

ESG Progress Summary Report (2024–2025)

1. Executive Summary

The NMDC Group ESG Summary Progress Report (2024–2025) provides an overview of the Group’s Environmental, Social, and Governance (ESG) initiatives, achievements, and strategic alignment with national and international sustainability frameworks. This report marks a milestone in NMDC Group’s commitment to transparency, accountability, and ESG integration across all business units. Throughout the reporting period, NMDC Group advanced measurable progress across key ESG focus areas:

- **Health & Safety:** Achieved full contractor integration into NMDC’s safety management system, with over Two Million hours of safety training, a 12% reduction in TRIR, and 180+ audits conducted.
- **Clean Technology Investment:** Deployed over AED 240 million in R&D across clean initiatives, including nature-based solutions, vessel fuel optimization, and renewable energy infrastructure, with AED 340.7M and AED 84.6M revenue realized from offshore wind and caisson construction projects, respectively.
- **Biodiversity & Land Use:** Conducted rigorous environmental assessments and monitoring across 100% of NMDC Energy and 16 NMDC D&M projects, with designated no-disturbance zones monitored using real-time geofencing systems.
- **Corporate Behaviour:** Ethics, compliance, and audit frameworks were strengthened, with new plans under development for 2025 focused on risk-based due diligence and employee ethics training.

The report is underpinned by an internal methodology, including the review of over 100 documents & reports and engagement of more than 30 stakeholders. It also outlines NMDC Group’s alignment with MSCI ESG Ratings, GRI, SASB, and TCFD frameworks, and sets the foundation for third-party assurance in future disclosures.

2. Introduction

As a leading engineering, procurement, construction, and marine dredging company, NMDC Group recognizes its responsibility to operate sustainably and ethically while delivering infrastructure of strategic importance to the region. This ESG Progress Summary (2024–2025) is part of a broader commitment to embedding sustainability in every aspect of operations. The report is intended to:

- Showcase how NMDC Group manages material ESG topics which may impact its business and stakeholders.
- Reflect progress in implementing sustainability initiatives aligned with NMDC's strategic objectives and UAE's national development goals; and
- Enhance transparency through standardized ESG disclosures that meet global investor expectations and regulatory requirements.

This report covers all NMDC Group entities and business lines and applies a structured ESG performance tracking methodology aligned with leading frameworks such as MSCI ESG Ratings, Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and the Task Force on Climate-related Financial Disclosures (TCFD).

3. Objective

The objective of this summary is to provide a transparent, structured, and evidence-based account of NMDC Group's performance, progress, and commitments across ESG domains. The purpose of the report is to:

- 1. Demonstrate Accountability**
Communicate NMDC Group's efforts in managing ESG risks and opportunities, aligned with stakeholder expectations, national goals (e.g., UAE Net Zero 2050), and international frameworks.
- 2. Track Progress**
Monitor and disclose progress against ESG initiatives with a focus on areas such as health & safety, biodiversity protection, clean technology, and ethical governance.
- 3. Inform Decision-Making**
Provide actionable insights to internal and external stakeholders to guide future ESG integration, reporting, and investment.
- 4. Support Ratings and Assurance**
Align NMDC's disclosures with global standards such as MSCI ESG Ratings, GRI, SASB, and TCFD, enhancing credibility and comparability of ESG performance for rating agencies and potential assurance engagements.
- 5. Enhance Stakeholder Trust**
Reinforce NMDC Group's commitment to transparency, continuous improvement, and stakeholder inclusion, validated through the engagement of over 30 internal stakeholders and review of more than 100 supporting documents.

4. Methodology & Data Assurance

The summary report is grounded in a robust, multi-step methodology designed to ensure data accuracy, consistency, and relevance to both internal and external stakeholders.

Methodology Summary:

- **Scope**
The report covers all NMDC Group.
- **Document Review & Evidence Base**
Over 100 internal and external documents were reviewed, including:
 - Project-level environmental studies
 - Audit and inspection reports
 - Certification and compliance records
 - Clean technology investment plans and outcomes
- **Stakeholder Engagement & Validation**
The ESG content was validated through an extensive consultation process:
 - Over 30 stakeholders engaged across departments including HSE, Operations, Procurement, Engineering, HR, and Legal.
 - Content was validated in working sessions and one-on-one interviews.
 - Final outcomes and KPIs were reviewed and agreed upon with each responsible stakeholder before inclusion in this report.
- **Data Assurance**
While the report is not yet externally assured, internal data validation checks were conducted:
 - Cross-referencing of reported indicators
 - Review by NMDC internal audit and compliance teams
 - Review against project documentation

5. Health & Safety

NMDC Group continues to lead by example in ensuring a robust health and safety culture, underpinned by leadership oversight, ISO-certified systems, and strong contractor integration. Health and Safety is considered a core pillar of operational excellence across the Group's entities, projects, and workforce tiers, including contractors and joint ventures.



Health & Safety Management System and Governance

NMDC Group has an ISO 45001:2018 certified Health and Safety Management System (HSMS) covering all business units. In 2024, all NMDC Group entities successfully passed surveillance audits for ISO 14001, ISO 45001, and ISO 9001 with zero non-conformities. In addition, NMDC Dredging & Marine (D&M) and NMDC Infra hold certifications under the Abu Dhabi Occupational Safety and Health System Framework (OSHAD SF).

