



الإمارات العربية المتحدة
وزارة الصناعة
والتكنولوجيا المتقدمة

ACHIEVEMENT REPORT 2023



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Further diversifying our economy is a key strategic focus of our future plans. It is therefore necessary to accelerate economic development efforts to continue building a leading global economy, to enhance our competitiveness, and to achieve the highest global rankings.



His Highness
Sheikh Mohammed bin Zayed Al Nahyan
President of the UAE

”

We aim to develop new projects and industries within the framework of a forward-thinking industrial system which confronts challenges head-on, innovates solutions, thinks outside the box, and exceeds expectations. Developing the industrial sector improves our economic stability, worldwide stature, and future generations prospects.



His Highness
Sheikh Mohammed bin Rashid Al Maktoum
Vice President, Prime Minister, and Ruler of Dubai,
may God protect him

”
The Emirati leadership is committed to enabling citizens to benefit from the country’s economic development as well as its ambitious industrial projects.

His Highness

Sheikh Mansour bin Zayed Al Nahyan

Vice President of the State, Deputy Prime Minister,
Head of the Presidential Office



The Ministry of Industry and Advanced Technology's 2023 Achievement Report confirms the United Arab Emirates' is on track to achieving its objectives in the industrial and advanced technology sectors. Accomplishments made in 2023 represent significant progress towards these goals and build on all those achievements made since the ministry was established.

In collaboration with private and public sector partners, the Ministry of Industry and Advanced Technology organized events and created programs and initiatives that helped achieve several objectives, including attracting foreign and local investments, strengthening the role of technology in the industrial sector, and increasing GDP. This was in addition to accelerating the development of legislation and regulation to support strategic initiatives such as the Technology Transformation Program. The UAE has also made significant progress in industrial performance indicators, in part due to the enablers and incentives the ministry has introduced, such as competitive financing. These initiatives and the country's enhanced performance has attracted investment and supported local industries to boost their international competitiveness in line with the ministry's objectives.

The Ministry of Industry and Advanced Technology's participation at COP28 was in line with the objectives of the National Strategy for Industry and Advanced Technology, designed to enhance the role of the industrial sector in the areas of sustainability, climate neutrality,

and the circular economy, considering the immediate connection between industry and climate challenges and the role of technological solutions in safeguarding the environment, as the Ministry announced many worldwide projects, initiatives, and collaborations support trends in industrial sustainability and innovation through advanced technology, the most noticeable of which is the release of a carbon-reduction strategy for the industrial sector, which encompasses important manufacturing areas.

The year 2023 was full of accomplishments. Looking through the report, you might notice that the Ministry was able to make significant progress in terms of numbers by pursuing parallel paths that prioritized local industry and attracting foreign investment.

Thank you for your attention, and we would be happy to hear your valuable thoughts about our missions, based on building partnerships and collaboration as well as offering many different kinds of support for creative ideas that elevate the role of technology and industry.



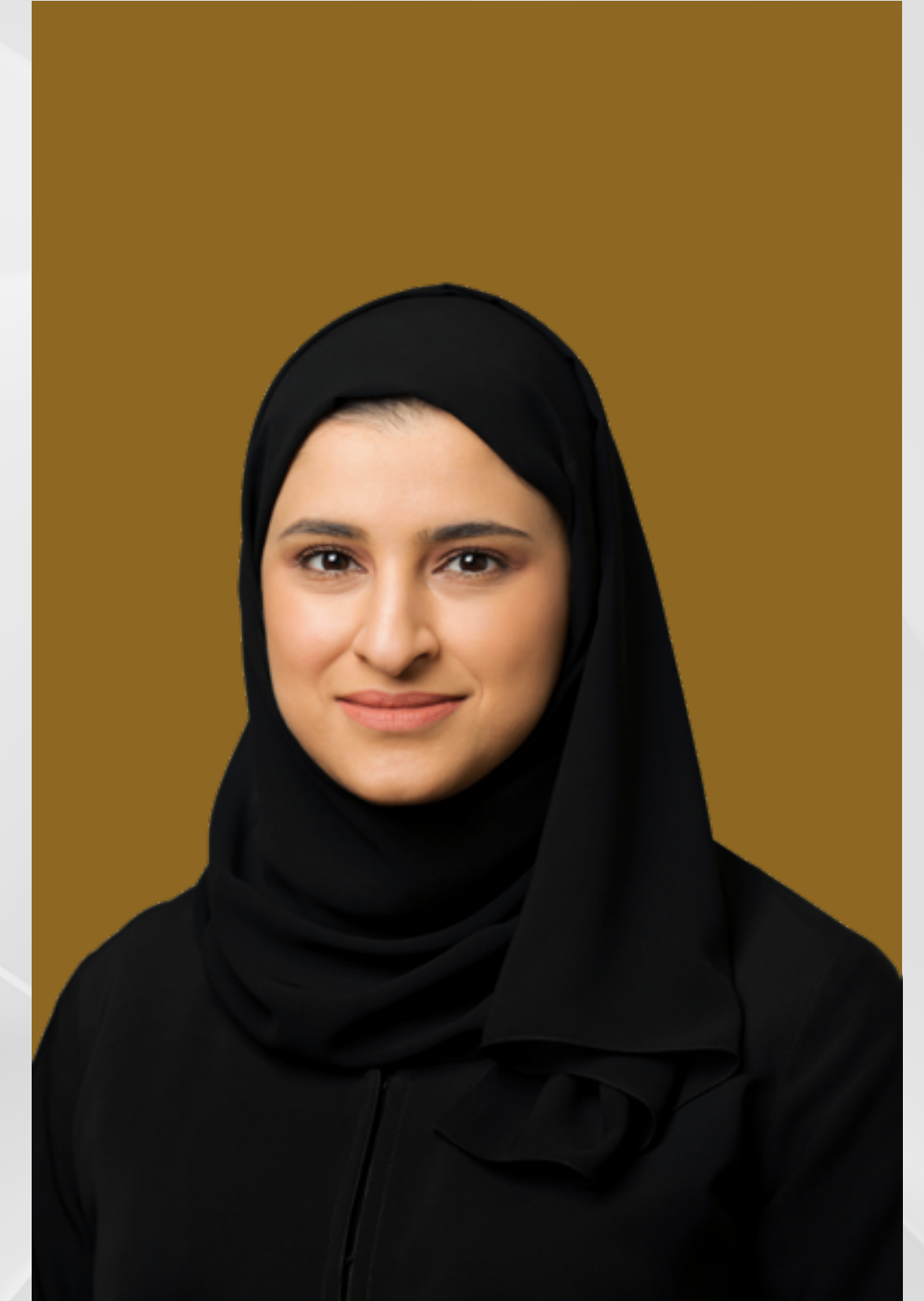
His Excellency Dr. Sultan Al Jaber
Minister of Industry and Advanced
Technology

The United Arab Emirates' Ministry of Industry and Advanced Technology accomplished achievements in the industrial and advanced technology sectors in 2023. In line with the wise leadership's vision and directives, the 2023 achievements report in your hands is the fruit of a full year of hard work by the Ministry of Industry and Advanced Technology team to accomplish the goals of the United Arab Emirates and strengthen its position as a regional and international hub for innovation attracting major industrial and technological investments, in a way that enhances the nation's economic diversification, increases the contribution of the technology and industry sector to GDP and offers chances to train the next generation of Emirati experts and leaders in these fields. This is one of the main objectives of leadership, which considers the growth of individuals as the ultimate goal of all development and economic growth initiatives through opportunities and education.

This year saw a focus on the role of technology in the industry, by stimulating innovation and adopting advanced technology in modern industries, as well as enhancing the country's position as a leading global destination in future industries, through a variety of initiatives, the most important of which is the Technological Transformation Program, which includes the industrial technological transformation index and advanced technology incentives. In addition to launching the Future Factory Award as part of the "Make in the Emirates" awards and the "Industry 4.0" Empowerment Centers program, the Ministry has made significant progress in supporting and enhancing the national industrial sector's competitiveness, productivity, and sustainability.

