

ADVANCING INNOVATION

Digital transformation and artificial intelligence (AI) are core to ADNOC Distribution's strategy. We are embedding AI, advanced analytics, and secure digital platforms across our value chain and customer touchpoints to deliver safer, more reliable and efficient performance, elevate end-to-end experiences, and support our environmental and social stewardship.

A dedicated management-level AIDT Committee chaired by the CEO, has been established to evaluate and monitor all AI projects, supporting alignment with strategic objectives and responsible implementation. With more than 20 AI projects now deployed or in development from real-time demand forecasting, smart workforce planning to hyper personalized journeys and seamless "plug & charge" for EVs, we are setting new standards in station optimization and property monetization, transforming our stations into destinations of choice, and reinforcing our competitive leadership in convenience and mobility retail.

Mapping our innovation with UNSDGs



Material Topics

Technological Innovation , Digitalization and Cyber Security



AI-Enabled Strategy Execution

ADNOC Distribution is committed to adopting AI and digital technologies for operational enhancement and decision-making by actively working towards becoming an AI driven company and promoting a strong digital culture, conducting exploration and training sessions with business teams and embedding AI into everyday process.

ADNOC Distribution's growth strategy is focused on delivering sustainable top-line expansion, superior operational performance, and outstanding customer experiences, while advancing our sustainability ambitions. Artificial Intelligence (AI) and advanced data analytics are core enablers of this strategy, and we are committed to creating measurable value for our customers, shareholders, employees, and communities.

Powering Possible: Integration of Artificial Intelligence, a key enabler to execute ADNOC Distribution's strategy

Artificial Intelligence is a core enabler of ADNOC Distribution's strategy. We are integrating AI and advanced analytics across the value chain to drive top-line growth, improve operational efficiency, elevate customer experience, and support sustainability. Our ambition is to become a best-in-class AI-enabled convenience and mobility retailer by embedding data-driven decision-making into day-to-day operations and establishing a scalable foundation for ongoing innovation.

Our approach is anchored in four mutually reinforcing pillars. Each pillar has defined strategic inputs and measurable key metrics to drive accountability and transparent value delivery. We drive growth through data-led insights that inform market expansion, network planning, and category decisions. We improve efficiency with predictive analytics and resource optimization that reduce operating costs and enhance asset utilization. We elevate customer engagement with hyper-personalized offers and seamless, app-enabled journeys that increase satisfaction and loyalty. We are future-proofing operations through AI-driven energy efficiency

and predictive maintenance that bolster resilience and lower emissions. With more than 20 AI initiatives underway across retail, fuels, and logistics, our portfolio is progressing from pilots to scaled deployment. These initiatives are prioritized for measurable business impact, designed for repeatability, and sequenced to accelerate time to value while maintaining governance and quality. High-impact use cases are already reshaping how we plan, operate, and serve customers. To drive growth, we deploy intelligent assortment and convenience store clustering to tailor ranges by micro-market and use AI-guided site selection to optimize network expansion and format placement.

To enhance efficiency, we forecast fuel demand to improve supply planning and reduce stock-outs, apply smart workforce management to align staffing with demand, and automate lubricants supply planning to lower working capital and waste. To elevate customer experience, we leverage hyper-personalized offers through our loyalty program to increase spend per visit and retention, introduce AI-powered agents to handle routine inquiries and bookings, and use computer vision to accelerate in-store checkout and reduce queues. To future-proof operations, we apply predictive maintenance to minimize downtime and extend asset life and optimize energy usage across sites to reduce consumption and emissions.

These capabilities are enabled by a modern data and AI cloud platform, allowing advanced modeling at scale. Robust governance and security frameworks, including defined data ownership, model lifecycle controls, and cybersecurity practices, support reliability, compliance, and trust. Cross-functional product teams, agile delivery, and targeted upskilling accelerate adoption, while responsible AI principles guide fairness, transparency, and accountability in model design and deployment.

Integration of Artificial
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The impact is tangible. By embedding AI into core processes, we are reducing OPEX through predictive planning and automation, optimizing inventory and working capital via demand forecasting and dynamic replenishment, and unlocking new revenue through targeted personalization and digitally enabled services. Customers benefit from faster, more tailored interactions across channels, reinforcing trust and loyalty and improving overall service quality.