QHSE is a strategic priority at NMDC Group and is governed by the Senior Group QHSE Director, with oversight from the ESG & Sustainability Committee. This management-level Committee includes the QHSE Director and is responsible for overseeing Group-wide Health & Safety performance. QHSE responsibilities extend to all business units, with managers overseeing governance, emergency preparedness, business continuity, occupational health, and compliance. The QHSE function includes a structured reporting hierarchy with key positions including Group HSE Director, Group Quality Director, Group MS/QA Manager, and QHSE Reporting Team Leader.

A consolidated annual report on Health, Safety, and Environment performance is developed and submitted to management. This report includes performance data and analysis from across the Group and outlines achievements and plans to ensure the safety and welfare of all personnel and environmental stewardship in all operations.

Key Performance Highlights

- **IMS Implementation (100% Coverage):**
NMDC's Integrated Management System (IMS) was extended to cover 100% of contractors, aligning with ISO 45001, ISO 14001, and ISO 9001 standards. This standardization ensures safe work practices across diverse project environments.
- **HSE Certifications & Accreditations**
NMDC is accredited by the Offshore Petroleum Industry Training Organization (OPITO) and the ANSI National Accreditation Board (ANAB) for 10 HSE-related training programs. The Group also mandates IOSH Managing Safely accreditation for key new personnel.
- **Safety Training & Drills (20,000+ hours)**
Over Two Million hours of safety training were conducted across NMDC Group including contractors. This included H2S safety (OPITO certified), IOSH Managing Safely courses, fire drills, and confined space entry training.
- **Contractor Engagement (100% Participation)**
100% of active contractors participated in monthly toolbox talks, pre-task briefings, and safety bulletins, fostering a unified safety culture.

- **Audits & Inspections (180+ Conducted)**
More than 180 audits and inspections were conducted on contractor and employee worksites. Over 92% of non-conformities identified were closed within the same quarter.
- **Recognition Programs (30 Awards)**
NMDC's monthly "HSE Champion" recognition awarded over 500 safety teams (including contractors), resulting in a 42% improvement in proactive safety reporting.
- **TRIR Reduction (12% YoY)**
The Total Recordable Incident Rate (TRIR) reduced by 12% compared to FY 2023 due to robust monitoring, root cause analysis of near misses, and implementation of risk-based corrective measures.
- **Contractor Pre-Qualification (100% Reviewed)**
All new contractors were subject to pre-qualification H&S audits, with a 95% pass rate. Contracts included mandatory clauses on HSE performance KPIs and joint safety committee participation.

Contractor Health & Safety Integration

Contractor HSE performance is integral to and is covered under NMDC's Group-wide safety targets. NMDC Energy, along with other Group companies, employs several structured measures to integrate and monitor contractor health and safety performance:

- **Integrated Management System (IMS):** Contractors are required to comply with NMDC's IMS, which aligns H&S protocols across all workforce tiers. This ensures standardized safety practices.
 - **Training & Drills:** Regular safety training and emergency drills, are mandatory for contractors, with participation tracked and documented.
 - **Safety Communication & Engagement:** Contractors are included in safety campaigns, toolbox talks, and awareness programs (e.g., monthly safety bulletins, pre-task briefings).
 - **Audits & Inspections:** Contractor worksites undergo routine H&S audits alongside employee sites, with corrective actions monitored through a centralized system.
 - **Safety Culture & Recognition:** Contractor teams are eligible for NMDC's safety recognition programs to incentivize compliance.
 - **Monitoring & Progress Tracking:** Contractor safety performance (e.g., TRIR, near-misses) is recorded and analysed alongside employee data for holistic reporting.
- NMDC Energy-Specific Updates.

To further strengthen contractor H&S integration, NMDC Group is also implementing pre-qualification safety assessments for new contractors, requiring subcontractor H&S

compliance clauses in all contracts and hosting joint safety committees with contractor representatives.

NMDC Energy-Specific Updates

NMDC Energy has established its own ESG Committee, which includes its HSE Director and oversees all sustainability and HSE-related initiatives. The committee includes cross-functional leadership to ensure a holistic and integrated approach to ESG performance.

To ensure transparency, NMDC Energy now reports work-related injuries for contractors separately. These figures are tracked annually and incorporated into safety performance reviews and planning. Additionally, NMDC Energy has internal performance contracts for senior leadership, including the CEO, for HSE.

Subcontractor statistics for the past 3 years:

Year	LTIFR	TRIFR	Fatalities
2024	0.00/million hours worked	0.05/million hours worked	0
2023	0.00/million hours worked	0.00/million hours worked	0
2022	0.00/million hours worked	0.00/million hours worked	0

NMDC Energy's health & safety targets cover contractors and are aligned with those of the wider Group and are supported through:

- Pre-qualification safety assessments and contract clauses for HSE compliance
- Training and engagement programs tailored to high-risk roles
- Joint safety committees with contractor representation
- Use of INTELEX for transparent incident reporting
- Continuous review of safety metrics as part of ESG & Sustainability Management Committee oversight

6. Opportunities in Clean Technology

In alignment with the UAE's Net Zero by 2050 strategy, NMDC Group significantly scaled its investment in clean technology, sustainable engineering, and nature-based solutions throughout 2024. The Group deployed over **AED 240 million** in direct and indirect clean technology initiatives across marine, offshore energy, and infrastructure operations. These investments reflect NMDC's commitment to decarbonization, operational efficiency, biodiversity enhancement, and long-term value creation.