The Ministry announced numerous projects, initiatives, and collaborations that support trends in industrial sustainability and innovation through advanced technology, making its participation in the COP28 Conference of the Parties crucial. Additionally, thousands of experts, investors, innovators, and visitors attended the Ministry's booth at the conference, where it hosted 38 local and international players in the system of technological solutions that support sustainability, carbon reduction, and climate action. The Ministry's participation, included also discussions and interactive sessions, workshops, and the signing of international memorandums of understanding focused on advanced technology and its application in the industrial sector in line with the country's goals in the climate file, where the latest technological solutions in the field of sustainability in the industrial sector and in various sectors were presented with the aim of accelerating the pace of climate action and supporting efforts to achieve climate neutrality by enhancing the role of advanced technology.

We are aware of the crucial role of advanced technology in boosting the efficiency and sustainability of the industrial sector, developing advanced industries, supporting supply chains, dealing with global crises, developing products, increasing competitiveness, reducing production costs, strengthening partnerships, and increasing their contribution to the UAE economy, and we will continue to work on developing incentives and capabilities to support technology solutions in the industrial sector.



Her Excellency Sarah Al Amiri
Minister of State for Public
Education and Advanced
Technology

Executive Summary 2023

The Ministry of Industry and Advanced Technology has continued its efforts to develop the national industrial sector throughout 2023, in line with the UAE's sustainable economic development goals, as well as the directives and vision of its leadership to boost the sector's contribution to GDP. These efforts are aimed at enhancing the competitiveness of local products, attracting investments, and strengthening the UAE's position as a global hub for manufacturing and innovation.

Through different initiatives, programs, and projects, the ministry has achieved significant milestones, notably increasing the industrial sector's contribution to GDP. By the end of 2023, the sector's contribution exceeded **30%** of the Operation 300bn's main target, launched in 2021, reaching AED 197 billion.



Since the launch of the 300 billion project in 2021, the industrial productivity efficiency of the UAE's sector has grown by **7%**. This can be attributed to the development of the quality infrastructure system, the provision of empowerment and incentive packages, and the promotion of technology adoption and digital transformation. Additionally, there was a **17%** growth in the nation's industrial exports, which are expected to reach 187 billion dirhams in 2023. Projects worth 9.3 billion were identified to substitute imports.



In collaboration with its strategic partners, the ministry announced AED 5.3 billion in financing solutions to support the growth of industrial companies. SMEs received **70%** more financing than in 2022. 90% of small and medium-sized businesses reported using these solutions to their advantage.

In 2023, the Ministry and Etihad Export Financing collaborated to offer financing solutions totaling 1.4 billion dirhams, an increase of **5%** in compared with 2022.

The ministry's efforts to develop the business ecosystem contributed to attracting industrial investments worth AED 3.3 billion across vital sectors, including biotechnology, hydrogen industries, and electric vehicles.

The UAE ranked first regionally and 29th globally in United Nations Industrial Development Organization's (UNIDO) Quality Infrastructure for Sustainable Development Index. Additionally, the country climbed five places in the United Nations' Technology and Innovation Report.



Executive Summary 2023



To enhance business resilience as an important pillar to attract industrial investment and stimulate business growth, the Ministry reduced the value of service fees provided to the industrial sector by **52%** in 2023, with a total value amounting to 29.5 million dirhams.

To recognize the individuals and entities which have significantly contributed to the advancement of the UAE's industrial sector, the Ministry launched the Make it in the Emirates Awards during the second edition of Make it in the Emirates Forum – 2023. The Ministry also The Make it in the Emirates (MIITE) Startup Pitch Competitions with

an to create a platform for startups to pitch and showcase their new ideas and technologies.

In order to support the growth of local supply chains, the Ministry initiated the “National Content - formerly National Value Added” initiative. During the course of the last two years, this program has demonstrated significant progress in redirecting funds to the domestic economy, as proven by the **17%** growth in local spending to 61 billion dirhams. **28%**, or 31 billion dirhams, of the 120 billion dirhams total local purchase possibilities mentioned during the two “Make in the Emirates” Forum sessions have been achieved.



As part of its endeavors to enhance the role of local talent in the national industrial sector, the ministry prioritized training programs. This led to an increase in the number of Emiratis employed by National Content-certified companies from **8,806** in 2022 to **15,768** in 2023, a **80%** growth.

The Industrialist Program was launched to train and hire local talent across vital industries. Under the program, the **Industrialist Career Fair** was held in 2023, offering **500** job and 60 training opportunities for national talent. The exhibition saw the participation of **3,000** Emiratis seeking employment, resulting in **4,000** immediate job interviews, and more than **400** Emiratis signed employment offers.



Executive Summary 2023

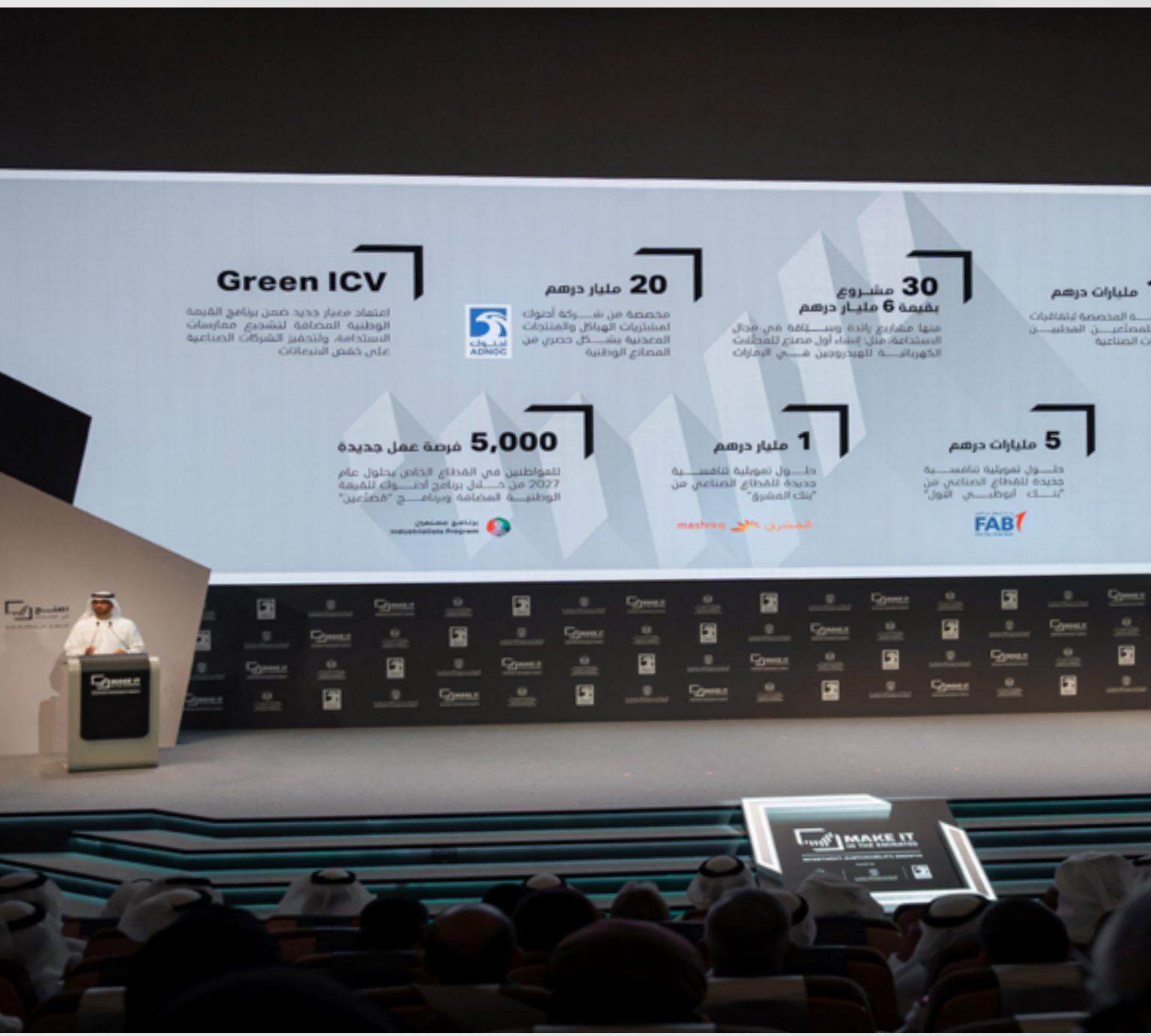
During its participation in COP28 hosted by the UAE, the ministry announced The Industrial Decarbonization Roadmap, a phased approach to enhance the sector's contribution to achieving climate neutrality by reducing carbon emissions by over 93% by 2050.