Our Fill & Go initiative exemplifies this strategy in action. By integrating computer vision-based license plate recognition with the ADNOC Distribution app, customers can preorder fuel and convenience products and complete purchases through a contactless, accelerated experience, driving loyalty and incremental revenue while streamlining operations.

Looking ahead, we are industrializing successful use cases on our AI cloud, leveraging shared data assets, and expanding adoption across the network. As models mature, we expect to scale repeatable solutions, continually improve performance, and sustain rigorous governance so that AI remain a central engine of growth, efficiency, and differentiated customer experience for ADNOC Distribution.



"We are building an AI-native, customer-centric platform that reimagines how we operate and serve our customers. By leveraging best-in-class technologies, including AI-enabled solutions, and advancing new capabilities with the establishment of our new Innovation Center, we are driving digital transformation that enhances efficiency, personalisation, and sustainability, helping shape the future of mobility and convenience retail."

Saeed Al Ahabbi
Chief Shared Services & Technical Officer



Drive growth

ADNOC Distribution is using AI to boost growth by increasing revenue potential across businesses lines through data-driven improvements

Intelligent assortment: suggests products to add/remove to C-store inventory based on insights on customer preferences

C-store clustering: tailors assortment and pricing to various store profiles

Intelligent service station location: leverages on AI to develop new service stations based on traffic patterns, average spending and competitor presence



Case Study AI-driven assortment optimization

As part of our strategy to accelerate non-fuel growth, **elevate customer experience**, and **improve operational efficiency**

Solution: We have deployed an **AI-driven assortment optimization engine** that applies advanced machine learning to cluster convenience stores by real purchasing behavior, regional trends, and customer demographics; by uncovering clear buying patterns, the system recommends the **optimal product mix** for each cluster and links insights to replenishment and promotions to **help make the most relevant items available at the right time.**

Impact: This capability enhances conversion and basket value, reduces inventory waste and out-of-stocks, and delivers **a more personalized shopping experience** across store formats. Built on our scalable AI cloud and governed by robust data and cybersecurity controls, the solution is designed to scale across the network and integrate with our digital journeys (such as Click & Collect), reinforcing our position as an **AI-driven leader in convenience and mobility retail** and advancing our sustainability goals through reduced waste and smarter, more efficient supply chains.



Deliver enhanced efficiency

AI is driving operational efficiencies across businesses by enabling cost avoidance, reducing OPEX and optimizing inventory management

Fuel demand prediction: forecasts fuel sales demand to avoid fuel runouts

Smart workforce management: optimizes operational cost of service stations staff, leading to OPEX savings

Lube automation: predicts lube demand and automates supply orders



Case Study Smart workforce management

Fuel stations were staffed with non optimal filler counts and schedules, driving operational waste, inconsistent service levels, and elevated staff OPEX. Station managers lacked data driven, demand aligned workforce plans tailored to local dynamics, shifts, and skill mixes.

Solution: We implemented an automated AI/ML workforce optimization model that recommends an optimal number of fillers and service schedules for each station. The model ingests predicted demand along with existing shifts, a skills and efficiency matrix, and station specific constraints

to generate practical rosters and service levels. These recommendations are embedded into planning routines to help right size deployment and align staffing with actual demand patterns.

Impact: The program improved cost efficiency and customer service while boosting employee productivity and giving operations teams actionable insights. Rolled out across stations, it helped to minimize operational waste and reduced staff OPEX.



Elevate customer experience

AI enhances customer experience by delivering hyper-personalized offerings, reducing wait times and ensuring a seamless customer experience

Hyper-personalized offers: suggests tailored offers for customers depending on their historic behavior

Seamless experiences: allow customers faster fueling based on stored preferences or F&B ordering straight to car via the app



Fuel demand prediction

ADNOC Distribution needed to prevent fuel run outs and reduce the manual effort of tracking tank levels and consumption across more than 550 stations. Planning lacked product and station level, near real time demand visibility, which led to shortages, inefficient replenishment, and inconsistent workforce planning.

