

مؤسسة الإمارات للطاقة النووية
Emirates Nuclear Energy Corporation



شركة براكة الأولى ش.م.خ
Barakah One Company PJSC



شركة نواة للطاقة
Nawah Energy Company



SUSTAINABILITY REPORT 2021



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1 ABOUT THIS REPORT

This report provides stakeholders with a comprehensive and transparent update on the Emirates Nuclear Energy Corporation (ENEC) sustainability performance for 2021. The report covers the activities of ENEC and its subsidiaries, Nawah Energy Company, and Barakah One Company (BOC), collectively referred to as “The Enterprise”, as well as ENEC’s Joint Venture (JV) partner and Prime Contractor for the Barakah Nuclear Energy Plant (Barakah Plant), the Korea Electric Power Corporation (KEPCO), and other subcontractor activities where relevant. Complete details on the scope of this report can be found in Appendix A, as well as the data presented throughout the report.

Reporting Standards

This report has been prepared in accordance with GRI Standards: Core option, referencing Abu Dhabi Securities Exchange’s (ADX) 31 Key Performance Indicators. Additionally, the report describes our commitment to the 17 United Nations (UN) Sustainable Development Goals (UN SDGs). Please refer to Appendix C to view the Global Reporting Initiative (GRI) content index and Appendix E for UN SDG, GRI, and ADX Mapping.

Reporting Period

This report describes the Enterprise’s economic, environmental, social, and governance activities between 1st January 2021 and 31st December 2021.

For questions or comments regarding this report and the Enterprise’s sustainability program, please visit www.enec.gov.ae or contact HSESTeam@enec.gov.ae.

Disclaimer:

This report contains commitment statements and reflects management’s reasonable and current expectations. No assurance can be given that such expectations will prove correct. Such statements are subject to risks and uncertainties and should not be relied upon due to ever-changing future events that could materially change the outcome. This document has not been subject to review by an independent third-party assurance provider.

GRI standards GRI 2016: 102-12, 102-46, 102-52, 102-53, 102-54, 104-45



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MESSAGE FROM THE CEO



“ Today, the world faces the combined global challenges of ensuring energy security and sustainability ”

H.E. Eng. Mohamed Al Hammadi
Managing Director and Chief Executive Officer (NEC)



Our nation's founding father, His Highness, the late Sheikh Zayed bin Sultan Al Nahyan, pioneered sustainability. His vision for the UAE paved the way for the sustainable growth of our economy, society, and environmental stewardship.

As energy is instrumental in powering such ambitious growth and development, following our late founder's footsteps, this report captures how the Enterprise has successfully managed challenges in 2021 by transforming from coexisting with COVID-19 to refocusing on the planet's future, by investing in the vast opportunities offered by the Barakah Plant.

The successful expansion of our operations has been powering the sustainable development of our Emirate, the nation, and the wider world. Therefore, this year's sustainability report captures the Enterprise's initiatives that promote and enable sustainable operations at the Barakah Plant.

After describing the construction of a safe, clean, reliable, and efficient nuclear energy plant in Barakah, this report further captures how the Enterprise proudly managed to deploy its integrated and sustainable strategy into every segment of its nuclear energy plant's operations in 2021. In a year when the United Nations declared in its Sixth Assessment Report, that climate change is widespread, rapid, and intensifying, the contribution of our clean nuclear energy is vital to mitigating such impacts on humanity.

In addition to climate change, and while the world is facing rising energy prices, the nuclear energy generated by our plants are pivotal to securing clean, safe, and reliable energy for the UAE. Consequently, the United Nations Framework Convention on Climate Change (UNFCCC) has officially announced that the UAE will be hosting the 28th Conference of Parties (CoP) to be held in November 2023.

In 2021, the UAE celebrated the 50th anniversary of its formation. The entire nation celebrated this proud moment with Barakah Plant Unit 1 successfully starting its commercial operations and supplying clean and sustainable electricity around the clock. The Enterprise has prevented 2.83 million tons of greenhouse gas (GHG) emissions from the national grid in 2021, and is decisively contributing to the UAE Net-Zero by 2050 goal.

I humbly thank everyone at the Enterprise and our stakeholders, whose dedication and hard work have contributed to our achievements in 2021. I am hereby delighted to present the 2021 edition of the Enterprise's sustainability report.





3

ENEC ENTERPRISE AT A GLANCE

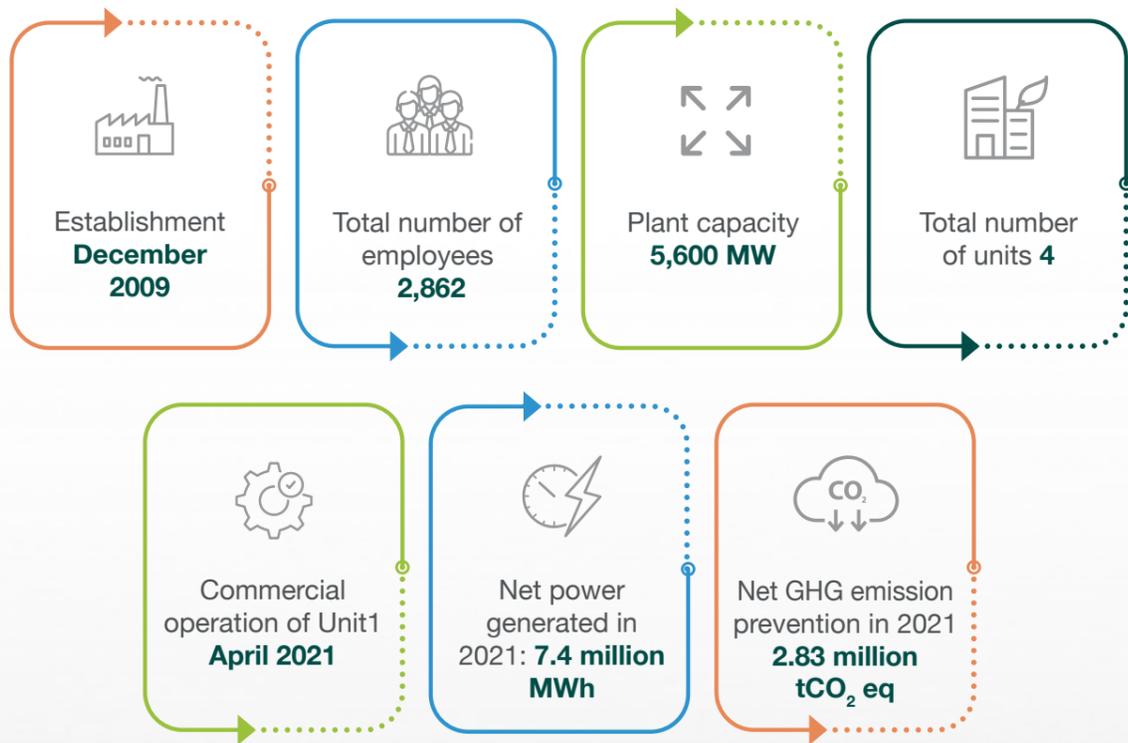


ENEC was established by federal law under Decree No 6 of December 2009 by His Highness, the late President of the United Arab Emirates (UAE), Sheikh Khalifa bin Zayed Al Nahyan. Since its inception, ENEC has been working to deliver safe, clean, reliable, and efficient nuclear energy to the nation. ENEC is a Public Joint Stock Company (PJSC) owned by Abu Dhabi Development Holding Company (ADQ), one of the region's largest holding companies and one of the investment arms of the Government of Abu Dhabi.

ENEC has constructed and owns the UAE's first nuclear energy plant to meet the growing energy requirement of the nation with clean nuclear energy. ENEC is working closely with the Abu Dhabi and Federal Government to ensure a peaceful nuclear energy program, in alignment with the industrial infrastructure vision of the UAE. ENEC is contributing to the development of human resource capacity for the nuclear energy program in coordination with the educational sector of UAE, and effectively engaging with the UAE community to ensure a high level of awareness and understanding about the program and the role of nuclear energy in the nation's energy portfolio.

ENEC has constructed the UAE's first nuclear energy plant at Barakah, in the Al Dhafra Region of Abu Dhabi – the Barakah Nuclear Energy Plant (Barakah Plant). The Barakah Plant consists of four third-generation Advanced Power Reactor (APR-1400) nuclear energy generating units and their associated facilities, with a combined capacity of approximately 5,600 Megawatts (MW). The Barakah Plant is expected to meet up to 25% of the UAE's electricity demand, once fully operational.





OUR VISION

Powering the growth of the UAE.



OUR MISSION

Ensure a safe and sustainable peaceful nuclear energy program.

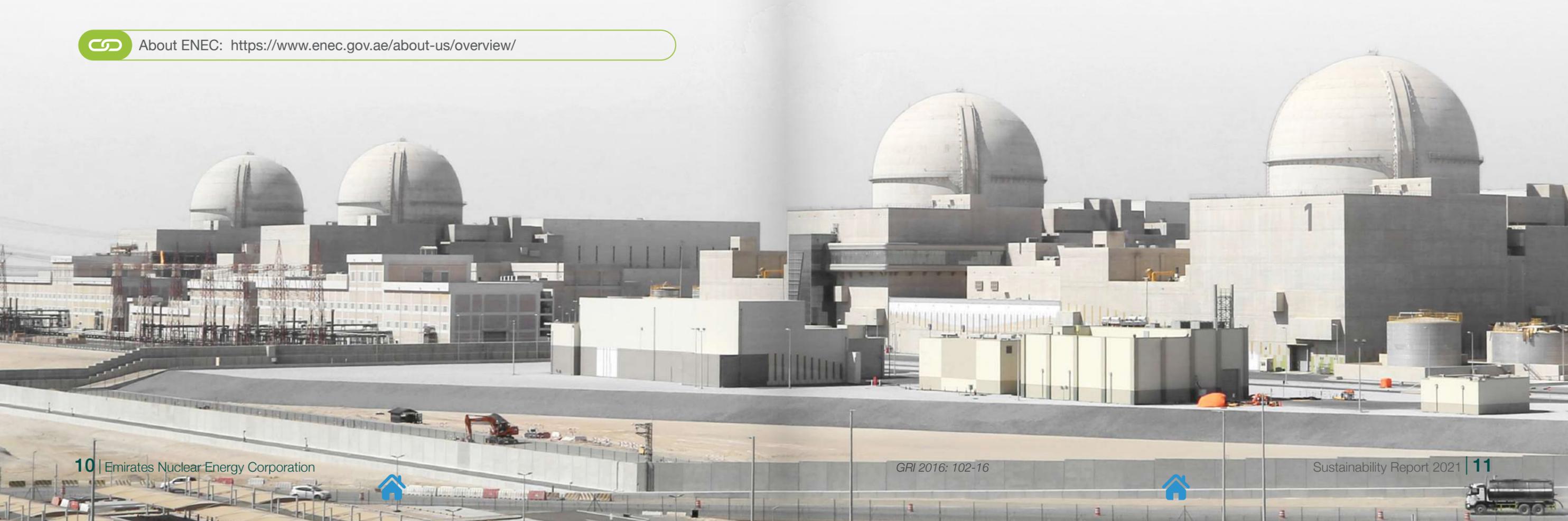


OUR VALUES

Our vision and mission are guided by our commitment to the six corporate values of Accountability, Teamwork, Safety, Integrity, Trust, and Excellence (AT SITE). We at ENEC are committed to following our values in our day-to-day operations. All our meetings start with a safety moment and conclude with an AT SITE moment based on our corporate values.



About ENEC: <https://www.enec.gov.ae/about-us/overview/>



Accountability

Responsibility and authority are well-defined and clearly understood, and people take ownership for their work, delivering high quality results in a timely manner as efficiently as possible.

Teamwork

Individuals and teams communicate and coordinate their activities within and across organizational boundaries, demonstrating a strong sense of collaboration and cooperation in connection with projects and operational activities.

Safety

Safety is the overriding priority at ENEC. We design and execute world-class safety and security processes and systems that ensure the safety of the public, ENEC employees, and the environment.

Integrity

We listen to and respect the opinions, expertise, and traditions of others. We are accountable for our work, our business, and our actions. We do not tolerate discrimination or harassment.

Trust

We build trust through adhering to nuclear standards, living our values, fulfilling our commitments, and promoting open and fact-based communications with our colleagues, our stakeholders, and the general public.

Excellence

We actively pursue excellence through the continuous performance improvement of our projects, programs, and processes, which drives greater effectiveness and efficiency, in pursuit of outstanding and sustainable results.



3.1 Group Structure



ENEC

In Decree No. 6 of December 2009, ENEC was mandated by the UAE Government to deliver the UAE Peaceful Nuclear Energy Program and develop the cornerstone of the UAE’s nuclear program, the Barakah Plant – the first nuclear energy plant in the Arab World.

In 2009, KEPCO, South Korea’s single largest public power electric utility, was awarded the prime contract for the design, construction, and operation of the four reactors at the Barakah Plant. The contract also covers extensive training, human resource development, and education programs as the UAE builds the capacity to staff a thriving nuclear energy industry. KEPCO was chosen following a comprehensive year-long evaluation conducted by 75 international experts who evaluated various factors, including safety, deliverability, and commitment to human resource development.

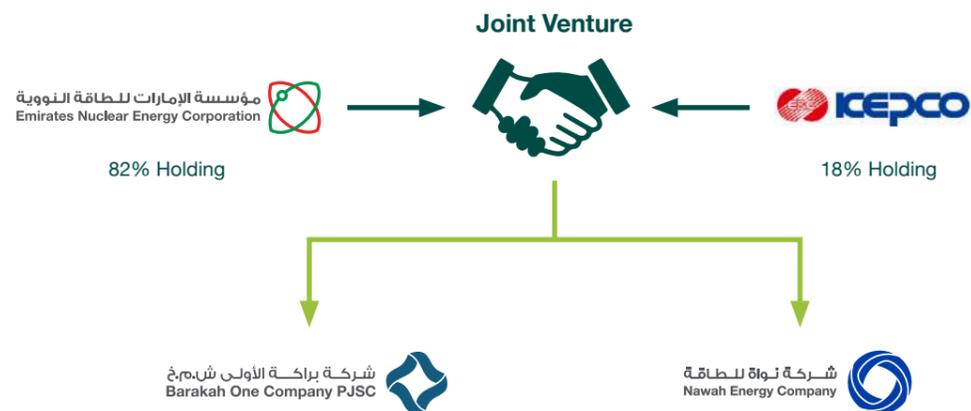
The Barakah Plant is integral to the UAE’s vision of sustainable growth and a step toward a future, where our nation’s energy demand is not entirely dependent on oil and gas. By developing the Barakah Plant, we support the diversification of the UAE’s energy portfolio by providing clean electricity to meet the country’s domestic energy demand while creating high-value careers for UAE Nationals. This serves as an incubator for the development of a high-tech local nuclear industry. The Barakah Plant supports the UAE’s sustainable economic growth and environmental protection efforts.

[ENEC Prime Contractor https://www.enec.gov.ae/barakah-plant/prime-contractor/](https://www.enec.gov.ae/barakah-plant/prime-contractor/)



3.2 Our Business Subsidiaries

In October 2016, ENEC signed a Joint Venture agreement with KEPCO, launching Nawah and Barakah One Company. Through the JV, KEPCO became a minority shareholder of Nawah and Barakah One Company, holding 18% in each subsidiary, while ENEC maintains a majority share of 82% in the two subsidiaries.



Nawah Energy Company

A Joint Venture subsidiary of the Emirates Nuclear Energy Corporation (ENEC) and partially owned by the Korea Electric Power Corporation (KEPCO), Nawah Energy Company has been mandated to safely operate and maintain Units 1 to 4 of the Barakah Nuclear Energy Plant in adherence to the highest standards of quality, safety, security, and operational transparency.

Nawah is a multinational, multicultural company committed to operating excellence through its skilled nuclear energy workforce in the United Arab Emirates, with a focus on the development of UAE Nationals, and ensuring the highest levels of efficiency and standards in operating the Barakah Plant.

Nawah commenced commercial operations of Unit 1 of the Barakah Plant in 2021.

[Nawah Energy Company https://www.nawah.ae/about-nawah/overview](https://www.nawah.ae/about-nawah/overview)

Barakah One Company

A Joint Venture subsidiary of the Emirates Nuclear Energy Corporation (ENEC) and partially owned by the Korea Electric Power Corporation (KEPCO), Barakah One Company is in charge of representing the financial and commercial interests of the Barakah Nuclear Energy Plant project. BOC is accountable for ensuring that ENEC and KEPCO build the plant following the highest quality, safety, and sustainability standards under all existing contracts, including the prime contract.

Moreover, in October 2016, BOC and Abu Dhabi Water and Electricity Company (ADWEC), which has since become the Emirates Water and Electricity Company (EWEC), announced a Power Purchase Agreement (PPA), which mandates the price-per-kilowatt structure of the electricity produced by the Barakah Plant Units 1 to 4. Setting a price at which electricity is produced and sold to the grid by the Barakah Plant is a significant commercial milestone for the project. With BOC managing the commercial interests of the Barakah Plant, ENEC, Nawah and KEPCO continue to deliver the program in a safe, efficient, and commercially viable manner.



3.3 ENEC Progress

In April 2021, Barakah Plant Unit 1 commenced commercial operations. In September 2021, Unit 2 of Barakah Plant was safely and successfully connected to the UAE electricity grid. In October 2021, ENEC celebrated the successful completion of the construction of Unit 3 and is now ready to complete operational readiness activities. This marked the end of construction prior to national and international pre-operational assessments. Unit 4 is progressing with its construction and commissioning activities.

Unit	% Completion 2021	2021 Project Progress Update
Unit 1	Commercially Operational	<ul style="list-style-type: none"> Commenced commercial operations (April 2021)
Unit 2	Connected to the Grid	<ul style="list-style-type: none"> Received Operating License from FANR (March 2021) Completed initial Fuel Load (March 2021) Initial start-up completed (August 2021) Plant connected to the grid (September 2021)
Unit 3	Construction Completed	<ul style="list-style-type: none"> Construction complete (October 2021) Conducting operational readiness activities
Unit 4	91%	<ul style="list-style-type: none"> Construction and commissioning in progress

Operating and Regulatory Licenses

We are working to ensure the highest standards of quality and transparency are implemented throughout the construction and operation of the Barakah Plant. All our activities are conducted under the strict regulation of the Federal Authority for Nuclear Regulation (FANR) with oversight from the Nuclear Safety Review Board (NSRB). In addition, senior nuclear experts from the International Atomic Energy Agency (IAEA) and the World Association of Nuclear Operators (WANO) continue to conduct independent assessments of the robustness of the UAE Peaceful Nuclear Energy Program.

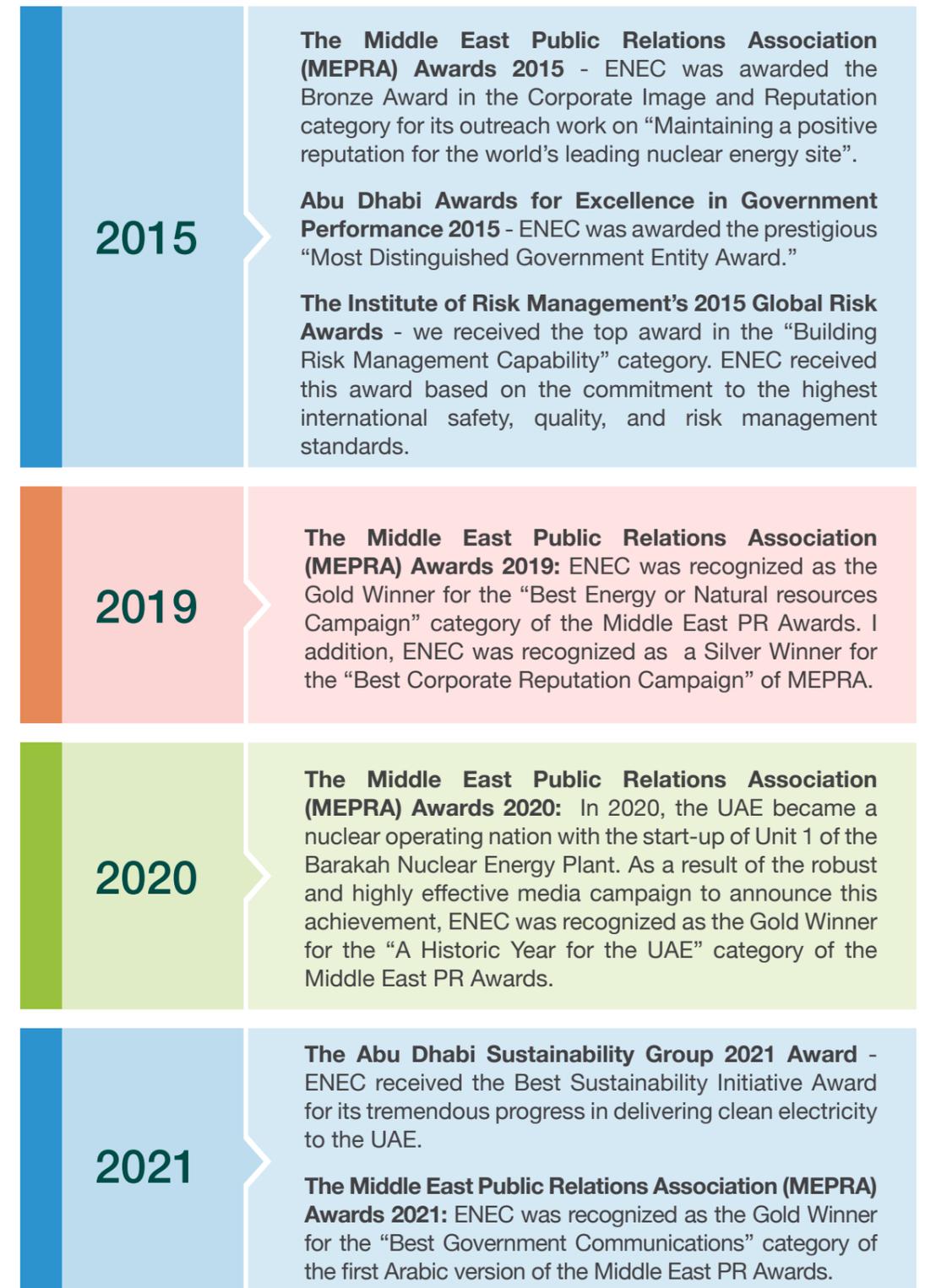
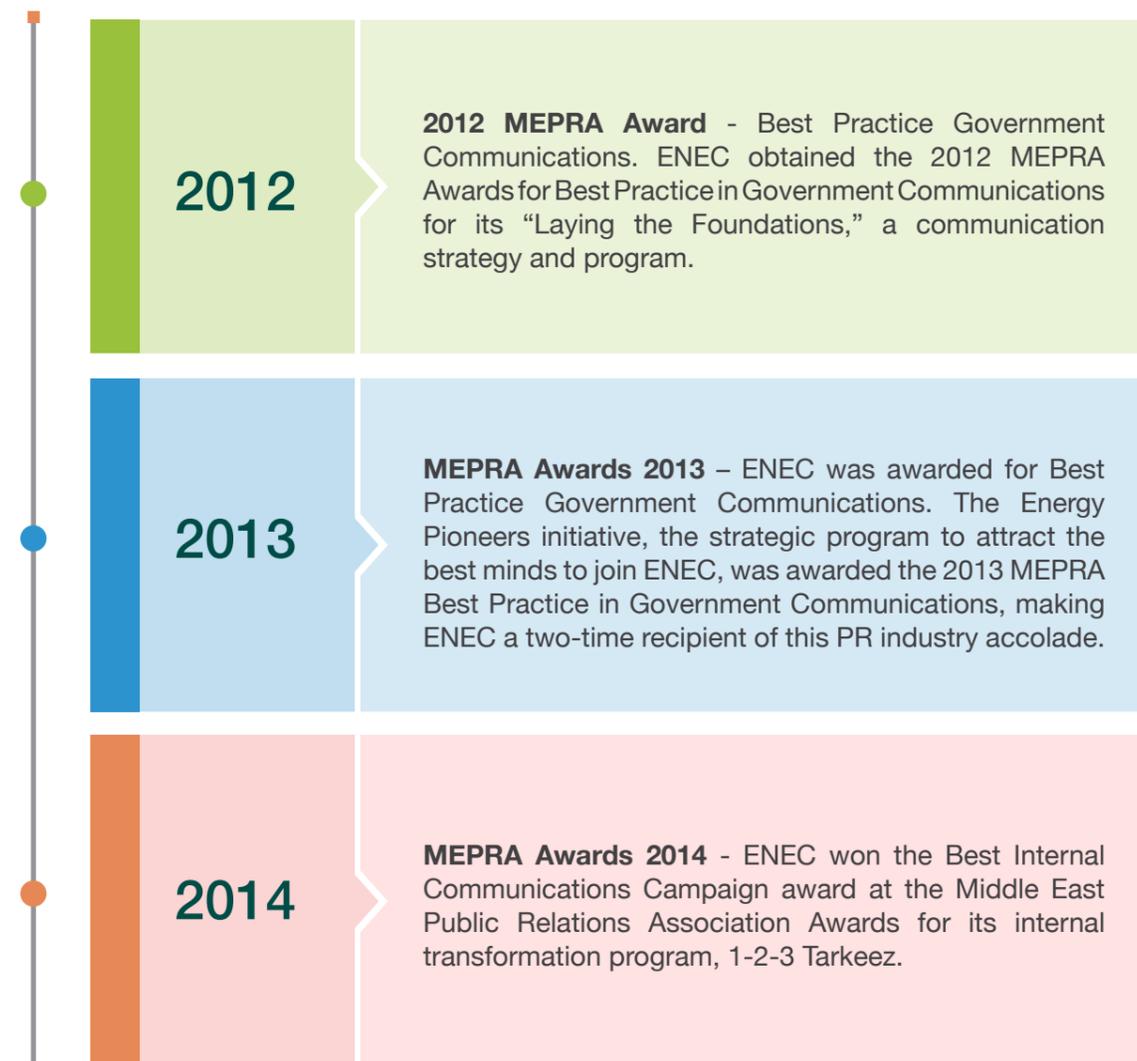
In February 2020 and March 2021, FANR issued an Operating License to Nawah Energy Company, allowing to start safely loading fuel into Barakah Plant Units 1 and Unit 2, respectively. The Operating License was issued following a rigorous series of inspections and extensive study of the Operating License Application (OLA) document by FANR. Since 2009, the UAE Peaceful Nuclear Energy Program has been subject to more than 280 inspections by FANR. Additionally, more than 40 independent inspections, reviews, and assessments have been conducted by WANO and IAEA, have ensuring that the highest international standards are met throughout the development and delivery of the UAE Peaceful Nuclear Energy Program.

Memberships



3.4 Awards and Recognitions

We are focused on delivering a world-class nuclear energy program to the UAE. The Enterprise constantly strives to achieve the highest standards across every aspect of our work - from our undivided commitment to safety and quality to the smooth operations of our business. This reflects the awards and recognitions the Enterprise has received since the inception of the UAE Peaceful Energy Program.



4

GOVERNANCE AND MANAGEMENT



4.1 Enterprise Governance

Robust governance and management structures are essential to the management of our risks and to maintaining accountability. Under the leadership of the Board of Directors, the Enterprise strives for excellence in governance by aligning our processes, procedures, and performance with the requirements of the Abu Dhabi Accountability Authority (ADAA), FANR, WANO and the Institute of Nuclear Power Operations (INPO).

Responsible stewardship of its economic, environmental, and social aspects forms the basis of the Enterprise's corporate governance processes. The Board of Directors and the leadership ensure that the Enterprise remains a viable, thriving entity, with continually improving Environmental, Social and Corporate Governance (ESG), and financial performance. The Enterprise's robust and streamlined governance structure help ensures effective business operations and assessment and management of risks that may impact our plants and operations. It also ensures that funds are used appropriately, failing to do so would expose our stakeholders and the organization to commercial, financial, and legal risks.

The Enterprise understands that strong leadership is vital to developing the UAE's Peaceful Nuclear Energy Program. The program is guided by a Board of Directors with members representing excellence in the nuclear, corporate, and government fields and an executive management team. We have established a solid governance philosophy and Code of Ethics that drives our business excellence, quality assurance missions which enables us to meet and exceed international standards and certifications requirements.

Board of Directors

The Board of Directors of the Enterprise is the supreme authority of the Enterprise entrusted by Law No. 21 of 2009, with full authority to govern and oversee the Enterprise's activities. It has the powers, objectives, and responsibilities outlined in Law No. 21 of 2009.

Board members are appointed based on their expertise, including their understanding of the unique safety and security responsibilities of the Enterprise. The Board is a collegial body, but members can act critically and independently of a notary, especially when such independence enhances nuclear safety, security, and reliability.

Enterprise board members must participate in an induction program and receive the necessary training in nuclear power, safety, and decision-making. The Board Members are subjected to performance evaluation measures at the end of their respective terms by the Chairman of the Board. The performance results are considered for renewal of appointment for a further period and shared with the Abu Dhabi Executive Council if requested. In August 2021, the Enterprise announced changes to its Board of Directors, with two new members joining. The two new members are His Excellency (H.E.) Mohamed Al Hammadi, Managing Director and Chief Executive Officer of ENEC, and H.E. Masood M. Sharif Mahmood, CEO of Etisalat UAE operations.