The year 2023 saw the announcement of a package of joint investment projects worth \$2.2 billion between member states, in line with the UAE's approach to enhancing international cooperation and partnerships to ensure sustainable economic development. These projects were announced under the umbrella of the integrated industrial partnership for sustainable economic development between the UAE, Egypt, Jordan, and Bahrain.



Under the umbrella of the Technological Transformation Program, the Ministry launched a number of successful initiatives in 2023 to support the UAE's efforts to encourage the adoption of advanced technology in all sectors. One of these initiatives is the Industrial Technological Transformation Index, which measures the digital maturity of factories using an integrated framework and assessed 153 industrial companies. The most significant finding was that **32%** of these organizations applied technologies from the Fourth Industrial Revolution and **70%** applied standards of sustainability, indicating a high degree of technological transition for these businesses. The value of investment in the technology used by the examined companies was tracked, with an average of **600 million dirhams**. It also contributed to creating... 360 jobs in the field of advanced technology for national talent.

2023 was an exceptional year in which the Ministry of Industry and Advanced Technology lined up with the Year of Sustainability goals, UAE directions, and the vision of its wise leadership to achieve sustainable development and increase the industrial sector's contribution to the country's GDP. It has supported climate action efforts to achieve climate neutrality through a variety of programs, and will continue to do so through its strategic vision and integrated work system, to support The UAE's journey and achieving the goals of the UAE Centenary 2071 to be the best country in the world.



Chapter 1:

01

Boosting the industrial sector's investment attractiveness

In 2023, we continued to launch incentives and enablers to create a supportive environment for industrial companies. This aligns with the ministry's commitment to enhancing the sector's investment attractiveness as well as regional and international competitiveness, boosting self-sufficiency in strategic, priority industries and enhancing sustainable economic growth. This chapter highlights the Ministry of Industry and Advanced Technology's key achievements in 2023, such as providing flexible financing options, reducing industrial service fees, adopting policies that support growth, customs exemptions and removing barriers to trade, particularly across countries in Asia, Europe and Africa.

02

03

04

Incentives, enablers, financing solutions and supportive legislation

In line with the objectives of the National Strategy for Industry and Advanced Technology, and to support efforts to enhance industrial attractiveness, the Ministry of Industry and Advanced Technology continued throughout the year 2023 to provide incentives, financing solutions, and flexible legislative frameworks that support the growth and development of the national industrial sector, enhancing its competitiveness. These include:

Financing solutions

- New flexible financing solutions worth **AED 5.3 billion** were provided to the industrial sector, in cooperation with **Emirates Development Bank, First Abu Dhabi Bank** and **Mashreq Bank**.



- **SMEs secured 90%** of financing solutions provided under the initiative.

Credit solutions to enhance exports

AED 1.4 billion worth of credit solutions were provided in cooperation with Etihad Credit Insurance Company, an increase of 5% from 2022, to help boost industrial exports.

Customs exemptions

The ministry also provided customs exemptions for manufacturers on industrial inputs, including machinery, equipment and raw materials, totaling **AED 3 billion**, with the aim of enhancing the competitiveness of Emirati products in regional and international markets.

Reducing or cancelling customs tariffs for locally manufactured product exports

In partnership with the Ministry of Economy, the Ministry of Industry and Advanced Technology contributed to the signing of Comprehensive Economic Partnership Agreements (CEPAs) with Georgia, Cambodia, Türkiye, South Korea and Mauritius, providing access to markets with a total of approximately 1.9 billion consumers when combined with 2022 free trade agreements. The agreements contributed to the cancellation or reduction of customs tariffs on UAE exports by:



98 %
for
Mauritius



82 %
for
Türkiye



95 %
for
Georgia



93 %
for
South Korea



92 %
for
Cambodia

Removing technical barriers to trade

The ministry succeeded in reducing trade barriers, through five Technical Barriers to Trade (TBT) chapters completed under CEPAs with Georgia, Cambodia, Türkiye, South Korea and Mauritius, , which contributed to:

- **Enhancing product competitiveness**
- **Opening new markets for UAE industries**
- **Supporting the national economy and boosting trade**
- **Removing technical trade barriers in line with international best practices**

The ministry's services

In 2023, the ministry provided **300,000 services** to approximately 9,500 customers. 94% of services were delivered within set timeframes, while three were improved in line with the Government Services Development **Guide 2.0**, approved by the Prime Minister's Office, which resulted in:

- **Redesigning service procedures to increase effectiveness and efficiency**
- **Reducing service delivery time**

Reducing the cost of doing business

The ministry launched a series of initiatives to reduce service fees by AED 29.5 million in 2023, helping stimulate investment in the country's industrial sector.

These initiatives included:

- **The ministry reduced industrial services fees by 52% in line with i Federal Decree-Law No. 25 of 2022**
- **Reducing labor fees in coordination with the Ministry of Human Resources and Emiratization**
- **33% reduction in conformity certificate fees, and 92% in national conformity mark fees , contributing to a reduction in operational costs for local companies and institutions and motivating them to grow their business**

Executive framework on the regulation and development of industry

To support industrial sector development, and in collaboration with its partners including members of the Industry Development Council, the ministry implemented Federal Decree-Law No. 25 of 2022 regarding the regulation and development of industry. It also hosted awareness workshops for manufacturers and stakeholders to:

- **Provide the flexibility required for the adoption of more supportive policies**
- **Provide incentives to empower the industrial sector**
- **Boost investment attractiveness, as well as stimulate local and foreign investment**
- **Increase the adoption of advanced technology solutions in the industrial sector**
- **Stimulate innovation and R&D, which is reflected in the quality of industrial outputs**

Issuing a guide for industrial exemptions and activities, as well as a guide for inspections and examinations

The ministry issued a guide for industrial exemptions and activities, as well as a guide for inspections and examinations, to enhance company performance by:

- **Exempting factories across the UAE from customs duties imposed on the import of equipment, spare parts and raw materials**
- **Supporting national industries and enhancing their competitiveness across local and international markets**

Updating the GCC-unified industrial law

The Ministry of Industry and Advanced Technology, with its GCC counterparts, contributed to developing and updating the GCC-unified industrial law, as well as its executive strategic regulations. It also enhanced the universal definition for Gulf products and their specifications.

Private sector engagement in developing standards and regulations

The ministry enhanced private sector engagement in technical committees for developing standards and legislation. Through the Future Industries Lab, it aims to empower the industrial sector and advance the UAE's ranking in global competitiveness indices. 2023 highlights included:

- **40% private sector participation in developing technical standards and regulation**
- **The private sector was included in 10 specialized technical committees 5 memoranda of understanding were signed with Procter & Gamble Middle East, the Emirates Food Industries (EFI), SKM Air Conditioning, LG Academy, IEC Academy & Capacity-Building, to enhance private sector participation in the Future Industries Lab initiative.**
- **23 new entities were registered to grant halal certificates, bringing the total to 113 entities from 50 countries.**
- **33% increase in the total number of designated conformity assessment bodies.**
- **90% improvement rate in conformity assessment body renewal services**
- **95 new technical assessors qualified in specialized sectors**
- **19% increase in total recruitment areas of expertise**
- **1,100 participants from Indonesia and Belarus joined awareness workshops on halal accreditation**
- **Two agreements were signed with Singapore and Russia to support cooperation in the halal field. This reaffirms Islamic countries' leadership regionally and internationally in halal industries. The agreements also contributed to providing technical support**
- **For accreditation bodies through joint assessments in line with the UAE Halal System**
- **Enhancing confidence in products displaying the Halal National Mark.**

National Industrial Census

In 2023, the Ministry of Industry and Advanced Technology launched the Industrial Census as part of its strategic vision to support national industrial sector readiness, ensure business continuity and sustainability and enhance the country's competitiveness in global indices, as well as contribute to achieving its food and medical security objectives. The project encompasses an integrated database for the sector, detailing factory production capacity, energy consumption and data on manufacturing sector entities.

