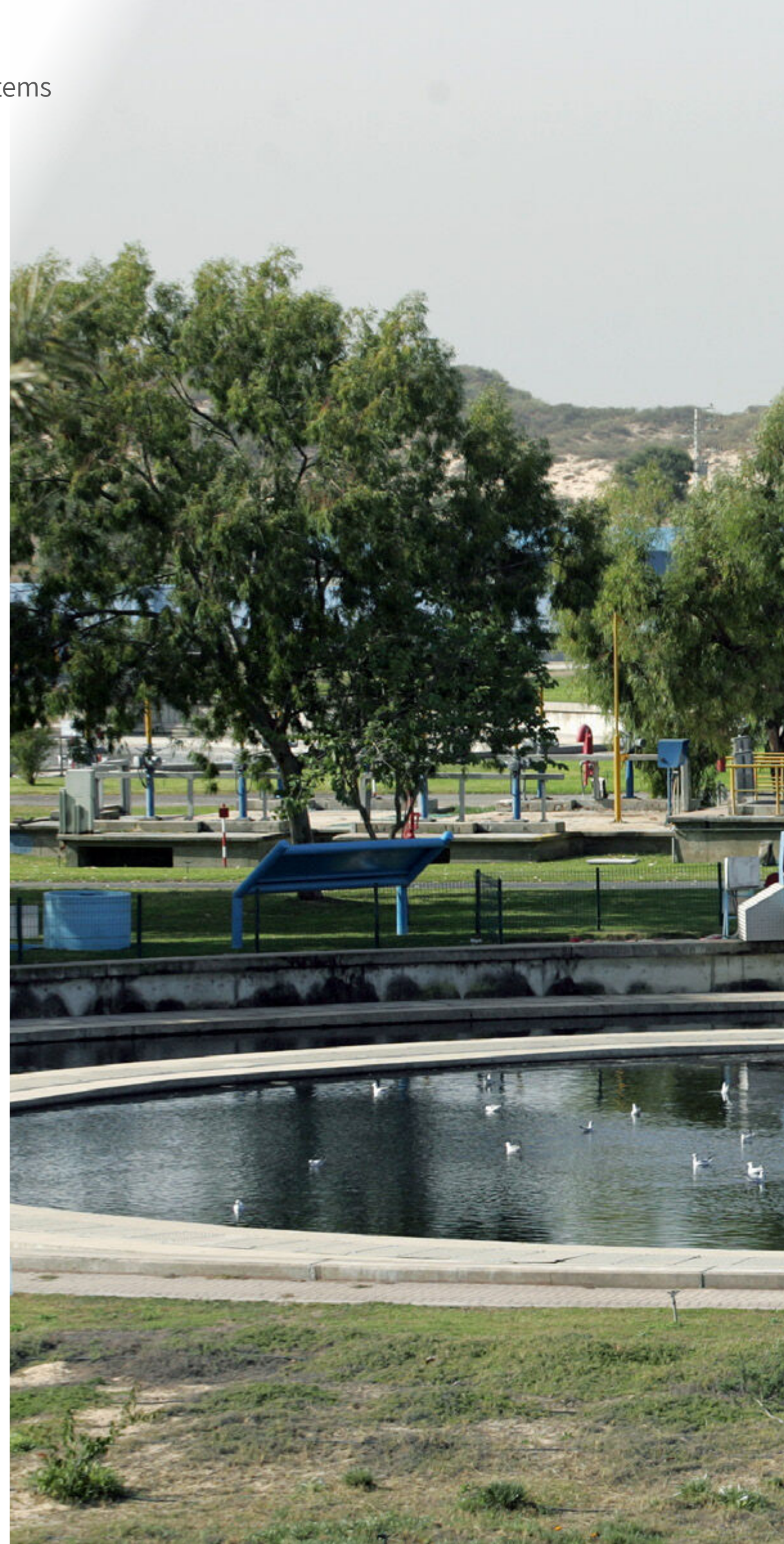


Protecting ecosystems

Mekorot is an infrastructure company with facilities located across Israel. As part of its sustainable management worldview, Mekorot works to protect ecosystems and biodiversity.

Landscape rehabilitation and nature preservation

Mekorot accords high importance to the protection of nature and landscapes. We have therefore formulated a document of enterprise-wide guidelines, as a foundation for detailed planning, to be used by facility engineers and landscape architects in complex engineering projects. In accordance with this document, Mekorot acts to reduce the space taken up by its facilities, while endeavoring to blend the facilities into the natural environment. This is achieved by planting trees, applying environmental development, painting facilities to blend with the landscape outline, burying facilities underground, and more. According to the type of work, in some cases Mekorot provides environmental compensation by building lookout points, bicycle trails, and effluent reservoirs, accessible for the benefit of the public.



The Jerusalem Fifth System

The Jerusalem Fifth System is designed to respond to the demand for water in Israel's capital, its largest city, adding to the four existing systems to solve the problem of transporting water to Jerusalem in the coming fifty years. This is a complex, long-term project at a cost of approximately NIS 2.5 billion, aimed at supplying the water needs of the city of Jerusalem and the surroundings in the future by building pumping stations, large-diameter pipelines, water pools, a tunnel, and a connection of this system to the municipal system.

In this project, a clear example of Mekorot's environmental sensitivity and protection of the environment as a top priority, the Company is devoting extensive resources to protecting the environment and landscape, and has adhered to several principles: including environmental considerations in planning, holding ongoing dialogue with the community in the area of the activity, applying green building approaches, and preserving landscape. Mekorot is also taking care to preserve biodiversity in the area, plant and relocate trees, and rehabilitate existing quarries. The project as a whole emphasizes energy efficiency, reducing its carbon footprint.

Protecting water sources

Water sources (drill sites, springs, and surface water) and water transmission systems (pipelines, pools, and stations) are exposed to contamination as a result of various hazards. Mekorot has approximately 3,000 facilities nationwide, some in proximity to potential environmental hazards such as industrial factories, gas stations, sewage lines, and waste disposal sites. Pollutants from these sites may seep into the ground, penetrating to contaminate groundwater. Mekorot has set an overarching goal of preventing and minimizing the contamination of water sources.

Its actions to protect water sources are grounded in the Public Health Regulations (Sanitary Quality of Drinking Water), 5773-2013. The Company also has a formalized working procedure in this area, aimed at establishing uniform guidelines for the identification, reporting, monitoring, and treatment of environmental hazards in the surroundings of drinking water supply systems and sources. Each district has an environmental protection engineer responsible for this area, who is charged with determining the risk level of hazards and overseeing inquiries.

As an infrastructure company, Mekorot has activities with the potential to contaminate the ground in various ways: use of lubricant oil for deep drilling, use of generators to protect the continuity of the water supply, and washing and disinfecting pipelines and water pools according to the requirements of the Public Health Regulations. To reduce environmental risk, Mekorot endeavors to reduce discharges to the extent possible, and to

reduce the use of materials bearing environmental risks; for example, expanding the use of water in place of lubricant oil to drill sites with depths of up to 400 meters, and maintaining a limited supply of diesel fuel, stored in containers that prevent ground pollution and allow continuous reporting of breaches. Mekorot also works to minimize environmental threats to water sources in order to preserve this national resource. Where it does not have the statutory authority to address and resolve a hazard, Mekorot contacts the regulators to request that they exercise their authority to remove potential hazards.

Removing PFAS from potable water drill sites

PFAS (per- and poly fluorinated alkyl substances) are a family of compounds with a wide range of uses. The compounds are highly stable in the environment and can migrate over great distances; exposure to the substances may have severe impacts on health. The Ministry of Health has therefore adopted the threshold values of the European Directive – 0.1 micrograms per liter in total for twenty substances – and the timeline of implementation by January 2026.

Several surveys and tests on the presence of PFAS have recently been conducted in Israel. The findings are concerning, with regard to sources of drinking water that are close to areas with potential PFAS pollution. The surveys discovered low concentrations of PFAS at several Mekorot drill sites, as well as some private drill sites.

Mekorot, in collaboration with Ben Gurion University, is carrying out a pilot project to test technology for removing PFAS from groundwater. The goal of the pilot project is to test IX, GAC, and Novel Tech removal technologies, in order to identify the optimal solutions for the removal of the various types of PFAS from groundwater. Related parameters are being examined, such as the quality of water obtained, the lifetime of the substrate, operational aspects, initial technological and financial feasibility (capex and opex), etc.



Restoring water to nature

Mekorot accords high importance to the protection of the environment, and of nature and landscapes. Maintaining, preserving, and rehabilitating natural water reservoirs and aquatic habitats for the long term are some of the most significant, important challenges in sustainable water management. Natural reservoirs are critical for the water sector in several ways: they provide high-quality, low-cost natural water, and their geographical locations across Israel reduce the risk of centralized damage, allow operational flexibility, and reduce transport distances. The volume of the reservoirs allows seasonal and multi-annual storage and modulation of water on a national scale, which, among other matters, helps protect the biodiversity dependent on the reservoirs. Efforts are being made to restore water to nature, based on the approach that this is a key element of sustainable operation.

Performing environmental surveys

Environmental risks to water sources are an issue of national importance. Mekorot has therefore embarked on a process of nationwide environmental surveys, based on a formalized engineering methodology, to identify potential sources of pollution that may harm or contaminate groundwater, including potable water drill sites of the Company. The Company also tracks focus areas of potential drinking water contamination, including sewage systems, wastewater purification plants, garbage dumps, landfills, quarries, gas stations, livestock farming areas, industrial zones with potential for environmental pollution, and more, and routinely



monitors water quality. The surveys examine physical, statutory, and sanitary aspects of the water systems, helping to preserve water quality, as a complementary measure to water pollution treatment and monitoring. To emphasize, the findings described below do not refer to water supplied to consumers, which is rigorously monitored and is of good quality, meeting all required standards. The surveys are conducted at the frequency required under the Drinking Water Regulations, which prescribe annual preventive surveys of water treatment facilities (excluding facilities used only for disinfection), surveys every five years for potable water production facilities, and surveys every ten years for potable water supply systems. All of the surveyed systems were found to be sound, and are subject to preventive maintenance, such that repairs are performed routinely according to field needs. 121 potable water drills were performed in 2022, compared with 113 in 2021. 51 treatment facilities of the Company were surveyed, in accordance with the requirements in the standards.

Rehabilitation of aquifers

Aquifer rehabilitation has been designated a national project, in view of its high importance. Mekorot began to proactively inject water into aquifers after they were damaged by seven years of continuous drought in Israel. The water injections are designed to rehabilitate the aquifers and improve water quality. Mekorot also operates drill sites to restore and purify contaminated or salinated water. A notable example is the Eastern Drain program, a flagship project to stop salination and rehabilitate the Coastal Aquifer. Desalination plants were built as a complement to aquifer rehabilitation, aimed at providing an alternative source of potable water and allowing the rehabilitation process, which requires reduced pumping and injection of water into the aquifers, to begin. Mekorot represents the state in aquifer rehabilitation projects and is responsible for building and operating pumping facilities to treat contaminants.²⁶

²⁶ The execution of the rehabilitation process requires state budgets and direction by regulatory agencies.

Rehabilitation of streams and aquatic habitats

Within its commitment to landscape rehabilitation and the protection of nature, Mekorot acts, in accordance with regulatory guidelines and in collaboration with green organizations and government agencies, to restore water to nature, with an emphasis on the rehabilitation of streams and aquatic habitats. Mekorot is also working to formulate an agreement with the Water Authority and the Nature and Parks Authority in this area. Within this activity, based on permits from the Water Authority, Mekorot returns quantities of water to nature; these quantities are expected to grow based on Water Authority allocations and on the amount of desalinated water available. In 2022, **Mekorot restored approximately 30 MCM of water to nature**; in hydrological terms, this year was not as good as 2021, when Mekorot restored approximately 40 MCM of water to nature. The group also performs deep water drilling, intended, among other purposes, to restore water to nature and divert it into streams where the flow of water has stopped, as part of the rehabilitation process. These efforts are underway in the Golan Heights and Galilee regions.

Discharges into the environment

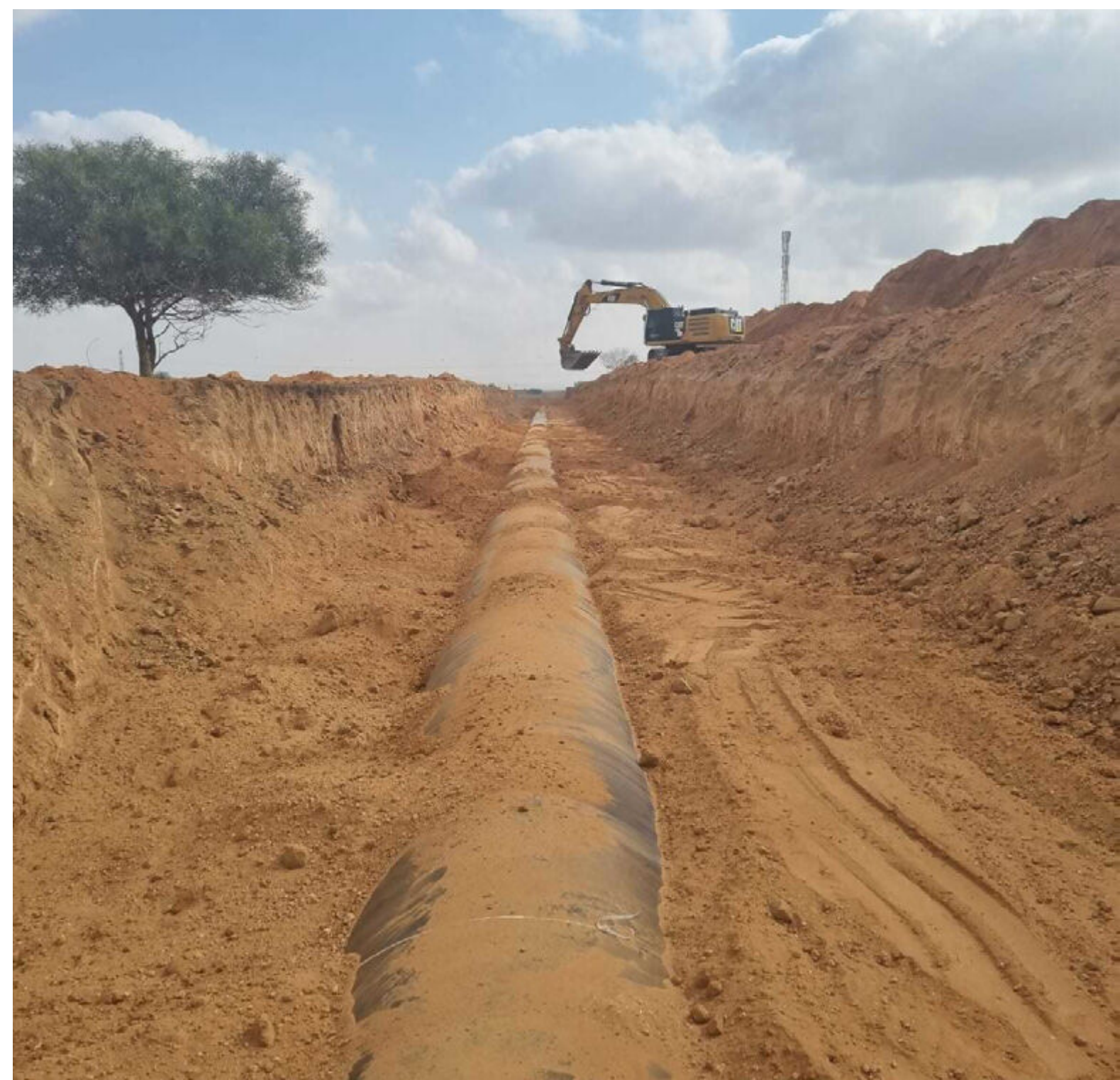
As part of the routine operation of Mekorot water infrastructures, water is occasionally discharged into the environment, involving potential risk of contamination of the ground and water sources. Mekorot operates in accordance with an annual permit, in collaboration with the Water Authority and the Ministry of Environmental Protection, and ensures that discharges are performed only in compliance with the established requirements and permits. Accordingly, in the case of necessary discharges not included in the annual order, Mekorot applies for a dedicated authorization.