Key Highlights:

Nature-Based Solutions

- Tidal Mudflats Regeneration Project**
 AED 700,000 was invested in 2024 to pilot a dredged silt reuse initiative aimed at developing coastal tidal mudflat habitats. This project is expected to sequester approximately 200,000 tons of CO₂-equivalent over 30 years and promote marine biodiversity. A further AED 50 million is earmarked for future scaling.
- Artificial Reefs Deployment**
 100 3D-printed reef units were deployed in Al Nouf Artificial Islands at a cost of AED 2 million, fostering coral regeneration and marine habitat restoration.

Clean Technology R&D – AED 240.7M+ in 2024

NMDC Group's clean tech R&D portfolio extends beyond officially reported group-level R&D figures, with substantial investments across NMDC D&M and NMDC Energy. Highlights include:

Project	Investment (AED)	Impact / Benefit
Solar System – Al Fattan	792,724	CO ₂ savings: 254 tons over 2 years
Water Maker – Shujaa-2000	367,000	Reduces bottled water use; 100 tons/day capacity
Fuel Monitoring – DLS-4200	1,500,000	Estimated 5% fuel optimization fleet-wide
Digital Twin Platform	370,000	AED 2.4M in cost savings; 10% efficiency gains
Ocean Ops Fleet System	734,000	Predictive analytics & visibility improvements
Welding Robot – Falcon Initiative	2,180,000	22% productivity increase; energy use reduction
Offshore Wind Vessel Design	5,500,000	Supports expansion into wind installation markets

Repowering DLB-750 Vessel	24,900,000	10-year life extension; avoided newbuild emissions
GGBS Concrete Use	6,520,000	32,580 tons used; significant cement emissions avoided

Additional contributions include:

- Oil Filter Crusher (AED 9,174): 95% oil recovery from waste and clean scrap separation.
- Ras Al Khair Fabrication Yard (AED 200M): State-of-the-art, environmentally conscious offshore yard in KSA. Acquisition of EMDAD Group has now introduced demand side power management, integration services and other clean tech solutions into NMDC Group's portfolio.

Zero Flaring & Gas Management

- Vapour Recovery Systems: Implemented in NMDC Energy client projects to eliminate flaring, recirculating vapours into process streams and eliminating liquid effluent discharges offshore.
- SF₆ Reduction Initiative: Achieved a 66% reduction in **SF₆ gas** usage through replacement of gas-insulated systems with **high-voltage underground cables**, minimizing environmental and operational risks.

Clean Project Revenue

- Yunlin Offshore Wind Farm (Taiwan)
Revenue in 2024 totalled AED 340.7 million, with a cumulative three-year revenue of AED 1.1 billion. The project contributed to estimated emission avoidance of 500,000 tCO₂-eq/year.
- Caisson Construction Technology
AED 84.64 million in revenue was earned through UAE's first use of caisson-based marine transport construction, reducing CO₂ footprint by 18% compared to land-based alternatives.
- NMDC Energy is a JV partner with Technip Energies and JGC in the Ruwais LNG project that will build two new LNG trains of capacity 2x4.8 mtpa, with 2024 revenue of AED 3.085bn.
- Select NMDC Energy client projects used vapor recovery systems to eliminate flaring by recirculating gases back into the process stream. This reduced environmental impact and enhanced energy efficiency.

- In a NMDC Energy client project, we achieved a 66% reduction in the use of SF₆ gas—a highly potent greenhouse gas—by replacing a substantial portion of the 230 kV Gas-Insulated Busbar (GIB) system with high-voltage underground power cables. This engineering decision not only minimized the project's environmental footprint by significantly cutting SF₆ gas usage but also enhanced operational efficiency. Underground cables offer improved thermal performance, reduced maintenance needs, and lower risk of gas leaks compared to traditional GIB systems.
- NT Energies is offering a containerised solution based on Shell Consolv Technologies for carbon capture in hard to abate industries. This has the potential to scale up and be manufactured locally in NMDC UAE Yards and there are ongoing discussions with 2 clients for future implementation. An earlier pilot plant named Canopy has been successfully implemented in Europe and each unit is valued at approximately AED 11M.
- BEEAH, in partnership with Masdar, established the Emirates Waste to Energy Company (EWTE). NT Energies is in the process of tendering for a contract and a feasibility offer has been submitted to the BEEAH for a 400 kilo tons per annum (KTA) Carbon Capture Plant.
- A fuel monitoring system was installed and commissioned onboard a NMDC Energy vessel at a cost of approximately AED 1.4 million, bringing the total number of fully operational systems on company-owned assets to 12, with two more systems expected to go online later this year. This newbuild design incorporates the following clean technologies:
 - Alternative fuel readiness (i.e., provision for a methanol system to reduce the carbon footprint associated with conventional marine fuel combustion).
 - Optimized hull design featuring an X-bow configuration to minimize water resistance during sailing, thereby lowering fuel consumption during transit.
 - Maximized deck space to accommodate multiple monopiles, reducing the frequency of port calls to marshalling ports and consequently decreasing fuel consumption.
 - The latest propulsion system available on the market, designed for minimal fuel usage.
 - Electric mission equipment, which limits the use of hydraulic components thereby lowering the risk of oil leaks and environmental pollution.
 - A battery system for peak shaving and overall energy savings.
 - A retractable derrick crane that allows the A-frame to be lowered for passing under bridges such as the Suez Canal and the Baltic Bridge, enabling shorter

voyage routes and consequently reducing fuel consumption and carbon footprint.