Solution: Our team developed and deployed machine learning models that forecast fuel demand for each product at every station, generating hourly, daily, and monthly predictions. The models leverage historical sales, seasonality, price changes, holidays, and station

specific behavior, and their outputs are embedded into replenishment and operations processes to enable proactive inventory management and workforce planning. The solution was rolled out across the entire ADNOC network of 550+ sites.

Impact: Network wide run outs dropped, effectively minimizing shortages. Automated, data driven forecasts reduced operational overhead for monitoring and planning, while improved demand visibility enabled better workforce scheduling and more confident strategic decision making.

Hyper-personalization

Customers currently receive generic offers that fail to reflect their individual behaviors and purchase patterns, resulting in lower engagement, missed cross sell and upsell opportunities, and inefficient marketing spend. An AI-powered approach is needed to personalize offers at scale to lift customer lifetime value and brand loyalty across the entire customer base post validation.

Solution: A "Next Best Offer" AI engine ingests data from multiple touchpoints including app interactions, purchase history, loyalty activity, and discount behavior to predict and deliver the most relevant offer for each

customer based on their preferences, lifecycle stage, and engagement history. This precision targeting drives retention, unlocks cross sell and upsell opportunities, and improves ROI on marketing campaigns, with the design ready to scale to all customers.

Impact: The initiative is projected to generate enhanced revenue, with loyalty program pilots showing a 20% increase in spend among engaged customers. Value is created through higher customer retention and improved upsell conversion, translating into sustained revenue growth and more efficient marketing investments.

Chatbot 2.0 (Gen AI for customers)

Customers were experiencing static, generic digital interactions that limited engagement, self service, and conversion. ADNOC needed a scalable, multi channel conversational layer that could personalize responses in real time and support use cases such as investor relations, trip planning, and broader customer service.

Solution: We implemented Chatbot 2.0, a generative AI platform built on Azure OpenAI, Azure ML, and Databricks, integrated with Azure Data Lake to deliver context aware, real time conversations tailored to user intent and profile.

The ARIF Investor Relations chatbot is live on the ADD website (since 2024), with "Plan Your Trip" and GenAI for Customers assistants slated for web/app rollout, enabling scale across customer facing channels.

Impact: The GenAI chatbot provides human-like, personalized engagement that strengthens brand affinity, increases digital adoption and conversion, and unlocks new revenue opportunities. It improves the output of customer channels while establishing a foundation for rapid expansion across platforms and use cases.

ARIF Finance Chatbot: streamlining compliance and decision-making

We have transformed the way employees access critical financial governance and data by introducing an AI-powered virtual assistant that uses natural language processing and voice recognition (including an AI Avatar) to deliver instant, reliable answers; retrieve documents and data from a curated repository; and streamline routine queries and day-to-day tasks.

Key features:

- Intuitive, user-friendly interface that reduces the learning curve and boosts productivity
- Consistently up-to-date content to support timely decisions
- Hands-free interaction via robust voice recognition

Impact:

Enhances compliance and policy adherence, accelerates information retrieval, improves user experience, and advances Finance's digital transformation reinforcing governance while increasing operational efficiency. Complementing this internal capability, in 2024 we introduced ARIF, one of the world's first AI investor relations chatbots, delivering dynamic insights in English and Arabic and simplifying access to strategy, performance, and disclosures for investors and analysts. Together, these chatbots enhance compliance and policy adherence, accelerate information retrieval, improve user experience, and advance Finance's digital transformation.



Data Privacy and Cyber Security

Cybersecurity and data privacy are foundational to digital transformation and to the confidence our stakeholders place in us. Our enterprise-wide program protects the confidentiality, integrity, and availability of data across retail, digital, and operational environments, safeguarding payments, customer information, and critical infrastructure.

These efforts are backed by sustained Investment in digital transformation (annual) AED 95M, to include the tools, talent, and controls needed to protect our ecosystem.

We operate an ISO 27001 certified Information Security Management System (ISMS) and must comply with the UAE Personal Data Protection Law (PDPL). Our Privacy Policy sets out how personal data is collected, used, and protected, reflecting our commitment to fair, transparent, and lawful processing and to privacy-by-design principles across platforms.