This area is managed and monitored by headquarters, under the supervision of the VP of Technology and Engineering and the VP of Operations. Most discharges by Mekorot are from potable water drilling and do not entail a risk of ground contamination. Each discharge is reported directly from the field, using an app installed on field staff's mobile phones. The reports are automatically distributed by email to all of the recipients required according to the authorization. In 2022, the system for gathering data on the discharges was upgraded, and an app was developed for entering data on discharges into the environment. The discharge plan and the application for an authorization for 2023 were collated using the new system, by environmental protection engineers at the districts. 1,076 discharges into the environment were reported in 2022. For further information regarding discharges into the environment, see the Periodic Report for 2022, p. 111-113 (in Hebrew).

Eastern drain project

The eastern drain drilling project led by Mekorot is a key part of its overall plan to restore the southern part of the coastal aquifer. The area to be restored extends from Ashdod in the north to Kibbutz Nir Am in the south, and from the coast in the west to Moshav Bnei Ayish in the east.

The goals of the restoration program are to stabilize the level of groundwater, preserve a westward gradient, halt aquifer salination, and protect the operational reservoir of the aquifer.



Reduction of light pollution

The plan for transition to environment- and nature-friendly lighting at Mekorot facilities is part of the sustainable development policy led by the Company in recent years, aimed at protecting the natural environment and natural resources in the present, for the generations of the future. Within the plan, formulated in collaboration with the Nature and Parks Authority, the Society for the Protection of Nature in Israel, the Ministry of Environmental Protection, and the Water Authority, most of the Company's facilities are darkened at night and only illuminated when necessary, to minimize the negative impacts of lighting on the surrounding flora and fauna. Lighting plans are also adapted to routine operational needs, to prevent light leakage; where necessary, facility lighting is replaced with soft LED bulbs.

The plan has been implemented in full at the Eshkol site, one of the largest Mekorot facilities. The Company is currently working to implement the plan at all of its facilities, within a comprehensive work plan, based on prioritization of lighted facilities located in areas with higher ecological sensitivity. A series of implementation procedures has been formulated as part of the plan, including procedures for lighting planning, examinations of facility lighting planning, adaptation of illumination power to types of usage, examination of photometric planning, and more.

134 facilities
located in
ecologically
sensitive areas have
been darkened

Energy savings
from this
process stand at
approximately **NIS**
364,500
per year

The project is the outcome of interfaces between two concurrent processes:

- › An ecological risk management process in progress at the Company, which has contributed significantly in other ways, including time and resource savings in lighting planning, reduced maintenance costs, improved efficiency of electricity consumption, and, consequently, reduced greenhouse-gas emissions.
- › The Company's collaboration strategy, within which employees launch and respond to calls for proposals, in collaboration with various companies, overseen by the Innovation Unit, jointly with content leaders at the Environmental Protection Unit.

Prevention of invasive species

Invasive species pose a serious threat to biodiversity and ecosystems. As part of our commitment to the protection of Israel's unique biodiversity, Mekorot has entered into a four-way agreement with the Society for the Protection of Nature in Israel, the Nature and Parks Authority, the Ministry of Environmental Protection, and the Water Authority specifying guidelines to prevent invasive species from becoming established and address invasive plants in the course of the construction, development, and operation of Mekorot facilities and pipelines. Formalized work processes were established within the joint project for cases in which an environmental landscape annex is required for an activity of the Company, or the activity occurs in a nature preserve.

Within the invasive species prevention projects at Mekorot sites (including the Western Yarkon Pipeline, the Kohav Ya'ir 30 Pipeline, and Mihmoret), inspection tours are conducted with the Nature and Parks Authority, and pruning and spraying are performed in line with the agreements.

Biological pest control using barn owls

Mekorot is a participant in a national initiative to use barn owls and falcons for pest control in agricultural areas, led by the Society for the Protection of Nature in Israel, the Duchifat Foundation, and the Plant Protection and Audit Services at the Ministry of Agriculture. Within the sustainable development activities promoted by Mekorot, dozens of nesting boxes were placed at its water reservoirs, to help fight rodents and reduce the need to use harmful poisons that endanger humans and the environment. The barn owls, which feed primarily on rodents, form a key element in biological pest control, helping to reduce the number of rodents in the vicinity of facilities and agricultural fields. Rodents can damage water reservoir embankments, as well as electricity and communications infrastructures; reducing the rodent population helps maintain a regular water supply and protect groundwater.



Future goals

- Use environment-friendly pesticides, reduce the use of chemicals, and transition to biological pest control, which reduces harm to water sources.
- Implement the project for reducing light pollution throughout the Company.
- Use phosphorus-free anti-scalants.
- Produce chlorine on site and avoid shipping and transporting hypochlorite.

Social

65-90 →

Resilience of the water supply to the public

We at Mekorot see the consistent supply of high-quality drinking water as the foundation of our success. Climate change and global warming are causing reduced availability of water in natural sources, heat waves, floods, and increased aridity, accompanied by fires, and a corresponding rising demand for water. In the awareness that water is an exhaustible resource, we apply prudent and sustainable resource management aimed at meeting the present demand and providing for long-term needs. In Israel, where a desertification process can be expected as a consequence of climate change, the optimal solution for the consumption of potable water from natural sources is a massive transition to seawater desalination. This substitute requires altering water supply systems, reinforcing the transmission system and production facilities, and reducing the extraction of potable water from natural sources. Within Mekorot's effort to prepare for every scenario and possibility, including security threats, the Company is working to develop some of the most advanced means and processes in the world for

water monitoring, water safety, and water incident management, to help reduce dependence on external factors. Mekorot employees are dedicated and faithful in their work, in any field and weather conditions, delivering personal, professional, reliable service to supply water of the utmost quality, availability, and trustworthiness. Integrated service management is performed by the Operations and Maintenance Division, the Engineering and Technology Division, and the Development Division, each overseeing the activities relevant to its core operations. A board of directors' committee oversees operations, development, and planning. As a government water company, Mekorot reports to the Water Authority, which manages the water sector in Israel. Mekorot supplies water to consumers based on water quotas set by the Water Authority. The Water Authority accords high importance to the resilience of drinking water supply systems, and has a department dedicated to this issue. Mekorot is working to upgrade its water quality monitoring system, set up a national control room, upgrade its cybersecurity system, and establish an alternate disinfection system, to improve water supply reliability and reduce dependence on suppliers of chemicals.

At sea and on land, in emergencies and every day – committed to a resilient water supply

In February 2023, the resilience of Mekorot's water supply to the communities of northern Israel was tested, in an unprecedented multi-arena incident.

Earthquakes focused in Turkey and affecting the entire Middle East had an impact on more than 90 drill sites, mainly in northern Israel, leading to high turbidity levels that necessitated the immediate cessation of activity for 24 hours at these sites.²⁷

The availability of desalinated water was simultaneously impaired to a significant extent due to winter storm Barbara, which led to higher sea levels and higher turbidity of sea water; as a result, several key coastal desalination plants were partially shut down (the plants are sensitive to the quality of raw seawater, which can affect preliminary treatment).

At the time, Mekorot was conducting routine maintenance on the National Water Carrier, which is planned for the winter months, when demand trends relatively lower. The maintenance work substantially reduced the availability of water from the Kinneret Sea.

Contending with multiple arenas and a combination of circumstances that put the resilience of the water supply to a major test, Mekorot acted quickly and effectively to provide solutions for all Israelis. Thanks to integrative management of water from a variety of sources at the national level, Mekorot's nationwide reach, its ability to pool resources and operate flexibly, and its prudent deployment of the national system, Mekorot was able to supply the national demand for water comprehensively and successfully.

Proper preparation and prudent conduct during the event averted harm to the resilience of the water supply, throughout the country and specifically in the north.

²⁷ When the incident was over, the drill sites that had been shut down were drained until normal results were obtained, and then returned to regular operation.



Water supply continuity

To ensure a high-quality, safe, regular, reliable water supply for the broad range of current users and needs, Mekorot operates ten integrative command and control centers that control approximately 3,000 water facilities remotely, in real time, including drill sites, pumping stations, and pipelines, using IT systems and advanced technologies allowing effective and energy-efficient operation. The command and control centers take in hundreds of thousands of data points from the field every day, creating a status snapshot of water quality, safety, and delivery, at the level of individual facilities as well as the facilities in aggregate. The systems can also issue alerts of unusual situations, so that they can be addressed immediately. The control rooms operate 24 hours a day, seven days a week.

The Company also uses local systems for automatic operation, without intervention from the command center. When necessary, these systems allow the control system to intervene in routine operation remotely through a secure online connection. Control is performed through several communication channels, including landline, wireless, cellular, and satellite communications. Mekorot also operates an automatic remote reading (AMR) system, which can read water meters remotely and provide alerts of sabotage, damage, or failure of water meters. The control systems provide a real-time overview of the water sector at any moment, allow remote control over all of the Company's water facilities, and ensure the reliability and availability of the water supply.

Preparedness to supply water during crises

As a national water infrastructure company, Mekorot is obligated to prepare and preserve its preparedness to cope with any emergency in Israel. The Company has a management system backed by dedicated procedures to manage water crises arising from climate risks, earthquakes, or security threats, among other factors. In an emergency, Mekorot would serve as the execution arm of the Water Authority, and would be required to ensure a regular water supply to its consumers, including essential enterprises and livestock farms. To meet this requirement, Mekorot has a special unit for emergency periods and events. The unit is the core of the Mekorot staff for preparation of the system to cope with crises.

In the event of a threatened crisis, Mekorot operates according to the procedures and adapts

means to enable it to cope with the anticipated crisis in all areas of its activity: water supply, water security, water quality, information security, communications, personnel, and emergency inventories, in line with regulatory guidelines. The Company is working on three levels to allow optimal utilization of water sources and backups during supply disruptions: connection of consumers to more than one system; reduction of areas served by a single water source; and connection of additional areas to the national network. Our water supply system allows continued activity and use of surplus water during a crisis, or during load shedding leading to a shutdown of desalination plants. When load shedding is expected at the IEC, Mekorot prepares in advance by increasing water stores and using alternate water sources.



Water security

The geopolitical history of the State of Israel has led Mekorot to develop strategy to protect water sources and potable water supply systems for agriculture and industry. We have developed methods of coping with threats to water security, including an advanced risk-assessment system, an event management system, alert and protection systems to prevent penetration and damage of the Company's facilities, capabilities

for preparedness for scenarios, and training of professional teams. The security approach implemented by the Company minimizes the risk of a failure to supply water as a result of various scenarios, and improves protection against sabotage and damage to equipment. The Company takes various actions within this approach, ranging from the water sources to the supply to customers, primarily the following:

- > **Security-focused system planning**
- > **Fencing and security of facilities**
- > **Integrating advanced technologies with physical and electronic protection**
- > **Deployment of means of discovering and identifying hazards**
- > **Installation of a sophisticated system for continuous monitoring, command, and control throughout the supply system, for early alerts of deterioration of water quality**
- > **Development and implementation of strategies, including procedures and methods to cope with contamination incidents**

Connecting non-connected regions to the national carrier system

Water supply to Arava region communities

Mekorot continually develops new solutions to increase water sources in the Arava region, in order to support settlement in this area, promote accelerated development of agriculture, and improve residents' quality of life. The National Water Carrier connects northern and southern Israel; the southernmost town connected to the system is Mitspe Ramon. Arava residents are not connected to the National Carrier, and are currently supplied with water from local drill sites with high salinity levels.

By building new brackish water desalination plants and connecting Arava residents to the national supply system and the Sabha desalination plant in Eilat, Mekorot aspires to provide a long-term solution for the water scarcity suffered by the region for many years. Within its multi-annual plan, **Mekorot aims to supply 32 MCM of water to the southern Arava and 70 MCM of water to the middle Arava by 2030, thereby meeting the annual consumption target.** As part of its preparations for a regular supply of quality water in the future, the Company is investing in research and development of new technologies for water desalination and membrane treatment, to maximize utilization of water sources.

In 2022, within the plan for the southern Arava, the main development work on five reservoirs was completed (Timna, Ofarim, Yotvata, Tsofar, and Notsa); the reservoirs are expected to become operational in 2023. Mekorot also completed a new section of the pipeline from Naot Hakikar to the Ofarim pipeline, along Highway 90 in the mid-Arava region, in 2022. The pipeline, completed and activated in March 2022, allows desalinated water to be supplied from the national water system to the mid-Arava for the first time.

Jordan Valley water supply

The water supply in the Jordan Valley primarily relies on local drilling. In the last few years, groundwater levels in this region have consistently decreased, jeopardizing the resilience of the area's water supply. To compensate for the shortages and ensure the availability of the water supply in this region, in 2022 Mekorot undertook a complex, rapid procedure involving the installation of a continuous pipeline from Jerusalem, along Highway 1, to the center of the valley. This 40-km pipeline was installed and put to use in a targeted operation completed in just three months. The water pipeline serves as a supplementary source, adding the missing quantity of water to bridge the gap left by local drilling.



Water management and control quality standards and laboratories

The Mekorot water supply system is planned for maximal reliability, through the operation of multiple water sources feeding potable water into the national water system. The Company does its utmost to protect water quality and public health. To ensure that water quality is at the required standard, Mekorot applies controls and continuous monitoring to examine quality and detect contamination, throughout the supply chain, from the water source to the final delivery point, based on a sampling plan compliant with the requirements of the Drinking Water Regulations and approved by the Ministry of Health. The sampling plan is applied at production sites as well as in the water supply system. Each sample is tested for several factors (microbial or chemical), at a licensed laboratory and/or in the field. To protect water sources and the spheres of influence of the production sites from environmental pollution, the Ministry of Health has established protective zones surrounding drill sites. Spheres of influence are set at the protective zone plus 100 meters. This is a complementary measure to the treatment and monitoring efforts of Mekorot, highlighting our approach to water quality assurance.

Control activities include, among others:

- > Preventive sanitation surveys.
- > Routine water quality tests at production, acquisition, and treatment facilities and in supply systems.
- > Disinfection of water at exits from production and acquisition plants, to protect water quality, in accordance with the requirements of the Ministry of Health, and continuous monitoring of the concentration of substances.
- > Continuous measurement instruments, such as turbidity

meters, installed in supply systems and at exits of treatment and disinfection facilities, for constant monitoring of water quality.

- > Supervision of water systems through staffed control rooms operating 24 hours a day, which receive data on the water supply and water quality from measurement devices, and immediate alerts if a measurement threshold is crossed or if a malfunction is suspected.

Any alert of a suspected malfunction is addressed immediately through corrective action, and, if necessary, reported in real time to the Ministry of Health. The corrective actions may include correcting the disinfection level, redirecting excessively turbid water to reservoirs for sedimentation of the turbidity, switching to alternate sources of potable water, washing and draining pipelines, and repeated testing of the water to track the effectiveness of the actions taken. As part of its commitment to transparency towards the public and its stakeholders, Mekorot releases an annual Drinking Water Quality Report, in accordance with the Drinking Water Regulations. The report, which is accessible to the public, describes water quality and any unusual incidents over the past year. As stated in the report, the percentage of deviations in bacterial measurements is minuscule (0.19% of bacterial tests performed on the water supplied), reflecting a multi-annual trend of low deviations relative to the guidelines of the World Health Organization and the United States Environmental Protection Agency (EPA), which accept up to 5% deviations.