- An additional investment made in 2024, approximately AED 367,000 for the installation of a new water maker onboard NMDC's recently acquired construction vessel, Shujaa-2000 (ex-Nor Goliath), which can produce 100 tons of water per day.
- In 2024, AED 24.9m was invested in repowering an ageing vessel DLB-750, including the drydocking, life extension and Condition Assessment Program (CAP II) for Aging Vessels compliance.
- In some NMDC Energy client projects, Zero Flaring was implemented by recirculating vapours back to process stream using Vapour recovery technology and liquid effluents were eliminated in offshore facilities and recirculated into process stream.

EMDAD Group Acquisition

The Acquisition of EMDAD Group in May 2025 has now introduced demand side power management, integration services and other clean tech solutions into NMDC Group's portfolio:

- Within the NMDC LTS subsidiary EMDAD Group, a subsidiary (EMJEL) is specialized in the development and supply of chemical recipes used in oil & gas well stimulation and completions. Well stimulation reduces the need for new wells to be drilled and also increased the efficiency of the existing wells reducing the overall carbon footprint of Oil & Gas extraction. EMJEL is also a key supplier to ADNOC drilling of specialty well cement used for the sealing and completion of Oil & Gas wells. The cement mixtures are designed, prepared, tested and supplied to ADNOC Drilling for their activities.
- Within the NMDC LTS subsidiary EMDAD Group, one of the business lines is specifically focused on system integration solutions and ensuring optimization of existing systems.
Within the NMDC LTS subsidiary EMDAD Group, one business line is an owned and operated waste management plant in Habshan that has been serving ADNOC in waste management for more than 7 years.

Additionally, NMDC LTS has set the target of securing a minimum of AED 150m a year of service provision to ENEC in the Nuclear Services business along with developing a relationship with a globally recognised Nuclear Power Developer / Service Provider to further enhance NMDC LTS's services in this business.

Future Projects and Expansion

- R&D Pipeline:
 - Hydrogen & E-Methane:
 - *Project Crystal (Green Hydrogen)*: FEED completed; EPC tender ongoing (AED 1.284B)
 - *E-Methane Plant (500 MW)*: Budgetary proposal submitted
 - NT Energies Solar PMC Bid: Phase II of a mega solar facility
 - Hybrid Solar-Diesel Sites: Pilot success may scale to other locations
 - Wind Expansion: AED 1.84 billion under consideration for wind vessels and jack-up barges
 - Hydrogen Centre of Excellence: Collaborative initiative under review with UAE and French entities
 - The Group is exploring the procurement of outdoor air quality monitors.
 - There are ongoing discussions for Project ACE with client 44.01 in Fujairah involving tender preparation scope for cost and feasibility study of DAC (Direct Air Capture) & mineralisation project, scope awarded to Genesis and co-ordinated by NT Energies locally. There are also ongoing discussions for the next phases of Al Reyadah CCUS (Carbon Capture, Utilization, and Storage) facility by ADNOC.

Circular Materials & Innovation

- GGBS Concrete: Used extensively to replace energy-intensive cement, reducing fuel and lifecycle energy use. In 2024, NMDC Group utilised a total of 32,580 ton of GGBS (Ground granulated blast furnace slag) in concrete mix at a cost of AED 6.52m across projects whose combined revenue was AED 919 million. GGBS concrete replaces energy-intensive cement with a low-energy by-product from steel manufacturing, significantly reducing fuel consumption and CO₂ emissions. Its use also improves concrete durability and lowers lifecycle energy demands, supporting more sustainable and energy-efficient construction.
- Non-Metallics & Composites: Deployed in projects for gratings, trays, sunshades, and sleepers, lowering corrosion risk and enhancing durability.
- Integrated Control & Safety Systems (ICSS): Implemented in select projects to streamline process control and improve energy efficiency.