In 2025, we further strengthened our cybersecurity position across the business. We enhanced threat intelligence, introduced real-time monitoring, and improved incident response to accelerate detection and recovery. To protect digital transactions, we upgraded our Payment Card Industry Data Security Standard (PCI DSS) certification to the latest version, for more secure and seamless payment processing. We expanded multi-factor authentication (MFA) and strengthened password protocols to protect customer and employee accounts. A comprehensive cybersecurity posture analysis of the AWS private cloud was completed to strengthen cloud controls. In addition, a third-party data privacy platform was deployed to manage the data protection program, and Data Protection Impact Assessments (DPIAs) were initiated where required.

Given the critical nature of our operations, we conducted targeted cybersecurity assessments of our Operational Technology (OT) and Industrial Control Systems (ICS), identified vulnerabilities, and implemented protective measures to enhance site resilience.

Building on this foundation, our digital incident response capabilities include business continuity and contingency plans, emergency response plans, and incident response procedures, with annual testing. External verification and vulnerability analysis are performed, and we seek to maintain PCI DSS compliance to ensure IT compliance. Our IT infrastructure and information security management systems undergo annual internal and external audits.

Penetration testing and simulated hacker attacks are conducted as part of third-party vulnerability analysis. A preventive control is in place to assess new projects that involve processing personal data through a Data Protection Impact Assessment (DPIA).

For customer data privacy, online opt-in and optout options are provided, and individuals may request access to their personal data, have inaccuracies corrected, and request deletion. Information is designed to be retained in line with departmental data retention schedules and applicable requirements.



Zero
clients,
customers,
and employees
affected by breaches



100%
of employees
provided with digital,
cybersecurity, and
privacy awareness/
training



Zero
data privacy
breaches



100%
compliance
with standards
(e.g., ISO)

Total number of substantiated complaints received concerning breaches of customer privacy:



Zero
complaints
from regulatory
bodies



Zero
complaints
received from
outside parties
and substantiated by
the organization



Zero
identified
leaks, thefts,
or losses of
customer data

Cyber Security Governance

Our enterprise AI governance framework, anchored in ADNOC's values and ADNOC Group standards, defines roles and accountabilities across the AI lifecycle from use case selection and data stewardship to model development, testing, deployment, and monitoring.

It sets requirements to prevent high-risk outcomes and embeds compliance with applicable legal and regulatory obligations. Continual monitoring and robust cybersecurity controls safeguard our models, data, and infrastructure to help enable the safe, responsible, and commercially viable adoption of AI solutions that are aligned with our strategy and trusted by stakeholders.

This AI governance operates within our broader cybersecurity and privacy oversight, underpinned by regular, formal reporting from management to the Board that provides better visibility into our security posture, key risks, remediation progress, and compliance status. Together, this integrated approach enables timely, informed decisions at the highest level and reinforces stakeholder trust.

Oversight and accountability

Board and executive oversight

Governance of IT security and risk is overseen by the Board through structured management reporting and is led by Saeed Al Ahbabi, Chief Shared Services & Technical Officer. This ensures accountability for strategy, resourcing, and performance.

Management committees

Digital Division convenes regular Information Security Risk and Compliance Committee meetings to review risk exposure, control effectiveness, exceptions, and improvement plans, escalating material items to the executive and Board as required.

Group alignment

At the ADNOC Group level, periodic Information Security Management Review meetings provide consolidated oversight of information security responsibilities across Group companies and reinforce consistent standards.

Policy framework

Our cybersecurity and privacy policies are aligned to our ISO 27001-certified ISMS, the UAE PDPL, and internal Cybersecurity Management Standard. They set out roles and responsibilities, risk-based controls, compliance requirements, and continuous improvement expectations.

Integration with business strategy

Cybersecurity, data privacy, and AI governance are integrated with our business strategy to protect our operations, customers, and partners while enabling secure, scalable innovation. We apply a risk-based approach to safeguard the confidentiality, integrity, and availability of information across enterprise IT, cloud, retail payments, and OT/ICS environments, to support the reliability of critical services and continuity of operations. Transparency in how data is collected, analyzed, and used

is embedded across our processes, and privacy and security-by-design principles are built into new platforms and services to maintain compliance and strengthen stakeholder trust.