Less than **0.5%**
deviations in water
quality in both microbial
and chemical tests

Mekorot operates
approximately **800**
advanced, dedicated
treatment facilities to
improve, disinfect, and
treat water according to
the highest standards
prevailing in the
Western world²⁸

²⁸ This figure refers to facilities for filtering, desalination, adsorption, vaporization, and dilution; dilution hubs used to treat potable water only; and approximately 700 chlorination facilities and 40 UV purification facilities.



Summary of microbial and chemical tests performed in accordance with Ministry of Health standards and guidelines, 2020-2022²⁹

Test type	2020		2021		2022	
	Number of tests	Percentage of normal tests	Number of tests	Percentage of normal tests	Number of tests	Percentage of normal tests
Microbial tests (groundwater facilities)	15,239	99.81%	17,037	99.77%	15,115	99.81%
Microbial tests (supplied water)	30,509	99.53%	29,443	99.71%	30,705	99.81%
Total microbial tests	45,748	99.62%	46,480	99.73%	45,820	99.81%
Chemical tests	101,184	99.97%	99,794	99.97%	93,180	99.96%
Total tests	146,932	99.85%	146,274	99.90%	139,000	99.91%

Mekorot has **6** laboratories that perform approximately **380,000** tests annually, for Mekorot as well as private companies. The laboratories are recognized by the Ministry of Health, licensed by the Laboratory Licensing Authority, and compliant with the **ISO 17025** standard

Future goals

- Provide approximately 90% independence in water supply during emergencies.³⁰
- Comply with the annual sampling plan, performing 145,000 microbial and chemical tests.
- Preserve high water quality, at up to 0.5% deviations in water quality in both microbial and chemical tests.

The water supply resilience goals, which also refer to the quality of water supplied, are long-term goals; the key challenge is to maintain resilience and quality over time. Mekorot met all of its resilience and quality goals in 2022.

²⁹ To improve the transparency and coherence of Mekorot's public reports, a decision was made to adjust its reporting methodology in the area of water quality testing in its corporate responsibility report to the annual publications of the report on drinking water quality.

³⁰ This figure refers to 60-90 liters of water per day per capita in emergencies.

Approximately **10** studies are performed each year in the area of water quality, seeking solutions for water treatment, wastewater treatment, testing of new monitoring devices, and more

Responsible behavior towards employees

Our employees are our most valuable asset, and we at Mekorot consider them the bedrock of our success. We therefore strive to create a safe and respectful work environment. The guiding values at Mekorot in general and for management in particular are cooperation, mutual respect, transparency, and good communication. We are committed to protecting our employees' health and safety, and creating a workplace that promotes equal opportunities and individual and professional development for every employee. The relationship between the employee union and management is led by the VP of Human Resources and the chairperson of the union; we see our employees and their union representatives as partners on our journey and in our actions.



Digital transformation in human resources – adopting a customer success mindset

To cope with the challenges of Israel's water sector, over the last few years the Company has built and implemented a comprehensive strategic plan, an element of which is a technological and digital revolution – including the replacement of decades-old core systems, automation of many manual processes, and the use of advanced software, applications, and technologies in every area.

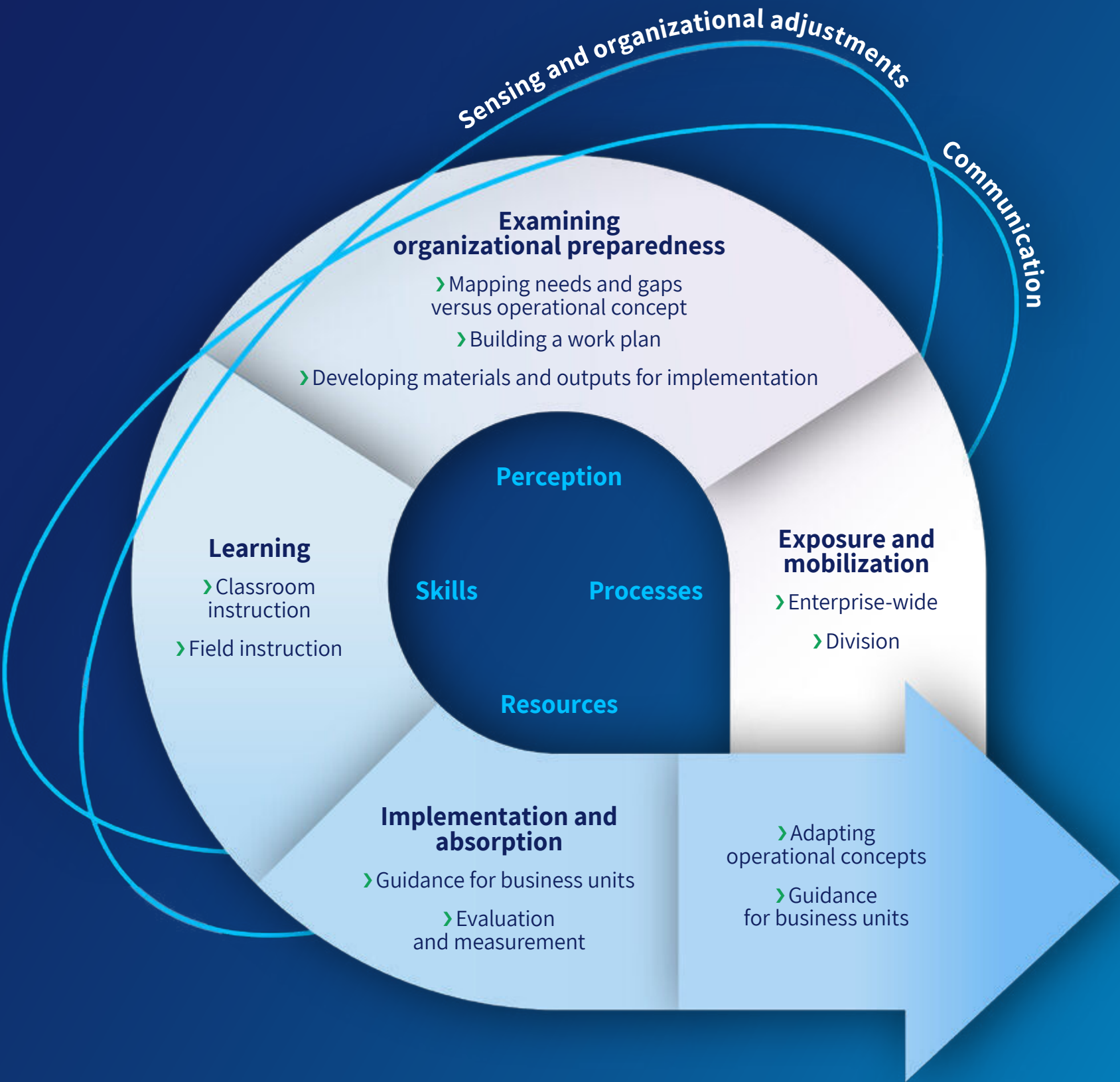
While aspiring to apply innovative tools and concepts, Mekorot is faced with the fact that it is an 85-year-old geographically decentralized government company, subject to regulation and collective agreements, encumbered with bureaucratic processes, and a heterogeneous multigenerational organization whose employees have served for an average of twenty years. This has highlighted our awareness that a major digital transformation in human resources was required, not only as a technological or systemic project, but at the level of business and organizational processes that can generate cultural change and exert a true impact on human capital and the ways it is deployed.

The purpose of the digital transformation in human resources is to support fundamental change – a conversion from

an antiquated unit managing staff with a focus on administration and payroll to an advanced, leading human-resources system.

For that purpose, Mekorot adopted a concept referred to in the technology services industry as **customer success**. A joint team was established to implement this concept and adapt it to Mekorot, drawn from human-resource units (organizational development and change management) and information-systems units. The team works integratively on all of the aspects necessary to successfully implement process-related and technological solutions among employees, who are seen as customers in this context, for all intents and purposes. This work encompasses implementation, training, and change management, focusing on managing relationships between all of the partners in the project.

The human-resources transformation process led to improved business results and monetary savings estimated at tens of millions of shekels. The process made it possible to apply hybrid work-from-home models while maintaining strong connectedness to the organization, strengthen employees' sense of belonging, and maintain routine practices that respond to employees' needs. This transformation also allowed innovative projects in this field to be promoted.





Employment data³¹

There are **1,562**
employees at Mekorot

99% of the employees of
Mekorot are employed full time

99% of the employees
of Mekorot are covered by
collective labor agreements

86% of employees
are permanent (including
local permanence)

26 women took maternity
leave in 2022. Of these,
one employee chose not to
return to the Company after
maternity leave

³¹ Data as of the end of 2022.

The average age of
Mekorot employees
is **47.2**

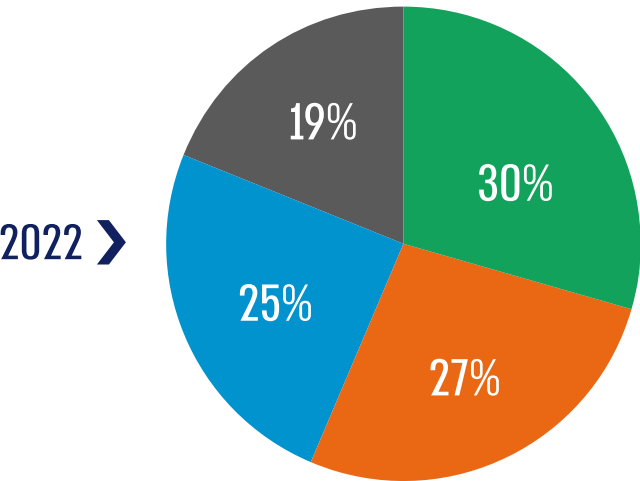
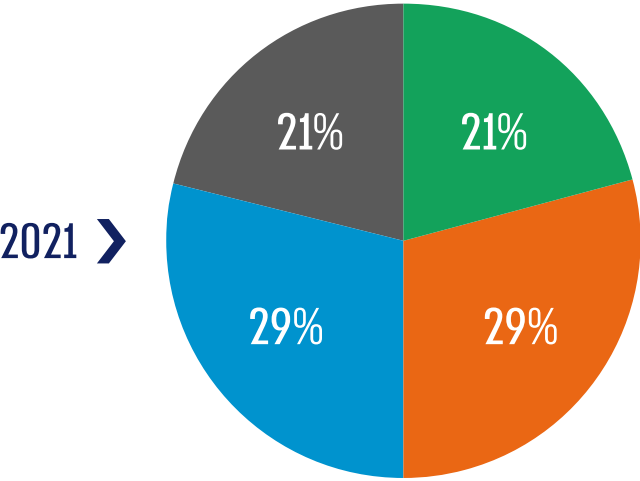
The average length
of service of Mekorot
employees is **17** years

23% of the
Company's employees
hold academic degrees

9 employees completed
higher-education programs
with tuition subsidized by
the Company in 2022

100% of
employees went through
a feedback process

Geographical distribution of Mekorot employees



● North | ● Center | ● Tel Aviv | ● South

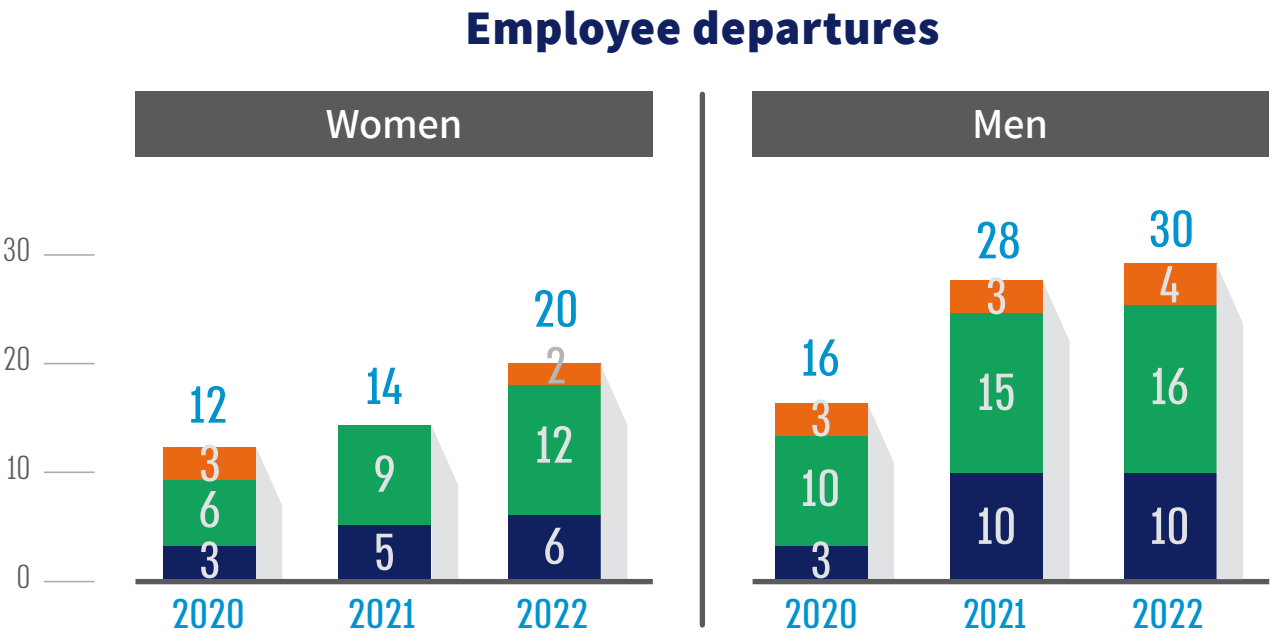
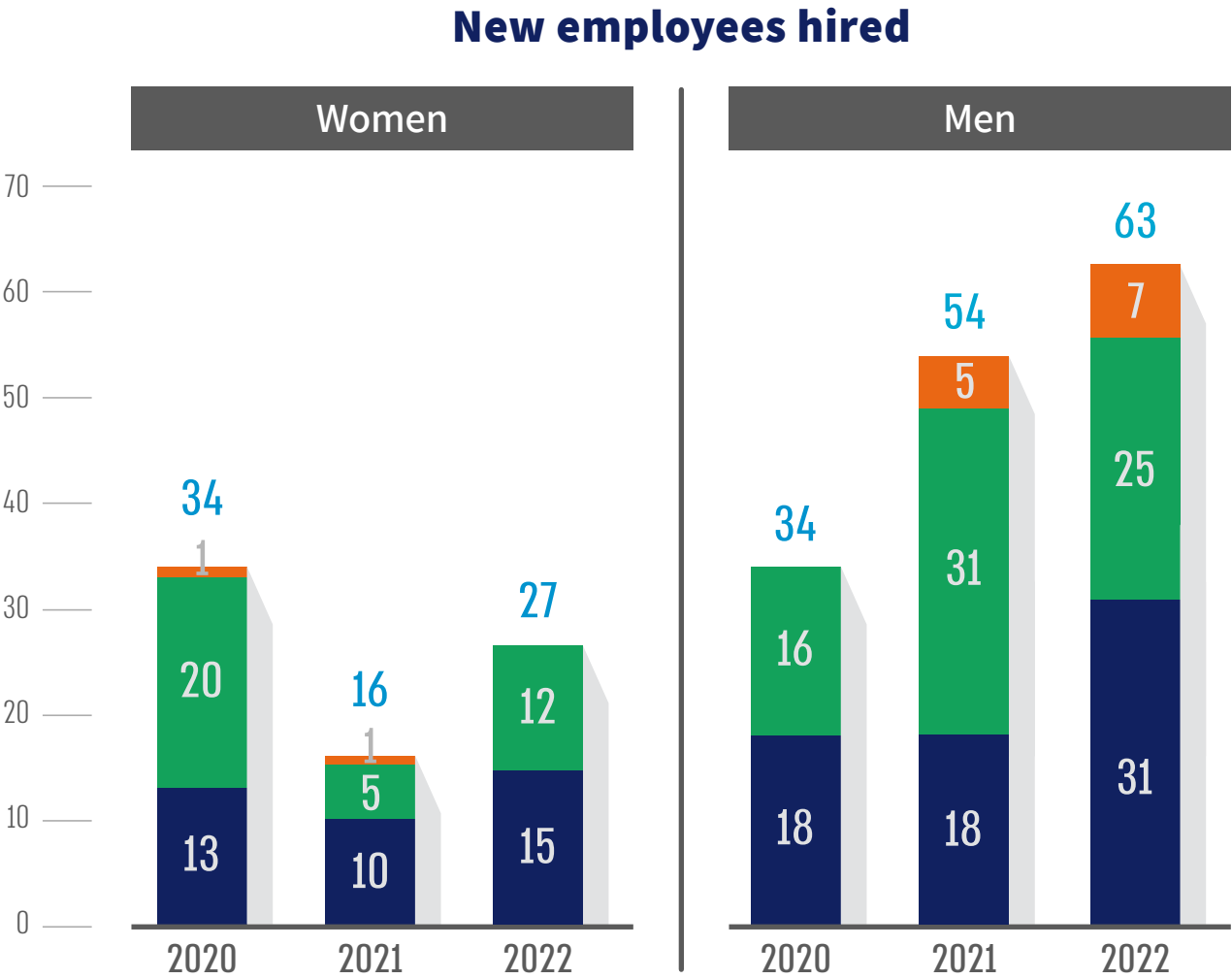
Headcount segmented by age, gender, and rank