The national Industrial Census project focuses on:

- **Enterprise business size (large, medium, small and micro)**
- **Diversity in manufacturing industries**
- **The diverse locations of industrial establishments across emirates (including free zones)**

The national Industrial Census achieved a response rate of 82%, comprising approximately 8,000 factories and exceeding its target.

Make it in the Emirates Forum

The Ministry of Industry and Advanced Technology launched the Make it in the Emirates Forum to enhance the UAE's position as a top investment destination and global hub for manufacturing and innovation, as well as boost the competitiveness of local products.

Within two years, the forum became a leading regional and global platform that brings together decision-makers, experts, investors and entrepreneurs to explore opportunities establish and expand their businesses.

The second edition of the forum, held under the theme 'Investment.Sustainability.Growth' achieved several milestones:

- **Increased the value of local purchase agreements by more than AED 10 billion to AED 120 billion for more than 1,400 products. This supports the resilience and sustainability of supply chains as well as local business growth**
- **10 new industrial investment projects were announced**
- **Financing worth AED 6 billion was announced as part of agreements signed with commercial banks**
- **500 jobs created for Emiratis across the sector under The Industrialist Program**

Make it in the Emirates Awards

The Make it in the Emirates Awards celebrate visionaries, entrepreneurs, and innovators who contribute to shaping the future of industry in the UAE in line with government directives to achieve sustainable economic growth. The awards showcase success models and contributions, with the aim of enhancing industrial sector competitiveness and promoting the UAE as a regional and global hub for manufacturing and innovation. The awards received 407 applications across 10 categories.

Winners were announced during the forum:



**ICV Excellence Award
ADNOC**



**Sustainable Manufacturer Award
Emirates Global Aluminium**



**Industrial Strategic Partner Award
Abu Dhabi Department of
Economic Development**



**Smart Manufacturer Award
Lipton, Jebel Ali factory**



**ICV Excellence Award
Baker Hughes - Baker Middle East**



**Excellence in Innovation Award
Edge Group**



**Emiratization in Manufacturing
Award
Emirates Steel Arkan**



**Inspirational Leader Award
Ismail Ali Abdullah, CEO of Strata
Manufacturing Company**



**Quality Standards Award
Al Ain Food and Beverages**



**Young Talent of the Year Award
Engineer Maryam Hamad
Hilal Al-Kuwaiti from Strata
Manufacturing Company**

Make it in the Emirates (MIITE) Startup Pitch Competition

The Make it in the Emirates Forum 2023 also saw the launch of the MIITE Startup Pitch Competition, aimed at showcasing innovative business models and connecting startups with investors.

The competition received applications from around the world, including the UAE, Japan, Germany, Korea, Singapore, India, the United Kingdom, the United States and many other countries.

The competition comprised:

24 finalists

400 applications

40% local

60% international

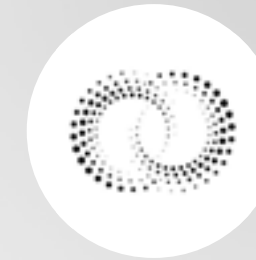
Financial prizes for winners

Winners:

VFlow Tech, a Singapore-based startup which has developed innovative storage solutions for renewable energy sources.



The Food Engine, a UAE-based startup, has developed an automated farming system that uses 90% less water.



Farmin, a UAE-based startup, uses satellite images and artificial intelligence to perform critical predictive analytics.



Roadshows

In 2023, the ministry conducted **11 roadshows** across Asia and Europe with the aim of strengthening partnerships and attracting more industrial investments.

Key event participation to promote investment opportunities:

| | | | |
|-----|--|--|--|
| Q1: | | | |
| Q2: | | | |
| Q3: | | | |
| Q4: | | | |

Growth and new investments

In 2023, the ministry continued to enhance the flexibility of supply chains to support the capabilities of industrial companies and boost their investments in local manufacturing, as well as foster partnerships between local, regional and international companies through:

- **Accelerating 10 industrial projects worth AED 3.3 billion across biotechnology, hydrogen, electric vehicles and F&B, as well as metals such as iron, steel, aluminum.**
- **8% growth in industrial licenses issued in 2023, supported by incentives and enablers provided by the ministry.**

Integrated Industrial Partnership for Sustainable Economic Development

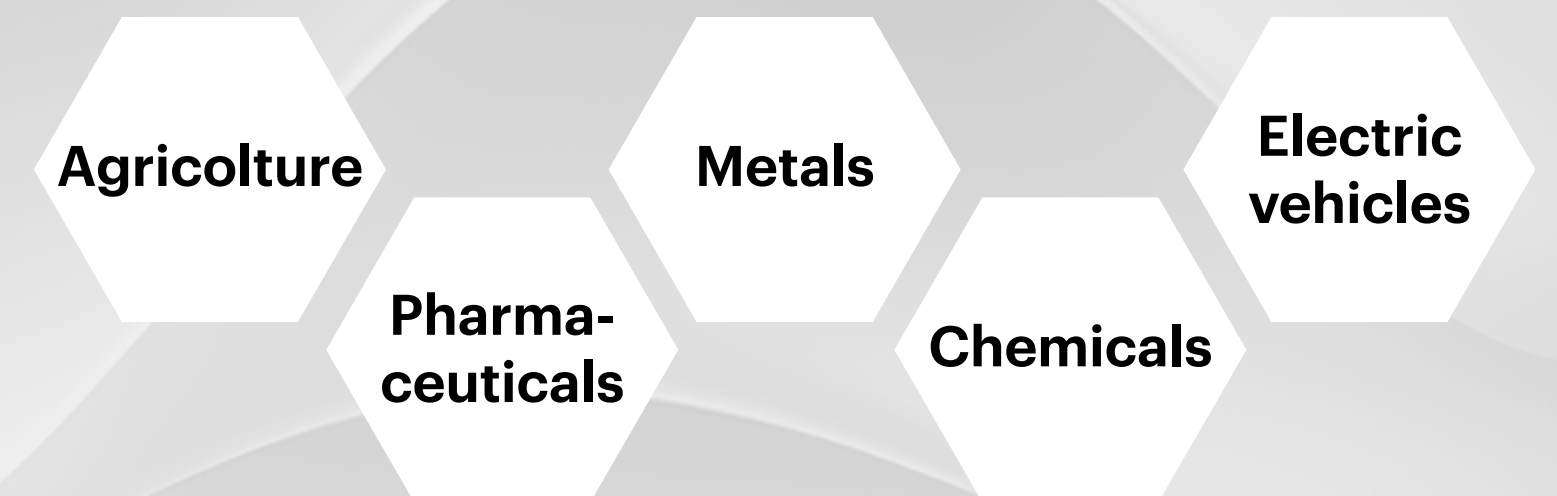
Under the Integrated Industrial Partnership for Sustainable Economic Development, several projects were announced in the UAE, Egypt, Jordan and Bahrain, enhancing integration between countries to develop globally competitive industries, ensure supply chain security and flexibility, promote sustainable economic development and strengthen value-added manufacturing sectors . In 2023, the partnership saw:

- **The signing of 15 agreements for new industrial projects**
- **The announcement of supply agreements and projects worth \$3.3 billion 14 integrated industrial projects**

and supply agreements in vital and priority industries

- **Supporting industrial diversification, import substitution and self-sufficiency**
- **Hundreds of private sector participants attended Executive Committee of the Partnership workshops.**

Strategic and priority sectors covered by the partnership:



Chapter Two:

02

Promoting Local Products and Content

03

04

Through the National In-Country Value (ICV) Program and quality infrastructure, the Ministry of Industry and Advanced Technology focused on creating an advanced national industrial ecosystem comprising startups, as well as small, medium and large companies to keep pace with future benchmarks and stimulate the competitiveness of the local products across global markets. The ministry's efforts align with the National Strategy for Industry and Advanced Technology to accelerate sector development and enhance its contribution to achieving sustainable economic development in line with the directives of UAE leadership.