His Excellency
Khaldoon Khalifa Al Mubarak
Chairman, Board of Directors



His Excellency
Eng. Suhail Mohamed Faraj Al Mazrouei
UAE Minister of Energy and Industry
Vice-Chairman, Board of Directors



Khaled Abdulla Al Qubaisi
Member, Board of Directors



Mohamed Hassan Al Suwaidi
Member, Board of Directors



Masood M. Sharif Mahmood
Member, Board of Directors



Mohamed Al Hammadi
Member, Board of Directors



Eng. Awaidha Murshed Ali Al Marar
Member, Board of Directors



David V. Scott
Member, Board of Directors



Michael J. Wallace
Member, Board of Directors



Charles G. Pardee
Member, Board of Directors

Our governance philosophy is guided by eight Principles focused on achieving the organization's goals and ensuring effective stewardship of the UAE's Peaceful Nuclear Energy Program

Equity



ENEC demonstrates fairness and equitable treatment of its stakeholders and inspires and motivates people to work together to realize the organization's vision and mission.

Responsiveness



We promote effective and timely decision-making through structured and efficient processes and procedures. This also ensures that decisions are made by those best placed to make them.

Transparency and accountability



ENEC is committed to clear, open, and timely reporting with stakeholders. The organization manages responsibilities and accountabilities through an established delegation of authority and process to identify activities and decisions for allocating roles. We place clear ownership and accountability for decision-making at all levels of the organization.

Consult and inform



We use internal governance forums to provide accountable persons with access to an appropriately broad range of advice, support, and challenges.

Laws and regulations



ENEC uses internal control systems to ensure compliance with laws, regulations, and internal policies and procedures. Operational management implements and maintains this support from the Compliance and Audit departments.

Effectiveness and efficiency



ENEC balances individual and collective accountabilities for decision-making while embedding levels of trust in those responsible for decision-making.

Minimize need for committee



ENEC provides clarity in purpose and membership for all governance activities, with clear responsibility, authority, and output for strategic decision-making.

Maximize authority delegated to each executive



We promote responsibilities and accountabilities in operational activities through an established delegation of authority for effective and timely decision-making.



Board Committees

The Board has three committees to oversee the Enterprise's activities and to provide clear direction. Each committee has a written charter outlining its responsibilities, which is approved by the Board.

Board Committee	Description	Sustainability Issues Addressed
Committee on Nuclear Power (CNP)	CNP oversees and advises the Board of Directors on nuclear safety, security, reliability, regulation, and environmental matters related to the construction and operation of the Enterprise's nuclear units. The CNP consists of three board members and external members with extensive prior nuclear industry experience.	<ul style="list-style-type: none"> • Health and Safety • Security • Quality and Reliability • Environmental Management
Audit, Risk, and Compliance Committee (ARCC)	ARCC assists the Board in discharging its responsibilities overseeing Audit, Governance, Risk Management, and Compliance functions. The ARCC is composed of four members and is chaired by a Board Member. One member of the committee is independent of the ENEC Board of Directors.	<ul style="list-style-type: none"> • Health and Safety • Governance and Accountability • Risk Management • Ethics • Regulatory Compliance
Human Capital Committee (HCC)	HCC, comprised of at least two Board members, reviews, and advises the Board of Directors on issues regarding human resources and staffing, compensation, and senior executive succession planning.	<ul style="list-style-type: none"> • Resourcing and Succession • Emiratization • Training and Development

The Enterprise has established and implemented a robust set of standards, principles, and model behaviors for its employees to follow as part of their duties. We require all employees, contractors, business partners, and representatives to achieve the highest personal and professional integrity standards in all aspects of their activities. The Enterprise requires all its stakeholders to comply with all applicable laws, rules, regulations, standards, policies, and procedures.

Auditing and Accountability

We regularly report our financial performance and the performance of our subsidiaries to the Department of Finance (DoF), Abu Dhabi Development Holding Company (ADDH; now known as ADQ), and the Department of Energy (DoE). To ensure timely, meaningful, and reliable disclosures of our financial performance, the following mechanisms are in place:

Statutory Audit: Conducted by the ADAA, which audits the activities of our internal auditors to ensure legal compliance.

Internal Audit: Regular reviews and audits of our financial and non-financial systems, processes, and results are conducted by the internal audit team.

External Audit: Carried out quarterly, bi-annual, and annual audits by an independent third-party auditor, reporting the findings directly to the ENEC Board of Directors.

Management Systems (MS) Internal and External Audits: Carried out annually according to management system requirements internally by the MS team and externally by appointed third parties.

Internal Audit

Our internal audit function provides independent objective assurance and advisory support to Senior Management and the Board of Directors by evaluating and recommending improvements related to risk management, internal control, governance processes, and supporting Anti-Fraud and Misconduct Investigations. Our internal audit function is well established and acts as an assurance provider to the Board of Directors, reporting directly to the Board via the ARCC. The function conducts annual risk assessments covering all activities, including projects, schedule, performance, finance, Information, and Communications Technology (ICT), human resources, and any audit-related issues that arise annually. The ENEC internal audit function adheres to the Institute of Internal Auditors (IIA) standards and the requirements set by ADAA and is subject to periodic assessments by ADAA.

ENEC launched the Combined Assurance Framework (CAF) to provide a means for the internal audit function and other assurance providers to work together and align their assurance processes. As a result, the audit committee and senior management are given insights on governance, risk management, and control arrangement from a comprehensive, holistic perspective. As part of the 2021 Audit Plan, all risks identified, including mitigation plans, were assessed to ensure the appropriate implementation of measures to eliminate and minimize any potential negative impacts.

Business Principles, Ethics and Compliance

We continuously strive to uphold the highest standards of ethical conduct and integrity, to ensure the safety and long-term success of the UAE Peaceful Nuclear Energy Program.



Therefore, we established and implemented a robust set of standards, principles, and model behaviors to create and sustain a corporate environment in which the affairs of ENEC are conducted fairly and transparently, free from any acts of fraud or misconduct. We require all employees, contractors, business partners, and representatives to act by the highest standards of personal and professional integrity in all aspects of their activities and to comply with all applicable laws, rules, regulations, and ENEC standards, policies, and procedures.

Compliance

Across ENEC and its subsidiaries, we adopt a zero-tolerance approach to all forms of fraud and misconduct. We strictly follow legal and regulatory obligations and respect and comply with all commitments, including agreements, standards, and codes of practice. We have established our Enterprise Business Ethics and Compliance Program (Compliance Program) which helps us to direct the conduct of our business with the highest standards of ethics and integrity, complying with all applicable legal and regulatory obligations. This is administered across the organization through an Enterprise Business Ethics and Compliance Policy and Governance, Risk, and Compliance Policy.

Enterprise Business Ethics and Compliance Framework:

To support the implementation and operation of the Compliance Program, an Enterprise Business Ethics and Compliance Framework was established, which is based on international Standard ISO 37301 (Compliance Management System – Requirements with guidance for use) and Committee of Sponsoring Organizations (COSO) Internal Control Framework. The Compliance Program covers ethical, legal, and regulatory compliance aspects.

Governance, Risk, and Compliance (GRC) Policy:

This policy implements an integrated, systematic, and proactive corporate governance structure to achieve ENEC's goals. Furthermore, it establishes and maintains governance over our subsidiaries with a high level of performance while managing diverse risks, while promoting compliance with the highest standards of business ethics and applicable agreements, laws, and regulations.

Enterprise Business Ethics and Compliance Policy:

This Policy Statement confirms ENEC's commitment to ethical conduct and compliance with applicable laws and regulations. It also emphasizes ENEC's professional conduct complementing our AT SITE values of accountability, teamwork, safety, integrity, trust, and excellence.

Legal and Regulatory Compliance Program:

We maintain a Compliance Universe, a live repository of all applicable international, federal, and local laws, regulations, licenses, permits, and commitments. The Legal Department and the concerned Subject Matter Experts evaluate any changes in the legal and regulatory obligations, and the Compliance Universe is updated. The Compliance Universe is further divided into various compliance areas based on the subject handled, and owners are assigned who are responsible for demonstrating compliance. Compliance Registers are established and regularly monitored by the Compliance Department. A self-certification process is also built to seek compliance assurance from the compliance owners. Compliance Ambassadors who are required to support the compliance owners in establishing and maintaining the compliance registers have been appointed for each compliance area.

Some of the significant laws enacted applicable to the Enterprise includes:

- Law No 8 of 2021, concerning the Emirates Nuclear Energy Company "Public Joint Stock Company"
- Federal Law No 33 of 2021, regarding the Organization of Labor Relations (HR Law) becoming effective from 2022
- Federal Decree-Law No 32 of 2021, on Commercial Companies becoming effective from 2022
- Chairman of the Abu Dhabi Accountability Authority Decision No 34 of 2021, on the Issuance of the Anti-Corruption Procedures Regulation

Compliance Program Automation:

We have set a plan to implement an Enterprise Governance, Risk and Compliance (EGRC) platform to automate our compliance management processes in 2021/2022. This eliminates the need to maintain multiple excel workbooks and provides compliance status through meaningful digital reports and dashboards.



Compliance Program Governance:

Board oversight of the Compliance Program:

The ARCC, which is a Board Committee, oversees the Ethical Compliance and Legal and Regulatory Compliance Programs. A report is presented to the ARCC every quarter on the implementation and performance of the Compliance Program.

Management oversight of the Compliance Program:

The Enterprise Compliance Review Board (ECRB), a management oversight body comprising of the CEOs and the Senior Officers of the Enterprise, maintains oversight and conducts management reviews on the Compliance Program implementation, performance, and effectiveness.

Advisory Body of the Compliance Program:

An advisory body called the Enterprise Compliance Council (ECC) was established to provide advice on implementing the Compliance Program. The Vice Presidents and Directors, who are the compliance area owners of the business form the Council, offer the necessary support for the implementation of the Compliance Program.

Ethical Compliance Program:

Code of General Business Principles and Ethics:

The Code stipulates the expected professional behaviors (compliance with legal obligations regarding ethical conduct) from all employees irrespective of their category of employment. It covers a wide range of topics including anti-fraud, anti-corruption, and misconduct, Health, Safety and Environment, treating each other with respect, preventing harassment, intimidation, retaliation and discrimination, non-retaliation against employees who raise concerns, protecting assets of the company and other related aspects.

Every employee within the Enterprise must complete the training on the Code on an annual basis. This is ensured through an online training program through our Learning Management System Taqa (LMS Taqa). Adherence to ethics and prevention of fraud and corruption principles is ensured through annual disclosures through our Enterprise Disclosure Management System wherein employees declare that they had read, understood, and would abide by the Code.

Promoting an Ethical Culture:

Onboarding Sessions:

ENEC's onboarding sessions include topics on the Code of Ethics and the responsibilities of its Employees towards complying with the Code and their obligations to report any matter of fraud and misconduct when they become aware of such issues. During the Onboarding sessions, the principles of our Anti-Fraud and Misconduct Program (AFMP) and methods of reporting their concerns are explained.

Anti-Fraud Fundamentals Training:

Periodic Anti-Fraud Fundamentals training sessions for all employees are conducted jointly by the Enterprise Business Ethics and Compliance and the Audit and Investigation Departments. Around 8 virtual sessions have been conducted in 2021.

Compliance and Ethics Campaigns:

Twice a year the Enterprise Business Ethics and Compliance Department conducts campaigns to promote a culture of ethics and compliance. This covers a wide range of topics dealing with doing the right thing including preventing and detecting fraud, bribery and corruption, conflict of interest, business courtesies, reporting channels, dealing with harassment, intimidation, retaliation and discrimination and respecting others.

In 2021, two campaigns were conducted. The first campaign covered the theme of the various reporting channels that have been established at the Enterprise for employees to report concerns such as grievances, fraud and misconduct, concerns involving nuclear safety, and others.

The second campaign covered promoting awareness on what constitutes a conflict of interest, why one should be aware of situations that could pose a conflict of interest, and how to handle them. The campaigns were communicated through posters, quizzes, dedicated awareness sessions and newsletters on Ethics and Compliance.

Preventing Fraud, Bribery and Corruption:

ENEC has established an AFMP procedure that supports prevention, detection, investigation and response towards fraud or misconduct incidents, and to instill honesty and ethical behavior in ENEC's culture and environment.

The AFMP procedure provides a framework to promote responsible and secure whistleblowing. It serves to receive and address any concern or complaint regarding fraud and/ or misconduct. As outlined in the AFMP procedure, the whistleblowing system comprises four anonymous reporting channels that are available at ENEC for reporting suspected incidents of fraud, fraudulent activity, or misconduct.



The four reporting channels are:

- i. Toll-free hotline available in multiple languages 24/7 across several countries
- ii. Dedicated email address for reporting concerns
- iii. Dedicated Web Portal – Internal and External; and
- iv. Provision to submit verbal/ written complaints using AFMP Reporting Forms

The AFMP procedure highlights the significance associated with the protection of whistleblowers. It condemns and addresses any acts of retaliation against whistleblowers for reporting concerns in good faith.

<https://www.enec.gov.ae/about-us/leadership-and-governance/reporting/>

Enterprise Business Ethics Committee:

This committee oversees the investigations of fraud and misconduct cases and endorses the investigation reports for necessary disciplinary actions.

Enterprise Employee Relations Committee:

This committee reviews the cases referred for final warning and termination for consistency in the application of sanctions to violations pertaining to our Code of General Business Principles and Ethics.



4.2 Risk Management

ENEC takes a proactive approach to risk management. ENEC has developed an Enterprise Risk Management (ERM) program and is committed to developing a remarkable risk-management capability that is in line with industry peers and beyond, both regionally and internationally.

The Board of Directors are responsible for overseeing the processes established to identify and to proactively, assess, manage, report, and monitor material risks that threaten to achieve the Enterprise's goals and objectives. ENEC's Executive Risk Management Committee (ERMC) functions as Risk Counsel for the Enterprise and its Board.

The ERM is designed to ensure that risks are proactively identified, assessed, and managed in a prioritized, consistent, effective, and efficient manner at all levels to create value and support the safe delivery of the UAE Peaceful Nuclear Energy Program.

To ensure we adhere to industry best practices in risk management, our ERM Program is aligned with the International Organization for Standardization (ISO) 31000 Risk Management principles, the COSO ERM standards and frameworks as well as the FANR and the ADAA requirements.



Our ERM policy and procedure documents have been formalized through ENEC's management system to facilitate and govern ERM's integration with the business. The ERM Program also covers elements of environment and sustainability through a threat and opportunity assessment with clearly defined environmental assessment for land-based and aquatic ecosystems, as well as atmospheric and waste emissions. All environmental related risks are highlighted in an Environmental Social Action Plan status update report, which is shared with financial lenders to demonstrate ENEC's commitment to environmental protection and sustainability.

ENEC is continuously improving and is committed to continue developing a remarkable risk-management capability that compares well with its industry peers and beyond, both regionally and internationally.

- The ERM Process includes the identification, assessment, mitigation, review, and communication of all types of risks including environmental, social, and governance-related risks.
- Management also reviews the COSO guidance on applying ERM on ESG-related risks for implementation of best practices.
- The Enterprise includes a specific category for assessing environment related risks in the Risk Tolerance and Appetite Criteria duly approved by the Board of Directors.

The key ESG themes considered in our risk management process are as follows:

- **Environment**
 - Climate Change Vulnerability
 - Raw Material Sourcing (Water Stress)
 - Waste Management
 - Opportunities in Clean Technology
- **Social**
 - Human Capital Development
 - Health and Safety
 - Workforce Vulnerability
 - Privacy and Data Security
- **Governance**
 - Ownership
 - Governance Policies
 - Board Governance

- Board Diversity and Structure
- Business Ethics
- Financial Systems
- Transparency

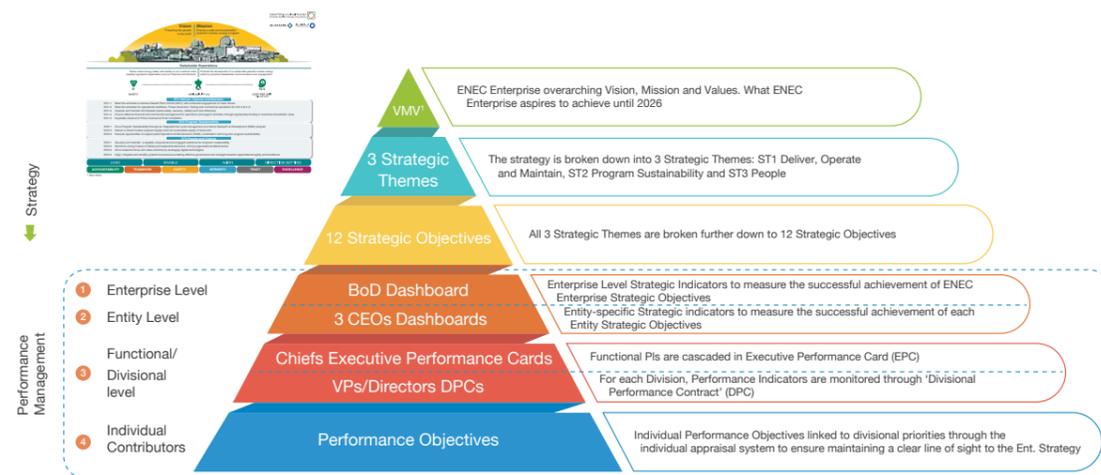
The ERM is part of our Enterprise Integrated Business Planning cycle. The business planning process utilizes existing risks for the divisions as an input to ensure that all mitigation actions defined are considered for new activities (initiatives/projects). A threat or opportunity registered in the risk register is a pre-requisite for a new Business Case (BC).



4.3 Operational Efficiency

Enterprise Performance Management Framework

Enterprise facilitates the long-term strategic planning and the annual business planning necessary to meet strategic goals and objectives and assure alignment with UAE strategic policies. This includes monitoring, reporting, and improving performance (including strategic KPIs) against established plans.



¹ VMM: Vision, Mission, Values

The Strategic Performance Dashboard presents the critical Strategic Indicators (SIs) results that measure Enterprise's performance annually. The dashboard consists of three main pillars – Safety and Quality, Schedule, and Cost. It measures the most critical aspects of performance across the Enterprise. To realize such performance, the Enterprise has embedded a comprehensive and robust performance management framework, which consists of the following:

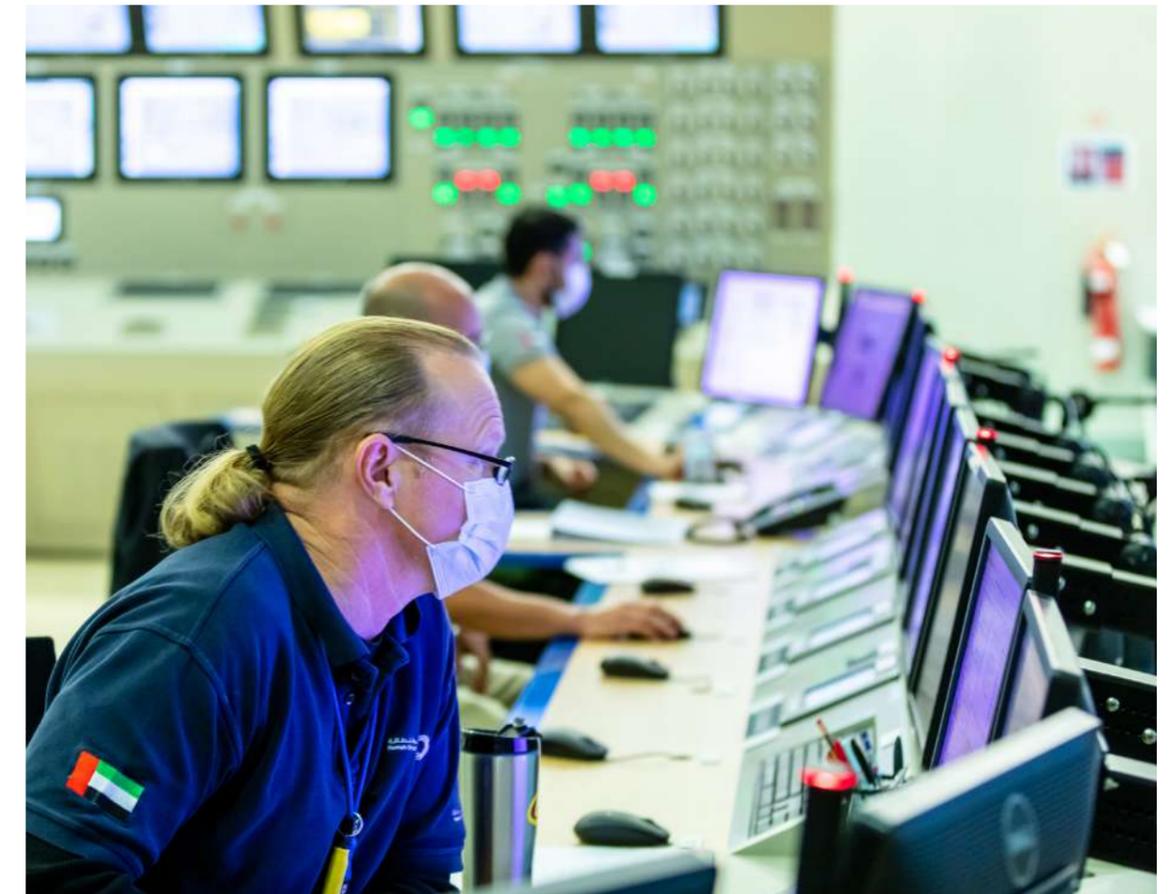
- Translate the strategy into tangible performance indicators to provide a clear 'line of sight' between organizational performance and individual performance requirements
- Clear governance and links, overall, to the broader strategic design and planning process
- Cope with changing priorities and providing sufficient consistency and accountability, having a strong focus on performance and sound processes in providing clear responsibility for setting and achieving performance targets
- Continuous monitoring of the adequacy of metrics and thresholds/targets

Despite the unique challenges presented by the global COVID-19 pandemic and the resulting unforeseen business disruptions, the Enterprise's strategic performance results were excellent in 2021, meeting and exceeding targets on several indicators by a substantial margin.

Business Excellence

Since the inception of ENEC, the Board of Directors have focused on achieving the highest level of business excellence through the establishment of its Corporate Excellence program, which integrates the highest standards of business excellence throughout the organization. The program fosters success by creating a transparent, friendly environment for employees, maintaining up-to-date policies, procedures, and processes aligned with industry best practices, conducting regular benchmarking, sharing lessons learned, and facilitating internal and external communication to nurture mutually beneficial working relationships.

Together with ENEC's Code of Ethics, Quality Assurance Program, and employee reporting program, the Corporate Excellence program promotes a strong, sound, and sustainable business model.



4.4 Business Continuity Management

Business Continuity Management Program Organization and Scope

The Business Continuity and Resilience (BCR) Department is responsible for the Enterprise-wide management of the business and operational environment to ensure resilience is built into day-to-day work practices and environment. The objective is to prevent or reduce the risk from potential threats and to ensure the continuity of delivering essential services. The Enterprise BCR capability is implemented as per National Emergency Crisis and Disasters Management Authority (NCEMA) regulation 7000 and other applicable laws and regulations in pursuit of the safe, reliable, and efficient generation of electricity from nuclear energy to power the growth of the UAE. In 2021, the Business Continuity program underwent significant changes in terms of scope. In addition, the release of the new NCEMA order to meet the compliance requirements for NCEMA 7000:2021 standard which has been released in 2021 leading to a significant shift in the Enterprise's activities to align with the new requirements.

Business Continuity Management Program Compliance and Reporting

The Enterprise is required by Article 19 ('Ensuring Business Continuity') in Federal Decree-Law No. (2) of 2011 to develop plans that guarantee Business Continuity by the UAE National Standard for BCM – NCEMA 7000.

To ensure consistency in implementation and internal reporting of the Business Continuity Management compliance across the Enterprise, the BCR Department, working in collaboration with Enterprise Business Ethics and Compliance, developed a Business Continuity Compliance Register documenting the specific requirements of NCEMA 7000. For ENEC, in addition to internal reporting of Business Continuity Management compliance against NCEMA 7000, additional reporting is done internally against provisions in the International Standard for Business Continuity Management: ISO 22301. Compliance with ISO 22301 is assessed using the Business Continuity Management Matrix developed by the Corporate Management Systems Group, with technical support from the BCR Department.

External reporting of Business Continuity Management compliance is delivered to the Emergency, Crisis, and Disasters Management Centre (ADCMC). ENEC Business Continuity Management Program implementation reports to ADCMC are based on compliance with NCEMA 7000. Other external entities which request and receive reports and assessments on Business Continuity Management implementation within the Enterprise include ADQ and the DoE.

Business Continuity Management Program Accomplishments, 2021

In 2021, the BCR Department achieved the following accomplishments, in line with its key objectives outlined in the BCM Program.

Primary Objectives in 2021:

- Achieve 100% Enterprise compliance to NCEMA 7000 requirements as per the compliance register by Q3 2021.
- Implement and ensure Enterprise resilience through a unified Business Continuity Management System (BCMS) by developing Enterprise Business Continuity Plans and demonstrating the program element efficiency via exercises across the locations by the end of Q4 2021.
- Ensure all Incident and Emergency response systems across the Enterprise are integrated into a single framework to meet the program objectives as defined in the Integrated Incident and Emergency Response (IIER) Program Charter. The capability was proven through an integrated exercise by Q4 2021.

Accomplishments in 2021:

The Enterprise Business Continuity Program has put outstanding efforts into implementing the National Standard for Business Continuity requirements, third edition, NCEMA 7000:2021. To measure the level of implementation of the new national standard, the ADCMC conducts audits on government and semi-government entities across Abu Dhabi. The Enterprise has achieved a score of 95.7% for the year 2021 from the ADCMC audit visit held on 12th Jan 2022. Compared to 75%, the passing score to obtain the compliance certificate, the Enterprise is considered one of the highest achieving entities in the Emirate of Abu Dhabi.

The Enterprise Business Continuity program has completed ISO 22301:2012 Surveillance Audit in November 2021 and is preparing to transition to ISO 22301:2019.

Supporting the Integrated Incident and Emergency Response program, the Enterprise Business Continuity and Resilience has conducted and supported several exercises:

- Conducted Incident Management Team (IMT) / Cyber Security Incident Response Team (CSIRT) exercise to practice the interfaces of both teams
- Supported the Emergency Response Organization (ERO) Drills for the Gold, Green, Red, and White Teams to ensure KEPCO interfaces
- Supported the Enterprise 2021 ConvEx; both the dry run and on the actual ConvEx Exercise
- Supported the Cyber Security managed CSIRT exercise to cover IMT required supports for CSIRT

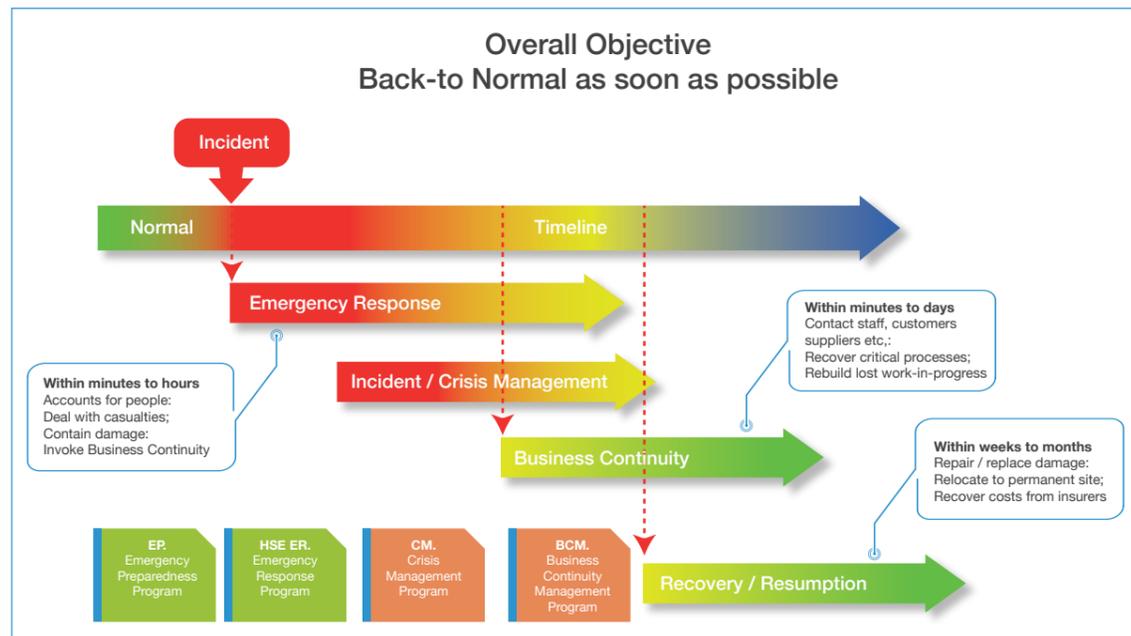
The Enterprise BCR Program has completed a snapshot self-assessment 'covering Nawah Business Continuity Program Compliance in accordance with NCEMA 7000:2021. This assessment review achieved a score of 100%. This verifies adherence of Enterprise Business Continuity Management documentation and support activities to AE/SCNS/ NCEMA 7000:2021, the National Standard for Business Continuity Management System (Specifications) established by the NCEMA.



The Enterprise BCR program has superseded the individual entities' (ENEC, Nawah, and BOC) policies, into a unified Enterprise Business Continuity Policy.

The BCR department has initiated the establishment of an Enterprise-wide Framework for IIER. This is to ensure all Incident and Emergency response systems across the Enterprise are integrated into a single framework covering design, beyond design, and all-hazard response and incident management approach, to achieve the overall objective of 'back to normal/better' state as soon as possible following a business disruption.