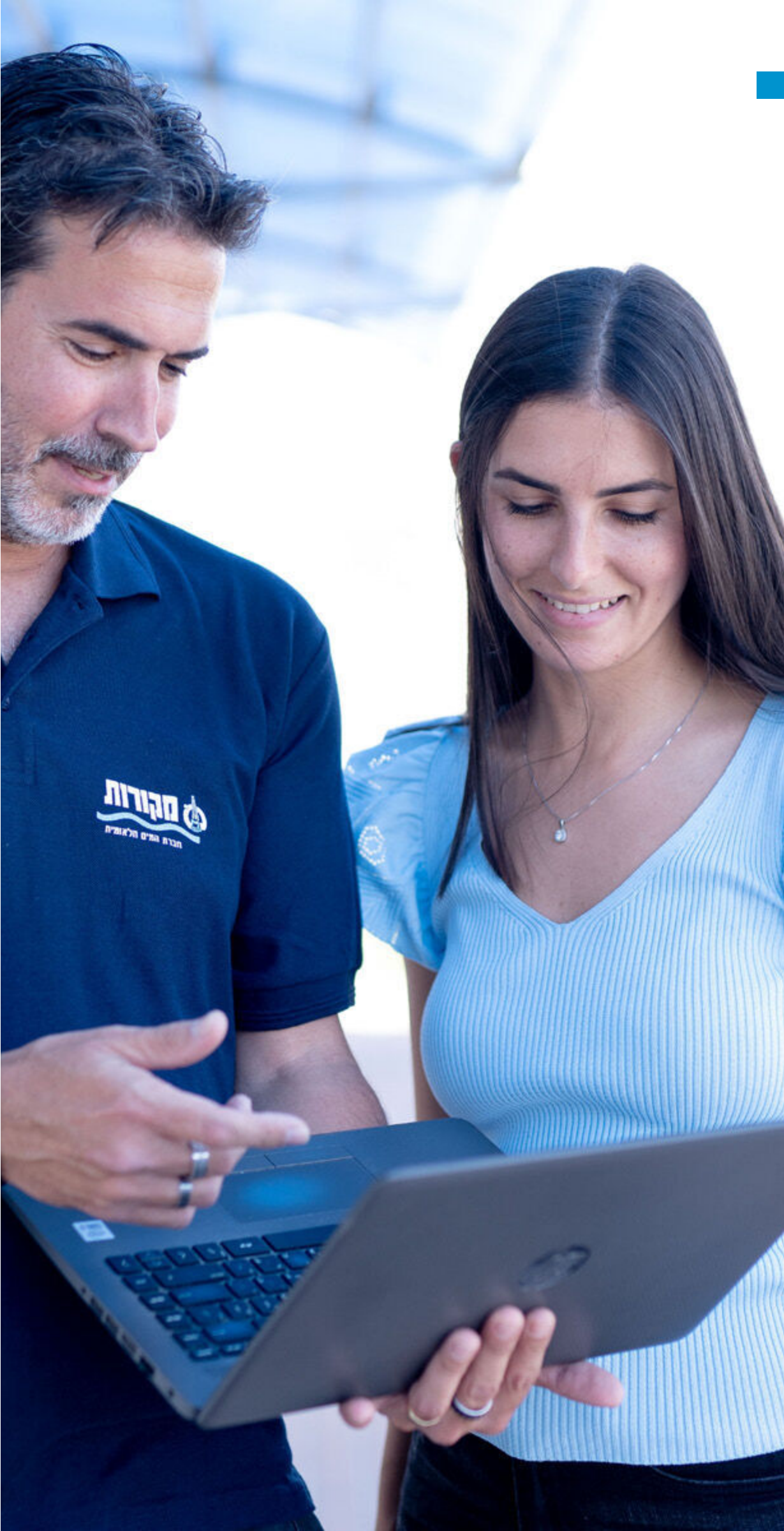
		2021			2022		
		Women	Men	Total	Women	Men	Total
Senior executives	< 30	0	1	1	0	0	0
	31-50	1	1	2	2	1	3
	50+	2	6	8	8	1	9
	Total	3	8	11	10	2	12
Middle management	< 30	0	0	0	0	0	0
	31-50	5	12	17	9	9	18
	50+	11	8	19	20	8	28
	Total	16	20	36	29	17	46
First-tier management	< 30	0	1	1	1	0	1
	31-50	9	45	54	31	19	50
	50+	17	48	65	57	10	67
	Total	26	94	120	89	29	118
Employees	< 30	23	40	63	61	31	92
	31-50	206	520	726	506	221	727
	50+	119	467	586	453	114	567
	Total	348	1,027	1,375	1,020	366	1,386
Total		393	1,149	1,542	1,148	414	1,562

Employee turnover by gender³²

<30 31-50 50+ Total



³² Data on employee departures refer to employees who resign or are dismissed, and do not include employees who retire.



Employee retention

Mekorot management views the Company's organizational culture and climate as an important strategic pillar of its overall strategy, particularly as it concerns employee retention. This approach is reflected in many areas, including embedding organizational values; strengthening management tiers and managerial skills; developing processes and tools to improve transparency and partnership, including intra-organizational communication; promoting all elements of personal and professional development; empowering employees in their roles; adapting organizational structure, remuneration, and benefits; and more.

As part of Mekorot's investment in employee retention, an infrastructure forepersons' course trained and certified 25 employees for foreperson roles in 2022. The course was held at ORT College in Kfar Saba, under the supervision

of the Ministry of Labor. The Company also runs a mentoring program for senior executives, offers scholarships for academic tuition to its employees, and provides volunteering opportunities that contribute to employees' capabilities and individual skills while strengthening connectedness to the organization.

Intra-organizational communication

We value intra-organizational communication, and we work to promote multi-directional communication channels among the units of the Company. We believe in the value of mutual inspiration and encourage our employees to hold dialogue with professional experts in their field. In our view, systemic thinking and cooperation among different units have high value for both the employees and the Company. This dialogue enables employees to gain broader understanding, learn from each other, deepen interpersonal relationships, and improve the corporate climate.

We also ensure open dialogue of management and the CEO with our employees and managers, through various channels:

Mekorot participated in rankings of the 100 best workplaces in 2022, and maintained its position in 14th place

CEO coffee sessions, roundtable meetings, the 100 Conference, intra-organizational communication, human-resource activities focused on the employee experience, innovation platforms, a wide range of professional forums, an intra-organizational application, and more.

Since 2021, Mekorot has conducted evaluation and feedback processes for all of its employees. This process, administered through a software system, is held annually, fostering dialogue between managers and employees. Intra-organizational service surveys were conducted at Mekorot in 2021 and 2022, to measure employee satisfaction.

The Employee Service Center was enhanced and improved during 2021. Within this process, an innovative advanced online platform was created to compile knowledge and tools on employee conduct at the Company. The system offers information on benefits, employment data, a digital tender submissions mailbox, administrative forms, a service mailbox for employee inquiries, questions and answers, and a social newsletter. In 2022, a service mailbox for personal inquiries was added for employees' questions on issues such as human resources, salaries, and training. Inquiries sent to the mailbox receive an official response on a wide range of topics, including assistance when employees are unsure where to direct their questions. Mekorot is also working to upgrade its human-resources portal in order to make information more accessible to employees.



Employee well-being and perquisites

Mekorot aspires to provide its employees with optimal conditions for an appropriate balance between their personal and family needs and the demands of the workplace. Mekorot therefore cares for employees’ well-being in a number of ways:

- > Flexible work hours.
- > Set days with no afternoon meetings .
- > Parent positions with suitable work hours.
- > A uniform, ordered hiring and onboarding process, including individual guidance, from hiring to retirement.
- > Adapted mentoring and handover processes, employment terms and entitlements in accordance with collective agreements, and timely promotions in rank and role.
- > Vacation days beyond the legally required amount; employees are encouraged to use their vacation time.
- > Periodic monitoring of the percentage of employees who work more than 50 hours a week
- > Work from home permitted, based on approval by management and regulators .
- > Subsidized medical examinations and health-insurance policies, with insurance terms improved from time to time.
- > Raising awareness of health and promotion of healthy lifestyles: Health Month, supportive messaging, and more .
- > Ergonomic adaptation of workstations to employees’ needs.
- > Support during life events and assistance in crises, for employees and their family members .
- > Aid for employees experiencing financial distress.
- > Reimbursement of children's daycare and camp expenses, for eligible employees.
- > Tuition aid for children of eligible employees.
- > Enrichment lectures and workshops for employees and their families, in a variety of fields.
- > Regular well-being events for employees: an event for employees’ children beginning first grade in school, an event for employees’ children celebrating their bar/bat mitzvah, an event to recognize outstanding employees, teambuilding days, a conference for new employees, a conference for permanent employees, gifts for employees’ children beginning their military service, management connectedness activities, a company convention in Eilat, a “happy hour” session for employees, and more.



Preparing for retirement

As part of its obligations in the areas of fair employment and the creation of a safe and respectful work environment, Mekorot is diligent in developing knowledge and preparing employees for retirement, including through a retirement seminar, held about six months before retirement to equip employees to cope with the anticipated change. The following are also offered to retirees:

- > Knowledge and useful information on a range of aspects relevant to life in retirement, such as monetary resources and budgeting, rights pertaining to National Insurance, pension rights, taxation, and more.
- > Some employees are offered the opportunity to continue to work as consultants post-retirement.
- > Leisure and other activities are offered to retirees of the Company.



We ensure that all of our employees receive fair retirement terms; retiree rights are covered by the collective labor agreements. Most employees of the Company retire with a pension, through an early retirement program or at retirement age, and receive benefits and grants, as well as the retirement preparation plan described above.

Diverse, equitable, respectful employment

Mekorot maintains equal opportunities and fair processes in hiring, screening, and promotion of employees at the Company, and avoids discrimination on the basis of religion, race, sex, or ethnicity. All workers at the organization are entitled to equal rights. The Company believes that diverse human capital contributes to its strength and to the creation of an inclusive and pleasant work environment for all employees. As a government company, Mekorot accords high importance to promoting diverse employment and focuses on the inclusion of population groups underrepresented in the labor market.³³ Diverse employment expands the potential of human capital, allows quality hiring from all segments of the population, enhances innovation and creativity, and generates shared value for employees and the Company. A work plan has been formulated in the area of diversity, including diversity targets. This area is overseen by the Human Resources Division and regularly reported on by the head of the division to the board of directors. The Company is in regular contact with non-profits and organizations specializing in hiring and placement of workers from population groups underrepresented in the labor market, including Olim Beyahad, Equal Chance, Ryan Employment Centers, and others.

Prevention of harassment and abuse

Mekorot takes a severe view of any form of discrimination or harm to its employees, and addresses such matters immediately. Mekorot aspires to create a workplace free of violence and of physical or verbal harassment, and takes preventive action through training and education. Based on the expansion of the letter of appointment of the Supervisor of Sexual Harassment in 2020 to encompass responsibility for the prevention of abuse in the workplace, a mechanism is available to employees of the Company to file complaints on this matter. The messages received are sent to the Supervisor of Sexual Harassment, who follows an ordered procedure for addressing complaints, with guidance from legal experts in this field. Various channels are at employees' disposal for submitting complaints, including email, the employee portal, and a physical mailbox; employees who choose to do so can submit their complaint anonymously.



One complaint concerning sexual harassment was filed in 2022. The complaint was investigated in depth, leading to a disciplinary report, the recommendations of which have been implemented in full

4 complaints concerning workplace abuse were filed in 2022, one of which led to the dismissal of a manager. In the other cases, no factual basis was found for abuse

17% of employees hired in 2022 are from population groups underrepresented in the labor market

³³ According to the definition of the Israeli Forum for Employment Diversity, these groups primarily include people from the ultra-orthodox (Haredi) community, people from the Arab sector, Israelis of Ethiopian descent, and people with disabilities.



Promoting gender equality

Mekorot values the promotion of gender equality in the workplace and therefore applies a policy of equitable employment, with diligent protection of women's rights at work. Under the collective labor agreement, there is no differentiation in remuneration between women and men; employees are hired and promoted based solely on their skills and the Company's needs. To promote gender equality, the Company conducts a range of processes, including setting measurable quantitative targets to promote the professional and personal development of women employees and managers.

Lectures and workshops dedicated to the empowerment of women are held every year, on topics including racism and gender equality, leadership, the development of excellence, and branding, as well as talks on raising awareness of the early detection of breast cancer and recognizing signs of distress and domestic abuse. Mekorot also launched a campaign in 2021 to promote women through a training program in practical engineering in water technology, for field positions. Mekorot selected three women for this program, and provided them with tuition aid, professional training, and close mentoring, at a total investment

of NIS 10,000. The program is aimed at increasing the inclusion of women and creating a more diverse and equitable work environment. Mekorot also has an in-house mentoring program, through which eight women senior executives provided guidance to eight women employees in 2022. The program emphasizes providing tools for professional, managerial, and personal development of the mentored employees. At the end of 2022, some of the program's graduates were in process for promotion to middle-management roles. Approximately 25% of all management positions at the Company are held by women.



Future goals

- Appropriate representation – meet the goals of the work plan on inclusion of underrepresented groups at the organization and establish positions specifically for these population groups.
- Increase diversity by raising the rate of hiring from underrepresented population groups to 24% of all hires.