The National In-Country Value (ICV) Program

Among the ministry's key strategic objectives is promoting the growth of national companies (suppliers and manufacturers). It aims to achieve this goal by redirecting local investment into the national industrial sector through an integrated system of legislation, policies, programs and initiatives.

The ministry launched the National ICV Program in 2021 to encourage government entities and major national companies to procure products and services from local suppliers.

In 2023, the program achieved several milestones towards accelerating the expansion and development of the national industrial sector. Key achievements include:

- **AED 120 billion** in purchasing opportunities were announced at the second edition of the Make in the Emirates Forum, an increase of AED 10 billion from 2022.
- In 2023, eight federal and local entities, as well as major national institutions, joined the program, bringing the total to **28**.

In 2023, eight new entities have joined the program:



- **22%** growth in ICV-certified companies to 5,500 in 2023, compared to 4,500 in 2022
- **26%** growth in national spending on products and services among ICV entities to AED 67 billion in 2023, compared to AED 53 billion in 2022
- An increase in ICV-certified supplier investments from **AED 197 billion** in 2022 to over AED 200 billion in 2023

- During the second Make it in the Emirates Forum, **1,400** products were identified for local production .

The value of local procurement agreements increased by more than AED 10 billion to reach AED 120 billion

- Almost a third (**28%**) of AED 110 billion worth of offtake opportunities, equivalent to AED 31 billion, were completed between 2022 and 2023, way ahead of the 10-year target
- A dedicated platform for jobs in the industrial sector, the Nafis Program, was created
- **17** entities implemented the ICV Program in 2023, compared to 10 in 2022
- More than **7000** ICV certificates were issued in 2023

The National In-Country Value (ICV) Program

In line with the program's objective to promote the growth of national industrial companies, as well as redirect spending into the economy, the ICV Program aims to create job opportunities and upskill local talent. In 2023, it achieved:

- An **80%** increase in the number of Emiratis working for ICV-certified companies (from 8,806 in 2022 to 15,768 by the end of 2023)
- **5%** Emiratization rate across ICV-certified companies and 20% across assessors.
- A reduction in the National ICV fee to **AED 500** for companies registered in the Ministry of Economy's National Programme for Small and Medium Enterprises

An update of the National ICV platform to include:

KPI reports dashboard for program participants QR code verification for certificates

The ministry launched 'The Industrialist Program' to support the growth and development of the national industrial sector by upskilling Emirati talent. The launch was followed by 'The Industrialists Career Exhibition', aimed at creating job opportunities for nationals in the industrial and advanced technology sectors.



برنامج مُصنِّعين
Industrialists Program

In 2023, the ministry launched training programs under The Industrialist Program to upskill Emirati talent in vital industries such as oil and specialty gas, security, safety, iron and paper, as well as priority industries including food and beverages. These programs were conducted in collaboration with the Centre of Excellence for Applied Research and Training (CERT) to provide high-quality opportunities across a diverse range of fields.

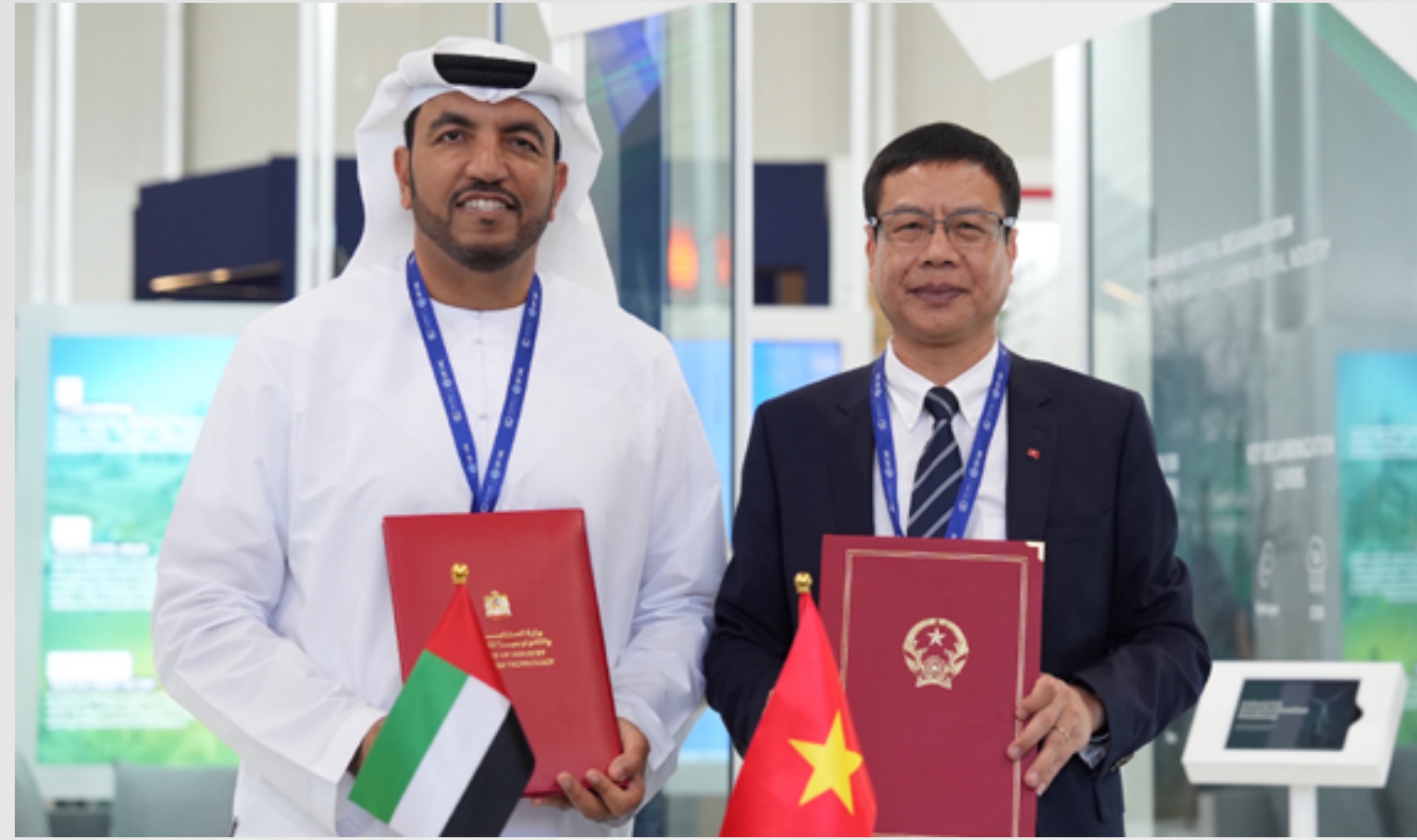
- The Industrialist Career Exhibition drew **3000** Emirati participants and provided **500** jobs, as well as **60** training opportunities for local talent, in addition to **4000** immediate-hire job interviews.
- More than **400** Emiratis accepted job offers as part of the program (further hires in the pipeline).

Quality Infrastructure

In line with the objectives of the National Strategy for Industry and Advanced Technology, the ministry has continued to enhance quality infrastructure, aligning with global best practices and promoting the competitiveness of local products across global markets. This is aimed at removing trade barriers, enhancing the performance of the UAE's industrial exports and accelerating the adoption of advanced technologies in the sector.