The figure below provides a high-level timeline for emergency response, incident management, and return to normal operations by relevant teams included in the IIER process.



Business Continuity Program Initiatives

In 2021, the BCR Department played a direct role in the initiation and execution of several projects supporting the continuous improvement of the Business Continuity Management Program for the Enterprise. These projects include:

- Lean Six Sigma Green Belt Business Impact Analysis Improvement Project. This project aims to improve efficiency and reduce errors in gathering and analyzing information collected in Business Impact Assessments (BIAs) across the Enterprise. This information is essential to effective business continuity planning, as well as the prioritization of resources and activities required for the recovery and resumption of crucial operations at the Corporate Headquarters (HQ), the Barakah Plant, and Korea Affairs Office.

- BCM Software Implementation. The project aims to procure and implement a software application compliant with NCEMA 7000 that can be used to streamline our business continuity plan development across the Enterprise. This includes the development and annual updates of each entity's Business Impact Assessment, Business Continuity Risk Assessment, Business Continuity Strategy, Business Continuity Response Plans, Business Continuity Tests and Exercise, Business Continuity Management Program Review, and continual improvement of the BCM Program.



4.5 Quality, Safety, and Reliability – Integrated Management Systems

ENEC is committed to establishing and implementing corporate excellence to promote continual improvement and organizational excellence culture. Corporate excellence aligns with our corporate strategy, drives innovation, and emphasizes knowledge management.

As part of our commitment to safety, ENEC designed a rigorous Quality Assurance (QA) program to ensure that the UAE's first nuclear energy plant is designed, constructed, commissioned, and operated in line with the best industry practices, governing codes standards, regulations, and license requirements. Our QA program is an integral part of ENEC's Integrated Management System (IMS).

Our QA program aims to ensure that ENEC's overriding priority, the safety of the UAE community, our employees, and the environment is achieved consistently. Our QA program is applied to all aspects of our work, and we conduct regular training sessions, assessments, and audits to ensure our high standards are being met and continually improved upon. Importantly, our QA program applies not just to ENEC but also every contractor and sub-contractor involved in the program, and hence, our entire supply chain.

By extending our QA program to all our activities, we aim to achieve the highest safety, quality, availability, and reliability standards. To date, ENEC has dedicated more than 41,000 man-hours to quality audits for all aspects of the program.

Like our philosophy on safety, we believe that everyone is personally responsible for quality, and it is this approach that will drive continual improvement in everything we do. We conduct regular audits of the IMS framework and QA program to ensure high standards are being met and continuously improved upon. In 2021, we conducted 54 internal, external QA/MS audits and assessments on all aspects of the IMS framework and QA program. These include 23 internal and 20 external (supplier and third-party audits) QA/MS audits, as well as 11 assessments of the IMS framework. We also supported an external audit related to maintaining ISO certifications, which include:

- ISO 45001:2018 Occupational Health and Safety Management Systems
- ISO 9001:2015 Quality Management Systems
- ISO 14001:2015 Environmental Management Systems
- ISO 22301:2012 Business Continuity Management Systems
- ISO 27001:2013 Information Security Management Systems
- ISO 20000-1 Information Technology Service Management System



Quality Assurance <https://www.enec.gov.ae/about-us/leadership-and-governance/quality-assurance/>





5

EMBEDDING SUSTAINABILITY INTO THE ORGANIZATION

Sustainability is at the core of the Enterprise, and this is demonstrated through the development of the UAE Peaceful Nuclear Energy Program. The program provides the largest clean energy source in the UAE and is the largest decarbonization project in the Arab world. ENEC's sustainability journey does not stop with nuclear energy generation; it spreads across the design, construction, and operation of our plants. With the commencement of Unit 1 operations, it is paramount to manage operational sustainability matters, particularly where the Enterprise has clear foresight. We adopt the following approach to sustainability.



With the commercial operation of the Barakah Plant, ENEC's sustainability stewardship is demonstrated through embedding sustainability in the development of strategy, stakeholder management, materiality assessment, maturity analysis, and a sustainable supply chain.



5.1 Enterprise Strategy Development Framework

The Enterprise Strategy provides overall direction to the business with a focus on the key milestones and activities to achieve the objectives of the Enterprise in the most efficient and effective way. The Enterprise Strategy provides businesses with goals and ambitions for the future and determines the best way to achieve them.

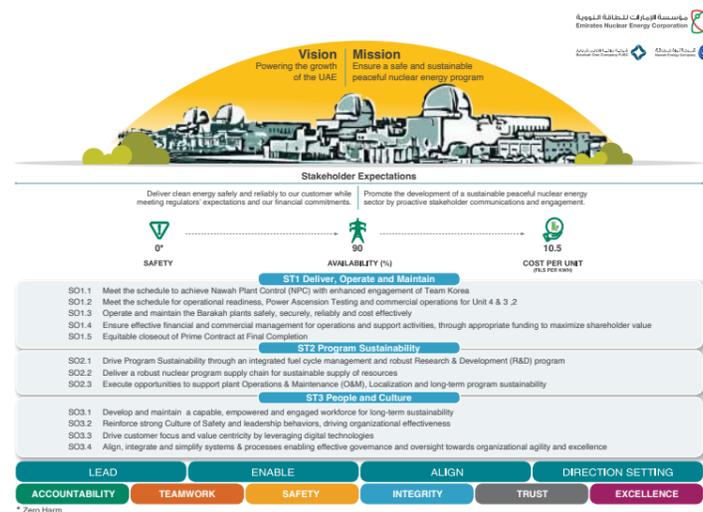
As the Enterprise moves toward the next phase of the program from construction to operations, shifting priorities continue to guide its direction and strategy development process. These priorities help position the Program among the most advanced peaceful nuclear energy programs globally by establishing and managing the adoption of safe practices, state-of-the-art technologies, and the integration of guidelines from IAEA, INPO, and WANO.

While updating the Enterprise Strategy 2022-2026, specific key drivers were considered, including internal and external forces that drive the strategy and outlook of an organization during any given phase of its evolution. The key drivers for the Enterprise are detailed below.

Upon the commencement of commercial operations of Unit 1, the key challenges the Enterprise faced, included the need for transformation to evolve our business dynamics, corporate culture, and mindset to move from construction to operations mindset and continuously develop the Enterprise into a nuclear excellence and human performance-based entity.

Enterprise Strategy 2022-2026

Led by the Strategy Drivers and following the Strategy Management Framework, the Enterprise Strategy was updated as below.



Sustainability Management

Our company's vision, mission, and values are fundamentally built on sustainability principles. The Enterprise's sustainability management program ensures alignment with international guidelines and standards, including the United Nations Sustainable Development Goals (UN SDGs), the GRI standards, ADX ESG Disclosure Guidance, as well as national visions, including the Abu Dhabi Economic Vision 2030, and UAE Energy Strategy 2050.

The Enterprise's sustainability framework focuses on three Sustainability Value Pillars covering the delivery of safe, clean, efficient, and reliable energy to the UAE while supporting economic growth by maximizing our economic footprint and creating value for citizens by empowering our people.

All sustainability aspects that are identified as material are addressed from the construction phase through to plant operations, until the ultimate decommissioning of the nuclear energy plant.



Sustainability Value Pillars



One of the themes of the Enterprise Strategy 2022-2026 is 'Program Sustainability'. As the organization is transitioning from a construction phase to a procedure's clean energy, it becomes paramount to sustain our ability to provide operations with the required materials and services, as well as developing an uninterrupted supply chain of suitably qualified and experienced personnel, consumables, and operational spare parts.

Program sustainability also means that we need to look at the future beyond the commercial operations of the four units. The arenas of research and development are also to be explored to provide the required technical solutions and enhancements to maintain and extend the lifespan of the plant.

There are three objectives under the Program Sustainability theme:

<p>1 Drive an integrated fuel cycle management and a fit-for-purpose R&D program:</p>	<p>Deliver integration across the nuclear fuel process to ensure the security of supply & efficient management across its lifecycle from design, quality control, procurement, transportation, to radioactive waste disposal. In addition, ensure the roll-out of the R&D program to enable long-term program sustainability and agility.</p>
<p>2 Deliver a robust nuclear program supply chain for sustainable supply of material and services:</p>	<p>Strengthen and enhance Procurement & Supply Chain capability & build a robust material, equipment & services sourcing channels with critical and strategic suppliers and partners to assure the availability of the required supplies at the right time and cost.</p>
<p>3 Execute opportunities to support plant O&M, localization, and long-term program sustainability:</p>	<p>Establish the foundation for efficient and cost-effective operations, drive localization of critical supply chain parts and identify and execute feasible future growth opportunities. All sustainable and most cost-efficient nuclear power plants have localized supply chains and industries that can cater to the plant.</p>

Our Sustainability Performance Management Procedure guides the implementation of the sustainability program and defines the roles and responsibilities to:

- Establish sustainability objectives, targets, and programs aligned with our vision, mission, and strategic objectives
- Regularly monitor and measure how our activities, products, and services potentially impact sustainability and our stakeholders
- Monitor the performance of our sustainability initiatives
- Ensure compliance with the Abu Dhabi Sustainability Group (ADSG) membership commitments

The Enterprise continually strives to improve its sustainability performance by setting clear and measurable objectives and targets, monitoring, reviewing, and regularly reporting performance at every business level.



5.2 Stakeholder Engagement

Our stakeholders are important for us to continuously evolve in an everchanging world. We engage with stakeholders to identify what is essential for the business and communicate with them on economic, environmental, social, and governance issues.

In 2021, we conducted several events, activities, surveys, meetings etc. to directly engage with our stakeholders. Through these engagements, we inform them of our progress, new developments, strategic decisions, and priorities, etc. where they can share their feedback and suggestions, this helps us improve as a responsible and sustainable business. Meetings, internal communication and focus groups, and feedback sessions were the critical tools for us in 2021 for stakeholder engagement.

To develop our materiality list of materiality disclosures, we shared an online survey amongst our stakeholders to gain insight into what they consider essential for us to disclose in our sustainability report.

Stakeholder surveys were conducted last year, and all surveys were prepared with a specific agenda and goal to make it easier for everyone to communicate. Stakeholder surveys mainly focused on engaging various groups – Regulatory authorities, suppliers, customers, community, and industry peers.

The survey participants were requested to rate the sustainability topics on a scale of 1 to 10, which is later converted into a materiality matrix for better visualization of the data so that inferences can be drawn, and the sustainability topics could be prioritized. By conducting these surveys, we also let the stakeholders know that we seek their expertise and feedback in defining the content of our sustainability report, and their opinion is of utmost importance to us in realizing the goal of a completely sustainable ecosystem.

The External Stakeholders Working Group (ESWG)

The External Stakeholders Working Group (ESWG) was established and is led by our communications division. We developed a stakeholder map that incorporates and categorizes key external stakeholders based on their influences on ENEC and its subsidiaries operations and business. We have also identified a specific group of strategically important stakeholders who are vital to the success of the UAE Peaceful Nuclear Energy Program.

The ESWG was established to enhance and build on stakeholder's relationships and to assign clear organizational responsibilities and focal points for a direct liaison to streamline communications with them.

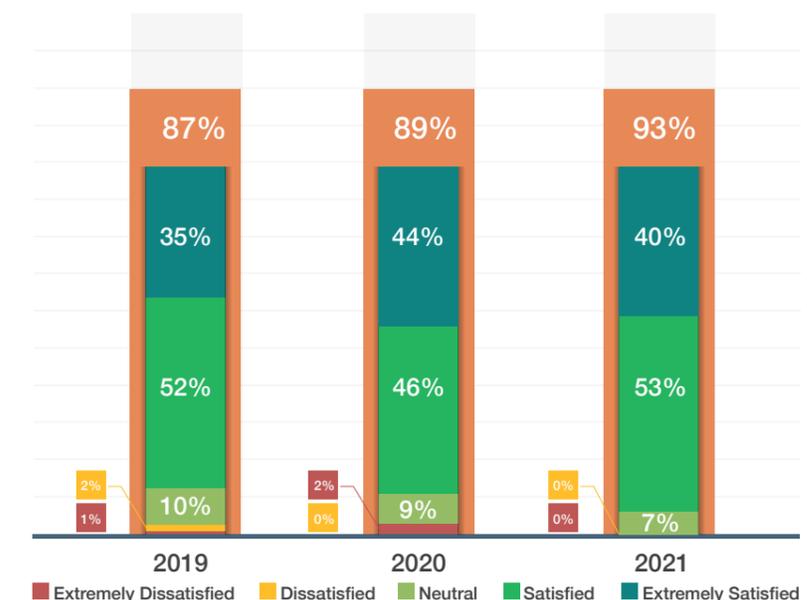
The key objectives of the ESWG are to:

1. Increase the executive team's awareness regarding key updates, issues, and support interactions with the strategic external stakeholders to enable effective decision-making.
2. Ensure smooth coordination between ENEC, subsidiaries, and stakeholders.
3. Align ENEC and subsidiaries plans and staff in engagement and communication with stakeholders.
4. Support the effective management of stakeholders to ensure that their expectations and interests are considered in the planning and implementation of policies and processes, to enhance stakeholder satisfaction and engagement while ensuring that our safety, security, quality, environmental and business objectives are not compromised.

Stakeholder Satisfaction

Under the Enterprise Strategy to strengthen our partnership with our external stakeholders, Our Stakeholder Relations department conducts a survey every year with external stakeholders to measure their experience with the Enterprise. The objective of the External Stakeholder Satisfaction Survey is to measure and evaluate the overall satisfaction of the Enterprise's external stakeholders and to obtain feedback on specific elements, to enhance their experience in the future.

The 2021 survey revealed an improvement in external stakeholder satisfaction from 89% in 2020 to 93% in 2021.



Outreach Program

The Outreach Program is designed to introduce and raise awareness about the UAE Peaceful Nuclear Energy Program across the UAE. Although it is a simplified approach, it is customized to cater to different groups of the UAE society to achieve the following:

- Understand the critical role nuclear plays in achieving Net Zero goals
- Highlight the value of clean electricity to delivering Net Zero 2050
- Highlight the role of nuclear energy for mitigating climate change
- Increase awareness of about the UAE Peaceful Nuclear Energy Program
- Increase support of specific groups as influencers among their communities
- Showcase the benefits of the project to the UAE

The sessions are designed to target different sectors in the UAE, varying from schools and university students to government entities and the public. Due to COVID-19, the program shifted to be virtual by using digital platforms to conduct the outreach sessions. Overall, 59 sessions attended by over 2,210 participants were conducted virtually in 2021.

Outreach Satisfaction Survey

The Stakeholder Relations department conducts outreach satisfaction surveys to measure and evaluate the overall satisfaction of the attendees and their feedback on specific elements, to enhance their experience in the future. The overall satisfaction survey results in 2021 was 94%.

Public Opinion Poll

- Approximately half of the residents of the UAE consider where their electricity is generated, no differences were noted between the various emirates.
- 88% of UAE residents claim to be conscious of conserving electricity, with the tendency being higher among expats.
- The main motivation behind consumption tracking and conservation, according to 76% of respondents is to reduce energy bills.



5.3 Materiality

A Sustainability report reflects a company's economic, environmental, and social influence within and outside the organization. Through them, stakeholders gain deeper insights into an operation, and benefit from the opportunity to submit feedback and influence decisions for the betterment of the organization and nation. While considering the disclosures that would be considered for the report, multiple methodologies were adopted.

Material sustainability topics of the Enterprise were finalized through a systematic approach:

Questionnaire Development



Multiple brainstorming sessions were conducted to develop a survey questionnaire format. The questions were based on GRI standards and addressed a wide range of economic, environmental, social, and governance concerns.

Questionnaire Distribution - Online Survey

To supplement the brainstorming and questionnaire distribution results, the Enterprise conducted an online survey to cast a wider net for collecting feedback. A detailed survey questionnaire format was created online and then shared across various channels for collecting responses from the stakeholders.



Prioritizing Sustainability Issues

The questionnaire results from surveys were collated together based on the priorities set by our stakeholders.

Sustainability Brainstorming Sessions

These sessions were conducted to understand the sustainability priorities of the organization in different departments and divisions. These sessions set the guidelines and the central theme for the current sustainability report.

Alignment with National and International Plans and Commitments

The finalized topics were compared with various national and international commitments and priorities such as – The Paris Climate Agreement, Abu Dhabi Economic Vision 2030, ADX ESG Guideline, UAE Energy Strategy 2050, and the UN’s SDGs. A list of finalized material topics was then compiled for approval by ENEC’s leaders and executives.



We consider the materiality analysis as a vital tool to identify our most relevant economic, environmental, social, and governance priorities consistent with ENEC’s vision and business strategy and to define the contents of our sustainability report. We plotted the topics as represented in the matrix above through rigorous stakeholder consultation. Through this matrix, we have identified the issues that significantly impact the economic, social, and environmental performance of the Enterprise or that may substantially influence stakeholders’ perceptions and decisions.

#	Material Topic UN SDG	Material Topics GRI	Description	Material Topic ADX	Sustainability Value Pillar	Boundaries	Priority
1	-	-	Infrastructure security	-	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	Most important
2	3	403, 414	Health and Safe Work Environment (contractor & sub-contractors)	ADX S7	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and Contractors	Most important
3	-	403	Workforce health and safety	ADX S7	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and Contractors	Most important
4	-	307,308	Federal and local Compliance (Environment & Sustainability)	-	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and Contractors	Most important
5	-	306	Radioactive waste best practices	ADX E7	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	Most important
6	3	403	Prevention from nuclear radiation (workers & public)	ADX S8	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and Community	Most important
7	-	301, 302	Plant operation fuel supply	-	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	Most important
8	-	415, 416,	Infrastructural emergency preparedness, due to natural or man-made reasons	-	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and Community	Most important
9	-	418	Data protection library and strong firewall	ADX G6	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	Most important
10	-	404	State-of-the-art training and education for employees	-	Empowering our People	ENEC Enterprise	More important
11	-	401	Employee turnover rate	ADX S3	Empowering our People	ENEC Enterprise	More important
12	-	406	Non-discrimination and Equal opportunity	-	Empowering our People	ENEC Enterprise	More important

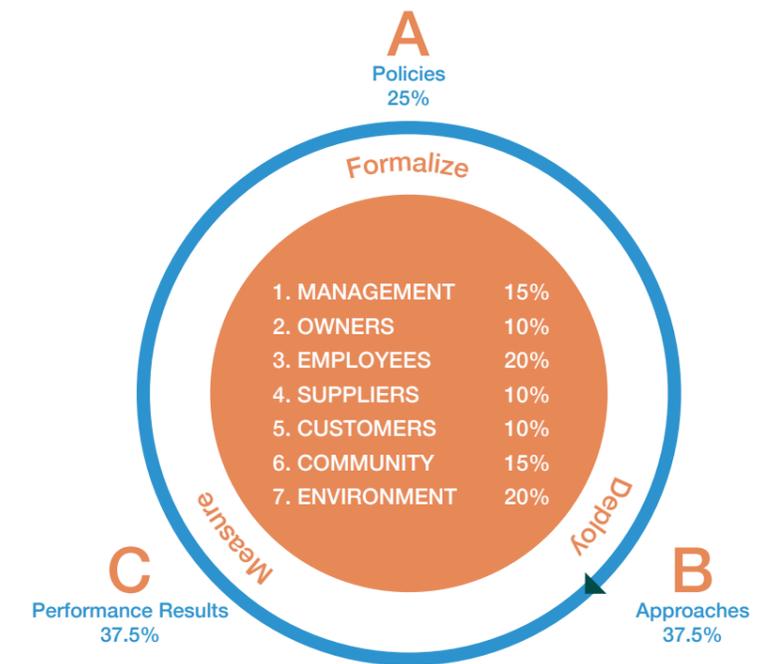


#	Material Topic UN SDG	Material Topics GRI	Description	Material Topic ADX	Sustainability Value Pillar	Boundaries	Priority
13		405	Diversity and Equal Opportunity	ADX S4	Empowering our People	ENEC Enterprise	More important
14		413	Local communities	ADX S12	Empowering our People	ENEC Enterprise	More important
15		-	Climate risk mitigation	ADX E10	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	More important
16	-	304	Environmental oversight	ADX E8	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and contractors	More important
17	-	307	Environmental compliance	ADX G8	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise and contractors	More important
18		305	Emissions	ADX E10	Safe, Clean, Efficient and Reliable Energy	ENEC Enterprise	More important
19	-	102-9, 102-10	Supply Chain Assessment on ESG	-	Our Economic Footprint	ENEC Enterprise	More important
20	-	204	Procurement practices	-	Our Economic Footprint	ENEC Enterprise	More important
21	-	418	Customer privacy	-	Empowering our People	ENEC Enterprise	More important
22		202, 205, 206	Market Presence, Anti-Corruption and Anti-Competitive Behavior	ADX G5	Our Economic Footprint	ENEC Enterprise	More important
23	-	201	Economic performance	-	Our Economic Footprint	ENEC Enterprise	More important
24		302	Energy	ADX E04	Our Economic Footprint	ENEC Enterprise	Important
25	-	103-2	Addressing the grievances for workforce and contractors	-	Empowering our People	ENEC Enterprise and contractors	Important
26	-	419	Socio-economic Compliance	-	Empowering our People	ENEC Enterprise	Important
27	-	203	Indirect economic impact	-	Empowering our People	ENEC Enterprise	Important

We are committed to implementing sustainability management according to ADX's ESG Disclosure Guidelines and aligning our activities with local initiatives, such as the AD SG, in addition to international best practices and global initiatives such as the UN SDGs.

Sustainability Maturity

We utilize the Sustainability Maturity Assessment Tool (SMAT) deployed by the AD SG under the leadership of the Environment Agency of Abu Dhabi (EAD), to assess our sustainability management. The tool has over 150 criteria's that assess sustainability policies, approaches, and performance across seven areas, including management, owners, employees, suppliers, customers, community, and environment. We complete the responses to the criteria and then verify through external sustainability experts. The results of the SMAT show that our sustainability program has continued to mature year-on-year, rising 2% since last year



“ ‘Nuclear energy has an important role to play in our nation’s future. Energy is essential to drive growth in a rapidly growing economy like ours’.
H.E. Eng. Mohamed Al Hammadi, MD, and CEO of ENEC ”





Sustainability Maturity Index

Contribution to UN SDGs

Our sustainability strategy helps us track our contribution to the UN SDGs. We play a pivotal role in the UAE's contribution to the UN SDGs, specifically in support of 'Affordable and Clean Energy' (UN SDG 7) by instituting a comprehensive civil nuclear energy program which includes building four new nuclear reactors with an estimated capacity to provide up to 25% of the UAE's electricity needs.

Our sustainability pillars are aligned with the UN SDGs. More information on our contribution to the specific targets of each UN SDG is provided within the relevant chapters of this report.

Sustainability Value Pillar	Sustainability Aspect	UN SDG Addressed
Our Economic Footprint	<ul style="list-style-type: none"> Financial Responsibility Supply Chain Management Economic Development 	
	<ul style="list-style-type: none"> Health, Safety, Environment, and Sustainability Management System (HSEMS) Health, Safety, and Security Quality, Efficiency, and Reliability Environmental Management 	
Empowering our People	<ul style="list-style-type: none"> Our Workforce National Talent Development Knowledge Creation 	

5.4 Clean Energy Certificates

To secure sustainable finance, organizations are increasingly required to meet key ESG indicators, including demonstrating that the energy consumed by their operations is generated from clean or renewable sources. Leading international organizations are also starting to recognize the relationship between improved sustainability practices and overall economic/business performance.

These factors are driving the growth of a new 'green certification' market, with demand for Energy Attribute Certificates (EAC) increasing steadily across the globe. An EAC is official documentation to prove renewable or clean energy consumption that creates transparency by certifying electricity purchased and consumed. Consumers and corporations can purchase EACs as a tool to reduce their carbon footprint and improve their sustainability rating. It gives them the choice to ensure the electricity they consume is clean and encourages sustainable energy producers to deliver more clean electricity, thus incentivizing more green investment.

In 2021, the DoE and the International Renewable Energy Certificate (I-REC) Standard Foundation signed a local Issuer agreement, formalizing DoE's position as the sole issuer of Clean Energy Certificates in the Emirate of Abu Dhabi. Clean Energy Certificates is the name used in Abu Dhabi for EACs.

From September 2021, energy providers and power end-users in Abu Dhabi were able to purchase I-REC Standard adherent EACs to certify their ownership of a certain amount of electricity generated from a specified clean energy source (e.g., solar, or nuclear). This is part of Abu Dhabi's Regulatory Policy for Clean Energy Certificates, demonstrating the commitment to drive the transition to a sustainable decarbonized energy sector and marking a foundational step to establish an EAC market and facilitate trading clean energy attributes.

EWEC acts as the Single Registrant that registers the renewable and nuclear energy generation plants with I-RECs and identifies the sources of electricity injected into the grid from DoE-licensed generation entities. EWEC then sells these certificates to businesses or consumers who wish to obtain a clean energy certificate. This is significant, as it is the first time globally that the I-REC Standard has allowed issuance of EACs/I-RECs for power generated from nuclear energy, among other technologies.

The Clean Energy Certificate system means energy providers and power end-users in Abu Dhabi can purchase I-REC Standard adherent EACs to certify their ownership of a certain amount of electricity generated from a specified clean energy source (e.g., solar, nuclear, etc.), in a given period of time, and use the certificates as an account for their CO₂ emissions from electricity. It also provides them with a transparent method of displaying and showcasing their 'green' credentials.

Upon completion of the four units of the Barakah Plant and the upcoming Al Dhafra Solar Photo Voltaic (PV) plant, EWEC will measure with an estimated 46 Terawatt (TW) of clean net power production each year, with Barakah estimated to be producing 88% of the total clean electricity by 2025.



The availability of large volumes of clean electricity delivered through the UAE's strategic nuclear and renewable energy assets, verified via these standards, makes green finance more readily available for businesses and encourages further investment in green energy sources. Nuclear energy not only has the ability to generate baseload green electricity, but it can also be used to produce green hydrogen – a very promising fuel for heavily electrified industries such as shipping and aviation.

As a result of the first Clean Energy Certificate auction held by EWEC, it was announced that the Abu Dhabi National Oil Company (ADNOC) formed a clean energy partnership with EWEC under which it will receive up to 100% of its electricity supplied by EWEC's solar and nuclear energy resources. The partnership supports the UAE's efforts to achieve Net Zero by 2050 and allows ADNOC to demonstrate its green credentials and access global ESG financing.



5.5 UAE's Year of the Fiftieth

The late H.H. Sheikh Khalifa bin Zayed Al Nahyan announced 2021 as the 'Year of the 50th' to commemorate 50 years of the UAE's formation in 1971. The UAE celebrated its remarkable journey over the last 50 years and commenced preparations for the next 50. The activities marking the UAE's Golden Jubilee were built on the following four pillars:



- Launching the 'Year of the 50th' with a festive spirit that engages all those who call the UAE their home
- Calling upon all UAE nationals to contemplate the values and achievements of the past in honor of the UAE's Founding Fathers
- Inspiring youth to have their vision for the next 50 years and supporting them to make quality national achievements
- Championing long-term initiatives and impactful policies to empower citizens and residents to do their part

ENEC marked the Year of the 50th by announcing the UAE's first commercially operational nuclear energy plant delivering clean energy. It celebrated Barakah Unit 1 delivering on the Nation's vision for a brighter future, in alignment with the start of the UAE's 'Year of the 50th'. The UAE Peaceful Nuclear Energy Program has been guided by wise leadership with a clear Vision and Mission that are supported by the Enterprise Values while delivering on our stakeholder's expectations.





6

SUSTAINABLE ECONOMIC GROWTH

6.1 Overview

The UAE achieved a Gross Domestic Product (GDP) growth of 3.8% in 2021, (Source: <http://wam.ae/en/details/1395303055589>) which is the highest in the region. The Central Bank of the UAE estimates a higher growth in the year 2022. As the nation's economy grows, the UAE requires electricity to power and meet the rising energy demand. The UAE Peaceful Nuclear Energy Program is a strategic and responsible deployment of multibillion-dollar government investment in economic and industrial growth, and energy diversification. This Program will power the future growth of the UAE.

The program has already delivered skilled jobs and new business opportunities for companies, as well as expanded investment in the Al Dhafra region of Abu Dhabi. As the first nuclear energy plant in the region, and with other countries now looking to follow the UAE's lead. The Barakah Plant will continue to add value to the nation and UAE companies will have a competitive edge to conduct business in the regional and international nuclear energy sector.

Sustainability Objectives

Our economic development sustainability objectives include:

1. Financial responsibility – deliver cost-effective power through a combination of fiscal responsibility and effective operational execution.
2. Supply chain management – develop a supply chain that is increasingly locally based and meets the environmental, social, and sustainability standards of the nuclear industry.
3. Economic development – become a driving force behind the UAE's investment plan, providing business development opportunities and contributing to the UAE's GDP.
4. Action to combat climate change – deliver zero carbon electricity to the energy grid thereby reducing the UAE's GHG emissions.

UN SDG Targets and ADX Metrics Addressed

ENEC is contributing to the following UN SDGs by delivering the sustainability objectives:

Sustainability Value Pillar	Sustainability Aspect	UN SDG Addressed
Our Economic Footprint	• Financial Responsibility	   
	• Supply Chain Management	
	• Economic Development	
	• Combat Climate Change	



UN SDGs Addressed



Diversify, innovate, and upgrade for economic productivity.