Wage gaps between men and women by rank³⁴

Rank / wage gap	2020	2021	2022	
			Gross salary	Determinant salary for severance pay (pension)
Senior management	17%	2%	-5%	1%
Middle management	8%	1%	3%	0%
First-tier management	18%	16%	18%	8%
Non-management employees	39%	38%	44%	13%

³⁴ Variations in reported data between 2020 and 2021 are influenced by an organizational management change, as well as by changes in employment terms under the collective labor agreement, derived from individual attributes of employees: length of service, increments for children, overtime, etc.



Employee development

Mekorot views its human capital as the key to its success, and considers it an essential goal to invest in its employees and managers and in their development and training. We believe that a skilled, professional, quality workforce is key to the resilience of a company in a market characterized by transformations arising from resource scarcity, ecological changes, technological progress, and growing competition in the area of water. Accordingly, a comprehensive training plan has been developed, covering several parallel learning axes for employees: a study program based on law and regulation, a professional development program, a managerial development program, and a program on personal and organizational development and leadership in embedding digital transformation at the Company. A key element in motivating employees is the Company's ability to develop their skills, reinforce their connectedness to the Company, and apply their professional capabilities so that they can bring optimal performance to their role. Mekorot encourages employees to complete and expand their academic education, from practical engineering to postgraduate degrees, with tuition aid granted to eligible employees.

In the area of learning based on law and regulation, a detailed study program is built each year according to the requirements of the various regulatory agencies, differentially adapted to the occupations required to study each law.

In the area of learning for professional development, a program has been designed consisting of professional training tracks for various occupations at the organization, including courses and workshops for a wide range of target audiences, such as regional managers, cluster supervisors, welders, engineers, overseers, project managers, laboratory workers, risk managers, and more. These programs are aimed at imparting professional skills to participants, as well as soft and interpersonal skills, to benefit optimal performance in their roles.

In learning for managerial development, a broad training infrastructure has been created, including basic and advanced managerial skills, reinforcement sessions for course graduates, and more. Various management forums have also been established for the different tiers of management within the organization.

74 hours
of training per
employee on average

113,591
hours of training³⁵



³⁵ Total training hours refer to all training programs at Mekorot, which are divided into three categories: learning programs based on law and regulation, learning programs for professional development, and learning programs for managerial and organizational development.

The Nachshon program for personal development and empowerment

The Nachshon program was introduced at Mekorot in 2021. This personal development and empowerment program is designated for the groups of employees mapped and identified as having potential for high contribution to the organization. The program provides tools to strengthen personal and professional skills and capabilities. 26 employees participated in Nachshon in 2022. The program will be held annually for approximately 25 employees who are not part of the organization's management tier. Mekorot sees the

Nachshon program as an opportunity to reinforce the value of excellence and boost program graduates' connectedness to the organization, while improving employees' performance, strengthening human capital, and retaining Mekorot employees' talent and knowledge. It is also an opportunity for participating employees, who gain tools for personal development and can increase their influence and contribution, both in their current roles and during their future careers, within the organization and in general.



Mekorot participated in the National Excellence Competition of the Human Resources Israel organization for 2021, in **4** categories in the area of human capital, and earned the following achievements:

1. Innovation in learning – a paper reached the finals stage and won second place in the national competition
2. Change management in organizations – a paper earned an honorable mention
3. Emotional connectedness and the employee experience – a paper earned an honorable mention
4. Digital transformation in the world of human resources – a paper earned an honorable mention

Mekorot also participated in the National Excellence Competition by Human Resources Israel in 2022, adding the category “Integration of HRTech in human resources,” and earned a commendation for its work in the area of digital transformation in human resources and implementation of the customer success approach



Project management course for maintenance engineers

In 2022, Mekorot began to offer its maintenance engineers a course dedicated to professional knowledge on tools, methods, and concepts in the field of project management, designed to improve their personal capabilities in managing maintenance projects. 25 employees participated in the first session of the course, opened in January 2023. The Company plans to hold five more sessions of the program for similar-sized groups of relevant employees. The course strengthens participants’ connectedness to the organization, fosters cooperation among units and districts, offers opportunities for teambuilding and empowerment, boosts professional capabilities and knowledge, and leads to the formulation of a coherent approach to project management in the context of maintenance. The course also reinforces participants’ understanding of their role, and provides tools and capabilities for effective management, while creating a growing peer group of colleagues.

Regional supervisor course

A unique, first-of-its kind course, in terms of content, professional level, and scope, was designed in 2021 for regional supervisors at Mekorot. The first session of the course opened in 2021. The course targets professional development, including development of various interpersonal skills relevant to the supervisors’ role. Professional content areas covered by the training include water supply, machinery, electricity, hydrology, and hydraulics. The course encompasses both theoretical knowledge and hands-on training, including field tours. In addition to strengthening supervisors’ understanding of their role and course graduates’ connectedness to the organization, the program enables Mekorot to ensure uniform procedures and work methods, and develop and expand professional knowledge in this field. 25 employees participated in the course that began in 2021 and ended in 2022. Another session of the course opened in 2023, with 26 participants. The Company plans

to hold courses on a similar scale for relevant employees, according to need and the size of the target population for the course.

The Company holds training for relevant employees on the subject of digital transformation, in collaboration with the Engineering and Technology Division, in connection with the launch of information systems, new applications, and/or new versions of existing systems. The training encompasses the conceptual level of change management, learning about business-related work processes, and operation of the systems, including implementation, as well as continued guidance and ongoing support for end users.

The Human Resources Division leads employee learning and development throughout the organization. At the end of each learning activity, the Organizational Development and Training Unit runs automated, anonymous feedback surveys for participants, with the aim of learning and drawing conclusions in order to improve future activities.

Future goals

- **Work from home – transition to a hybrid model, in line with the guidelines of the Commissioner of Salaries at the Ministry of Finance, while measuring outputs and setting targets.**
- **Employee experience – an employee experience program adapted for the post-Covid period is being formulated, retaining activities conducted over the last year.**
- **Digital transformation in human-resource processes – digitize all human-resource processes and forms throughout the employee life cycle, from onboarding to retirement or departure, including transition to mobile.**

1.7 work accidents per 100 employees
in 2022 (1.8 in 2021)

Occupational health and safety

Mekorot is committed to protecting the safety and health of its employees, suppliers, contractors, customers, and community, in accordance with a safety policy approved by the management and board of directors of the Company. Its occupational safety and health policy addresses the promotion of employees' physical and mental health and is an integral element of the Company's strategy; Mekorot applies the highest standards in this area. The VP of Operations and Maintenance is responsible for safety management at the Company, overseeing five district safety supervisors who are registered with the Ministry of Labor, charged with advising and assisting management in all matters concerning occupational safety, hygiene, and health.

Promoting employee health at Mekorot

Mekorot accords high importance to promoting healthy lifestyles among its employees. The Company has a holistic perspective on employee health, encompassing mental health as well as physical health. Mekorot therefore offers psychological and social services to its employees, through an engagement with an external company. The counseling services include a 24/7 telephone hotline and subsidized individual sessions. The Company's human-resources unit ensures that relevant messaging is sent to all employees, informing them of the services

placed at their disposal by Mekorot during crises, such as the pandemic and military operations. Mekorot holds many company events that further contribute to employees' mental and social resilience. Healthy snacks primarily based on fruits and vegetables, such as smoothies, are served at these events, particularly the "happy hour" meetings. As part of its efforts to promote healthy lifestyles, Mekorot participates in a sports league for workplaces. Approximately 200 employees are active athletes in the league, in sports such as mini-soccer, basketball, mountain biking, running, netball, and bowling. Athletes compete in league events year-round and in a final sporting event of the season held annually in Eilat. In 2022, Mekorot joined the Running Out of Time global relay run event, with the dual purpose of, first, raising public awareness and sending a message to world leaders about the critical need to act urgently on the climate crisis, and second, promoting healthy, empowering athletic activities that strengthen bonds among employees. Mekorot fully subsidized employees' participation in the event; a group of seventeen Mekorot employees took part in the relay.



Promoting safety and hygiene at Mekorot

Mekorot has joint committees on safety and hygiene for management and employees (half of the members of the safety committees are employee representatives and half are management representatives). The committees operate based on a geographical division, by district, and a central committee oversees these issues on the national level.

In 2019, Mekorot voluntarily performed a safety diagnostics survey, with guidance from an external firm; application of the findings is currently underway. Mekorot conducts internal and external safety tests, for certification under the ISO 45001 occupational safety and health standard, the ISO 14001 environmental protection standard, and the ISO 9001 quality standard. Based on the findings of the tests, Mekorot applies corrective action and adjusts its work procedures as necessary.

Further to a safety diagnostics survey conducted at the Company, in August 2022 its safety approach and policy were updated, under the heading “Professionalism begins with safety.”

The safety approach and policy were communicated in an enterprise-wide effort to all Mekorot employees, and made transparently available to the public on the Mekorot website.³⁶

Mekorot's approach to safety comprises four key elements:



**Responsibility
& commitment**



Professionalism



Proactivity



**Continual
improvement**

To ensure that all employees of the Company are aware of safety policy updates, training on safety policy is provided to all new employees; when necessary, changes are posted on bulletin boards at the districts. Field employees undergo a basic eight-hour training program annually, in addition to targeted training by role.

To maintain employees’ health and minimize potential risks in its work processes, Mekorot conducts medical monitoring and testing in the workplace for employees in roles exposed to greater risk. We provide equipment to protect employees’ health and safety, to a strict standard, and distribute informational leaflets on exceptional events, such as extreme weather conditions.

Mekorot rigorously tracks and monitors safety,

setting measurable targets: the number of work accidents, dangerous events, and near-miss events; the frequency of work accidents; and the severity of work accidents. Mekorot has invested great effort in improving its safety culture, leading to improvement in overall accident figures.

In addition, every five years, Mekorot conducts an occupational health and safety risk-management process, addressing a wide range of areas, including the use of devices, mechanical equipment, and machinery; work at height; preventing slips; exposure to hazardous substances; exposure to noise; exposure to viruses, microbes, and other communicable substances; monitoring of injuries; hazardous waste treatment; electrocution risk; and more.

Segmentation of data on accidents³⁷

	2021 (data published in 2021 report)	2022 ³⁸
Work accidents	28	27
Hazardous events	45	46
Near-misses	44	17
Frequency of work accidents	0.97 ³⁹	1.08
Days of absence due to work accidents	496 ⁴⁰	313
Total days of absence due to all accidents	797 ⁴¹	743

³⁶ Mekorot safety policy (mekorot.co.il) (Hebrew).

³⁷ The reporting method has changed (relative to 2020) in terms of the work accident frequency measure – the number of accidents is normalized per 100 employees.

³⁸ All 2022 data presented below are the current data on the Mekorot safety system as of March 28, 2023. Note that these data may be updated over time, for various reasons, including recognition or non-recognition of accidents as work accidents by the National Insurance Institute, and more.

³⁹ **Report correction:** A value of 0.15 was reported in Mekorot's 2021 corporate responsibility report. This was a clerical error, which is corrected below.

⁴⁰ **Report correction:** A value of 543 was reported in Mekorot's 2021 corporate responsibility report. This figure was correct at the time, but needed to be revised due to non-recognition by the National Insurance Institute of some of the accidents reported in the 2021 report as work accidents.

⁴¹ **Report correction:** A value of 841 was reported in Mekorot's 2021 corporate responsibility report. A reexamination of the data during the writing of this report indicated that the correct figure is 797, as reported above.





Mekorot has various initiatives to raise awareness of this issue, including:

- › Establishing a group of safety trustees at Mekorot, in line with the findings of the safety survey of 2020;⁴²
- › Enforcement inspections to comply with the requirements of the law;
- › Safety training for employees and contractors;
- › Investigation of safety incidents and publication of findings for lessons-learned processes;
- › Publication of a monthly safety report distributed to all employees of the Company;
- › Management controls applied in the area of safety;
- › Meter forum held to set professional standards;
- › Encouragement of employees of the Company to excel in safety, and awards for outstanding employees;
- › Increased involvement of managers in safety, including through training on incident inquiries; 60% of managers participated in 2022.



Transportation safety

Mekorot has sites located nationwide; as part of their routine work, employees and contractors need to make many trips between facilities and infrastructure locations. Transportation safety is therefore a top priority for us. We apply the following measures to protect our employees' safety:

- › A quarterly report released to all employees of the Company on transportation safety.
- › Monitoring and maintaining vehicles at importers' garages, with original parts, according to manufacturer instructions.
- › Training provided to all drivers, trailer users, and forklift operators at the Company.
- › Proactive safety audits of vehicles, engineering equipment, and trailers by district safety officers.
- › Sample audits by the national transportation safety supervisor.
- › Traffic accident committees.
- › Investigation and lessons-learned process regarding severe traffic accidents.
- › Training for family members of employees who drive leased vehicles and vehicles of the Company.

⁴² A six-month pilot project was conducted in 2023 in the northern operational district; based on the findings of the project, this effort is planned to expand to the Company as a whole.

Future goals

- Continue to implement the findings of the safety report of 2020.
- Promote digital transformation in safety by creating an application to document the various safety processes, such as safety incident reports, documentation of field inspections and tours, risk and hazard surveys, digital work permits, regulation of equipment lending and electricity for contractors, documentation of records, training, and more.
- Reduce the number of accidents, normalized per 100 employees, by 8% by 2025 and 15% by 2030.
- Formulate a new safety concept and policy for safety management at the Company, and obtain approval of Company management.

Activities of Mekorot with the community and customers



Fairness to customers and customer satisfaction

One of the key challenges confronting Mekorot is the quality of service at the Company. Mekorot is working to adapt to changing conditions, including the progressive improvement of service quality at corporate and public organizations, along with customers' expectations for outstanding professional service; a leap forward in technology in the private and public sector, greatly contributing to improved service and competition; and an evolving reality in which customers are more aware and social networks are more present, leading to increased demand for service to be delivered to customers efficiently, through technological means, as in other service sectors in the economy. Accordingly, Mekorot is conducting a significant process, led by the Customer Relations and External Parties Unit, in which it is adopting the perception of the consumer as a customer, and working to instill norms concerning the service concept, operational efficiency, and technological tools for customers.

The new service concept positions customers as active partners in the activity of the Company and enables them to receive the information and services they need quickly and easily. Mekorot conducted a first-of-its-kind customer satisfaction survey in 2021 to measure customers' satisfaction with the services provided by the Company. As is sometimes the case during significant change processes, in which target audiences are drawn in stages, customers' responsiveness to the 2021 survey was low. The Customer Relations and External Parties Unit led a lessons-learned process aimed at improving participation levels; in 2022, Mekorot distributed an updated customer survey that drew a substantial response. Mekorot has approximately 5,000 customers, including consumers, private producers, laboratory customers, and external parties that request one-time or ongoing work from the Company. Laboratory customers receive water quality testing services from the Company's laboratories. Each district has its own clients; customer service is provided at the level of the operational district, and reported to headquarters.

The Customer Relations and External Parties Unit led a lessons-learned process aimed at improving participation levels; in 2022, Mekorot distributed an updated customer survey that drew a substantial response

Initiatives and processes promoted by Mekorot for fair, transparent action and stronger customer relationships:

- › Dialogue and proactive communication with customers.
- › Surveys to measure the customer experience.
- › Roundtable meetings to share information about the Company and understand customers' needs.
- › Mapping of customer interface processes.
- › Adaptation of services to the business environment and to customers' needs, and improving the accessibility of service to customers and the general public.
- › Development of infrastructures, tools, and systems for access to information, documenting contacts, and conveying messages to customers.
- › Creation of a new website to make information accessible to customers of the Company.
- › Operation of the digital system Tamar for infrastructure coordination, allowing users to contact the responsible function online, through the Mekorot website or the Ministry of Transportation website.
- › Digitization of processes and transition to smart forms.