We extend this discipline to AI, applying dedicated cybersecurity principles that protect models, data, and interfaces throughout the AI lifecycle. Controls are tailored to each asset's risk profile and span systems, applications, APIs, data sources, and the broader AI ecosystem, including third-party providers.

AI Policy

Our AI policy aligns with the Cybersecurity Management Standard and our Information Security Management System, reinforcing resilience against vulnerabilities while enabling responsible, commercially viable innovation.

ADNOC Distribution has identified eight (8) core principles to guide the way it approaches the development, deployment and use of AI:



Transparency



Explainability



Confidentiality, Privacy and Data Protection



Human-Centeredness



Accountability



Fairness and Non-discrimination



Robustness, Safety and Security



Environmental and Social Sustainability

These principles are meant to provide an ethical foundation and strong cybersecurity measures. The standard also requires adherence to governance processes, personal data protection, vulnerability management, and a commitment to training and awareness. Compliance issues can be reported through the Thakallam hotline.

Approach to ensure safe and ethical AI deployment

Security is integrated early in the design of systems and solutions to establish a secure foundation from the start. We deploy advanced threat detection and prevention technologies, conduct regular vulnerability assessments and penetration testing, and maintain robust incident response plans for rapid threat mitigation. Ongoing monitoring and adherence to international standards underpin our resilience and readiness.



Prevention and Mitigation

All our staff must comply with our AI policy and related standards, which define governance, technical and non-technical safeguards, data and access management, and operational practices to ensure AI solutions are used properly, effectively, and safely. Data Protection Impact Assessments (DPIAs) are initiated where required.



Incident Handling and Remediation

Any deviations or breaches must be reported. For example, if an AI tool is used without prior approval, the relevant business function must self-report to Group D&CS so that immediate remedies, treatments, and lessons learned can be applied.



Managing Positive Impacts

We design AI systems with high-quality data, clear ethical guardrails, and robust fail-safe mechanisms. Continuous monitoring and iterative improvement help ensure alignment with organizational goals and operational excellence. Our policy also provides for user identification of AI-generated content and addresses potential bias, data privacy, and cybersecurity risks.