Clean Technology Product Lines Overview

Product Line	% of Company Revenues (Recent FY)	Status / Description
Generation or development of wind power capacity	1.29%	Generating revenue
	-	Investing into – AED 5.5 million investment in the conceptual and basic design of a wind foundation installation vessel
Generation or development of solar power capacity	-	Investing into – AED 792,724 invested in a hybrid solar/diesel system; NT Energies also submitted a PMC bid for a mega solar plant (Phase II)
Generation or development of waste-based power capacity	-	Exploring – Through NT Energies JV with Technip Energies (waste-to-energy)
Developing or distributing fuel cells/hydrogen systems	-	Developing this technology – Green hydrogen project (Project Crystal with Masdar); 500 MW e-Methane Plant (Ruwais); Hydrogen Centre of Excellence
Production or distribution of batteries	-	Exploring – Lithium battery systems used in select client projects
Natural gas generation	11.75%	Generating revenue
	-	Developing this technology – \$1.136B contract with Taiwan Power Company for subsea gas pipelines
Production or distribution of advanced materials that aid in the reduction of fuel requirement or energy dependence	3.50%	Generating revenue
Production or distribution of industrial automation technologies	-	Developing/Investing into – AED 2.18 million robotic welding station; 13 crawler/mobile cranes replaced with 9 gantry cranes
Developing or distributing optimization technologies & systems	0.01%	Generating revenue
Waste treatment operations or development and distribution of waste treatment technologies	0.01%	Generating revenue
	-	Developing/Investing into – AED 709,174 spent on tidal mudflats and oil filter crusher
Development and distribution of reused products or products using recycled waste	0.11%	Generating revenue

Developing or distributing air quality information technology	-	Exploring – Procurement of outdoor air quality monitors underway
Developing or distributing conventional pollution controls	-	Investing into – DP vessel, vapor recovery systems, and high-voltage underground cables
Carbon capture & storage activities	-	Exploring/Developing – Kasawari CCS project, containerized solutions via NT Energies, and ongoing tenders with BEEAH, ADNOC, and 44.01
Developing water infrastructure and distribution	0.32%	Generating revenue
Production or distribution of smart metering devices	-	Investing into – AED 1.4 million spent on onboard vessel fuel monitoring system
Desalinization operations or development and distribution of desalinization technologies	-	Investing into – AED 367,000 spent on new water maker
Development and distribution of products using recycled materials	0.61%	Investing into – AED 24.9 million invested in repowering an aging vessel

Nuclear Power Services: NMDC Group, via the NMDC LTS subsidiary, has commenced entry in the Nuclear Power Generation services sector. During Q1, the mandatory NQA-1 quality system was developed and more than 55 people trained, relationships have been developed with internationally recognised Nuclear Power Services sector companies as well as strategic alignment with the local nuclear power operator (ENEC) to be the selected local partner. NMDC LTS is actively tendering work, and awards are expected in Q4 2025 with further growth and development in this sector in 2026.

NMDC Group has also invested AED 1.6m in fuel efficiency monitors + AED 2m in CCTV systems with active AI on all support craft (either rented or owned) to further optimize fuel consumption contributing to cost cutting, increased HSE coverage and lower environmental impact.

NMDC Group, following the successful repowering of the Umm El Zemoul dredger in 2023, NMDC has started this process on both the Al Hamra and Al Khatem dredgers, repowering two more retired 40 years old vessel with 7,000 tons of steel avoided. The vessel will be operational in 2026 and fit for purpose for next 10-15 years. The investment cost is AED 100 million the repowering of these additional vessels in the next year. The savings are at AED 160 million in comparison to acquiring a new vessel.

NMDC LTS has invested AED 3.5m to develop a Nuclear NQA-1 compliant quality system in order to diversify NMDC group's services into the Nuclear Services Industry. To date 2 formal tenders have been submitted to the Nuclear Operator (ENEC) and award is expected during

Q3 2025. This represents a significant diversification step into the clean energy sector of Nuclear.

7. Biodiversity & Land Use

The Group's proactive approach to biodiversity ensures environmental integrity during construction and dredging operations. All projects undergo layered assessments, audits, and compliance reviews involving regulators. NMDC Group maintains a strong commitment to conserving biodiversity and minimizing land and marine ecosystem disturbances during construction, dredging, and offshore operations. The Group's approach combines proactive planning, regulatory engagement, and investment in nature-based solutions to ensure long-term environmental integrity across all business units, including NMDC Energy. In accordance with the Group Biodiversity SOP, internal audits are undertaken at planned intervals based on risk to determine whether the SoP is effectively implemented and maintained. NMDC Group Directors, Managers and the HSE Department are responsible for monitoring the effectiveness of the SoP's under their control.

Key Highlights

- **EIAs and CEMPs for NMDC Energy (100% Coverage)**
All 2024 NMDC Energy projects completed verified Environmental Impact Assessments and Construction Environmental Management Plans, in compliance with UAE and international regulatory frameworks.
- **No-Disturbance Zones (5 Projects Monitored)**
Projects identified restricted marine and ecological zones through the **PDS 2000 monitoring system**. This system provides real-time alerts if dredgers approach designated areas. These zones were:
 - Protected coral reefs and mangroves
 - Cultural heritage sites
 - Marine turtle nesting beaches
- **Enforcement and Mitigation**
No incidents of entry violations into no-disturbance zones were recorded in 2024 (although one event of environmental nuisance had occurred). Adjusted working hours during breeding seasons and low-noise machinery deployment were used at two sensitive sites.
- **Regulatory Engagement**
All plans were reviewed by the Environment Agency Abu Dhabi (EAD), with periodic third-party validation ensuring transparency and ecological accountability.

Environmental Assessments & Compliance

In 2024, 100% of NMDC Energy projects underwent Environmental Impact Assessments (EIA) and Construction Environmental Management Plans (CEMPs), which were reviewed and verified by external regulatory authorities.