Community engagement

Empowerment of the community is a key element of the fundamental values of Mekorot, and of its activity in each of its core areas.

Mekorot believes that the community is an essential partner in promoting a sustainable reality, and views the public as having a vital role in coping with environmental challenges. The Customer Relations and Corporate Responsibility Unit, which is responsible for this area, has set a goal of strengthening and developing relationships with stakeholders of Mekorot, and promoting shared value in Mekorot projects. The Company promotes social activity in areas related to its core operations, creating value for the community and the environment, and raising awareness of the protection of the environment in general and water in particular. All of these actions form components of the value chain at Mekorot. We work to realize these values by harnessing the Company's resources; collaborating with a range of community elements; and carrying out long-term, annual, and ad-hoc projects.

Environmental education

In view of the national challenges confronting the water sector in Israel, it is essential to constantly think ahead, including in the area of education. Over the years, in recognition of the importance and crucial role of education in the attainment of values-related objectives, we have taken action to raise awareness and increase knowledge regarding the environment and water, with a range of academic and community partners, including:

- › **Educational activity for the holiday of Shavuoth:** An educational campaign at schools and preschools about the importance of water conservation, to mark the celebration often referred to as the Holiday of Water.
- › **Professional conferences:** Participation in local and international conferences to present the activity of the Company (in the areas of water sector management, sustainable development, and more) and gain exposure to the many advanced technologies in the water industry.
- › **Social media:** Mekorot maintains professional pages on the social networks Facebook, Instagram, LinkedIn, and Twitter, to raise awareness of environmental and water-related issues.
- › **Visitor centers:** Our visitor centers are a way for us to connect with the community and consumers, and display the unique and advanced activities of Mekorot. The largest Mekorot visitor center has operated since 2009 at the Eshkol site. Other centers include Sapir, near the Kinneret Sea, Einan in the north, and centers currently reopening in central and southern Israel. Eshkol, open to the public free of charge, receives approximately 20,000 visitors annually, including families and groups of children and retirees. Mekorot also offers online tours, in line with the guidelines of the Ministry of Health. Virtual tours of the Company's sites, focusing on various topics in the water industry, are available to the public on social media.

- › **Academic research:** Promotion of research on water, in collaboration with research institutes and universities.
- › **Collaboration with educational institutions:** Mekorot cooperates with various academic institutions and educational programs, including ORT Braude, Atidim Infrastructure, and Atidim Industry, where employees provide individual and professional guidance to students. Most of these programs are located in peripheral regions. Experts from the Company also give lectures to students in various academic settings. In 2023, the city of Rishon Letsion launched an educational program on water engineering, designed for seventh- to twelfth-grade students. The program focuses on the water sector in Israel, the climate crisis, and sustainable solutions for coping with global warming in the context of supplying a life-sustaining product.
- › **Scholarships:** Outstanding engineering students are granted scholarships at the Technion and at Ariel College.
- › **Business collaborations:** We promote business activities with commercial companies, creating collaborations to promote technologies for monitoring and maintaining water quality and quantity for households, industry, and agriculture.
- › **Intra-organizational education:** To raise awareness among all employees of Mekorot, the Company holds online learning and dialogue sessions (webinars); sends out bulletins, tutorials, lectures, and instructional videos on sustainability and environmental issues; and distributes information to relevant employees regarding environmental and water content and conferences, according to their professional role at the Company.



Employee volunteering

In 2022, Mekorot employees volunteered and took part in a wide range of social activities in various fields: education in peripheral regions and in academia, assistance for people in need, volunteering in hospitals, and more. As a government company, Mekorot is prohibited from making monetary or money-equivalent donations, or financing employee volunteering at the expense of work hours. The Company promotes community engagement activities within its work plans and in the form of employee volunteering (outside work hours), as well as through employees' initiatives.

5,851 total hours
of volunteering by Mekorot
employees in 2022

2.82% of Mekorot
employees volunteered
regularly, at **126.23**
hours per employee
on average

4.87% of Mekorot
employees volunteered
once, at **3.91** hours
per employee on average

Future goals

- Continue to send out an annual customer survey.
- Create a structured policy for community engagement.
- Centralize community engagement management under a single function at Company headquarters, overseeing all districts.

Responsible Corporate Governance

91-103 →

Corporate responsibility is a key tool for Mekorot's management of its economic, environmental, and social impacts, encompassing all aspects of its business performance. This approach constitutes a way for the Company to develop and enhance its business advantages, in terms of efficiency, innovation, improved reputation, risk management, protection of water resources, and identification of new business opportunities. Mekorot is a government company operating under the responsibility of the Ministry of Energy and Water, the Ministry of Finance, and the Water Authority, and subject to laws and regulations pertaining to government companies in Israel. Sound corporate governance is an integral part of the organizational culture of Mekorot and a prerequisite in every area of its activity. It is also a vessel for risk management and for attainment of the Company's strategic objectives.

Mekorot is a government company operating under the responsibility of the Ministry of Energy and Water, the Ministry of Finance, and the Water Authority

7 board members⁴³

43% women on the board of directors

14% external directors

57% directors with accounting and financial expertise

36 meetings of 7 board committees

Segmentation of directors by age:



⁴³ As of December 31, 2022.

Structure of the board of directors

At Mekorot, the identity and duties of the chairperson of the board of directors are separate from the identity and duties of the CEO, and the duties of the board of directors are separate from the duties of the officers of the Company. As Mekorot is a government company, the process of searching for members of its board of directors is under the responsibility of the relevant ministers, and the Company has no control or responsibility in this matter. The Government Companies Authority (hereinafter: “GCA”) has established an equitable team of directors, open to the public, with acceptance based on threshold conditions and predetermined criteria. A managerial core has been established for the Company, to ensure that directors are appointed who provide an appropriate response to the needs of the Company in terms of required skills, experience, and occupational diversity by population segment (religion and gender). As of the end of 2022, the board of directors of the Company consists of seven members, of which three are women. One of the directors is an external director pursuant to Section 1 of the Government Companies Law, 1975 (hereinafter: the “**Companies Law**”), who does not hold office at the organization. Four of the directors have accounting and financial expertise.

Committees of the board of directors

- > **Personnel committee** – Discusses salaries, benefits, perquisites, bonuses, and other employment terms of the CEO, Deputy CEO, VPs, unit managers, CFO, Internal Auditor, Corporate Secretary, and other officers, as determined by the ministers, after consultation with the GCA, and of the other employees of the Company. The committee provides recommendations to the board of directors; its purpose is to make the discussions of the board more efficient and hold in-depth discussions of the topics noted above, conclusions and recommendations of which are presented for approval by the board of directors.
- > **Finance and risk management committee** – Discusses and routinely monitors financial matters, including the Company's budget, debt write-offs, credit policy, and funding; also serves as the committee designated to oversee risk management. The committee provides recommendations to the board of directors; its purpose is to make the discussions of the board more efficient and hold in-depth discussions of the topics noted above, conclusions and recommendations of which are presented for approval by the board of directors.
- > **Audit committee** – Routinely discusses internal audit reports of the Company. Duties: approval of the annual internal audit plan; approval of transactions with interested parties; contractual engagement of the Company with directors regarding the terms of their service, including exemption, insurance, commitment to indemnity, or indemnity pursuant to permission to indemnify; contractual engagement of the company with its directors regarding the terms of their employment in other roles; decision regarding the procedure for quality assurance of internal audit (an external procedure); approval of termination of the service of the Internal Auditor.

Scope of audit in 2022:
19,532 hours. **53%**
of these hours were invested in
internal audit, while **47%**
constitute external audit

- > **Planning, development, and operations committee** – Routinely monitors the development plans of the Company and project execution status; routinely monitors assets at the Company; and discusses topics pertaining to planning and operations. The committee provides recommendations to the board of directors; its purpose is to make the discussions of the board more efficient and hold in-depth discussions of the topics noted above, conclusions and recommendations of which are presented for approval by the board of directors.
- > **Balance sheet committee** – Serves as a subcommittee of the board of directors; examines the financial statements and formulates recommendations regarding the approval thereof for the board of directors. This committee is not the audit committee of the board of directors.
- > **Remuneration committee** – Discusses salaries, benefits, perquisites, and bonuses of senior officials at the Company, subject to the compensation policy approved by the board of directors. The recommendations and conclusions of the committee are presented to the board of directors for approval.
- > **Technology committee** – Discusses all technological matters at the Company. The committee also discusses investments in technological ventures (startups), and monitors the progress of technological developments and systems developed or implemented at the Company.

Composition of the board of directors

As Mekorot is a government company, the processes of searching for and appointing directors are performed by the responsible ministers – the Minister of Finance and the Minister of Energy and Water – and through the GCA. The ministers are charged with selecting candidates who meet the requirements of the Companies Law, which sets threshold conditions, and who are in the pool of directors established by the GCA. The directors should also be aligned with the characteristics of the managerial core established for the Company by the GCA, which requires a representative with financial skill and a representative with background in infrastructure management. The directors are screened by an appointment examination committee, which reviews their experience, education, and political affiliation. Mekorot has a formalized onboarding process for directors, derived from a circular of the GCA, to enable new directors appointed to the board to become familiar with the Company as quickly as possible. In accordance with the circular, Mekorot ensures that, upon appointment, members of the board of directors and senior management members receive the necessary information and tools regarding all activities of the Company. Towards that end, the appointees meet with a series of relevant parties at the Company and receive a director's file containing all of the basic information and data they require to embark on their role in the best and most professional manner. The board of directors elects committee members based on their skills and the qualifications required for each committee.

Remuneration of executives and officers

Mekorot, as a government company, is subject to the laws and regulations applicable to government companies. Pursuant to the law, the government has established rules and procedures for the salaries and employment terms of CEOs and senior executives at government companies and subsidiaries, which form the guidelines for the board of directors, the management of the Company, and the GCA in approving arrangements in these areas. The remuneration policy document concerning the terms of service and employment of the officers of the Company was prepared in accordance with the provisions of the Companies Law and the Companies Regulations (Reliefs in Connection with the Obligation to Establish a Remuneration Policy), 5773-2013. The remuneration policy document aims to define, describe, and specify the Company's policy with regard to the remuneration of its officers, including the extent and components of such remuneration, within the applicable law. The remuneration policy was prepared with due attention to the nature of the Company, among other matters, as a government company and as a bond company (as defined in the Companies Law). The considerations, principles, and metrics established in the remuneration policy are based on the Company's objectives, with the aim of improving its performance by creating a correlation between the extent of achievement of the Company's objectives and the remuneration of its senior employees; retaining quality officers able to cope with the challenges the Company faces; and encouraging excellence at work. During the course of 2020, an updated remuneration policy was formulated with respect to the terms of service and employment of officers at the Company. At the date of publication of this report, the resolution to approve the policy has not yet been passed. In general, employment agreements of senior executives

at government companies are grounded in a senior executives' contract with a uniform format. With regard to senior executives' pay, the Ministerial Committee on Wages has determined that the terms of employment of senior employees are to be based on a contract, established in coordination with the GCA. This policy provides a regulated option for clawbacks of remuneration received under certain conditions. However, some senior executives at Mekorot are employed under a collective labor agreement. The remuneration policy applies to officers of the Company who are employed under individual employment agreements, excluding provisions specified in the policy that apply to officers employed under a collective labor agreement; all of the foregoing excludes provisions stated to apply to certain officers, as specified therein. Part of the remuneration policy is a remuneration model, grounded in a circular of the GCA concerning principles for a remuneration and incentive model for senior employees of government companies, as of 2015. The remuneration model, which is approved annually by the board of directors, is based on remuneration of employees based on the performance of the Company and their individual performance. Retirement arrangements and severance pay are regulated in accordance with the provisions of the law.

Wage gaps and remuneration of members of the board of directors

In 2022, the ratio of the annual pay of the CEO of the Company to the median cost of remuneration of all other employees (excluding the CEO) stood at 2.80; the ratio of the annual pay of the CEO to the average cost of remuneration of all other employees was 2.87.⁴⁴ These ratios were 3.26 and 2.81, respectively, in 2021. Remuneration is granted to members of the board of directors in accordance with the Government Companies Regulations (Compensation and Expenses for Directors from the Public at Government Companies), 5754-1994. Thus, compensation and reimbursement of expenses are performed pursuant to the law. In 2022, the total amount of the compensation of directors at the Company was approximately NIS 329 thousand. In 2021, by contrast, the total amount of the compensation of directors at the Company was approximately NIS 216 thousand.

⁴⁴ The CEO's annual pay refers to the cost of the CEO's regular wages, excluding severance and payments to the CEO related to the end of employment at the subsidiary EMS Mekorot Projects in April 2023.

Mechanisms for contacting the board of directors

Mechanisms for sending feedback and recommendations from employees to the board of directors are established by regulatory rules of the GCA. The state is the only shareholder of Mekorot; Mekorot is controlled through the appointment of the members of the board of directors by the responsible ministers. Employees can contact the board of directors through the Corporate Secretary, or contact the chairperson of the board of directors directly, without mediation. The management tier at Mekorot consists of people who have risen through the ranks from the field, and encourages direct communication and employee engagement. Employees are requested and required to report immediately on incidents of suspected impairment of corporate governance, any matter pertaining to suspected fraud or theft, or any failure to comply with the law or with Company regulations. In any case of doubt regarding the completeness or accuracy of information transmitted at the Company, the matter must be reported to the supervisors and to the responsible parties.

Prevention of conflicts of interest

The CEO and the chairperson of the board of directors are appointed in accordance with the law and the guidelines of the public committee for the examination of appointments. The committee is charged with, among other matters, examining and preventing conflicts of interest. All officers of the Company sign a certification of avoidance of conflicts of interest. Mekorot upholds moral conduct and integrity. Employees of the Company are required, through its code of ethics, to avoid actual or apparent conflicts of interest. Private employment of subordinates, suppliers, or any party with a working relationship with Mekorot in any form beyond their work-related engagement is prohibited.

The Company is working to implement an organization-wide risk-management system: it has appointed an oversight committee for risk management, headed by the CEO, that convenes frequently to discuss overall risk management at Mekorot; the finance committee, which serves as the risk management subcommittee of the board of directors, also holds quarterly discussions on this subject.



ESG aspects in the board of directors

Sustainable development is separately audited and addressed in discussions of management and the board of directors. ESG is under the managerial responsibility of the Customer Relations and External Parties Unit, which was established in the course of the restructuring. The unit is working to implement a dedicated ESG strategy, as described above, and continually examine the environmental, social, and economic impacts of the Company on its stakeholders. The head of the unit reports to the VP of Development and Customers, and submits periodic reports on the activity of the unit to management and the board of directors. The board of directors addresses environmental and social issues in the course of its routine work and in the context of the Company's annual goals. Exceptional events, including events and hazards with environmental impacts, safety incidents, and more, are reported immediately to the board of directors. Through its committees, the board of directors is also engaged with processes pertaining to ESG aspects at the Company, such as approval of the ESG report; occasional renewal of the code of ethics; energy efficiency; preparation for climate change, particularly preparing to supply water during droughts, earthquakes, and emergencies; procedures for participation by the public and for the community relations of the Company; and establishment of a team to manage climate risks. Mekorot's board of directors approved its ESG strategic plan and goals in 2023.

Business continuity

Mekorot works continually to maintain functional and business continuity, so that it can ensure a continuous supply of high-quality water. The Company is prepared to respond to emergencies that may affect the security of the water supply, such as war, earthquakes, epidemics, cyber attacks, tsunamis, severe weather events, and water source contamination and poisoning.