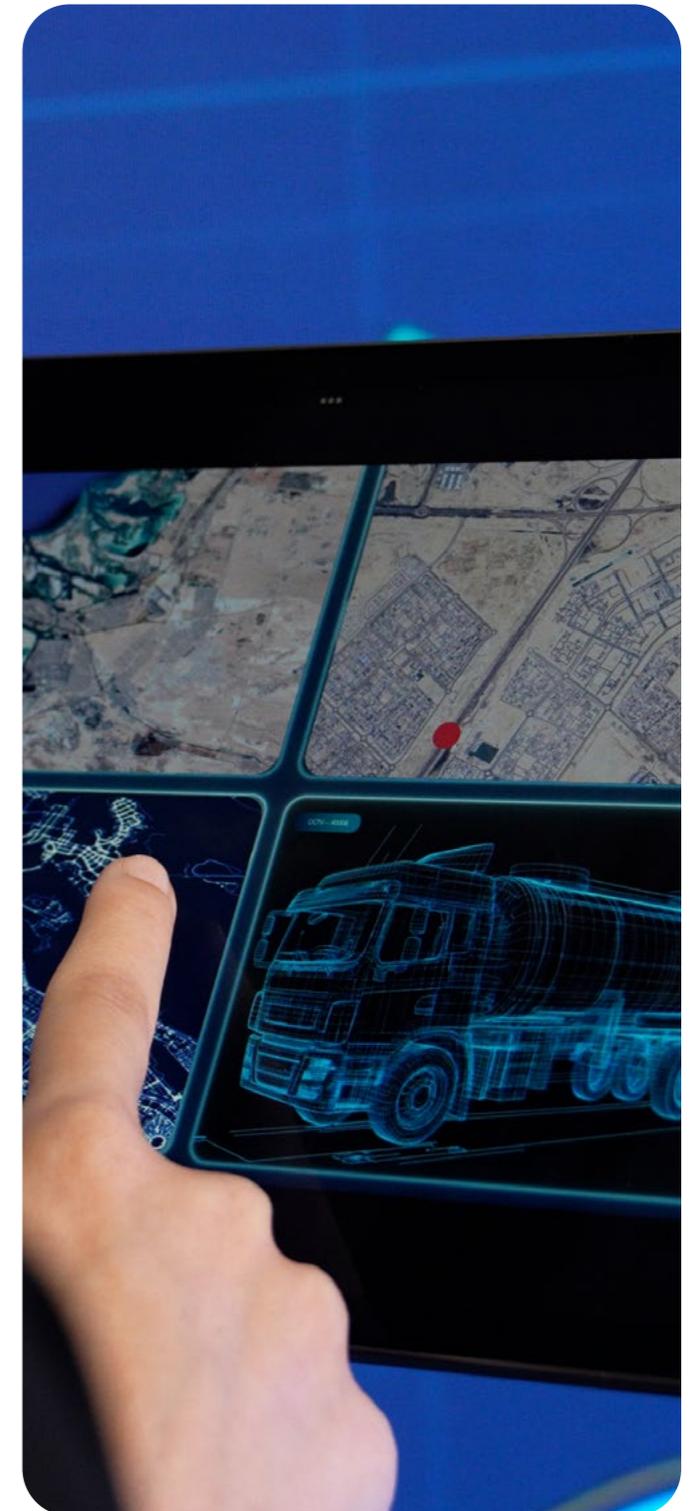
Recognizing that people are a key line of defense, we broadened employee training including phishing simulations and awareness initiatives to build a resilient security culture. We strive to embed accountability and vigilance across the organization, equipping employees to identify risks and act decisively to safeguard personal data. We pair strong governance with a culture of security. Employees receive role-appropriate training and awareness, supported by policies, simulations, and clear escalation channels. We conduct ongoing risk assessments, control testing, and compliance reviews, and we maintain structured incident response processes to contain threats and accelerate recovery. Our program is strengthened by continued monitoring and alignment with international standards and applicable regulations.

Training covers data handling principles, regulatory requirements, and best practices for maintaining privacy in everyday operations. In 2025, 100% of employees were trained on cybersecurity strengthening stakeholder confidence and safeguarding our information assets.

Information security Policy and privacy Policy framework

We safeguard our operations and stakeholder data through a regularly improving security and privacy framework that embeds clear accountability across our workforce and supply chain. This approach underpins resilience, builds trust, and drives compliance across our key markets, including the UAE, KSA, and the EU. Our Information Security Policy is supported by robust processes and advanced tools for prevention, detection, and rapid response. We maintain a Data Privacy Policy to comply with GDPR. Our Ethics & Compliance function is introducing a Data Protection & Privacy Policy tailored to UAE and KSA requirements.

Information security is a shared responsibility reinforced through our culture and Supplier Code of Conduct, with explicit roles and obligations for employees and suppliers. We actively monitor systems, enforce strong access and protection controls, and maintain tested incident and breach response protocols. We deliver ongoing staff training on data handling, privacy obligations, and security best practice to sustain awareness and compliance. Policies, controls, and training are reviewed regularly to address emerging risks, regulatory changes, and stakeholder expectations, supporting legal compliance.



Research and Development

Our Research and Development is the engine behind our Green Mobility Initiative, a nationwide transformation to decarbonize transportation in alignment with the UAE's Net Zero by 2050 Strategy, the National Hydrogen Strategy, the UAE's Third Nationally Determined Contributions (NDCs), and updated commitments under the Paris Agreement.

By advancing both hydrogen and electric mobility, the initiative tackles one of the country's most material emission sources while diversifying energy and strengthening the UAE's clean-tech leadership.

We deployed two clean fuel technologies: hydrogen fueling and electric vehicle (EV) charging infrastructure - creating dual pathways for energy diversification, and customer choice.