In this context, 2023 achievements included:

- **27,063** standards and technical regulations approved by end of year, an increase of 3% compared to 2022



- The signing of **6** memoranda of understanding with leading standardization bodies including the British Standards Institution (BSI); Egyptian Organization for Standards & Quality; Singapore Standards Council (SSC); Vietnam Standard and Quality Institute (VSQI); Russia's Federal Agency for Technical Regulation and Metrology;

and Halal Standards - Singapore to enhance cooperation and knowledge exchange.

- UAE participation in **155** regional and international standardization committees i, providing access to global best practices.
- UAE Cabinet's approval of regulation on legal units of measurement, , in line with the requirements of the Metre Convention (Convention du Mètre).
- Adopting the Technical Regulation for Monitoring Air Quality Measurements. This contributes to achieving the National Air Quality Agenda 2031, aimed at improving quality of life by promoting a safe and healthy environment .

In 2023, the ministry achieved several milestones including:

- Approving regulation for consumer meters (electricity, water, gas and thermal energy). By enhancing quality and reducing waste resulting from inaccurate measurement tools, approximately **AED 870 million** was saved in water consumption and **AED 323 million** in electrical energy consumption.
- More than **6,500** ICV certificates were issued.



- Six national electrical and mass measurement standards were recognized by the International Bureau of Weights and Measures (BIPM), and published on the database. This brings the UAE's number of internationally recognized measurement standards to **17**.
- **93%** product compliance rate in the national market survey as a result of strengthening the regulatory system, which contributes to enhancing confidence in national products.

- **591** local products obtained the Made in the Emirates mark, and 29 licenses were granted for its use.
- **23** new entities registered to grant halal certificates, bringing the total to **113** from **50** countries.
- **33%** increase in total number of conformity assessment bodies.
- **95** technical assessors qualified in specialized technical sectors.
- **19%** increase in total areas of employment.



Chapter Three:

03

Accelerating Technological Transformation and Innovation

04

In line with the objectives of 'We the UAE 2031' to accelerate technological transformation in priority sectors and strengthen the UAE's position as a global hub for innovation and future industries. MoIAT launched the Technology Transformation Program (TTP). The program, launched under the National Strategy for Industry and Advanced Technology, serves as a framework for initiatives including the Industrial Technology Transformation Index (ITTI), Industry 4.0 Enablement Centres and related incentives.

The Technology Transformation Program (TTP)

In October 2022, the ministry launched the TTP with the aim of accelerating technological transformation and creating quality investment opportunities for local and international investors. The initiative contributes to enhancing the sustainability of the national industrial sector and increasing its contribution to GDP. Throughout 2023, the program has achieved several milestones , including:

1. Industrial Technology Transformation Index (ITTI):

In February 2023, the ministry launched the ITTI In collaboration with the Abu Dhabi Department of Economic Development (ADDED). The index measures the digital maturity and sustainability of factories, contributing to the development of roadmaps to technological transformation.

Key ITTI achievements in 2023:

- **650** technological projects implemented
- **360** high-tech jobs created in line with assessment recommendations
- An estimated **AED 600+ million** in technology investments across assessed companies
- **15** factories identified under 'Industry 4.0' for the successful adoption of Fourth Industrial Revolution technologies
- The ITTI governance system was implemented by a national committee of representatives from local and federal government entities, as well as free zones, under the Industrial Development Council.
- The ITTI's digital platform encompasses the entire assessment process, supporting companies in their journey towards technological transformation.
- A program was launched to train and certify ITTI assessors.
- **43** assessors from across **18** local and international entities were certified to conduct ITTI assessments.

A total of 153 companies were assessed under the ITTI and empowered with a roadmap for digital transformation. Results have shown:

- A **70%** increase in the adoption of sustainability best practices
- **75%** of industrial companies have developed a roadmap for digital transformation
- **60%** increase in the implementation or planning of innovative technological projects
- **32%** increase in the adoption of cutting-edge technologies such as artificial intelligence, big data and advanced analytics, robotics digital twins and advanced sensors.

The assessment concluded that assessed companies had benefitted from the impact of technological transformation, through:

A **10%** reduction in energy consumption

A **15%** reduction in product quality costs

A **10-15%** increase in productivity

A **15-20%** reduction in operational costs

2. Industry 4.0 Enablement Centres:

The ministry launched the initiative in collaboration with its strategic partners with the aim of accelerating the adoption of advanced technologies in the industrial sector, as well as building the technical and digital capabilities of factories and individuals. The centers support the development of digital strategies, as well as the implementation of technological transformation projects.



- The first center was launched in collaboration with EDGE in 2022.
- The second facility was launched in collaboration with United Arab Emirates University (UAEU) in 2023.

Industry 4.0 Enablement Centres conduct a range of theoretical and practical training programs and offer models and testing platforms as well as provide a platform for collaboration between the industrial and academic sectors. Key initiatives include:

The Leadership 4.0 Program

The program aims to train and upskill industry leaders, enhancing their artificial intelligence capabilities to support business growth. Additionally, it provides training opportunities for industrial company CEOs to boost factory operations through advanced technologies and Fourth Industrial Revolution solutions.

In 2023, the Leadership 4.0 Program trained **62** leaders from **46** factories, contributing to the ministry's strategic objective of empowering industry figures to accelerate the adoption of transformative technologies and promote sustainable practices.

The Pioneers 4.0 Hackathon Series

Launched by the ministry in collaboration with EDGE, the program is aimed at supporting and accelerating digital transformation, as well as the adoption of Fourth Industrial Revolution technologies in the national industrial sector.

In 2023, two events were organized as part of the Pioneers 4.0 Hackathon in collaboration with five technology partners. The events drew participation from 87 students, attending 15 universities, highlighting the ministry's commitment to upskilling local talent, as well as bridging the gap between higher education and the industrial ecosystem.

The Tour 4.0 Program

Launched by the ministry, the Tour 4.0 Program comprises a series of visits to advanced and smart manufacturing facilities. The initiative aims to enhance awareness and facilitate knowledge exchange on advanced technology adoption best practices.

In 2023, the ministry hosted several visits, which drew participation from **16** industrial company leaders.

3. Advanced technology incentives:

National ICV Program advanced technology bonus

The National ICV Program formula was updated to include the advanced technology bonus, which awards up to an additional 5% in points to industrial companies that use ITTI criteria.

The initiative aims to encourage advanced technology adoption, as well as Fourth Industrial Revolution and sustainable solutions.

The bonus enables industrial companies to make data-driven decisions for more efficient resource allocation. More than 80 industrial companies were identified as eligible for the National ICV Program bonus.

Golden Visa nominations

The ministry's new incentive packages provide manufacturers and SMEs with the opportunity to nominate top talent from national industrial companies for a Golden Visa. The incentive was linked to the index to attract and retain exceptional talent in the industrial sector.

Free assessments for factories

As part of its efforts to enhance collaboration between federal and local government entities, and the private sector, the ministry collaborated with program partners to provide over 110 free-of-charge ITTI assessments.



Linking the index to technology adoption

grants

The index was linked to Abu Dhabi Department of Economic Development's technology adoption grants program, among incentive packages provided to industrial companies in the emirate. Grants can reach up to AED 1.5 million per company to support technological transformation.

Advanced technology funding

Technological projects worth AED 1.5 billion were financed as part of collaborations with Emirates Development Bank, Mashreq Bank and First Abu Dhabi Bank.



Promoting Research and Development

1. Mohammed bin Rashid Medal for Scientific Distinction

His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai honored the winners of the fourth edition of the Mohammed bin Rashid Medal for Scientific Distinction, which recognizes accomplished scientists and researchers.

The awards, which introduced a new category for young scientists and were expanded to encompass institutions, included:

| | | |
|------------------------------|------------------------------|---|
| Scientific Excellence | Lifetime Achievements | Emerging Scientist (New Category) |
|------------------------------|------------------------------|---|

The medal awarded across diverse categories to scientists and researchers who have made a significant impact in their fields on both the local and global levels, to recognize research contributions and professional achievements.