The management of the Company performs situational assessments and acts to allow continuous operation and business continuity, with an emphasis on the integrity and quality of the water supply. Management is working according to the four main goals set at the outbreak of the Covid-19 pandemic:

- › Maintain continuous functioning and business continuity.
- › Protect employees' health and safety.
- › Maintain resilience through occupational security and care for the individual.
- › Continue to execute development plans.

To embed and implement the enforcement programs, enforcement supervisors have been appointed for each area, to oversee the implementation of the plans and apply controls through various mechanisms

Risk management and internal enforcement programs

An annual discussion is held to examine the activity of senior management in terms of economic, environmental, and social aspects, as part of the risk management and identification procedure. The Company is working to implement an enterprise risk management (ERM) system, and has appointed a higher committee on risk management. The committee convenes frequently to discuss the overall risk-management system of the Company, led by the Risk Management Unit and headed by the CEO. Discussions are also held by the finance committee, which has adopted working procedures aimed at instilling norms of compliance with the Companies Law and the Securities Law at the Company, thereby reducing the exposure of the Company, its managers, and its employees to potential risks. To embed and implement the enforcement program, a supervisor of internal enforcement has been appointed to oversee the implementation of the plan and apply controls through various mechanisms.

Environmental risk is a corporate risk to which a risk-management procedure is applied. In this procedure, risks material to the Company's operations are identified and assessed, as a tool for decision-making, risk mitigation, improvement of performance, and utilization of opportunities to maximize shared value for the Company and its stakeholders. In 2021, the Company also completed a **risk survey** dedicated to safety, cybersecurity, self-licensing, securities, prevention of embezzlement and fraud, and prevention of bribery and corruption. In 2022-2023, Mekorot aimed to optimally manage the risks based on the findings of the survey.

Mekorot has enforcement programs on various topics, including securities; competition law; environmental issues; self-licensing; protection of privacy; prevention of fraud, bribery, and corruption; and more. Mekorot regularly updates its various enforcement programs, to ensure compliance with regulations and instill norms of compliance, thereby reducing the exposure of the Company, its managers, and its employees. To embed and implement the enforcement programs, enforcement supervisors have been appointed for each area, to oversee the implementation of the plans and apply controls through various mechanisms. In 2023, management and the board of directors updated the compliance and enforcement programs in the areas of competition; the environment; self-licensing; protection of privacy; and embezzlement, fraud, bribery, and corruption.

Ethics and prevention of corruption

As a national company, working to secure the water sector in Israel, Mekorot has the obligation and responsibility to conduct its business in a values-driven, moral manner. Mekorot's code of ethics was initially formulated in 2010, and revamped in 2020. In 2021, management approved a new and up-to-date code presenting the system of values, standards, and principles that guide the Company in all of its actions. The code establishes the vision, mission, and behaviors expected of all employees at the Company, and is designed to guide Mekorot employees and management to appropriate values-driven conduct in their interactions with all stakeholders. The guiding values of the Mekorot code of ethics include the national mission, a quality available water supply, professionalism, reliability and transparency, learning and innovation, cooperation and mutual respect, and sustainable development.



Protecting human rights

Mekorot sees the human rights of all of its stakeholders, including its customers, employees, and suppliers, as a top priority.

The human right to water

Mekorot works ceaselessly to supply water at an optimal and reliable level of quality, at reasonable prices, accessible to all people in the environment in which it operates, in recognition of the human right to water as an essential resource for life; Mekorot therefore aspires to deliver its services equitably, conveniently, and accessibly to everyone. Mekorot's actions in this context are guided by the Water Law, 1959, which establishes the right to water as a statutory right, as well as Israeli case law, which states that access to water sources for basic human use constitutes part of the right to a minimum standard of dignified existence, as water is an essential resource for humans and people cannot survive without basic access to water of reasonable quality. Mekorot also supports the declaration of the United Nations General Assembly recognizing clean water and sanitation as a human right, regardless of the person's financial status, and operates in light of this declaration.

Protecting the human rights of Mekorot employees

Mekorot is committed to protecting the human rights of its employees. The Company implements this commitment proactively, as stated in its code of ethics and as reflected in various areas of its activity pertaining to human resources, including the following:

- › Maintaining a respectful, inclusive, fair work environment free of violence, abuse, and harassment.
- › Ensuring equal opportunities and fairness, from job candidate hiring and screening processes to promotion processes for employees, throughout the value chain at Mekorot.
- › Mekorot rigorously prevents discrimination of all kinds, including based on religion, nationality, ethnicity, sex, gender identity, or any other characteristic, other than affirmative action.
- › Mekorot cares for employees' health and well-being throughout their employment, providing access to psychological and social services and promoting healthy lifestyles and participation in sports and social activities.
- › Employees receive training on topics related to human rights, including the prevention of sexual harassment and abuse, equal opportunities at work, and more.
- › All Mekorot employees sign its code of ethics; the values of the code reflect the Company's commitment to maintaining human rights and fairness for everyone.



Protecting human rights at Mekorot's suppliers

Mekorot works to uphold a responsible supply chain, including by periodically monitoring its suppliers' employment conditions to ensure that they comply with the law and maintain ethical conduct, and that all of the rights of the suppliers' employees are protected. Mekorot's code of ethics extensively addresses the relationship between the Company and its suppliers, and reflects the Company's expectation that suppliers meet the norms and standards in place at Mekorot, as presented and formalized in its code of ethics.

Mekorot insists on fair employment and works to prevent violation of workers' rights by contractors. Mekorot exercises added caution by including provisions in its contracts with suppliers to indicate that Mekorot does not have an employer-employee relationship with the contractor's employees, and that the contractor, as their employer, undertakes to protect the workers' rights in accordance with the law and case law, and ensure proper application of Israeli labor law.

Mekorot sees its code of ethics as a vital component of its identity, as a growing and thriving group with a unique and meaningful contribution to Israel's water sector

Instilling and publicizing the code of ethics

After writing its code of ethics, Mekorot completed a plan to instill the code within the organization, consisting of launch meetings, appointment of an organizational ethics supervisor, and formation of an ethics committee. The Company also produced a training video and an online tutorial for instruction on the code of ethics, to instill and communicate the code among employees and relevant stakeholders. Mekorot sees its code of ethics as a vital component of its identity, as a growing and thriving group with a unique and meaningful contribution to Israel's water sector.

In 2021-2022, approximately 99% of the Company's employees and 100% of its suppliers signed the code of ethics. As of the end of 2022, 91% of employees have successfully completed the training program on the code of ethics.

The code is available to all stakeholders on the Company's website. The code is also accessible to Mekorot employees through the organizational portal; employees periodically receive communications on this subject, with the contact information for the ethics committee. Every new employee joining Mekorot reads the code of ethics and signs a commitment to act in accordance with the code. All new employees participate in training on this subject as part of their orientation days. Ethics issues discussed by the ethics committee are also communicated through newsletters.

The ethics supervisor, who heads the ethics committee,

and ethics trustees are at employees' disposal. The ethics committee is charged with promoting and cultivating ethics at the Company, among managers and employees. The committee initiates, encourages, and drives ethics discourse at the Company, including through discussions of ethics dilemmas, primarily brought to it by employees, and suggestions for resolutions based on the code of ethics. Human-resources managers at the districts and the head of the Human Resources Department at the headquarters of the Company are authorized as ethics trustees and charged with instilling and cultivating ethics at the Company.

Mechanisms for reporting and addressing ethical issues

The Corporate Secretary is the ethics supervisor for the organization and the head of the ethics committee. Employees can contact the ethics supervisor, openly or anonymously, through a designated email inbox posted on the Company's website, in the code of ethics, and on the organizational portal. There are also physical mailboxes at the Company's sites and headquarters where messages can be submitted. Messages are handled based on ordered mechanisms, according to topic. Where there is no existing mechanism for a topic, the message is examined with the Internal Auditor of the Company.

⁴⁵ The Ethics Mailbox, at ethics@mekorot.co.il

Preventing bribery and corruption

Mekorot is a government company that conducts extensive business operations, and is committed to upholding the law and sound practices. The Company performed a survey of embezzlement and fraud risks to examine and assess risk factors in this area. A compliance plan in the areas of embezzlement and fraud, bribery, and corruption was formulated and approved by the board of directors. The plan, which includes a set of procedures, guidelines, and work processes, is designed to ensure that the Company takes the necessary active measures to secure compliance by all employees of the organization with the provisions of the law in the areas of embezzlement, fraud, bribery, and corruption. The plan emphasizes the Company's

zero-tolerance policy for breaches in these areas, and specifies mechanisms for instilling the relevant guidelines and oversight systems. The Risk Management Unit also applies financial controls in various processes, including examination of the separation of roles in authorizations to access critical systems. In the event of suspected embezzlement and/or a bribery and corruption incident, several reporting channels are available to employees, in accordance with the enforcement plan: an anonymous hotline contacted via email, or a message to their personal supervisor, the Internal Auditor, or the Compliance Officer, who is responsible for this program.

Future goals

Ethics and prevention of corruption

- Send the code of ethics to all employees, to read and sign annually, as part of the process of familiarization with the Company's new code.
- Translate the code of ethics into English and post it on the Company's website.
- Gain greater insight on the prevention of bribery and corruption through a dedicated tutorial for employees.

4 messages on ethics issues were received in 2022 (compared with four in 2021 and five in 2020)

In 2022, approximately **99.2%** of the employees of the Company successfully completed a tutorial on the prevention of fraud and embezzlement, bribery, and corruption, and specifically the prevention of conflicts of interest (compared with **64%** in 2021)

No incidents of employee embezzlement, bribery, and/or corruption were discovered in 2022

Compliance with regulation

The policy of Mekorot is to comply with all legal provisions, laws, guidelines, regulations, compacts, and standards that are in effect, and to strive to attain standards beyond the required level, to the extent possible and appropriate. As a government water company, Mekorot is required to comply with a series of rules applicable to the entire supply chain of water for residents of the State of Israel, in every core area of its activity, as well as with binding rules for the protection of employees and stakeholders of the Company. Regulatory requirements vary over time, and generally tend towards stricter standards. To meet these requirements, the Company is aided by and develops the best feasible technologies in professional, economic, environmental, and safety terms.

To meet these requirements, the Company is aided by and develops the best feasible technologies in professional, economic, environmental, and safety terms



As part of its routine operations, Mekorot makes essential use of hazardous materials, to restore water drilling sites, in water treatment plants, and in disinfection. The use of toxic substances may cause hazardous events and environmental harm; Mekorot therefore operates in accordance with the Hazardous Materials Law, and stores and uses hazardous materials according to a toxic substance permit. Each district, the Jordan region, the central laboratory, and the

Shafdan Unit have valid toxic substance permits, and work to comply with the terms stated in the permits and renew the permits regularly. No legal or administrative proceedings were conducted in 2022 in which Mekorot and/or officers thereof were charged or convicted of failure to comply with regulation. This includes environmental issues; no sanctions or fines were imposed on Mekorot for failure to comply with environmental rules and regulations.

Responsible supply chain

Mekorot, as a government company, conducts its purchasing processes in line with the requirements of the law and of the Tender Regulations. Purchasing and tenders are primarily managed by the Goods Procurement, Logistics, and Inventory Unit and by the Services Procurement and Tenders Unit. Purchasing at Mekorot is principally designated for development activity and projects, as well as for routine maintenance and operations activities: pipeline and drilling equipment, pumps and pumping equipment, engines, transformers and electrical equipment, taps and valves, electronics and computers, software, measurement equipment, filters, quality improvement materials, and more. In 2022, goods purchased reached approximately NIS 510 million, from 982 suppliers.

The Mekorot code of ethics is sent to service providers and suppliers, in every contractual engagement; they commit to uphold the code and the values that guide Mekorot: professionalism, reliability, transparency, integrity, and mutual respect.

Mekorot regularly applies reviews and examines the quality of manufacturing, products, and purchased goods received.

Promoting a responsible supply chain

- › **Supplier preference** – In accordance with the Required Tender Law, Mekorot grants precedence to domestic purchasing (made in Israel), and regularly examines its threshold conditions to enable small and mid-sized businesses to participate in its tenders. Mekorot also prioritizes businesses owned by women. In 2022, 22% of total purchasing by the Company was from small and mid-sized businesses, and 83% was purchased locally.
- › **Green purchasing** – In procurement and tenders, the Purchasing Unit examines green criteria aimed at minimizing the environmental impacts of the Company's operations. Key parameters examined include the energy efficiency of electrical products such as pumps and vehicles, to reduce consumption of electricity and fuels at the Company, thereby reducing air emissions. 14% of purchasing in 2022 was from suppliers selected based on green criteria.
- › **Employment conditions oversight** – As part of its responsible supply-chain management, Mekorot occasionally conducts reviews of its suppliers to ensure that contractors operate in line with the requirements of the law and maintain ethical conduct, and that all rights of contractor employees are protected. As part of these reviews, internal payroll staff examine payroll data for security guards and cleaners; if a staffing contractor is found to be in breach of legal requirements, the Company terminates its engagement with the contractor. Mekorot also conducts surprise inspections at activity sites to ensure that the work is in compliance with procedures.
- › **Prevention of bribery and corruption in the supply chain** – Before issuing a tender, Mekorot examines the economic structure of the transaction to estimate the prevalent cost of the service. Within due-diligence testing of suppliers and contractors, Mekorot examines the identity of the owner of the account receiving the payment. In addition, the Company has its major suppliers sign a statement declaring that they have no previous convictions. In all public tenders, contractors submitting a bid must declare that they have no convictions, have no conflict of interest, comply with labor protection laws, protect workers' rights (in tenders for security guards and cleaning staff), maintain work safety and hygiene, and more. Mekorot is committed to acting ethically and preventing bribery and corruption incidents throughout its supply chain. Accordingly, every contract between the Company and a supplier has a clause requiring the contractor to be familiar with the code of ethics and referring the supplier to read the code. The new code of ethics, released in 2021, has an expanded section on suppliers and a new chapter, "Relationships with suppliers and contractors." In engagements involving material monetary amounts, the code of ethics is sent directly to the suppliers, who must report reading the code by return email.
- › **Supplier evaluation** – The expansion of Mekorot's operations as the national water company with suppliers and service providers led management to embark on a uniform, structured process to evaluate its suppliers, in order to ensure excellence in the supply chain. In 2022, relevant employees from a wide range of areas and units that receive various services participated in the supplier evaluation survey.

Promoting shared value in the supply chain

Within its promotion of a shared-value policy, Mekorot promotes many engineering initiatives with its suppliers throughout the supply chain. Our goal is to help entrepreneurs develop a quality product that is also aligned with the Company's needs.

Promoting entrepreneurship – As part of the activity of the Innovation Unit, Mekorot releases lists of its needs. Entrepreneurs submit proposals for solutions and collaborations based on the list. After a rigorous screening procedure, accepted proposals are tested at Mekorot sites with the required experiments. At the conclusion of this process, the solution may be used by Mekorot, or alternatively the supplier may market it as a solution for the international water industry. This initiative offers the supplier/partner continuous unmediated contact, which shortens the experimentation phase for the project and raises its chances of success in the international water sector, and at Mekorot specifically.

Water quality improvement – Within the activity of the Water Quality Unit at Mekorot, the Company performs quality tests for suppliers of chemicals. Based on the findings, the suppliers implement various recommendations of Mekorot to improve the quality of the chemicals and adjust them to regulatory requirements.

Conference on surveys and research – Mekorot holds an annual conference on research and innovation. The conference focuses on presentations of research activities conducted independently by the Company and with its partners in the Israeli water industry and academia. Mekorot invites hundreds of guests from the water industry, academia, and government ministries that work closely with the water sector to the conference. Participating companies can present their capabilities through booths, poster displays, and talks. The conference draws great interest, and the number of participants has grown each year.