Achieve higher levels of economic productivity through diversification, technological upgrading, and innovation, including through a focus on high value added and labor-intensive sectors.



Promote policies to support job creation and growing enterprises.

Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage the formalization and growth of micro, small- and medium-sized enterprises, including through access to financial services.



Promote inclusive and sustainable industrialization.

Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.



Promote sustainable public procurement practices.

Promote public procurement practices that are sustainable, in accordance with national policies and priorities.



Integrate climate change measures

Integrate climate change measures into national policies, strategies and planning and lower the GHG emission by the country.

ADX ESG Metrics Addressed

Social S9	S9. Child & Forced Labor Develop and implement human rights policy. Extend the coverage to include all suppliers and vendors.
Social S11	S11. Nationalization Prioritize to increase Emiratization rate.
Social S12	S12. Community Investment Invest part of the revenue to community development.

6.2 Financial Responsibility

We have developed the necessary policies and procedures to conduct business in an accountable and efficient manner to ensure the UAE Peaceful Nuclear Energy Program makes optimal utilization of government resources.

Measures are in place to ensure funds are spent efficiently and within budget. Expenditures are monitored closely, and all expenses are approved by authorized personnel within the Enterprise, as per the appropriate Delegation of Authority (DOA) before being committed. Payments are approved based on the limit authorized in the respective Board-approved DOA, which is reviewed and updated periodically. Lastly, we monitor the financial performance of the departments within the organization and identify opportunities for cost optimization.

Project Financing

We established a comprehensive and sound financial structure that has allowed for the construction of the UAE's first nuclear energy plant and infrastructure to progress towards the delivery of Units 1 to 4. The overall project financing requirements are estimated at United States Dollar (USD) 24.4 billion:

- USD 16.2 billion comes from a direct loan by the Government of Abu Dhabi
- USD 2.5 billion have been provided as a direct loan from the Export-Import Bank of Korea (KEXIM)
- USD 250 million were generated through loan agreements with five local and international commercial banks
- A total of USD 4.7 billion in equity commitments were made for the establishment of Nawah Energy Company and the BOC, in exchange for equity interest in the two companies, shared between ENEC (82%) and KEPCO (18%)

Budgeting and Spending

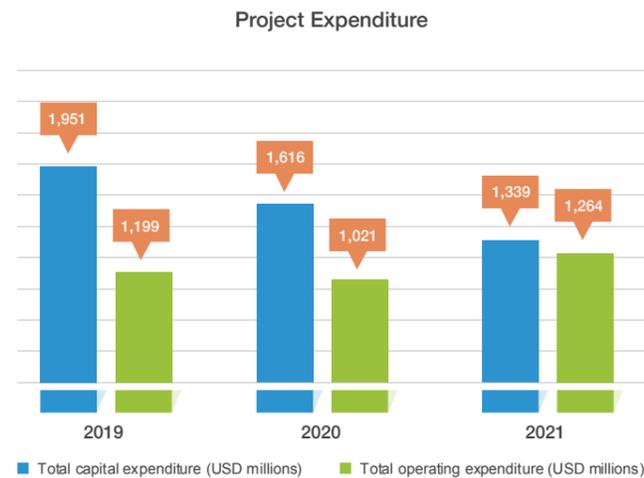
The Enterprise manages the overall project expenditure, including both subsidiaries, Nawah Energy Company, and the BOC.

Enterprise's capital expenditure mainly represents payments made towards our USD 20 billion contractual agreement with the Prime Contractor. Capital expenditure in 2021 was USD 1,339 million which reflects a downward trend due to the winding down of construction activities.

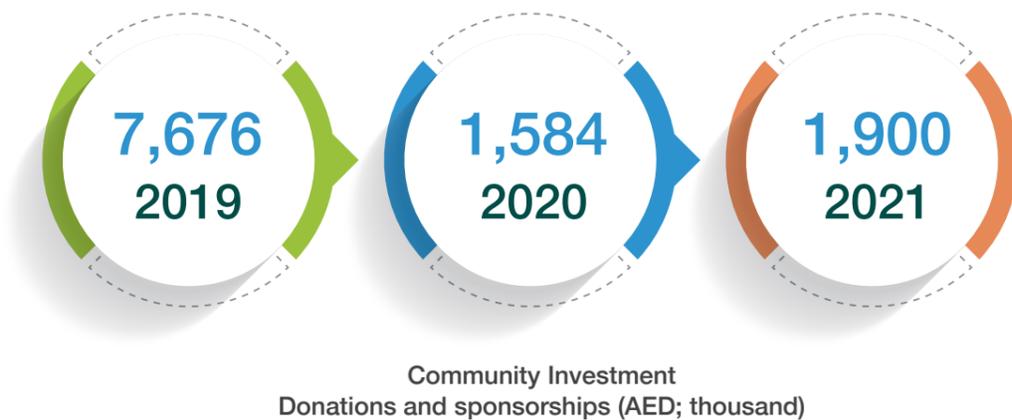
The Enterprise's operating expenditure is increasing, which reflects the transitioning of the organization from a construction project to an operational facility. The major contributors to the increase of the operational expenditure in 2021 in comparison to 2020 pertains to Unit 1 operations, including nuclear fuel consumption, and depreciation costs.



Operating expenditure also includes employee wages & benefits, service contractors, communication administration, and capacity building, including the ENEC Energy Pioneers scholarship program.



The Enterprise has demonstrated its commitment to the local community and has contributed over AED 1.9 million in donations and sponsorships in 2021.



6.3 Sustainable Supply Chain Management

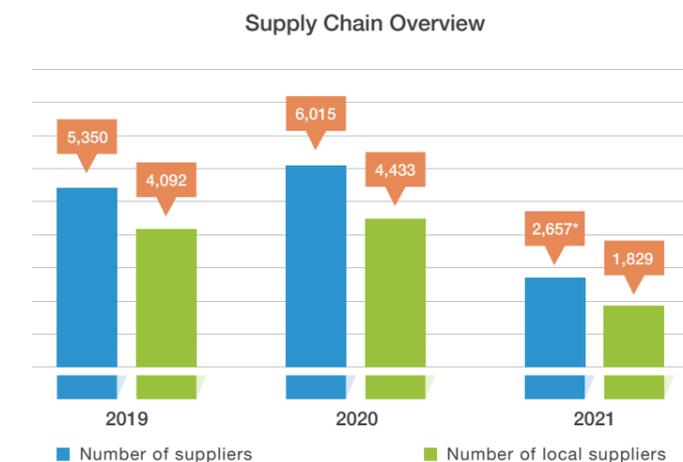
Our supply chain is responsible for the Governance, Oversight, Support and Performance (GOSP) Strategic Procurement, Strategic Contract Management, Operational Procurement, Inventory Management, and Warehouse and Logistics. Our supply chain is managed and assessed on four required key elements: qualified staff (People), Process (i.e., SAP systems), Procedures, and Warehouse (Plant) to plan, source, procure, receive, store, transport, and issue required materials and services for the Barakah Plant's safe and secure operation.

The overall supply chain required to construct and operate the Barakah Plant is both extensive and global. We have 2,657 registered suppliers that compete for contracts every year. These suppliers range from locally owned Small and Medium-sized Enterprises (SMEs) to large-scale Multinational Companies (MNCs).

ENEC is responsible for corporate procurement requirements, including expert services, ICT equipment and site-related support services. ENEC's Procurement and Supply Chain (PSC) function provides a central procurement and contracting service ensuring ENEC's goods and services are procured to the best contractual terms and conditions, and in full compliance with legal and regulatory requirements, supporting ENEC's sustainability objectives.

Similarly, Nawah Supply Chain is responsible for plant-related procurement including expert support, engineering, and manpower services. The Nawah Supply Chain function provides a central procurement and contracting service ensuring that Nawah's materials and services are procured on the best contractual terms and conditions that ensure nuclear safety and quality requirements are met.

The Prime Contractor, KEPCO, has many suppliers and subcontractors of its own. ENEC oversees these arrangements, provides guidance, and tracks performance to ensure our standards and UAE-specific requirements are implemented and followed.

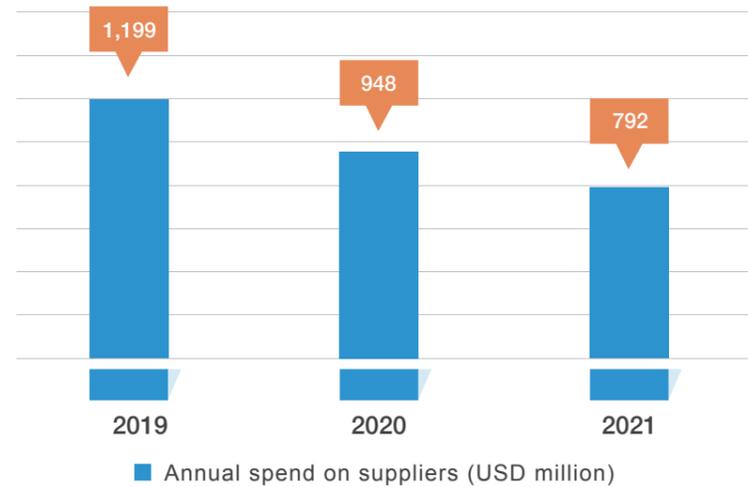


Scope: ENEC, Nawah, and BOC

* Reduction in the number of registered suppliers is due to supply base optimization



Supply Chain Expenditure



Scope: ENEC, Nawah, and BOC

- Supplier Code of Conduct <https://www.enec.gov.ae/doc/supplier-code-of-conduct-pri-version-211120191-5e04bff053da3.pdf>
- Contractor HSES Management Procedure <https://www.enec.gov.ae/doc/enec-standard-hse-requirements-for-contractors-60c5f19aac042.pdf>

Supply Chain Localization

To bring the maximum economic benefit to the UAE from the nuclear energy project, and to improve the security of supply, the Enterprise strives to procure its goods and services from locally based suppliers whenever possible. In 2021, 68.8% of the suppliers registered with the Enterprise are locally based, and 84% of the 2021 procurement spend, equalling a total of USD 792 million, was placed with locally based suppliers.

In 2021, ENEC implemented the In-Country Value (ICV) Program. The ICV program, being a national strategic priority targeting the increase of the total spend retained in-country value which will boost business development investments, contribute to local human capability development, and to stimulate productivity of the local economy. The ICV Program, in alignment with the UAE’s vision, will support the future development of the market capabilities in the country and improve business relations between the Enterprise and companies both locally and internationally. In 2021, the weighted average ICV score of awarded suppliers was 22.5%.

ENEC is also an active supporter of the Khalifa Fund for Enterprise Development (KFED) – a dynamic organization that promotes and supports entrepreneurial ventures in Abu Dhabi. Currently, 28 KFED companies are registered as suppliers with ENEC, and we are actively encouraging them to bid for future contracts.

Local Procurement			
Year	2019	2020	2021
Total procurement spending on suppliers based in the UAE (USD millions)	354	396	792
Percentage of registered suppliers that are locally based (%)	76	74	68.8
Percentage of procurement spending on locally based suppliers (%)	30	42	84*
Number of KFED suppliers registered (Locally owned SME companies funded by KFED) (Cumulative)	32	30	28

Scope: ENEC, Nawah, and BOC

*KEPCO has a registered office in the UAE and is considered a local supplier



Labor Practices

ENEC's Supplier Code of Conduct lists mandatory labor practices. ENEC views compliance with all labor laws and good worker welfare practices as a prerequisite for being registered as a supplier or being awarded a contract. To verify this, ENEC previously required suppliers to sign a statement of compliance regarding worker welfare. In 2021, following a decision by the relevant government department, this explicit statement of compliance is no longer collected as its provisions are covered by laws and regulations.

Supplier Risks and Screening

To safeguard from potential risk and satisfy internal Health, Safety, Environment, and Sustainability (HSES) requirements, we take an active role in ensuring that our supply chain meets high ethical standards and that relevant suppliers implement the environmental, social, and labor-related policies and procedures required to operate responsibly.

All suppliers registered through ENEC's supplier portal must agree to our 'Supplier Code of Conduct', which sets out the principles and standards of conduct expected of every supplier. The document covers topics such as fraud, ethical behaviour, conflicts of interest, whistleblowing, compliance with the law and ENEC's environmental and sustainability leadership.

ENEC has developed a Sustainable Procurement Guidelines document, which provides guidance on incorporating elements of sustainability in the procurement process, to support ENEC's sustainability goals, policies, and procedures.

6.4 Economic Development

The development of the Barakah Plant is a major driver of short-term and long-term economic development for the Al Dhafra region and the UAE overall. The project has created thousands of jobs and has led to significant investment in local infrastructure that will benefit the region for decades to come. Most significantly, the project has provided an opportunity for local businesses to meet the necessary quality standards required to join a global nuclear supply chain.

Business and Industrial Development

ENEC established a dedicated Business and Industrial Development (BID) team to work alongside UAE companies to ensure they meet the strict quality and technical standards required to tender for contracts for the UAE Peaceful Nuclear Energy Program. The Enterprise Roadmap for Plant Sustainability, Localization and Future Business Growth (Roadmap) mandates and empowers the BID team to build a sustainable localized nuclear supply chain and to encourage international vendors in establishing new facilities in the UAE. The roadmap provides strategic direction in the following areas:

- 1. Plant support areas:** Implementation of shared cost efficiency measures that target the main operating drivers of the Barakah Plant
- 2. Nuclear supply chain localization:** Identification of localization opportunities to strengthen the UAE's local supply chain across the nuclear cycle
- 3. Business development and growth:** Identification of business development and growth areas for the UAE Nuclear Energy Program

The BID team recognizes the fundamental role the UAE Peaceful Nuclear Energy Program plays in promoting sustainability and combatting climate change. Increasing plant reliability and availability is the focus of the BID efforts in plant support and localization, initiatives such as the Emirates Nuclear Industry Association, Commercial Grade Dedication and Hot Maintenance Shops are examples of this emphasis on sustainable energy production. In addition to this, we are involved in producing services to assist other non-nuclear countries to pursue peaceful nuclear programs on their path to a clean energy future

During 2021, the COVID-19 pandemic has posed significant challenges for supply chains globally, with national lockdowns slowing down the flow of raw materials and finished goods. To combat those challenges, the BID team prioritized the execution of opportunities to support plant operations and maintenance (O&M), localization and long-term program sustainability. We continued to assess potential suppliers as per the Barakah Plant's needs for services, consumables or parts and we supported local companies to be part of the UAE's nuclear supply chain. As a result, new framework agreements were awarded to UAE based companies for maintenance and outage support services, inspection, radiation protection, decontamination and several local manufacturers delivered steel supports, skids, gaskets, and fasteners for the plant.



In 2021 four new partnerships were signed for Commercial Grade Dedication, decontamination and waste management, testing, and measurement equipment. These partnerships, stimulated by numerous Supplier Forums organized by BID with French Nuclear Industry Association (Groupement des Industriels Français de l'Energie Nucléaire - GIFEN), Business France, and the Korea Nuclear Association, resulting in a substantial turnout of French and Korean nuclear experienced companies.

The ICV Program (In-Country Value) certificate is a sustainability tool that evaluates a company's contribution toward the local UAE economy. The program aims to diversify the local economy, strengthen supply chains, and increase Emiratisation. Implemented in 2021 by ENEC and monitored by the ICV Working Group, the ICV Program aligns with the Ministry of Industry and Advanced Technology (MolAT) that is the regulatory authority managing it and its governance. Regular meetings occur with the MolAT and the other participating entities regarding the ICV and the local market/suppliers. The ICV Award Strategy introduced by ENEC Supply Chain led to a significant number of agreements being awarded to ICV certificate holders. Internal meetings occur within the ICV working group to discuss the Program's performance and way forward.

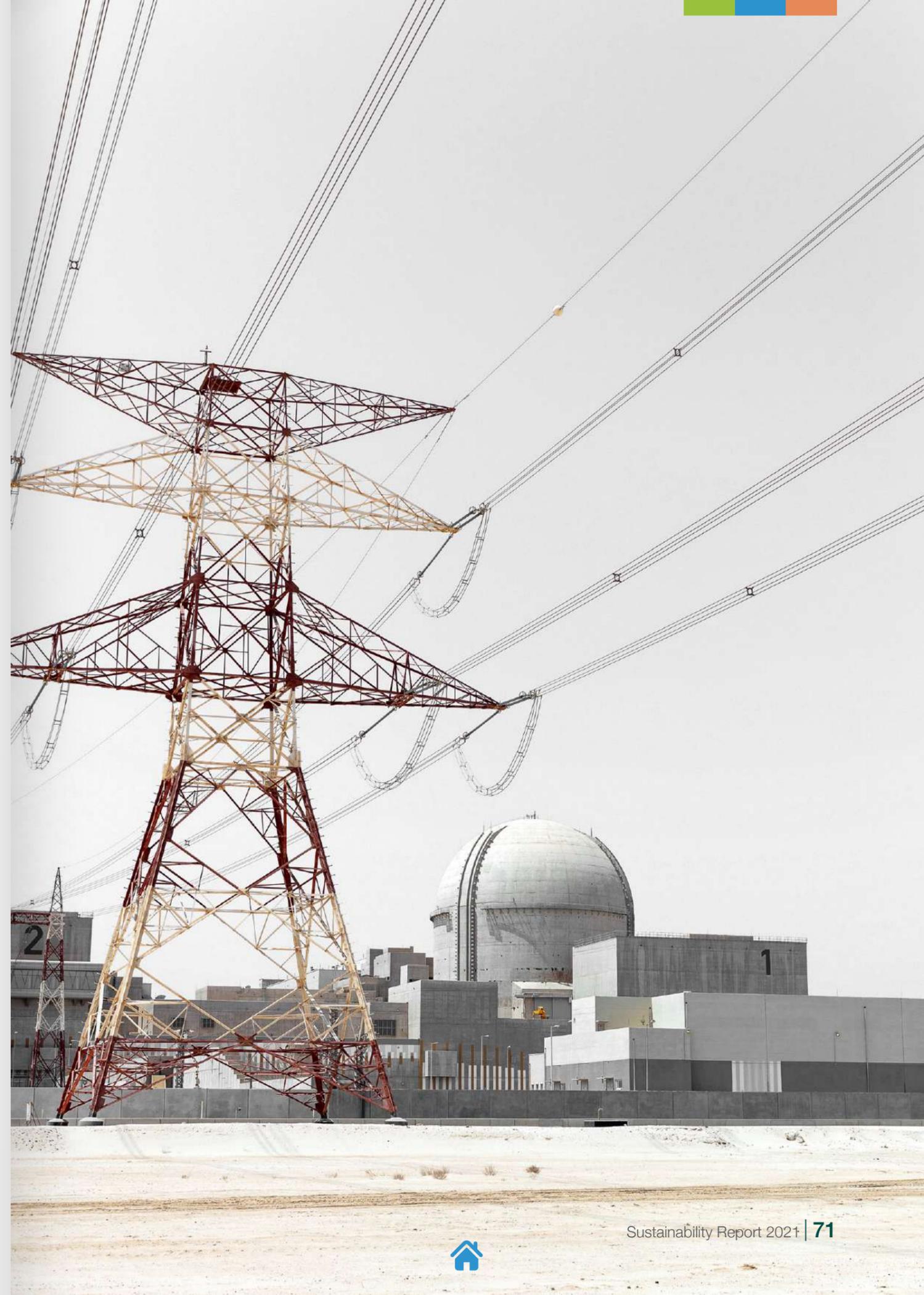
Knowledge Transfer and Partnerships

ENEC is proud to be supporting local businesses in the UAE and facilitating the development of a local nuclear energy supply chain. A major component of the UAE Peaceful Nuclear Energy Program is ENEC's commitment to working alongside UAE companies to ensure that they meet the strict quality and technical standards required to tender contracts for the country's nuclear energy program. This is in line with the UAE strategy for economic and industrial development, which aims to increase the total output and value added of the UAE manufacturing sector. It also aims to enhance the depth of knowledge and innovation required to promote environmentally friendly and energy-efficient manufacturing.

The UAE's economic development and the start of operations at the Barakah Plant create opportunities for local companies to form partnerships with experienced international companies to fulfil the needs of the four nuclear reactor Units at Barakah and other potential newcomers to the nuclear sector in the Middle East region. The BID team are the interface between local and international entities to ensure their participation in the Program and promote partnerships, joint ventures, or knowledge transfer.

We are committed to:

- Identifying and building alliances between local companies and international entities
- Working with government entities to attract and incentivize international investment in the UAE's nuclear energy sector
- Assisting investors to establish a local stand-alone presence or to identify and work with local partners





7 SAFETY OF OUR PEOPLE

7.1 Overview

ENEC was established in 2009 to deliver safe, clean, efficient, and reliable electricity to the UAE grid and contribute to the sustainable energy future of the UAE. The core principles of ‘safe, clean, efficient and reliable’ have been rigorously applied to both the construction and operation of the Barakah Plant.

Sustainability Objectives

Our Health, Safety and Environment (HSE) and sustainability objectives include:

1. **HSEMS** – safeguard the health and well-being of all employees, contractors, and the local community
2. **Health, Safety and Security** – ensure the safety and security of the public, our employees, and contractors, through the design and execution of world-class safety and security processes and systems, and the development of a robust culture of health, safety, and security
3. **Quality, Efficiency and Reliability** – achieve operational excellence and the implementation of industry best practices
4. **Environmental Management** – adhere to the highest available standards and regulations while working to prevent pollution, preserve biodiversity, conserve water and energy resources, and handle waste effectively

By delivering on these sustainability objectives, we are contributing to the achievement of the following UN SDGs targets and ADX ESG Metrics:

UN SDGs Targets and ADX ESG Metrics Addressed

Sustainability Value Pillar	Sustainability Aspect	UN SDG Addressed
Safe, Clean, Efficient and Reliable Energy	• Health, Safety, Environment Management System (HSEMS)	  
	• Health, Safety and Security	
	• Quality, Efficiency and Reliability	  
	• Environmental Management	



UN SDGs Addressed



Reduce mortality from non-communicable diseases and promote mental health

By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.



Reduce Road Injuries and Death

By 2030, halve the number of global deaths and injuries from road traffic accidents.



Reduce Illness and Death from Hazardous Chemicals and Pollution

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.



Improve water quality, wastewater treatment and safe reuse

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.



Universal access to modern energy

By 2030, ensure universal access to affordable, reliable, and modern energy services.



Protect labor rights and promote safe working environments

Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.



Develop sustainable, resilient, and inclusive infrastructures

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.



Substantially reduce waste generation

By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.

ADX ESG Metrics Addressed

Environment E1	E1. GHG Emissions Measure scope 1, scope 2 and scope 3 emissions in CO ₂ equivalent
Environment E2	E2. Emissions Intensity Track and improve GHG emission intensity.
Environment E3	E3. Energy Usage Measure and conserve direct and indirect energy consumption.
Environment E4	E4. Energy Intensity Track and improve energy intensity.
Environment E5	E5. Energy Mix Identify energy sources and monitor consumption from specific source of generation.
Environment E6	E6. Water Usage Track water consumption and reclaimed waste usage.
Environment E7	E7. Environmental Operations Develop and implement environmental, waste & wastewater recycling and energy management policy.
Environment E8	E8. Environmental Oversight Involve Management team to oversee and/or manage sustainability KPI's.
Environment E9	E9. Environmental Oversight Involve Board of Directors to oversee and/ or manage sustainability KPI's.
Environment E10	E10. Climate Risk Mitigation Invested, annually, in climate-related infrastructure, resilience, and product development
Social S9	S9. Child & Forced Labor Develop and implement child labor/ forced labor policy. Extend the coverage to include all suppliers and vendors.
Social S11	S11. Nationalization Prioritize to increase Emiratization rate.
Social S12	S12. Community Investment Invest a part of the revenue to community development.



7.2 Our Response to COVID-19

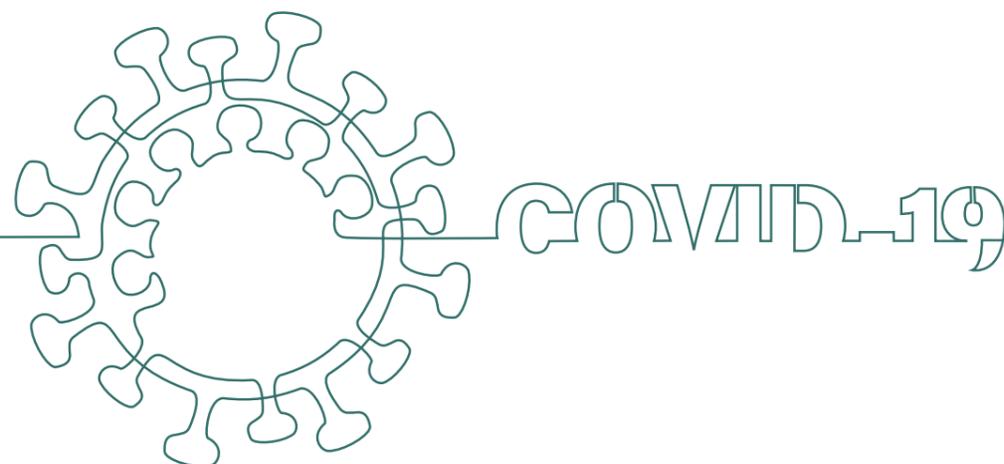
ENEC has worked in close coordination with the Abu Dhabi Department of Health (DoH) to carry out exhaustive measures to safeguard the well-being, security and prosperity of its representatives and project workers, alongside the security of the plant and the construction site.

ENEC has implemented a comprehensive COVID-19 testing program, comprised of universal Polymerase Chain Reaction (PCR)-based testing of all personnel prior to site entry, and ongoing, statistically representative sentinel testing of those already at work sites.

All parties testing positive for COVID-19 were transferred off site to either personal accommodation or to quarantine facilities. Close contacts were identified through contract tracing methods, and all identified close contacts were either isolated in a specialized building in Barakah Plant or transferred off site to personal accommodations. All COVID-19 related activities were conducted in line with the Abu Dhabi Government requirements to safeguard the health, safety, and well-being of the site's workforce. This has enabled ENEC to minimize the spread of COVID-19 in our plant, offices, and construction site.

ENEC has been constantly reviewing the impact of the pandemic on our workforce and have taken rapid action when necessary to prevent the spread of COVID-19 at our sites. We have aligned our testing and vaccination arrangements with those of Abu Dhabi government and have, where necessary, gone beyond those guidelines to safeguard the well-being of our people. We will continue to monitor the situation and will revise our access and testing arrangements according to the situation at the time.

We wish to express our deep gratitude for the support of the UAE's health authorities and remain, alongside our partners, determined to uphold the highest standards of health and safety, and reaffirm our One Team approach to caring for the health, safety, and well-being of all staff at the Enterprise.



7.3 Health, Safety, Environment Management Systems (HSEMS)

To integrate the management of all aspects of health, safety, and our environmental impacts, we developed a comprehensive Health, Safety, and Environmental Management System (HSEMS). Our HSEMS defines the principles by which we conduct business, including HSE policies, procedures, and codes of practice that ensure a systematic approach to HSE. The key elements include:

1. HSE Legal Compliance
2. HSE Communication and Consultation
3. HSE Risk Management
4. Contractor HSE Management
5. HSE Performance Management
6. HSE Incident Management
7. HSE Training and Competency Programs
8. Emergency Management Programs
9. HSE Review and Inspection

The HSEMS has been in place since 2010 and is continually improved to ensure alignment with regulatory requirements, international standards and the identification of new and emerging risks and opportunities. The HSEMS is certified against ISO 14001:2015 Environment Management System (EMS) and ISO 45001:2018 Occupational Health and Safety Management System (OHSMS). OHSMS has obtained the Abu Dhabi Centre for Occupational Safety and Health System (OSHAD) Certificate of Approval.

To manage and monitor the HSEMS, we have several teams, including a Corporate HSES team, a Construction HSE oversight team (Chief Program Office – CPO), Nawah Health and Safety team, Nawah Environment team, Nawah Emergency Preparedness team, Teslam HSE team, and the BCR team.



Working with Contractors

We work closely and collaborate with our contractors, to develop and maintain a world-class nuclear safety culture, policies, and procedures. Throughout the construction phase at Barakah Plant, ENEC oversaw the HSES performance of KEPCO including contractors and subcontractors. A comprehensive approach was developed for the management of contractor procedures for dealing with HSES topics. Through the oversight activities, ENEC monitors the effectiveness of implementation of contractors and subcontractors' HSES programs. daily, weekly, and monthly inspections are performed at the sites along with weekly and monthly cross-organizational meetings.



7.4 Health, Safety and Security

Safety is the overriding priority for UAE's Peaceful Nuclear Energy Program. The Enterprise is committed to delivering the highest standards of safety and quality as we work to generate clean and sustainable nuclear energy for the Nation.

The construction and operation of the Barakah Plant is regulated by FANR, who also licenses the Barakah Plant's operators. We continually adopt global best practices from global nuclear energy industry leaders and industry organizations including IAEA, WANO, and INPO.

Our Sustainability Policy and our Occupational Safety and Health (OSH) Policy outline our commitment to conducting work in a sustainable manner and effectively controlling environmental, health, safety, and security risks through all phases of the nuclear energy plant lifecycle. Our internal culture considers safety as the collective responsibility of everyone involved in the project, from the Board of Directors to employees, contractors, subcontractors and even visitors.