His Highness Sheikh Mohammed bin Rashid awarded the Medal for Scientific Distinction to Prof. Ehab El-Saadany, Professor of the Department of Electrical Engineering and Computer Science and Director of the Advanced Power and Energy Center at Khalifa University, UAE, and Prof. Ling Shao, Chief Scientist of Terminus Group, President of Terminus International, and one of the founders of the Mohamed bin Zayed University of Artificial Intelligence.

Other winners included Prof. Qutayba Hamid, Vice Chancellor and Dean of Medicine at the University of Sharjah, who was honored with the Lifetime Achievement Medal; and Dr. Mohammed Al-Marri, Major, Dubai Police and Assistant Professor of Genetics at the Mohammed Bin Rashid University of Medicine and Health Sciences, who was honored with the Rising Scientist Medal.

The medal recognizes scientists, researchers and establishments that have made exceptional contributions to scientific research in the country. The award seeks to highlight their role in society and create an enabling environment for innovation and scientific research, especially for young scientists.

The Advanced Technology Research Council, which is headed by His Highness Sheikh Khaled bin Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, was awarded the Mohammed bin Rashid Medal for Supporting Scientific Research. The recognition reflects the council's achievements in advancing the national R&D ecosystem and its pivotal role in building the UAE's knowledge economy.

2. Golden Visa

Endorsed by the Emirates Scientists Council, 75 scientists and researchers demonstrating significant achievements in their field were awarded the Golden Visa.



Chapter Four:

04

Supporting Sustainable Industrial Growth

The ministry launched the Technology Transformation Program (TTP) to accelerate adoption across priority sectors and strengthen the UAE's position as a global hub for innovation. The initiative, which falls under the National Strategy for Industry and Advanced Technology, aligns with the objectives of 'We the UAE 2031', and encompasses the Industrial Technology Transformation Index (ITTI), Industry 4.0 Enablement Centres and incentives packages.

Under the National Strategy for Industry and Advanced Technology, the ministry continued to enhance the sectors' contribution to achieving the UAE's sustainable development objectives, particularly towards battling climate change and resource depletion. Given the role of energy in industry, as well as the importance of technology solutions in shaping sector transformation, MoIAT's role in achieving sustainable development goals has become of increased importance over the past few years.

COP28

MoIAT participated in COP28, one of the largest and most important international gatherings in 2023, hosted by the UAE from November 30 to December 12. During the conference, the ministry announced several projects, initiatives and international partnerships to support the UAE's industrial sustainability and innovation vision. Key milestones include:

- The ministry convened policymakers, technology players and global industrial leaders at COP28 in a series of specialised sessions to discuss enhancing the industrial sector's contribution to climate action and sustainable economic development.
- The pavilion showcased key technological solutions that support sustainability, decarbonization, and climate action, while promoting investment opportunities under the Make it in the Emirates initiative. It aimed to highlight the role of advanced industry and technology in accelerating climate action.
- At the conference, over 38 local and international entities participated in the "Technology and Innovation Center" located within the ministry's pavilion. Among these entities were 27 SMEs that are involved both locally and internationally in supporting climate technologies and solutions.



- The ministry hosted 22% of the startups that exhibited at COP28's Startup Village.
- The ministry hosted 16 climate technology startups at its pavilion at COP28, enabling them to present innovative climate solutions.
- In collaboration with the United Nations Industrial Development Organization (UNIDO), the ministry organized five sessions in the Green Zone to explore how to enhance the industrial sector's contribution to climate action through the adoption of advanced technologies. The focus was on the role of governments in accelerating the development and adoption of such technologies, creating effective dialogue among international policymakers, and promoting international cooperation.
- The ministry helped launch World Industrial Day, a joint initiative between ministry, UNIDO and the Global Manufacturing and Industrialization Summit (GMIS) to raise awareness about the importance of promoting sustainable industrial practices and encouraging innovation for climate action.



The Industrial Decarbonization Roadmap

In a groundbreaking global initiative, the ministry, in collaboration with its strategic partners in both the public and private sectors, launched a decarbonization roadmap for the industrial sector during COP28.

The initiative aligns with national efforts to achieve UAE Net Zero by 2050 strategic initiative objectives, reflecting a commitment to Nationally Determined Contributions under the Paris Agreement. The ministry developed and announced the Industrial Decarbonization Roadmap after conducting a comprehensive evaluation of more than 50 modern technologies and innovative solutions, assessing their efficiency and feasibility for local adoption.

In addition to the overall roadmap, sector-specific timelines were outlined for different sectors including iron, steel, aluminum, cement, and petrochemicals. Various technologies and decarbonization methods were put forward for each sector, based on their predicted impact. The impact of decarbonization policies on the operational cost of each sector was also evaluated. The roadmap is structured around three main phases:

- Phase One (2024-2030) aims to reduce carbon emissions by **5%**.
- Phase Two (2030-2040) targets a reduction of **63%**.
- Phase Three (2040-2050) aims for a reduction of **93%**.



The UAE, through this roadmap, aims to achieve additional targets, including:

- Encourage other countries to adopt initiatives to decarbonize the industrial sector by embracing advanced technology solutions.
- Highlight the UAE's model for promoting the adoption of sustainable and environmentally friendly technologies and practices across national industries.
- Underline the UAE's commitment to encouraging the use of environmentally friendly technology and processes in industry, inspiring other countries to do the same.
- Support the adoption of effective mechanisms through clean energy solutions, carbon capture, utilization and storage, and enhancing manufacturing efficiency – all of which contribute to decarbonization.

The Cement and Concrete Breakthrough Initiative

During COP28, the Ministry of Industry and Advanced Technology launched the Cement and Concrete Breakthrough Initiative, co-led by the UAE and Canada. This significant step aims to achieve several objectives, including:

- Enhancing global cooperation to address climate challenges in the industrial sector.
- Encouraging and supporting hard-to-abate sectors, such as cement, to address their sustainability challenges.
- Developing and implementing policies and measures to support the adoption of sustainable practices in the cement and concrete industry. This contributes to enhancing decarbonization in the industrial sector as a first step by 2030.

Green Public Procurement Pledge

Under the Clean Energy Ministerial Industrial Deep Decarbonization Initiative (IDDI), the UAE, represented by the ministry, endorsed the Green Public Procurement Statement of Intent at COP28. The initiative reflects a collective effort among participating governments to boost demand for low and near-zero-emission steel, cement, and concrete through public procurement. It is aimed at:

- Strengthening efforts to reduce carbon emissions and achieve climate neutrality by 2050.
- Enhancing the involvement of all sectors, with industry at the forefront.
- Participating in global government efforts within the timeline to promote low-emission steel, cement, and concrete purchasing rates.

- These efforts include assessing decarbonization rates in all public construction projects, supported by transparent reports and sharing best practices to contribute to the evolution of this type of procurement.
- Adding to the ministry's industrial decarbonization roadmap, with a focus on hard-to-abate industries.

Green ICV

In 2023, the Ministry of Industry and Advanced Technology achieved a significant milestone by announcing the adoption of a new standard under the National In-Country Value (ICV) Program. The Green ICV is designed to encourage sustainable practices throughout the value chain, aiming to enhance the competitiveness and sustainability of the industrial sector. The announcement was made on the sidelines of the 39th edition of the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC), held at the Abu Dhabi National Exhibition Centre.



This standard offers several advantages, including:

- Providing companies with the opportunity to earn bonus points in the National ICV Program if they commit to implementing sustainability standards and green policies.
- The additional bonus can reach up to 3%, determined by assessing sustainability, water management, recycling and decarbonization practices in companies and factories.
- Benefits include evaluating the participation of factories and companies in national sustainability, water management, recycling, and decarbonization efforts, as well as obtaining international ISO environmental standard certificates. This is in addition to Green Industries Environmental Label provided by the Environment Agency – Abu Dhabi (EAD).