Sustainable development – Laying infrastructure for pipelines involves the use of steel, which has a long lifetime of decades, but is fully recyclable. When digging to lay pipelines, Mekorot aspires to use local materials to cover the dig site, minimizing mileage and transport of imported materials.



Mekorot has set a goal for 50% of its critical suppliers to be companies that publish ESG reports and have signed the Mekorot Code of Ethics, by 2025.

83% of orders placed in 2022 were Blue and White purchasing (made in Israel)

14% of orders placed in 2022 were categorized as green purchasing

22% of orders in 2022 were from suppliers categorized as small and mid-sized businesses



Information security

Mekorot, as an infrastructure company, operates information systems and command and control systems deployed nationwide, at its facilities and control centers, and uses administrative information systems to support its routine operations and the achievement of its objectives. These nodes pose a risk of damage to information security by hostile parties, which could harm the routine activity of the Company. Mekorot protects its systems against such threats, which have mounted in recent years, and works to improve and enhance its defenses and information security, on several levels, including the establishment of a national cybersecurity center to monitor and address cybersecurity incidents on the Company's networks; raising the level of information security in critical systems; implementing advanced solutions and technological tools; acting to continually publicize and raise awareness of this issue among employees; and more. As a government company, Mekorot receives assistance for its control systems from the Israel Police and the Israel National Cyber Directorate. Mekorot also operates in accordance with an information-security policy and invests extensive resources in mechanisms for backups, information security, and electronic and physical defense of its sites. The Company operates DPR alternate systems and backups for its communication systems, to allow operational continuity during a shutdown. Pursuant to regulatory approval, Mekorot plans to develop its cyber defense and implement an information-security program at a cost of approximately NIS 10 million per year, over a period of five years.

Initiatives for defense against information-security threats:

- > Raising awareness among employees.
- > Preparing and practicing procedures.
- > Installing technological means and information-security systems to improve cyber attack discovery, identification, and prevention capabilities.
- > Expanding SOC (system and organization controls) capabilities.
- > Enforcing password and authorization policies.
- > Conducting internal and external audits.
- > Replacing information systems used over a long period with new systems aligned with needs, according to the guidelines of the Israel National Cyber Directorate.

Future goals

Maintain information security

- Raise awareness of cybersecurity risks through training, certification, lectures, management drills, phishing drills, etc.
- Run resilience tests on new and renewed applications.
- Provide information-security guidelines for new projects, purchases, and development.
- Write and update information-security and cybersecurity procedures.
- Expand SOC (system and organization controls) capabilities.

In 2022, Mekorot passed testing for the **ISO 27001** standard on information security and cyber defense

A comprehensive management drill on cybersecurity was successfully completed in 2022

Several actions were taken to expand defense against cyber attacks via email

A company-wide process was initiated to implement regulations on cyber risk management in the supply chain. This process will continue in 2023



GRI and ESG Index

104-116 →

GRI index

Mekorot company has reported with reference to the GRI Universal Standards, for the period of 2022.

GRI Standard	Index	Description	Pages
GRI 101: Foundation 2021			
GRI 2: General Disclosure 2021			
GRI 2: General Disclosure 2021	2-1	Organizational details	21-22, 36-37
	2-2	Entities included in the organization’s sustainability reporting	6,23-24
	2-3	Reporting period, frequency and contact point	6
	2-4	Restatements of information	26-27, 52, 86,113-116
	2-5	External assurance	Wasn't performed
	2-6	Activities, value chain and other business relationships	21-22, 26, 36-37, 101
	2-7	Employees	74-76, 115
	2-8	Workers who are not employees	98
	2-9	Governance structure and composition	92-94
	2-10	Nomination and selection of the highest governance body	93-94
	2-11	Chair of the highest governance body	93
	2-12	Role of the highest governance body in overseeing the management of impacts	92-95
	2-13	Delegation of responsibility for managing impacts	16, 95
	2-14	Role of the highest governance body in sustainability reporting	16-17, 95
	2-15	Conflicts of interest	95
	2-16	Communication of critical concerns	95
	2-17	Collective knowledge of the highest governance body	95





GRI Standard	Index	Description	Pages
GRI 2: General Disclosure 2021	2-18	Evaluation of the performance of the highest governance body	96
	2-19	Remuneration policies	94
	2-20	Process to determine remuneration	94
	2-21	Annual total compensation ratio	94
	2-22	Statement on sustainable development strategy	3-4,17-19
	2-23	Policy commitments	19, 97-98
	2-24	Embedding policy commitments	79, 96, 98-99, 101
	2-25	Processes to remediate negative impacts	41, 57, 59, 70, 95, 98, 103
	2-26	Mechanisms for seeking advice and raising concerns	79, 95, 98, 99
	2-29	Approach to stakeholder engagement	10-12, 79, 98
	2-30	Collective bargaining agreements	72, 74
GRI 3: Material Topics 2021			
GRI 3: Material Topics 2021	3-1	Process to determine material topics	13
	3-2	List of material topics	14
Water Supply Resilience			
GRI 3: Material Topics 2021 Water supply resilience	3-3	Management of material topics: Water supply resilience	66-68
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	39-41, 66, 68-69
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	28, 88





GRI Standard	Index	Description	Pages
Integrative Water Management			
GRI 3: Material Topics 2021 (Integrative water management)	3-3	Management of material topics: Integrative water management	39-45
GRI 303: Water and Effluents 2018	303-2	Management of water discharge- related impacts	43-44
	303-3	Water withdrawal	113-114
Ethics and Prevention of Corruption			
GRI 3: Material Topics 2021	3-3	Management of material topics	97-99
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	97-99,101
	205-2	Communication and training about anti-corruption policies and procedures	97-99,101
	205-3	Confirmed incidents of corruption and actions taken	99
Transmission System Efficiency			
GRI 3: Material Topics 2021 Transmission system efficiency	3-3	Management of material topics: Transmission System Efficiency	46-49
Occupational Health and Safety			
GRI 3: Material Topics 2021	3-3	Management of material topics	85-87
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	85
	403-2	Hazard identification, risk assessment, and incident investigation	85-87
	403-3	Occupational health services	76, 85
	403-4	Worker participation, consultation, and communication on occupational health and safety	76, 85





GRI Standard	Index	Description	Pages
Occupational Health and Safety			
GRI 403: Occupational Health and Safety 2018	403-5	Worker training on occupational health and safety	86, 87
	403-6	Promotion of worker health	76, 85
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	60, 70, 85-87
	403-8	Workers covered by an occupational health and safety management system	85
	403-9	Work-related injuries	86
	403-10	Work-related ill health	86
Energy Efficiency			
GRI 3: Material Topics 2021	3-3	Management of material topics	46, 51
GRI 302: Energy 2016	302-1	Energy consumption within the organization	52,113
	302-2	Energy consumption outside of the organization	46
	302-3	Energy intensity	Not reported
	302-4	Reduction of energy consumption	52
	302-5	Reductions in energy requirements of products and services	44, 48-52
Innovation and Technology			
GRI 3: Material Topics 2021 (Innovation and technology)	3-3	Management of material topics: Innovation and technology	31-34
Fairness To Customers and Customer Satisfaction			
GRI 3: Material Topics 2021 Fairness to customers and customer satisfaction	3-3	Management of material topics: Fairness to customers and customer satisfaction	88





GRI Standard	Index	Description	Pages
Compliance with Standards and Regulation			
GRI 3: Material Topics 2021 Compliance with standards and regulation	3-3	Management of material topics: Compliance with standards and regulation	100
GRI 2: General Disclosure 2021	2-27	Compliance with laws and regulations	100 ,57
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	22,116
Environmental management and the climate crisis			
GRI 3: Material Topics 2021 Environmental management and the climate crisis	3-3	Management of material topics: Environmental management and the climate crisis	56-64 ,50
GRI 201: Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	63 ,52
GRI 3: Material Topics 2021	3-3	Management of material topics	59-64
GRI 304: Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	59-61
	304-2	Significant impacts of activities, products, and services on biodiversity	59-64
	304-3	Habitats protected or restored	59-64
GRI 3: Material Topics 2021	3-3	Management of material topics	53
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	53
	305-2	Energy indirect (Scope 2) GHG emissions	53
	305-5	Reduction of GHG emissions	53-54





GRI Standard	Index	Description	Pages
Environmental management and the climate crisis			
GRI 3: Material Topics 2021	3-3	Management of material topics	57
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	57
	306-2	Management of significant waste-related impacts	57
	306-3	Waste generated	57
	306-5	Waste directed to disposal	57





GRI Standard	Index	Description	Pages
Additional Topics the Company Reports on as Part of The GRI Index			
GRI 3: Material Topics 2021	3-3	Management of material topics	72, 77-78
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	76, 115
	401-3	Parental leave	74
GRI 404: Training and Education 2016	404-1	Average hours of training per year per employee	82
	404-2	Programs for upgrading employee skills and transition assistance programs	77, 82-84
	404-3	Percentage of employees receiving regular performance and career development reviews	74, 77
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	75, 93
	405-2	Ratio of basic salary and remuneration of women to men	81, 94
GRI 201: Economic Performance 2016	201-3	Defined benefit plan obligations and other retirement plans	78, 94
	201-4	Financial assistance received from government	22
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	7-9, 26, 32-33, 36-37, 47, 89
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	101-102
GRI 413: Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	88-90
	413-2	Operations with significant actual and potential negative impacts on local communities	59-64

Numerical Data Annex

Environment

Parameter examined	2019	2020	2021	2022
Production and extraction ⁴⁶				
Total water supplied (MCM)	1,637	1,659	1,792	1,750
Potable water supplied (MCM)	1,213	1,246	1,349 ⁴⁷	1,351
Brackish water supplied (MCM)	144	143	140 ⁴⁸	133
Effluent water supplied (MCM) (effluents + Shafdan)	280	266	303	266
Desalinated water acquired (MCM)	679	613	557.5 ⁴⁹	557.4
Electricity production from renewable sources (MWh) ⁵⁰	9,008	15,920	14,688 ⁵¹	14,584
Energy and emissions				
Consumption of self-produced green energy (MWh) ⁵²	9,008	15,920	14,688	14,584
Consumption of electricity from private electricity producers (MWh)	6,342	963,100	906,952	1,229,900
Total electricity consumption by Mekorot⁵³ (MWh)	2,041,800	2,262,400	2,409,800	2,354,800
Gasoline consumption for transportation (L)	1,000,000	808,315	822,282	999,633
Diesel fuel consumption for transportation (L)	2,000,000	1,845,730	1,784,643	1,993,813
Diesel fuel for generators (L)	285,743	316,341	396,500	414,500
Total fuel consumption by Mekorot (L)	3,285,743	2,970,386	3,003,425	3,407,946
Ratio of fuel consumption to quantity of water supplied (MWh/MCM)	1.17	1.24 ⁵⁴	1.24	1.35

⁴⁶ Data are reported excluding data on the Shafdan, in line with the data for 2021.

⁴⁷ **Report correction:** A figure of 1,347 was reported in the 2021 report, due to a clerical error. The corrected figure above is consistent with the water supply report.

⁴⁸ **Report correction:** A figure of 143 was reported in the 2021 report, due to a clerical error. The corrected figure above is consistent with the water supply report.

⁴⁹ **Report correction:** A figure of 559 was reported in the 2021 report, due to a clerical error. The corrected figure above is consistent with the water supply report.

⁵⁰ Data refer to solar-power systems and hydroelectric turbines.

⁵¹ A decrease occurred in these figures in comparison to data reported in 2020, due to a decrease in the operation of turbines as a result of a malfunction in Kfar Yehoshua, which has been repaired.

⁵² **Report correction:** The 2021 report contained a clerical error across this row, such that the data seemingly indicated total green energy consumption from in-house production greater than the total green energy produced in house. The figures have been corrected here.

⁵³ Changes in electricity consumption result from variations in water sources (the ratio supplied from the Kinneret Sea, groundwater, or desalination). The data do not indicate a change in trend; they are consistent with expected cyclical variation in energy consumption (usually correlated with annual precipitation quantities).

⁵⁴ The increase in 2020 resulted from growth in water production from the Kinneret Sea following rainy years, which requires high energy consumption.

Environment

Parameter examined	2020	2021	2022
Floodwater capture ⁵⁵			
Saar Stream	4,468,995	5,149,221	4,315,045
Kfar Baruch	8,678,950	1,571,500	204,872
Abu Said Dam	584,667	1,066,704	744,079
Total floodwater rechanneled to agriculture	13,732,612	7,787,425	5,263,996
Menashe Streams	13,191,496	8,450,006	10,330,001
Shikma	12,300,000	2,843,000	0 ⁵⁶
Total floodwater rechanneled for groundwater enrichment	25,491,496	11,293,006	10,330,001
Total floodwater captured	39,224,108	19,080,431	15,593,997

⁵⁵ Report correction: Data for previous years were updated in the course of data cleansing and improvement of measurement methods.

⁵⁶ There were no significant floods in 2022; therefore, no floodwater was rechanneled to Shikma.



Social

Parameter examined	2019	2020	2021	2022
Employee data				
Number of employees	1,574	1,576	1,542 ⁵⁷	1,562
Employee turnover (%) ⁵⁸	3	1.8	1.8	2.7

	Women	Men	Women	Men	Women	Men	Women	Men
Sick days	5,228	7,623	2,101	5,056	3,954	9,356	6,070	11,767
Vacations	5,577	18,652	4,493	17,530	7,267	22,060	9,974	26,325
Reserve military duty	15	949	56	643	8	756	6	526
Personal events	170	495	130	434	173	701	80	335
Deceased employees	0	2	0	2	0	0	0	3
Total	10,990	27,721	6,780	23,665	11,402	32,873	16,130	38,956

⁵⁷ **Report correction:** A figure of 1,576 employees in 2021 was stated in the 2021 report, due to a clerical error. The error is corrected here.

⁵⁸ Data on employee departures refers to employees who resigned or were dismissed, and does not include employees who retired.



Economic – corporate governance

Parameter examined	2019	2020	2021	2022
Economic value of the Mekorot Group (at the end of the reported year)				
Revenues (NIS millions)	4,651	4,665	5,030	4,904
Cost of sales and works (NIS millions)	(4,146)	(3,949)	(3,980)	(4,239)
Net profit (NIS millions)	61	209	386	448
Total assets (NIS millions)	16,784	17,659	19,489 ⁵⁹	20,873
Salaries, labor wages, and related expenses (NIS millions)	785	741	729	728
Payments to the government – tax expenses (income) (NIS millions)	37	63	54	56
Employee benefit liabilities (NIS millions)	718	696	698	534
Scope of development projects (NIS billions)	1.4	1.5	1.7	1.5

⁵⁹ Report correction: Figure updated according to the annual financial report for 2022.



Disclaimer

This ESG report does not constitute part of the financial statements or of the immediate or periodic reports of Mekorot. This report contains forward-looking statements (pursuant to the Securities Law, 1968), including expectations, forecasts, targets, goals, estimates, and plans pertaining to the activity of the Company.

The statements presented in this report reflect an assessment and statement of intent by Mekorot during the writing of the report, and are subject to changes and updates. All information and data presented in this document reflect data about the activity of the Company at the time of publication and to the best of the Company's knowledge. This document may contain estimates, omissions, generalizations, errors, and/or inaccuracies.

In any case of conflict or inconsistency between the information presented in this report and the information appearing in the public financial statements of the Company, which are published on the website of the Israel Securities Authority and the Tel Aviv Stock Exchange, the information in the publications shall prevail.





Your opinion is important to us, you are welcome send us feedback: rmor@MEKOROT.CO.IL