Hydrogen focus Implementation timeline

2023

ADNOC launched the UAE's first public hydrogen refueling station (pilot program) in Masdar City

2024–2025

The pilot program expanded to hydrogen-powered buses in Abu Dhabi, in partnership with the Integrated Transport Centre (ITC)

sectors. This project advances long-term transport decarbonization nationally by demonstrating a scalable, renewable hydrogen supply chain. The Masdar City pilot station is powered by alkaline water electrolysis a proven, scalable method that produces hydrogen at >99.99% purity using desalinated water and solar electricity, providing renewable lifecycle emissions. The system produces approximately 4 - 4.5 kg of green hydrogen per hour, with annual capacity of ~35,000 kg, enabling real-time refueling of hydrogen buses operated by the ITC. Refueling is demand-responsive, supported by on-site storage and digitally managed flow systems for stable, safe, and efficient operations.

Technology stack and verification

- Blockchain-based emissions and attribute tracking using the I-TRACK (HX) standard from the I-REC Foundation, providing traceability across production, transport, and consumption
- Carbon intensity accounting certified under ISO/TS 19870:2023, achieving an independently verified value of 0.88 kg CO₂e/kg H₂—far below global grey hydrogen benchmarks (>30 kg CO₂e/kg H₂)
- Third-party verification by Bureau Veritas and environmental assurance under ISO 14071, reflecting alignment with international best practices

Innovation and strategic significance

A cornerstone of the Green Mobility Initiative is the first-of-its-kind piloting of hydrogen production and distribution infrastructure in the UAE's fuel retail and public transport



This hydrogen pilot positions us as a regional leader in clean mobility innovation by delivering tangible infrastructure and establishing the technical and compliance foundations for hydrogen as a mainstream mobility fuel. The station and systems are designed for modularity and replication, enabling rapid scale-up across future service station locations. Together, these innovations integrate clean energy technologies and digital systems into a replicable model that supports national energy transformation priorities and sets a regional benchmark. In parallel, the EV charging program is a strategic and scalable pillar of the Green Mobility Initiative, expanding low-carbon mobility in line with national decarbonization goals. Solar energy, delivered in partnership with EWEC and Masdar-Emerge, helps EV

charging provided through the network to be powered by clean, renewable electricity.

The EV network is equipped with advanced capabilities - charge point management systems, data analytics, and plug-and-charge - to enhance reliability, performance, and customer experience. Additional features, including automated maintenance and dynamic load management, are being deployed to further strengthen operational resilience and infrastructure uptime. ADNOC Distribution is increasing investment in clean tech during 2025 and progressing toward a target of 402 EV charging points installed. The use of modular fast and super-fast charging enables rapid scaling across urban areas and highway corridors.



Way Forward

Our path forward will continue to uphold our steadfast commitment to sustainability, innovation, and deliver exceptional experiences for our stakeholders.

We will build on our core strengths and expand and enhance our EV charging and mobility solutions, prioritizing reliability, and seamless digital integration that aligns with evolving customer expectations. We expect that growth will be maintained through judicious planning, disciplined operational management, and improving our other services in food, retail, and convenience services around core offerings.

Digital transformation remains a key enabler for ADNOC, with focused investments in workforce upskilling, fostering innovation, and strengthening governance frameworks to drive clear visibility into value creation and impact. Our operational resilience will be sustained through rigorous asset management, proactive risk mitigation, and ongoing process optimization that drives efficiency, safety, and cost-effectiveness.

Advancing decarbonization and environmental stewardship is central to us and aligned with UAE's National Goals, with accelerated scaling of renewables, low-carbon fuels, circular resource use, water recycling, and biodiversity initiatives.

We also seek to deepen community engagement through long-term partnerships that emphasize road safety, environmental responsibility, and support for inclusive enterprise, while enriching customer trust via regular service enhancements and robust data privacy measures. Simultaneously, we will optimize financial capital to accelerate innovation, expand digital capabilities, and unlock value from its real estate and asset base.

We believe that together, these priorities compose a holistic roadmap that integrates sustainability, technology, and customer centricity, positioning ADNOC Distribution as a resilient and responsible leader in the evolving energy and mobility landscape, committed to creating enduring value.