ENEC has a social responsibility to ensure a safe community and safeguard our employees' health and safety. Extensive effort is made to ensure the occupational health, safety, and security of our people at both our headquarters and onsite facilities. The existing measures cover the prevention of workplace incidents, emergency preparedness should an emergency arise, and business continuity management in the event of a crisis. The HSES Department's priority is to facilitate proactive HSE initiatives, ensure regulatory compliance and enable a safe working environment for all. ENEC aspires to achieve zero incidents and is determined to continuously improve health and safety performance across all activities.

 Safety at ENEC <https://www.enec.gov.ae/regulation/safety-at-enec/culture-of-safety/>

Health

Across ENEC, all job categories have been assessed for potential occupational health risks as part of a thorough Occupational Health Risk Assessment. This allows us to quantify the effects of unmanaged occupational health exposures on employees and to take appropriate actions to control risks. Contractors and subcontractors are expected to deploy similar systems to ensure risks are identified, evaluated, and mitigated as low as reasonably practicable (ALARP).

Heat Stress

Heat stress has been identified as one of the region's highest occupational health risks, primarily for personnel working outdoors in the summer months. The focus is to avoid heat stress incidents by implementing control measures that ensure employees, contractors, and subcontractors are never over-exposed to the sun and remain hydrated.



Heat Stress



Scope: ENEC, Nawah, BOC, and contractors

This year, the Enterprise undertook certified first aid and fire warden training sessions to raise employee awareness levels and response process in the case of medical emergencies.

Due to its large number of contractors and subcontractors, KEPCO has appointed an in-house, DoH approved, first aid and medical services provider at the Barakah Plant, which offers 24/7 medical facilities and services. We regularly inspect their services, and assess them monthly, to ensure conformance to all DoH standards and registration requirements.

Food Safety

The Corporate Health Team, in coordination with the Teslam HSE Team, conduct periodic compliance assessments on food safety and catering at Barakah Plant. All concerns are raised to the respective service providers to ensure that adequate corrective measures are taken.

The teams provide targeted awareness campaigns based on issues raised, such as health and well-being programs, that assess the eating habits of employees. Other targeted initiatives include tips around healthy eating during the Holy Month of Ramadan and raising awareness around staying hydrated and using cool shelters during the summer weather. Apart from the challenges posed by COVID-19, no other findings were recorded on food safety aspects.

Industrial Hygiene

Various industrial hygiene procedures and programs are in place, such as identification and monitoring of oxygen deficient areas, control of confined spaces, calibration of industrial hygiene equipment, industrial hygiene stress factor monitoring and related hygiene assessments, including air quality surveys, noise control areas and management of hazardous substances. Respirator and Self-Contained Breathing Apparatus (SCBA) training and fit testing equipment are available, and all breathing apparatus are tested and inspected.

Health Screening

Health screening and medical surveillance is mandatory for all employees and involves visiting an occupational health physician and completing a health history questionnaire to determine current medical issues and identify previous occupational incidents that may have resulted in a medical issue. All results and recommendations from the screening are confidentially processed to manage the individual's occupational health. Each employee undergoes this assessment periodically based on the risks associated with their job category, in conformance with OSHAD and FANR statutory requirements.

Health and Safety Grievances

The Condition Reporting (CR) program facilitates proactive reporting of safety concerns and near-miss incidents. The program assigns responsibility for the implementation of corrective actions to the relevant party. Also, in place is the Employee Grievance Committee which addresses and resolves employee grievances. All employees have a responsibility to stop work activities where an existing or potential threat to safety is observed. All employees can raise health-related concerns through the CR program. Contractors and subcontractors can raise grievances through the Safety Observation Program, where workers can drop a card on any well-being grievance related issue in boxes spread across the plant. In 2021, no well-being related grievances were raised.

Safety

Employee Occupational Safety

At ENEC, we strive to improve the HSES awareness of all employees through HSES e-Learning modules, and HSES communications and training sessions. Each year, we hold mandatory health and safety awareness sessions for all our employees.

Employees at the Enterprise work at the ENEC HQ in Abu Dhabi and/or onsite in Barakah Plant, regularly travelling between the two locations. This means that safety risks ranging from transportation, construction, operation, and nuclear safety onsite are all material issues that are incorporated into the management of safety. In 2021, we achieved a zero Lost Time Injury Frequency Rate (LTIFR) and a reduction in the Total Recordable Case Frequency Rate (TRCFR) among our employees.



Employee Occupational Safety			
Year	2019	2020	2021
Number of employee hours worked	7,387,735	7,243,242	8,985,700
Fatalities (employees)	2	0	0
Lost Time Injury Frequency Rate (LTIFR; employees)	3.84	0.51	0
Total Recordable Case Frequency Rate (TRCFR; employees)	2.48	0.74	0.67

Scope: ENEC, Nawah, and BOC

LTIFR and TRCFR are calculated per million man-hours.

Contractor Occupational Safety

We closely monitor the safety performance of the Prime Contractor, KEPCO, and its subcontractors, working closely with them to ensure that the same rigorous safety systems and culture exists throughout the construction site. We regularly undertake audits to ensure that our contractors and subcontractors follow all relevant UAE laws and regulations. This starts with the review of KEPCO's HSEMS and its procedures and stretches to onsite inspections for all areas and disciplines. Observed deficiencies, if not corrected on the spot, are reported through a deficiency notification program, which is the formal communication channel with the Prime Contractor, and then addressed through corrective action plans. Performance indicators and deficiency notifications are followed-up and tracked monthly until complete implementation and effective closure is reached.

In 2021, the contractor LTIFR and TRCFR have increased due to an increase in reported incidents as well as the inclusion of data from Teslam HSE. This is mainly due to the rigorous training and inspections performed jointly by ENEC, the Prime Contractor, and subcontractors. When incident causes are identified, corresponding corrective actions are developed and implemented in a timely manner to minimize a recurrence.

Contractor Occupational Safety			
Year	2019	2020	2021
Number of contractors and subcontractors)	9,497	6,257	6,419
Contractor and subcontractor hours worked (millions)	40.74	16.32	17.26
Fatalities (contractors and subcontractors)	0	0	0
Lost Time Injury Frequency Rate (LTIFR; contractors and subcontractors)	0.04	0	0.06
Total Recordable Case Frequency Rate (TRCFR; contractors and subcontractors)	0.37	0.31	0.64

Scope: Contractors and Teslam

LTIFR and TRCFR are calculated per million man-hours

Nuclear Safety

Nawah has developed the necessary procedures and management systems to achieve the highest standards of nuclear safety and quality during operation of the Barakah Plant. All procedures and systems are built on the expertise and operational experience of the global nuclear energy industry, adopting best practices from operators around the world and from industry organizations, including IAEA, WANO, and INPO.

The design, siting, construction, operation, and decommissioning of nuclear energy plants as well as the use of all radioactive material and radiation sources is regulated by FANR. All activities across ENEC comply with the FANR's core values of safety awareness and responsibility, competency, independence, and transparency. All procedures and programs in place are aligned with FANR requirements.

Health and Safety Engagement and Awareness

To improve the levels of health and safety within our organization and achieve zero incidents, it is crucial to directly engage with all employees, contractors and subcontractors and raise their awareness about health and safety matters. In 2021, the following health and safety related activities were executed:

Workplace and Wellness Programs

- Food Safety and Accommodation Inspections: At Barakah Plant we continue to conduct regular food safety and accommodation inspections in accordance with the applicable food safety and accommodation procedure. The inspections were diligently conducted and



were vigilantly monitored by representatives from DoH and Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)

- Hand washing campaign: This campaign was merged with COVID-19 prevention measures to prevent workers from being contaminated and educate them on best practice to continuously ensure hand hygiene

Medical Screening and Assessments

- Ongoing COVID-19 awareness sessions
- Provision of additional blood pressure monitors that were distributed across the Barakah Plant: Blood pressure monitors were stationed across movement control offices

Security

We work closely with the Critical Infrastructure and Coastal Protection Authority (CICPA), the Abu Dhabi Government agency tasked with handling the protection and security of vital assets and infrastructure, including the Barakah Plant. Under the regulation of FANR and with guidance from the IAEA, CICPA has developed and implemented the highest international security standards for the Barakah Plant.

The security teams across the Enterprise are responsible for implementing the FANR-approved Physical Protection Plan (PPP) for construction. The PPP for construction addresses the protection of nuclear materials and the nuclear facility against malicious acts, such as the unauthorized removal of nuclear material. An additional FANR-approved Physical Protection Plan for Operation (PPP-O) addresses the organizational structure and staffing of security, the plant's physical protection (including the designation of protected and vital areas) guard training and qualification, information security, cybersecurity, and responses to security contingencies including preparedness for concurrent nuclear safety-related emergencies and security threats. The PPP-O provides assurances that physical protection strategies will neutralize any threats and seeks to ensure that the nuclear facility is protected from malicious acts and radiological sabotage.

Emergency Preparedness

Working with internal and external stakeholders, we developed a comprehensive Emergency Preparedness and Response program. This covers all aspects of nuclear emergency activities, emergency response organization, emergency equipment, training, and awareness.

ENEC Emergency Management program includes development and periodic review of necessary Emergency Response related procedures and plans, Emergency Response awareness for all staff, specialized certified training for Fire Wardens and First Aiders, internal training for Chief Wardens, Emergency Coordinators and Security personnel, and drills and exercises of potential emergency events. Every quarter, Corporate HSES perform assessments on the quality of conducted emergency evacuation drills. Assessments include

evaluation of the emergency evacuation drill reports and follow-up meetings with responsible stakeholders on lessons learnt and areas for further improvement. Assessment is done based on the developed assessment criteria, and each report is evaluated against those criteria.

Emergency response training takes the main part of the ENEC Emergency Management program, and all trainings are conducted as per the annual training plan to ensure all main responders are competent and qualified in their roles. Twenty-seven (27) various emergency response trainings were conducted in 2021, a total 181 people attended the training.

Emergency Preparedness and Response at ENEC HQ

ENEC HQ office in Abu Dhabi has established, implemented, and maintained robust emergency response processes to prepare and respond to potential emergencies as per the regulatory requirements of UAE Fire and Life Safety Code of Practice and OSHAD SF Element 6 – Emergency Management. Our HQ Emergency Response and Evacuation Plan defines the emergency setup, organization, procedures, responsibilities, and arrangements, as well as planned response to emergencies that may occur in the building. The established emergency response program includes training for First Aiders, Fire Wardens, Security staff, facility management and other members of the emergency response team on their roles and response capabilities.

A complete understanding of the emergency procedures by everyone in the building is essential for the Emergency Plan's success and is achieved through online HSE and Emergency Response training, which is mandatory for all employees, contractors, and service providers on annually. Additionally, Emergency Evacuation layouts for each floor with marked evacuation routes and location of emergency response equipment are placed in prominent locations throughout the building. Emergency response leaflets are available in all meeting rooms in Arabic and English and shared with visitors at the reception and in meeting rooms. Leaflets were converted into QR codes to scan and read as part of minimizing touchpoints during the COVID-19 pandemic.

Teslam is the responsible custodian of the Annual Maintenance Plan to maintain all fire and life safety equipment in all ENEC buildings, including HQ. Our Corporate HSES department ensures all regulatory requirements are met with respect to fire safety and emergency preparedness and conducts regular assessments.

Practicing evacuation and emergency procedures during emergency drills provide training that will be valuable in an emergency. In 2021, despite strict pandemic restrictions at both the Barakah Plant and the Headquarters, 98% of all planned drills were conducted successfully.

Barakah Emergency Preparedness Program

Nawah is the custodian of the Barakah Emergency Preparedness Program, which ensures that commissioning and operations of all programs, processes, and activities are developed, implemented, and completed in a safe and efficient manner.

The comprehensive program focuses on a commitment to protect the health and safety of employees, the public, and environment from a potential radiological event. The program covers the following functional roles and capabilities:



- Onsite Emergency Preparedness
- Offsite Emergency Preparedness
- Emergency Response Equipment and Facilities
- Emergency Response Training
- Drill and Exercise Program
- Barakah Emergency Plan and associated Implementing Procedures

The ability of Nawah to respond to a radiological emergency at the Barakah Plant in a timely and effective manner must be periodically demonstrated to obtain, and maintain, an operating license from FANR. Emergency drills and exercises are scheduled periodically to test the effectiveness of Nawah's Emergency Response Plan, and its implementing procedures, which include emergency communications, timely response of Emergency Response Facilities, adequacy of emergency response resources, and coordination between the various agencies involved. In line with the Enterprise Strategy and priorities for the safe, secure operations of Units 1 and 2, Nawah continues to work closely with FANR, local stakeholders, the IAEA, and international nuclear experts to ensure that their Emergency Preparedness and Response Program adheres to the highest international standards. Key Performance Indicators as described in Nawah's Business Plan are implemented and closely monitored to ensure all aspects of the Emergency Preparedness and Response Program are fully maintained to the highest levels. Additionally, the onsite emergency plan includes assessment criteria and protective actions to return the plant to a stable condition in case of radiological emergencies.

In 2021, Emergency Preparedness Drills and Exercises Program scheduled several tabletops and drills activities while taking safety of participants into great consideration. Emergency Preparedness conducted a total of five tabletops and five drills for the Emergency Response Organization (ERO) to ensure their proficiency in performing Risk Significant Planning Standards activities. The overall ERO performance was evaluated as satisfactory. All deficiencies, weaknesses, and improvement opportunities were identified and are being addressed formally.

The UAE was honored to host the IAEA ConvEx-3 Exercise for the first time in 2021. ConvEx-3 is an IAEA International Convention Exercise at the highest levels of complexity. ConvEx-3 is a full-scale exercise designed to evaluate international emergency response arrangement and capabilities for a severe nuclear or radiological emergency over several days, regardless of its cause. The 2021 IAEA ConvEx-3 Exercise covered a multi-unit event that overwhelms country resources and prompts requests for international assistance. The Rehearsal Drill was conducted on 28 September 2021 and the full exercise was conducted over two days: 26-27 October 2021. Thirteen UAE Federal Authorities participated in the exercise besides nine Abu Dhabi Local Authorities and 25+ International Organizations. In addition, GCC Countries, and 196+ States were also invited by the IAEA. High level official delegations from participating countries and IAEA attended to observe the exercise. The overall ERO team performance was evaluated as satisfactory and there were no findings from the regulator FANR.





8

ENVIRONMENTAL STEWARDSHIP



Sustainability is one of the top priorities to ENEC in its activities across all assets and subsidiaries. ENEC's sustainability goals are aligned with the UN SDG's and ADX's ESG disclosure requirements. Nuclear energy plants produce electricity with net negative greenhouse gas emissions. Hence, the Barakah Plant complements the UAE's national and international goal of reducing its carbon footprint.

8.1 Environment Management Approach

ENEC has followed the environmental appraisal process designed by EAD. ENEC has completed environmental studies and obtained the Environmental Permit from EAD to construct and operate the nuclear power plant. Such environmental studies have enabled the Enterprise to select a suitable site for the nuclear energy plant, to identify its environmental impacts and suitable mitigation measures.

The Construction Environment Management Plan (CEMP) specific to the construction phase, and the Operational Environment Management Plan (OEMP), specific to the operation phase, have been approved by EAD and have been implemented by ENEC.

The Barakah Environment and Sustainability Charter is an agreement co-signed by ENEC and its Prime Contractor, to strictly implement the mitigation measures and monitoring program defined in the EAD approved CEMP. ENEC implements the environmental performance monitoring and reporting program as defined in the approved environmental studies and EAD's environmental permit conditions, to align with national environmental regulations.

ENEC's Environmental Management System (EMS) is certified against ISO 14001:2015 and is being implemented. In 2021, zero significant or reportable environmental incidents, and zero breaches of environmental regulations or environmental permit conditions were recorded.



8.2 Sustainability Initiatives at the Enterprise

Q1 2021: Responsible Face Mask Disposal Campaign

The Enterprise encouraged its employees to safely dispose their mask after usage by launching its responsible face mask disposal campaign, educating its employees to cut the strap of the mask and tag the plastic bag as - "RISK OF CONTAMINATION" - to reduce environmental impacts.

#QUARTERLYSUSTAINABILITYINITIATIVES

Responsible Face Mask Disposal Campaign at ENEC

Masks are essential for stopping the spread of COVID-19 during the pandemic and they have become an everyday accessory. However, there are environmental concerns due to the large increase in the use of disposable face masks if not disposed carefully. While we can't avoid the use of masks, for now, there are some precautions people can take to lessen the environmental impact.

The year 2020 came with a new source of pollution – a certain type of waste that has been accumulating in significantly large quantities, globally – face masks! Over 90 million face masks are being disposed per week. Face masks help us fight COVID-19 but incorrect disposal of face masks leads to rise in pollution, negatively impacting our environment and subsequently society.

The used face masks we see on the ground and in the sea is harmful to the environment and to the population. This is due to masks:

- Carrying a higher risk of contamination
- Being composed of materials that take a lot of time to degrade and release toxic substances during the process
- Debris is left on land and in oceans which can harm wildlife through getting tangled in string as well as be mistaken for food, entering the food chain and being detrimental to human health.

Responsible Face Mask Disposal

ENEC recognizes the importance of responsible disposal of face masks. We encourage our employees to implement the following measures to ensure the correct disposal of face masks.

- Wash your hand thoroughly before you take off your mask
- When you take off your mask, only touch the elastic straps
- Fold the contaminated part inwards two or more times
- Cut the two strings on the side to avoid the risk of wildlife being tangled up
- Wrap the mask in tissue paper or place in plastic bag before disposing
- Dispose of the mask in general waste bins, not in recycling bins
- Ensure bins are lined and closed to prevent wind from flying the mask into the environment
- If you are sick with COVID-19, write RISK OF CONTAMINATION on the bag
- When you have finished wash your hands with soap and water
- Consider using cloth or reusable masks to help prevent additional pollution

Q2 2021: Clean Hands Save Lives

Frequent and proper hand hygiene is one of the most important measures to prevent the spread of infections and diseases.

The Enterprise advised its employees to regularly wash their hands with soap and water, or used a hand sanitizer with at least 60% alcohol concentration to clean their hands when soap and water are not available, BEFORE and AFTER:

- Touching eyes, nose, or mouth
- Touching their mask
- Entering and leaving a public place
- Touching an item or surface that may be frequently touched by other people



Q3 2021: Sustainable Food Waste Management

UAE ranks 42nd on the global food security index among 113 countries. This initiative encouraged employees to do the following:

- Don't over buy
- Check use-by date
- Plan meals ahead
- Save and use leftovers
- Freeze to preserve the food longer

The Enterprise has a dedicated contractor that handles and disposes the food waste generated at Barakah Plant

#QUARTERLYSUSTAINABILITYINITIATIVES

Think, Eat, Save

Sustainable food waste management at ENEC

Sustainable food waste management seeks to reduce food waste and its associated impacts, over the entire lifecycle, starting with the use of natural resources, manufacturing, sales, and consumption and ending with decisions on recovery or final disposal.

Reducing food waste is an important method of reducing production costs, improving food security and nutrition and promoting environmental sustainability.

ENEC has a dedicated contractor that handles all the food waste at Barakah and dispose of it accordingly. However, it does not stop there. See what you can do to support reducing the effects of food waste!

Did you know?

- 1/3 of food waste produced globally goes to waste.
- Food waste is not just a social concern, but an environmental one too.
- Food wasted translates to energy and water wasted that are used to grow, harvest, transport and package the food.
- Food waste going to the landfill produced methane (CH₄) – a green house gas that is even more potent than carbon dioxide! **That is 86x stronger than CO₂!**

Growing attention to food loss and waste is reflected in the United Nations Sustainable Development Goals (SDGs). SDG Target 12.3 calls for halving per capita global food waste at the retail and consumer levels and reducing food loss along production and supply chains by 2030.

UAE ranks at 42 on global food security index among 113 countries.

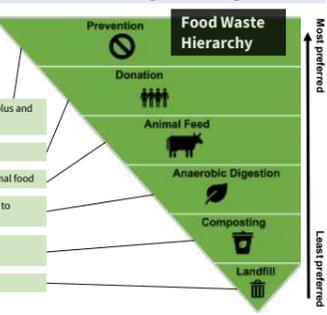
Reducing food loss and waste contributes to:



TIPS

- Don't over buy
- Check use-by date
- Plan meals ahead
- Save and use leftovers
- Freeze to preserve food longer

Food Waste Hierarchy



- Prevention: Minimization of food surplus and avoidable food waste
- Donation: Donate extra food
- Animal Feed: Divert food scraps to animal food
- Anaerobic Digestion: Food scraps for digestion to recover energy
- Composting: Create nutrient-rich soil amendment
- Landfill: Last resort to disposal

Methane impacts

Climate
Responsible for 40% of warming since the industrial revolution.

Health
Responsible for roughly 1/2 of the deaths caused by air pollution.

Agriculture
Responsible for up to 15% yield losses of soy, rice, wheat and maize.

Q4 2021: Sustainable Transportation

The Enterprise recognizes that future transport systems must be sustainable to align with the Abu Dhabi Plan 2030 and the Department of Transport's Surface's Transport Masterplan. The Enterprise's Fleet Management is opting for cleaner transportation modes in phases by undertaking various initiatives. As of December 2021, the Enterprise has 51 hybrid vehicles in its fleet, representing almost 25% of the total fleet.

Hybrid transport vehicles are:

- Less polluting
- Cheaper to operate
- More hydrocarbon fuel-efficient
- Generators of electricity using the kinetic energy produced by their braking system

SUSTAINABLE TRANSPORT

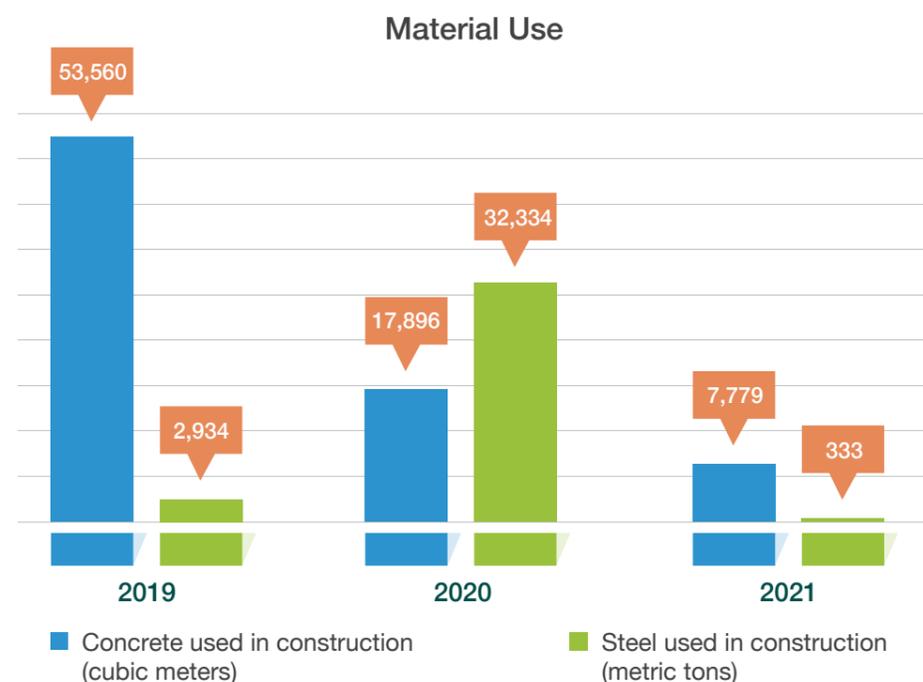


HYBRID VEHICLES



8.3 Material Use

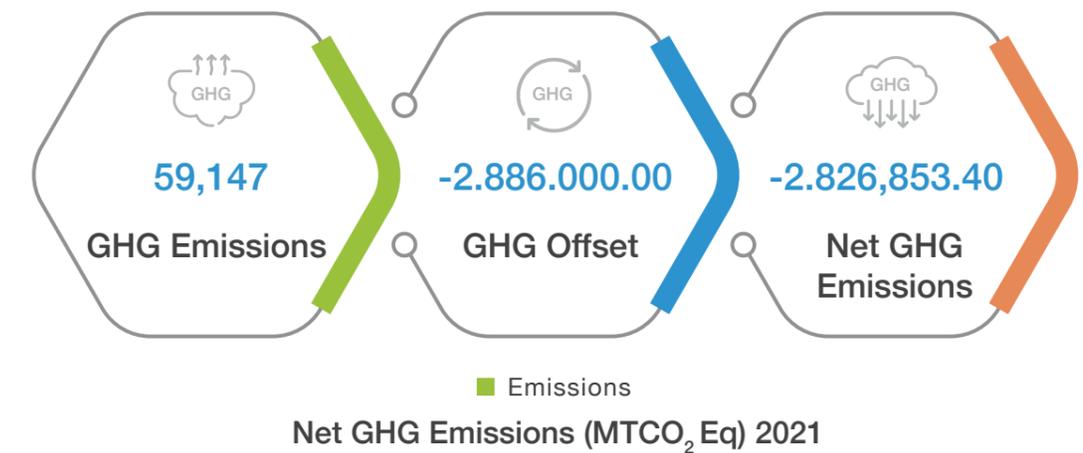
The construction of a nuclear energy plant requires significant amounts of material input, primarily nuclear-grade concrete, and steel that are vital to the safety and reliability of the plant. Our consumption of materials has declined over the years, as the Barakah Plant construction phase approaches completion. Beyond the large amounts of material required for construction, we track the consumption of office-based materials such as paper, plastic water bottles and printer cartridges.



8.4 GHG Emissions, Energy and Water Management

GHG Emissions

Electricity is generated in the UAE primarily through the combustion of hydrocarbon fuel, which emits higher levels of GHG to the atmosphere. Electricity generated by Barakah Plant has near zero-emission that support the UAE to meet its voluntary commitment under the Paris Climate Change Agreement.

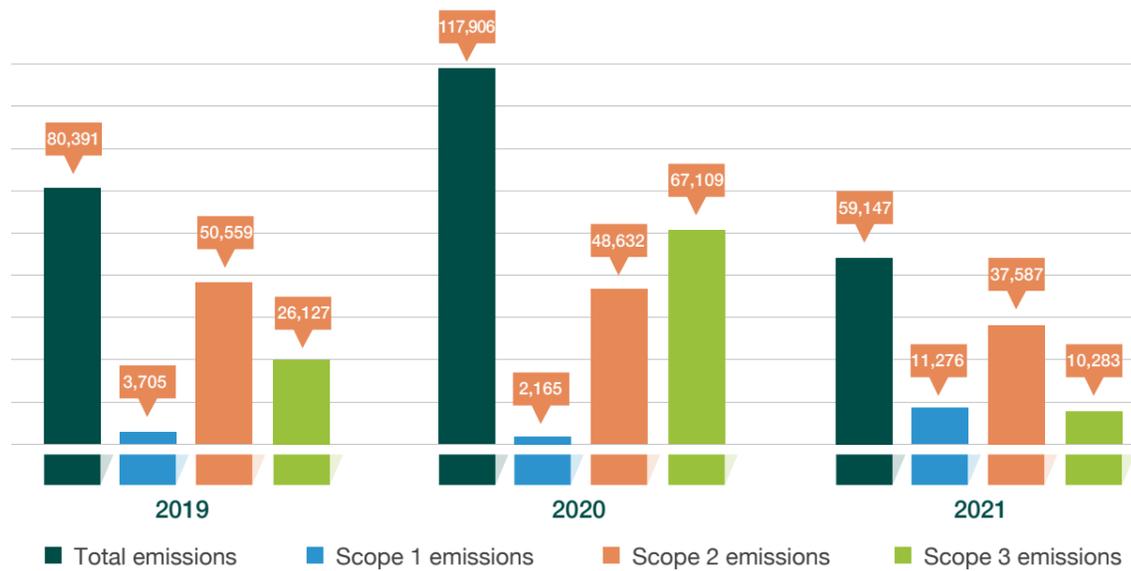


ENEC took a lifecycle approach to the measurement and accounting of 2021 GHG emissions. This means we tracked direct and indirect emissions from the construction and operation processes of the plant (including the sourcing of fuel) and its future decommissioning, as follows.

- **Scope 1** emissions are direct emissions generated from the burning of fossil fuels, e.g., petrol and diesel used for heavy machinery, generators, and light vehicles
- **Scope 2** emissions are generated from the use of electricity and are known as 'indirect' since energy plants elsewhere generate the actual emissions
- **Scope 3** emissions are known as 'other indirect emissions' since they occur outside the boundaries of the organization, such as the supply chain, and come from the provision of products and services.



(MTCO₂Eq) GHG Emission



Scope: ENEC, Nawah, BOC, and Contractors
 GHG emission factors have been updated for 2021

Energy and Water Management

Energy and water are essential resources for the construction and operation of a nuclear plant. Due to natural water resources being scarce in the region, efficient water usage practices have gained importance. The Enterprise and their contractors have set internal targets to reduce their energy and water consumption. ENEC designs and implements the monthly monitoring program.

ENEC HQ building, located in Masdar City, has achieved 4 Pearl design and construction rating under Estidama Pearl Building Rating system. The building has implemented the high level of energy and water conservation measures in its design and construction required by Pearl Building Rating System. The design measures improve the energy and water saving during the entire operational life of the building.