UAE Climate Tech Forum



In 2023, the Ministry of Industry and Advanced Technology conducted the UAE Climate Technology Forum in collaboration with ADNOC and Masdar, which drew 1,000 climate technology decision-makers, executives, innovators, and major investors.

The summit focused on the importance of international partnerships and collaboration in R&D to accelerate the process of developing, adopting, and disseminating advanced technologies in fields such as hydrogen, carbon capture, renewable energy, and energy efficiency. It aimed to explore tangible solutions for decarbonization and achieve progress in addressing the impacts of climate change. The summit emphasizes leveraging technology to transform one of the world's biggest challenges into a significant opportunity for achieving sustainable economic and social development.

Key Achievements:

- Signing three local and international agreements to enhance climate technology industries.
- Organizing a roundtable titled 'Hydrogen Economy', featuring representatives from leading companies in climate technology.
- Conducting several discussions on sustainability, the hydrogen economy, and the exchange of climate technologies.
- Hosting informational sessions on advanced technologies with Japan, the UK, and other countries.
- Hosting a session on supporting and promoting entrepreneurship in the green technology sector that supports climate action efforts, as well as enhancing private sector sustainability partnerships.
- Conducting a session on R&D opportunities in climate technologies, which discussed partnerships and incentives available for startups to facilitate the commercialization of R&D outputs and enhance climate action across vital sectors.
- Hosting a session in partnership with UNIDO to discuss mechanisms that enhance private sector partnerships and promote innovation in climate action.

Energy Demand Management

The ministry collaborated with the Ministry of Energy and Infrastructure on a comprehensive project for demand-side energy management, aimed at ensuring consumption efficiency, leading to optimal decarbonization.



Green Partnerships

As part of its efforts to enhance green partnerships in line with the UAE's environmental, climate, and sustainable development goals, the ministry forms green partnerships, and supports collaborations across the public and private sectors. In 2023, several green partnerships were established, including:

- The signing of a strategic cooperation agreement between ADNOC, John Cockerill Hydrogen and Strata Manufacturing aimed at accelerating the growth of the UAE's hydrogen economy. The agreement includes manufacturing electrolyzers, a first-of-its-kind move for the UAE, to contribute to decarbonization efforts and empower the local manufacturing sector.

- Emirates Steel Group "Arkan", Omium International "Omium", and Khalifa University of Science and Technology signed a strategic cooperation agreement in the field of green hydrogen research and development at COP28, with the support of the Ministry of Industry and Advanced Technology, at the ministry's pavilion in the Green Zone. The goal is to improve the utilization of green hydrogen in the steel industry by implementing DRI and PEM hydrogen technology.



Participation in events



Abu Dhabi Sustainability Week 2023

16-19 January 2023

Abu Dhabi Sustainability Week is one of the biggest global events focused on sustainability and climate action initiatives in line with the UAE's goals of achieving climate neutrality.



Sharjah Investment Forum 2023

February 8 - 9, 2023

Showcasing the most recent advancements in finance, renewable energy, the environment, digital skills, and emerging technologies that will impact the investment landscape, the Sharjah Investment Forum is considered one of the top investment conferences and exhibitions in the Middle East and North Africa.



World Government Summit 2023

February 13 - 15, 2023

The World Government Summit, the global platform that aims to anticipate the future of governments around the world, held its 2023 session under the slogan "Forecasting the Future of Governments," and brought together a group of senior government leaders, ministers, senior officials, decision-makers, thought leaders, and specialists in financial, economic, and social affairs from various countries to exchange experiences, knowledge and ideas that contribute to global development and prosperity.

Participation in events



The International Defense Exhibition “IDEX” 2023

20 - 24 January 2023

The International Defense Exhibition (IDEX) is a global forum that unites decision-makers and experts in the defense sector to showcase the latest technological advances created to address global security challenges. It also highlights the importance of international collaboration in restructuring defense systems and addressing future challenges, as well as Abu Dhabi's vital position in the development of global defense-related sectors.



Hannover Messe 2023

April 24–28, 2023

The Hannover Messe International Industrial Fair is the world's largest exhibition specializing in the industrial sector, attracting many international industrial companies and exhibitors.



Annual Investment Meeting 2023

May 8–May 10, 2023

One of the most important international economic forums, the Annual Investment Forum helps create investment partnerships and promotes sustainable growth in international markets. Every year, a large number of international business leaders from both the public and private sectors, as well as governmental representatives of various countries, gather to explore strategies for driving sustainable development and creating future solutions for the global economy.

Participation in events



Med: Ducab Blade Intelligent Factory

June 13, 2023

The Ministry of Industry and Advanced Technology witnessed the launch of the Blade Factory, which is affiliated with the Ducab Group and is considered a smart and advanced factory that utilizes technologies of the Fourth Industrial Revolution, including digital communication, artificial intelligence, data analysis, and smart supply chain management.



G20 Summit in New Delhi 2023

9 - 10 June 2023

The G20 is a platform for the world's 20 largest economies. It was founded in 1999 and meets once a year in one of its member countries to discuss plans for the global economy and suggest answers to financial and geopolitical challenges.



Opening of a Yokogawa branch in the Emirates

July 2023

Participation in events



Youth at COP28

August 3, 2023

“Youth at COP28” is an awareness workshop held as part of the 2023 Summer Camp in cooperation with the COP28 Presidency Team, the Youth Climate Pioneer Team, the Emirates Youth Council, and the Ministry of Industry and Advanced Technology Youth Council, with the goal of introducing young people to COP28, as well as the importance of their role in confronting climate change and achieving sustainable development goals.



“inVISION” event organized by du

August 20, 2023

“inVISION” is an event organized by du with the Ministry of Industry and Advanced Technology’s support. It serves as a forum for collaboration, knowledge exchange, and the exploration of cutting-edge ideas that will help shape the UAE’s sustainable future. The event brings together a group of professionals, business executives, public servants, and representatives of several global ICT businesses to discuss the most recent developments in smart cities, agricultural technology, Industry 4.0, and sustainability.



L’Oréal-UNESCO programme

September 21, 2023

The Middle East Regional Program for Emerging Female Researchers, “L’Oréal-UNESCO for Women in Science,” in collaboration with Khalifa University of Science and Technology, is one of the regional programs held by the “L’Oréal-UNESCO” global initiative for women in science, which recognizes female researchers in Gulf Cooperation Council countries. It celebrates women who have contributed to the fields of life sciences, physics, mathematics, and computer science.

Participation in events



The Communication and Partnership Forum” from the Emirates Development Bank

The “Communication and Partnership Forum” is the first of a series of events organized by the Emirates Development Bank in cooperation with the Ministry of Industry and Advanced Technology’s “Make in the Emirates” initiative, with the goal of improving cooperation between government agencies and businesses from the private sector in order to boost the country’s economic growth and diversification.



Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) 2023 October 2-5, 2023

ADIPEC is the world’s largest forum of its kind for the energy sector, aiming to unify the energy sector’s efforts around a shared goal and vision to decarbonize and boost global energy security.



GITEX GLOBAL October 2-5, 2023

GITEX Global is an exclusive platform for showcasing the newest technological advancements and cutting-edge concepts. It comprises a diverse array of top technology events and includes participation from the entire business community.

Participation in events



Standards and Metrology Institute for Islamic Countries (SMIIC)

October 17-18, 2023

The Institute of Standards and Metrology for Islamic Countries seeks to eliminate technical barriers to trade between the member countries by harmonizing the system of technical specifications for diverse goods and products.



Dubai Airshow 2023 November 13-17, 2023

The Dubai Airshow is a crucial platform for gathering global industry executives and is a driving force behind the aviation industry. The event brings together leading businesses and industry professionals from the aviation, space, and defense sectors to encourage collaboration and push technological advancements while exploring the most recent, relevant global trends.



COP28 November 30 - December 12, 2023

COP28 was the most significant and largest climate gathering in 2023. It was hosted by the UAE and attended by more than 70,000 individuals, including heads of state.