Similarly, all 16 NMDC Dredging & Marine (D&M) projects were subject to a comprehensive suite of environmental assessments and studies, verified with third parties:

- Environmental Impact Assessments (EIA) – 37.5%
- Construction Environmental Management Plans (CEMP) – 37.5%
- Preliminary Environmental Reviews – 12.5%
- Environmental Management Plans (EMP) – 12.5%
- Habitat Destruction Monitoring & Species Protection/Disturbance – 18.75%
- Habitat Pre-Surveys – 6.25%
- Marine Monitoring Plans – 6.25%

In accordance with the Biodiversity SOP, NMDC Group commits to compliance with all EIA obligations and mitigation requirements, ongoing environmental monitoring, record-keeping of environmental actions, and the allocation of sufficient resources to fulfil site-specific mitigation and biodiversity monitoring programs.

Operational Control Measures

To minimize ecosystem disturbance and environmental harm, NMDC Group enforces stringent operational controls across land and marine environments. These include:

- **Turtle Nesting Protection:** Mandatory guidelines issued by NMDC Energy's CEO are enforced across all projects to safeguard nesting habitats.
- **Real-Time Monitoring of No-Disturbance Zones:** Projects use the PDS 2000 system, which superimposes geofenced no-go zones into dredger navigation systems. Real-time alerts prevent accidental intrusion into:
 - Protected coral reefs and mangroves
 - Cultural heritage sites
 - Marine turtle nesting beaches

- **Pollution Prevention:** Measures outlined in the Aspects and Impacts Register include:
 - Blasting operations enclosed with HDPE and nylon sheets to contain dust emissions.
 - Acoustic enclosures on diesel generators to reduce noise pollution.
 - Secondary containment systems on oil tanks to prevent soil and water contamination.

No violations of no-disturbance zones were reported in 2024, although one isolated environmental nuisance event was addressed with corrective measures.

Construction and Dredging Impact Mitigation

Specific control practices to limit the environmental impact of dredging include:

- Minimizing dredged volumes and sidecast materials
- Using accurate survey systems to optimize dredging processes
- Limiting the number of anchors to reduce seabed disruption
- Deploying silt curtains in proximity to coral or seagrass habitats
- Scheduling dredging activities to avoid sensitive periods such as spawning seasons
- Monitoring turbidity and oxygen levels to amend dredging practices in real-time

Restoration & Rehabilitation

NMDC Energy and its subsidiaries undertake rehabilitation of disturbed areas both during and after operations, provided such work is permitted or required by client contracts and regulatory EIAs. These efforts include:

- Relocating bird nests where applicable
- Monitoring and transplanting coral reefs in reef-adjacent projects
- Mangrove planting and ecosystem restoration by third-party specialists (e.g., WKC, Kayan)

It is important to note that rehabilitation is only conducted when explicitly scoped by the client and regulatory body. Some offshore projects may not involve direct ecological disturbance, or the EIA may not require restoration efforts.

Nature-Based Solutions and Conservation Initiatives

NMDC Group is advancing the use of nature-based solutions to enhance biodiversity:

- **3D-Printed Reef Project:** In collaboration with the Environmental Agency of Abu Dhabi (EAD), NMDC deployed 100 artificial reefs over 70 km of dredged areas, with a budget of AED 2 million. These reefs are designed to promote coral regeneration and marine biodiversity.
- **Mudflats Restoration:** A pilot project to reuse excess dredged silt for the creation of tidal mudflats has been launched. This initiative is expected to sequester approximately 200,000 tons of CO₂-equivalent over a 30-year period. To date, AED 700,000 has been invested, with a potential total budget of AED 50 million if scaled.
- **Mangrove and Tree Planting Programs:**
 - 40,000 mangroves planted in KSA (target met in early 2025)
 - 30,000 trees to be planted in KSA by 2025 (10,000 trees per year)
 - Recipient of the 2024 IPLOCA Environmental Award for planting 20,001 mangroves under the Blue Carbon Initiative, targeting 246 tons of CO₂ captured annually

Qualitative & Quantitative Biodiversity Targets

Qualitative Commitments:

- Full compliance with client-specific and regulatory biodiversity expectations
- Integration of eco-friendly materials and wastewater management practices
- Implementation of internal policies such as the QHSE Policy and Biodiversity SOP
- Protection of coastal and marine ecosystems through mitigation and compensation strategies

Quantitative Targets:

- AED 50 million capex planned for expansion of the mudflat project
- 246 tons/year CO₂ sequestration from the Blue Carbon mangrove initiative
- 30,000 trees by 2025, and 40,000 mangroves planted in 2024–2025

Oil spills are monitored and recorded on the INTELEX platform.

Year	Business Unit	Volume of Oil Spills (cubic metre - m3)
2024	NMDC Energy	~0.1
2024	Emarat Europe	~0.025

2023	NMDC Energy	~0.01
2023	NMDC Energy	~0.01
2022	NMDC D&M	~0.08
2022	NMDC D&M	~0.02
2022	NMDC D&M	~0.01

On 20 September 2024, during nearshore reclamation activities, a localized environmental nuisance occurred when natural foam, generated by the physical agitation of materials during reclamation, was carried by sea currents and accumulated along a nearby beach. Although the work area was secured with standard silt barriers/screens, unexpected sea conditions caused the foam, which contained no chemical agents, to drift beyond the controlled zone. The operations team responded immediately by deploying water pumps to suppress the foam.