Energy

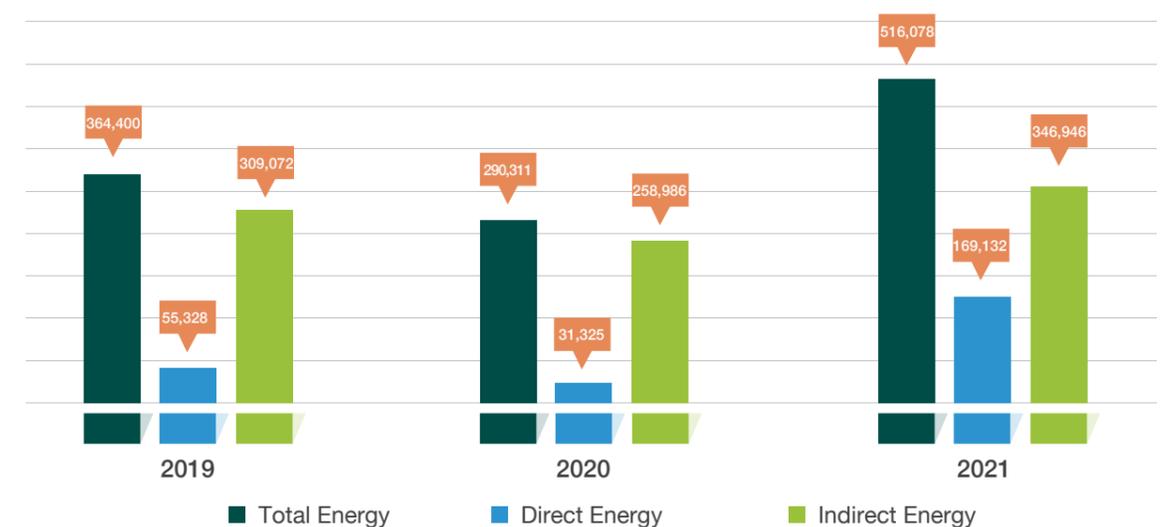
Electricity imported from the national grid, indirect energy use, is used for lighting, equipment, and ancillary buildings at the site. ENEC consumed Gasoline and Diesel, direct energy, in its construction process. The Barakah staff accommodation facility kitchen was functional in 2021 requiring the use of significant amounts of Natural gas to meet its energy needs. This, along with increases in gasoline and diesel consumption, were the main contributors to the increase in energy intensity in 2021.



GHG Emissions
 Emissions intensity (MTCO₂ Eq./person) *

Scope: ENEC, Nawah, BOC, and Contractors
 * Intensities calculated using total number of employees and contractors.

Energy Consumption (GJ)



Energy			
Year	2019	2020	2021
Total energy consumption (Gigajoules - GJ)	364,401	290,311	516,078
Energy intensity (GJ/person) *	28.90	31.89	59.29
Direct energy (GJ)	55,328	31,325	169,132
Indirect energy (GJ)	309,072	258,986	346,946

Scope: ENEC, Nawah, BOC, and Contractors

* Intensities calculated using total number of employees and contractors

Water

The Enterprise's office buildings, and the contractor and staff accommodation are the major consumers of potable water. Landscape associated with the buildings and power plant utilize Treated Sewage Effluent (TSE) from the onsite wastewater treatment plant. In addition, the contractors use the TSE in dust control and suppression measures during construction activities. TSE meets the standards set by DOE. ENEC verifies the water quality by testing the water sample in the laboratory, once in every month.

Water			
Year	2019	2020	2021
Total water consumed (cubic meters)	1,302,190	2,005,169	1,895,868
Water Intensity (cubic meters/person) *	103.28	220.28	217.70

Scope: ENEC, Nawah, BOC, Teslam, and Contractors

* Intensities calculated using total number of employees and contractors

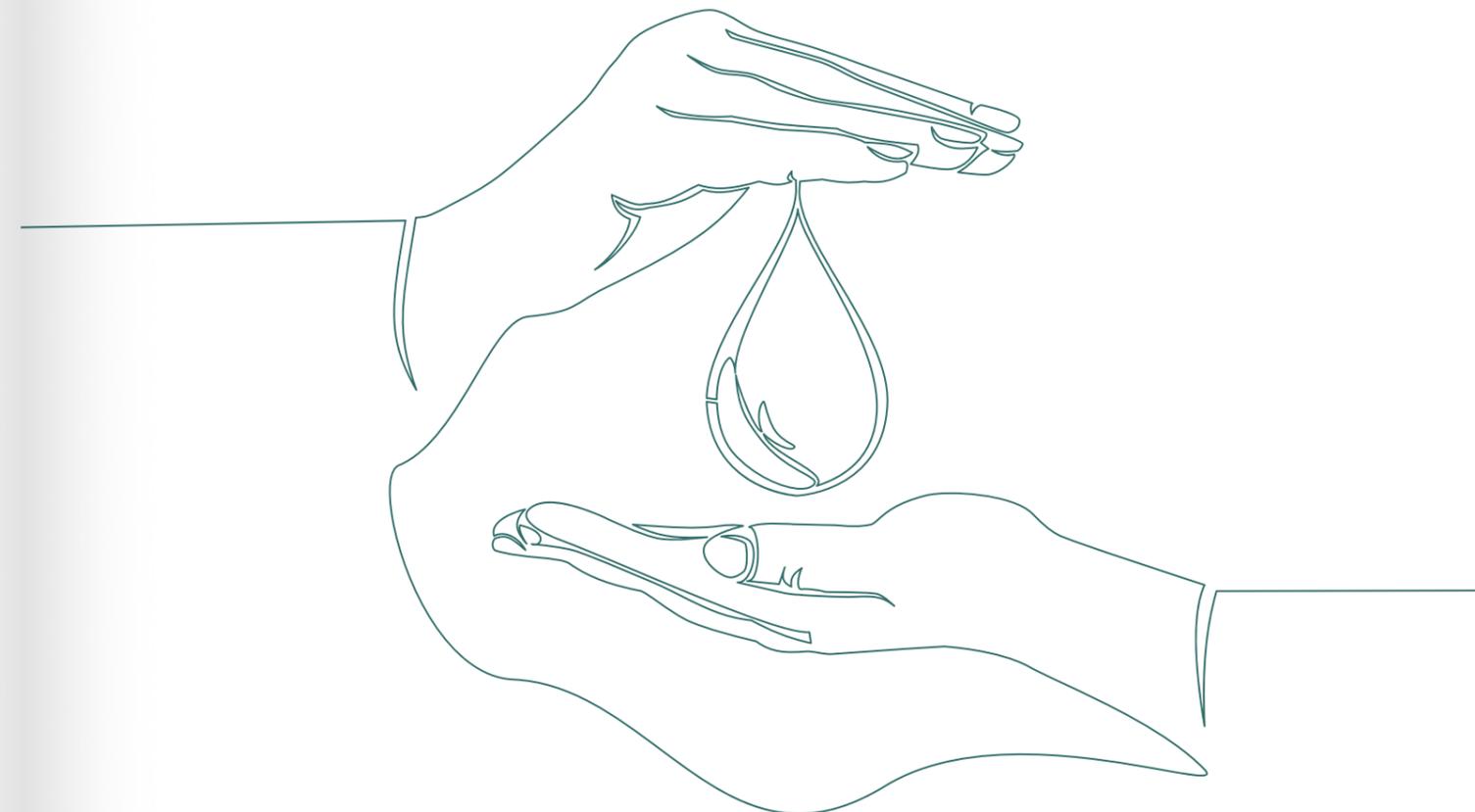
Wastewater

Greywater and the sewage from office buildings, and contractor and staff accommodations, constitute our non-hazardous liquid waste. Construction and maintenance activities generate hazardous liquid waste such as oils, paints, etc. All non-hazardous liquid waste is treated in the onsite wastewater treatment plant.

In 2021 ENEC treated 100% of the non-hazardous wastewater to the standards set by DOE's 'Recycled Water and Biosolids Regulations 2018' and used 30% of the TSE for irrigation and 70% for dust suppression activities. Hazardous waste was generated during the cleanup of chemical pond at wastewater treatment plant post Unit 1 commercial operations. Hazardous liquid wastes are being recycled offsite, by a third-party contractor.

Wastewater			
Year	2019	2020	2021
Wastewater recycled offsite (million liters)	17	1	0
Wastewater recycled onsite (million liters)	1,218	927	1,544
Percentage of wastewater recycled onsite	99%	100%	100%
Hazardous liquid waste disposed (liters)	0	0	136,040
Hazardous liquid waste recycled (liters)	93,078	75,014	21,113

Scope: ENEC, Nawah, BOC, Teslam, and Contractors



8.5 Waste

Our office building, along with our contractor, and staff accommodations, are the principal source of municipal solid waste generation. Construction activities at site results in the generation of construction waste. ENEC carried out several waste segregations drives at the Barakah site to segregate the recyclable waste.

Non-hazardous Waste

Combined efforts from ENEC & its subcontractors have led to the diversion of 31.5% of waste from the landfill. As the construction phase is coming to an end, less recyclable waste has been generated. Hence there is a decline in the recycling percentage.

Non-hazardous waste			
Year	2019	2020	2021
Non-hazardous waste disposed (metric tons)	8,850	6,082	10,608
Non-hazardous waste recycled (metric tons)	19,339	7,952	4,888
Percentage of total non-hazardous waste recycled	69%	57%	31.5%

Scope: ENEC, Nawah, BOC, Teslam, and Contractors

Hazardous Waste

Construction activities and use of construction materials have resulted in the generation of hazardous waste. The hazardous waste is either recycled or disposed of through Tadweer approved Environmental Service Providers. In 2021, the hazardous waste generated was from sludge accumulation in the chemical pond during pre & post commercial operations of Unit 1.

In 2021, the Enterprise safely disposed over seven metric tons of electronic waste in accordance with local and international environmental standards. The Enterprise received a Green Certificate which highlights our commitment to sustainable waste management practices.



Hazardous Waste			
Year	2019	2020	2021
Hazardous waste disposed (metric tons)	0	0	202.62
Hazardous waste recycled (metric tons)	10	10	30.22
Percentage of total hazardous waste recycled	100%	100%	13%

Scope: Nawah and Teslam



8.6 Biodiversity

The Barakah Plant uses seawater for cooling of its nuclear reactors and discharges slightly warmer water back to the marine environment. This could result in marine habitat loss, species displacement, and marine sediment quality impacts. The Enterprise has implemented a mitigation program identified in the environmental studies to minimize its impact on the marine environment.

Marine Wildlife Management

In 2021, the Enterprise continued its turtle rescue program. Sea turtle rescues at Barakah Plant commonly occur during the winter months when the water temperature drops, and turtles become sick. All rescued sea turtles were handled by Nawah in a turtle holding facility before being transported to The National Aquarium (TNA) in Abu Dhabi for treatment and rehabilitation. A turtle release event was held at the Barakah Plant in conjunction with EAD and TNA on 21 June 2021. In 2021, a total of 49 alive turtles (34 hawksbill turtles, 12 green turtles and 3 loggerhead turtles) were rescued.

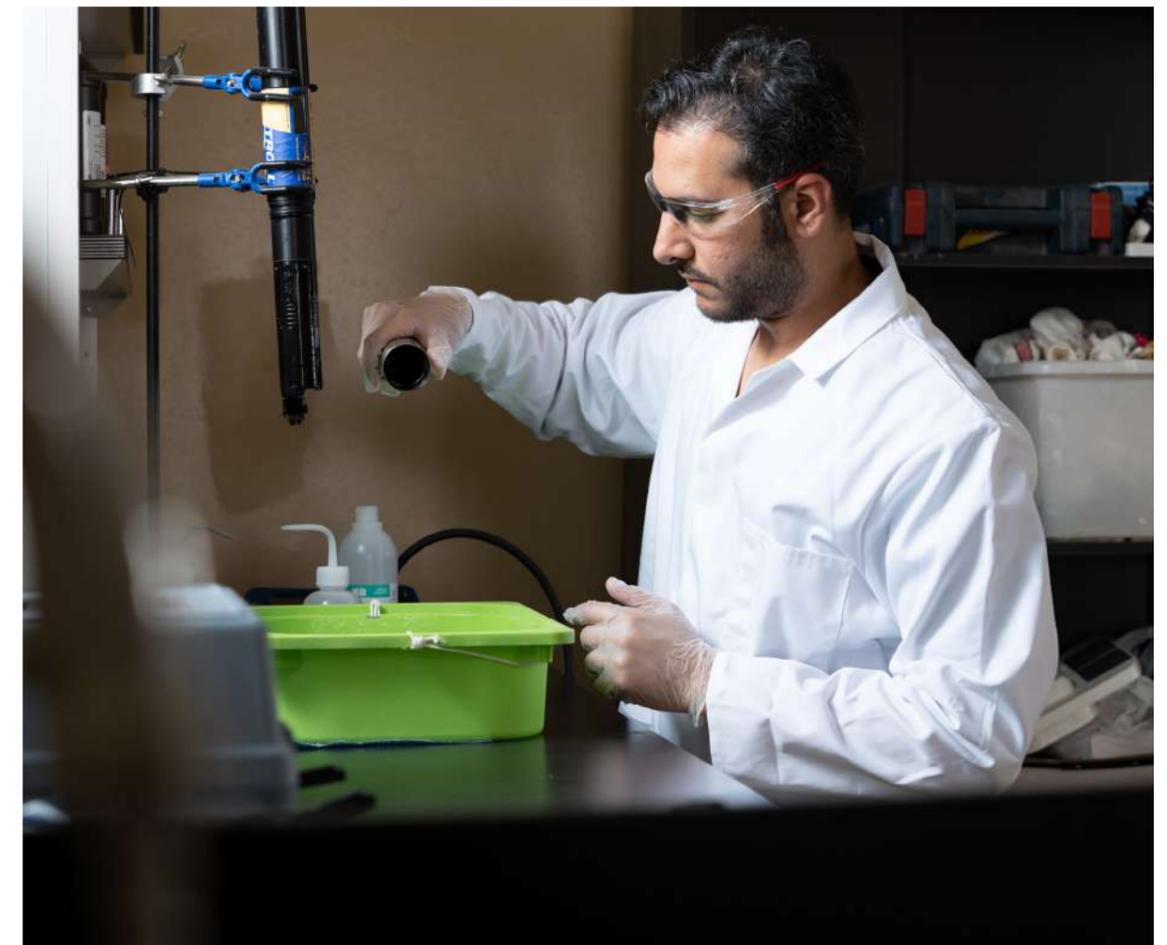
Coral Translocation and Fragmentation

Nawah continued the third (April 2021) and fourth (September/ October 2021) coral monitoring program, covering the winter and summer periods, respectively, to assess the condition and status of the translocated coral fragments and colonies undertaken by the Emirates Marine Environmental Group (EMEG) in 2021. Coral Watch health analysis indicates that translocated corals were generally less healthy than previous surveys with the majority of fragments and colonies recording scores of 2 or less on the color scale.



8.7 Radiological Monitoring Laboratory

In August 2014, Nawah's Environmental Radiochemistry Laboratory started to establish background radiation baseline for the Barakah Plant, in accordance with the Radiological Environmental Monitoring Program (REMP) section of the Offsite Dose Calculation Manual (ODCM). This program continues during the operation to monitor the plant operational activities to ensure the health and safety of the public. The Lab sends semi-annual reports to FANR, containing the results of radiological tests performed on samples including soil, sediment, fish, invertebrates, air, drinking water, seawater (840 air samples, (particulate and gaseous), 312 surface water, 12 drinking water, 8 groundwater, 20 soil, 8 sediments, 8 invertebrate, and 32 fish samples were collected). Test results have been reported for 2021 and all results indicate that radiation levels are within acceptable limits.





9

EMPOWERING OUR PEOPLE



9.1 Overview

Hundreds of professionals from around the globe, with a wide range of expertise, knowledge, and training, have gathered as a team for the construction and operation of the Barakah Plant. As the first project of its kind within the Arab World, we have drawn from the best national and international talent, while simultaneously investing heavily in the creation of knowledge through highly specialized nuclear energy education and training programs for UAE Nationals.

Sustainability Objectives

Our knowledge and employment sustainability objectives include:

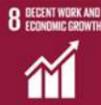
Our workforce – to generate jobs, recruit, and retain high-quality people within ENEC and the nuclear energy sector

National talent development – to develop UAE National talent for employment at ENEC and in the nuclear energy sector

Knowledge creation – to contribute to the development of a knowledge-based economy benefiting from international experience and the provision of world-class training and education programs

UN SDG Targets Addressed

By delivering on these sustainability objectives, we are contributing to the achievement of the following SDG targets:

Sustainability Value Pillar	Sustainability Aspect	UN SDG Addressed
Empowering our People	• Our Workforce	  
	• National Talent	
	• Development	
	• Knowledge Creation	



UN SDGs Addressed



Increase the number of people with relevant skills for financial success

By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship.



Ensure full participation in leadership and decision-making

Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.



Full employment and decent work with equal pay

By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.



Promote youth employment, education, and training

By 2030, substantially reduce the proportion of youth not in employment, education, or training.

ADX ESG Metrics Addressed

Social S4	S4. Gender Diversity Disclose percentage total enterprise headcount held by men and women (Overall, entry and mid-level, and senior- and executive level)
Social S9	S9. Child & Forced Labor Develop and implement human rights policy. Extend the coverage to include all suppliers and vendors
Social S11	S11. Nationalization Prioritize to increase the Emiratization rate.
Social S12	S12. Community Investment Invest part of the revenue to community development

9.2 Our Workforce

The Enterprise fosters a highly engaging and nurturing work environment for its employees. Moreover, the Enterprise strives to recruit and retain the best of the talent from UAE and the world. In 2021, female employees represented 17.82% of our total workforce. As a key priority, we are encouraging women to join the nuclear sector through initiatives such as Women in Nuclear (WiN) that support current and future female employees.

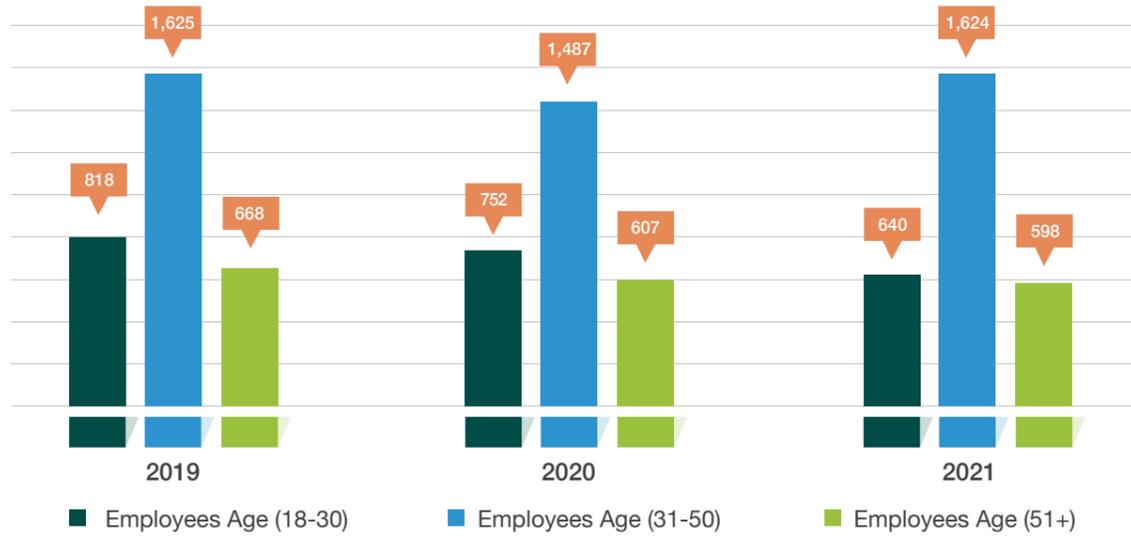
Workforce Profile

Our workforce is comprised of the highest calibre of professionals and specialists, who are helping to deliver one of the largest nuclear energy projects globally, and one of the most strategically significant projects in UAE history. In total, we have a proud workforce of 2,862 employees in the year 2021.

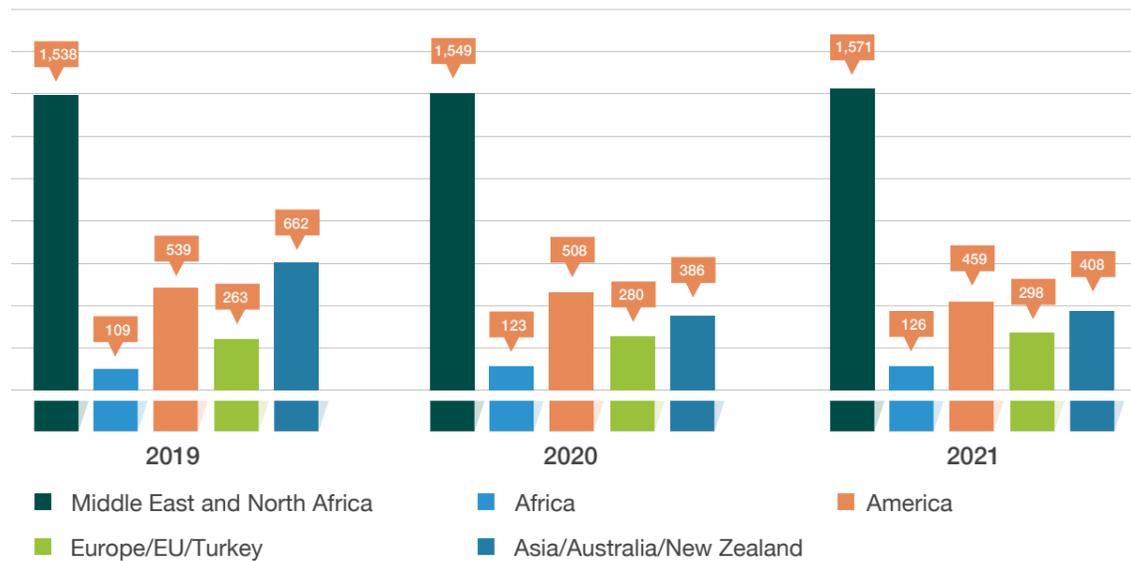
Our workforce has representation from over 1,519 UAE nationals. We have also employed a youth population of 640 (ages 18-30 years), contributing to national goals and targets for youth employment as ENEC believes in providing a platform for the nation's young and enthusiastic talent.



Workforce Age Distribution



Employee Numbers by Nationalities



Scope: ENEC, Nawah, and BOC

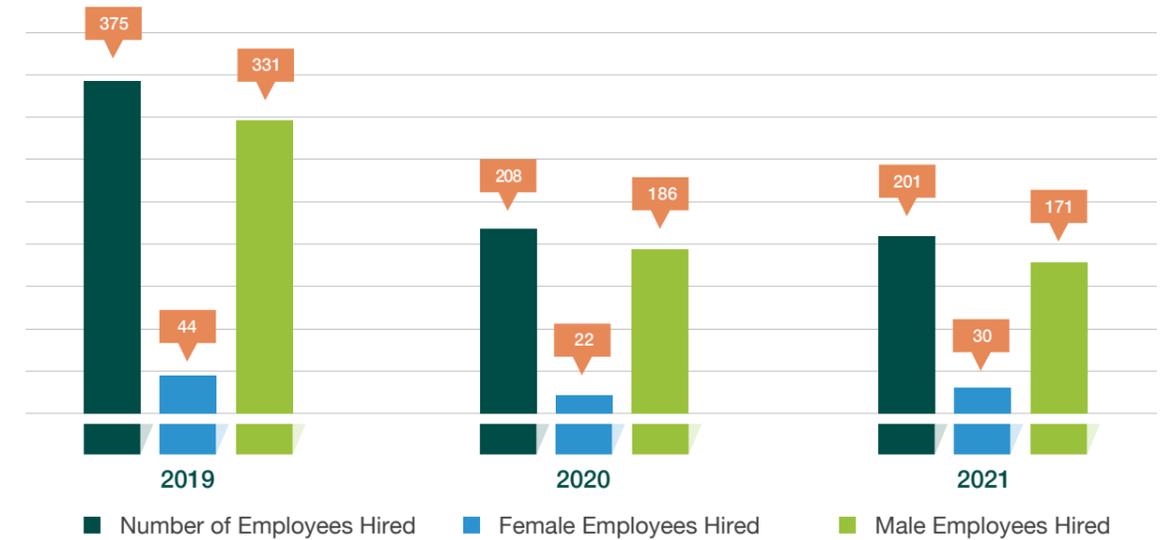
Recruitment and Onboarding

While recruiting capable professionals, it is essential to achieve our organizational strategy, therefore, quality control measures are in place to provide merit-based recruitment.

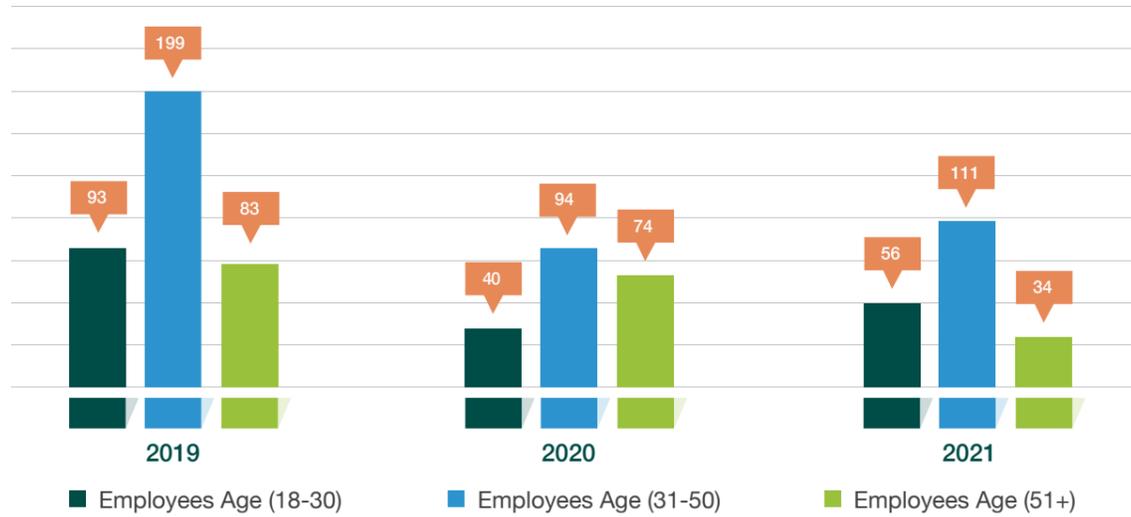
Our rapidly growing workforce directly impacts the national economy through the spending of wages and benefits, which in turn indirectly supports job creation in other sectors. There is also an additional indirect impact as many expat employees relocate with their families, spurring further economic activity within the UAE.

In 2021, 201 employees were recruited, including 58 UAE Nationals, 30 women, and 56 youth (ages 18-30 years). All new employees undergo a rigorous induction program entitled 'Becoming a Nuclear Professional'. This training covers our regulatory requirements, safety culture, radiological restrictions, and risks, as per the Enterprise's policies, procedures, and internal systems.

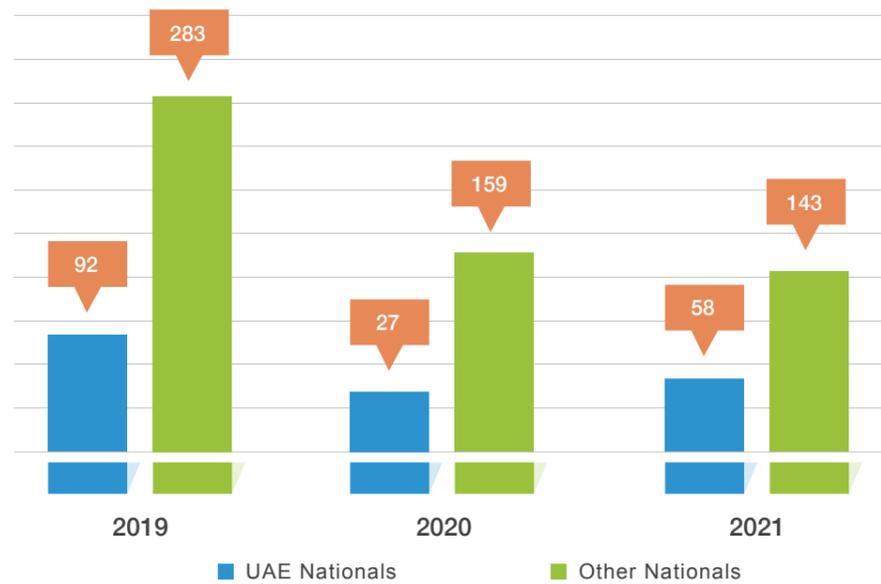
Number of Employees Hired



Hired Employees - By Age Distribution



Hired Employees - By Nationality



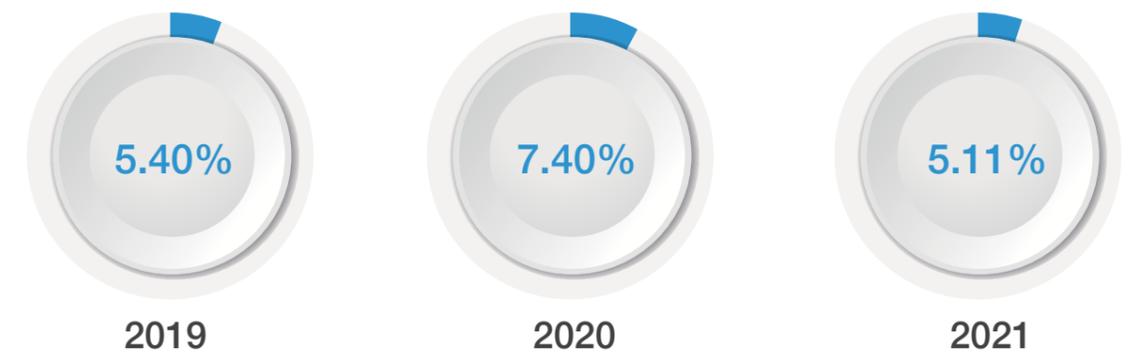
Scope: ENEC, Nawah, and BOC

Engagement and Satisfaction

Engagement among employees supports achieving ENEC's mission, vision, and corporate strategy by improving employee satisfaction, retention, and productivity.