While the foam posed no environmental or health risk, a concerned member of the public reported the occurrence to the Environment Agency – Abu Dhabi (EAD), and a fine was issued in line with regulatory protocols.

In response, NMDC acted swiftly and proactively, implementing a series of corrective and preventive actions to enhance environmental safeguards and ensure future resilience:

- Reinforced silt curtain and foam boom installations to improve containment performance under varying sea conditions.
- Increased land-based foam suppression measures, including the deployment of additional water pumps and the practice of pre-wetting materials with sand and water to minimize foam formation.
- Enhanced real-time monitoring of silt curtains to identify potential breaches early.
- Conducted emergency response drills with site teams to improve readiness and response times.
- Appointed a full-time Environmental Officer at all reclamation sites to provide continuous oversight.
- Shared lessons learned across relevant teams to promote awareness and continuous improvement.

This event served as an opportunity to further strengthen operational environmental controls and reinforce NMDC's ongoing commitment to proactive environmental management and regulatory compliance.

NMDC Energy-Specific Updates

NMDC Energy is committed to minimizing environmental disturbance across its operations. Rehabilitation and restoration are conducted on 100% of projects where clients permit or

request such measures. These may occur during or after operations, depending on project timelines and contract scope.

To protect environmentally sensitive zones, no-disturbance areas are designated during specific projects. These zones are digitally integrated into dredger navigation systems (e.g., PDS 2000) with real-time warnings to alert crews if a restricted area is entered. These areas may include protected habitats, cultural heritage zones, or marine reserves and are coordinated with relevant authorities such as the Department of Culture and Tourism (DCT).

Limitations on restoration or conservation activities are often determined by client requirements, which dictate the company's role in environmental planning and land use on a project-by-project basis.

8. Carbon Emissions, Climate Strategy & Environmental Stewardship

NMDC Energy acknowledges the growing urgency of addressing climate change and its impacts. While the company continues to strengthen its environmental practices and reporting, targeted initiatives have been developed to lay the groundwork for a more resilient and climate-conscious future.

Climate Strategy & Emissions Reduction

NMDC Group developed a Climate Adaptation Plan (encompassing NMDC Energy), which outlines the company's commitment to integrating climate risk assessments across all projects by 2027 and achieving zero net increase in operational climate vulnerabilities beyond 2028. The plan addresses five core areas: climate risk identification, adaptation measures, governance, partnerships, and performance monitoring.

To advance its climate mitigation efforts, NMDC Energy has also introduced its first emissions intensity target and aims to apply gradual reduction (number to be determined between 1-5%) annually from 2026, using 2023 as the baseline year.

While NMDC Energy does not yet report through CDP or have SBTi-approved targets, steps are being taken to assess Scope 3 emissions coverage, with future iterations expected to include currently uncovered categories such as employee commuting.

Low-Carbon Technology and Carbon Capture Initiatives

Through its joint venture NT Energies, NMDC Energy is exploring several carbon capture and low-carbon technology initiatives, with an emphasis on scalable solutions suitable for hard-to-abate industries:

- Shell Consolv-Based Containerized Carbon Capture Unit: NT Energies is offering a modular carbon capture system developed with Shell Consolv technologies. Two clients are in advanced discussions for future implementation. Each unit is valued at ~AED 11 million

and can be manufactured locally at NMDC yards. A pilot plant has been successfully implemented in Europe.

- Emirates Waste to Energy (EWTE) Project: NT Energies submitted a feasibility offer to BEEAH for a 400 KTA carbon capture plant, supporting waste-to-energy decarbonization in partnership with Masdar.
- Project ACE in Fujairah: Ongoing collaboration with client 44.01 for a Direct Air Capture (DAC) and mineralisation project. Feasibility and cost scope preparation is underway, coordinated locally by NT Energies.
- Al Reyadah CCUS Expansion: NT Energies is engaged in early discussions regarding future phases of the ADNOC-led Al Reyadah Carbon Capture, Utilization, and Storage facility.

No revenue was generated in 2024 from active carbon capture or sequestration operations; however, these projects reflect NMDC Energy's direction toward carbon reduction and innovation in clean tech.

Toxic Emissions and Waste Management

NMDC Energy is actively implementing a Waste Reduction Action Plan, with the goal of achieving a 10% year-on-year reduction in total waste generated. This plan emphasizes procurement efficiency, resource conservation, and improved waste segregation at the source.

In 2024, the company recorded the following waste intensity metrics:

- Hazardous Waste: 4.3 tons per USD million
- Non-Hazardous Waste: 0.25 tons per USD million

In addition, NMDC Energy tracks and reports emissions of NO_x (Nitrogen Oxides) based on fuel consumption whilst SO_x were deemed negligible since ultra-low sulphur fuel is used. The emissions (tons) for the last two years are as follows:

	2023	2024
NMDC ENERGY	0.7 tons	15.8 tons

The increase is attributed to increase in project activities as reflected in manhours 47.9 million (2023) & 71.1 million (2024). Initiatives to reduce emissions include replacement of combustion engines, transitioning from fuel-powered to electric-powered cranes, compressors, and transport equipment.

9. Corporate Behaviour



NMDC Group is committed to upholding the highest standards of business ethics and integrity across all operations. The Group's Ethics & Compliance Plan is updated annually and approved by the Board Audit Committee, which is responsible for overseeing the Group's ethics and compliance activities, including whistleblowing cases, anti-fraud frameworks, and the review of the Business Code of Conduct and related policies.

Ethics & Compliance Plan 2025

The 2025 Ethics & Compliance Plan outlines a structured approach to promoting a strong culture of ethics and compliance, with focus areas including:

- **Standards of Conduct & Policies:** Continued implementation of business ethics policies, introduction of a risk-based Business Partner Due Diligence Policy and Procedure, and full implementation of Code of Conduct-related policies.
- **Governance Oversight:** Oversight of the Compliance Plan by the Audit and Ethics & Compliance Committees.
- **Training & Awareness:** Development of five new online training modules covering the Business Code of Conduct, Fraud, Bribery & Corruption, Conflict of Interest, Gifts, Hospitality & Entertainment (GHE), and Cybersecurity. The Group is tailoring compliance training for high-risk departments and launching targeted programs for those involved in Due Diligence, People & Culture assessments, and fraud awareness. Code of Conduct awareness workshops and videos are being developed for employees without computer access.
- **Monitoring & Auditing:** Ongoing monitoring of employee and business partner acknowledgment of the Code of Conduct, assessment of declared conflicts of interest and GHE of value, tracking training participation and completion scores, and periodic evaluations to assess the effectiveness of implemented measures.
- **Reporting & Investigating:** Review and update of the Investigation Policy and execution of independent investigations and corrective actions where necessary.
- **Risk Assessment:** Annual compliance risk assessments conducted across key departments.
- **Additional Responsibilities:** Establishment and management of Compliance Programs for Joint Ventures (JVs), development of the Annual Compliance Report, and provision of governance advisory to company management.

As part of a broader effort to align third parties with its ethical standards, the Legal Department is updating all contract templates to include anti-bribery and corruption clauses. A link to the Business Partner Code of Conduct will be embedded into the E-supplier platform, with acknowledgment from business partners formally tracked and verified.



Group-wide Implementation and Expansion

In 2024, NMDC Energy conducted additional Business Ethics workshops for 291 employees and 21 contractors at the Hail & Ghasha project. These sessions covered all key topics outlined in the Group's Business Partner Code of Conduct and other Ethics & Compliance policies. This commitment will continue through 2025, with a focus on expanding subcontractor training, particularly around anti-corruption and business ethics.

Two joint training programs are scheduled for 2025:

- JV Hail & Ghasha: A compliance session delivered online in collaboration with Saipem SpA, covering JV Compliance Program documentation. Management interviews will be conducted to assess awareness and adherence, with a second face-to-face monitoring session planned for October 2025.
- JV MERAM: Ethics training sessions will begin in July 2025 with the management team, followed by broader sessions for employees. Topics include bribery, corruption, fraud, AML, terrorism funding, data privacy, and HSE, in addition to whistleblower mechanisms.

The Group plans to enhance contractor onboarding by incorporating business ethics topics into HSE inductions. Subcontractors are required to read and acknowledge the Business Partner Code of Conduct and are trained on a project-by-project basis.

Audit and Monitoring Activities

Regular audits and compliance monitoring are conducted across all operations and business partners. As part of the 2025 plan, the following activities are included:

- Monitor employee and partner Code of Conduct acknowledgment, with mechanisms for non-digital access tracking.
- Monitor and assess declared conflicts of interest and GHE of value.
- Monitor training participation and completion to ensure annual compliance.
- Conduct periodic evaluations of the effectiveness of policies, trainings, internal controls, and digital tools.
- Execute independent investigations and corrective actions, and update investigation policies accordingly.
- Conduct risk-based compliance assessments for key departments.

A 3-year Internal Audit Plan has also been established, increasing the average number of internal audits from 6 (2022–2024) to 10 (2025–2027), with audits prioritized based on business plan updates, risk assessment, and project value (>10% of annual revenue).

10. Conclusion

NMDC Group's ESG journey in 2024–2025 has been characterized by strategic investments, operational improvements, and a growing culture of accountability across all entities. From enhancing health and safety systems to pioneering nature-based solutions and integrating ESG into contractor management and corporate governance, the Group has taken measurable steps toward creating long-term value for stakeholders and the environment.

The Group's alignment with global ESG frameworks and national sustainability ambitions positions it well to deliver on future sustainability targets while minimizing risks and seizing opportunities in a transitioning economy.

Looking ahead, NMDC Group remains committed to:

- Expanding third-party assurance and ESG ratings readiness
- Deepening ESG integration across departments and capital allocation decisions
- Strengthening stakeholder engagement and performance transparency, and
- Contributing to national and global climate and biodiversity goals

This report reflects not only our current ESG performance but also our collective ambition to lead in sustainability excellence across the marine and energy infrastructure sectors.