ENEC implements an employee assistance program to support our employees to resolve personal problems that are detrimental to their health and well-being that may also affect their performance in the workplace. The COVID-19 pandemic resulted in challenges to our employees' mental and physical well-being. As such, we adopted a flexible and remote working approach to ensure the well-being of our employees with regular communication alongside the use of technological solutions for voice and video calls. Additionally, employee membership to fitness centres continued to be provided.

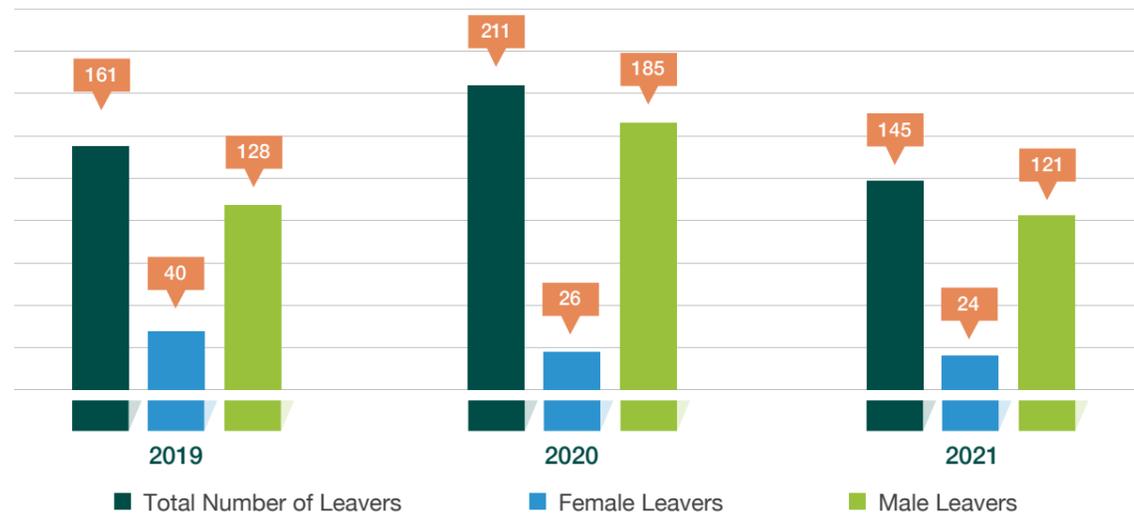
Despite the economic challenges that continue in 2021 due to COVID-19, the economy and business as usual are coming back to the pre-COVID levels and we have provided our full efforts to limit turnover and support all employees. This year has observed the lowest employee turnover rate of 5.11%, with 145 employees leaving the company. Keeping attrition rates low enables retention of knowledge and expertise. Human resource consultation in the form of exit interviews and surveys are undertaken to capture the primary reasons for our employees' decision to leave ENEC. In 2020, an Employee Retention Strategy was implemented which included Individual Development Plans (IDPs) for all employees, which was carried forward in the year 2021. The majority of female employees that left did so due to personal reasons and better opportunities during 2021.



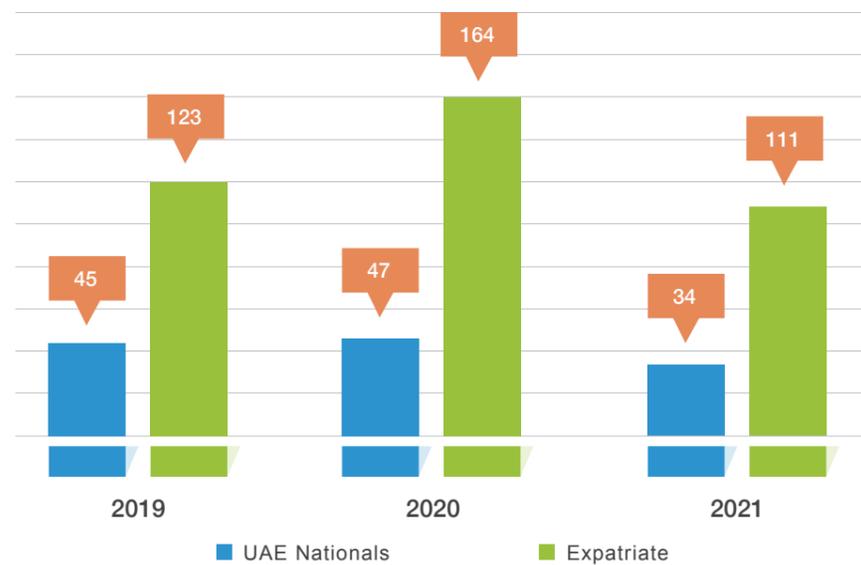
Employee Attrition Rate - Total



Employee Attrition Rate - Gender



Employee Attrition Rate - By Nationality



Scope: ENEC, Nawah, and BOC

Employee Concern Program

To enhance a work environment that supports and encourages all employees, contractors, and subcontractors, Nawah established an industry best practice Employee Concern Program (ECP), where they can identify and disclose nuclear safety and quality concerns without fear of retaliation.

The ECP is an independent system for reporting nuclear safety and quality concerns. It is designed to encourage open communication and to ensure employees can raise nuclear safety or quality issues without fearing harassment, intimidation, retaliation, or discrimination (HIRD). The ECP addresses nuclear safety and quality concerns in a timely and objective manner and acts as an alternative and anonymous system for reporting nuclear safety concerns.

The ECP is a first of its kind program in the UAE and supports a Safety Conscious Work Environment (SCWE). SCWE is a fundamental principle in maintaining a strong nuclear safety culture. The program relies on employees and contractors to identify and report nuclear safety issues as well as issues impacting our plant's programs, processes, and performance. A strong SCWE supports the goal of adopting a strong Nuclear Safety Culture. It encourages personnel to raise any nuclear safety concern such as:

- Problems with the safety, design, operation, maintenance, management, or construction of the Barakah Plant
- Treatment of individuals by their supervisor, manager, or peers

Mentorship Programs

In 2021, the Talent Management team, under the Human Capital Division, developed the Mentoring Program, which supports the line managers and designated mentors in taking a consistent approach to the process of mentoring employees who are likely to benefit from development support. By offering mentorship, ENEC increases performance by developing, motivating, and retaining talent.

Annual Reviews

Annual employee performance reviews are extremely important across the Enterprise, ensuring employee awareness and understanding in their objectives. It identifies the employee's areas of strength and development by eliminating factors and conditions that keep an employee from performing effectively.

Talent Management Framework

Employees are ENEC's most valuable asset and the competitive advantage of ENEC and its subsidiaries. In 2021, our Talent Management team followed the Talent Management Framework to support the ENEC Strategy 2022-2026 in developing and maintaining a capable and engaged workforce.



ENEC is committed to building a robust talent infrastructure by identifying, designing, executing, documenting, measuring, monitoring, and controlling both automated and non-automated business processes to achieve consistent, targeted results aligned with the Enterprise's strategic goals and integrated management system requirements.

The framework comprises of eight Talent Management practices that are broad, resourceful, and enabling and are spread across the employee lifecycle. The practices include strategic workforce planning, talent identification, talent acquisition, talent integration, career management, talent development, performance, recognition and rewards management, talent risk management, talent analytics, automation, and process optimization.

Knowledge Transfer Framework

The knowledge transfer mission is to maintain a knowledgeable and skilled workforce with a focus on the sustainable and continuous development of UAE nuclear professionals and leaders.

All nuclear plant operating organizations have programs in place to capture, store, and retrieve much, if not all, of the information/knowledge help by the organization's workforce. Therefore, for implementing knowledge transfer, the knowledge management approach is applied through:

- Identifying business, operational, and safety risks due to knowledge gaps (such as knowledge loss risk assessment to identify where the organization is most at risk of losing mission-critical knowledge)
- Effective transfer of knowledge from an ageing workforce to younger workers; and improved strategic planning and decision-making resulting from access to more reliable knowledge/information

Leadership Development Program

ENEC is committed to developing the leadership competencies of its employees and establishing a strong leadership level that enables achieving strategic objectives. The Enterprise Nuclear Leadership Academy offers leadership development programs for differing tiers of the organization including:

- First Line Essentials Program
- Nuclear Leader as a Coach program
- Leading Effective Teams
- Continuous Leadership Development modules

Five ladder structures of leadership:

- **Leading the Organization:** The ENEC Strategic Leadership Program
- **Leading Your Function:** The ENEC Organizational Leadership Program
- **Leading Your Team:** The ENEC Team Leadership Program
- **Manager of Others:** The ENEC Management Program
- Individual Contributor

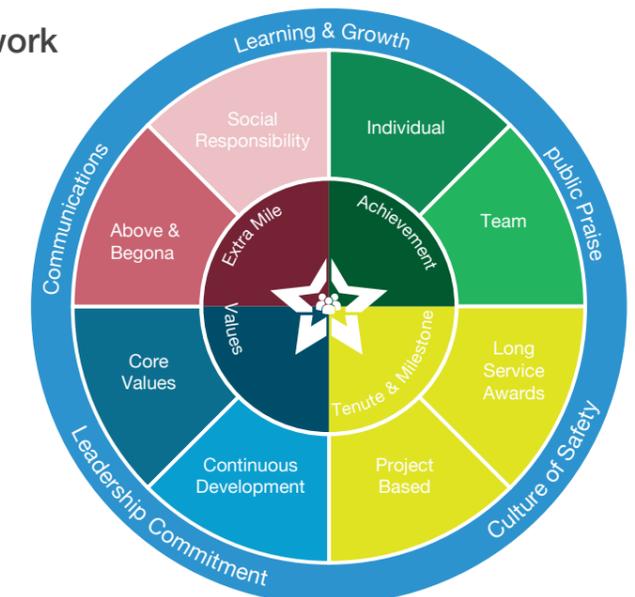
Employee Recognition and Reward Framework

ENEC is committed to rewarding its employees in a fair, transparent, and systematic manner for their knowledge, skills, behaviours, and value-added contributions. ENEC adopts reward practices that enable engaging, motivating, and retaining the right people at all levels. ENEC's Employee Recognition and Awards Framework has been developed to build a positive recognition work environment.

- **Spot awards** is an automated process whereas a nominator would nominate an employee who has done exceptional work outside of their day-to-day activities and responsibilities
- **Corporate awards** are for employees who have done exceptional cost-saving activities for the Enterprise. They are nominated and then a panel would review their accomplishment and approve/reject the nomination accordingly

Employee Recognition Framework

- 1 ACHIEVEMENT RECOGNITION** Involves recognizing tangible outcomes or product of an employee's work.
- 2 VALUES RECOGNITION** Focuses on how employee does their job as opposed to results of their work. Important to recognize their trainino, skills, and expertise.
- 3 EXTRA MILE RECOGNITION** Focuses on outstanding achievement, exemplary performance and wide impact achievements that go above and beyond.
- 4 TENURE & MILESTONES RECOGNITION** Focuses on recognizing tenure and celebrating key milestones.



Anti-discrimination

As per the ENEC Code of General Business Principles and Ethics and Disciplinary Action Code, employees must make all employment decisions without regard to an individual's race, colour, national origin, religion, gender, age, disability, or other characteristics (personal traits). Such employment decisions include selection, hiring, placement, compensation, benefits, transfer, promotion, training, termination, and disciplinary action. Employees are prohibited from undertaking any act of discrimination in the workplace against any other person based on a personal trait.

Female Participation

ENEC believes in a fair and equal gender opportunity that supports and encourages the professional development of female employees to realize their full potential in the nuclear industry. We developed an integrated approach to promoting the inclusion of women in our workforce by supporting the new generation of women employed in the nuclear industry, developing their skills, and creating an inclusive workplace that supports work-life balance and well-being.

In 2021, the workforce was comprised of 510 female employees. Women made up 17.81% of the total workforce and 12.20% of senior management, higher than previous years. Many of the women at the Barakah Plant are employed in highly technical roles, making it one of the most gender-diverse nuclear energy plants in the world.

Workforce Female Ratio



Women in Nuclear (WiN)

WiN is a global working group represented in the UAE that supports the overall role of women in the nuclear industry. It focuses on women working professionally in various fields of nuclear energy applications. The working group addresses the general concerns about nuclear energy and supports the overall understanding of women's needs in the organization, taking into consideration the UAE's culture and the significant number of women employed at the Barakah Plant.

WiN plays an integral role in ensuring that Barakah is the employer of choice for all women and drives ENEC's female employees to join international networks to expand their horizons.

"Women in Nuclear" has the following strategic objectives:

- Support Global and UAE Women in Nuclear Chapters
- Collect, evaluate, and address female employees' needs to ensure that the Barakah Plant is a female choice of employment
- Provide an open communication channel between the working group and external technical and professional organizations
- Support female employees who are striving for professional excellence by providing formal and informal mentoring, coaching opportunities, presentations on technical topics and updates, communicating items of interest to working women, and providing guidance on continuing educational opportunities
- Work with educational institutions and community organizations to promote careers in engineering and nuclear technologies for females, especially UAE Nationals

Taking into consideration the UAE's culture and the significant number of women employed at the Barakah Plant, we support female employees who are striving for professional excellence by providing formal and informal mentoring, coaching opportunities, presentations on technical topics and updates, communicating items of interest to working women and providing guidance on continuing educational opportunities.

[Women in Nuclear https://www.nawah.ae/about-nawah/women-in-nuclear-\(win\)](https://www.nawah.ae/about-nawah/women-in-nuclear-(win))



9.3 National Talent Development

ENEC strives to achieve and maintain a high-impact organization that focuses on continual improvement and implements best practices for developing human capital capabilities that fulfil ENEC's strategic plan while complying with the relevant national laws and regulations. In addition, ENEC provides a positive work-life balance for its employees and promotes Emiratisation in a cohesive cross-cultural workforce. ENEC is committed to investing in the Western Region community and economy to support its sustainable growth by creating long-term partnerships and job opportunities.

Emiratization

ENEC is committed to creating employment opportunities for UAE nationals and ensuring the implementation of retention programs, and ENEC being the employer of choice for those UAE nationals. ENEC is committed to building the UAE's national capabilities and ensuring the implementation of continuous learning and professional development programs.

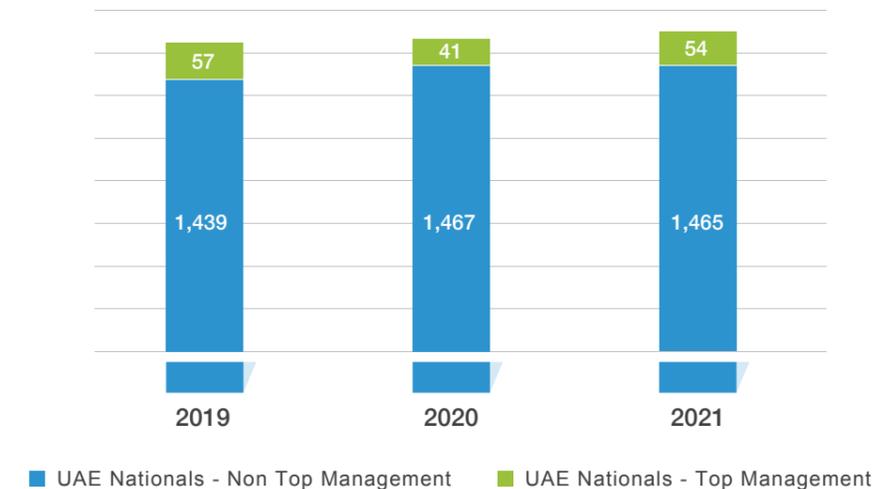
Emiratization remains a foundational strategy for Human Capital and the Enterprise. From 2021, a 5-year forward-looking Emiratization Strategy was developed and is in the implementation stages, with a focus on:

- Emirati Leader development and advancement for core positions through our talent identification and succession planning program
- Emirati effective participation in sustainable positions supporting Barakah Plant operations beyond 2024
- Effective engagement of international experts in knowledge transfer and advancement of Emiratis
- Implementing robust programs for the development of technical and non-technical entry-level Emiratis

A dedicated Emiratization department is responsible for attracting and retaining national talent to reduce reliance on international expertise. In 2021, we employed 1,519 UAE Nationals, 11 more as compared to 2020. The Emiratization rate was 53.07% across the workforce in 2021, and 64.63% amongst senior management.

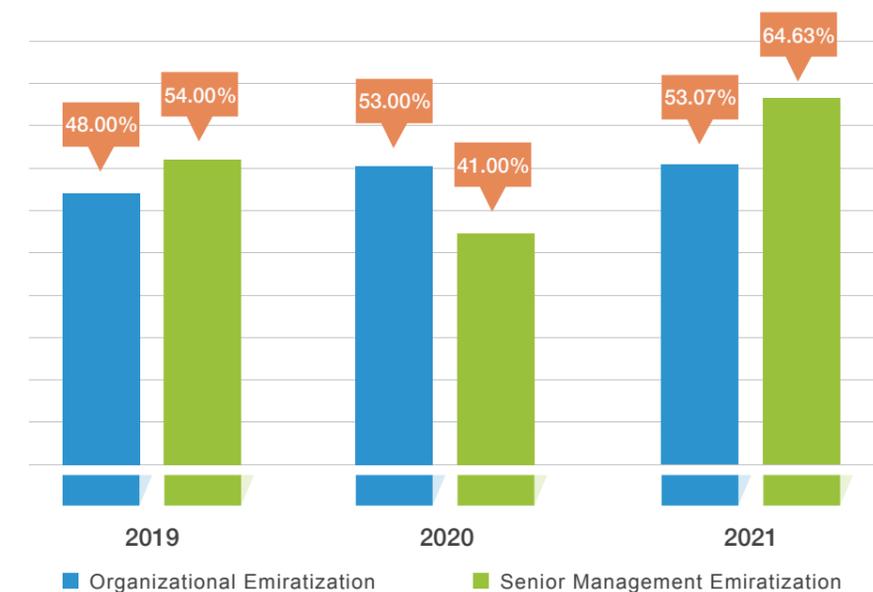


Emiratization



Scope: ENEC, Nawah, and BOC

Emiratization Rate



Scope: ENEC, Nawah, and BOC



The percentage of UAE Nationals in Senior Management Positions has increased from 41% in 2020 to 64% in 2021. Our Talent Reviews and Succession Planning cycles were formally initiated in 2021 across the Enterprise to identify key succession roles as well as potential Emirati successors for Directors and above. All potential successors now have Individual Development Plans tracking the key milestones in their development before potential assessment and appointment as warranted. Key metrics were developed and assigned across executive scorecards to ensure progress is made in this area.



9.4 Knowledge Creation

The creation of knowledge and skills, internally and externally, is important to the long-term sustainability of the UAE Peaceful Nuclear Energy Program. We collaborate with a range of academic and governmental institutions to deliver knowledge and skills training for our own employees and the employees of other sector-based companies.

Our ongoing efforts to support the UAE's transition to a knowledge-based economy include knowledge sharing and engaging with local and international stakeholders, thereby driving growth, and setting new standards of excellence. The nuclear energy industry has some of the most stringent quality, technical and risk management standards in the world and we are committed to sharing its experiences in implementing and maintaining these standards with other national stakeholders and entities. Hence, we seek to reach out to our stakeholders to provide formal education and an overview of the program and technology

Learning and Development

ENEC is committed to developing nuclear capability and nuclear talent in a cost-effective, value creation, and efficient manner. ENEC is committed to providing suitable and effective tools to enable its employees to continually build and enhance the skills and capabilities that drive differentiation and success at all levels.

To deepen the understanding about ENEC, a foundational training program for all new joiners is conducted. ENEC also provides 35 core competency courses to postulate ample opportunity for the continuous development of the technical and soft skills that are crucial for a successful workplace. All training at ENEC is aligned with the international nuclear industry. Guidance is provided by the World Association of Nuclear Operators (WANO) and complies with requirements of FANR.

In recognition of employee time and resources, we blend traditional instructor-led courses with distant learning in the form of e-Learning, e-Reads, and workshops, thus providing the freedom to continue personal development at times most suitable to individual schedules. All training records are paperless and digital biometric iForms hold employee training records and attendance history. The system is intended to provide real-time, accurate records with automated reminders for expirations and renewals required.

Systematic Approach to Training

Delivering a Systematic Approach to Training (SAT) that applies to ENEC, Barakah Plant and corporate training programs, as applicable, and overseeing contractor provided training to ensure compliance with applicable requirements. All training programs comply with the Systematic Approach to Training (SAT) in determining the training needs, as required by FANR.



The training programs' conduct, compliance, and effectiveness are periodically reviewed and evaluated internally as well as externally, by WANO and FANR, to ensure continuous improvement. The Nuclear Training function designs, develops, implements, evaluates, and oversees training and qualification programs for the staff of Barakah Plant. This is conducted primarily through the development and implementation of general employee training programs, Nawah administered initial and continuous training programs for Barakah Plant Operations and Technical staff, and simulator training facilities.

Data Management Training

Based on the Mandate from Abu Dhabi Digital Authority, the ENEC Data Management Program (EDMP) was developed. EDMP aims to transform our processes to a data driven organization, capitalizing on the strategic role of data management and analytics in informing effective leadership decision making. It has been introduced as part of building the capabilities of employees within ENEC on data management. This training is designed to provide a comprehensive understanding of ENEC data management programs components and structure, data governance models and techniques, data quality standards and audits, and concepts of quantitative and qualitative data analysis methods to support the executive decision-making process.

Nuclear Knowledge Management Training

As knowledge management is a mandatory requirement within the nuclear industry, a virtual group training was conducted by the Nuclear Management Institute, a leading international institute in nuclear knowledge management. Employees were trained on nuclear knowledge management theories, models, and best practices.

ENARA Leadership Program

The ENARA Leadership Program provides developmental opportunities to leaders and has four tiers of leadership development programs dedicated to Executives (VP/Chief), Directors, Managers, and Heads/ Supervisors. Programs are developed for each leadership tier, focusing on the competencies and effective behaviours needed at each tier.

Global Sanctions Course

In a world of increasingly complex laws, regulations, and policies, providing our employees with an understanding of global sanctions is key. CCL Academy has provided training to employees in of customized groups with the aims of explaining what sanctions are, understanding various sanctions regimes, and understanding how to identify red flags and monitor sanctions.

Workforce Investigator Course

ENEC provided employees with practical training focusing on compliance, employee concern programs, cross-culture communication, and employee relation.

The course aimed to enhance employees' knowledge of workplace investigations in line with best-practice investigative skills and techniques by training them on how to analyse evidence and write an investigation report.

Innovation Management Certification – Level 1

To maintain an innovation and excellence culture within ENEC and its subsidiaries, employees from the Youth Category undergo Innovation Management Certification-Level 1. The certificate is provided by the Global Innovation Management Institute (GIMI), a leader in the field of Innovation. The training is customized to the ENEC Innovation Requirement that aims to build innovation management capabilities at all levels of the organization, provide in-depth understanding of how to define innovation strategy, how to build innovation capacity and how to instil innovation discipline.

Nuclear Energy Training

ENEC collaborates with the IAEA, Khalifa University of Science and Technology (KU), and FANR to offer the UAE-IAEA Nuclear Energy Management School. This school provides participants with a unique international educational experience aimed at preparing future nuclear energy leaders while encouraging research and discussion on topics relating to the peaceful use of nuclear technology and creating a network of nuclear energy peers around the world.

ENEC also recently launched the Nuclear Leadership Academy. The strategy and journey adopted for the academy works to match the right learning at the right time for each leader through a series of programs and initiatives that support leadership training and development.

Competency Progression Plan

ENEC focuses on setting competency models and monitoring realistic and measurable standards of employee performance that support the timely and professional achievement of its strategic and operational objectives. ENEC identifies employees required behaviours and skills necessary to create a mutual understanding of their strengths and development gaps.

Train for Work

ENEC supports the Train for Work initiative by TAMM, the Human Resources Authority of Abu Dhabi, which enables job seekers who are actively looking for a job to acquire work experience and gain better opportunities to secure a job in the marketplace.

Partnering with Academic Institutions

Nawah works with the government and local universities to ensure that the UAE workforce is qualified for jobs in the nuclear energy sector, including senior technical and management careers. Nawah offers a variety of scholarships and training opportunities to the most talented science students and experienced professionals. There is also an outreach program to schools to encourage students to study science and advise them of career possibilities with Nawah.



Higher Diploma of Nuclear Technology (HDNT) program

ENEC has successfully partnered with numerous schools and universities through career counsellors to advertise the HDNT program, as well as creating an application portal that enables us to keep track of the interested and eligible candidates.

UAE Nationals who want to become a part of the emerging nuclear energy sector can apply for scholarships in the HDNT program at Abu Dhabi Polytechnic (ADPoly), or for a variety of degrees at KU. ENEC provides scholarships to students in both bachelor's and master's degree programs in chemical, nuclear, mechanical, and electrical engineering.

The HDNT program is the long-term manpower program for foundational technical positions within Nawah. The program is a joint initiative between Abu Dhabi Polytechnic and Nawah. During the three-year program, students learn various subjects including Mathematics, Physics, Chemistry, Mechanical Science, Electrical Science, Heat Transfer, Fluid Flow, Nuclear Physics, Plant Systems, Nuclear Safety, Radiation Measurement, Radiation Protection, and Nuclear Materials. Courses are taught by Abu Dhabi Polytechnic faculty as well as by our capacity-building nuclear instructors. The program also includes on-the-job training (OJT), a 23-week program designed to expose students to the various disciplines offered and introduce them to the plant and their specialized fields.

Nuclear Infrastructure Development School

ENEC has also partnered with KU, FANR, NCEMA, CICPA, ADPoly, and the IAEA to launch the UAE Collaborating Centre which helps the UAE and the IAEA. The Centre enables enhanced sharing of the experience of the UAE in building its nuclear power infrastructure development with other embarking IAEA Member States.

This collaboration delivers the Nuclear Infrastructure Development School, which provides participants with a unique international educational experience aimed at preparing future nuclear energy leaders while encouraging research and discussion on topics relating to the peaceful use of nuclear technology and creating a network of nuclear energy peers around the world. This program is run every two years.

National Qualification Authority (NQA)

Since 2015, ENEC has partnered with the National Qualification Authority (NQA), developing, and achieving the NQA Vocational Education and Training Awards Council (VETAC) endorsement for 368 National Occupational Skill Standards (NOSS), 23 National Awards, and eight National Principal Qualifications (Q+NOSS).

Since 2017, Nawah has been a recognized National Registered Training Provider (RTP), authorized to issue nationally endorsed qualifications. These qualifications are obtainable by Nawah employees who can demonstrate competence in line with the national standards. Pending approval from the NQA, once implemented, these nationally endorsed qualifications will be recognized by other UAE institutions for credit transfer and career advancement. Furthermore, the qualifications will be internationally recognized.

ENEC Internship and Summer Program

ENEC hosts students as part of sharing knowledge and providing educational support through its internship and summer training programs.

Internship is for external student's internship/summer trainees (referred by the college/university). In co-ordination with the higher education body, ENEC receives requests to host students for a period of between four months and one year.

Summer training is for external students who are interested in becoming summer trainees. These trainees voluntarily initiated a summer training request. ENEC hosts summer trainees during their school summer break in response to host students for a period of between two and four months.

ENEC's Talent Management department conducts an initial screening of each intern's profile and CV, and the eligible candidates are contacted for an interview. The purpose of the interview is to assess the intern's knowledge and suitability for the internship program.

Student Sponsorships			
Year	2019	2020	2021
Higher Diploma	100	63	100
Bachelor	12	31	12
Masters	1	1	1
PhD	2	0	2
Total Number of Students	115	95	115

Barakah Youth Council (BYC)

The Barakah Youth Council (BYC) inspires, supports, and empowers the future UAE National leaders of the UAE Peaceful Nuclear Energy Industry. The BYC serves as a direct channel of communication between the senior leadership of ENEC, Nawah, and BOC and the young UAE National employees. The council provides these young employees with a voice to champion change and drive continuous improvement while also being involved in the decision-making for the evolution of the UAE Peaceful Nuclear Energy Program.



Energy Pioneer Program

ENEC established the Energy Pioneers program in 2009 with the aim to develop a pipeline of Emirati talent as the nuclear energy program grows. Our Energy Pioneers program is designed to attract our nation's most promising science students, engineering graduates, and experienced professionals, and train them to become leaders in the UAE's growing nuclear energy sector.

Our Energy Pioneers will have an important role in the success of the nuclear energy program in the UAE, where they will receive training of the highest international standards by the industry's leading global experts.

The Energy Pioneers Program was fostered to continue building a pipeline of future nuclear-qualified talent. As of year-end, the Talent Pipeline consisted of 592 Energy Pioneers, of which 386 achieved qualifications, and 206 are continuing the Training and Job Qualification program.

Qualification	SRO	RO	Local Operator	Chemistry	Radiation Protection	Maintenance	Engineering	Other
Certified	34	7	63	40	28	63	151	0
Ongoing	16	80	68	7	9	2	22	2
Total	50	87	131	47	37	65	173	2

University Students Internship Program

ENEC runs an internship program for UAE and Korean students in undergraduate engineering programs. We launched this program in collaboration with KEPCO and the Korea Nuclear Association (KNA). The program is designed to involve the students in activities such as plant design, plant construction, commissioning, operation, maintenance, and decommissioning.

Technical Working Group

The Technical Working Group (TWG) was established to research, track, and share information on the status of and progress being made by our international peer companies in the nuclear sector. TWG aims to identify and understand gaps and constraints in the sector and identify unique solutions and innovations that contribute to the success and the achievement of the UAE Peaceful Nuclear Energy Program.



Training and Development

Year	2019	2020	2021
Total number of internal and external training hours delivered	625,402	341,163	156,389
Average hours of internal and external training per employee	201	120	54.64
Internal training hours delivered	567,394	328,715	118,029
UAE National employees	212,896	101,278	39,198
International employees	354,498	227,437	78,831
External training hours delivered	58,008	12,448	38,360
UAE National employees	50,096	6,672	29,648
International employees	7,912	5,776	8,712
Number of e-Learning and e-Reads available	965	1,169	789
Number of e-Learning and e-Reads completed	68,638	58,216	50,195

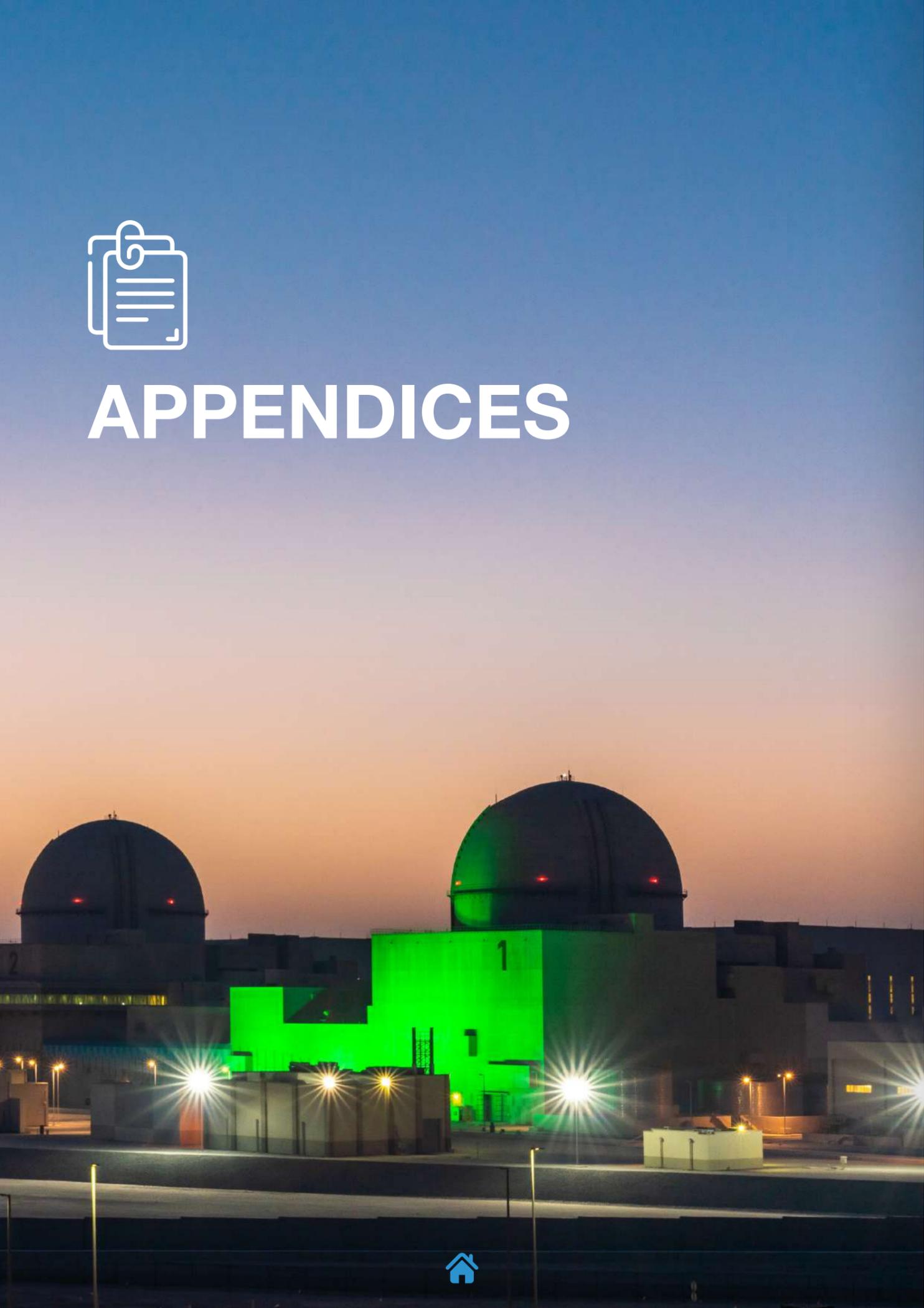
Scope: ENEC, Nawah, and BOC

Training hours were reduced by the trainers where several classes were either postponed or converted to e-Learnings. The main contributing factor for the decrease was due to COVID-19 safety restrictions imposed by the government. Also, the reduction in the number of e-Learnings and e-Reads is a result of the migration to a new learning platform (LMS Taqa) and inclusion of only relevant courses in the learning platform.





APPENDICES



Appendix A - Report Scope and Boundaries

The scope and boundaries of this report includes operations and activities that fall under ENEC and subsidiaries, Barakah One Company (BOC), and Nawah Energy Company, including contractors. The scope covers ENEC HQ activities at leased buildings in Abu Dhabi, and construction, operations, and maintenance related activities carried out at the Barakah Plant.

This report was prepared using data and information collected in cooperation with all ENEC, BOC, and Nawah divisions. In addition, Health, Safety, and Environmental data submitted monthly by KEPCO, ENEC's Prime Contractor on the Barakah site project, has been used in combination with ENEC HQ data to produce this report.

Section of the report	Boundaries of performance reporting
Our Economic Footprint	
Financial Responsibility	ENEC, Nawah, and BOC
Supply Chain Management	ENEC, Nawah, and BOC
Economic Development	ENEC, Nawah, and BOC
Safe, Clean, Efficient and Reliable Energy	
HSE Management System (MS)	ENEC, Nawah, BOC, KEPCO and subsidiaries, contractors
Health, Safety and Security	ENEC, Nawah, BOC, KEPCO and subsidiaries, contractors
Quality, Efficiency and Reliability	ENEC, Nawah, and BOC
Environmental Management	ENEC, Nawah, BOC, KEPCO and subsidiaries, contractors
Empowering our People	
Our Workforce	ENEC, Nawah, and BOC
National Talent Development	ENEC, Nawah, and BOC
Knowledge Creation	ENEC, Nawah, and BOC



Appendix B – Stakeholder Mapping

The information presented in this report describes the Enterprise’s performance and status as of December 31, 2021. The reporting period is 1 January 2021 to 31 December 2021. Compiling this report has enabled the Enterprise to better understand the impact of their operations. Moreover, the data highlights data streams that the Enterprise will continue to monitor for future reporting, and to promote continuous improvement. No limitations for reporting on scope or boundary were identified during the preparation of this report.

ENEC Stakeholder Groups			
Stakeholder	Description	Interest/Role/Expectations	Channels of Engagement
Government Entities	Federal, regional, and local government ministries and authorities	Safety, security, environment, emergency preparedness, shared infrastructure, and other resources	<ul style="list-style-type: none"> Site delegations, facility tours and inspections Regular meetings and written correspondence Program Executive Updates Participation in governmental initiatives and campaigns
Nuclear-specific Organizations	Nuclear-specific industry bodies including multilateral organizations, associations, and advisory bodies	Information sharing and knowledge transfer, industry best practices, safety and security, and technology, etc.	<ul style="list-style-type: none"> Regular meetings and workshops Regular reports and program updates Delegations to site Shared initiatives Knowledge-sharing workshops Interactive dialogue Reporting International Advisory Board Associated events, seminars, and conferences and regional events
Media	Local, regional, and international media	On-going access to timely, comprehensive information about the project	<ul style="list-style-type: none"> Arranging interviews Site visits Media training



ENEC Stakeholder Groups			
Stakeholder	Description	Interest/Role/Expectations	Channels of Engagement
International Organizations, Government and Financial Institutions	Multilateral organizations, governments of GCC Nations, governments of civilian nuclear energy programs	On-going access to timely, comprehensive information about the project	<ul style="list-style-type: none"> • Delegations and events • Responding to on-going requests for information
Academic Bodies	Federal, regional, and international academic institutions	Involvement in human capacity development, vocational and technical training, bachelors, and master's programs	<ul style="list-style-type: none"> • Energy Pioneers Programs • Regular events and career fairs at schools and universities
Non-Government Organizations (NGOs)	Environmental and social interest groups	Potential environmental and social impacts/ issues during all phases of the project	
Prime Contractor Program Related Companies	KEPCO or its Subcontractors	Initiating and developing all construction and operation works, knowledge transfer, industry best practices, health & safety and security, technology	<ul style="list-style-type: none"> • Regular meetings and workshops • Regular reports and program updates • Knowledge-sharing • Interactive dialogue • Reporting • Associated events, seminars, and conferences and events

ENEC Stakeholder Groups			
Stakeholder	Description	Interest/Role/Expectations	Channels of Engagement
Social Actors	Including but not limited to Al Dhafra Region residents ENEC, Nawah and Barakah One staff, Senior Reactor Operators, and Abu Dhabi residents	Increase awareness and knowledge, health & safety, security, environment, emergency preparedness, and shared infrastructure and other resources	<ul style="list-style-type: none"> • Awareness sessions • Internal engagement programs • Corporate Social Responsibilities (CSRs)
Administration, Infrastructure and Utility Organizations	Energy, electricity, and transmission companies	Obtaining Non-Objection Certificate Infrastructure works, essential urban planning activities, power supply	<ul style="list-style-type: none"> • Meetings • Benchmarking • Non-Objection Certificate • Regular meetings and workshops • Regular reports and program updates



Appendix C – GRI Content Index



This report has been prepared in accordance with the GRI Standards: Core option. As signified by the icon above, the report has successfully completed a Materiality Disclosure Service provided by the GRI. The table below is an index of the GRI disclosures included in this report as per the GRI Standards. For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report.

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 101: Foundation 2016		
GRI 102: General Disclosures 2016	Organizational Profile	
	102-1 Name of the organization	Emirates Nuclear Energy Corporation (ENEC)
	102-2 Activities, brands, products, and services	Clean energy power production (nuclear)
	102-3 Location of headquarters	Abu Dhabi
	102-4 Location of operations	UAE
	102-5 Ownership and legal form	Page - 14
	102-6 Markets served	UAE
	102-7 Scale of the organization	Page - 05
	102-8 Information on employees and other workers	Page 107-108

GRI Standard	Disclosure	Page number(s) and/or direct answers
	102-9 Supply chain	Page - 65
	102-10 Significant changes to the organization and its supply chain	Page - 66, 67, 68
	102-11 Precautionary Principle or approach	Page - 25, 26
	102-12 External Initiative	Page - 50, 55, 69, 102, 123
	102-13 Membership of associations	Page - 17
Strategy		
	102-14 Statement from senior decision-maker	Page - 7
	102-15 Key impacts, risks, and opportunities	Page - 31
Ethics and Integrity		
	102-16 Values, principles, standards, and norms of behavior	Page - 11, 16
	102-17 Mechanisms for advice and concerns about ethics	Page - 26
Governance		
	102-18 Governance structure	Page - 21, 22
	102-22 Composition of the highest governance body and its committees	Page - 24
	102-26 Role of highest governance body in setting purpose, values, and strategy	Page - 21
Stakeholder engagement		
	102-40 List of stakeholder groups	Page - 131-133



GRI Standard	Disclosure	Page number(s) and/or direct answers
	102-41 Collective bargaining agreements	Collective bargaining is not permitted within the UAE
	102-42 Identifying and selecting stakeholders	Page - 48, 49, 50
	102-43 Approach to stakeholder engagement	Page - 51, 52
	102-44 Key topics and concerns raised	Page 48-49, 52-54
Reporting practice		
	102-45 Entities included in the consolidated financial statements	Financial statements include the activities of the Enterprise, no other entity is included.
	102-46 Defining report content and topic Boundaries	Page - 05
	102-47 List of material topics	Page - 53
	102-48 Restatements of information	No information from 2019 and 2020 have been restated
	102-49 Changes in reporting	No significant changes.
	102-50 Reporting period	1 January 2021 - 31 December 2021
	102-51 Date of most recent report	2020
	102-52 Reporting cycle	Page - 05 Annual
	102-53 Contact point for questions regarding the report	Page - 05
	102-54 Claims of reporting in accordance with the GRI Standards	Page - 05, 134
	102-55 GRI content index	Page - 134 - 147
	102-56 External assurance	Not assured

GRI Standard	Disclosure	Page number(s) and/or direct answers
Material Topics		
GRI 200: Economic		
GRI 201: Economic Performance 2016		
	103-1 Explanation of the material topic and its Boundary	Page - 61 - 69
GRI 103: Management Approach 2016	103-2 The management approach and its components	Page - 65
	103-3 Evaluation of the management approach	Page - 65
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Page - 66
GRI 202: Market Presence 2016		
	103-1 Explanation of the material topic and its Boundary	Page - 118
GRI 103: Management Approach 2016	103-2 The management approach and its components	Page - 118
	103-3 Evaluation of the management approach	Page - 118
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	Page - 119
GRI 203: Indirect Economic Impacts 2016		
	103-1 Explanation of the material topic and its Boundary	Page - 51- 54
GRI 103: Management Approach 2016	103-2 The management approach and its components	Page - 65, 69
	103-3 Evaluation of the management approach	Page - 63



GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Page - 69
	203-2 Significant indirect economic impacts	Page - 69 - 70
GRI 204: Procurement Practices 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 65, 69
	103-3 Evaluation of the management approach	Page - 63
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Page - 65
GRI 205: Anti-corruption 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 26
	103-2 The management approach and its components	Page - 26
	103-3 Evaluation of the management approach	Page - 26
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Page - 31
	205-2 Communication and training about anti-corruption policies and procedures	Page - 29, 30

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 300: Environmental		
GRI 301: Materials 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 89
	103-2 The management approach and its components	Page - 89
	103-3 Evaluation of the management approach	Page - 89
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Page - 94
GRI 302: Energy 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51-54
	103-2 The management approach and its components	Page - 95
	103-3 Evaluation of the management approach	Page - 95
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Page - 97
	302-2 Energy consumption outside of the organization	Page - 97
	302-3 Energy intensity	Page - 97
	302-4 Reduction of energy consumption	Page - 97



GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 303: Water and Effluents 2018		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 98
	103-3 Evaluation of the management approach	Page - 98
GRI 303: Water and Effluents 2018	303-2 Management of water discharge-related impacts	Page - 98
	303-4 Water discharge	Page - 99
	303-5 Water consumption	Page - 99
GRI 304: Biodiversity 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 102
	103-3 Evaluation of the management approach	Page - 102
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	Page - 101, 102
	304-2 Significant impacts of activities, products, and services on biodiversity	Page - 102
	304-3 Habitats protected or restored	Page - 101, 102

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 305: Emissions 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 95
	103-3 Evaluation of the management approach	Page - 95
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Page - 95
	305-2 Energy indirect (Scope 2) GHG emissions	Page - 95, 96
	305-3 Other indirect (Scope 3) GHG emissions	Page - 95, 96
	305-4 GHG emissions intensity	Page - 95, 96
	305-5 Reduction of GHG emissions	Page - 95, 96
GRI 306: Waste 2020		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 100
	103-3 Evaluation of the management approach	Page - 100



GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Page - 100, 101
	306-2 Management of significant waste-related impacts	Page - 100, 101
	306-3 Waste generated	Page - 100, 101
	306-4 Waste diverted from disposal	Page - 100, 101
	306-5 Waste directed to disposal	Page - 100, 101
GRI 307: Environmental Compliance 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 89
	103-3 Evaluation of the management approach	Page - 89
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	Page - 89
GRI 400: Social		
GRI 401: Employment 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 105
	103-3 Evaluation of the management approach	Page - 105
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Page - 109

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 403: Occupational Health and Safety 2018		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 73
	103-3 Evaluation of the management approach	Page - 73 - 85
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Page - 77
	403-2 Hazard identification, risk assessment, and incident investigation	Page - 77
	403-3 Occupational health services	Page - 79 - 81
	403-4 Worker participation, consultation, and communication on occupational health and safety	Page - 77
	403-5 Worker training on occupational health and safety	Page - 83
	403-6 Promotion of worker health	Page - 83
	403-8 Workers covered by an occupational health and safety management system	Page - 77
	403-9 Work-related injuries	Page - 82
	403-10 Work-related ill health	Page - 82, 83



GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 404: Training and Education 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 83
	103-3 Evaluation of the management approach	Page - 83
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Page - 127
	404-2 Programs for upgrading employee skills and transition assistance programs	Page - 126, 127
	404-3 Percentage of employees receiving regular performance and career development reviews	Page - 127
	GRI 405: Diversity and Equal Opportunity 2016	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 107 - 118
	103-3 Evaluation of the management approach	Page - 107 - 118

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Page - 107 - 118
GRI 406: Non-discrimination 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 116
	103-3 Evaluation of the management approach	Page - 116
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	No incidents recorded
GRI 409: Forced or Compulsory Labor 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 21
	103-2 The management approach and its components	Page - 21
	103-3 Evaluation of the management approach	Page - 25
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Policy against forced and compulsory labor in place



GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 410: Security Practices 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 84
	103-3 Evaluation of the management approach	Page - 84
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	Page 105
GRI 413: Local Communities 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 50
	103-3 Evaluation of the management approach	Page - 48
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Page 49
	413-2 Operations with significant actual and potential negative impacts on local communities	No, such operations recorded.

GRI Standard	Disclosure	Page number(s) and/or direct answers
GRI 414: Supplier Social Assessment 2016		
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	Page - 51 - 54
	103-2 The management approach and its components	Page - 68
	103-3 Evaluation of the management approach	Page - 68
GRI 414: Supplier Social Assessment 2016	414-2 Negative social impacts in the supply chain and actions taken	Not registered



Appendix D - Acronyms and Synonyms

Acronyms		Acronyms	
ADAA	Abu Dhabi Accountability Authority	ARCC	Audit, Risk and Compliance Committee
ACTVET	Abu Dhabi Centre for Technical and Vocational Education and Training	ASME	American Society of Mechanical Engineers
ADAFSA	Abu Dhabi Agriculture and Food Safety Authority	AT SITE	Accountability, Teamwork, Safety, Integrity, Trust, and Excellence
ADCMC	Abu Dhabi Emergency, Crisis, and Disasters Management Centre	BCI	Business Continuity Institute
ADNOC	Abu Dhabi National Oil Company	BCM	Business Continuity Management
ADPoly	Abu Dhabi Polytechnic	BCR	Business Continuity and Resilience
ADQ	Abu Dhabi Development Holding Company	BID	Business and Industrial Development
ADSG	Abu Dhabi Sustainability Group	Barakah Plant	Barakah Nuclear Energy Plant
ADWEC	Abu Dhabi Eater and Electricity Company	BOC	Barakah One Company
ADX	Abu Dhabi Securities Exchange	BYC	Barakah Youth Council
AFMP	Anti-Fraud and Misconduct Program	CAF	Combined Assurance Framework
ALARP	As low as reasonably practicable	CAPEX	Capital Expenditure
APR	Advanced Power Reactor	CEMP	Construction Environmental Management Plan
		CEO	Chief Executive Officer

Acronyms		Acronyms	
CICPA	Critical Infrastructure and Coastal Protection Authority	ECP	Employee Concerns Program
CNP	Committee on Nuclear Power	ECRB	Enterprise Compliance Review Board
CO2	Carbon Dioxide	EDMP	Enterprise Data Management Program
COIT	Certified Operator Initial Training	EMEG	Emirates Marine Environmental Group
ConvEx-3	IAEA International Emergency Response Exercise	EMS	Environmental Management System
CoP	Conference of Parties	ENEC	Emirates Nuclear Energy Corporation
COSO	Committee of Sponsoring Organizations	EOF	Emergency Operations Facility
CPO	Chief Program Office	EOW	Essential On-site Workers
CR	Condition Reporting	EPRI	Electric Power Resource Institute
CSIRT	Cyber Security Incident Response Team	Eq	metric tons Carbon Dioxide equivalent
DOA	Delegation of Authority	ERM	Enterprise Risk Management
DoE	Department of Energy	ERO	Emergency Response Organization
DoF	Department of Finance	ESG	Environmental, Social and Corporate Governance
DoH	Department of Health	ESWG	External Stakeholders Working Group
EAD	Environment Agency - Abu Dhabi	EWEC	Emirates Water and Electricity Company
ECC	Enterprise Compliance Council	FANR	Federal Authority for Nuclear Regulation



Acronyms		Acronyms	
GCC	Gulf Cooperation Council	HSJV	Hyundai-Samsung Joint Venture
GDP	Gross Domestic Product	IAEA	International Atomic Energy Agency
GHG	Greenhouse Gas	ICT	Information and Communications Technology
GIFEN	Groupement des Industriels Français de l'Énergie Nucléaire	ICV	In-Country Value
GIMI	Global Innovation Management Institute	IDPs	Individual Development Plans
GJ	Gigajoules	IIA	Institute of Internal Auditors
GOSP	Governance, Oversight, Support and Per- form	IIER	Integrated Incident and Emergency Response
GRI	Global Reporting Initiative	IMS	Integrated Management System
GSEC	General Secretariat of the Executive Council	IMT	Incident Management Team
HCC	Human Capital Committee	INPO	Institute of Nuclear Power Operations
HDNT	Higher Diploma of Nuclear Technology	ISO	International Organization for Standardization
HIRD	harassment, intimidation, retaliation, or discrimination	JV	Joint Venture
HQ	Headquarters	KEPCO	Korea Electric Power Corporation
HSE	Health, Safety and Environment	KEXIM	Export-Import Bank of Korea
HSEMS	Health, Safety, Environment Management System	KFED	Khalifa Fund for Enterprise Development
HSES	Health, Safety, Environment and Sustainability	KNA	Korea Nuclear Association

Acronyms		Acronyms	
KU	Khalifa University of Science and Technology	OLA	Operating License Approval
kWh	kilowatt hour	OSC	Operations Support Center
LMS Taqa	Learning Management System Taqa	OSH	Occupational Safety and Health
LTIFR	Lost Time Injury Frequency Rate	OSHAD	Abu Dhabi Centre for Occupational Safety and Health
MEPRA	The Middle East Public Relations Association	OSHAD-SF	Abu Dhabi Centre for Occupational Safety and Health - System Framework
MNCs	Multinational Companies	OSHMS	Occupational Health and Safety Management System
MoIAT	Ministry of Industry and Advance Technology	PCR	Polymerase Chain Reaction
MS	Management Systems	PJSC	Public Joint Stock Company
MSA	Maintenance Service Agreement	PPA	Power Purchase Agreement
MTCO2	Metric Tonnes Carbon Dioxide	PPP	Physical Protection Plan
NCEMA	National Emergency Crisis and Disasters Management Authority	PPP-O	Physical Protection Plan for Operation
NOSS	National Occupational Skill Standards	PSC	Procurement and Supply Chain
NQA	National Qualification Authority	Q	Quarter
NSRB	Nuclear Safety Review Board	Q+NOSS	National Principal Qualifications
ODCM	Offsite Dose Calculation Manual	QA	Quality Assurance
OEMP	Operational Environmental Management Plan	RA	Risk Assessment



Acronyms		Acronyms	
REMP	Radiological Environmental Monitoring Program	TWL	Thermal Work Limit
RTP	Registered Training Provider	UAE	United Arab Emirates
SASB	Sustainability Accounting Standards Board	UN	United Nations
SAT	Systematic Approach to Training	UNFCCC	United Nations Framework Convention on Climate Change
SCBA	Self-Contained Breathing Apparatus	UN SDGs	United Nations Sustainable Development Goals
SCWE	Safety Conscious Work Environment	US	United States
SIs	Strategic Indicators	USD	United States Dollar
SMAT	Sustainability Maturity Assessment Tool	VETAC	Vocational Education and Training Awards Council
SMEs	Small and Medium-sized Enterprises	WANO	World Association of Nuclear Operations
Tadweer	The Abu Dhabi Waste Management Centre	WiN	Women in Nuclear
TAMM	Abu Dhabi Government Service		
The Code	ENEC Code of General Business Principles and Ethics		
TNA	The National Aquarium		
TRCFR	Total Recordable Case Frequency Rate		
TSC	Technical Support Center		
TW	Terawatt		

Glossary	
Climate Change	Describes changes in the variability or average state of the earth's atmosphere over time scales ranging from decades to millions of years.
Emiratization	A national program initiated by the government of the United Arab Emirates to proactively increase the number of UAE Nationals in the public and private sectors, to empower UAE Nationals and reduce dependency on foreign workers.
Environmental Management System	The management of environmental programs in a comprehensive, systematic, planned, and documented manner. It includes the organizational structure, planning, and resources for developing, implementing, and maintaining policy for environmental protection.
GRI Reporting Standards	A framework, managed by the GRI, for reporting on an organization's economic, environmental, and social performance.
GRI	The GRI (Global Reporting Initiative) is the independent, international organization that helps businesses and other organizations take responsibility for their impacts, by providing them with the global common language to communicate those impacts.
Greenhouse Gas Emissions	Anthropogenic gas emissions which increase the natural trapping of incoming solar radiation (the Greenhouse Effect) inside the earth's atmosphere. This increases the earth's global mean surface temperature and is the primary driver of climate change. These gases include carbon dioxide, methane, and hydrofluorocarbon emissions.
Gulf Cooperation Council	A political and economic union involving the six Arab states of the Arabian Gulf with many economic and social objectives.
Nuclear Energy	The energy released during nuclear fission or fusion, especially when used to generate electricity.



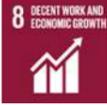
Glossary

Nuclear Fission	When the nucleus of an atom splits and releases energy, primarily in the form of heat. Nuclear energy plants use steam, turbines, and generators to turn the heat released by nuclear fission into electricity.
Nuclear Fuel Cycle	The series of industrial processes, which involve the production of electricity from uranium in nuclear energy reactors. This can include uranium discovery, conversion, enrichment, de-conversion, and fuel fabrication, use of fuel in reactors, storage, reprocessing, and disposal.
Occupational Health and Safety	A cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment.
Radioactive	Emitting or relating to the emission of ionizing radiation or particles.
Renewable Energy	Energy from a source that is not depleted when used.
Stakeholder Engagement	The process by which a firm's stakeholders engage in dialogue to improve a firm's decision-making and accountability toward sustainable development.
Stakeholders	A party that affects or can be affected by the actions of a business.
Sustainability	Sustainable development has been commonly defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Brunt land Report for the World Commission on Environment and Development (1992)
Sustainability Reporting	The voluntary public presentation of information about an organization's environmental, social, and economic performance over a timeframe, usually released annually.

Appendix E – UN SDGs, GRI & ADX Mapping

Category	Corresponding UN SDG	Corresponding GRI Standards	ADX Metric	Page and/or Notes
Environment		GRI 305: Emissions 2016	E1. GHG Emissions	Page 95
	-	GRI 305: Emissions 2016	E2. Emissions Intensity	Page 96
		GRI 302: Energy 2016	E3. Energy Usage	Page 97, 98
	-	GRI 302: Energy 2016	E4. Energy Intensity	Page 98
		GRI 302: Energy 2016	E5. Energy Mix	Page 98
		GRI 303: Water and Effluents 2018	E6. Water Usage	Page 98, 99
	-	GRI 103: Management Approach 2016	E7. Environmental Operations	Page 98
	-	GRI 102: General Disclosures 2016	E8. Management Environmental Oversight	Page 98
	-	GRI 102: General Disclosures 2016	E9. Board Environmental Oversight	Page 24
		-	E10. Climate Risk Mitigation	-



Category	Corresponding UN SDG	Corresponding GRI Standards	ADX Metric	Page and/or Notes
Social		GRI 102: General Disclosures 2016	S1. CEO Pay Ratio	-
		GRI 405: Diversity and Equal Opportunity 2016	S2. Gender Pay Ratio	-
		GRI 401: Employment 2016	S3. Employee Turnover	Page 112
		GRI 102: General Disclosures 2016 GRI 405: Diversity and Equal Opportunity 2016	S4. Gender Diversity	Page 109
		GRI 103: Management Approach 2016	S6. Non-Discrimination	No incidents recorded
		GRI 403: Occupational Health and Safety 2018	S7. Injury Rate	Page 82, 83
	-	GRI 103: Management Approach 2016	S8. Global Health and Safety	Page 73
		GRI 103: Management Approach 2016*	S9. Child and Forced Labor	-
		GRI 103: Management Approach 2016	S10. Human Rights	-
		-	S11. Nationalization	Page 118
-	GRI 413: Local Communities 2016	S12. Community Investment	Page 64	

Category	Corresponding UN SDG	Corresponding GRI Standards	ADX Metric	Page and/or Notes
Governance		GRI 405: Diversity and Equal Opportunity 2016	G1. Board Diversity	Page 22
	-	-	G2. Board Independence	Page 21
	-	-	G3. Incentivized Pay	-
	-	-	G4. Supplier Code of Conduct	Page 66
		-	G5. Ethics and Prevention of Corruption	Page 26, 27
	-	-	G6. Data Privacy	-
	-	-	G7. Sustainability Reporting	Yes, Annual
	-	-	G8. Disclosure practices	GRI 2020 Standard
	-	-	G9. External Assurance	-





SUSTAINABILITY REPORT 2021

